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Demographic and Health Survey

2018

GOVERNMENT OF ZAMBIA

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Zambia Statistics Agency
(Formerly Central Statistical Office)
Lusaka, Zambia

Ministry of Health
Lusaka, Zambia

University Teaching Hospital Virology Laboratory
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The DHS Program
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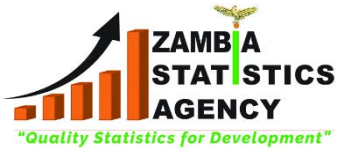

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FOREWORD

The Government of Zambia, through the Zambia Statistics Agency and the Ministry of Health together with its cooperating partners, conducted the 2018 Zambia Demographic and Health Survey (2018 ZDHS). This study is the sixth in a series of Demographic and Health Surveys in Zambia. Previous surveys were conducted in 1992, 1996, 2001-02, 2007, and 2013-14.

The ZDHS provides an opportunity to inform policy and provide data for planning, implementation, and monitoring and evaluation of national health programmes. It is designed to provide up-to-date information on health indicators, including fertility levels, nuptiality, sexual activity, fertility preferences, awareness and use of family planning methods, breastfeeding practices, nutritional status of children, early childhood and maternal mortality, maternal and child health, awareness and behaviours regarding HIV/AIDS and other sexually transmitted infections, and prevalence of HIV.

The Zambia Statistics Agency wishes to express its appreciation to those involved in the implementation of the 2018 ZDHS through financial and technical support.

Particular thanks go to the following:

- The U.S. Agency for International Development in Zambia, for providing the funding for organising and conducting the 2018 Zambia DHS;
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- ICF, for providing technical support, training of fieldwork staff, consultations, recommendations, and analyses of the data collected.

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Above all, we appreciate the cooperation of all of the survey respondents countrywide who have made the 2018 ZDHS a success.

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ACRONYMS AND ABBREVIATIONS

ACT	Artemisinin-based combination therapy
AIDS	Acquired immune deficiency syndrome
ANC	Antenatal care
ARI	Acute respiratory infection
ART	Antiretroviral therapy
ARVs	Antiretroviral drugs
BCG	Bacille Calmette-Guérin
CAPI	Computer-assisted personal interviewing
CDC	Centers for Disease Control and Prevention
CI	Confidence interval
CPH	Census of Population and Housing
CPR	Contraceptive prevalence rate
CSAs	Census supervisory areas
CSO	Central Statistical Office
CSPro	Censuses and Survey Processing
DBS	Dried blood spot
DFID	Department for International Development
DHS	Demographic and Health Survey
DPT	Diphtheria, pertussis, and tetanus vaccine
EA	Enumeration area
EIA	Enzyme immunoassay
ELISA	Enzyme-linked immunosorbent assay
eMTCT	Elimination of mother-to-child transmission
EPI	Expanded Programme on Immunisation
GAR	Gross attendance ratio
GBV	Gender-based violence
GF	Global Fund
GFR	General fertility rate
GPI	Gender parity index
HepB	Hepatitis B
Hib	*Haemophilus influenzae* type b
HIV	Human immunodeficiency virus
ICF	ICF (originally, Inner City Fund)
IMCI	Integrated management of childhood illnesses
IPTp	Intermittent preventive treatment for malaria in pregnancy
IPV	Inactivated polio vaccine
IQC	Internal quality control
IRBs	Institutional review boards
IRS	Indoor residual spraying
ITN	Insecticide-treated net
IUD	Intrauterine device
IYCF	Infant and young child feeding

LAM	Lactational amenorrhoea
LLIN	Long-lasting insecticidal net
LPG	Liquid petroleum gas
MGCD	Ministry of Gender and Child Development
MHA	Ministry of Home Affairs
MMR	Maternal mortality ratio
MNDP	Ministry of National Development Planning
MOH	Ministry of Health
MR	Measles and rubella
MTCT	Mother-to-child transmission
MWDSEP	Ministry of Water Development, Sanitation, and Environmental Protection
NAC	National AIDS Council
NAR	Net attendance ratio
NMEC	National Malaria Elimination Centre
OPV	Oral polio vaccine
ORS	Oral rehydration salts
ORT	Oral rehydration therapy
PCV	Pneumococcal vaccine
PEPFAR	U.S. President's Emergency Plan for AIDS Relief
PLHIV	People living with HIV
PRMR	Pregnancy-related mortality ratio
RDT	Rapid diagnostic testing
RHF	Government-recommended homemade fluids
RR	Risk ratio
RV	Rotavirus vaccine
SD	Standard deviation
SDGs	Sustainable Development Goals
SDM	Standard days method
SE	Standard error
SEA	Standard enumeration areas
SP	Sulfadoxine-pyrimethamine
STI	Sexually transmitted infection
TDRC	Tropical Diseases Research Centre
TFR	Total fertility rate
TOT	Training of trainers
UNAIDS	Joint United Nations Programme on HIV and AIDS
UNFPA	United Nations Population Fund
UNZA	University of Zambia
USAID	United States Agency for International Development
UTH-VL	University Teaching Hospital Virology Laboratory
VAD	Vitamin A deficiency
VIP	Ventilated improved pit latrine
WHO	World Health Organization
ZAMSTATS	Zambia Statistics Agency (formerly CSO)
ZDHS	Zambia Demographic and Health Survey

SUSTAINABLE DEVELOPMENT GOAL INDICATORS

Zambia DHS 2018

Indicator	Sex		Total	DHS table number
	Male	Female		
2. Zero hunger				
2.2.1 Prevalence of stunting among children under 5 years of age	38.3	31.0	34.6	11.1
2.2.2 Prevalence of malnutrition among children under 5 years of age	10.2	8.7	9.5[a]	na
a) Prevalence of wasting among children under 5 years of age	4.8	3.7	4.2[a]	11.1
b) Prevalence of overweight among children under 5 years of age	5.4	5.0	5.2[a]	11.1
3. Good health and well-being				
3.1.1 Maternal mortality ratio[1]	na	na	252	15.4
3.1.2 Proportion of births attended by skilled health personnel	na	na	80.4	9.6
3.2.1 Under-5 mortality rate[2]	67	53	61	8.2
3.2.2 Neonatal mortality rate[2]	33	22	27	8.2
3.7.1 Proportion of women of reproductive age (aged 15-49 years) who have their need for family planning satisfied with modern methods	na	66.2	na	7.13.2
3.7.2 Adolescent birth rates per 1,000 women				5.1
a) Girls aged 10-14 years[3]	na	3	na	5.1
b) Women aged 15-19 years[4]	na	135	na	5.1
3.a.1 Age-standardized prevalence of current tobacco use among persons aged 15 years and older[5]	18.5	0.9	9.7[a]	3.10.1, 3.10.2
3.b.1 Proportion of the target population covered by all vaccines included in their national programme				
a) Coverage of DPT containing vaccine (3rd dose)[6]	91.6	92.6	92.1	10.3
b) Coverage of measles containing vaccine (2nd dose)[7]	66.5	61.2	63.8	10.3
c) Coverage of pneumococcal conjugate vaccine (last dose in schedule)[8]	89.7	89.9	89.8	10.3
5. Gender equality				
5.2.1 Proportion of ever-partnered women and girls aged 15 years and older subjected to physical, sexual or psychological violence by a current or former intimate partner in the previous 12 months[9,10]	na	32.3	na	17.12
a) Physical violence	na	21.1	na	17.12
b) Sexual violence	na	10.8	na	17.12
c) Psychological violence	na	22.6	na	17.12
5.3.1 Proportion of women aged 20-24 years who were married or in a union before age 15 and before age 18				4.3
a) Before age 15	na	5.2	na	4.3
b) Before age 18	na	29.0	na	4.3
5.6.1 Proportion of women aged 15-49 years who make their own informed decisions regarding sexual relations, contraceptive use and reproductive health care[11]	na	46.5	na	na
5.b.1 Proportion of individuals who own a mobile telephone[12]	65.7	53.0	59.3[a]	15.7.1, 15.7.2

	Residence			
	Urban	Rural	Total	
7. Affordable clean energy				
7.1.1 Proportion of population with access to electricity	70.6	8.1	32.8	2.4
7.1.2 Proportion of population with primary reliance on clean fuels and technology[13]	18.0	1.5	8.0	2.4

	Sex			
	Male	Female	Total	
8. Decent work and economic growth				
8.10.2 Proportion of adults (15 years and older) with an account at a bank or other financial institution or with a mobile-money-service provider[14]	17.6	10.8	14.2[a]	15.7.1, 15.7.2
16. Peace, justice, and strong institutions				
16.9.1 Proportion of children under 5 years of age whose births have been registered with a civil authority	14.1	14.0	14.0	2.11
17. Partnerships for the goals				
17.8.1 Proportion of individuals using the Internet[15]	26.0	12.1	19.0[a]	3.5

na = Not applicable
[1] Expressed in terms of maternal deaths per 100,000 live births in the 7-year period preceding the survey
[2] Expressed in terms of deaths per 1,000 live births for the 5-year period preceding the survey
[3] Equivalent to the age-specific fertility rate for girls age 10-14 for the 3-year period preceding the survey, expressed in terms of births per 1,000 girls age 10-14
[4] Equivalent to the age-specific fertility rate for women age 15-19 for the 3-year period preceding the survey, expressed in terms of births per 1,000 women age 15-19
[5] Data are not age-standardized and are available for women and men age 15-49 only.
[6] The percentage of children age 12-23 months who received three doses of DPT-HepB-Hib
[7] The percentage of children age 24-35 months who received two doses of measles and rubella vaccine
[8] The percentage of children age 12-23 months who received three doses of pneumococcal vaccine
[9] Data are available for women age 15-49 who have ever been in union only.
[10] In the DHS, psychological violence is termed emotional violence.
[11] Data are available for currently married women who are not pregnant only.
[12] Data are available for women and men age 15-49 only.
[13] Measured as the percentage of the population using clean fuel for cooking.
[14] Data are available for women and men age 15-49 who have and use an account at a bank or other financial institution; information on use of a mobile-money-service provider is not available.
[15] Data are available for women and men age 15-49 who have used the internet in the past 12 months.
[a] The total is calculated as the simple arithmetic mean of the percentages in the columns for males and females.

READING AND UNDERSTANDING TABLES FROM THE 2018 ZAMBIA DEMOGRAPHIC AND HEALTH SURVEY (ZDHS)

The new format of the 2018 ZDHS final report is based on approximately 200 tables of data. For quick reference, they are located at the end of each chapter and can be accessed through links in the pertinent text (electronic version). Additionally, this more reader-friendly version features about 90 figures that clearly highlight trends, subnational patterns, and background characteristics. Large colourful maps display breakdowns for provinces in Zambia. The text has been simplified to highlight key points in bullets and to clearly identify indicator definitions in boxes.

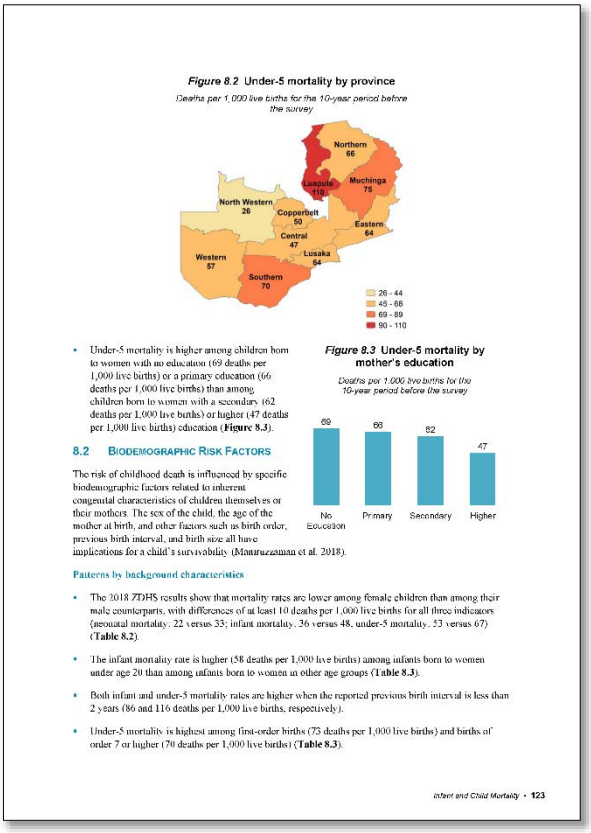

Figure 8.2 Under-5 mortality by province

Deaths per 1,000 live births for the 10-year period before the survey

- Under-5 mortality is higher among children born to women with no education (69 deaths per 1,000 live births) or a primary education (66 deaths per 1,000 live births) than among children born to women with a secondary (62 deaths per 1,000 live births) or higher (47 deaths per 1,000 live births) education (**Figure 8.3**).

Figure 8.3 Under-5 mortality by mother's education

Deaths per 1,000 live births for the 10-year period before the survey

8.2 BIODEMOGRAPHIC RISK FACTORS

The risk of childhood death is influenced by specific biodemographic factors related to inherent congenital characteristics of children themselves or their mothers. The sex of the child, the age of the mother at birth, and other factors such as birth order, previous birth interval, and birth size all have implications for a child's survivability (Mauruzzaman et al. 2018).

Patterns by background characteristics

- The 2018 ZDHS results show that mortality rates are lower among female children than among their male counterparts, with differences of at least 10 deaths per 1,000 live births for all three indicators (neonatal mortality: 22 versus 33; infant mortality: 36 versus 48, under-5 mortality: 53 versus 67) (**Table 8.2**).
- The infant mortality rate is higher (58 deaths per 1,000 live births) among infants born to women under age 20 than among infants born to women in other age groups (**Table 8.3**).
- Both infant and under-5 mortality rates are higher when the reported previous birth interval is less than 2 years (86 and 116 deaths per 1,000 live births, respectively).
- Under-5 mortality is highest among first-order births (75 deaths per 1,000 live births) and births of order 7 or higher (70 deaths per 1,000 live births) (**Table 8.3**).

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The following pages provide an introduction to the organization of ZDHS tables, the presentation of background characteristics, and a brief summary of sampling and understanding denominators. In addition, this section provides some exercises for users as they practice their new skills in interpreting ZDHS tables.

Example 1 – Exposure to Mass Media: Women
A Question Asked of All Survey Respondents

Table 3.4.1 Exposure to mass media: Women 1

Percentage of women age 15-49 who are exposed to specific media on a weekly basis, according to background characteristics, Zambia DHS 2018

3 Background characteristic	Reads a newspaper at least once a week	Watches television at least once a week	Listens to the radio at least once a week	Accesses all three media at least once a week	Accesses none of the three media at least once a week	2 Number of women
Age						
15-19	12.4	36.8	29.5	4.8	47.5	3,000
20-24	10.1	37.9	33.1	4.3	46.0	2,733
25-29	10.4	40.4	37.6	5.2	43.3	2,237
30-34	10.4	43.2	38.4	6.0	42.1	1,862
35-39	10.1	37.3	35.9	5.3	46.2	1,697
40-44	9.2	35.2	36.0	5.4	48.6	1,253
45-49	11.3	28.5	34.9	4.9	52.5	900
Residence						
Urban	14.8	67.0	43.6	9.1	23.8	6,374
Rural	7.1	12.4	26.6	1.5	65.4	7,309
Province						
Central	11.1	30.7	38.6	4.0	46.7	1,165
Copperbelt	14.5	62.8	42.2	8.3	25.4	2,201
Eastern	16.6	19.0	33.7	3.6	51.6	1,605
Luapula	6.2	22.3	43.3	2.6	47.8	1,071
Lusaka	15.2	72.9	43.1	10.7	21.4	2,733
Muchinga	7.5	17.3	31.2	1.7	61.7	754
Northern	4.1	15.4	24.6	1.5	68.4	1,054
North Western	1.0	18.9	11.8	0.4	77.4	718
Southern	5.3	22.8	27.0	2.3	60.9	1,574
Western	9.4	14.4	19.7	2.3	70.7	808
Education						
No education	0.3	12.5	21.9	0.0	72.0	1,054
Primary	4.6	20.4	26.5	0.9	60.9	6,059
Secondary	15.0	54.0	42.0	7.2	31.1	5,816
Higher	40.5	88.5	59.1	28.9	5.8	755
Wealth quintile						
Lowest	4.7	3.3	16.6	0.3	79.0	2,442
Second	6.0	4.6	25.3	0.4	69.8	2,387
Middle	7.3	11.6	30.4	1.3	62.8	2,477
Fourth	8.9	54.1	39.1	4.2	32.1	3,011
Highest	22.4	91.2	52.9	15.4	5.4	3,367
Total 4	10.7	37.8	34.5	5.1	46.0	13,683

5

Step 1: Read the title and subtitle, highlighted in orange in the table above. They tell you the topic and the specific population group being described. In this case, the table is about women age 15-49 and their exposure to different types of media. All eligible female respondents age 15-49 were asked these questions.

Step 2: Scan the column headings—highlighted in green in Example 1. They describe how the information is categorized. In this table, the first three columns of data show different types of media that women access at least once a week. The fourth column shows women who access all three types of media, while the fifth column shows women who do not access any of the three types of media on a weekly basis. The last column lists the number of women age 15-49 interviewed in the survey.

Step 3: Scan the row headings—the first vertical column highlighted in blue in Example 1. These show the different ways the data are divided into categories based on population characteristics. In this case, the table presents women's exposure to media by age, urban-rural residence, province, level of education, and wealth quintile. Most of the tables in the ZDHS report will be divided into these same categories.

Step 4: Look at the row at the bottom of the table highlighted in red. These percentages represent the totals of all women age 15-49 and their weekly access to different types of media. In this case, 10.7%* of women age 15-49 read a newspaper at least once a week, 37.8% watch television at least weekly, and 34.5% listen to the radio on a weekly basis.

Step 5: To find out what percentage of women with higher education listen to the radio on a weekly basis, draw two imaginary lines, as shown on the table. This shows that 59.1% of women age 15-49 with higher education listen to the radio at least once a week.

By looking at patterns by background characteristics, we can see how exposure to mass media varies across Zambia. Mass media are often used to communicate health messages. Knowing how mass media exposure varies among different groups can help programme planners and policymakers determine how to most effectively reach their target populations.

*For the purpose of this document data are presented exactly as they appear in the table including decimal places. However, the text in the remainder of this report rounds data to the nearest whole percentage point.

Practice: Use the table in Example 1 to answer the following questions:

a) What percentage of women in Zambia do not access any of the three media at least once a week?
b) Which age group of women is most likely to watch television at least once a week?
c) Compare women in urban areas to women in rural areas—which group is more likely to read a newspaper at least once a week?
d) What are the lowest and highest percentages (range) of women who do not access any of the three media at least once a week by province?
e) Is there a clear relationship in exposure to newspapers on a weekly basis by education level?
f) Is there a clear relationship in exposure to television on a weekly basis by wealth quintile?

Answers:

a) 46.0%

b) Women age 30-34: 43.2% of women in this age group watch television on a weekly basis.

c) Women in urban areas; 14.8% of urban women read the newspaper at least once a week, compared to 7.1% of rural women.

d) Women with no exposure to media ranges from a low of 21.4% in Lusaka province to a high of 77.4% in North Western province.

e) Yes. Women's exposure to newspapers on a weekly basis increases as a woman's level of education increases; 0.3% of women with no education read the newspaper at least once a week, compared to 40.5% of women with higher education.

f) Yes. Women's exposure to television on a weekly basis increases with household wealth, from 3.3% of women in the poorest households to 91.2% of women in the wealthiest households.

Example 2 – Prevalence and Treatment of Symptoms of ARI

A Question Asked of a Subgroup of Survey Respondents

Table 10.5 Prevalence and treatment of symptoms of ARI 1

Among children under age 5, percentage who had symptoms of acute respiratory infection (ARI) in the 2 weeks preceding the survey, and among children with symptoms of ARI in the 2 weeks preceding the survey, percentage for whom advice or treatment was sought, according to background characteristics, Zambia DHS 2018

Background characteristic	Among children under age 5: Percentage with symptoms of ARI[1]	Among children under age 5: Number of children	Among children under age 5 with symptoms of ARI: Percentage for whom advice or treatment was sought[2]	Among children under age 5 with symptoms of ARI: Percentage for whom treatment was sought same or next day	Among children under age 5 with symptoms of ARI: Number of children
Age in months					
<6	1.1	1,036	*	*	11
6-11	2.3	924	*	*	21
12-23	2.8	1,891	(78.4)	(39.8)	52
24-35	2.0	1,862	(83.0)	(57.1)	38
36-47	1.3	1,866	(74.9)	(47.5)	23
48-59	0.9	1,782	*	*	15
Sex					
Male	1.6	4,666	81.1	38.8	75
Female	1.8	4,695	71.6	41.8	86
Mother's smoking status					
Smokes cigarettes/ tobacco	9.1	70	*	*	6
Does not smoke	1.7	9,291	76.2	40.7	155
Cooking fuel					
Electricity	0.8	646	*	*	5
Solar power	(0.0)	26	*	*	0
Kerosene	*	0	*	*	0
Coal/lignite	*	2	*	*	0
Charcoal	1.2	3,516	(91.4)	(47.5)	43
Wood	2.2	5,169	69.1	36.9	113
Animal dung	*	0	*	*	0
Other	*	1	*	*	0
Residence					
Urban	1.2	3,307	(88.9)	(53.7)	39
Rural	2.0	6,054	71.9	36.1	122
Province					
Central	1.5	819	*	*	12
Copperbelt	0.9	1,166	*	*	10
Eastern	1.4	1,266	*	*	17
Luapula	2.3	877	*	*	21
Lusaka	0.3	1,446	*	*	5
Muchinga	0.8	569	*	*	5
Northern	3.8	846	(56.9)	(27.8)	32
North Western	0.0	517	*	*	0
Southern	3.2	1,242	*	*	39
Western	3.3	613	(84.2)	(33.9)	20
Mother's education					
No education	2.1	951	*	*	20
Primary	1.6	4,763	64.4	26.5	78
Secondary	1.8	3,276	(87.7)	(52.7)	59
Higher	1.2	371	*	*	5
Wealth quintile					
Lowest	2.4	2,343	69.4	35.5	57
Second	1.9	2,079	(79.7)	(41.0)	40
Middle	1.2	1,735	(59.7)	(28.9)	21
Fourth	1.4	1,733	*	*	25
Highest	1.2	1,469	*	*	18
Total	1.7	9,361	76.0	40.4	161

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Symptoms of ARI include short, rapid breathing that is chest-related and/or difficult breathing that is chest-related.
[2] Includes advice or treatment from the public and private health sectors, pharmacies, shops, markets, and itinerant drug seller. Excludes advice or treatment from a traditional practitioner.

Step 1: Read the title and subtitle. In this case, the table is about two separate groups of children: all children under age 5 (a) and children under age 5 with symptoms of acute respiratory infection (ARI) in the 2 weeks before the survey (b).

Step 2: Identify the two panels. First, identify the columns that refer to all children under age 5 (a), and then isolate the columns that refer only to children under age 5 with symptoms of ARI in the 2 weeks before the survey (b).

Step 3: Look at the first panel. What percentage of children under age 5 had symptoms of ARI in the 2 weeks before the survey? It's 1.7%. Now look at the second panel. How many children under age 5 are there who had symptoms of ARI in the 2 weeks before the survey? It's 161 children, or 1.7% of the 9,361 children under age 5 (with rounding). The second panel is a subset of the first panel.

Step 4: Only 1.7% of children under 5 had symptoms of ARI in the 2 weeks before the survey. Once these children are further divided into the background characteristic categories, there may be too few cases for the percentages to be reliable.

- Among children under age 5 with symptoms of ARI in the 2 weeks before the survey in urban areas, what percentage of children under age 5 had treatment or advice sought? It's 88.9%. This percentage is in parentheses because there are between 25 and 49 cases (unweighted) in this category. Readers should use this number with caution—it may not be reliable. (For more information on weighted and unweighted numbers, see Example 3.)
- Among children under age 5 with symptoms of ARI in the 2 weeks before the survey, what percentage of children in Central province had treatment or advice sought? There is no number in this cell—only an asterisk. This is because fewer than 25 children under age 5 who had recent symptoms of ARI in Central province had advice or treatment sought. Results for this group are not reported. The subgroup is too small, and therefore the data are not reliable.

Note: When parentheses or asterisks are used in a table, the explanation will be noted under the table. If there are no parentheses or asterisks in a table, you can proceed with confidence that enough cases were included in all categories that the data are reliable.

Example 3 – Understanding Sampling Weights in ZDHS Tables

A sample is a group of people who have been selected for a survey. In the ZDHS, the sample is designed to represent the national population age 15-49. In addition to national data, most countries want to collect and report data on smaller geographical or administrative areas. However, doing so requires a large enough sample size in each area. For the 2018 ZDHS, the survey sample is representative at the national and provincial levels, and for urban and rural areas.

To generate statistics that are representative of the country as a whole and the 10 provinces, the number of women surveyed in each province should contribute to the size of the total (national) sample in proportion to size of the province. However, if some provinces have small populations, then a sample allocated in proportion to each province's population may not include sufficient women from each province for analysis. To solve this problem, provinces with small populations are oversampled. For example, let's say that you have enough money to interview 13,683 women and want to produce results that are representative of Zambia as a whole and its provinces (as in modified Table 3.1). However, the total population of Zambia is not evenly distributed among the provinces: some provinces, such as Lusaka, are heavily populated while others, such as North Western, are not. Thus, North Western must be oversampled.

Table 3.1 Background characteristics of respondents

Percent distribution of women age 15-49 by selected background characteristics, Zambia DHS 2018

	Women		
Background characteristic	Weighted percent	Weighted number	Unweighted number
Province	3	2	1
Central	8.5	1,165	1,397
Copperbelt	16.1	2,201	1,615
Eastern	11.7	1,605	1,536
Luapula	7.8	1,071	1,414
Lusaka	20.0	2,733	1,775
Muchinga	5.5	754	1,183
Northern	7.7	1,054	1,239
North Western	5.2	718	1,081
Southern	11.5	1,574	1,347
Western	5.9	808	1,096
Total 15-49	100.0	13,683	13,683

A sampling statistician determines how many women should be interviewed in each province in order to get reliable statistics. The **blue column (1)** in the table at the right shows the actual number of women interviewed in each province. Within the provinces, the number of women interviewed ranges from 1,081 in North Western to 1,775 in Lusaka. The number of interviews is sufficient to get reliable results in each province.

With this distribution of interviews, some provinces are overrepresented and some provinces are underrepresented. For example, the population in Lusaka is about 20% of the population in Zambia, while North Western's population contributes only 5% of the population in Zambia. But as the blue column shows, the number of women interviewed in Lusaka accounts for only about 13% of the total sample of women interviewed (1,775/13,683) and the number of women interviewed in North Western accounts for 8% of women interviewed (1,081/13,683). This unweighted distribution of women does not accurately represent the population.

In order to get statistics that are representative of Zambia, the distribution of the women in the sample needs to be weighted (or mathematically adjusted) such that it resembles the true distribution in the country. Women from a small province, like North Western, should only contribute a small amount to the national total. Women from a large province, like Lusaka, should contribute much more. Therefore, DHS statisticians mathematically calculate a "weight" that is used to adjust the number of women from each province so that each province's contribution to the total is proportional to the actual population of the province. The numbers in the **purple column (2)** represent the "weighted" values. The weighted values can be smaller or larger than the unweighted values at province level. The total national sample size of 13,683 women has not changed after weighting, but the distribution of the women in the provinces has been changed to represent their contribution to the total population size.

How do statisticians weight each category? They take into account the probability that a woman was selected in the sample. If you were to compare the **green column (3)** to the actual population distribution

of Zambia, you would see that women in each province are contributing to the total sample with the same weight that they contribute to the population of the country. The weighted number of women in the survey now accurately represents the proportion of women who live in Lusaka and the proportion of women who live in North Western.

With sampling and weighting, it is possible to interview enough women to provide reliable statistics at national and provincial levels. In general, only the weighted numbers are shown in each of the ZDHS tables, so don't be surprised if these numbers seem low: they may actually represent a larger number of women interviewed.

ZAMBIA

N
TANZANIA
DRC
Luapula
Northern
Muchinga
ANGOLA
North Western
Copperbelt
MALAWI
Eastern
Central
MOZAMBIQUE
Lusaka
Western
Southern
ZIMBABWE
NAMIBIA
0
125
250
500
Kilometre
BOTSWANA

INTRODUCTION AND SURVEY METHODOLOGY 1

The 2018 Zambia Demographic and Health Survey (ZDHS) was implemented by the Zambia Statistics Agency (ZamStats) in collaboration with the Ministry of Health (MOH). Data collection took place from 18 July 2018 to 24 January 2019. ICF provided technical assistance through The DHS Program, which is funded by the United States Agency for International Development (USAID) and offers financial support and technical assistance for population and health surveys in countries worldwide. Other agencies and organisations that facilitated the successful implementation of the survey through technical or financial support were the Global Fund (GF), the Department for International Development (DFID) in Zambia, and the United Nations Population Fund (UNFPA).

1.1 SURVEY OBJECTIVES

The primary objective of the 2018 ZDHS was to provide up-to-date estimates of basic demographic and health indicators. Specifically, the ZDHS collected information on:

- Fertility levels and preferences; contraceptive use; maternal and child health; infant, child, and neonatal mortality levels; maternal mortality; and gender, nutrition, and awareness regarding HIV/AIDS and other health issues relevant to the achievement of the Sustainable Development Goals (SDGs)
- Ownership and use of mosquito nets as part of the national malaria eradication programmes
- Health-related matters such as breastfeeding, maternal and childcare (antenatal, delivery, and postnatal), children's immunisations, and childhood diseases
- Anaemia prevalence among women age 15-49 and children age 6-59 months
- Nutritional status of children under age 5 (via weight and height measurements)
- HIV prevalence among men age 15-59 and women age 15-49 and behavioural risk factors related to HIV
- Assessment of situation regarding violence against women

The information collected through the ZDHS is intended to assist policymakers and programme managers in evaluating and designing programmes and strategies for improving the health of the country's population.

1.2 SAMPLE DESIGN

The sampling frame used for the 2018 ZDHS is the Census of Population and Housing (CPH) of the Republic of Zambia, conducted in 2010 by ZamStats. Zambia is divided into 10 provinces. Each province is subdivided into districts, each district into constituencies, and each constituency into wards. In addition to these administrative units, during the 2010 CPH each ward was divided into convenient areas called census supervisory areas (CSAs), and in turn each CSA was divided into enumeration areas (EAs). An enumeration area is a geographical area assigned to an enumerator for the purpose of conducting a census count; according to the Zambian census frame, each EA consists of an average of 110 households.

The current version of the EA frame for the 2010 CPH was updated to accommodate some changes in districts and constituencies that occurred between 2010 and 2017. The list of EAs incorporates census

information on households and population counts. Each EA has a cartographic map delineating its boundaries, with identification information and a measure of size, which is the number of residential households enumerated in the 2010 CPH. This list of EAs was used as the sampling frame for the 2018 ZDHS.

The 2018 ZDHS followed a stratified two-stage sample design. The first stage involved selecting sample points (clusters) consisting of EAs. EAs were selected with a probability proportional to their size within each sampling stratum. A total of 545 clusters were selected.

The second stage involved systematic sampling of households. A household listing operation was undertaken in all of the selected clusters. During the listing, an average of 133 households were found in each cluster, from which a fixed number of 25 households were selected through an equal probability systematic selection process, to obtain a total sample size of 13,625 households. Results from this sample are representative at the national, urban and rural, and provincial levels.

All women age 15-49 and men age 15-59 who were either permanent residents of the selected households or visitors who stayed in the households the night before the survey were eligible to be interviewed.

1.3 QUESTIONNAIRES

Four questionnaires were used in the 2018 ZDHS: the Household Questionnaire, the Woman's Questionnaire, the Man's Questionnaire, and the Biomarker Questionnaire. The questionnaires, based on The DHS Program's Model Questionnaires, were adapted to reflect the population and health issues relevant to Zambia. Input on questionnaire content was solicited from various stakeholders representing government ministries and agencies, nongovernmental organisations, and international cooperating partners. After all questionnaires were finalised in English, they were translated into seven local languages: Bemba, Kaonde, Lozi, Lunda, Luvale, Nyanja, and Tonga. In addition, information about the fieldworkers for the survey was collected through a self-administered Fieldworker Questionnaire.

The Household Questionnaire listed all members of and visitors to selected households. Basic demographic information was collected on each person listed, including age, sex, marital status, education, and relationship to the head of the household. For children under age 18, parents' survival status was determined. The data on age and sex of household members were used to identify women and men eligible for individual interviews. The Household Questionnaire also collected information on characteristics of the household, such as source of water; type of toilet facilities; materials used for flooring, external walls, and roofing; ownership of various household goods; and ownership and use of mosquito nets. In addition, all households were eligible to have their salt tested for the presence of iodine. However, due to an uneven distribution of the two types of salt test kits among the fieldworkers, the tests were not uniformly applied, thus compromising the reliability of the results. Accordingly, the results are not included in this report.

The Woman's Questionnaire was used to collect information from all eligible women age 15-49. These women were asked questions on the following topics:

- Background characteristics (including age, education, and media exposure)
- Reproduction and child mortality
- Contraception
- Antenatal, delivery, and postnatal care
- Vaccinations and childhood illnesses
- Maternal and child health and nutrition
- Marriage and sexual activity
- Fertility preferences
- Women's work and husbands' background characteristics
- Knowledge, awareness, and behaviour regarding HIV/AIDS and other sexually transmitted infections (STIs)

- Knowledge, attitudes, and behaviour related to other health issues (e.g., injections, smoking, childhood illnesses, and pregnancy and childbirth)
- Fistula
- Adult and maternal mortality
- Domestic violence
- Women's empowerment

The Man's Questionnaire was used to collect information from all eligible men age 15-59. These men were asked questions on the following topics:

- Background characteristics
- Reproduction
- Contraception
- Marriage and sexual activity
- Fertility preferences
- Employment and gender roles
- HIV/AIDS
- Other health issues

The Biomarker Questionnaire was used to record the results of anthropometry measurements and haemoglobin and HIV testing. The signature of the fieldworker (biomarker technician) who conducted the testing was included on the questionnaire.

The Fieldworker Questionnaire collects data on the basic characteristics of fieldworkers and can serve as a tool in conducting analyses of data quality. Fieldworkers filled out a two-page self-administered questionnaire on their general background characteristics. ZamStats distributed and collected this questionnaire before the fieldworkers entered the field. No personal identifiers were attached to the ZDHS fieldworkers' data files.

The Household, Woman's, and Man's Questionnaires were programmed into tablet computers to facilitate computer-assisted personal interviewing (CAPI) for data collection purposes, with the capability to choose any of the eight specified languages for each questionnaire. The Biomarker Questionnaire was completed on paper during data collection and then entered into the CAPI system in the field before the data collection teams completed each cluster.

The protocols for survey methodology, biomarker measurements, and all instruments were approved by institutional review boards (IRBs) at ICF and the Tropical Diseases Research Centre (TDRC) in Zambia. Both IRBs approved the protocols before the commencement of data collection activities.

1.4 ANTHROPOMETRY, ANAEMIA TESTING, AND HIV TESTING

The 2018 ZDHS incorporated three biomarkers: anthropometry, haemoglobin testing, and HIV testing. All data related to the coverage of the anthropometric measures and the results of the haemoglobin and HIV testing were recorded in the Biomarker Questionnaire. HIV testing was conducted via two methods: rapid diagnostic testing (RDT), which provided respondents with immediate feedback regarding their HIV status, and collection of dried blood spot (DBS) samples. After collection, the DBS samples were sent to a central laboratory for testing, where they were used to produce a national HIV prevalence estimate.

1.4.1 Anthropometry Measurements

In all households, height and weight measurements were recorded for children age 0-59 months. Weight measurements were obtained using lightweight, electronic SECA 878 scales with a digital screen and the mother and child function. Height measurements were carried out with measuring boards made by Shorr

Productions. Children younger than age 24 months were measured while lying down (recumbent) on the board, while standing height was measured for children older than 24 months.

1.4.2 Anaemia Testing

Blood specimens were collected from all children age 6-59 months and women age 15-49 who consented to testing for anaemia. A consent statement was read to all eligible respondents. This statement explained the purpose of the test, informed them that the results would be made available as soon as the test was completed, and requested permission for the test to be carried out. For young women age 15-17 who had never been married, the consent of a parent or guardian was sought first, followed by their assent. For children age 6-59 months, consent was provided by a parent or guardian.

Blood samples were drawn from a finger prick (or a heel prick for young children with small fingers or children less than 12 months old) by pricking the finger or heel with a retractable, safety lancet and the third blood drop was collected in a microcuvette for haemoglobin measurement. Haemoglobin analysis was carried out on-site using a battery-operated portable HemoCue 201+ analyser, which produces a result in less than 1 minute. Results were given verbally and in writing to the child's parents/guardians. Parents of children with a haemoglobin level below 7 g/dl were given a referral form with the haemoglobin level indicated and advised to take the child to a health facility for follow-up care. Likewise, non-pregnant women and pregnant women were also given referral forms and referred for follow-up care at a health facility if their haemoglobin levels were below 7 g/dl and 9 g/dl, respectively. All households in which anthropometry measurements, anaemia testing, or both were conducted were given a brochure explaining the causes of and ways to prevent anaemia.

Lancets and other supplies and equipment used during sample collection (a HemoCue microcuvette, gloves, gauze, alcohol swab, bandage packaging, and waste collection bag) were disposed of safely, usually by taking the materials to a nearby health facility that uses proper protocols for the disposal of biohazardous waste.

1.4.3 HIV Testing

All women and men interviewed with the individual questionnaires were eligible for HIV testing. The survey featured a parallel system for HIV testing in which a rapid diagnostic testing algorithm was performed in the household for respondents who wished to be informed of their status, and DBS specimens were collected and transported to a central lab for anonymised testing. HIV prevalence for the survey was based on the laboratory test results.

The national RDT algorithm in Zambia at the time of the 2018 ZDHS implementation consisted of a screening test (Determine® HIV 1/2) followed by confirmation of reactive specimens with a second rapid test (Uni-gold HIV 1/2). To test respondents via RDT, a blood sample was collected directly from a finger prick using a sample collection device supplied with the RDT kit.

Dedicated nurse counsellors who provided pre- and post-test counselling conducted the HIV rapid testing. Pre-test counselling included explanations of HIV infection and transmission, the meaning of test results, risks associated with sexual behaviours, and how to prevent and treat HIV and other sexually transmitted infections. Post-test counselling messages were tailored to participants' HIV results and risk profiles.

Testing and delivery of results at home were done after creating conditions that would guarantee the confidentiality of respondents. All participants with HIV-seropositive or indeterminate results were referred to the nearest health facility for further care and treatment.

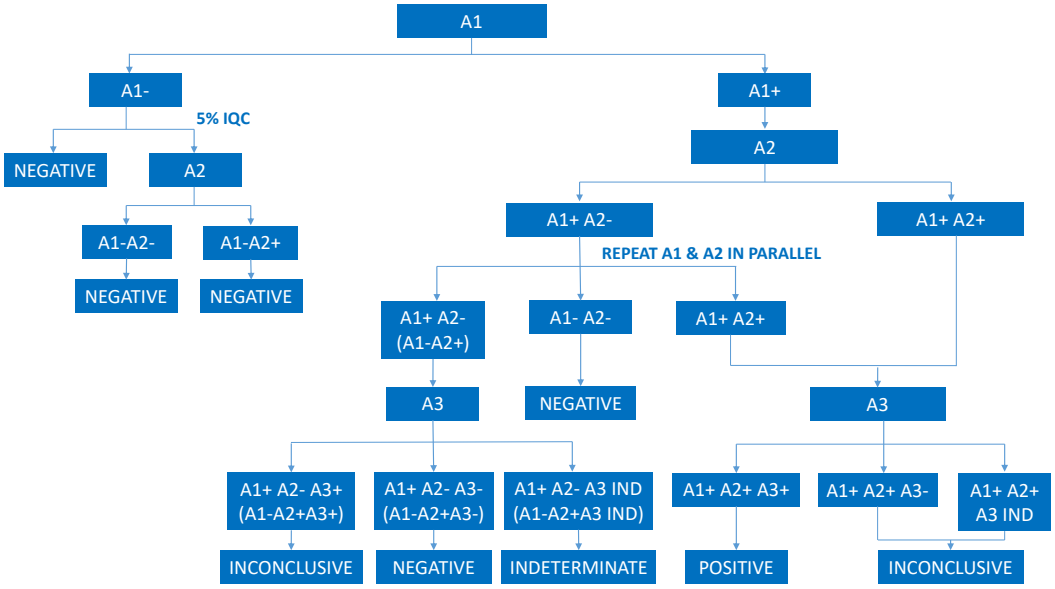
For the purposes of HIV testing in the central lab using DBS samples, at the time of collection of the blood sample, a unique and random barcoded identification number was assigned to each participant who consented to testing. Sheets of peel-off labels with the unique barcodes were pre-printed for use in the

field. Matching barcode labels were affixed to the Biomarker Questionnaire, a fresh filter paper card, and a blood sample transmittal sheet. Respondents were also asked whether they would consent to having the laboratory store their blood sample for future testing. If respondents did not consent to additional testing of their blood sample in the future, their refusal was recorded on the Biomarker Questionnaire and on the filter paper card.

Blood samples were dried overnight and packaged for storage the following morning. Approximately every 2 weeks, or more frequently, all DBS samples and transmittal sheets from the clusters were collected from teams in the field by fieldwork monitors or provincial coordinators and transported to the University Teaching Hospital Virology Laboratory (UTH-VL) for registration and processing. Each specimen was then assigned a unique serial laboratory number during the registration process at the laboratory before being stored in a freezer at a temperature of at least -20°C. Before samples were tested, all personal identifiers were removed from the data file.

Laboratory HIV testing of DBS samples was guided by the testing algorithm shown in **Figure 1.1**, which was agreed upon by ICF and the laboratory. Enzyme immunoassay (EIA) kits were obtained from different manufacturers and had different antigen preparations. The first testing assay was Bioelisa HIV-1+2 Ag/Ab (Biokit, Spain); the second was Genscreen ULTRA HIV Ag/Ab (Bio-Rad, France). The Geenius HIV 1/2 Supplemental Assay (Bio-Rad, France) was used to confirm the HIV status of all double-EIA positive samples. Five percent of the samples which tested negative on the first assay were retested as part of the internal quality control (IQC).

Figure 1.1 **2018 ZDHS HIV testing algorithm**



1.5 PRETEST

Thirty participants took part in a training session to pretest the ZDHS survey questionnaires both on paper and via CAPI over a 4-week period from 3-28 April 2018 outside of Lusaka District. An additional eight participants attended the biomarker training portion of the pretest, which ran from 16-28 April. The training utilised a variety of different learning tools such as formal lectures, informal discussions on various practice scenarios, videos, and hands-on demonstrations. In addition to the aforementioned training, the biomarker technicians participated in an anthropometry standardisation exercise and a health clinic visit.

From 25-27 April, interviewers and biomarker technicians conducted practice fieldwork to solidify skills learned during pretest training and to provide a simulated fieldwork experience to test survey materials.

The practice occurred in two EAs, one urban and one rural, that were both near the training venue. Each area had 26 selected households, but these were divided in half to create four practice clusters (one for each team) of 13 households. To complete the fieldwork, each interviewer had to complete at least one household interview per day. While the interviewers recorded responses on tablet computers using CAPI, the Biomarker Questionnaires were first filled out on paper and later entered into the CAPI system by the interviewers. At the end of each day, both during and after the pretest fieldwork, debriefing sessions were held and questionnaires were modified based on lessons drawn from the exercise.

1.6 TRAINING OF FIELD STAFF

A training of trainers (TOT) to prepare the master trainers for the main training was conducted from 11-12 June 2018. Fifteen trainers were selected. The trainers, employed through the ZamStats and the MOH, later served as the team supervisors and provincial coordinators during the ZDHS data collection.

ZamStats recruited 123 people, including 24 supervisors and 99 interviewers, to attend the training on the questionnaire content. The training consisted of lectures, demonstrations, and practice interviews. Fifty-three biomarker technicians attended a parallel training course on conducting biomarker tests.

The main fieldwork training, conducted from 13 June to 9 July 2018, was led by the master trainers and backstopped by staff from The DHS Program. Sessions discussed concepts, procedures, and methodologies related to conducting the survey, and participants were guided through the questionnaires both on paper and in CAPI. The training included presentations, lectures, hands-on exercises, mock interviews, role-plays, group work, and quizzes. In addition, subject specialists from the MOH were invited to make short presentations on programmes in Zambia that provide services in the areas of family planning and reproductive health, HIV/AIDS and other STIs, childhood immunisation, child health and nutrition, and fistula.

The biomarker classroom portion of the training commenced on 18 June and continued through 9 July. This training was led by staff from The DHS Program with the assistance of staff members from ZamStats, MOH, TDRC, and UTH-VL. Biomarker training included classroom instruction that focused on anthropometry measurements, anaemia and HIV testing, appropriate procedures for obtaining informed consent, recording of information in the Biomarker Questionnaire, reporting test results back to respondents with referrals as needed, and pre- and post-test HIV counselling. The facilitators used learning tools similar to those used during the pretest, including an anthropometry standardisation exercise, a health clinic visit, and 3 days of field practice.

Throughout the training, each individual's performance was evaluated. Those determined to be capable of successfully conducting the tests were placed on teams as supervisors, interviewers, or biomarker technicians. The supervisors received additional training covering their roles and responsibilities, including how they should organise fieldwork, monitor interviews, and conduct quality control checks on both paper and CAPI questionnaires.

From 6-8 July, interviewers and biomarker technicians conducted practice fieldwork to solidify skills learned during the training and provide a simulated fieldwork experience to test the survey materials. The practice occurred in six EAs, three in the urban locality of Chawama and three in the rural locality of Shimabala. Each area contained 52 selected households, but areas were divided into four mini-clusters of 13 households (creating 24 mini-clusters).

To complete the practice fieldwork, each interviewer had to complete at least one household per day. All of the interviewers and supervisors had the opportunity to practice household and individual interviews, while the biomarker technicians practiced testing and measuring eligible household members.

1.7 FIELDWORK

Data collection was carried out from 17 July 2018 to 24 January 2019 by 22 teams, with each team consisting of seven members typically featuring the following composition: one supervisor, three female interviewers, one male interviewer, and two biomarker technicians.

Fieldwork monitoring was an integral part of the ZDHS. Senior technical staff from ZamStats, the Department of Population Studies at the University of Zambia (UNZA), UTH-VL, and TDRC visited teams regularly to review their work and monitor data quality. ZamStats organised three groups of fieldwork monitors. The first group consisted of 10 provincial coordinators, each responsible for supervising the work of the teams in one province. They helped teams resolve any issues that arose in accessing clusters or while conducting their work, and they supported the technical work of the interviewers. The second group consisted of five biomarker monitors, each responsible for two provinces, who supervised the work of the biomarker technicians. The final supervisory group consisted of three information technology (IT) staff, who were deployed to teams on an as-needed basis to resolve CAPI-related issues. Three staff members from The DHS Program each independently visited teams to monitor data collection and biomarker collection. These visits occurred 17-21 July, 17 September-1 October, and 2-5 October 2018.

During field visits, monitors provided the teams they visited with critical feedback to improve their performance. All monitors used the ZDHS field-check tables, based on data from the completed clusters, to illustrate problems specific to each team visited.

1.8 DATA PROCESSING

All electronic data files were transferred via a secure internet file streaming system to the ZamStats central office in Lusaka, where they were stored on a password-protected computer. The data processing operation included secondary editing, which required resolution of computer-identified inconsistencies and coding of open-ended questions. The data were processed by two IT specialists and one secondary editor who took part in the main fieldwork training; they were supervised remotely by staff from The DHS Program. Data editing was accomplished using CSPro software. During the fieldwork, field-check tables were generated to check various data quality parameters, and specific feedback was given to the teams to improve performance. Secondary editing and data processing were initiated in July 2018 and completed in March 2019.

1.9 RESPONSE RATES

Table 1.1 shows response rates for the 2018 ZDHS. Of the 13,595 households in the sample, 12,943 were occupied. Of these occupied households, 12,831 were successfully interviewed, yielding a response rate of 99%.

In the interviewed households, 14,189 women age 15-49 were identified as eligible for individual interviews; 13,683 women were interviewed, yielding a response rate of 96% (the same rate achieved in the 2013-14 survey). A total of 13,251 men were eligible for individual interviews; 12,132 of these men were interviewed, producing a response rate of 92% (a 1 percentage point increase from the previous survey).

Of the households successfully interviewed, 12,505 were interviewed in 2018 and 326 in 2019. As the large majority of households were interviewed in 2018 and the year for reference indicators is 2018, this report is considered the 2018 ZDHS.

Table 1.1 Results of the household and individual interviews

Number of households, number of interviews, and response rates, according to residence (unweighted), Zambia DHS 2018

Result	Residence		Total
	Urban	Rural	
Household interviews			
Households selected	4,944	8,651	13,595
Households occupied	4,768	8,175	12,943
Households interviewed	4,714	8,117	12,831
Household response rate[1]	98.9	99.3	99.1
Interviews with women age 15-49			
Number of eligible women	5,766	8,423	14,189
Number of eligible women interviewed	5,513	8,170	13,683
Eligible women response rate[2]	95.6	97.0	96.4
Interviews with men age 15-59			
Number of eligible men	5,078	8,173	13,251
Number of eligible men interviewed	4,498	7,634	12,132
Eligible men response rate[2]	88.6	93.4	91.6

[1] Households interviewed/households occupied
[2] Respondents interviewed/eligible respondents

HOUSING CHARACTERISTICS AND HOUSEHOLD POPULATION

2

Key Findings

- ***Drinking water:*** In Zambia, 72% of households have access to an improved water source.
- ***Sanitation:*** Fifty-four percent of households have access to improved sanitation.
- ***Electricity:*** Thirty-four percent of households have electricity (69% in urban areas and 8% in rural areas).
- ***Household population and composition:*** The Zambian population is relatively young; almost half of the population (48%) is age 0-14, while only 3% is age 65 or older.

Information on the socioeconomic characteristics of the household population in the 2018 ZDHS provides a context to interpret demographic and health indicators and can furnish an approximate indication of the representativeness of the survey. In addition, this information sheds light on the living conditions of the population.

This chapter presents information on sources of drinking water, sanitation, exposure to smoke inside the home, wealth, handwashing, household population and composition, educational attainment, school attendance, birth registration, and family living arrangements.

2.1 HOUSING CHARACTERISTICS

2.1.1 Drinking Water Sources and Treatment

Improved sources of drinking water

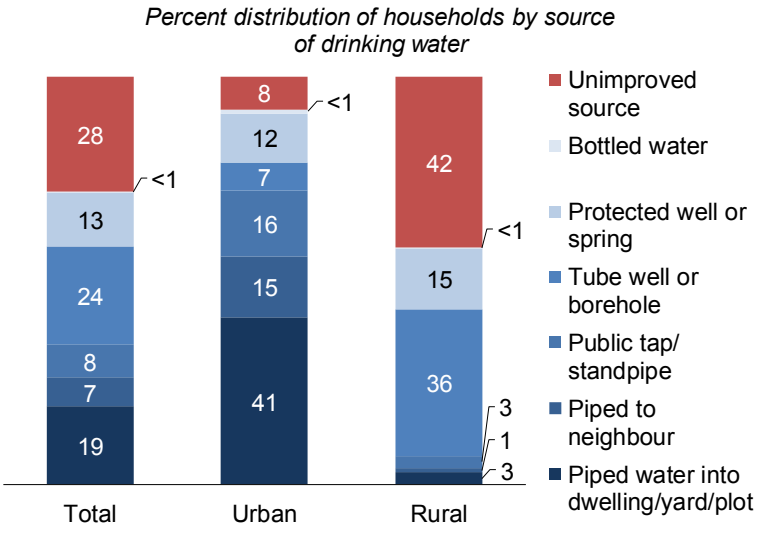
Include piped water, public taps, standpipes, tube wells, boreholes, protected dug wells and springs, rainwater, water delivered via a tanker truck or a cart with a small tank, and bottled water.

Sample: Households

In Zambia, 72% of households have access to an improved water source, although access is more predominant in urban (92%) than rural (58%) households (**Table 2.1.1**). The most common sources of drinking water in urban households are water piped into the household's dwelling, yard, or plot (41%); water from a public tap or standpipe (16%); and water piped to a neighbour (15%). Rural households obtain their drinking water mainly from tube wells or boreholes (36%), followed by protected dug wells (14%). **Figure 2.1** shows that 42% of rural households obtain their drinking water from an unimproved water source, as compared with 8% of urban households. The percentage of households with an unimproved source of drinking water decreases with increasing wealth (**Table 2.1.2**).

Trends: The percentage of households with an improved source of drinking water has increased over time, from 63% in 1992 to 72% in 2018.

Figure 2.1 **Household drinking water by residence**



Basic drinking water service

Is from an improved source, provided either water is on the premises or round-trip collection time is 30 minutes or less.

Sample: De jure population

Limited drinking water service

Is from an improved source, provided round-trip collection time is more than 30 minutes.

Sample: De jure population

Sixty-four percent of Zambia's population has basic drinking water service, while 6% has limited drinking water service (**Table 2.1.2**). Access to basic drinking water service varies widely by province, from 36% in Northern to 91% in Lusaka. Access to basic drinking water service increases with rising wealth; however, there is no clear association between household wealth and limited drinking water service.

Table 2.1.3 shows that 65% of de jure residents do not treat their drinking water (45% in urban areas and 78% in rural areas). Thirty-five percent of residents (54% in urban areas and 22% in rural areas) use an appropriate treatment method such as boiling, bleaching, filtering, and solar disinfecting.

2.1.2 Sanitation

Improved toilet facilities

Is a flush/pour flush toilets that flushes the water and waste to a piped sewer system, septic tank, pit latrine, or an unknown destination; a ventilated improved pit (VIP) latrine; a pit latrine with a slab; or a composting toilet

Sample: Households

Basic sanitation service

Use of improved facilities that are not shared with other households.

Sample: De jure population

Limited sanitation service

Use of improved facilities shared by 2 or more households

Sample: De jure population

In Zambia, the Ministry of Water Development, Sanitation and Environmental Protection (MWDSEP) has embarked on the 2018-2021 strategy to improve access to water and sanitation services and improve good hygiene practices among all segments of the population. To that end, MWDSEP will strengthen the implementation of the National Urban and Rural Water Supply and Sanitation Programmes, which involves water supply and sanitation infrastructure development, water quality monitoring, and sanitation and hygiene promotion. The target of these efforts is to provide access to basic sanitation to 70% of the urban population and 55% of the rural population by December 2021 (MWDSEP 2018).

The 2018 ZDHS results showed that 33% of the population has basic sanitation service, 41% in urban areas and 28% in rural areas (**Table 2.3.1**). Fifty-four percent of households have access to an improved sanitation facility, with the most commonly used facility being a pit latrine with a slab (37%).

Patterns by background characteristics

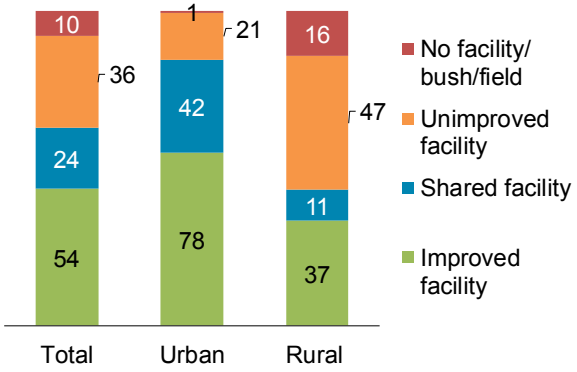
- By province, the proportion of the population with improved sanitation facilities varies from a high of 80% in Lusaka to a low of 6% in Western. The proportion of the population engaging in open defection is highest in Western (50%) and lowest in Copperbelt, Lusaka, and Northern (1% each) (**Table 2.3.2**).
- Eighteen percent of the population in the lowest wealth quintile has basic sanitation service, as compared with 65% of the population in the highest wealth quintile.

Figure 2.2 compares the availability of sanitation facilities nationally and by residence. The figure shows that urban households are more likely than rural households to have either improved or shared toilet facilities, while rural households are more likely to have unimproved facilities or no facilities. Overall, 16% of rural households have no toilet facility, as compared with 1% of urban households.

Trends: The proportion of the population with access to improved sanitation increased from 27% in 2013-14 to 54% in 2018.

Figure 2.2 **Household toilet facilities by residence**

Percent distribution of households by type of toilet facilities



2.1.3 Exposure to Smoke inside the Home

Exposure to smoke inside the home, from either cooking with solid fuels or smoking tobacco, has potentially harmful health effects. In Zambia, 25% of households cook inside the home, and 91% use solid fuel for cooking; only 9% of households use clean fuel for cooking. Tobacco is smoked in the home daily in 12% of households (**Table 2.4**).

2.1.4 Other Housing Characteristics

The 2018 ZDHS also collected data on access to electricity, flooring materials, and the number of rooms used for sleeping. Only one in three (34%) households in Zambia have access to electricity (69% of urban households and 8% of rural households). The flooring materials most commonly used are earth or sand (45%) and cement (48%). Usage of these materials varies widely by residence, with 69% of rural households using earth or sand and 81% of urban households using cement (**Table 2.4**).

2.1.5 Household Wealth

Household Durable Goods

Wealth can be measured by number of household durable consumer goods. **Table 2.5** shows information on various household effects, means of transportation, agricultural land, and livestock/farm animals. Urban households are generally more likely to own household effects; for example, 66% of urban households own television sets, as compared with 15% of rural households. However, rural households are more likely to own agricultural land (79%) and farm animals (63%) than urban households (16% and 13%, respectively).

Wealth Index

Wealth index

Households are given scores based on the number and kinds of consumer goods they own, ranging from a television to a bicycle or car, and housing characteristics such as source of drinking water, toilet facilities, and flooring materials. These scores are derived using principal component analysis. National wealth quintiles are compiled by assigning the household score to each usual (de jure) household member, ranking each person in the household population by their score, and then dividing the distribution into five equal categories, each with 20% of the population.

Sample: Households

Table 2.6 presents wealth quintiles according to urban-rural residence and province. The table also includes the Gini coefficient, a measure of disparity in wealth. The Gini coefficient ranges from 0-1, with 0 implying an equal distribution of wealth and 1 implying a totally unequal distribution.

Forty-six percent of the population in urban areas are in the highest wealth quintile, as compared with 3% of the population in rural areas. Nearly two-thirds of the rural population is in either the lowest (33%) or the second lowest (31%) wealth quintile.

By province, Western has the highest percentage of the population in the lowest wealth quintile (47%). Conversely, Lusaka (51%) and Copperbelt (39%) have the highest percentages of the population in the highest wealth quintile (**Table 2.6**).

2.1.6 Handwashing

The interviewers observed the places most often used for handwashing. Twenty-five percent of the de jure population have a fixed place for handwashing, although this is more common among urban (33%) than rural (19%) populations. Among the observed places of handwashing, 66% of the de jure population had water, 42% had soap, and 4% had cleansing agents other than soap (**Table 2.7**).

2.2 Household Population and Composition

Household

A person or group of related or unrelated persons who live together in the same dwelling unit(s), who acknowledge one adult male or female as the head of the household, who share the same housekeeping arrangements, and who are considered a single unit.

De facto population

All persons who stayed in the selected households the night before the interview (whether usual residents or visitors).

De jure population

All persons who are usual residents of the selected households, whether or not they stayed in the household the night before the interview.

How data are calculated

All tables are based on the de facto population, unless specified otherwise.

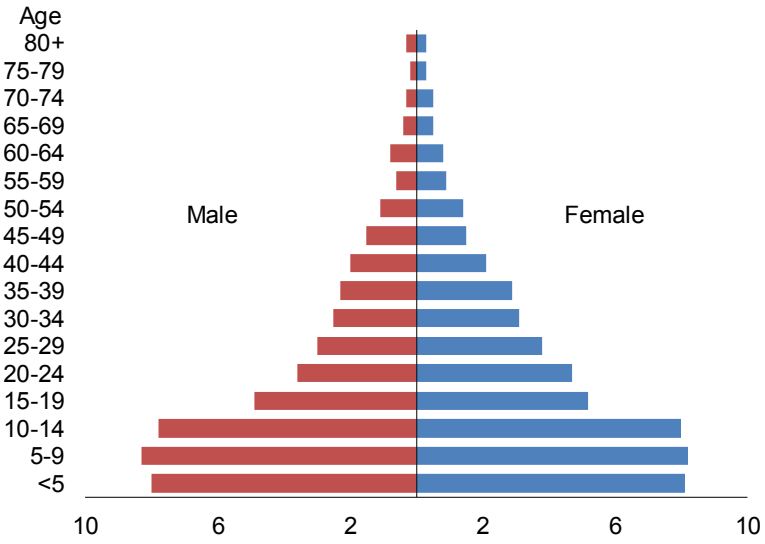
The 2018 ZDHS included a total of 62,191 de facto household members, among whom 29,673 were male and 32,517 were female.[1] Forty-eight percent of household members are age 0-14 and 49% are age 15-64; only 3% of household members are age 65 and above (**Table 2.8**).

Table 2.9 shows that women head 27% of households in Zambia. The table also shows that urban households are slightly smaller (4.7 persons) than rural households (5.2 persons). Overall, 32% of households in Zambia are caring for foster and/or orphaned children.

Figure 2.3 shows the de facto household population by 5-year age groups according to sex. The broad base of the pyramid indicates that Zambia's population is largely young. Almost half (48%) of the population is under age 15. This kind of distribution is characteristic of developing countries with high fertility and low life expectancy.

***Figure 2.3* Population pyramid**

Percent distribution of the household population



Trends: Overall, the age composition of the de facto population has remained relatively constant since 1992.

2.3 Children's Living Arrangements and Parental Survival

Orphan

A child with one or both parents who are dead.

Sample: Children under age 18

[1] The sex-specific numbers do not sum to the total due to rounding in the number of weighted cases.

Sixteen percent of children under age 18 are not living with a biological parent, and 10% of these children are orphans (i.e., one or both parents are dead). By province, the percentage of children with one or both parents dead is lowest in Eastern, North Western, and Southern (8% each) and highest in Copperbelt (13%). Twenty-one percent of children not living with a biological parent are from households in the highest wealth quintile (**Table 2.10**).

***Figure 2.4* Orphanhood by household wealth**

Percentage of children under age 18 with one or both parents dead

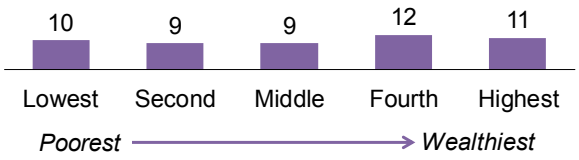


Figure 2.4 shows that there is little variation in the percentages of children with one or both parents dead according to wealth. Ten percent of children from households in the lowest wealth quintile and 11% from households in the highest quintile are orphans.

Trends: The percentage of children under age 18 who do not live with a biological parent has declined only slightly since 2007, from 19% to 16%.

2.4 BIRTH REGISTRATION

Registered birth

Child has a birth certificate or child does not have a birth certificate, but his/her birth is registered with the civil authorities.

Sample: De jure children under age 5

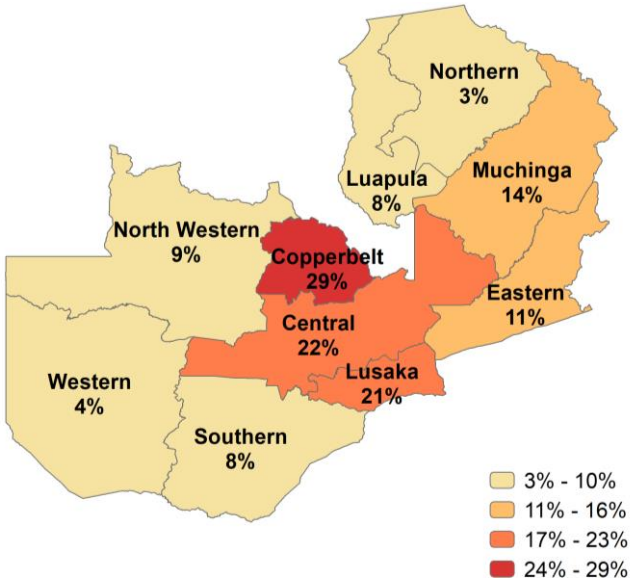
The global concern regarding the need to have all births registered by 2030 is evident in targets 16.9 and 17.19 of the SDGs. This is important given the need to protect all children because a child who is not registered is in danger of being shut out of society—denied the right to an official identity, a recognised name, and a nationality. In this regard the Zambian government, under the Department of National Registration, Passport and Citizenship, has drawn a roadmap to scale up birth registration in the country (MHA, 2017).

Table 2.11 presents information on birth registration of children under age 5. Fourteen percent of children's births are registered with the civil authorities. There is no variation by age or sex in the percentage of births registered. However, 25% of urban children are registered, as compared with only 8% of rural children. Furthermore, the percentage of registered births rises with increasing wealth, from 4% in the lowest quintile to 32% in the highest quintile.

Figure 2.5 shows large variations by province in the percentage of children whose births are registered with the civil authorities. Copperbelt (29%) has the highest percentage of registered births, while Northern (3%) has the lowest.

Figure 2.5 **Birth registration by province**

Percentage of de jure children under age 5 whose births are registered with the civil authorities



Trends: The percentage of children under age 5 whose births are registered with the civil authorities increased from 11% in 2013-14 to 14% in 2018.

2.5 EDUCATION

2.5.1 Educational Attainment

Median educational attainment

Half of the population has completed less than the median number of years of schooling, and half of the population has completed more than the median number of years of schooling.

Sample: De facto household population age 6 and older

The majority of Zambians have either no formal education or only some primary education. Specifically, 60% of females and 54% of males age 6 and over have no education or only some primary education (**Tables 2.12.1** and **2.12.2**). Women have completed a median of 4.6 years of schooling, while men have completed a median of 5.3 years.

Trends: The percentage of females age 6 or above with no education declined from 24% in 1992 to 16% in 2013-14 and remained at 16% in 2018.

Patterns by background characteristics

- Urban residents are better educated than rural residents. Only 9% of females age 6 and older in urban areas have no education, as compared with 21% in rural areas. The corresponding percentages among males are 8% and 18% (**Tables 2.12.1** and **2.12.2**).
- Among both women and men, median number of years of education increases with increasing wealth.
- Men and women in the highest wealth quintile (18% and 14%, respectively) are more likely than their counterparts to attain a higher education.

2.5.2 School Attendance and Orphanhood

School Attendance Ratios

Net attendance ratios (NAR)

Percentage of the school-age population that attends primary or secondary school.

Sample: Children age 7-13 for primary school NAR and children age 14-18 for secondary school NAR

Gross attendance ratios (GAR)

The total number of children attending primary school divided by the official primary school-age population and the total number of children attending secondary school divided by the official secondary school-age population.

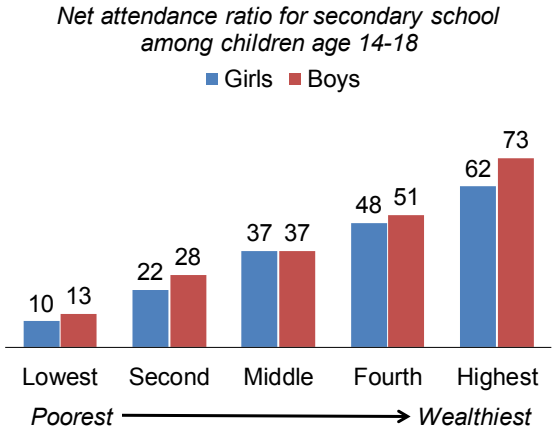
Sample: Children age 7-13 for primary school GAR and children age 14-18 for secondary school GAR

In Zambia, the primary school net attendance ratio (NAR) for the population age 7-13 is 79% (81% for girls and 77% for boys). The secondary school NAR drops drastically to 40% (38% for girls and 42% for boys). The variation in secondary school NARs by residence is large, with a difference of 27 percentage points between urban (56%) and rural (29%) areas (**Table 2.13**).

Figure 2.6 shows the secondary school NAR among children age 14-18 by wealth quintile. Sixty-two percent of girls in the highest wealth quintile attend secondary school, as compared with 10% of those in the lowest wealth quintile. Boys follow a similar trajectory (73% in the highest quintile and 13% in the lowest). Across nearly all wealth quintiles, the secondary school NAR is higher among boys.

The gross attendance ratio (GAR) is similar for boys and girls at both the primary level (97% and 98%, respectively) and the secondary level (60% and 55%, respectively).

***Figure 2.6* Secondary school attendance by household wealth**



Gender Parity Indices (GPI)

The ratio of female to male students attending primary school and the ratio of female to male students attending secondary school. The index reflects the magnitude of the gender gap.

Sample: Primary school students and secondary school students

Patterns by background characteristics

- The disparity in attendance between females and males at the primary level is minimal in all provinces other than Eastern (1.27), Central (1.07), and Luapula (1.07).

Orphanhood

Orphaned children may be at greater risk of dropping out of school than children with biological parents. This can occur for various reasons, such as the inability to pay school fees, the need to help with household chores, and the need to care for sick parents or younger siblings. **Table 2.15** presents data on school attendance rates among children age 10-14 by survivorship of parents. Double orphans (i.e., children

whose father and mother are dead) are less likely to currently be in school than children whose parents are both alive and who are living with at least one parent (79% and 88%, respectively).

List of Tables

For more information on household population and housing characteristics, see the following tables:

- **Table 2.1.1 Household drinking water**
- **Table 2.1.2 Drinking water according to province and wealth**
- **Table 2.1.3 Treatment of household drinking water**
- **Table 2.2 Availability of water**
- **Table 2.3.1 Household sanitation facilities**
- **Table 2.3.2 Sanitation facility type according to province and wealth**
- **Table 2.4 Household characteristics**
- **Table 2.5 Household possessions**
- **Table 2.6 Wealth quintiles**
- **Table 2.7 Handwashing**
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- **Table 2.10 Children's living arrangements and orphanhood**
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- **Table 2.13 School attendance ratios**
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Table 2.1.1 Household drinking water

Percent distribution of households and de jure population by source of drinking water and by time to obtain drinking water, percentage of households and de jure population with basic drinking water service, and percentage with limited drinking water service, according to residence, Zambia DHS 2018

	Households			Population		
Characteristic	Urban	Rural	Total	Urban	Rural	Total
Source of drinking water						
Improved source	**91.8**	**58.0**	**72.3**	**91.1**	**57.4**	**70.7**
Piped into dwelling/yard/plot	41.1	2.9	19.1	41.3	2.3	17.7
Piped to neighbour	15.4	1.1	7.2	14.3	1.0	6.3
Public tap/standpipe	16.2	2.5	8.3	15.6	2.4	7.6
Tube well or borehole	6.9	36.4	23.9	7.1	36.1	24.7
Protected dug well	11.4	14.0	12.9	11.8	14.6	13.5
Protected spring	0.2	0.7	0.5	0.2	0.7	0.5
Rainwater	0.0	0.3	0.2	0.0	0.2	0.1
Tanker truck/cart with small tank	0.0	0.0	0.0	0.0	0.0	0.0
Bottled water	0.7	0.1	0.3	0.7	0.0	0.3
Unimproved source	**8.2**	**42.0**	**27.7**	**8.9**	**42.6**	**29.3**
Unprotected dug well	6.6	25.1	17.2	7.2	25.8	18.4
Unprotected spring	0.8	4.2	2.8	0.9	4.1	2.9
Surface water	0.5	12.7	7.6	0.6	12.6	7.9
Other	0.2	0.0	0.1	0.2	0.0	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
Time to obtain drinking water (round trip)						
Water on premises[1]	66.2	14.6	36.5	65.8	14.5	34.8
30 minutes or less	29.5	69.6	52.6	29.6	68.9	53.4
More than 30 minutes	3.8	14.8	10.1	4.2	15.6	11.1
Don't know/missing	0.4	1.1	0.8	0.4	1.0	0.7
Total	100.0	100.0	100.0	100.0	100.0	100.0
Method for storing water						
Closed container/jerry can	93.5	90.0	91.5	93.1	90.3	91.4
Open container/bucket	6.1	9.8	8.2	6.5	9.6	8.4
Does not store water	0.4	0.2	0.3	0.4	0.2	0.2
Other	0.1	0.0	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Percentage with basic drinking water service[2]	88.2	49.6	66.0	87.2	48.5	63.8
Percentage with limited drinking water service[3]	3.2	7.6	5.7	3.5	8.2	6.4
Number of households/ population	5,441	7,390	12,831	25,346	38,746	64,092

[1] Includes water piped to a neighbour and those reporting a roundtrip collection time of zero minutes
[2] Defined as drinking water from an improved source, provided either water is on the premises or round-trip collection time is 30 minutes or less. Includes safely managed drinking water, which is not shown separately.
[3] Drinking water from an improved source, provided round-trip collection time is more than 30 minutes

Table 2.1.2 Drinking water according to province and wealth

Percent distribution of de jure population by drinking water source, percentage of de jure population with basic drinking water service, and percentage with limited drinking water service, according to province and wealth quintile, Zambia DHS 2018

Background characteristic	Improved source of drinking water[1]	Unimproved source of drinking water[2]	Total	Percentage with basic drinking water service[2]	Percentage with limited drinking water service[3]	Number of persons
Province						
Central	73.7	26.3	100.0	65.9	7.8	5,730
Copperbelt	80.8	19.2	100.0	78.0	2.7	9,074
Eastern	79.2	20.8	100.0	68.4	8.3	8,357
Luapula	58.1	41.9	100.0	49.8	7.6	5,526
Lusaka	98.0	2.0	100.0	91.2	6.5	10,700
Muchinga	52.3	47.7	100.0	46.3	6.1	3,676
Northern	39.9	60.1	100.0	36.2	3.5	5,502
North Western	65.5	34.5	100.0	60.4	4.2	3,477
Southern	66.2	33.8	100.0	56.4	9.8	7,811
Western	44.5	55.5	100.0	38.2	5.9	4,237
Wealth quintile						
Lowest	42.6	57.4	100.0	36.1	5.5	12,813
Second	58.3	41.7	100.0	48.9	8.5	12,820
Middle	67.8	32.2	100.0	56.6	10.6	12,822
Fourth	87.5	12.5	100.0	82.2	4.9	12,819
Highest	97.4	2.6	100.0	95.2	2.3	12,818
Total	70.7	29.3	100.0	63.8	6.4	64,092

[1] See Table 2.1.1 for definition of an improved source.
[2] See Table 2.1.1 for definition of an unimproved source.
[3] Defined as drinking water from an improved source, provided either water is on the premises or round-trip collection time is 30 minutes or less. Includes safely managed drinking water, which is not shown separately.
[4] Drinking water from an improved source, provided round-trip collection time is more than 30 minutes

Table 2.1.3 Treatment of household drinking water

Percentage of households and de jure population using various methods to treat drinking water, and percentage using an appropriate treatment method, according to residence, Zambia DHS 2018

	Households			Population		
Water treatment method	Urban	Rural	Total	Urban	Rural	Total
Boil	24.0	8.7	15.2	24.2	8.0	14.4
Bleach/chlorine added	35.2	15.2	23.7	37.7	15.4	24.2
Strain through cloth	0.0	0.1	0.1	0.0	0.1	0.1
Ceramic, sand, or other filter	0.1	0.1	0.1	0.0	0.1	0.1
Solar disinfection	0.1	0.1	0.1	0.1	0.1	0.1
Let stand and settle	0.2	0.2	0.2	0.2	0.3	0.3
Other	0.3	0.0	0.2	0.3	0.0	0.2
No treatment	47.1	77.5	64.6	45.1	78.0	65.0
Percentage using an appropriate treatment method[1]	52.4	22.1	35.0	54.4	21.6	34.5
Number of households/population	5,441	7,390	12,831	25,346	38,746	64,092

Note: Respondents may report multiple treatment methods, so the sum of treatment may exceed 100%.
[1] Appropriate water treatment methods include boiling, bleaching, filtering, and solar disinfecting.

Table 2.2 Availability of water

Percent distribution of households and de jure population using piped water or water from a tube well or borehole, by availability of water in the last 2 weeks, according to residence, Zambia DHS 2018

Availability of water in last 2 weeks	Households			Population		
	Urban	Rural	Total	Urban	Rural	Total
Not available for at least 1 day	43.1	9.2	28.8	43.1	9.1	27.9
Available with no interruption of at least 1 day	55.3	90.7	70.2	56.0	90.7	71.5
Don't know/missing	1.6	0.1	1.0	0.9	0.3	0.6
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of households/ population using piped water or water from a tube well[1]	4,364	3,173	7,537	20,023	16,197	36,219

[1] Includes households/population reporting piped water or water from a tube well or borehole as their main source of drinking water and households/population reporting bottled water as their main source of drinking water if their main source of water for cooking and handwashing is piped water or water from a tube well or borehole

Table 2.3.1 Household sanitation facilities

Percent distribution of households and de jure population by type of toilet/latrine facilities, percent distribution of households and de jure population with a toilet/latrine facility by location of the facility, percentage of households and de jure population with basic sanitation services, and percentage with limited sanitation services, according to residence, Zambia DHS 2018

	Households			Population		
Type and location of toilet/latrine facility	Urban	Rural	Total	Urban	Rural	Total
Improved sanitation facility	**77.7**	**37.2**	**54.4**	**79.0**	**37.7**	**54.0**
Flush/pour flush to piped sewer system	17.2	0.6	7.6	17.2	0.5	7.1
Flush/pour flush to septic tank	13.6	1.8	6.8	14.4	1.4	6.6
Flush/pour flush to pit latrine	3.9	0.2	1.8	3.9	0.1	1.6
Flush/pour flush, don't know where	0.4	0.1	0.2	0.5	0.1	0.2
Ventilated improved pit (VIP) latrine	0.8	0.7	0.8	0.8	0.8	0.8
Pit latrine with slab	41.8	33.9	37.2	42.2	34.8	37.7
Composting toilet	0.0	0.0	0.0	0.0	0.0	0.0
Unimproved facility						
Unimproved sanitation facility	**20.8**	**46.5**	**35.6**	**20.0**	**46.8**	**36.2**
Flush/pour flush not to sewer/septic tank/pit latrine	0.7	0.0	0.3	0.7	0.0	0.3
Pit latrine without slab/open pit	20.0	46.4	35.2	19.2	46.7	35.8
Hanging toilet/hanging latrine	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.1	0.1	0.1	0.1	0.0	0.1
Open defecation (no facility/bush/ field)	**1.4**	**16.2**	**10.0**	**1.0**	**15.5**	**9.8**
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of households/population	5,441	7,390	12,831	25,346	38,746	64,092
Location of toilet facility						
In own dwelling	20.3	4.4	11.8	21.6	4.0	11.6
In own yard/plot	73.4	81.3	77.7	72.7	83.4	78.8
Elsewhere	6.3	14.3	10.6	5.7	12.6	9.6
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of households/population with a toilet/latrine facility	5,363	6,191	11,554	25,090	32,729	57,819
Percentage with basic sanitation service[1]	35.4	26.4	30.2	40.6	27.8	32.9
Percentage with limited sanitation service[2]	42.2	10.9	24.2	38.3	9.8	21.1
Number of households/population	5,441	7,390	12,831	25,346	38,746	64,092

[1] Defined as use of improved facilities that are not shared with other households. Includes safely managed sanitation service, which is not shown separately.
[2] Defined as use of improved facilities shared by 2 or more households

Table 2.3.2 Sanitation facility type according to province and wealth

Percent distribution of de jure population by type of sanitation, percentage of de jure population with basic sanitation service, and percentage with limited sanitation service, according to province and wealth quintile, Zambia DHS 2018

	Type of sanitation						
Background characteristic	Improved sanitation facility[1]	Unimproved sanitation facility[2]	Open defecation	Total	Percentage with basic sanitation service[3]	Percentage with limited sanitation service[4]	Number of persons
Province							
Central	38.9	54.4	6.8	100.0	26.6	12.3	5,730
Copperbelt	76.7	22.3	1.0	100.0	46.2	30.5	9,074
Eastern	39.2	44.5	16.3	100.0	25.3	13.9	8,357
Luapula	48.8	46.8	4.4	100.0	39.4	9.3	5,526
Lusaka	80.0	18.8	1.2	100.0	34.3	45.5	10,700
Muchinga	52.0	42.6	5.4	100.0	40.5	11.4	3,676
Northern	55.8	43.4	0.9	100.0	45.5	10.3	5,502
North Western	47.7	49.2	3.1	100.0	30.1	17.6	3,477
Southern	51.4	28.2	20.4	100.0	27.5	23.9	7,811
Western	6.2	43.8	50.0	100.0	4.9	1.3	4,237
Wealth quintile							
Lowest	25.8	48.1	26.1	100.0	17.5	8.2	12,813
Second	35.3	51.4	13.3	100.0	26.2	9.1	12,820
Middle	42.1	49.5	8.4	100.0	27.7	14.3	12,822
Fourth	72.7	26.2	1.2	100.0	28.2	44.4	12,819
Highest	94.3	5.6	0.1	100.0	64.8	29.5	12,818
Total	54.0	36.2	9.8	100.0	32.9	21.1	64,092

[1] See Table 2.3.1 for definition of an improved facility.
[2] See Table 2.3.1 for definition of an unimproved facility.
[3] Defined as use of improved facilities that are not shared with other households. Includes safely managed sanitation service, which is not shown separately.
[4] Defined as use of improved facilities shared by 2 or more households

Table 2.4 Household characteristics

Percent distribution of households and de jure population by housing characteristics, percentage using solid fuel for cooking, percentage using clean fuel for cooking, and percent distribution by frequency of smoking in the home, according to residence, Zambia DHS 2018

	Households			Population		
Housing characteristic	Urban	Rural	Total	Urban	Rural	Total
Electricity						
Yes	69.1	8.4	34.2	70.6	8.1	32.8
No	30.9	91.6	65.8	29.4	91.9	67.2
Total	100.0	100.0	100.0	100.0	100.0	100.0
Flooring material						
Earth, sand	11.3	69.4	44.7	10.7	68.3	45.5
Dung	1.3	5.7	3.8	1.4	5.7	4.0
Wood/planks	0.0	0.1	0.0	0.0	0.0	0.0
Palm/bamboo/reeds	0.0	0.1	0.1	0.0	0.1	0.1
Parquet or polished wood	0.2	0.0	0.1	0.2	0.0	0.1
Vinyl or asphalt strips	0.3	0.1	0.2	0.4	0.0	0.2
Ceramic tiles/terrazzo tiles	5.4	0.3	2.5	5.8	0.2	2.4
Cement	80.7	24.0	48.1	81.0	25.2	47.2
Carpet	0.6	0.1	0.3	0.5	0.1	0.3
Other	0.1	0.2	0.2	0.1	0.3	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0
Rooms used for sleeping						
One	35.9	31.5	33.4	23.4	21.8	22.4
Two	37.9	41.4	39.9	40.0	41.7	41.0
Three or more	26.2	27.1	26.7	36.6	36.5	36.5
Total	100.0	100.0	100.0	100.0	100.0	100.0
Place for cooking						
In the house	44.5	9.8	24.5	44.6	8.3	22.7
In a separate building	5.1	48.2	29.9	5.5	51.7	33.4
Outdoors	50.4	42.0	45.5	49.8	40.0	43.9
Other	0.0	0.0	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Cooking fuel						
Electricity	18.4	2.0	9.0	17.8	1.5	7.9
Solar power	0.1	0.3	0.2	0.0	0.3	0.2
LPG/natural gas/biogas	0.3	0.1	0.2	0.2	0.1	0.1
Kerosene	0.0	0.0	0.0	0.0	0.0	0.0
Coal/lignite	0.1	0.0	0.0	0.1	0.0	0.0
Charcoal	75.4	18.1	42.4	75.7	16.6	40.0
Wood	5.8	79.3	48.1	6.2	81.4	51.7
Straw/shrubs/grass	0.0	0.2	0.1	0.0	0.2	0.1
Agricultural crop	0.0	0.0	0.0	0.0	0.0	0.0
Animal dung	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Percentage using solid fuel for cooking[1]	81.3	97.5	90.6	82.0	98.2	91.8
Percentage using clean fuel for cooking[2]	18.7	2.1	9.1	18.0	1.5	8.0
Frequency of smoking in the home						
Daily	8.9	13.6	11.6	9.1	13.8	12.0
Weekly	5.2	6.1	5.7	5.3	6.0	5.7
Monthly	0.6	0.5	0.6	0.7	0.5	0.6
Less than once a month	1.1	2.0	1.6	1.3	2.1	1.8
Never	84.2	77.8	80.5	83.6	77.6	80.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of households/ population	5,441	7,390	12,831	25,346	38,746	64,092

LPG = Liquefied petroleum gas
[1] Includes coal/lignite, charcoal, wood, straw/shrubs/grass, agricultural crops, and animal dung
[2] Includes electricity, LPG/natural gas/biogas, and solar power

Table 2.5 Household possessions

Percentage of households possessing various household effects, means of transportation, agricultural land, and livestock/farm animals, by residence, Zambia DHS 2018

Possession	Residence		Total
	Urban	Rural	
Household effects			
Radio	60.3	37.4	47.1
Television	66.3	14.8	36.6
Computer	14.8	2.3	7.6
Refrigerator	45.8	4.3	21.9
Internet	14.3	2.1	7.3
Bed	89.3	56.0	70.1
Table	71.3	49.9	59.0
Sofa	65.3	19.8	39.1
Washing machine	2.3	0.5	1.2
Air conditioner	4.0	0.5	2.0
Generator	2.1	1.0	1.4
Microwave	9.0	0.7	4.3
Geyser	4.3	0.6	2.2
Grain grinder	0.7	1.4	1.1
Plough	1.4	17.6	10.7
Tractor	0.3	0.4	0.4
Hammer mill	0.4	1.3	0.9
Watch	36.9	11.8	22.4
Mobile phone	90.0	61.7	73.7
Means of transport			
Bicycle	24.3	47.7	37.8
Animal-drawn cart	0.7	7.6	4.7
Motorcycle/scooter	1.6	3.4	2.6
Car/truck	11.7	3.0	6.7
Boat with a motor	0.2	0.4	0.3
Banana boat	0.8	3.0	2.0
Ownership of agricultural land	16.3	79.4	52.7
Ownership of farm animals[1]	13.4	63.3	42.2
Ownership of a bank account	42.1	9.1	23.1
Number	5,441	7,390	12,831

[1] Traditional cattle, dairy cattle, beef cattle, horses, donkeys, mules, goats, sheep, chickens, pigs, or rabbits/other poultry

Table 2.6 Wealth quintiles

Percent distribution of the de jure population by wealth quintiles, and the Gini coefficient, according to residence and province, Zambia DHS 2018

Residence/ province	Wealth quintile					Total	Number of persons	Gini coefficient
	Lowest	Second	Middle	Fourth	Highest			
Residence								
Urban	0.4	2.7	12.4	38.7	45.7	100.0	25,346	0.19
Rural	32.8	31.3	25.0	7.7	3.2	100.0	38,746	0.41
Province								
Central	15.9	21.9	28.9	18.5	14.8	100.0	5,730	0.44
Copperbelt	2.2	7.8	14.6	36.3	39.0	100.0	9,074	0.25
Eastern	31.3	29.7	25.1	7.4	6.5	100.0	8,357	0.47
Luapula	28.7	35.6	19.1	8.6	7.9	100.0	5,526	0.44
Lusaka	1.6	3.4	8.4	36.0	50.5	100.0	10,700	0.19
Muchinga	38.3	26.4	20.7	9.8	4.8	100.0	3,676	0.47
Northern	39.5	25.4	21.0	8.7	5.5	100.0	5,502	0.46
North Western	25.5	27.4	22.1	13.0	12.1	100.0	3,477	0.52
Southern	11.1	21.6	32.0	24.8	10.4	100.0	7,811	0.38
Western	47.0	24.3	14.1	6.8	7.8	100.0	4,237	0.51
Total	20.0	20.0	20.0	20.0	20.0	100.0	64,092	0.44

Table 2.7 Handwashing

Percentage of the de jure population for whom the place most often used for washing hands was observed, by whether the location was fixed or mobile; total percentage of the de jure population for whom the place for handwashing was observed; among the de jure population for whom the place for handwashing was observed, percentage with water available, percentage with soap available, and percentage with a cleansing agent other than soap available; percentage of the de jure population with a basic handwashing facility; and percentage with a limited handwashing facility, according to background characteristics, Zambia DHS 2018

Background characteristic	Percentage of de jure population for whom place for washing hands was observed:			Number of persons	Place for handwashing observed and:			Number of persons for whom place for hand-washing was observed	Percentage of de jure population with a basic hand-washing facility[3]	Percentage of de jure population with a limited hand-washing facility[4]	Number of persons for whom a place for hand-washing was observed or with no place for hand-washing in the dwelling, yard, or plot
	Place for hand-washing was a fixed place	Place for hand-washing was mobile	Total		Water available	Soap available[1]	Cleansing agent other than soap available[2]				
Residence											
Urban	32.9	33.1	66.0	25,346	72.9	51.8	1.5	16,729	36.2	41.4	21,545
Rural	19.4	26.4	45.8	38,746	58.4	32.9	6.7	17,742	15.3	38.0	33,236
Province											
Central	28.8	32.0	60.8	5,730	71.0	51.7	4.9	3,486	30.9	36.7	5,155
Copperbelt	27.8	48.6	76.4	9,074	62.3	45.1	0.8	6,929	33.6	55.8	7,749
Eastern	24.1	16.5	40.6	8,357	63.8	43.7	4.4	3,391	17.2	23.8	8,264
Luapula	21.6	36.1	57.7	5,526	55.8	33.9	7.3	3,188	19.3	42.5	5,153
Lusaka	33.3	28.9	62.3	10,700	81.6	56.0	1.4	6,664	39.9	35.0	8,904
Muchinga	21.4	23.2	44.6	3,676	61.8	16.0	4.4	1,639	10.1	55.9	2,483
Northern	19.2	19.6	38.8	5,502	62.5	36.5	12.1	2,136	15.8	30.8	4,579
North Western	24.6	24.1	48.6	3,477	56.7	20.1	0.7	1,691	9.3	44.1	3,162
Southern	17.5	18.5	36.0	7,811	48.3	22.9	7.3	2,809	7.5	45.3	5,320
Western	20.2	39.8	59.9	4,237	68.1	49.8	7.6	2,539	26.6	36.7	4,013
Wealth quintile											
Lowest	16.5	26.0	42.5	12,813	57.0	29.3	8.5	5,441	12.8	35.9	11,185
Second	16.9	27.7	44.6	12,820	53.6	29.1	6.8	5,712	13.2	38.9	10,970
Middle	19.4	27.8	47.2	12,822	54.8	34.8	5.8	6,047	16.2	40.2	10,720
Fourth	19.3	40.2	59.5	12,819	63.2	40.0	2.0	7,625	24.2	47.9	10,562
Highest	51.7	23.6	75.3	12,818	85.7	63.2	0.9	9,646	50.5	34.5	11,344
Total	24.7	29.0	53.8	64,092	65.5	42.1	4.2	34,471	23.5	39.4	54,782

[1] Soap includes soap or detergent in bar, liquid, powder, or paste form.
[2] Cleansing agents other than soap include locally available materials such as ash, mud, or sand.
[3] The availability of a handwashing facility on premises with soap and water
[4] The availability of a handwashing facility on premises without soap and/or water

Table 2.8 Household population by age, sex, and residence

Percent distribution of the de facto household population by various age groups and percentage of the de facto household population age 10-19, according to sex and residence, Zambia DHS 2018

	Urban			Rural					
Age	Male	Female	Total	Male	Female	Total	Male	Female	Total
<5	14.8	13.3	14.0	18.0	17.0	17.5	16.7	15.5	16.1
5-9	15.3	13.6	14.4	18.6	17.2	17.9	17.3	15.8	16.5
10-14	14.5	14.0	14.3	17.4	16.1	16.7	16.3	15.2	15.7
15-19	10.4	10.6	10.5	10.2	9.4	9.8	10.3	9.9	10.1
20-24	9.2	10.6	9.9	6.6	7.8	7.2	7.6	8.9	8.3
25-29	7.8	9.0	8.4	5.2	6.2	5.7	6.2	7.3	6.8
30-34	6.2	7.4	6.8	4.7	5.0	4.9	5.3	6.0	5.7
35-39	5.9	6.3	6.1	4.1	4.9	4.5	4.8	5.5	5.1
40-44	5.2	4.3	4.7	3.7	3.9	3.8	4.3	4.1	4.2
45-49	3.2	2.7	2.9	3.1	2.9	3.0	3.2	2.8	3.0
50-54	2.1	2.7	2.4	2.3	2.5	2.4	2.2	2.6	2.4
55-59	1.2	1.6	1.4	1.4	1.8	1.6	1.3	1.7	1.5
60-64	1.8	1.4	1.6	1.6	1.5	1.6	1.7	1.5	1.6
65-69	0.6	0.8	0.7	1.0	1.2	1.1	0.8	1.0	0.9
70-74	0.6	0.8	0.7	0.7	1.1	0.9	0.7	1.0	0.8
75-79	0.4	0.5	0.4	0.6	0.7	0.6	0.5	0.6	0.5
80+	0.5	0.4	0.4	0.7	0.7	0.7	0.6	0.6	0.6
Don't know/missing	0.3	0.1	0.2	0.2	0.1	0.1	0.2	0.1	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Dependency age groups									
0-14	44.6	40.9	42.6	54.0	50.4	52.1	50.3	46.5	48.3
15-64	53.0	56.5	54.9	42.9	45.9	44.5	46.9	50.2	48.6
65+	2.1	2.5	2.3	2.9	3.6	3.3	2.6	3.2	2.9
Don't know/missing	0.3	0.1	0.2	0.2	0.1	0.1	0.2	0.1	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Child and adult populations									
0-17	50.5	46.8	48.5	59.9	55.8	57.8	56.2	52.1	54.1
18+	49.2	53.1	51.3	40.0	44.1	42.1	43.5	47.8	45.7
Don't know/missing	0.3	0.1	0.2	0.2	0.1	0.1	0.2	0.1	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Adolescents 10-19	24.9	24.7	24.8	27.6	25.5	26.5	26.5	25.2	25.8
Number of persons	11,535	13,254	24,789	18,138	19,264	37,401	29,673	32,517	62,191

Table 2.9 Household composition

Percent distribution of households by sex of head of household and by household size, mean size of household, and percentage of households with orphans and foster children under age 18, according to residence, Zambia DHS 2018

Characteristic	Residence		Total
	Urban	Rural	
Household headship			
Male	71.9	74.2	73.2
Female	28.1	25.8	26.8
Total	100.0	100.0	100.0
Number of usual members			
1	9.6	6.8	8.0
2	10.3	7.6	8.8
3	16.0	12.6	14.0
4	15.9	15.3	15.6
5	15.3	15.0	15.1
6	12.7	13.3	13.1
7	8.0	10.9	9.7
8	5.1	8.2	6.9
9+	7.0	10.3	8.9
Total	100.0	100.0	100.0
Mean size of households	4.7	5.2	5.0
Percentage of households with orphans and foster children under age 18			
Double orphans	3.0	2.6	2.8
Single orphans[1]	14.5	13.8	14.1
Foster children[2]	25.7	28.2	27.1
Foster and/or orphan children	31.1	32.9	32.1
Number of households	5,441	7,390	12,831

Note: Table is based on de jure household members, i.e., usual residents.
[1] Includes children with one dead parent and an unknown survival status of the other parent
[2] Foster children are those under age 18 living in households with neither their mother nor their father present, and the mother and/or the father are alive.

Table 2.10 Children's living arrangements and orphanhood

Percent distribution of de jure children under age 18 by living arrangements and survival status of parents, percentage of children not living with a biological parent, and percentage of children with one or both parents dead, according to background characteristics, Zambia DHS 2018

Background characteristic	Living with both parents	Living with mother but not with father		Living with father but not with mother		Not living with either parent					Total	Percentage not living with a biological parent	Percentage with one or both parents dead[1]	Number of children
		Father alive	Father dead	Mother alive	Mother dead	Both alive	Only father alive	Only mother alive	Both dead	Missing information on father/ mother				
Age														
0-4	66.1	25.0	2.0	0.9	0.1	4.7	0.4	0.3	0.2	0.3	100.0	5.5	3.0	10,077
<2	68.7	28.1	1.5	0.1	0.0	1.1	0.3	0.1	0.0	0.2	100.0	1.4	1.8	3,977
2-4	64.4	23.0	2.4	1.4	0.2	7.0	0.5	0.4	0.3	0.4	100.0	8.2	3.8	6,100
5-9	58.2	18.3	4.0	3.0	0.5	11.5	1.3	1.8	1.0	0.4	100.0	15.6	8.7	10,392
10-14	49.7	14.9	5.9	4.4	1.1	15.4	2.3	3.5	2.1	0.6	100.0	23.3	15.0	9,984
15-17	43.5	12.6	7.2	5.1	1.2	16.9	2.8	5.6	4.1	1.0	100.0	29.4	21.3	3,721
Sex														
Male	57.1	18.7	4.5	3.5	0.8	10.0	1.4	2.2	1.4	0.5	100.0	14.9	10.3	16,939
Female	55.8	18.7	4.1	2.5	0.5	12.4	1.6	2.4	1.4	0.5	100.0	17.8	10.1	17,235
Residence														
Urban	53.0	19.8	5.1	3.3	0.9	11.3	1.6	2.8	1.8	0.5	100.0	17.5	12.3	12,082
Rural	58.3	18.1	3.9	2.9	0.5	11.1	1.4	2.0	1.2	0.5	100.0	15.7	9.1	22,092
Province														
Central	54.2	18.7	3.8	2.9	0.5	13.8	1.5	2.5	1.7	0.5	100.0	19.4	10.0	3,086
Copperbelt	52.8	19.0	4.9	3.2	0.8	11.6	1.7	3.5	2.2	0.3	100.0	18.9	13.0	4,364
Eastern	63.6	15.9	3.4	2.6	0.7	9.8	1.1	1.4	0.9	0.5	100.0	13.3	7.7	4,566
Luapula	56.9	18.5	5.5	2.0	0.4	10.2	2.0	2.3	1.8	0.4	100.0	16.3	12.1	3,125
Lusaka	54.1	20.5	5.0	2.7	0.7	11.0	1.6	2.4	1.6	0.4	100.0	16.5	11.3	5,151
Muchinga	63.2	15.6	4.5	3.5	0.2	8.4	1.4	2.0	1.1	0.3	100.0	12.8	9.1	2,095
Northern	62.1	15.3	4.2	2.3	0.5	10.2	1.5	1.5	1.9	0.5	100.0	15.1	9.7	3,127
North Western	53.1	23.0	3.6	3.3	0.1	11.7	1.3	2.2	1.0	0.6	100.0	16.2	8.3	1,959
Southern	55.9	18.4	3.2	3.7	1.2	13.2	1.0	2.0	0.7	0.7	100.0	16.9	8.4	4,319
Western	47.2	23.8	5.5	4.8	0.8	11.4	2.1	2.7	1.1	0.5	100.0	17.3	12.2	2,382
Wealth quintile														
Lowest	56.6	22.9	5.3	2.4	0.3	7.8	1.5	1.6	1.1	0.4	100.0	12.1	10.0	7,486
Second	59.4	17.7	4.4	2.7	0.5	10.5	1.4	1.5	1.4	0.5	100.0	14.8	9.3	7,350
Middle	58.2	16.3	3.4	3.1	0.6	12.6	1.4	2.4	1.4	0.6	100.0	17.8	9.4	7,115
Fourth	52.3	20.1	4.9	3.5	1.2	11.6	1.3	3.1	1.6	0.5	100.0	17.6	12.2	6,419
Highest	54.9	15.8	3.5	3.8	0.7	14.4	1.8	3.0	1.7	0.5	100.0	20.8	10.7	5,803
Total <15	58.0	19.4	4.0	2.8	0.6	10.5	1.3	1.9	1.1	0.4	100.0	14.8	8.9	30,453
Total <18	56.4	18.7	4.3	3.0	0.7	11.2	1.5	2.3	1.4	0.5	100.0	16.4	10.2	34,174

Note: Table is based on de jure members, i.e., usual residents.

[1] Includes children with father dead, mother dead, both dead, and one parent dead but missing information on survival status of the other parent

Table 2.11 Birth registration of children under age 5

Percentage of de jure children under age 5 whose births are registered with the civil authorities, according to background characteristics, Zambia DHS 2018

Background characteristic	Percentage of children whose births are registered and who: Had a birth certificate	Did not have a birth certificate	Total percentage of children whose births are registered	Number of children
Age				
<2	4.8	8.9	13.8	3,977
2-4	6.6	7.6	14.2	6,100
Sex				
Male	6.3	7.8	14.1	4,993
Female	5.5	8.5	14.0	5,084
Residence				
Urban	10.5	14.8	25.3	3,445
Rural	3.5	4.7	8.2	6,632
Province				
Central	0.8	21.5	22.4	878
Copperbelt	14.2	14.8	29.0	1,273
Eastern	6.8	4.6	11.4	1,380
Luapula	4.4	4.0	8.3	968
Lusaka	7.9	13.5	21.3	1,491
Muchinga	11.4	2.5	14.0	589
Northern	1.1	1.6	2.6	902
North Western	4.8	4.1	8.9	574
Southern	2.9	5.1	7.9	1,337
Western	1.3	3.0	4.4	684
Wealth quintile				
Lowest	1.8	1.8	3.6	2,523
Second	3.8	4.5	8.3	2,251
Middle	5.0	8.7	13.7	1,921
Fourth	7.8	13.0	20.8	1,824
Highest	14.4	17.4	31.8	1,557
Total	5.9	8.2	14.0	10,077

Table 2.12.1 Educational attainment of the female household population

Percent distribution of the de facto female household population age 6 and over by highest level of schooling attended or completed and median years completed, according to background characteristics, Zambia DHS 2018

Background characteristic	No education	Some primary	Completed primary[1]	Some secondary	Completed secondary[2]	Higher	Don't know/ missing	Total	Number	Median years completed
Age										
6-9	45.7	54.3	0.0	0.0	0.0	0.0	0.0	100.0	4,190	0.0
10-14	6.0	83.7	4.0	6.2	0.0	0.0	0.0	100.0	4,959	3.1
15-19	3.7	30.1	13.5	46.6	5.6	0.3	0.2	100.0	3,222	6.9
20-24	4.1	21.9	13.0	36.4	19.4	5.1	0.2	100.0	2,895	7.9
25-29	6.0	23.9	14.2	31.4	15.6	8.6	0.3	100.0	2,384	7.4
30-34	10.9	30.9	13.4	23.5	11.0	9.8	0.6	100.0	1,940	6.6
35-39	11.2	33.7	17.6	23.2	6.0	7.4	1.0	100.0	1,773	6.2
40-44	11.0	34.5	20.0	21.2	6.5	5.7	1.1	100.0	1,319	6.2
45-49	14.7	38.1	19.7	18.1	3.6	4.5	1.2	100.0	920	5.7
50-54	17.7	35.8	21.5	14.4	3.3	5.9	1.4	100.0	843	5.6
55-59	24.4	34.6	18.5	14.1	2.2	4.7	1.4	100.0	558	4.5
60-64	23.2	39.1	21.1	10.9	1.1	3.6	1.0	100.0	481	3.8
65+	45.7	37.8	5.4	6.9	0.7	1.4	2.1	100.0	1,028	0.2
Don't know/ missing	(35.5)	(19.2)	(9.3)	(6.9)	(6.0)	(5.2)	(18.0)	100.0	31	(2.7)
Residence										
Urban	9.1	33.0	10.8	28.1	11.8	6.7	0.6	100.0	11,170	6.6
Rural	20.5	52.0	10.4	13.8	1.9	1.0	0.4	100.0	15,374	3.2
Province										
Central	16.2	42.0	13.6	19.6	5.6	2.5	0.4	100.0	2,432	4.8
Copperbelt	9.6	34.6	12.2	25.6	11.6	5.6	0.8	100.0	3,972	6.4
Eastern	22.2	55.5	6.6	11.2	2.2	1.7	0.6	100.0	3,259	2.7
Luapula	19.7	51.8	9.4	13.5	2.9	1.7	1.0	100.0	2,191	3.2
Lusaka	10.6	32.6	10.4	27.8	10.8	7.4	0.4	100.0	4,715	6.5
Muchinga	21.3	50.0	11.1	13.8	2.5	1.0	0.2	100.0	1,535	3.4
Northern	20.6	54.4	8.4	12.8	2.1	1.2	0.6	100.0	2,233	3.0
North Western	15.9	46.6	5.7	21.8	6.4	3.4	0.2	100.0	1,384	4.2
Southern	11.9	43.7	15.4	22.7	4.2	2.1	0.1	100.0	3,098	5.4
Western	20.8	47.7	9.5	16.4	3.6	1.6	0.3	100.0	1,723	3.4
Wealth quintile										
Lowest	29.2	54.7	8.2	7.1	0.4	0.0	0.3	100.0	5,113	1.8
Second	21.4	54.2	10.2	12.6	1.0	0.1	0.5	100.0	5,089	3.1
Middle	14.6	49.4	13.2	19.4	2.6	0.3	0.5	100.0	5,172	4.3
Fourth	10.3	37.1	13.1	29.5	7.8	1.7	0.5	100.0	5,454	6.2
Highest	4.7	27.0	8.2	28.6	17.1	13.9	0.6	100.0	5,716	8.1
Total	15.7	44.0	10.6	19.8	6.1	3.4	0.5	100.0	26,544	4.6

Note: Figures in parentheses are based on 25-49 unweighted cases.
[1] Completed grade 7 at the primary level
[2] Completed grade 12 at the secondary level

Table 2.12.2 Educational attainment of the male household population

Percent distribution of the de facto male household population age 6 and over by highest level of schooling attended or completed and median years completed, according to background characteristics, Zambia DHS 2018

Background characteristic	No education	Some primary	Completed primary[1]	Some secondary	Completed secondary[2]	Higher	Don't know/ missing	Total	Number	Median years completed
Age										
6-9	49.6	50.4	0.0	0.0	0.0	0.0	0.0	100.0	4,174	0.0
10-14	9.9	81.9	3.5	4.7	0.0	0.0	0.0	100.0	4,827	2.9
15-19	3.8	33.3	11.3	47.1	4.1	0.2	0.1	100.0	3,049	6.7
20-24	4.0	15.6	11.0	38.4	25.3	5.1	0.5	100.0	2,258	8.5
25-29	3.1	15.4	11.6	34.6	23.0	11.6	0.7	100.0	1,835	8.5
30-34	4.7	18.3	13.7	26.8	22.1	12.4	2.0	100.0	1,573	8.4
35-39	6.3	18.8	15.9	27.3	16.0	13.2	2.4	100.0	1,417	7.8
40-44	5.9	23.6	16.5	28.0	13.7	10.0	2.4	100.0	1,274	7.3
45-49	6.8	26.6	17.1	25.3	11.1	11.0	2.1	100.0	936	6.8
50-54	5.4	25.8	22.6	21.3	11.8	8.6	4.5	100.0	668	6.7
55-59	3.4	22.2	28.7	19.3	13.0	11.7	1.7	100.0	393	6.8
60-64	9.6	20.8	25.7	22.6	10.5	7.6	3.1	100.0	502	6.7
65+	14.6	38.5	14.4	18.0	5.7	5.9	2.8	100.0	771	5.4
Don't know/ missing	7.6	12.4	18.5	40.2	10.1	1.2	10.1	100.0	65	(8.3)
Residence										
Urban	8.0	30.3	8.3	26.3	16.8	9.2	1.0	100.0	9,472	7.2
Rural	18.0	46.3	10.6	18.0	4.3	1.8	0.9	100.0	14,268	3.9
Province										
Central	14.0	39.2	11.9	21.1	8.6	4.3	0.8	100.0	2,179	5.4
Copperbelt	8.9	31.4	8.3	26.5	16.0	7.9	0.9	100.0	3,372	6.9
Eastern	23.9	45.7	7.6	14.7	4.5	2.5	1.0	100.0	3,127	3.1
Luapula	19.1	42.8	8.6	18.5	5.7	2.7	2.5	100.0	1,990	3.9
Lusaka	8.2	31.7	9.8	24.5	15.9	8.8	1.1	100.0	4,073	6.8
Muchinga	13.8	47.8	10.5	20.8	4.6	2.1	0.4	100.0	1,379	4.5
Northern	14.7	44.9	12.5	20.8	4.5	1.9	0.7	100.0	2,023	4.5
North Western	11.6	45.4	5.3	23.0	8.3	5.7	0.7	100.0	1,255	4.9
Southern	13.3	39.0	12.9	22.5	8.0	3.8	0.5	100.0	2,918	5.7
Western	16.9	50.7	7.7	16.2	5.8	2.2	0.5	100.0	1,424	3.5
Wealth quintile										
Lowest	25.1	49.2	10.7	12.3	1.7	0.0	1.0	100.0	4,333	2.5
Second	18.9	48.7	9.9	17.8	3.2	0.3	1.2	100.0	4,652	3.5
Middle	13.9	43.6	12.2	22.2	6.6	0.8	0.7	100.0	4,959	4.8
Fourth	9.1	33.5	10.2	28.3	14.0	3.9	1.1	100.0	4,901	6.6
Highest	4.6	26.2	5.6	24.9	19.8	18.1	0.8	100.0	4,894	8.6
Total	14.0	39.9	9.7	21.3	9.3	4.8	1.0	100.0	23,740	5.3

Note: Figures in parentheses are based on 25-49 unweighted cases.
[1] Completed grade 7 at the primary level
[2] Completed grade 12 at the secondary level

Table 2.13 School attendance ratios

Net attendance ratios (NAR) and gross attendance ratios (GAR) for the de facto household population by sex and level of schooling; and the Gender Parity Index (GPI), according to background characteristics, Zambia DHS 2018

Background characteristic	Net attendance ratio[1]				Gross attendance ratio[2]			
	Male	Female	Total	Gender Parity Index[3]	Male	Female	Total	Gender Parity Index[3]
PRIMARY SCHOOL								
Residence								
Urban	83.2	82.7	82.9	0.99	101.8	102.1	102.0	1.00
Rural	73.8	79.2	76.5	1.07	94.6	96.1	95.3	1.02
Province								
Central	71.2	76.2	73.8	1.07	87.9	91.5	89.7	1.04
Copperbelt	79.7	81.8	80.8	1.03	97.7	101.3	99.6	1.04
Eastern	61.7	78.5	70.2	1.27	82.6	95.7	89.1	1.16
Luapula	69.3	74.0	71.5	1.07	87.4	92.1	89.7	1.05
Lusaka	85.2	82.3	83.7	0.97	105.5	100.5	103.0	0.95
Muchinga	80.2	80.6	80.4	1.01	106.8	98.0	102.4	0.92
Northern	78.0	78.2	78.1	1.00	97.4	100.6	99.0	1.03
North Western	82.4	83.0	82.7	1.01	103.3	103.3	103.3	1.00
Southern	82.8	85.8	84.4	1.04	105.4	100.8	103.0	0.96
Western	83.3	82.5	82.9	0.99	102.5	98.0	100.2	0.96
Wealth quintile								
Lowest	65.7	72.0	68.9	1.10	84.3	87.1	85.7	1.03
Second	72.5	78.8	75.7	1.09	94.4	96.4	95.4	1.02
Middle	79.2	83.8	81.5	1.06	99.4	101.9	100.7	1.03
Fourth	83.9	84.6	84.2	1.01	104.1	100.5	102.3	0.97
Highest	86.1	83.6	84.8	0.97	105.3	106.2	105.8	1.01
Total	77.0	80.5	78.8	1.04	97.1	98.2	97.7	1.01
SECONDARY SCHOOL								
Residence								
Urban	59.2	53.1	55.9	0.90	84.1	77.9	80.8	0.93
Rural	31.3	26.0	28.7	0.83	44.3	36.2	40.4	0.82
Province								
Central	35.2	37.6	36.4	1.07	50.8	52.9	51.8	1.04
Copperbelt	55.1	48.8	51.7	0.88	77.0	70.6	73.5	0.92
Eastern	22.7	19.9	21.3	0.88	33.9	26.1	30.2	0.77
Luapula	33.8	22.7	28.2	0.67	50.0	34.0	41.9	0.68
Lusaka	58.5	51.7	55.0	0.88	79.8	79.4	79.6	0.99
Muchinga	32.7	29.3	31.0	0.90	45.0	39.5	42.2	0.88
Northern	43.2	31.7	37.3	0.73	63.9	43.4	53.3	0.68
North Western	52.6	45.9	48.9	0.87	77.9	65.9	71.3	0.85
Southern	41.0	39.5	40.4	0.96	57.6	57.0	57.4	0.99
Western	38.7	34.8	36.7	0.90	53.8	46.5	50.1	0.86
Wealth quintile								
Lowest	12.7	10.1	11.3	0.79	21.1	13.7	17.1	0.65
Second	27.6	21.9	24.8	0.79	37.8	29.1	33.6	0.77
Middle	37.2	36.5	36.8	0.98	50.1	48.3	49.2	0.96
Fourth	51.0	48.3	49.7	0.95	70.6	69.7	70.2	0.99
Highest	73.0	61.9	67.0	0.85	107.2	94.8	100.6	0.88
Total	42.3	37.9	40.0	0.90	59.9	54.5	57.2	0.91

[1] The NAR for primary school is the percentage of the primary-school age (7-13 years) population that is attending primary school. The NAR for secondary school is the percentage of the secondary-school age (14-18 years) population that is attending secondary school. By definition the NAR cannot exceed 100.0 percent.
[2] The GAR for primary school is the total number of primary school students, expressed as a percentage of the official primary-school-age population. The GAR for secondary school is the total number of secondary school students, expressed as a percentage of the official secondary-school-age population. If there are significant numbers of overage and underage students at a given level of schooling, the GAR can exceed 100 percent.
[3] The Gender Parity Index for primary school is the ratio of the primary school NAR(GAR) for females to the NAR(GAR) for males. The Gender Parity Index for secondary school is the ratio of the secondary school NAR(GAR) for females to the NAR(GAR) for males.

Table 2.14 Children under age 5 by highest level of education

Percent distribution of children under age 5 by highest level of education attended, according to age, residence, and province, Zambia DHS 2018

Background characteristic	Sex: Male: Never attended school	Male: Highest level attended pre-K	Male: Total	Male: Number of children	Female: Never attended school	Female: Highest level attended pre-K	Female: Total	Female: Number of children	Total: Never attended school	Total: Highest level attended pre-K	Total: Total	Total: Number of children
Residence												
Urban	71.5	28.5	100.0	1,020	72.9	27.1	100.0	1,081	72.2	27.8	100.0	2,101
Rural	95.1	4.9	100.0	1,958	93.3	6.7	100.0	1,959	94.2	5.8	100.0	3,917
Province												
Central	90.8	9.2	100.0	262	85.9	14.1	100.0	270	88.3	11.7	100.0	532
Copperbelt	72.1	27.9	100.0	409	78.4	21.6	100.0	379	75.1	24.9	100.0	788
Eastern	93.0	7.0	100.0	361	90.2	9.8	100.0	404	91.5	8.5	100.0	764
Luapula	94.4	5.6	100.0	296	92.7	7.3	100.0	291	93.6	6.4	100.0	587
Lusaka	70.9	29.1	100.0	443	68.5	31.5	100.0	494	69.7	30.3	100.0	937
Muchinga	96.6	3.4	100.0	193	95.7	4.3	100.0	182	96.1	3.9	100.0	375
Northern	96.4	3.6	100.0	279	92.3	7.7	100.0	265	94.4	5.6	100.0	545
North Western	90.5	9.5	100.0	160	86.0	14.0	100.0	161	88.2	11.8	100.0	322
Southern	91.1	8.9	100.0	397	91.9	8.1	100.0	395	91.5	8.5	100.0	792
Western	94.7	5.3	100.0	177	97.3	2.7	100.0	201	96.0	4.0	100.0	378
Total	87.0	13.0	100.0	2,977	86.0	14.0	100.0	3,041	86.5	13.5	100.0	6,018

Table 2.15 School attendance by survivorship of parents

Among de jure children age 10-14, the percentage attending school and the ratio of the percentage attending, by parental survival, according to background characteristics, Zambia DHS 2018

Background characteristic	Percentage attending school by survivorship of parents: Both parents deceased	Number	Both parents alive and living with at least one parent	Number	Ratio[1]
Sex					
Male	77.4	102	84.9	3,489	0.9
Female	80.4	107	90.4	3,407	0.9
Residence					
Urban	89.7	73	93.1	2,365	1.0
Rural	73.1	136	84.8	4,531	0.9
Province					
Central	(77.5)	28	84.1	604	0.9
Copperbelt	(98.1)	30	91.6	809	1.1
Eastern	*	15	79.0	991	0.7
Luapula	(66.1)	29	81.5	630	0.8
Lusaka	*	30	93.2	1,050	1.0
Muchinga	*	12	87.5	469	0.8
Northern	(57.3)	26	87.0	641	0.7
North Western	*	13	90.9	403	1.1
Southern	*	13	92.5	834	1.0
Western	*	15	88.4	465	1.0
Wealth quintile					
Lowest	65.4	45	76.5	1,472	0.9
Second	69.3	48	85.4	1,483	0.8
Middle	80.1	42	88.6	1,514	0.9
Fourth	(95.1)	38	92.2	1,281	1.0
Highest	(90.5)	35	98.2	1,145	0.9
Total	78.9	209	87.6	6,896	0.9

Note: Table is based only on children who usually live in the household. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Ratio of the percentage with both parents deceased to the percentage with both parents alive and living with a parent

CHARACTERISTICS OF RESPONDENTS 3

Key Findings

- ***Literacy***: Two-thirds (66%) of women and 82% of men age 15-49 are literate.
- ***Exposure to mass media:*** Only 5% of women and 13% of men have access to three specified types of mass media (newspaper, television, and radio) on a weekly basis.
- ***Internet use:*** Overall, 12% of women and 26% of men age 15-49 have used the internet in the past 12 months.
- ***Employment:*** Forty-five percent of women are currently employed, as compared with 75% of men age 15-49. Among those employed in the 12 months preceding the survey, 34% of women and 31% of men work in agriculture.
- ***Health insurance:*** Health insurance coverage is low, with only 2% of women and 3% of men age 15-49 having any type of health insurance.
- ***Tobacco:*** One percent of women and 19% of men age 15-49 smoke tobacco.

This chapter presents information on the demographic and socioeconomic characteristics of the survey respondents such as age, education, place of residence, marital status, employment, and wealth status. This information is useful for understanding the factors that affect use of reproductive health services, contraceptive use, and other health behaviours.

3.1 Basic Characteristics of Survey Respondents

A total of 13,683 women age 15-49 and 12,132 men age 15-59 were interviewed in the 2018 ZDHS. **Table 3.1** shows the distribution of women and men age 15-49 interviewed by background characteristics. For the most part, the female and male populations have similar distributions. In both populations, the proportion of women and men in each age group decreases with increasing age, reflecting the comparatively young age structure of the population in Zambia.

A majority of women (81%) and men (80%) are Protestant. Seventeen percent of women and 19% of men are Catholic, while 1% of women and less than 1% of men are Muslim. **Table 3.1** shows that about 3 in 10 women (31%) and more than 4 in 10 men (46%) have never been married. More than half of women (55%) and 50% of men are currently married; 1% of women and less than 1% of men are living with someone as if married.

The data further show that female respondents are more likely than male respondents to be divorced or separated (10% versus 4%) or widowed (3% versus less than 1%).

More than half of women and men (53% and 55%, respectively) live in rural areas. By province, the largest proportion of female and male respondents (20% and 19%, respectively) live in Lusaka, while the

smallest proportion of women (5%) reside in North Western and the smallest proportion of men reside in North Western, Western, and Muchinga (5% each).

3.2 EDUCATION AND LITERACY

Literacy

Respondents who have attended higher than secondary school are assumed to be literate. All other respondents, shown a typed sentence to read aloud, are considered literate if they could read all or part of the sentence.

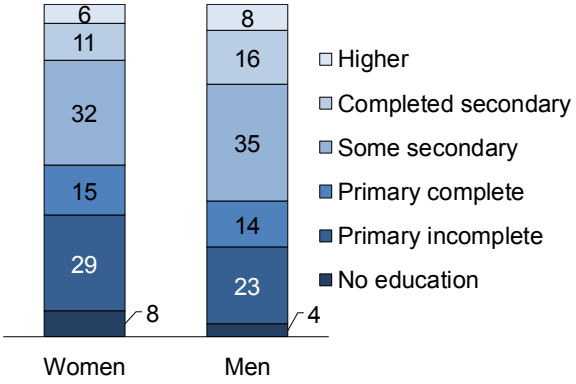
Sample: Women and men age 15-49

Education is an important factor influencing an individual's attitudes and opportunities. **Tables 3.2.1** and **3.2.2** show that men have slightly greater educational attainment than women; the median number of years of schooling completed among men is 6.9, as compared with 6.8 among women. In addition, 8% of women have no formal education, compared with only 4% of men. Forty-four percent of women and 38% of men have attended or completed primary school, and 43% of women and 50% of men have attended or completed secondary school. Higher education is relatively rare; only 6% of women and 8% of men have attended or completed a higher education (**Figure 3.1**).

Literacy follows a similar pattern, with only 66% of women being literate, as compared with 82% of men (**Tables 3.3.1** and **3.3.2**).

Figure 3.1 **Education of survey respondents**

Percent distribution of women and men age 15-49 by highest level of schooling attended or completed



Trends: The percentage of women with a secondary or higher education increased from 28% in 1996 to 48% in 2018, with a corresponding increase among men (from 44% to 58%). The percentage of women (8%) and men (4%) with no education has remained constant since 2013-14.

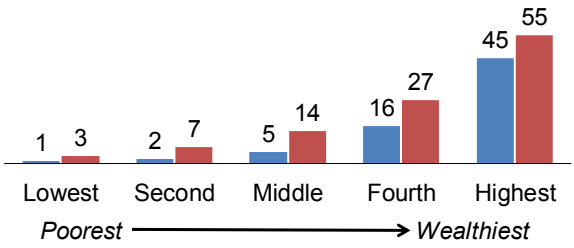
Patterns by background characteristics

- Urban women have on average completed more years of education (8.4) than their rural counterparts (5.7). A similar pattern is observed between urban (8.0) and rural (6.3) men.
- There is considerable provincial variation in educational attainment. The largest proportion of women with no education is found in Muchinga (15%), while the largest proportion of men with no education is found in Eastern (13%).

- The proportion of respondents who have completed secondary school or higher increases with increasing wealth. Forty-five percent of women and 55% of men in the highest wealth quintile have completed secondary school or higher, as compared with 1% of women and 3% of men in the lowest wealth quintile (**Figure 3.2**).

Figure 3.2 Secondary education by household wealth

Percentage of women and men age 15-49 with secondary education complete or higher



- Literacy among women generally decreases with age, from 76% among those age 15-19 to 58% among those age 45-49 (**Table 3.3.1**).
- Respondents living in urban areas are more likely to be literate than those living in rural areas, although the gap in literacy rates between urban and rural populations is higher among women than among men. Eighty-one percent of urban women and 91% of urban men are literate, as compared with 54% of rural women and 74% of rural men.

3.3 Mass Media Exposure

Exposure to mass media

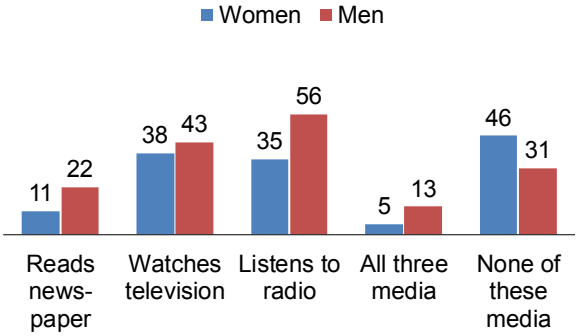
Respondents were asked how often they read a newspaper, listened to the radio, or watched television. Those who responded *at least once a week* are considered regularly exposed to that form of media.

Sample: Women and men age 15-49

Access to information is essential in increasing people's knowledge and awareness of important issues. Data on women's and men's exposure to mass media are especially crucial in the development of health education programmes and the dissemination of information, particularly on family planning, nutrition, HIV/AIDS, and other essential topics.

Figure 3.3 Exposure to mass media

Percentage of women and men age 15-49 who are exposed to media on a weekly basis



Radio is the dominant medium of information for men, whereas television is the most dominant medium for women: 56% of men age 15-49 listen to the radio and 38% of women watch television at least once a week (**Tables 3.4.1** and **3.4.2**). Men are more likely (13%) than women (5%) to access all three forms of media (newspaper, television, and radio) on a weekly basis. Forty-six percent of women and 31% of men do not access any of the three media on a weekly basis (**Figure 3.3**).

The internet is also a critical tool through which people access and share information. Internet use includes accessing web pages, email, and social media. Among all women and men age 15-49, 12% and 26% have used the internet in the last 12 months, respectively. Of those who have accessed the internet in the past 12 months, a greater percentage of women (55%) than men (47%) use the internet on a daily basis (**Tables 3.5.1** and **3.5.2**).

Trends: The percentage of women age 15-49 with no weekly access to mass media increased from 33% in 2007 and 34% in 2013-14 to 46% in 2018. Among men, the percentage increased from 19% in 2007 and 22% in 2013-14 to 31% in 2018.

Patterns by background characteristics

- Both men and women in urban areas are more likely to have accessed all three forms of mass media in the last week than those in rural areas (9% versus 2% among women and 22% versus 5% among men) (**Table 3.4.1** and **3.4.2**).
- Exposure to the three forms of mass media increases with increasing education. The proportion of women with exposure to all three forms of media rises from less than 1% among those with no education to 29% among those with a higher education. Among men, the corresponding increase is from less than 1% to 45%.
- Internet use in the last 12 months is more common in urban areas (22% of women and 44% of men) than in rural areas (3% of women and 11% of men) (**Tables 3.5.1** and **3.5.2**).
- Internet usage among women and men generally increases with increasing education and household wealth. Seventy-nine percent of women and 89% of men with a higher education used the internet in the past 12 months, as compared with 1% of women and 6% of men with no education. Similarly, 38% of women and 65% of men in the highest wealth quintile used the internet during the past 12 months, compared with less than 1% of women and 3% of men in the lowest wealth quintile.

3.4 EMPLOYMENT

Currently employed
Respondents who were employed in the 7 days before the survey.
Sample: Women and men age 15-49

Men are more likely (75%) to be currently employed than women (45%) (**Tables 3.6.1** and **3.6.2**). Twenty-one percent of men and 48% of women were not employed in the 12 months preceding the survey.

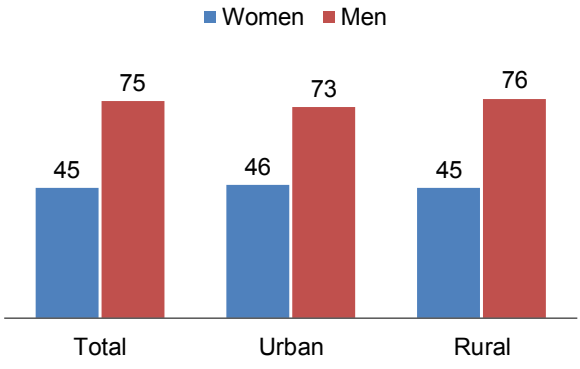
Trends: The percentage of women who are currently employed decreased from 46% in 1996 to 45% in 2018. Among men, however, the percentage increased from 62% to 75% over the same period.

Patterns by background characteristics

- The percentage of men who are currently employed is highest in Muchinga (81%) and lowest in North Western (65%). Conversely, the percentage of women who are employed is highest in Luapula (57%) and lowest in Muchinga (33%).
- There are minor differences between urban and rural areas in the percentages of women and men who are currently employed (46% versus 45% for women and 73% versus 76% for men) (**Figure 3.4**).

Figure 3.4 **Employment status by residence**

Percentage of women and men age 15-49 who are currently employed



3.5 OCCUPATION

Occupation

Categorised as professional/technical/managerial, clerical, sales and services, skilled manual, unskilled manual, domestic service, agriculture, and other occupations.

Sample: Women and men age 15-49 who were currently employed or had worked in the 12 months before the survey

Roughly one in three women (34%) and men (31%) age 15-49 work in the agriculture sector. Among men, 20% work in skilled manual occupations and another 20% work in unskilled manual occupations (**Tables 3.7.1** and **3.7.2**). Thirty-five percent of women are engaged in sales and services, while 8% work in professional/technical/managerial jobs.

Nineteen percent of employed women in Zambia are not paid for the work they do. Women engaged in agricultural work are more likely (37%) than women not working in agriculture (9%) to not be paid for their work. Sixty-three percent of women who worked in the past year are self-employed (**Table 3.8.1**). Among men, 16% are not paid for their work. Similar to women, men engaged in agricultural work are more likely to not be paid (26%) than those not working in agriculture (11%) (**Table 3.8.2**).

Trends: The proportion of women employed in agriculture declined from 58% in 2001-2002 to 34% in 2018; the corresponding decrease among men was from 52% to 31%. The proportion of women and men working in professional, technical, and managerial occupations increased between 1996 and 2018 (from 5% to 8% among women and from 7% to 9% among men).

Patterns by background characteristics

- Urban women are more likely to work in sales and services (50%) than women in rural areas (22%), while urban men are more likely to be engaged in skilled manual occupations (31%) and sales and services (20%) than rural men (11% and 7%, respectively). In rural areas, however, the highest percentage of women and men work in agriculture (59% of women and 50% of men) (**Tables 3.7.1** and **3.7.2**).

- The proportion of women and men working in professional, technical, and managerial occupations rises sharply between the secondary and higher levels of education.

3.6 HEALTH INSURANCE COVERAGE

Only 2% of women and 3% of men age 15-49 have any type of health insurance (**Tables 3.9.1** and **3.9.2**).

Trends: The percentage of women without health insurance increased slightly from 97% in 2013-14 to 98% in 2018, while the percentage among men was 97% in both 2013-14 and 2018.

3.7 TOBACCO USE

One percent of women age 15-49 smoke any kind of tobacco (**Table 3.10.1**), as compared with 19% of men age 15-49 (**Table 3.10.2**). Fourteen percent of men smoke daily, and 5% are occasional smokers. Forty-nine percent of men who are daily smokers reported that they smoke on average less than five cigarettes per day (**Table 3.11**).

Trends: The percentage of men age 15-49 who smoke cigarettes increased from 15% in 2000-01 to 23% in 2007 before declining to 19% in both 2013-14 and 2018.

Patterns by background characteristics

- The proportion of men who smoke any type of tobacco generally increases with age; only 3% of men age 15-19 smoke tobacco, as compared with 33% of those age 45-49.
- Men in Luapula are most likely to smoke cigarettes (25%), while those in Southern are least likely to do so (12%).
- Cigarette smoking among men decreases with increasing education, from 26% among those with no education to 8% among those with a higher education.

3.8 SURGERY

The Lancet Commission on Global Surgery was created in 2013 with the objective of bringing to the forefront the issue of global surgery and anaesthesia as an integral part of universal access to health services. Its vision is centred on universal access to safe, affordable surgical and anaesthesia care when needed. Four dimensions of access are considered: timeliness, surgical capacity, safety, and affordability (Lancet Commission 2015).

Two of the indicators identified by the Lancet Commission were access to timely essential surgery and surgical volume. To collect data informing these indicators, five questions were added to the 2018 ZDHS for both women and men. In this report, information from only the first two questions is analysed. In the first question, respondents were asked "Have you ever undergone a surgical operation in the past 5 years?" If they responded yes, they were asked "What type of operation(s) were they?"

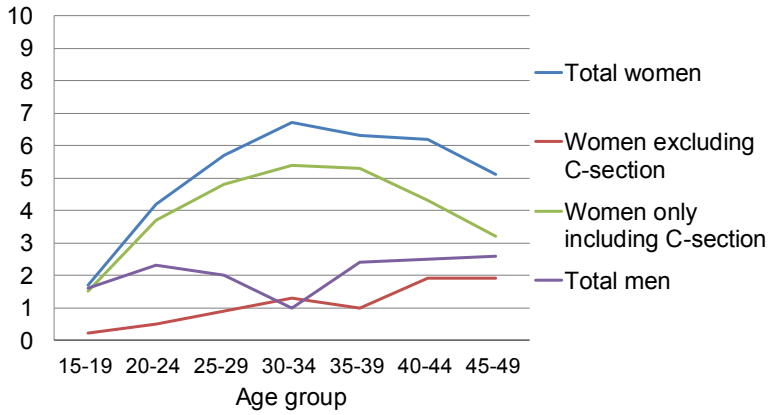
The results, presented in **Table 3.14**, show that 5% of women and 2% of men age 15-49 had an operation in the last 5 years. Among women, caesarean sections (C-sections) represented nearly four out of five surgeries undergone.

Patterns by background characteristics

- Across all age groups, the percentage of women who had surgery is higher than the percentage among men, peaking at age 30-34 (7%), when C-sections are particularly common. However, when excluding C-sections, the percentages of men and women converge (**Figure 3.5**). This demonstrates that the greater use of surgery among women is largely due to C-sections.

Figure 3.5 **Use of surgery by age group**

Percentage of women and men age 15-49 who underwent surgery in the last 5 years by age



- More women in urban areas (6%) reported having surgery in the last 5 years than women in rural areas (4%). A similar pattern is observed by men (3% and 1%, respectively) (**Table 3.14**).
- The percentage of women who have undergone surgery differs by province, ranging from a high of 7% in Eastern to a low of 3% in Western. Among men, provincial differences are small.

- The higher a woman's educational level, the more likely she is to have had surgery in the last 5 years. Thirteen percent of women with a higher education had surgery, as compared with 4% of women with no education or a primary education. The pattern among men is similar.

- Both women (7%) and men (4%) in the highest wealth quintile are more likely to have had surgery than those in the lowest quintile (3% and 1%, respectively).

List of Tables

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Table 3.1 Background characteristics of respondents

Percent distribution of women and men age 15-49 by selected background characteristics, Zambia DHS 2018

Background characteristic	Women			Men		
	Weighted percent	Weighted number	Unweighted number	Weighted percent	Weighted number	Unweighted number
Age						
15-19	21.9	3,000	3,112	24.9	2,781	2,852
20-24	20.0	2,733	2,687	18.2	2,032	1,994
25-29	16.4	2,237	2,166	15.4	1,721	1,630
30-34	13.6	1,862	1,864	12.4	1,383	1,357
35-39	12.4	1,697	1,622	11.5	1,280	1,282
40-44	9.2	1,253	1,280	9.8	1,097	1,096
45-49	6.6	900	952	7.9	883	893
Religion						
Catholic	17.2	2,354	2,351	18.7	2,089	2,048
Protestant	81.1	11,098	11,138	79.8	8,917	8,889
Muslim	0.5	64	61	0.4	48	54
Other	1.2	167	133	1.1	123	113
Marital status						
Never married	31.2	4,272	4,321	46.0	5,142	5,129
Married	55.4	7,580	7,544	49.6	5,545	5,497
Living together	0.5	68	53	0.2	27	37
Divorced/separated	10.0	1,370	1,366	3.7	418	404
Widowed	2.9	392	399	0.4	45	37
Residence						
Urban	46.6	6,374	5,513	44.8	5,013	4,191
Rural	53.4	7,309	8,170	55.2	6,165	6,913
Province						
Central	8.5	1,165	1,397	8.8	979	1,211
Copperbelt	16.1	2,201	1,615	15.5	1,727	1,313
Eastern	11.7	1,605	1,536	13.2	1,476	1,346
Luapula	7.8	1,071	1,414	7.6	849	1,140
Lusaka	20.0	2,733	1,775	19.4	2,166	1,415
Muchinga	5.5	754	1,183	5.4	599	968
Northern	7.7	1,054	1,239	7.7	855	976
North Western	5.2	718	1,081	5.0	556	847
Southern	11.5	1,574	1,347	12.5	1,395	1,117
Western	5.9	808	1,096	5.1	574	771
Education						
No education	7.7	1,054	1,145	4.0	446	450
Primary	44.3	6,059	6,217	37.6	4,206	4,399
Secondary	42.5	5,816	5,556	50.3	5,618	5,387
Higher	5.5	755	765	8.1	907	868
Wealth quintile						
Lowest	17.8	2,442	2,844	16.3	1,827	2,133
Second	17.4	2,387	2,677	17.5	1,952	2,214
Middle	18.1	2,477	2,683	19.8	2,218	2,391
Fourth	22.0	3,011	2,559	22.8	2,552	2,090
Highest	24.6	3,367	2,920	23.5	2,629	2,276
Total 15-49	100.0	13,683	13,683	100.0	11,177	11,104
50-59	na	na	na	na	955	1,028
Total 15-59	na	na	na	na	12,132	12,132

Note: Education categories refer to the highest level of education attended, whether or not that level was completed.
na = Not applicable

Table 3.2.1 Educational attainment: Women

Percent distribution of women age 15-49 by highest level of schooling attended or completed, and median years completed, according to background characteristics, Zambia DHS 2018

Background characteristic	Highest level of schooling						Total	Median years completed	Number of women
	No education	Some primary	Completed primary[1]	Some secondary	Completed secondary[2]	Higher			
Age									
15-24	3.6	25.6	13.4	42.3	12.5	2.6	100.0	7.3	5,733
15-19	3.3	28.8	14.0	47.5	6.1	0.3	100.0	7.0	3,000
20-24	3.9	22.2	12.7	36.7	19.4	5.1	100.0	7.9	2,733
25-29	6.6	23.5	14.2	31.7	14.9	9.1	100.0	7.4	2,237
30-34	10.9	31.6	13.9	24.0	10.4	9.3	100.0	6.5	1,862
35-39	11.8	35.1	17.4	23.2	5.5	7.0	100.0	6.2	1,697
40-44	12.6	36.2	19.8	20.4	5.5	5.5	100.0	6.1	1,253
45-49	15.4	38.6	21.3	16.8	3.3	4.7	100.0	5.6	900
Residence									
Urban	3.3	14.0	13.9	40.6	18.5	9.7	100.0	8.4	6,374
Rural	11.5	42.2	16.3	24.6	3.5	1.8	100.0	5.7	7,309
Province									
Central	6.2	26.0	19.1	34.3	10.4	4.0	100.0	6.9	1,165
Copperbelt	2.7	15.9	16.2	38.2	18.5	8.5	100.0	8.3	2,201
Eastern	13.2	51.0	9.9	19.5	3.5	2.9	100.0	4.9	1,605
Luapula	11.0	43.1	13.3	24.3	5.0	3.3	100.0	5.6	1,071
Lusaka	4.6	14.4	13.9	40.0	16.8	10.3	100.0	8.3	2,733
Muchinga	15.4	36.6	16.9	24.5	4.7	1.9	100.0	5.8	754
Northern	10.9	48.1	13.0	21.9	3.8	2.2	100.0	5.2	1,054
North Western	7.8	31.6	7.7	35.5	11.3	6.0	100.0	6.7	718
Southern	4.4	23.7	23.9	36.7	7.6	3.6	100.0	6.9	1,574
Western	13.3	33.2	15.2	28.4	7.0	2.8	100.0	6.2	808
Wealth quintile									
Lowest	19.1	53.0	14.3	12.9	0.7	0.0	100.0	4.1	2,442
Second	11.6	45.9	17.2	23.4	1.9	0.0	100.0	5.5	2,387
Middle	6.2	33.8	19.6	35.0	5.0	0.4	100.0	6.4	2,477
Fourth	4.0	18.0	17.9	44.4	13.1	2.7	100.0	7.6	3,011
Highest	1.2	6.3	8.7	38.8	25.4	19.6	100.0	10.2	3,367
Total	7.7	29.1	15.2	32.0	10.5	5.5	100.0	6.8	13,683

[1] Completed grade 7 at the primary level
[2] Completed grade 12 at the secondary level

Table 3.2.2 Educational attainment: Men

Percent distribution of men age 15-49 by highest level of schooling attended or completed, and median years completed, according to background characteristics, Zambia DHS 2018

Background characteristic	Highest level of schooling						Total	Median years completed	Number of men
	No education	Some primary	Completed primary[1]	Some secondary	Completed secondary[2]	Higher			
Age									
15-24	3.0	25.2	13.0	42.6	13.3	2.9	100.0	6.7	4,813
15-19	2.7	32.5	13.7	46.7	4.2	0.2	100.0	6.3	2,781
20-24	3.5	15.1	12.1	37.0	25.8	6.6	100.0	7.6	2,032
25-29	2.5	14.9	12.6	35.1	22.3	12.6	100.0	7.5	1,721
30-34	5.6	19.9	13.9	26.9	21.3	12.4	100.0	7.2	1,383
35-39	5.7	22.7	15.6	28.2	15.1	12.7	100.0	6.8	1,280
40-44	5.3	27.5	19.3	26.0	10.8	11.2	100.0	6.7	1,097
45-49	5.5	29.0	19.1	24.5	11.3	10.6	100.0	6.6	883
Residence									
Urban	1.5	10.0	11.1	38.9	24.4	14.2	100.0	8.0	5,013
Rural	6.0	33.9	17.1	31.5	8.3	3.2	100.0	6.3	6,165
Province									
Central	2.8	23.3	18.8	33.6	14.2	7.4	100.0	6.9	979
Copperbelt	1.6	12.7	10.0	39.5	23.7	12.6	100.0	7.8	1,727
Eastern	13.1	39.4	11.4	23.3	8.6	4.0	100.0	5.5	1,476
Luapula	4.2	32.7	14.9	32.8	10.4	5.0	100.0	6.4	849
Lusaka	1.6	10.8	13.9	36.5	23.0	14.1	100.0	7.8	2,166
Muchinga	3.4	31.2	16.2	37.8	8.4	3.0	100.0	6.4	599
Northern	3.5	30.7	18.1	35.7	8.6	3.4	100.0	6.5	855
North Western	2.5	22.8	8.8	40.0	15.9	10.0	100.0	6.9	556
Southern	2.2	20.1	19.6	38.8	13.3	6.0	100.0	6.8	1,395
Western	5.6	34.0	15.3	28.8	12.2	4.0	100.0	6.3	574
Wealth quintile									
Lowest	10.6	45.2	17.6	23.2	3.3	0.0	100.0	5.4	1,827
Second	5.2	38.3	17.2	32.4	6.4	0.5	100.0	6.1	1,952
Middle	3.6	25.6	19.1	37.7	12.4	1.5	100.0	6.6	2,218
Fourth	2.1	13.5	14.5	43.3	20.6	5.9	100.0	7.3	2,552
Highest	0.6	4.0	6.2	33.8	28.3	27.1	100.0	10.2	2,629
Total 15-49	4.0	23.2	14.4	34.8	15.5	8.1	100.0	6.9	11,177
50-59	4.8	27.0	27.1	22.9	8.6	9.7	100.0	6.6	955
Total 15-59	4.1	23.5	15.4	33.8	14.9	8.2	100.0	6.8	12,132

[1] Completed grade 7 at the primary level
[2] Completed grade 12 at the secondary level

Table 3.3.1 Literacy: Women

Percent distribution of women age 15-49 by level of schooling attended and level of literacy, and percentage literate, according to background characteristics, Zambia DHS 2018

Background characteristic	Higher than secondary schooling	No schooling, primary or secondary school: Can read a whole sentence	Can read part of a sentence	Cannot read at all	No card with required language	Blind/ visually impaired	Total	Percentage literate[1]	Number of women
Age									
15-24	2.6	53.0	17.5	26.8	0.0	0.0	100.0	73.1	5,733
15-19	0.3	57.1	18.3	24.2	0.0	0.0	100.0	75.7	3,000
20-24	5.1	48.6	16.5	29.7	0.0	0.1	100.0	70.2	2,733
25-29	9.1	42.2	16.0	32.7	0.0	0.0	100.0	67.2	2,237
30-34	9.3	36.0	16.7	38.0	0.0	0.0	100.0	62.0	1,862
35-39	7.0	34.3	15.8	42.8	0.0	0.1	100.0	57.1	1,697
40-44	5.5	37.6	16.1	40.6	0.2	0.1	100.0	59.1	1,253
45-49	4.7	39.7	13.9	41.5	0.0	0.3	100.0	58.3	900
Residence									
Urban	9.7	51.1	19.7	19.4	0.0	0.1	100.0	80.5	6,374
Rural	1.8	38.4	13.8	45.8	0.0	0.1	100.0	54.1	7,309
Province									
Central	4.0	49.4	20.4	26.1	0.0	0.0	100.0	73.9	1,165
Copperbelt	8.5	51.6	17.0	22.8	0.0	0.1	100.0	77.1	2,201
Eastern	2.9	35.6	11.2	50.1	0.0	0.1	100.0	49.7	1,605
Luapula	3.3	34.6	12.4	49.6	0.0	0.0	100.0	50.4	1,071
Lusaka	10.3	43.1	26.6	19.9	0.1	0.0	100.0	80.0	2,733
Muchinga	1.9	35.2	15.2	47.3	0.3	0.2	100.0	52.2	754
Northern	2.2	34.6	10.4	52.6	0.0	0.2	100.0	47.3	1,054
North Western	6.0	46.8	11.7	35.6	0.0	0.0	100.0	64.4	718
Southern	3.6	56.1	12.5	27.7	0.0	0.1	100.0	72.2	1,574
Western	2.8	47.5	13.0	36.7	0.0	0.0	100.0	63.3	808
Wealth quintile									
Lowest	0.0	24.7	12.2	63.1	0.0	0.0	100.0	36.9	2,442
Second	0.0	36.8	13.9	49.1	0.1	0.1	100.0	50.8	2,387
Middle	0.4	48.6	16.8	34.1	0.0	0.1	100.0	65.8	2,477
Fourth	2.7	50.9	21.7	24.6	0.1	0.1	100.0	75.3	3,011
Highest	19.6	54.9	16.8	8.6	0.0	0.1	100.0	91.3	3,367
Total	5.5	44.3	16.5	33.5	0.0	0.1	100.0	66.4	13,683

[1] Refers to women who attended schooling higher than the secondary level and women who can read a whole sentence or part of a sentence

Table 3.3.2 Literacy: Men

Percent distribution of men age 15-49 by level of schooling attended and level of literacy, and percentage literate, according to background characteristics, Zambia DHS 2018

Background characteristic	Higher than secondary schooling	No schooling, primary or secondary school: Can read a whole sentence	Can read part of a sentence	Cannot read at all	No card with required language	Blind/ visually impaired	Total	Percentage literate[1]	Number of men
Age									
15-24	2.9	61.1	18.5	17.4	0.0	0.0	100.0	82.5	4,813
15-19	0.2	61.1	20.0	18.6	0.0	0.0	100.0	81.4	2,781
20-24	6.6	61.0	16.5	15.8	0.1	0.1	100.0	84.0	2,032
25-29	12.6	56.4	16.9	13.8	0.3	0.0	100.0	86.0	1,721
30-34	12.4	53.6	15.5	18.3	0.1	0.1	100.0	81.6	1,383
35-39	12.7	50.1	17.3	18.5	1.0	0.4	100.0	80.2	1,280
40-44	11.2	50.1	16.3	22.4	0.0	0.0	100.0	77.6	1,097
45-49	10.6	51.8	15.1	22.2	0.0	0.3	100.0	77.5	883
Residence									
Urban	14.2	62.3	14.5	8.6	0.4	0.0	100.0	91.0	5,013
Rural	3.2	51.5	19.5	25.6	0.0	0.1	100.0	74.3	6,165
Province									
Central	7.4	34.4	35.9	22.4	0.0	0.0	100.0	77.6	979
Copperbelt	12.6	63.0	14.3	10.0	0.0	0.2	100.0	89.8	1,727
Eastern	4.0	46.6	16.0	33.2	0.1	0.1	100.0	66.7	1,476
Luapula	5.0	62.1	13.2	19.5	0.0	0.2	100.0	80.4	849
Lusaka	14.1	60.8	14.7	10.0	0.3	0.0	100.0	89.6	2,166
Muchinga	3.0	52.9	20.7	23.2	0.0	0.2	100.0	76.6	599
Northern	3.4	61.6	17.9	16.8	0.0	0.3	100.0	83.0	855
North Western	10.0	57.3	13.4	19.4	0.0	0.0	100.0	80.6	556
Southern	6.0	58.7	18.3	16.1	0.8	0.1	100.0	83.0	1,395
Western	4.0	63.4	10.6	22.0	0.0	0.1	100.0	77.9	574
Wealth quintile									
Lowest	0.0	43.2	20.5	36.1	0.1	0.1	100.0	63.7	1,827
Second	0.5	52.6	19.9	26.9	0.0	0.2	100.0	72.9	1,952
Middle	1.5	59.2	19.5	19.7	0.0	0.1	100.0	80.2	2,218
Fourth	5.9	63.0	19.6	10.9	0.5	0.0	100.0	88.6	2,552
Highest	27.1	59.6	9.0	4.0	0.2	0.1	100.0	95.7	2,629
Total 15-49	8.1	56.4	17.3	17.9	0.2	0.1	100.0	81.8	11,177
50-59	9.7	56.5	16.6	17.0	0.0	0.2	100.0	82.8	955
Total 15-59	8.2	56.4	17.2	17.9	0.2	0.1	100.0	81.9	12,132

[1] Refers to men who attended schooling higher than the secondary level and men who can read a whole sentence or part of a sentence

Table 3.4.1 Exposure to mass media: Women

Percentage of women age 15-49 who are exposed to specific media on a weekly basis, according to background characteristics, Zambia DHS 2018

Background characteristic	Reads a newspaper at least once a week	Watches television at least once a week	Listens to the radio at least once a week	Accesses all three media at least once a week	Accesses none of the three media at least once a week	Number of women
Age						
15-19	12.4	36.8	29.5	4.8	47.5	3,000
20-24	10.1	37.9	33.1	4.3	46.0	2,733
25-29	10.4	40.4	37.6	5.2	43.3	2,237
30-34	10.4	43.2	38.4	6.0	42.1	1,862
35-39	10.1	37.3	35.9	5.3	46.2	1,697
40-44	9.2	35.2	36.0	5.4	48.6	1,253
45-49	11.3	28.5	34.9	4.9	52.5	900
Residence						
Urban	14.8	67.0	43.6	9.1	23.8	6,374
Rural	7.1	12.4	26.6	1.5	65.4	7,309
Province						
Central	11.1	30.7	38.6	4.0	46.7	1,165
Copperbelt	14.5	62.8	42.2	8.3	25.4	2,201
Eastern	16.6	19.0	33.7	3.6	51.6	1,605
Luapula	6.2	22.3	43.3	2.6	47.8	1,071
Lusaka	15.2	72.9	43.1	10.7	21.4	2,733
Muchinga	7.5	17.3	31.2	1.7	61.7	754
Northern	4.1	15.4	24.6	1.5	68.4	1,054
North Western	1.0	18.9	11.8	0.4	77.4	718
Southern	5.3	22.8	27.0	2.3	60.9	1,574
Western	9.4	14.4	19.7	2.3	70.7	808
Education						
No education	0.3	12.5	21.9	0.0	72.0	1,054
Primary	4.6	20.4	26.5	0.9	60.9	6,059
Secondary	15.0	54.0	42.0	7.2	31.1	5,816
Higher	40.5	88.5	59.1	28.9	5.8	755
Wealth quintile						
Lowest	4.7	3.3	16.6	0.3	79.0	2,442
Second	6.0	4.6	25.3	0.4	69.8	2,387
Middle	7.3	11.6	30.4	1.3	62.8	2,477
Fourth	8.9	54.1	39.1	4.2	32.1	3,011
Highest	22.4	91.2	52.9	15.4	5.4	3,367
Total	10.7	37.8	34.5	5.1	46.0	13,683

Table 3.4.2 Exposure to mass media: Men

Percentage of men age 15-49 who are exposed to specific media on a weekly basis, according to background characteristics, Zambia DHS 2018

Background characteristic	Reads a newspaper at least once a week	Watches television at least once a week	Listens to the radio at least once a week	Accesses all three media at least once a week	Accesses none of the three media at least once a week	Number of men
Age						
15-19	15.8	42.0	48.5	7.3	35.2	2,781
20-24	20.9	43.2	53.0	10.1	32.7	2,032
25-29	23.7	44.1	58.0	12.9	28.7	1,721
30-34	26.6	43.4	59.3	16.7	29.1	1,383
35-39	27.2	46.9	63.1	17.9	25.8	1,280
40-44	24.2	42.4	62.0	15.9	28.2	1,097
45-49	24.4	40.8	59.0	14.9	30.6	883
Residence						
Urban	30.0	72.7	65.1	22.3	15.2	5,013
Rural	15.7	19.3	48.4	4.5	43.6	6,165
Province						
Central	24.4	35.8	61.0	10.0	28.7	979
Copperbelt	27.4	65.0	60.7	18.8	19.0	1,727
Eastern	24.8	24.5	48.1	7.6	41.1	1,476
Luapula	23.6	27.3	61.5	10.2	31.5	849
Lusaka	33.9	79.0	68.5	26.9	11.9	2,166
Muchinga	24.4	16.3	50.5	8.2	45.9	599
Northern	6.4	23.7	58.3	2.7	35.1	855
North Western	6.7	27.3	21.7	2.5	62.3	556
Southern	10.0	34.7	56.8	6.0	32.9	1,395
Western	13.6	20.2	30.5	3.9	57.2	574
Education						
No education	3.5	16.4	36.5	0.3	56.5	446
Primary	11.8	23.5	46.9	3.9	44.5	4,206
Secondary	25.8	52.7	61.4	14.7	22.8	5,618
Higher	56.1	89.3	73.0	44.6	4.9	907
Wealth quintile						
Lowest	11.4	6.2	34.8	1.3	59.9	1,827
Second	16.3	10.0	47.5	3.0	46.4	1,952
Middle	16.3	22.8	55.5	4.9	37.1	2,218
Fourth	23.5	62.7	63.2	16.0	19.3	2,552
Highest	37.4	91.9	70.2	30.3	5.1	2,629
Total 15-49	22.1	43.2	55.9	12.5	30.9	11,177
50-59	24.8	34.1	60.0	13.2	31.2	955
Total 15-59	22.3	42.5	56.2	12.5	30.9	12,132

Table 3.5.1 Internet usage: Women

Percentage of women age 15-49 who have ever used the internet and percentage who have used the internet in the past 12 months, and among women who have used the internet in the past 12 months, percent distribution by frequency of internet use in the past month, according to background characteristics, Zambia DHS 2018

Background characteristic	Ever used the internet	Used the internet in the past 12 months	Number	Among respondents who have used the internet in the past 12 months, percentage who, in the past month, used the internet: Almost every day	At least once a week	Less than once a week	Not at all	Missing	Total	Number
Age										
15-19	10.5	9.2	3,000	39.6	34.2	24.1	2.1	0.0	100.0	275
20-24	19.2	17.5	2,733	55.7	29.1	11.8	3.4	0.0	100.0	478
25-29	17.6	15.7	2,237	59.3	28.5	10.3	1.9	0.0	100.0	351
30-34	14.7	13.6	1,862	58.6	23.1	15.4	2.9	0.0	100.0	253
35-39	10.1	9.4	1,697	60.1	25.7	13.7	0.5	0.0	100.0	159
40-44	7.8	7.1	1,253	52.1	28.3	17.2	2.4	0.0	100.0	89
45-49	5.4	4.9	900	(72.6)	(16.8)	(6.9)	(3.7)	(0.0)	(100.0)	44
Residence										
Urban	24.4	22.2	6,374	56.5	28.1	13.2	2.2	0.0	100.0	1,418
Rural	3.8	3.2	7,309	44.8	28.8	22.2	4.3	0.0	100.0	231
Province										
Central	11.4	10.5	1,165	63.3	22.1	12.4	2.2	0.0	100.0	123
Copperbelt	22.9	20.7	2,201	56.2	28.0	12.3	3.5	0.0	100.0	454
Eastern	4.9	4.4	1,605	54.7	19.6	16.3	9.5	0.0	100.0	71
Luapula	6.4	6.0	1,071	58.3	26.5	9.2	6.0	0.0	100.0	64
Lusaka	24.4	22.1	2,733	58.5	25.8	14.8	0.9	0.0	100.0	604
Muchinga	6.0	5.5	754	39.1	52.5	6.6	1.8	0.0	100.0	42
Northern	5.1	3.6	1,054	29.3	54.5	11.7	4.5	0.0	100.0	38
North Western	13.6	11.8	718	50.4	23.2	25.9	0.6	0.0	100.0	85
Southern	7.4	7.0	1,574	37.0	41.7	19.2	2.1	0.0	100.0	111
Western	7.7	7.1	808	54.8	26.6	16.9	1.7	0.0	100.0	57
Education										
No education	0.5	0.5	1,054	*	*	*	*	*	*	5
Primary	1.0	0.8	6,059	(32.9)	(29.0)	(38.1)	(0.0)	(0.0)	(100.0)	47
Secondary	19.7	17.3	5,816	45.0	34.2	17.6	3.2	0.0	100.0	1,004
Higher	81.1	78.5	755	73.2	18.3	7.0	1.5	0.0	100.0	593
Wealth quintile										
Lowest	0.5	0.4	2,442	*	*	*	*	*	*	10
Second	1.2	0.7	2,387	*	*	*	*	*	*	16
Middle	3.6	3.1	2,477	26.7	50.6	15.6	7.1	0.0	100.0	76
Fourth	10.4	9.2	3,011	41.4	39.2	15.2	4.3	0.0	100.0	276
Highest	41.1	37.8	3,367	60.3	24.3	13.8	1.7	0.0	100.0	1,272
Total	13.4	12.1	13,683	54.9	28.2	14.4	2.5	0.0	100.0	1,649

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 3.5.2 Internet usage: Men

Percentage of men age 15-49 who have ever used the internet and percentage who have used the internet in the past 12 months, and among men who have used the internet in the past 12 months, percent distribution by frequency of internet use in the past month, according to background characteristics, Zambia DHS 2018

Background characteristic	Ever used the internet	Used the internet in the past 12 months	Number	Among respondents who have used the internet in the past 12 months, percentage who, in the past month, used the internet: Almost every day	At least once a week	Less than once a week	Not at all	Missing	Total	Number
Age										
15-19	22.9	20.3	2,781	34.7	37.8	23.9	3.5	0.0	100.0	565
20-24	39.5	36.8	2,032	45.9	33.5	16.2	4.4	0.0	100.0	747
25-29	35.1	32.3	1,721	51.8	35.0	10.2	2.9	0.0	100.0	556
30-34	29.0	27.0	1,383	51.6	32.1	12.7	3.7	0.0	100.0	374
35-39	25.7	24.5	1,280	54.8	30.9	11.6	2.8	0.0	100.0	313
40-44	19.3	18.0	1,097	51.4	31.8	14.2	2.6	0.0	100.0	198
45-49	17.7	16.6	883	50.2	41.2	7.6	1.1	0.0	100.0	147
Residence										
Urban	47.6	44.2	5,013	51.4	33.2	11.8	3.6	0.0	100.0	2,215
Rural	12.3	11.1	6,165	33.4	38.4	25.4	2.8	0.0	100.0	686
Province										
Central	30.6	28.6	979	40.8	45.4	13.3	0.5	0.0	100.0	280
Copperbelt	38.2	35.5	1,727	45.7	40.5	12.1	1.7	0.0	100.0	613
Eastern	11.4	11.0	1,476	38.8	41.9	17.5	1.9	0.0	100.0	162
Luapula	12.1	10.4	849	35.0	45.8	18.1	1.1	0.0	100.0	88
Lusaka	54.0	50.0	2,166	55.4	26.6	12.5	5.6	0.0	100.0	1,084
Muchinga	7.5	6.7	599	34.8	32.4	28.9	3.8	0.0	100.0	40
Northern	13.3	12.2	855	31.9	30.7	33.5	3.9	0.0	100.0	104
North Western	27.4	24.0	556	42.7	23.7	24.2	9.3	0.0	100.0	133
Southern	24.5	22.7	1,395	43.9	37.0	18.8	0.4	0.0	100.0	316
Western	15.1	14.0	574	44.6	42.9	8.7	3.7	0.0	100.0	80
Education										
No education	6.0	6.0	446	*	*	*	*	*	*	27
Primary	5.6	5.0	4,206	14.9	38.7	37.9	8.5	0.0	100.0	211
Secondary	36.6	33.0	5,618	39.5	39.8	16.9	3.8	0.0	100.0	1,857
Higher	90.5	88.9	907	72.2	21.3	5.2	1.3	0.0	100.0	807
Wealth quintile										
Lowest	3.0	2.5	1,827	(6.6)	(56.0)	(35.3)	(2.1)	(0.0)	(100.0)	46
Second	7.0	5.6	1,952	16.7	44.0	34.3	5.0	0.0	100.0	110
Middle	14.4	12.6	2,218	31.4	40.6	25.6	2.3	0.0	100.0	279
Fourth	32.7	29.5	2,552	38.9	38.1	17.7	5.3	0.0	100.0	754
Highest	68.3	65.1	2,629	56.3	30.6	10.3	2.7	0.0	100.0	1,712
Total 15-49	28.1	26.0	11,177	47.1	34.4	15.0	3.4	0.0	100.0	2,901
50-59	13.4	12.9	955	54.6	27.6	17.2	0.6	0.0	100.0	123
Total 15-59	26.9	24.9	12,132	47.4	34.2	15.1	3.3	0.0	100.0	3,023

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 3.6.1 Employment status: Women

Percent distribution of women age 15-49 by employment status, according to background characteristics, Zambia DHS 2018

Background characteristic	Employed in the 12 months preceding the survey		Not employed in the 12 months preceding the survey	Total	Number of women
	Currently employed[1]	Not currently employed			
Age					
15-19	17.4	4.3	78.2	100.0	3,000
20-24	35.9	8.5	55.6	100.0	2,733
25-29	50.0	7.6	42.4	100.0	2,237
30-34	59.2	7.4	33.4	100.0	1,862
35-39	63.2	6.6	30.3	100.0	1,697
40-44	63.5	8.4	28.1	100.0	1,253
45-49	63.5	9.5	27.0	100.0	900
Marital status					
Never married	25.6	5.4	69.0	100.0	4,272
Married or living together	51.2	7.6	41.2	100.0	7,648
Divorced/separated/ widowed	65.7	9.2	25.2	100.0	1,762
Number of living children					
0	22.5	5.2	72.4	100.0	3,489
1-2	46.5	7.0	46.4	100.0	4,427
3-4	56.0	8.4	35.6	100.0	2,945
5+	59.2	8.3	32.5	100.0	2,821
Residence					
Urban	45.7	5.3	49.0	100.0	6,374
Rural	44.5	8.7	46.8	100.0	7,309
Province					
Central	42.4	9.2	48.5	100.0	1,165
Copperbelt	39.6	5.3	55.1	100.0	2,201
Eastern	44.1	16.0	39.9	100.0	1,605
Luapula	57.1	5.0	37.9	100.0	1,071
Lusaka	47.6	4.4	48.0	100.0	2,733
Muchinga	33.3	7.7	59.0	100.0	754
Northern	47.5	4.0	48.5	100.0	1,054
North Western	38.8	6.2	55.1	100.0	718
Southern	48.3	6.1	45.6	100.0	1,574
Western	48.3	9.3	42.4	100.0	808
Education					
No education	43.1	11.0	45.9	100.0	1,054
Primary	47.5	8.0	44.5	100.0	6,059
Secondary	40.0	5.6	54.4	100.0	5,816
Higher	66.8	5.8	27.5	100.0	755
Wealth quintile					
Lowest	44.5	10.6	44.9	100.0	2,442
Second	43.4	9.0	47.6	100.0	2,387
Middle	47.3	6.4	46.2	100.0	2,477
Fourth	43.3	5.7	51.0	100.0	3,011
Highest	46.6	5.0	48.5	100.0	3,367
Total	45.0	7.1	47.8	100.0	13,683

[1] "Currently employed" is defined as having done work in the past 7 days. Includes persons who did not work in the past 7 days but who are regularly employed and were absent from work for leave, illness, vacation, or any other such reason.

Table 3.6.2 Employment status: Men

Percent distribution of men age 15-49 by employment status, according to background characteristics, Zambia DHS 2018

Background characteristic	Employed in the 12 months preceding the survey		Not employed in the 12 months preceding the survey	Total	Number of men
	Currently employed[1]	Not currently employed			
Age					
15-19	35.6	6.2	58.2	100.0	2,781
20-24	71.4	5.6	23.0	100.0	2,032
25-29	89.1	3.1	7.8	100.0	1,721
30-34	94.3	2.1	3.6	100.0	1,383
35-39	94.0	2.1	4.0	100.0	1,280
40-44	94.4	2.8	2.8	100.0	1,097
45-49	92.0	3.0	5.0	100.0	883
Marital status					
Never married	51.7	5.8	42.5	100.0	5,142
Married or living together	94.6	2.4	3.0	100.0	5,572
Divorced/separated/ widowed	85.6	5.0	9.3	100.0	463
Number of living children					
0	51.8	5.5	42.7	100.0	5,028
1-2	91.1	3.5	5.4	100.0	2,523
3-4	94.9	2.2	2.9	100.0	1,678
5+	94.3	2.6	3.1	100.0	1,948
Residence					
Urban	72.5	4.6	23.0	100.0	5,013
Rural	76.2	3.7	20.2	100.0	6,165
Province					
Central	71.6	2.0	26.4	100.0	979
Copperbelt	73.5	3.4	23.1	100.0	1,727
Eastern	70.5	5.2	24.2	100.0	1,476
Luapula	79.0	1.5	19.4	100.0	849
Lusaka	75.4	5.9	18.7	100.0	2,166
Muchinga	81.2	3.5	15.3	100.0	599
Northern	75.4	4.4	20.2	100.0	855
North Western	64.8	4.6	30.7	100.0	556
Southern	78.0	3.5	18.5	100.0	1,395
Western	75.6	4.6	19.8	100.0	574
Education					
No education	77.7	4.2	18.1	100.0	446
Primary	75.6	4.0	20.5	100.0	4,206
Secondary	71.6	4.5	23.9	100.0	5,618
Higher	86.2	2.0	11.8	100.0	907
Wealth quintile					
Lowest	80.7	4.0	15.4	100.0	1,827
Second	76.6	4.2	19.1	100.0	1,952
Middle	74.8	3.5	21.7	100.0	2,218
Fourth	76.3	3.3	20.4	100.0	2,552
Highest	66.7	5.2	28.1	100.0	2,629
Total 15-49	74.5	4.1	21.4	100.0	11,177
50-59	86.5	3.1	10.4	100.0	955
Total 15-59	75.5	4.0	20.5	100.0	12,132

[1] "Currently employed" is defined as having done work in the past 7 days. Includes persons who did not work in the past 7 days but who are regularly employed and were absent from work for leave, illness, vacation, or any other such reason.

Table 3.7.1 Occupation: Women

Percent distribution of women age 15-49 employed in the 12 months preceding the survey by occupation, according to background characteristics, Zambia DHS 2018

Background characteristic	Profes-sional/ technical/ managerial	Clerical	Sales and services	Skilled manual	Unskilled manual	Domestic service	Agriculture	Missing	Total	Number of women
Age										
15-19	1.9	0.0	23.4	1.3	10.9	9.4	53.1	0.0	100.0	653
20-24	4.4	1.1	36.6	0.8	12.2	8.5	35.4	1.0	100.0	1,212
25-29	10.4	1.3	37.6	1.7	12.0	8.1	29.0	0.0	100.0	1,290
30-34	11.2	1.4	36.9	1.6	12.4	8.1	28.3	0.0	100.0	1,241
35-39	8.5	0.9	36.0	2.3	12.2	10.7	29.5	0.0	100.0	1,183
40-44	8.1	0.9	34.3	3.4	10.8	7.3	35.2	0.0	100.0	901
45-49	5.8	1.1	30.8	2.9	11.5	6.0	42.0	0.0	100.0	657
Marital status										
Never married	12.1	2.5	36.1	1.7	11.1	11.1	25.5	0.0	100.0	1,323
Married or living together	6.9	0.7	33.9	1.7	10.7	6.4	39.4	0.3	100.0	4,495
Divorced/separated/ widowed	6.1	0.8	35.9	2.9	16.4	12.5	25.3	0.0	100.0	1,319
Number of living children										
0	13.0	2.8	33.9	1.9	10.9	9.7	27.9	0.0	100.0	963
1-2	10.3	1.2	36.5	1.6	12.0	10.1	27.8	0.5	100.0	2,371
3-4	7.7	0.9	36.8	2.0	12.5	8.3	31.8	0.0	100.0	1,897
5+	1.8	0.1	30.7	2.2	11.4	5.9	47.9	0.0	100.0	1,905
Residence										
Urban	13.0	2.1	49.6	2.8	12.3	14.6	5.3	0.3	100.0	3,251
Rural	3.3	0.1	22.2	1.1	11.4	3.3	58.5	0.0	100.0	3,885
Province										
Central	7.7	0.7	29.7	0.7	9.9	5.4	45.8	0.0	100.0	600
Copperbelt	12.7	1.2	47.3	3.4	11.4	12.4	11.5	0.0	100.0	988
Eastern	4.6	0.4	19.1	1.8	19.9	2.9	51.2	0.1	100.0	965
Luapula	4.3	0.2	25.2	0.9	7.8	2.9	58.6	0.0	100.0	666
Lusaka	13.9	2.7	45.7	2.9	15.3	16.0	3.6	0.0	100.0	1,422
Muchinga	2.6	0.6	28.9	2.0	5.5	3.1	57.3	0.0	100.0	309
Northern	4.1	0.2	28.2	1.3	7.1	3.3	55.8	0.0	100.0	543
North Western	7.7	1.3	32.4	1.9	9.7	2.9	44.2	0.0	100.0	322
Southern	4.0	0.6	40.8	1.0	8.5	14.4	29.4	1.3	100.0	857
Western	3.9	0.2	28.6	1.4	11.0	2.4	52.5	0.0	100.0	465
Education										
No education	0.8	0.0	22.5	2.2	15.0	7.0	52.6	0.0	100.0	570
Primary	0.6	0.2	29.3	1.5	12.0	7.6	48.5	0.4	100.0	3,363
Secondary	6.3	0.9	48.1	2.2	12.4	11.2	18.8	0.0	100.0	2,655
Higher	65.7	8.0	15.4	3.0	4.5	1.2	2.2	0.0	100.0	548
Wealth quintile										
Lowest	0.5	0.0	12.7	1.5	13.4	1.9	69.8	0.1	100.0	1,344
Second	1.0	0.0	23.5	0.9	12.3	2.0	60.3	0.0	100.0	1,250
Middle	2.1	0.1	34.6	1.5	9.2	10.2	41.5	0.8	100.0	1,332
Fourth	4.4	0.9	55.3	2.1	11.0	16.2	10.0	0.0	100.0	1,475
Highest	25.2	3.4	42.4	3.1	13.0	10.1	2.8	0.0	100.0	1,735
Total	7.7	1.0	34.7	1.9	11.8	8.4	34.2	0.2	100.0	7,136

Table 3.7.2 Occupation: Men

Percent distribution of men age 15-49 employed in the 12 months preceding the survey by occupation, according to background characteristics, Zambia DHS 2018

Background characteristic	Profes-sional/ technical/ managerial	Clerical	Sales and services	Skilled manual	Unskilled manual	Domestic service	Agriculture	Missing	Total	Number of men
Age										
15-19	2.5	0.7	8.2	9.3	36.4	7.8	34.9	0.2	100.0	1,164
20-24	5.3	0.3	14.8	16.5	26.1	7.9	29.1	0.0	100.0	1,565
25-29	11.2	0.9	14.5	23.8	16.2	8.2	24.9	0.1	100.0	1,588
30-34	10.5	0.8	13.1	23.3	16.1	7.0	28.7	0.5	100.0	1,332
35-39	11.1	0.8	14.3	22.9	14.3	6.2	30.5	0.0	100.0	1,230
40-44	10.8	0.3	12.2	22.4	16.4	3.5	34.4	0.0	100.0	1,066
45-49	10.1	0.2	10.2	23.1	15.6	3.5	37.3	0.0	100.0	839
Marital status										
Never married	8.5	0.8	13.2	15.6	27.7	9.3	24.8	0.1	100.0	2,957
Married or living together	8.9	0.5	12.4	22.1	16.3	5.1	34.6	0.1	100.0	5,406
Divorced/separated/ widowed	8.0	0.1	14.8	26.2	20.6	7.6	22.2	0.4	100.0	420
Number of living children										
0	7.9	0.6	13.3	15.0	27.8	9.4	25.8	0.1	100.0	2,882
1-2	11.3	1.0	13.7	24.6	18.8	6.0	24.3	0.3	100.0	2,386
3-4	9.4	0.3	12.5	24.5	14.5	5.7	33.0	0.0	100.0	1,629
5+	6.1	0.2	11.1	18.6	15.9	3.9	44.2	0.0	100.0	1,887
Residence										
Urban	14.6	1.1	20.1	31.3	17.1	8.9	6.7	0.2	100.0	3,862
Rural	4.1	0.2	7.0	11.4	22.9	4.8	49.5	0.0	100.0	4,921
Province										
Central	7.4	0.7	9.2	14.9	21.5	7.8	38.5	0.0	100.0	721
Copperbelt	11.4	0.3	14.7	32.3	20.6	8.3	12.4	0.0	100.0	1,327
Eastern	5.3	0.4	10.3	14.9	21.6	11.1	36.4	0.0	100.0	1,118
Luapula	5.9	0.1	10.2	7.7	14.9	3.6	57.7	0.0	100.0	684
Lusaka	15.8	1.4	22.2	29.0	15.2	9.9	6.0	0.5	100.0	1,760
Muchinga	3.9	0.3	10.2	12.2	15.6	3.3	54.2	0.3	100.0	508
Northern	3.5	0.2	6.8	8.6	13.4	3.6	63.9	0.0	100.0	683
North Western	10.2	2.2	10.3	24.4	12.2	3.2	37.6	0.0	100.0	385
Southern	6.8	0.2	9.6	19.5	28.6	3.1	32.1	0.0	100.0	1,137
Western	5.0	0.1	8.6	14.6	44.0	0.5	27.2	0.0	100.0	461
Education										
No education	1.1	0.0	7.3	10.4	27.6	6.2	47.3	0.0	100.0	366
Primary	1.0	0.1	8.4	14.2	24.7	6.9	44.7	0.1	100.0	3,345
Secondary	6.1	0.6	16.3	26.4	19.4	7.6	23.4	0.2	100.0	4,273
Higher	58.6	2.7	15.1	16.1	3.5	0.7	3.3	0.0	100.0	800
Wealth quintile										
Lowest	0.6	0.0	3.4	8.8	23.2	3.4	60.4	0.1	100.0	1,546
Second	1.3	0.1	5.8	9.8	24.6	5.0	53.3	0.1	100.0	1,578
Middle	2.5	0.3	11.7	17.1	23.2	6.7	38.4	0.1	100.0	1,738
Fourth	9.3	0.7	18.9	30.9	19.8	11.2	9.0	0.1	100.0	2,030
Highest	26.5	1.6	20.7	29.3	12.3	5.6	3.8	0.2	100.0	1,892
Total 15-49	8.7	0.6	12.8	20.1	20.3	6.6	30.7	0.1	100.0	8,784
50-59	9.0	1.0	10.8	18.4	14.6	1.8	44.2	0.2	100.0	856
Total 15-59	8.7	0.6	12.6	20.0	19.8	6.2	31.9	0.1	100.0	9,639

Table 3.8.1 Type of employment: Women

Percent distribution of women age 15-49 employed in the 12 months preceding the survey by type of earnings, type of employer, and continuity of employment, according to type of employment (agricultural or nonagricultural), Zambia DHS 2018

Employment characteristic	Agricultural work	Non-agricultural work	Missing	Total
Type of earnings				
Cash only	29.1	81.7	*	63.5
Cash and in-kind	30.5	8.9	*	16.3
In-kind only	3.7	0.4	*	1.5
Not paid	36.7	9.0	*	18.7
Total	100.0	100.0	100.0	100.0
Type of employer				
Employed by family member	25.4	4.8	*	11.9
Employed by non-family member	2.9	36.6	*	25.0
Self-employed	71.7	58.6	*	63.1
Total	100.0	100.0	100.0	100.0
Continuity of employment				
All year	22.1	69.6	*	53.2
Seasonal	75.9	20.2	*	39.3
Occasional	1.9	10.2	*	7.5
Total	100.0	100.0	100.0	100.0
Number of women employed during the last 12 months	2,443	4,681	12	7,136

Note: Total includes women with missing information on type of employment who are not shown separately. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 3.8.2 Type of employment: Men

Percent distribution of men age 15-49 employed in the 12 months preceding the survey by type of earnings, and continuity of employment, according to type of employment (agricultural or nonagricultural), Zambia DHS 2018

Employment characteristic	Agricultural work	Non-agricultural work	Missing	Total
Type of earnings				
Cash only	34.0	81.8	*	67.1
Cash and in-kind	37.9	6.5	*	16.1
In-kind only	2.4	0.6	*	1.2
Not paid	25.8	11.0	*	15.5
Total	100.0	100.0	100.0	100.0
Continuity of employment				
All year	35.8	61.9	*	53.9
Seasonal	62.0	20.0	*	32.9
Occasional	2.2	18.1	*	13.2
Total	100.0	100.0	100.0	100.0
Number of women employed during the last 12 months	2,696	6,078	10	8,784

Note: Total includes men with missing information on type of employment who are not shown separately. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 3.9.1 Health insurance coverage: Women

Percentage of women age 15-49 with specific types of health insurance coverage, and percentage with any health insurance, according to background characteristics, Zambia DHS 2018

Background characteristic	Social security	Other employer-based insurance	Mutual health organisation/ community-based insurance	Privately purchased commercial insurance	Other	None	Any health insurance	Number of women
Age								
15-19	0.0	0.7	0.0	0.0	0.2	99.1	0.9	3,000
20-24	0.0	0.5	0.2	0.3	0.2	98.9	1.1	2,733
25-29	0.0	1.3	0.3	0.2	0.6	97.7	2.3	2,237
30-34	0.1	2.7	0.3	0.2	0.5	96.2	3.8	1,862
35-39	0.0	2.7	0.1	0.1	0.4	96.7	3.3	1,697
40-44	0.0	1.8	0.0	0.2	0.5	97.8	2.2	1,253
45-49	0.0	1.5	0.1	0.2	0.4	97.9	2.1	900
Residence								
Urban	0.0	2.7	0.3	0.3	0.7	96.1	3.9	6,374
Rural	0.0	0.3	0.0	0.0	0.1	99.6	0.4	7,309
Province								
Central	0.0	1.2	0.0	0.2	0.1	98.5	1.5	1,165
Copperbelt	0.0	2.2	0.1	0.2	1.1	96.5	3.5	2,201
Eastern	0.0	0.4	0.0	0.0	0.1	99.5	0.5	1,605
Luapula	0.0	0.4	0.0	0.0	0.3	99.2	0.8	1,071
Lusaka	0.1	3.2	0.5	0.4	0.4	95.4	4.6	2,733
Muchinga	0.0	0.0	0.0	0.1	0.1	99.8	0.2	754
Northern	0.0	0.2	0.0	0.0	0.0	99.8	0.2	1,054
North Western	0.1	1.8	0.6	0.1	0.1	97.3	2.7	718
Southern	0.0	0.6	0.0	0.0	0.2	99.2	0.8	1,574
Western	0.0	0.8	0.0	0.1	0.5	98.7	1.3	808
Education								
No education	0.0	0.0	0.0	0.0	0.0	100.0	0.0	1,054
Primary	0.0	0.0	0.0	0.0	0.0	99.9	0.1	6,059
Secondary	0.0	1.3	0.1	0.1	0.4	98.1	1.9	5,816
Higher	0.1	14.8	2.2	1.7	3.5	78.2	21.8	755
Wealth quintile								
Lowest	0.0	0.0	0.0	0.0	0.0	100.0	0.0	2,442
Second	0.0	0.0	0.0	0.0	0.0	100.0	0.0	2,387
Middle	0.0	0.0	0.0	0.0	0.1	99.9	0.1	2,477
Fourth	0.1	0.4	0.0	0.0	0.2	99.4	0.6	3,011
Highest	0.0	5.4	0.6	0.6	1.3	92.3	7.7	3,367
Total	0.0	1.4	0.2	0.1	0.4	97.9	2.1	13,683

Table 3.9.2 Health insurance coverage: Men

Percentage of men age 15-49 with specific types of health insurance coverage, and percentage with any health insurance, according to background characteristics, Zambia DHS 2018

Background characteristic	Social security	Other employer-based insurance	Mutual health organisation/ community-based insurance	Privately purchased commercial insurance	Other	None	Any health insurance	Number of men
Age								
15-19	0.0	0.1	0.2	0.1	0.0	99.6	0.4	2,781
20-24	0.0	0.8	0.2	1.0	0.0	97.9	2.1	2,032
25-29	0.1	2.7	0.0	0.5	0.1	96.9	3.1	1,721
30-34	0.1	3.5	0.3	0.7	0.0	95.8	4.2	1,383
35-39	0.0	3.9	0.6	0.4	0.2	95.0	5.0	1,280
40-44	0.0	2.6	0.4	0.3	0.0	96.7	3.3	1,097
45-49	0.2	4.8	0.9	0.7	0.0	93.5	6.5	883
Residence								
Urban	0.1	4.1	0.7	1.0	0.1	94.3	5.7	5,013
Rural	0.0	0.5	0.0	0.1	0.0	99.4	0.6	6,165
Province								
Central	0.0	1.2	0.1	0.7	0.0	98.0	2.0	979
Copperbelt	0.1	4.1	0.0	0.5	0.1	95.4	4.6	1,727
Eastern	0.1	0.8	0.0	0.1	0.0	99.1	0.9	1,476
Luapula	0.0	1.2	0.2	0.2	0.0	98.3	1.7	849
Lusaka	0.0	4.3	1.4	0.9	0.0	93.6	6.4	2,166
Muchinga	0.0	0.5	0.1	0.0	0.0	99.4	0.6	599
Northern	0.0	0.0	0.0	0.0	0.0	100.0	0.0	855
North Western	0.0	2.6	0.0	0.3	0.1	97.0	3.0	556
Southern	0.0	1.0	0.0	1.0	0.1	97.9	2.1	1,395
Western	0.0	0.8	0.1	0.3	0.2	98.6	1.4	574
Education								
No education	0.3	0.6	0.0	2.6	0.0	96.6	3.4	446
Primary	0.0	0.2	0.1	0.0	0.0	99.7	0.3	4,206
Secondary	0.0	1.3	0.2	0.2	0.0	98.4	1.6	5,618
Higher	0.4	17.0	2.4	3.7	0.2	77.4	22.6	907
Wealth quintile								
Lowest	0.0	0.0	0.0	0.0	0.0	100.0	0.0	1,827
Second	0.0	0.0	0.0	0.0	0.0	99.9	0.1	1,952
Middle	0.0	0.1	0.0	0.0	0.0	99.8	0.2	2,218
Fourth	0.0	1.4	0.1	0.5	0.0	98.0	2.0	2,552
Highest	0.2	7.5	1.2	1.6	0.1	89.8	10.2	2,629
Total 15-49	0.0	2.1	0.3	0.5	0.0	97.1	2.9	11,177
50-59	0.1	3.5	0.0	1.8	0.0	94.6	5.4	955
Total 15-59	0.0	2.2	0.3	0.6	0.0	96.9	3.1	12,132

Table 3.10.1 Tobacco smoking: Women

Percentage of women age 15-49 who smoke various tobacco products, according to background characteristics and maternity status, Zambia DHS 2018

Background characteristic	Percentage who smoke:[1]			Number of women
	Cigarettes[2]	Other type of tobacco[3]	Any type of tobacco	
Age				
15-19	0.0	0.0	0.0	3,000
20-24	0.6	0.0	0.6	2,733
25-29	1.3	0.0	1.3	2,237
30-34	1.1	0.1	1.1	1,862
35-39	0.8	0.0	0.8	1,697
40-44	1.7	0.0	1.7	1,253
45-49	2.0	0.0	2.0	900
Residence				
Urban	1.0	0.0	1.0	6,374
Rural	0.8	0.0	0.8	7,309
Province				
Central	0.3	0.0	0.3	1,165
Copperbelt	1.2	0.0	1.2	2,201
Eastern	0.5	0.0	0.5	1,605
Luapula	0.7	0.0	0.7	1,071
Lusaka	1.0	0.1	1.0	2,733
Muchinga	1.3	0.1	1.3	754
Northern	0.6	0.0	0.6	1,054
North Western	0.2	0.0	0.2	718
Southern	0.4	0.0	0.4	1,574
Western	2.9	0.0	2.9	808
Education				
No education	2.5	0.0	2.5	1,054
Primary	0.7	0.0	0.7	6,059
Secondary	0.7	0.0	0.7	5,816
Higher	1.2	0.0	1.2	755
Wealth quintile				
Lowest	1.3	0.0	1.3	2,442
Second	0.6	0.0	0.6	2,387
Middle	0.7	0.0	0.7	2,477
Fourth	0.9	0.0	0.9	3,011
Highest	1.0	0.1	1.0	3,367
Total	0.9	0.0	0.9	13,683

[1] Includes daily and occasional (less than daily) use
[2] Cigarettes include kreteks.
[3] Includes pipes full of tobacco, cigars, cigarillos, and water pipes

Table 3.10.2 Tobacco smoking: Men

Percentage of men age 15-49 who smoke various tobacco products, and percent distribution of men by smoking frequency, according to background characteristics, Zambia DHS 2018

Background characteristic	Percentage who smoke:[1]			Smoking frequency			Total	Number of men
	Cigarettes[2]	Other type of tobacco[3]	Any type of tobacco	Daily smoker	Occasional smoker[4]	Non-smoker		
Age								
15-19	2.9	0.2	2.9	1.7	1.2	97.0	100.0	2,781
20-24	15.1	1.2	15.1	9.6	5.7	84.7	100.0	2,032
25-29	24.4	1.2	24.5	18.0	7.0	75.1	100.0	1,721
30-34	24.7	1.1	24.7	17.6	7.3	75.1	100.0	1,383
35-39	25.3	0.8	25.6	21.2	4.8	74.0	100.0	1,280
40-44	28.1	0.3	28.2	23.7	4.8	71.5	100.0	1,097
45-49	32.5	1.1	32.5	27.2	6.0	66.8	100.0	883
Residence								
Urban	17.2	1.4	17.4	12.4	5.2	82.3	100.0	5,013
Rural	19.5	0.3	19.5	15.3	4.5	80.2	100.0	6,165
Province								
Central	19.6	0.2	19.8	13.2	6.6	80.2	100.0	979
Copperbelt	21.8	2.1	21.8	13.9	8.5	77.6	100.0	1,727
Eastern	19.7	0.4	19.7	16.2	3.7	80.1	100.0	1,476
Luapula	24.6	0.2	24.8	24.0	1.2	74.8	100.0	849
Lusaka	15.9	1.4	16.0	12.5	3.9	83.6	100.0	2,166
Muchinga	17.1	0.1	17.2	14.5	3.0	82.5	100.0	599
Northern	18.1	0.2	18.2	13.6	5.0	81.4	100.0	855
North Western	19.4	1.0	19.4	13.2	6.4	80.4	100.0	556
Southern	12.3	0.2	12.3	8.5	3.8	87.7	100.0	1,395
Western	20.2	0.2	20.2	15.5	5.0	79.5	100.0	574
Education								
No education	25.7	0.5	25.7	23.2	3.3	73.5	100.0	446
Primary	22.9	0.4	22.9	18.8	4.5	76.7	100.0	4,206
Secondary	16.2	1.1	16.3	11.1	5.4	83.4	100.0	5,618
Higher	8.3	0.9	8.4	5.3	3.2	91.5	100.0	907
Wealth quintile								
Lowest	28.2	0.2	28.3	22.8	5.9	71.3	100.0	1,827
Second	21.2	0.5	21.3	17.4	4.0	78.5	100.0	1,952
Middle	17.9	0.5	18.0	12.7	5.5	81.8	100.0	2,218
Fourth	16.5	1.0	16.6	12.0	4.8	83.2	100.0	2,552
Highest	12.1	1.4	12.2	8.4	4.1	87.5	100.0	2,629
Total 15-49	18.5	0.8	18.5	14.0	4.8	81.2	100.0	11,177
50-59	31.9	0.3	31.9	27.1	5.0	67.9	100.0	955
Total 15-59	19.5	0.8	19.6	15.0	4.8	80.1	100.0	12,132

[1] Includes daily and occasional (less than daily) use
[2] Includes manufactured cigarettes, hand-rolled cigarettes, and kreteks
[3] Includes pipes full of tobacco, cigars, cigarillos, and water pipes
[4] Occasional refers to less often than daily use.

Table 3.11 Average number of cigarettes smoked daily: Men

Among men age 15-49 who smoke cigarettes daily, percent distribution by average number of cigarettes smoked per day, according to background characteristics, Zambia DHS 2018

Background characteristic	Average number of cigarettes smoked per day[1]						Total	Number of respondents who smoke cigarettes daily[1]
	<5	5-9	10-14	15-24	≥25	Don't know/ missing		
Age								
15-19	(72.6)	(16.5)	(8.2)	(2.8)	(0.0)	(0.0)	(100.0)	46
20-24	57.2	27.7	10.3	4.4	0.5	0.0	100.0	195
25-29	53.5	31.2	8.1	6.6	0.6	0.0	100.0	290
30-34	46.9	31.4	16.2	3.1	2.5	0.0	100.0	242
35-39	45.3	32.3	13.6	7.4	1.4	0.0	100.0	265
40-44	41.7	31.1	17.4	7.3	2.5	0.0	100.0	257
45-49	45.6	36.4	11.9	3.6	2.5	0.0	100.0	237
Residence								
Urban	40.3	34.6	16.2	7.4	1.4	0.0	100.0	599
Rural	54.4	29.2	10.5	4.2	1.7	0.0	100.0	933
Province								
Central	50.1	35.6	9.2	4.4	0.7	0.0	100.0	127
Copperbelt	38.5	34.3	20.4	6.6	0.2	0.0	100.0	237
Eastern	46.4	36.7	12.7	3.3	0.9	0.0	100.0	238
Luapula	71.6	18.3	5.9	3.1	1.1	0.0	100.0	198
Lusaka	36.1	37.0	15.7	9.1	2.1	0.0	100.0	263
Muchinga	43.9	28.0	16.8	8.0	3.3	0.0	100.0	86
Northern	71.4	16.8	8.9	2.9	0.0	0.0	100.0	114
North Western	44.5	31.6	6.1	8.5	9.4	0.0	100.0	73
Southern	45.6	30.8	13.5	6.9	3.3	0.0	100.0	107
Western	52.3	37.2	9.8	0.4	0.4	0.0	100.0	89
Education								
No education	54.1	35.2	8.0	1.5	1.1	0.0	100.0	104
Primary	49.8	31.1	12.3	5.3	1.4	0.0	100.0	766
Secondary	48.0	31.4	13.4	5.3	1.9	0.0	100.0	615
Higher	(34.0)	(24.1)	(21.4)	(18.4)	(2.0)	(0.0)	(100.0)	47
Wealth quintile								
Lowest	57.1	28.1	10.5	3.1	1.2	0.0	100.0	413
Second	51.2	31.7	10.6	4.9	1.6	0.0	100.0	337
Middle	51.7	29.5	10.2	6.2	2.4	0.0	100.0	277
Fourth	37.8	34.9	17.4	8.2	1.7	0.0	100.0	290
Highest	40.9	34.4	17.4	6.2	1.1	0.0	100.0	216
Total 15-49	48.9	31.3	12.8	5.4	1.6	0.0	100.0	1,533
50-59	45.6	34.8	10.7	6.0	2.9	0.0	100.0	257
Total 15-59	48.4	31.8	12.5	5.5	1.8	0.0	100.0	1,790

Note: Figures in parentheses are based on 25-49 unweighted cases.
[1] Includes manufactured cigarettes, hand-rolled cigarettes, and kreteks

Table 3.12 Smokeless tobacco use and any tobacco use

Percentage of women and men age 15-49 who currently use smokeless tobacco, according to type of tobacco product, and percentage who use any type of tobacco, Zambia DHS 2018

Tobacco product	Women	Men
Snuff, by mouth	0.2	0.4
Snuff, by nose	0.9	0.2
Chewing tobacco	0.0	0.0
Other type of smokeless tobacco	0.0	0.0
Any type of smokeless tobacco[1]	1.1	0.5
Any type of tobacco[2]	2.7	19.2
Number	13,683	11,177

Note: Table includes women and men who use smokeless tobacco daily or occasionally (less than daily).
[1] Includes snuff by mouth, snuff by nose, and chewing tobacco
[2] Includes all types of smokeless tobacco shown in this table along with cigarettes, pipes, cigars, cigarillos, and water pipes

Table 3.13 History of diabetes and hypertension

Percent distribution of women age 15-49 by history of diabetes and hypertension, Zambia DHS 2018

History of diabetes and hypertension	Total
History of diabetes	
Told had diabetes by medical practitioner	0.5
Number of women	13,683
Received treatment for diabetes	
Receiving treatment[1]	36.3
Not receiving treatment	63.7
Total	100.0
Number of women with diabetes	68
History of hypertension	
Told blood pressure was high	8.8
Number of women	13,683
Received treatment for hypertension	
Receiving treatment[2]	21.0
Not receiving treatment	79.0
Total	100.0
Number of women with high blood pressure	1,198

[1] Has taken medication for diabetes prescribed by a doctor or other health worker in the 2 weeks prior to the interview
[2] Has taken medication for hypertension prescribed by a doctor or other health worker in the 2 weeks prior to the interview

Table 3.14 Use of surgery

Percentage of women and men age 15-49 who underwent surgery in the 5 years preceding the survey, and percentage of women age 15-49 who underwent surgery in the 5 years preceding the survey excluding C-sections, according to background characteristics, Zambia DHS 2018

	Women			Men	
Background characteristic	Percentage who have undergone surgery in the last 5 years	Percentage who have undergone surgery in the last 5 years excluding C-sections	Number of women	Percentage who have undergone surgery in the last 5 years	Number of men
Age					
15-19	1.7	0.2	3,000	1.6	2,781
20-24	4.2	0.5	2,733	2.3	2,032
25-29	5.7	0.9	2,237	2.0	1,721
30-34	6.7	1.3	1,862	1.0	1,383
35-39	6.3	1.0	1,697	2.4	1,280
40-44	6.2	1.9	1,253	2.5	1,097
45-49	5.1	1.9	900	2.6	883
Residence					
Urban	6.0	1.3	6,374	3.1	5,013
Rural	3.7	0.6	7,309	1.0	6,165
Province					
Central	3.9	0.7	1,165	0.6	979
Copperbelt	5.0	0.7	2,201	3.3	1,727
Eastern	6.9	1.0	1,605	1.2	1,476
Luapula	5.5	0.9	1,071	2.9	849
Lusaka	4.8	1.3	2,733	3.4	2,166
Muchinga	4.0	0.9	754	0.5	599
Northern	3.5	0.6	1,054	0.5	855
North Western	3.3	0.7	718	1.3	556
Southern	5.2	0.8	1,574	0.8	1,395
Western	2.5	0.5	808	2.6	574
Education					
No education	3.8	0.6	1,054	0.7	446
Primary	3.5	0.6	6,059	1.3	4,206
Secondary	5.1	0.9	5,816	2.0	5,618
Higher	13.3	3.3	755	5.5	907
Wealth quintile					
Lowest	3.4	0.3	2,442	0.9	1,827
Second	3.3	0.5	2,387	0.7	1,952
Middle	3.9	0.8	2,477	1.3	2,218
Fourth	5.0	1.0	3,011	2.2	2,552
Highest	7.2	1.5	3,367	4.1	2,629
Total 15-49	4.8	0.9	13,683	2.0	11,177
50-59	na	na	na	2.8	955
Total 15-59	na	na	na	2.0	12,132

na = Not applicable

MARRIAGE AND SEXUAL ACTIVITY 4

Key Findings

- ***Current marital status:*** Fifty-six percent of women and 50% of men age 15-49 are currently married or living together with a partner as if married.
- ***Polygyny:*** Eleven percent of women age 15-49 have one or more co-wives.
- ***Median age at first marriage:*** Median age at first marriage is 19.1 years among women and 24.4 years among men age 25-49.
- ***Age at first sexual intercourse:*** Seventeen percent of women had sexual intercourse by age 15, as compared with 11% of men.
- ***Median age at first sexual intercourse:*** Median age at first sexual intercourse is 16.6 years among women age 25-49 and 18.5 years among men age 25-59.

Marriage and sexual activity help determine the extent to which women are exposed to the risk of pregnancy. Thus, they are important determinants of fertility levels. However, the timing and circumstances of marriage and sexual activity also have profound consequences for women's and men's lives.

4.1 MARITAL STATUS

Currently married

Women and men who report being married or living together with a partner as though married at the time of the survey.

Sample: Women and men age 15-49

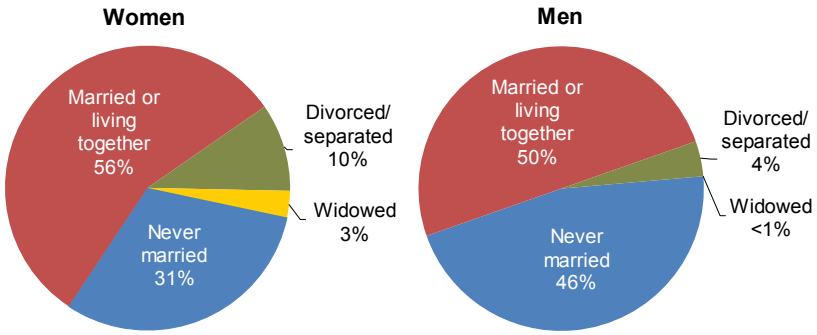
Table 4.1 shows that roughly one in seven women (15%) age 15-19 are currently in union, as compared with only 1% of men of the same age. Fifty-five percent of women age 15-49 are married, compared with 50% of men. The percentage of women age 15-49 who are married increases until age 35-39 and begins to drop thereafter. The percentage of married men continues to increase from age 15-19 to age 45-49.

Thirty-one percent of women have never been married, 56% are married or living together with a partner as if married, 10% are divorced or separated, and 3% are widowed. Among men, 46% have never been married, 50% are married or living together with a partner as if married, 4% are divorced or separated, and less than 1% are widowed (**Figure 4.1**).

Trends: The percentage of women who are currently married has declined over time, from 61% in 1992 to 55% in 2018. The percentage of men who are married increased from 48% in 1996 to 55% in 2001-02 before declining to 50% in 2018.

Figure 4.1 Marital status

Percent distribution of women and men age 15-49



4.2 POLYGYNY

Polygyny

Women who report that that their husband or partner has other wives are considered to be in a polygynous marriage

Men who report that they have more than one wife, or who live with more than one woman as if married, are considered to be in a polygynous marriage

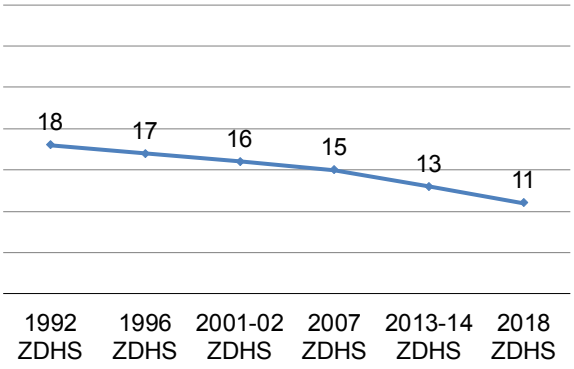
Sample: Currently married women and men age 15-49

Eleven percent of married women age 15-49 reported that their husband has other wives. Five percent of men age 15-49 reported having two or more wives (**Tables 4.2.1** and **4.2.2**).

Trends: The percentage of married women in a polygynous union has declined over time, from 18% in 1992 to 11% in 2018 (**Figure 4.2**).

Figure 4.2 Trends in polygyny

Percentage of married women age 15-49 in a polygynous union



Patterns by background characteristics

- The percentage of women with one or more co-wives is highest among those age 45-49 (18%) and lowest among those age 15-19 (3%). Similarly, men age 45-49 are most likely to have two or more wives (10%) (**Tables 4.2.1** and **4.2.2**).
- Women in urban areas (4%) are less likely than women in rural areas (16%) to have one or more co-wives. The percentage of men with two or more wives is 1% in urban areas and 7% in rural areas.
- Across the provinces, Southern (22%) has the highest percentage of women who report being in a polygynous union, while Copperbelt and Lusaka have the lowest percentages (4% each). Similarly, Southern (11%) has the highest percentage of men who report having two or more wives, while Copperbelt and Lusaka have the lowest percentages (1% each).
- Women with no education (18%) are more likely to have co-wives than women with a higher education (2%). Among men, age 15-49 those with a primary education are most likely to have two or more wives (7%).

4.3 AGE AT FIRST MARRIAGE

Median age at first marriage

Age by which half of respondents have been married.

Sample: Women age 20-49 and 25-49 and men age 20-49, 25-49, 20-59, and 25-59

In Zambia, women marry earlier than men. The median age at first marriage is 19.1 years among women and 24.4 years among men age 25-49. Nine percent of women were first married by age 15, as compared with less than 1% of men. By age 18, the percentage of women who are married increases to 39%. By age 25, four in five women (81%) are married (**Table 4.3**).

Trends: Median age at first marriage has increased over time among both women (from 17.4 years in 1992 to 19.1 years in 2018) and men (from 23.5 years in 1996 to 24.4 years in 2018).

Patterns by background characteristics

- Median age at first marriage among women age 25-49 is lower in rural areas (18.3 years) than in urban areas (20.3 years) (**Table 4.4**).
- Median age at first marriage among women age 25-49 increases with increasing education, from 17.5 years among those with no education to 20.6 years among those with a secondary education.

4.4 AGE AT FIRST SEXUAL INTERCOURSE

Median age at first sexual intercourse

Age by which half of respondents have had sexual intercourse.

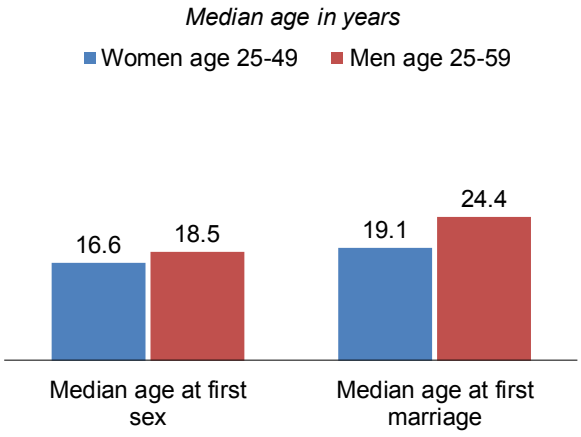
Sample: Women age 20-49 and 25-49 and men age 20-49, 25-49, 20-59, and 25-59

In Zambia, the median age at first sexual intercourse among women age 25-49 is 16.6 years. Seventeen percent of women had sexual intercourse by age 15 and 69% by age 18. By age 25, 95% of women have had sexual intercourse.

Men in Zambia initiate sexual intercourse at older ages than women. The median age at first sex among men age 25-59 is 18.5 years. Eleven percent of men age 25-49 had sexual intercourse by age 15 and 43% by age 18. Ninety-one percent of men have had sexual intercourse by age 25 (**Table 4.5**).

Among women age 25-49, the median age at first sexual intercourse is 2.5 years earlier than the median age at first marriage (16.6 years versus 19.1 years). Thus, exposure to the risk of childbearing is earlier than the median age at marriage (**Figure 4.3**).

Figure 4.3 **Median age at first sex and first marriage**



Trends: Median age at first sexual intercourse among women age 25-49 increased from 16.3 years in 1992 to 17.3 years in 2013-14 before declining to 16.6 years in 2018. Among men age 25-49, median age at first sexual intercourse has increased over time, from 16.7 years in 1996 to 18.5 years in 2018. The percentage of women who had sexual intercourse by age 18 declined from 71% in 1992 to 58% in 2013-14 before increasing to 69% in 2018. The percentage of men who had sex by age 18 declined from 65% in 1996 to 43% in 2018.

Patterns by background characteristics

- Women in rural areas begin having sexual intercourse 1.1 years earlier than women in urban areas (16.2 years versus 17.3 years) (**Table 4.6**).
- By province, median age at first sexual intercourse among women age 25-49 is lowest in North Western (15.7 years) and highest in Lusaka (17.5). Among men age 25-59, median age at first sexual intercourse is lowest in Eastern and Western (17.3 years each) and highest in Copperbelt (19.8).
- Among both women and men, median age at first sexual intercourse increases with increasing education. Among women age 25-49, it ranges from 15.8 years among those with no education to 20.0 years among those with a higher education. Among men age 25-59, it ranges from 17.9 years among those with no education to 19.8 years among those with a higher education.
- Median age at first sexual intercourse among women increases with increasing household wealth, from 16.0 years among those in the lowest wealth quintile to 18.1 years among those in the highest quintile (**Table 4.6**).

4.5 Recent Sexual Activity

The 2018 ZDHS collected data on recent sexual activity among women and men age 15-49. Among women, 53% had sexual intercourse within the 4 weeks prior to the survey, while 13% had never had sexual intercourse. Among men, 57% had sexual intercourse within the past 4 weeks, while 17% had never had sex (**Tables 4.7.1** and **4.7.2**).

List of Tables

For more information on marriage and sexual activity, see the following tables:

- **Table 4.1 Current marital status**
- **Table 4.2.1 Number of women's co-wives**
- **Table 4.2.2 Number of men's wives**
- **Table 4.3 Age at first marriage**
- **Table 4.4 Median age at first marriage by background characteristics**
- **Table 4.5 Age at first sexual intercourse**
- **Table 4.6 Median age at first sexual intercourse according to background characteristics**
- **Table 4.7.1 Recent sexual activity: Women**
- **Table 4.7.2 Recent sexual activity: Men**

Table 4.1 Current marital status

Percent distribution of women and men age 15-49 by current marital status, according to age, Zambia DHS 2018

Age	Marital status						Total	Percentage of respondents currently in union	Number of respondents
	Never married	Married	Living together	Divorced	Separated	Widowed			
					WOMEN				
15-19	84.4	14.4	0.2	0.3	0.7	0.0	100.0	14.6	3,000
20-24	39.7	52.3	0.3	4.5	2.8	0.3	100.0	52.6	2,733
25-29	18.3	68.3	0.7	7.3	4.0	1.3	100.0	69.0	2,237
30-34	7.2	74.5	0.5	10.7	4.8	2.3	100.0	75.0	1,862
35-39	3.0	76.1	1.0	11.9	3.5	4.6	100.0	77.0	1,697
40-44	3.1	71.7	0.8	13.3	3.2	7.9	100.0	72.4	1,253
45-49	2.5	68.1	0.5	11.2	3.0	14.7	100.0	68.6	900
Total 15-49	31.2	55.4	0.5	7.1	3.0	2.9	100.0	55.9	13,683
					MEN				
15-19	98.9	1.1	0.0	0.0	0.0	0.0	100.0	1.1	2,781
20-24	75.8	22.3	0.3	1.1	0.5	0.0	100.0	22.6	2,032
25-29	32.5	62.9	0.4	1.9	2.2	0.1	100.0	63.3	1,721
30-34	11.0	81.9	0.4	4.2	2.0	0.5	100.0	82.3	1,383
35-39	5.8	85.9	0.3	5.3	1.9	0.7	100.0	86.2	1,280
40-44	3.7	88.1	0.1	5.1	2.0	1.0	100.0	88.3	1,097
45-49	3.0	88.3	0.1	4.9	1.8	1.9	100.0	88.4	883
Total 15-49	46.0	49.6	0.2	2.5	1.2	0.4	100.0	49.9	11,177
50-59	2.4	88.9	0.8	4.8	1.7	1.4	100.0	89.7	955
Total 15-59	42.6	52.7	0.3	2.7	1.3	0.5	100.0	53.0	12,132

Table 4.2.1 Number of women's co-wives

Percent distribution of currently married women age 15-49 by number of co-wives, and percentage of currently married women with one or more co-wives, according to background characteristics, Zambia DHS 2018

Background characteristic	Number of co-wives				Total	Percentage with one or more co-wives[1]	Number of women
	0	1	2+	Don't know			
Age							
15-19	96.7	2.3	0.6	0.3	100.0	3.0	437
20-24	91.7	6.5	0.7	1.1	100.0	7.3	1,438
25-29	89.0	8.6	1.4	1.1	100.0	10.0	1,544
30-34	89.3	8.6	1.1	1.1	100.0	9.6	1,396
35-39	84.0	12.2	2.3	1.6	100.0	14.5	1,307
40-44	83.4	11.7	4.2	0.7	100.0	15.9	908
45-49	81.2	13.0	4.7	1.2	100.0	17.6	618
Residence							
Urban	93.9	4.0	0.3	1.8	100.0	4.3	3,080
Rural	83.7	12.7	3.0	0.6	100.0	15.7	4,568
Province							
Central	87.3	8.2	3.5	1.0	100.0	11.7	654
Copperbelt	96.3	3.5	0.0	0.2	100.0	3.5	1,043
Eastern	83.1	13.8	1.8	1.3	100.0	15.6	1,075
Luapula	91.3	7.7	0.5	0.5	100.0	8.2	611
Lusaka	93.7	3.7	0.3	2.3	100.0	3.9	1,384
Muchinga	82.7	13.5	3.3	0.5	100.0	16.8	470
Northern	85.4	13.0	1.1	0.5	100.0	14.1	668
North Western	90.3	8.4	0.1	1.2	100.0	8.5	359
Southern	77.1	14.8	6.8	1.3	100.0	21.6	993
Western	88.2	9.7	1.9	0.3	100.0	11.5	392
Education							
No education	81.9	15.4	2.1	0.6	100.0	17.5	743
Primary	85.3	11.1	2.7	0.9	100.0	13.8	3,881
Secondary	91.8	5.7	0.9	1.6	100.0	6.7	2,635
Higher	97.9	1.4	0.2	0.5	100.0	1.6	389
Wealth quintile							
Lowest	85.2	12.3	1.9	0.6	100.0	14.2	1,553
Second	82.4	14.4	2.7	0.5	100.0	17.1	1,509
Middle	85.1	11.0	3.1	0.8	100.0	14.1	1,468
Fourth	91.0	5.5	1.6	1.9	100.0	7.1	1,620
Highest	95.4	2.9	0.3	1.4	100.0	3.2	1,499
Total	87.8	9.2	1.9	1.1	100.0	11.1	7,648

[1] Excludes women who responded "don't know" when asked if their husband has other wives

Table 4.2.2 Number of men's wives

Percent distribution of currently married men age 15-49 by number of wives, according to background characteristics, Zambia DHS 2018

Background characteristic	Number of wives		Total	Number of men
	1	2+		
Age				
15-19	(98.7)	(1.3)	100.0	31
20-24	99.5	0.5	100.0	459
25-29	97.6	2.4	100.0	1,090
30-34	96.3	3.7	100.0	1,138
35-39	95.5	4.5	100.0	1,104
40-44	92.2	7.8	100.0	968
45-49	90.3	9.7	100.0	781
Residence				
Urban	98.8	1.2	100.0	2,170
Rural	92.8	7.2	100.0	3,402
Province				
Central	95.8	4.2	100.0	486
Copperbelt	99.3	0.7	100.0	728
Eastern	93.6	6.4	100.0	857
Luapula	93.9	6.1	100.0	429
Lusaka	98.7	1.3	100.0	1,022
Muchinga	93.5	6.5	100.0	332
Northern	95.1	4.9	100.0	475
North Western	95.8	4.2	100.0	271
Southern	89.1	10.9	100.0	704
Western	92.9	7.1	100.0	267
Education				
No education	93.9	6.1	100.0	276
Primary	92.7	7.3	100.0	2,263
Secondary	96.8	3.2	100.0	2,492
Higher	98.3	1.7	100.0	541
Wealth quintile				
Lowest	93.7	6.3	100.0	1,168
Second	91.8	8.2	100.0	1,087
Middle	94.5	5.5	100.0	1,119
Fourth	96.7	3.3	100.0	1,187
Highest	99.2	0.8	100.0	1,011
Total 15-49	95.1	4.9	100.0	5,572
50-59	92.6	7.4	100.0	856
Total 15-59	94.8	5.2	100.0	6,428

Note: Figures in parentheses are based on 25-49 unweighted cases.

Table 4.3 Age at first marriage

Percentage of women and men age 15-49 who were first married by specific exact ages and median age at first marriage, according to current age, Zambia DHS 2018

Current age	Percentage first married by exact age: 15	18	20	22	25	Percentage never married	Number of respondents	Median age at first marriage
				WOMEN				
15-19	2.2	na	na	na	na	84.4	3,000	a
20-24	5.2	29.0	46.5	na	na	39.7	2,733	a
25-29	7.9	33.5	51.8	65.3	76.7	18.3	2,237	19.8
30-34	10.1	37.2	56.7	70.1	81.3	7.2	1,862	19.4
35-39	8.6	44.7	63.7	74.2	83.9	3.0	1,697	18.5
40-44	9.5	40.6	60.9	72.5	81.6	3.1	1,253	18.9
45-49	10.2	45.8	64.1	76.4	86.8	2.5	900	18.4
20-49	8.1	36.6	55.3	na	na	16.3	10,683	19.4
25-49	9.1	39.3	58.3	70.7	81.2	8.2	7,950	19.1
				MEN				
15-19	0.0	na	na	na	na	98.9	2,781	a
20-24	0.1	2.8	10.0	na	na	75.8	2,032	a
25-29	0.1	4.0	13.3	27.8	53.2	32.5	1,721	24.6
30-34	0.2	4.7	13.2	28.9	54.3	11.0	1,383	24.4
35-39	0.2	5.1	16.2	29.8	52.8	5.8	1,280	24.6
40-44	0.0	4.3	15.5	34.5	61.8	3.7	1,097	23.6
45-49	0.2	4.7	14.1	30.1	50.7	3.0	883	24.9
20-49	0.1	4.1	13.3	na	na	28.5	8,396	a
25-49	0.1	4.5	14.4	29.9	54.5	13.4	6,365	24.4
20-59	0.1	4.0	13.3	na	na	25.8	9,351	a
25-59	0.1	4.4	14.2	29.8	54.6	12.0	7,319	24.4

Note: The age at first marriage is defined as the age at which the respondent began living with her/his first spouse/partner.
na = Not applicable due to censoring
a = Omitted because less than 50% of the women or men began living with their spouse or partner for the first time before reaching the beginning of the age group

Table 4.4 Median age at first marriage by background characteristics

Median age at first marriage among women age 20-49 and age 25-49, and median age at first marriage among men age 25-59, according to background characteristics, Zambia DHS 2018

Background characteristic	Women age 20-49	Women age 25-49	Men age 25-59
Residence			
Urban	a	20.3	a
Rural	18.4	18.3	23.3
Province			
Central	19.0	18.7	24.2
Copperbelt	a	20.1	a
Eastern	18.0	17.8	22.7
Luapula	18.8	18.5	24.1
Lusaka	a	20.3	a
Muchinga	18.3	18.1	23.1
Northern	18.0	17.8	24.0
North Western	a	19.7	24.1
Southern	18.7	18.7	23.5
Western	a	21.2	24.6
Education			
No education	17.6	17.5	23.4
Primary	17.9	17.9	22.9
Secondary	a	20.6	24.8
Higher	a	a	a
Wealth quintile			
Lowest	18.2	18.2	23.2
Second	18.4	18.2	23.2
Middle	18.4	18.1	23.2
Fourth	19.6	19.1	24.9
Highest	a	22.1	a
Total	19.4	19.1	24.4

Note: The age at first marriage is defined as the age at which the respondent began living with her/his first spouse/partner.
a = Omitted because less than 50% of the respondents began living with their spouse or partner for the first time before reaching the beginning of the age group

Table 4.5 Age at first sexual intercourse

Percentage of women and men age 15-49 who had first sexual intercourse by specific exact ages, percentage who never had sexual intercourse, and median age at first sexual intercourse, according to current age, Zambia DHS 2018

Current age	Percentage who had first sexual intercourse by exact age: 15	18	20	22	25	Percentage who never had intercourse	Number	Median age at first intercourse
				WOMEN				
15-19	12.7	na	na	na	na	50.3	3,000	a
20-24	15.4	62.6	82.5	na	na	8.0	2,733	17.0
25-29	14.6	63.3	80.3	89.4	93.6	2.1	2,237	16.9
30-34	17.9	68.2	85.3	91.6	94.8	0.8	1,862	16.6
35-39	18.3	73.1	87.1	92.3	96.1	0.1	1,697	16.5
40-44	16.6	70.8	85.5	93.3	95.9	0.1	1,253	16.6
45-49	20.0	71.0	86.0	92.7	94.5	0.3	900	16.4
20-49	16.6	67.1	83.9	na	na	2.7	10,683	16.7
25-49	17.1	68.6	84.4	91.5	94.9	0.8	7,950	16.6
15-24	14.0	na	na	na	na	30.2	5,733	a
				MEN				
15-19	16.3	na	na	na	na	54.7	2,781	a
20-24	13.0	47.7	72.7	na	na	12.3	2,032	18.1
25-29	12.2	43.2	67.0	82.0	93.2	2.7	1,721	18.5
30-34	11.6	44.5	66.6	82.0	91.7	0.7	1,383	18.4
35-39	9.6	43.6	67.5	81.8	90.5	0.6	1,280	18.4
40-44	8.8	40.2	65.4	82.6	89.9	0.3	1,097	18.6
45-49	9.0	41.8	64.7	79.6	88.4	0.3	883	18.5
20-49	11.1	44.0	68.0	na	na	3.8	8,396	18.4
25-49	10.5	42.8	66.4	81.7	91.1	1.1	6,365	18.5
15-24	14.9	na	na	na	na	36.8	4,813	a
20-59	11.0	43.8	67.8	na	na	3.4	9,351	18.4
25-59	10.4	42.7	66.4	81.7	91.0	1.0	7,319	18.5

na = Not applicable due to censoring
a = Omitted because less than 50% of the respondents had sexual intercourse for the first time before reaching the beginning of the age group

Table 4.6 Median age at first sexual intercourse according to background characteristics

Median age at first sexual intercourse among women age 20-49 and age 25-49, and median age at first sexual intercourse among men age 20-59 and age 25-59, according to background characteristics, Zambia DHS 2018

Background characteristic	Women age		Men age	
	20-49	25-49	20-59	25-59
Residence				
Urban	17.5	17.3	19.0	19.0
Rural	16.2	16.2	17.9	18.0
Province				
Central	16.6	16.6	18.6	18.7
Copperbelt	17.4	17.0	19.7	19.8
Eastern	16.3	16.3	17.2	17.3
Luapula	16.7	16.6	18.4	18.5
Lusaka	17.6	17.5	18.9	19.0
Muchinga	16.4	16.2	18.9	19.1
Northern	16.6	16.5	18.2	18.2
North Western	15.8	15.7	17.5	17.7
Southern	16.4	16.4	17.7	17.6
Western	15.8	15.9	16.9	17.3
Education				
No education	15.8	15.8	17.9	17.9
Primary	16.1	16.2	18.0	18.1
Secondary	17.5	17.3	18.5	18.6
Higher	a	20.0	19.8	19.8
Wealth quintile				
Lowest	16.0	16.0	17.8	18.1
Second	16.2	16.1	17.8	17.8
Middle	16.4	16.3	18.1	18.1
Fourth	16.8	16.7	18.7	18.9
Highest	18.3	18.1	19.2	19.3
Total	16.7	16.6	18.4	18.5

a = Omitted because less than 50% of the respondents had intercourse for the first time before reaching the beginning of the age group

Table 4.7.1 Recent sexual activity: Women

Percent distribution of women age 15-49 by timing of last sexual intercourse, according to background characteristics, Zambia DHS 2018

Background characteristic	Timing of last sexual intercourse: Within the past 4 weeks	Within 1 year[1]	One or more years	Never had sexual intercourse	Total	Number of women
Age						
15-19	19.1	21.9	8.7	50.3	100.0	3,000
20-24	52.9	27.5	11.6	8.0	100.0	2,733
25-29	65.3	24.3	8.3	2.1	100.0	2,237
30-34	68.7	20.3	10.2	0.8	100.0	1,862
35-39	69.1	19.3	11.5	0.1	100.0	1,697
40-44	64.2	18.2	17.5	0.1	100.0	1,253
45-49	60.7	14.1	24.8	0.3	100.0	900
Marital status						
Never married	12.8	28.9	16.3	42.0	100.0	4,272
Married or living together	84.5	13.4	2.1	0.0	100.0	7,648
Divorced/separated/ widowed	15.5	42.7	41.8	0.0	100.0	1,762
Marital duration[2]						
0-4 years	83.9	15.0	1.0	0.0	100.0	1,645
5-9 years	84.6	13.9	1.6	0.0	100.0	1,485
10-14 years	84.6	13.3	2.1	0.0	100.0	1,100
15-19 years	84.4	12.1	3.5	0.0	100.0	889
20-24 years	84.5	12.7	2.8	0.0	100.0	683
25+ years	86.0	10.1	3.8	0.0	100.0	596
Married more than once	84.5	13.6	1.9	0.0	100.0	1,251
Residence						
Urban	47.5	22.6	13.6	16.4	100.0	6,374
Rural	58.3	21.5	9.9	10.3	100.0	7,309
Province						
Central	53.4	21.0	11.4	14.2	100.0	1,165
Copperbelt	45.7	20.9	14.8	18.6	100.0	2,201
Eastern	63.0	21.6	7.0	8.4	100.0	1,605
Luapula	52.6	22.7	11.3	13.4	100.0	1,071
Lusaka	49.2	22.3	13.5	14.9	100.0	2,733
Muchinga	57.3	15.6	12.0	15.1	100.0	754
Northern	53.5	18.8	13.1	14.6	100.0	1,054
North Western	51.5	25.8	11.0	11.7	100.0	718
Southern	61.5	22.7	7.8	8.1	100.0	1,574
Western	49.8	30.9	12.2	7.2	100.0	808
Education						
No education	62.0	18.3	15.5	4.2	100.0	1,054
Primary	59.9	19.6	10.2	10.3	100.0	6,059
Secondary	44.9	24.9	11.9	18.3	100.0	5,816
Higher	51.5	24.2	15.8	8.5	100.0	755
Wealth quintile						
Lowest	57.5	22.6	11.7	8.2	100.0	2,442
Second	59.9	20.4	9.8	9.9	100.0	2,387
Middle	56.9	22.7	9.7	10.6	100.0	2,477
Fourth	52.9	21.7	12.7	12.7	100.0	3,011
Highest	42.9	22.6	13.3	21.2	100.0	3,367
Total	53.2	22.0	11.6	13.1	100.0	13,683

[1] Excludes women who had sexual intercourse within the last 4 weeks
[2] Excludes women who are not currently married

Table 4.7.2 Recent sexual activity: Men

Percent distribution of men age 15-49 by timing of last sexual intercourse, according to background characteristics, Zambia DHS 2018

Background characteristic	Timing of last sexual intercourse: Within the past 4 weeks	Within 1 year[1]	One or more years	Never had sexual intercourse	Total	Number of men
Age						
15-19	15.3	17.5	12.5	54.7	100.0	2,781
20-24	43.7	29.1	14.9	12.3	100.0	2,032
25-29	70.8	19.1	7.4	2.7	100.0	1,721
30-34	80.5	13.6	5.3	0.7	100.0	1,383
35-39	82.9	11.8	4.7	0.6	100.0	1,280
40-44	83.4	11.8	4.5	0.3	100.0	1,097
45-49	81.8	12.7	5.2	0.3	100.0	883
Marital status						
Never married	22.4	25.3	16.5	35.8	100.0	5,142
Married or living together	90.5	9.0	0.5	0.0	100.0	5,572
Divorced/separated/ widowed	32.0	40.2	27.8	0.0	100.0	463
Marital duration[2]						
0-4 years	88.2	11.3	0.5	0.0	100.0	1,345
5-9 years	90.7	9.0	0.3	0.0	100.0	1,176
10-14 years	89.3	10.3	0.4	0.0	100.0	795
15-19 years	92.2	7.3	0.5	0.0	100.0	661
20-24 years	91.0	7.8	1.2	0.0	100.0	472
25+ years	93.9	5.5	0.6	0.0	100.0	205
Married more than once	92.6	6.9	0.5	0.0	100.0	918
Residence						
Urban	50.1	18.6	11.5	19.9	100.0	5,013
Rural	62.2	17.2	7.0	13.7	100.0	6,165
Province						
Central	54.0	19.5	8.5	18.0	100.0	979
Copperbelt	48.3	16.2	12.4	23.1	100.0	1,727
Eastern	66.4	17.5	7.3	8.8	100.0	1,476
Luapula	55.4	18.3	9.3	17.0	100.0	849
Lusaka	53.6	16.9	10.9	18.6	100.0	2,166
Muchinga	58.9	13.6	6.2	21.3	100.0	599
Northern	56.2	16.6	9.1	18.2	100.0	855
North Western	56.5	23.5	8.1	11.9	100.0	556
Southern	61.9	18.7	5.9	13.5	100.0	1,395
Western	62.6	21.4	7.5	8.6	100.0	574
Education						
No education	64.2	15.6	8.4	11.8	100.0	446
Primary	60.0	15.4	6.9	17.8	100.0	4,206
Secondary	52.6	19.1	10.7	17.5	100.0	5,618
Higher	63.9	21.7	8.4	6.0	100.0	907
Wealth quintile						
Lowest	67.5	16.7	5.5	10.4	100.0	1,827
Second	63.0	16.7	6.6	13.8	100.0	1,952
Middle	59.4	16.3	9.6	14.7	100.0	2,218
Fourth	53.0	19.2	8.9	18.9	100.0	2,552
Highest	46.1	19.3	12.8	21.8	100.0	2,629
Total 15-49	56.8	17.8	9.0	16.5	100.0	11,177
50-59	81.4	12.0	6.4	0.2	100.0	955
Total 15-59	58.7	17.3	8.8	15.2	100.0	12,132

[1] Excludes men who had sexual intercourse within the last 4 weeks
[2] Excludes men who are not currently married

FERTILITY 5

Key Findings

- ***Total fertility rate (TFR):*** The TFR in Zambia is 4.7 children per woman. Urban areas have a lower TFR (3.4) than rural areas (5.8).
- ***Median birth interval:*** The median birth interval in Zambia is 38.3 months.
- ***Menopause:*** The percentage of women who are menopausal ranges from 4% among those age 30-34 to 46% among those age 48-49.
- ***Median age at first birth:*** The median age at first birth among women age 20-49 is 19.2 years.
- ***Teenage motherhood:*** The percentage of women age 15-19 who have begun childbearing increases with age, from 6% among those age 15 to 53% among those age 19.

The number of children that a woman bears depends on many factors, including the age she begins childbearing, how long she waits between births, and her fecundity. Postponing first births and extending the interval between births have played a role in reducing fertility levels in many countries. These factors also have positive health consequences. In contrast, short birth intervals (of less than 24 months) can lead to harmful outcomes for both newborns and their mothers, such as preterm birth, low birth weight, and death. Childbearing at a very young age is associated with an increased risk of complications during pregnancy and childbirth and higher rates of neonatal mortality.

This chapter describes the current level of fertility in Zambia and some of its proximate determinants. It presents information on the total fertility rate, birth intervals, insusceptibility to pregnancy (due to postpartum amenorrhoea, postpartum abstinence, or menopause), age at first birth, and teenage childbearing.

5.1 CURRENT FERTILITY

Total fertility rate

The average number of children a woman would have by the end of her childbearing years if she bore children at the current age-specific fertility rates. Age-specific fertility rates are calculated for the 3 years before the survey, based on detailed birth histories provided by women.

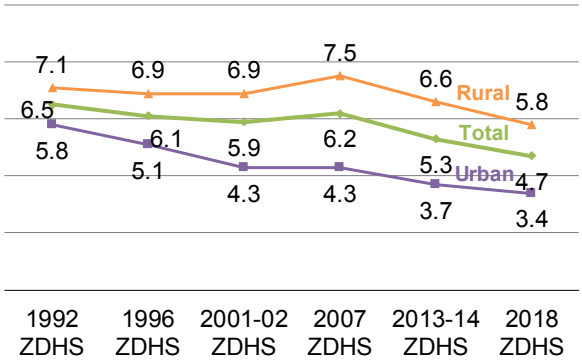
Sample: Women age 15-49

The total fertility rate (TFR) in Zambia is 4.7 children per woman. The TFR is lower in urban areas (3.4 children per woman) than in rural areas (5.8 children per woman). Age-specific fertility rates peak at age 20-24 (203 births per 1,000 women) and are lowest among women less than age 15 (3 births per 1,000 women) and those age 45-49 (12 births per 1,000 women) (**Table 5.1**).

Trends: The TFR in Zambia has declined by almost two children since 1992 (from 6.5 to 4.7 children per woman). TFR declines have been higher in urban areas (from 5.8 children per woman in 1992 to 3.4 in 2018) than in rural areas (from 7.1 to 5.8 children per woman) (**Figure 5.1**).

Figure 5.1 Trends in fertility by residence

Total fertility rate for the 3 years before each survey

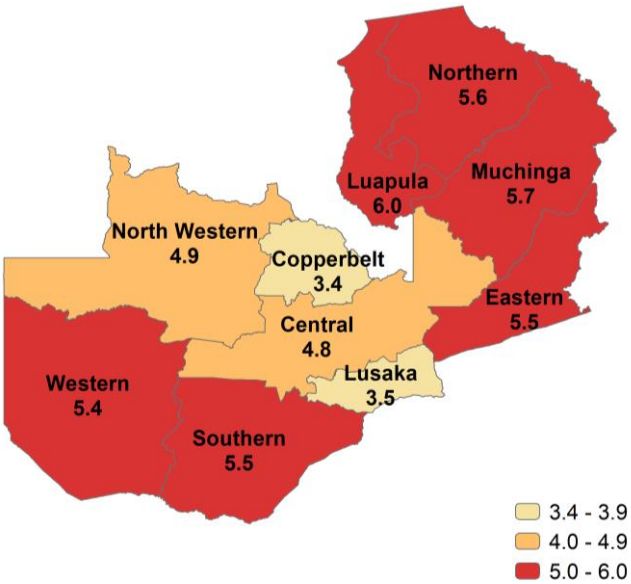


Patterns by background characteristics

- By province, the TFR ranges from a low of 3.4 children per woman in Copperbelt to a high of 6.0 children per woman in Luapula (**Table 5.2** and **Figure 5.2**).
- The average number of children per woman declines with increasing education. Women with no education have an average of 6.4 children, as compared with 2.4 children among women with a higher education.
- Women in the lowest wealth quintile (6.7) have almost four more children than those in the highest wealth quintile (3.0).

Figure 5.2 Fertility by province

Total fertility rate for the 3 years before the survey



5.2 Children Ever Born and Living

The 2018 ZDHS collected data on the number of children ever born to women age 15-49 and whether each child was still alive at the time of the survey. On average, women have given birth to 2.75 children, of whom 2.50 were still living at the time of the survey (**Table 5.4**). Number of children ever born increases with women's age; women age 45-49 have given birth to 6.35 children, among whom 5.46 were still living at the time of the survey. Currently married women age 15-49 have had an average of 3.84 children, of whom 3.51 were still living at the time of the survey (**Table 5.4**).

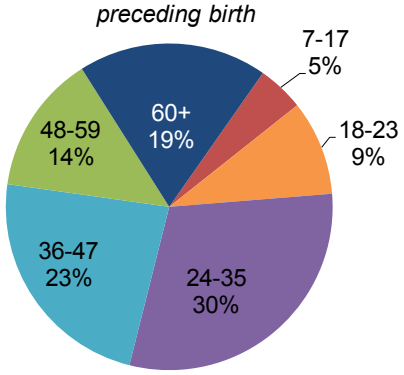
5.3 BIRTH INTERVALS

Median birth interval
Number of months since the preceding birth by which half of children are born.
Sample: Non-first births in the 5 years before the survey

After a live birth, the recommended interval before the next pregnancy is at least 24 months in order to reduce the risk of adverse maternal, perinatal, and infant outcomes (WHO 2005b). In Zambia, the median birth interval is 38.3 months. Fourteen percent of births occurred less than the recommended 24 months after the preceding birth (5% occurred 7-17 months after the preceding birth, and 9% occurred 18-23 months after the preceding birth) (**Table 5.5** and **Figure 5.3**).

***Figure 5.3* Birth intervals**

Percent distribution of non-first births by number of months since the preceding birth



Trends: The median birth interval in Zambia has exceeded the WHO-recommended 24 months after the preceding birth since 1992. Between 1992 and 2018, the median birth interval increased by 6.9 months (from 31.4 months to 38.3 months).

Patterns by background characteristics

- Birth intervals increase with age, from 26.0 months among women age 15-19 to 45.6 months among women age 40-49 (**Table 5.5**).
- The median birth interval varies only slightly according to the sex of the preceding birth.
- The median birth interval is shorter (28.0 months) if the child from the preceding birth is dead than if the child is alive (38.8 months).
- Women with seven or more children have a shorter median birth interval (36.4 months) than women with two or three children (38.0 months).
- The median birth interval is longer in urban areas (44.9 months) than in rural areas (36.2 months).
- Across the provinces, the median birth interval ranges from 33.8 months in Luapula to 44.0 months in Lusaka.
- Median birth intervals increase with increasing education and household wealth. The median birth interval is 36.7 months among women with no education, as compared with 53.7 months among women with a higher education. Similarly, the median birth interval is 34.5 months among women in the lowest wealth quintile, compared with 50.3 months among women in the highest quintile.

5.4 INSUSCEPTIBILITY TO PREGNANCY

Postpartum amenorrhoea

The period of time after the birth of a child and before the resumption of menstruation.

Postpartum abstinence

The period of time after the birth of a child and before the resumption of sexual intercourse.

Postpartum insusceptibility

The period of time during which a woman is considered not at risk of pregnancy either because she is postpartum amenorrhoeic and/or abstaining from sexual intercourse postpartum.

Median duration of postpartum amenorrhoea

Calculated as the number of months after childbirth by which time half of women have begun menstruating.

Sample: Women who gave birth in the 3 years before the survey

Median duration of postpartum insusceptibility

Calculated as the number of months after childbirth by which time half of women are no longer protected against pregnancy either by postpartum amenorrhoea or abstinence from sexual intercourse.

Sample: Women who gave birth in the 3 years before the survey

Postpartum amenorrhoea refers to the interval between childbirth and the return of menstruation. During this period, the risk of pregnancy is reduced. Among women who are not using contraception, exposure to the risk of pregnancy in the period following childbirth is determined by two major factors, namely breastfeeding and sexual abstinence. Postpartum protection from conception can be prolonged by the length and intensity of breastfeeding or by delayed resumption of sexual activities (postpartum abstinence).

The median duration of postpartum amenorrhoea among women who gave birth in the 3 years before the survey is 8.9 months, while the median durations of abstinence and insusceptibility are 3.9 months and 10.8 months, respectively (**Table 5.6**).

Trends: Median durations of postpartum amenorrhoea, abstinence, and insusceptibility fluctuated from 2013-14 to 2018. The median duration of postpartum amenorrhoea declined from 9.5 months in 2013-14 to 8.9 months in 2018, while the median duration of postpartum abstinence increased from 3.0 months to 3.9 months over the same period. The median duration of postpartum insusceptibility declined from 11.5 months in 2013-14 to 10.8 months in 2018.

Patterns by background characteristics

- Median durations of postpartum amenorrhoea, abstinence, and insusceptibility are longer among women in rural areas than among those in urban areas (**Table 5.7**).
- Median durations of postpartum amenorrhoea are longest among women in Northern (12.3 months) and Luapula (12.2 months) and shortest among women in Lusaka (4.4 months). The median duration of postpartum insusceptibility is longest in Western (17.5 months) and shortest in Lusaka (5.7 months).

5.5 MENOPAUSE

Menopause

Women are considered to have reached menopause if they are neither pregnant nor postpartum amenorrhoeic and have not had a menstrual period in the 6 months before the survey, or if they report being menopausal or having had a hysterectomy, or if they have never menstruated.

Sample: Women age 30-49

The 2018 ZDHS collected data on the percentage of women age 30-49 who are menopausal. Nationally, 9% of women are menopausal. By age group, the percentage of women who are menopausal ranges from 4% among those age 30-34 to 46% among those age 48-49 (**Table 5.8**).

5.6 AGE AT FIRST BIRTH

Median age at first birth

Age by which half of women have had their first child.

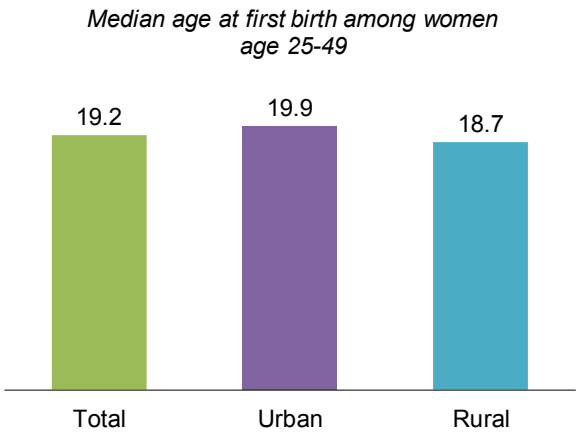
Sample: Women age 20-49 and 25-49

The age at which childbearing commences has a direct influence on a woman's cumulative fertility, particularly when there is little or no contraceptive use. The earlier a woman begins childbearing, the greater her likelihood of having many children. Also, having children at too young an age can have negative repercussions for the mother's health and can put her child's health at risk. In Zambia, the median age at first birth among women age 20-49 is 19.2 years (**Table 5.9**).

Patterns by background characteristics

- The median age at first birth ranges from 18.9 years among women age 35-39 to 19.4 years among women age 20-24.
- Among women age 25-49, the median age at first birth is higher in urban areas (19.9 years) than rural areas (18.7 years) (**Table 5.10** and **Figure 5.4**).
- Across the provinces, median age at first birth is lowest in Southern, Northern, and Eastern provinces (18.7 years each) and highest in Lusaka (20.0 years).
- Median age at first birth increases with increasing education, from 18.4 years among women with no education to 24.5 years among women with a higher education.

Figure 5.4 **Median age at first birth by residence**



- The median age at first birth is lowest among women in the second and middle wealth quintiles (18.6 years each) and highest among those in the highest quintile (21.0 years).

5.7 TEENAGE CHILDBEARING

Teenage childbearing

Percentage of women age 15-19 who have given birth or are pregnant with their first child.

Sample: Women age 15-19

Adolescent pregnancy undermines girls' human rights and compromises their opportunity to fully realise their socioeconomic development potential. Teenagers who have early exposure to sexual intercourse are thereby at risk of pregnancy and childbearing. The 2018 ZDHS collected data on pregnancy in late adolescence (age 15-19). Twenty-nine percent of adolescents had begun childbearing at the time of the survey. Twenty-four percent had given birth, while 5% were pregnant with their first child (**Table 5.11**).

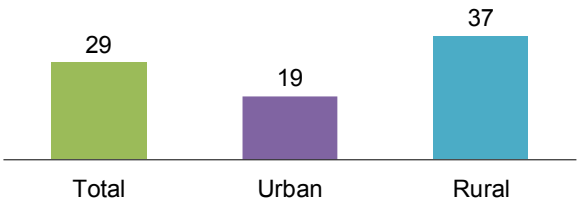
Trends: Teenage childbearing declined from 34% in 1992 to 29% in 2013-14 and 2018.

Patterns by background characteristics

- The percentage of women age 15-19 who have begun childbearing increases with age, from 6% among those age 15 to 53% among those age 19 (**Table 5.11**).
- The percentage of teenagers who have begun childbearing is higher in rural areas (37%) than in urban areas (19%) (**Figure 5.5**).
- Across the provinces, the percentage of teenagers who have begun childbearing ranges from 15% in Lusaka to 43% in Southern (**Table 5.11**).
- The percentage of women age 15-19 who have begun childbearing declines with increasing education and household wealth. Forty-two percent of young women with no education have begun childbearing, as compared with 23% of those with a secondary education. Similarly, 46% of young women in the lowest wealth quintile have begun childbearing, compared with 8% of those in the highest quintile.

Figure 5.5 **Teenage pregnancy and motherhood by residence**

Percentage of women age 15-19 who have begun childbearing



5.8 SEXUAL AND REPRODUCTIVE BEHAVIOURS BEFORE AGE 15

Among women and men age 15-19, 13% of women and 16% of men had sexual intercourse by age 15. Only 2% of women and less than 1% of men age 15-19 were married by age 15. Two percent of women age 15-19 gave birth before age 15, and less than 1% of men in that age group fathered a child before age 15 (**Table 5.12**).

LIST OF TABLES

For more information on fertility levels and some of the determinants of fertility, see the following tables:

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- **Table 5.2 Fertility by background characteristics**
- **Table 5.3.1 Trends in age-specific fertility rates**
- **Table 5.3.2 Trends in age-specific and total fertility rates**
- **Table 5.4 Children ever born and living**
- **Table 5.5 Birth intervals**
- **Table 5.6 Postpartum amenorrhoea, abstinence, and insusceptibility**
- **Table 5.7 Median duration of amenorrhoea, postpartum abstinence, and postpartum insusceptibility**
- **Table 5.8 Menopause**
- **Table 5.9 Age at first birth**
- **Table 5.10 Median age at first birth**
- **Table 5.11 Teenage pregnancy and motherhood**
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Table 5.1 Current fertility

Age-specific and total fertility rates, the general fertility rate, and the crude birth rate for the 3 years preceding the survey, by residence, Zambia DHS 2018

	Residence		
Age group	Urban	Rural	Total
<15	1	4	3
15-19	88	174	135
20-24	144	260	203
25-29	153	245	199
30-34	153	222	187
35-39	107	164	138
40-44	33	86	63
45-49	5	16	12
TFR (15-49)	3.4	5.8	4.7
GFR	120	201	163
CBR	30.9	38.4	35.3

Note: Age-specific fertility rates are per 1,000 women. Rates for the 45-49 age group may be slightly biased due to truncation. Rates are for the period 1-36 months preceding the interview. Rates for the 10-14 age group are based on retrospective data from women age 15-17
TFR: Total fertility rate, expressed per woman
GFR: General fertility rate, expressed per 1,000 women age 15-44
CBR: Crude birth rate, expressed per 1,000 population

Table 5.2 Fertility by background characteristics

Total fertility rate for the 3 years preceding the survey, percentage of women age 15-49 currently pregnant, and mean number of children ever born to women age 40-49, according to background characteristics, Zambia DHS 2018

Background characteristic	Total fertility rate	Percentage of women age 15-49 currently pregnant	Mean number of children ever born to women age 40-49
Residence			
Urban	3.4	6.4	4.6
Rural	5.8	10.0	6.7
Province			
Central	4.8	8.4	6.1
Copperbelt	3.4	6.3	4.9
Eastern	5.5	10.1	6.5
Luapula	6.0	9.9	7.1
Lusaka	3.5	6.2	4.6
Muchinga	5.7	8.5	7.3
Northern	5.6	8.4	7.0
North Western	4.9	7.9	6.6
Southern	5.5	11.8	5.8
Western	5.4	8.6	5.6
Education			
No education	6.4	9.3	6.9
Primary	5.6	9.1	6.5
Secondary	3.7	7.4	4.6
Higher	2.4	7.9	2.8
Wealth quintile			
Lowest	6.7	10.6	6.8
Second	5.9	10.4	6.9
Middle	4.9	8.9	6.5
Fourth	3.7	8.3	5.4
Highest	3.0	4.8	4.0
Total	4.7	8.3	5.9

Note: Total fertility rates are for the period 1-36 months prior to the interview.

Table 5.3.1 Trends in age-specific fertility rates

Age-specific fertility rates for 5-year periods preceding the survey, according to age group, Zambia DHS 2018

	Number of years preceding survey			
Age group	0-4	5-9	10-14	15-19
10-14	3	6	7	8
15-19	136	147	153	163
20-24	215	251	272	261
25-29	206	245	266	255
30-34	187	221	237	[232]
35-39	137	183	[212]	
40-44	67	[107]		
45-49	[16]			

Note: Age-specific fertility rates are per 1,000 women. Estimates in brackets are truncated. Rates exclude the month of the interview. For the 0-4 year period, rates for the 10-14 age group are based on retrospective data from women age 15-19.

Table 5.3.2 Trends in age-specific and total fertility rates

Age-specific and total fertility rates (TFR) for the 3-year period preceding several surveys, according to mother's age at the time of the birth, Zambia DHS 2018

Mother's age at birth	1992 ZDHS	1996 ZDHS	2001-02 ZDHS	2007 ZDHS	2013-14 ZDHS	2018 ZDHS
15-19	156	158	160	146	141	135
20-24	294	280	266	274	239	203
25-29	271	274	249	263	232	199
30-34	242	229	218	240	203	187
35-39	194	175	172	191	152	138
40-44	105	77	79	90	71	63
45-49	31	24	30	29	14	12
TFR (15-49)	6.5	6.1	5.9	6.2	5.3	4.7

Note: Age-specific fertility rates are per 1,000 women. Rates for the 45-49 age group may be slightly biased due to truncation.

Table 5.4 Children ever born and living

Percent distribution of all women and currently married women age 15-49 by number of children ever born, mean number of children ever born, and mean number of living children, according to age group, Zambia DHS 2018

Age	Number of children ever born											Total	Number of women	Mean number of children ever born	Mean number of living children
	0	1	2	3	4	5	6	7	8	9	10+				
ALL WOMEN															
15-19	75.9	21.1	2.9	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	3,000	0.27	0.26
20-24	26.2	36.9	25.9	8.9	1.6	0.5	0.0	0.0	0.0	0.0	0.0	100.0	2,733	1.25	1.16
25-29	10.0	16.2	25.7	25.3	14.9	5.8	1.6	0.4	0.0	0.0	0.0	100.0	2,237	2.45	2.30
30-34	4.4	7.7	13.8	19.0	22.9	16.2	10.0	4.2	1.4	0.3	0.2	100.0	1,862	3.70	3.43
35-39	1.3	3.9	8.6	12.6	15.3	17.1	17.1	13.5	6.4	2.9	1.2	100.0	1,697	4.93	4.52
40-44	2.0	4.5	6.0	10.3	13.4	13.9	13.1	12.9	11.5	5.4	7.0	100.0	1,253	5.55	4.95
45-49	2.3	2.6	5.2	7.2	7.3	11.7	15.7	13.9	11.7	7.4	15.0	100.0	900	6.35	5.46
Total	24.6	16.8	13.8	11.5	9.5	7.4	6.0	4.4	2.8	1.4	1.8	100.0	13,683	2.75	2.50
CURRENTLY MARRIED WOMEN															
15-19	25.4	59.7	14.4	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	437	0.90	0.84
20-24	5.9	39.2	37.4	13.7	2.7	1.0	0.1	0.1	0.0	0.0	0.0	100.0	1,438	1.72	1.59
25-29	2.2	11.9	26.9	29.7	18.9	7.6	2.1	0.6	0.0	0.0	0.0	100.0	1,544	2.86	2.69
30-34	1.4	5.1	11.9	19.0	25.5	17.7	11.8	5.0	1.9	0.4	0.2	100.0	1,396	4.03	3.76
35-39	0.8	2.7	6.4	11.3	15.4	16.8	18.5	15.8	7.4	3.4	1.4	100.0	1,307	5.21	4.79
40-44	1.0	3.2	4.3	8.8	12.4	14.1	12.8	14.5	13.4	6.3	9.2	100.0	908	5.98	5.34
45-49	0.6	1.9	3.8	4.9	6.3	9.9	15.4	15.7	14.7	9.5	17.3	100.0	618	6.87	5.97
Total	3.6	15.1	17.4	15.5	13.6	10.3	8.5	6.7	4.4	2.2	2.8	100.0	7,648	3.84	3.51

Table 5.5 Birth intervals

Percent distribution of non-first births in the 5 years preceding the survey by number of months since preceding birth, and median number of months since preceding birth, according to background characteristics, Zambia DHS 2018

Background characteristic	Months since preceding birth						Total	Number of non-first births	Median number of months since preceding birth
	7-17	18-23	24-35	36-47	48-59	60+			
Mother's age									
15-19	13.5	29.8	40.0	10.9	4.7	1.1	100.0	85	26.0
20-29	5.8	10.2	36.9	24.9	11.1	11.0	100.0	3,264	35.0
30-39	3.3	8.7	25.1	22.3	16.8	23.8	100.0	3,186	42.4
40-49	3.3	6.6	21.7	22.2	13.9	32.2	100.0	786	45.6
Sex of preceding birth									
Male	4.9	9.3	31.2	23.1	13.2	18.3	100.0	3,695	37.8
Female	4.2	9.5	29.1	23.5	14.4	19.2	100.0	3,626	38.8
Survival of preceding birth									
Living	3.1	9.0	30.7	23.7	14.4	19.1	100.0	6,828	38.8
Dead	24.7	15.4	23.4	17.8	5.5	13.2	100.0	493	28.0
Birth order									
2-3	4.6	8.7	32.2	23.0	12.3	19.2	100.0	3,382	38.0
4-6	4.1	9.7	26.9	23.7	16.4	19.1	100.0	2,820	39.5
7+	5.6	10.7	32.3	23.1	11.8	16.5	100.0	1,119	36.4
Residence									
Urban	3.9	7.4	22.7	20.7	16.4	28.9	100.0	2,449	44.9
Rural	4.9	10.5	33.9	24.6	12.5	13.7	100.0	4,872	36.2
Province									
Central	4.3	9.2	29.8	22.1	15.7	18.9	100.0	640	39.2
Copperbelt	2.7	8.7	26.3	22.2	14.5	25.6	100.0	842	42.6
Eastern	3.9	7.1	30.4	26.3	14.7	17.4	100.0	966	38.8
Luapula	5.7	15.1	36.2	20.0	11.7	11.4	100.0	746	33.8
Lusaka	3.6	7.9	22.6	20.9	16.3	28.6	100.0	1,067	44.0
Muchinga	7.0	11.4	33.8	23.2	11.0	13.6	100.0	472	35.3
Northern	5.1	11.3	38.2	21.7	11.3	12.3	100.0	705	34.2
North Western	5.3	8.9	29.1	26.2	11.8	18.8	100.0	383	38.1
Southern	5.8	8.6	28.6	24.5	14.8	17.7	100.0	1,024	38.4
Western	3.2	7.6	33.5	28.7	11.6	15.5	100.0	476	38.0
Mother's education									
No education	3.9	12.7	31.2	24.5	13.1	14.6	100.0	892	36.7
Primary	5.0	9.9	32.1	23.7	13.7	15.7	100.0	3,989	37.1
Secondary	4.2	7.8	28.0	22.9	14.2	23.0	100.0	2,179	40.4
Higher	3.8	5.4	16.3	16.9	13.5	44.1	100.0	261	53.7
Wealth quintile									
Lowest	5.3	12.3	37.0	25.2	10.3	9.9	100.0	1,906	34.5
Second	4.4	10.6	35.4	24.1	12.3	13.2	100.0	1,679	35.8
Middle	4.0	8.3	28.5	23.8	16.0	19.4	100.0	1,378	39.9
Fourth	5.9	6.7	25.2	23.4	15.8	23.0	100.0	1,275	41.6
Highest	2.7	7.3	18.2	17.8	17.2	36.8	100.0	1,083	50.3
Total	4.6	9.4	30.2	23.3	13.8	18.7	100.0	7,321	38.3

Note: First-order births are excluded. The interval for multiple births is the number of months since the preceding pregnancy that ended in a live birth.

Table 5.6 Postpartum amenorrhoea, abstinence, and insusceptibility

Percentage of births in the 3 years preceding the survey for which mothers are postpartum amenorrhoeic, abstaining, and insusceptible, by number of months since birth, and median and mean durations, Zambia DHS 2018

Months since birth	Percentage of births for which the mother is:			Number of births
	Amenorrhoeic	Abstaining	Insusceptible[1]	
<2	95.5	88.8	98.4	380
2-3	74.0	54.7	83.6	321
4-5	63.1	33.4	72.6	353
6-7	55.5	24.8	62.6	314
8-9	49.7	19.1	56.6	321
10-11	43.1	16.9	51.1	310
12-13	33.7	11.7	40.8	347
14-15	31.3	14.1	39.2	322
16-17	22.3	12.9	30.9	318
18-19	19.3	14.1	30.4	317
20-21	16.4	11.0	24.5	314
22-23	10.8	10.1	19.3	344
24-25	3.2	10.8	12.8	355
26-27	3.2	5.8	8.9	357
28-29	3.0	5.2	8.0	326
30-31	5.2	5.4	9.7	324
32-33	1.4	6.9	8.1	282
34-35	2.4	6.3	8.5	287
Total	30.4	20.3	37.7	5,893
Median	8.9	3.9	10.8	na
Mean	11.7	8.0	14.3	na

Note: Estimates are based on status at the time of the survey.
na = Not applicable
[1] Includes births for which mothers are either still amenorrhoeic or still abstaining (or both) following birth

Table 5.7 Median duration of amenorrhoea, postpartum abstinence, and postpartum insusceptibility

Median number of months of postpartum amenorrhoea, postpartum abstinence, and postpartum insusceptibility following births in the 3 years preceding the survey, according to background characteristics, Zambia DHS 2018

Background characteristic	Postpartum amenorrhoea	Postpartum abstinence	Postpartum insusceptibility[1]
Mother's age			
15-29	8.4	4.3	10.6
30-49	10.1	3.1	11.3
Residence			
Urban	5.4	3.8	7.8
Rural	10.7	3.9	12.3
Province			
Central	8.7	3.2	13.1
Copperbelt	5.8	5.1	9.0
Eastern	8.5	4.1	8.9
Luapula	12.2	4.5	13.1
Lusaka	4.4	*	5.7
Muchinga	9.2	(2.3)	9.8
Northern	12.3	4.6	13.6
North Western	11.1	3.7	12.3
Southern	10.5	3.4	11.2
Western	11.7	7.5	17.5
Mother's education			
No education	14.6	3.7	16.0
Primary	10.6	3.9	12.0
Secondary	6.3	4.0	8.7
Higher	(3.4)	*	(4.3)
Wealth quintile			
Lowest	12.2	4.4	13.1
Second	11.1	3.7	15.4
Middle	8.8	3.5	10.7
Fourth	5.6	4.3	8.4
Highest	4.5	3.5	5.7
Total	8.9	3.9	10.8

Note: Medians are based on the status at the time of the survey (current status). Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Includes births for which mothers are either still amenorrhoeic or still abstaining (or both) following birth

Table 5.8 Menopause

Percentage of women age 30-49 who are menopausal, according to age, Zambia DHS 2018

Age	Percentage menopausal[1]	Number of women
30-34	3.8	1,862
35-39	4.3	1,697
40-41	7.6	513
42-43	6.2	497
44-45	13.7	463
46-47	26.4	345
48-49	45.5	334
Total	9.1	5,712

[1] Percentage of women who (1) are not pregnant, and (2) have had a birth in the past 5 years and are not postpartum amenorrhoeic, and (3) for whom one of the following additional conditions applies: (a) their last menstrual period occurred 6 or more months preceding the survey, (b) they declared that they are in menopause or have had a hysterectomy, or (c) they have never menstruated

Table 5.9 Age at first birth

Percentage of women age 15-49 who gave birth by exact ages, percentage who have never given birth, and median age at first birth, according to current age, Zambia DHS 2018

	Percentage who gave birth by exact age					Percentage who have never given birth	Number of women	Median age at first birth
Current age	15	18	20	22	25			
15-19	1.8	na	na	na	na	75.9	3,000	a
20-24	2.9	30.9	56.9	na	na	26.2	2,733	19.4
25-29	3.7	33.2	57.7	75.2	86.0	10.0	2,237	19.3
30-34	4.3	32.4	58.2	75.8	87.3	4.4	1,862	19.3
35-39	3.8	35.4	61.8	78.1	88.6	1.3	1,697	18.9
40-44	3.6	33.3	59.8	77.7	87.0	2.0	1,253	19.2
45-49	4.9	33.8	60.8	77.3	88.6	2.3	900	19.2
20-49	3.7	32.9	58.7	na	na	10.2	10,683	19.2
25-49	4.0	33.5	59.4	76.6	87.3	4.7	7,950	19.2

na = Not applicable due to censoring
a = Omitted because less than 50% of women had a birth before reaching the beginning of the age group

Table 5.10 Median age at first birth

Median age at first birth among women age 20-49 and age 25-49, according to background characteristics, Zambia DHS 2018

Background characteristic	Women age 20-49	Women age 25-49
Residence		
Urban	a	19.9
Rural	18.7	18.7
Province		
Central	18.9	18.8
Copperbelt	a	19.9
Eastern	18.7	18.7
Luapula	19.3	19.2
Lusaka	a	20.0
Muchinga	19.0	18.9
Northern	18.7	18.7
North Western	19.2	19.4
Southern	18.6	18.7
Western	18.9	19.0
Education		
No education	18.4	18.4
Primary	18.5	18.6
Secondary	a	19.9
Higher	a	24.5
Wealth quintile		
Lowest	18.7	18.8
Second	18.6	18.6
Middle	18.6	18.6
Fourth	19.3	19.2
Highest	a	21.0
Total	19.2	19.2

a = Omitted because less than 50% of women had a birth before reaching the beginning of the age group

Table 5.11 Teenage pregnancy and motherhood

Percentage of women age 15-19 who have had a live birth or who are pregnant with their first child, and percentage who have begun childbearing, according to background characteristics, Zambia DHS 2018

Background characteristic	Percentage of women age 15-19 who:		Percentage who have begun childbearing	Number of women
	Have had a live birth	Are pregnant with first child		
Age				
15-17	12.6	3.9	16.6	1,735
15	4.0	2.3	6.4	653
16	12.6	2.6	15.1	530
17	22.8	7.2	30.0	552
18	35.2	6.7	41.9	722
19	46.2	6.6	52.9	543
Residence				
Urban	16.7	2.6	19.3	1,323
Rural	30.0	7.1	37.0	1,677
Province				
Central	26.4	4.2	30.6	297
Copperbelt	18.8	2.2	21.0	491
Eastern	32.4	7.1	39.5	342
Luapula	23.0	6.0	29.0	253
Lusaka	11.5	3.4	14.9	475
Muchinga	22.3	7.0	29.3	191
Northern	21.6	4.3	25.9	248
North Western	30.5	5.3	35.7	186
Southern	34.7	7.8	42.5	327
Western	33.1	8.1	41.2	190
Education				
No education	33.5	8.4	41.9	99
Primary	30.3	6.0	36.3	1,283
Secondary	18.7	4.2	22.8	1,609
Higher	*	*	*	9
Wealth quintile				
Lowest	37.1	9.1	46.2	510
Second	32.8	5.2	38.0	541
Middle	27.8	7.2	35.0	585
Fourth	23.3	3.6	27.0	655
Highest	5.8	1.8	7.6	709
Total	24.1	5.1	29.2	3,000

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 5.12 Sexual and reproductive health behaviours before age 15

Among women and men age 15-19, percentage who initiated sexual intercourse, were married, and had a live birth/fathered a child before age 15, according to sex, Zambia DHS 2018

Sex	Had sexual intercourse before age 15	Married before age 15	Gave birth/fathered a child before age 15	Number
Women	12.7	2.2	1.8	3,000
Men	16.3	0.0	0.1	2,781

FERTILITY PREFERENCES 6

Key Findings

- ***Desire for another child:*** Seventeen percent of currently married women age 15-49 want to have another child soon, and 35% want to wait at least 2 years before having another child.
- ***Limiting childbearing:*** Overall, 38% of women do not want another child or are sterilised.
- ***Ideal family size:*** Women prefer 4.6 children as their ideal family size, as compared with 4.9 children among men.
- ***Unwanted births:*** Of all births in the past 5 years and current pregnancies, 62% were wanted at the time of conception, 33% were mistimed, and 5% were not wanted.
- ***Wanted fertility:*** The total wanted fertility rate (4.0) is lower than the actual fertility rate (4.7).

Information on fertility preferences can help family planning programme planners assess the desire for children, the extent of mistimed and unwanted pregnancies, and the demand for contraception to space or limit births. This information may suggest the direction that fertility patterns will take in the future.

This chapter presents information on whether and when married women and men want more children, ideal family size, whether the last birth was wanted, and the theoretical fertility rate if all unwanted births were prevented.

6.1 DESIRE FOR ANOTHER CHILD

Desire for another child

Women and men were asked whether they wanted more children and, if so, how long they would prefer to wait before the birth of the next child. Women and men who are sterilised are assumed not to want any more children.

Sample: Currently married women and men age 15-49

Fifty-six percent of currently married women age 15-49 want to have another child; 17% of these women want to have another child within 2 years, while 35% want to wait at least 2 years. Thirty-six percent of women want no more children, and 2% are sterilised (**Table 6.1**). Overall, 67% of currently married men age 15-49 want to have another child; 19% want to have another child soon, and 47% want to wait at least 2 years. Twenty-seven percent of men want no more children or are sterilised.

The desire to limit childbearing among currently married women increases with number of living children, from 3% among those with no children to 79% among those with six or more children (**Table 6.2.1**). The pattern is similar among currently married men (**Table 6.2.2**).

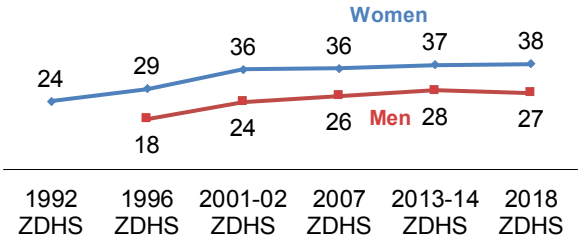
Trends: The percentage of currently married women age 15-49 who want no more children (including women and their husbands who are sterilised) increased from 24% in 1992 to 38% in 2018. Among currently married men (including men and their wives who are sterilised), the percentage who want no more children increased from 18% in 1996 to 27% in 2018 (**Figure 6.1**).

Patterns by background characteristics

- Eighty-one percent of currently married women with no living children want to have a child soon, as compared with 4% of women with six or more children.

***Figure 6.1* Trends in desire to limit childbearing**

Percentage of currently married women and men age 15-49 who want no more children



- A higher percentage of currently married women in urban (40%) than rural (36%) areas want to limit childbearing (**Table 6.2.1**).

6.2 IDEAL FAMILY SIZE

Ideal family size

Respondents with no children were asked, "If you could choose exactly the number of children to have in your whole life, how many would that be?" Respondents who had children were asked: "If you could go back to the time when you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be?"

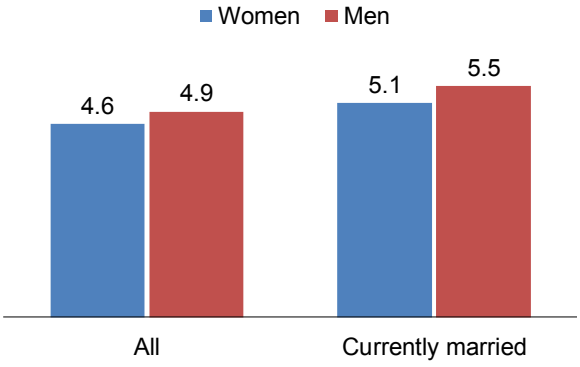
Sample: Women and men age 15-49

Women want to have slightly fewer children than men (4.6 children and 4.9 children, respectively). Similarly, among those who are currently married, the mean ideal number of children is slightly higher among men (5.5 children) than among women (5.1 children) (**Table 6.3** and **Figure 6.2**).

Trends: From 1992 to 2018, the ideal number of children decreased from 5.8 to 4.6 among all women and from 6.2 to 5.1 among currently married women. Similarly, between 1996 and 2018, the ideal number of children declined from 5.7 to 4.9 among all men and from 6.3 to 5.5 among currently married men.

***Figure 6.2* Ideal family size**

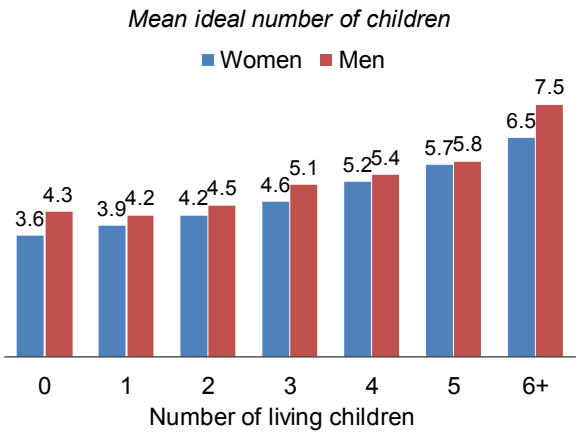
Mean ideal number of children among women and men age 15-49



Patterns by background characteristics

- The more children respondents already have, the more children they consider ideal. Women who have no children consider 3.6 children to be ideal on average. In contrast, women with six or more children consider 6.5 children to be ideal (**Figure 6.3**). Among men and women with the same number of children, men consistently consider a slightly higher number of children to be ideal than women.

Figure 6.3 **Ideal family size by number of living children**



- Older women want larger families. Ideal family size increases from 3.7 children among women age 15-19 to 6.1 children among women age 45-49 (**Table 6.4**).
- Women in rural areas have a larger ideal family size (5.0 children) than those in urban areas (4.0 children).
- Ideal number of children decreases with increasing education, from 5.6 among women with no education to 3.5 among those with a higher education.
- Women in the lowest two wealth quintiles want 5.2 children on average, while women in the highest wealth quintile want 3.8 children (**Table 6.4**).

6.3 Fertility Planning Status

Planning status of births/pregnancies

Women reported whether their births in the 5 years before the survey or current pregnancies were wanted at the time (planned birth), at a later time (mistimed birth), or not at all (unwanted birth).

Sample: Current pregnancies and births in the 5 years before the survey to women age 15-49

According to mothers' reports, 62% of births or current pregnancies were wanted, and 33% were mistimed (that is, wanted at a later date). Five percent of births or current pregnancies were not wanted at all (**Table 6.5**).

Trends: The percentage of births or current pregnancies wanted at the time of conception dropped from 66% in 1992 to 62% in 2018. The percentage of births or current pregnancies that were mistimed has fluctuated over time, increasing from 26% in 1992 to 29% in 1996, decreasing to 21% in 2001-02, and then steadily increasing to 33% in 2018. The percentage of unwanted births or pregnancies increased from 7% in 1992 to 19% in 2001-2002 before declining steadily to 5% in 2018.

Patterns by background characteristics

- Women with four or more children (10%) are more likely than women with one to three children (2%) to describe births in the last 5 years or current pregnancies as unwanted (**Table 6.5**).
- Women age 25-29 (69%) are more likely than their counterparts to report births or current pregnancies as wanted.
- The proportion of births or current pregnancies that are mistimed decreases with increasing mother's age, from 51% among women less than age 20 to 14% among women age 40-44.

6.4 WANTED FERTILITY RATES

Unwanted birth

Any birth in excess of the number of children a woman reported as her ideal number.

Wanted birth

Any birth that were fewer than or equal to the number of children a woman reported as her ideal number.

Wanted fertility rate

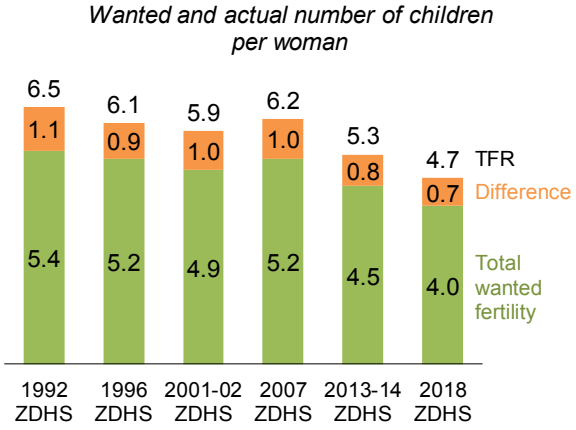
The average number of children a woman would have by the end of her childbearing years if she bore children at the current age-specific fertility rates, excluding unwanted births.

Sample: Women age 15-49

The wanted fertility rate reflects the level of fertility that would result if all unwanted births were prevented. The total wanted fertility rate in Zambia is 4.0 children, as compared with the actual total fertility rate of 4.7 children (**Table 6.6**).

Trends: The total wanted fertility rate in Zambia decreased from 5.4 children in 1992 to 4.0 children in 2018. Over the same period, the gap between wanted and actual fertility declined slightly, from 1.1 to 0.7 (**Figure 6.4**).

***Figure 6.4* Trends in wanted and actual fertility**



Patterns by background characteristics

- The total wanted fertility rate is consistently lower than the actual total fertility rate, but the size of the gap varies by women's background characteristics (**Table 6.6**).
- Women in rural areas want more children (5.0 children) than those in urban areas (2.9 children).
- Both the wanted fertility rate and the total fertility rate decrease with increasing education. The wanted fertility rate declines from 5.6 among women with no education to 2.2 among women with a higher education. The total fertility rate decreases from 6.4 among women with no education to 2.4 among those with a higher education.
- Similarly, wanted fertility and total fertility decrease with increasing household wealth. The wanted fertility rate decreases from 5.9 in the lowest wealth quintile to 2.6 in the highest wealth quintile. The total fertility rate decreases from 6.7 in the lowest quintile to 3.0 in the highest quintile.

LIST OF TABLES

For more information on fertility preferences, see the following tables:

- **Table 6.1 Fertility preferences according to number of living children**
- **Table 6.2.1 Desire to limit childbearing: Women**
- **Table 6.2.2 Desire to limit childbearing: Men**
- **Table 6.3 Ideal number of children according to number of living children**
- **Table 6.4 Mean number of children according to background characteristics**
- **Table 6.5 Fertility planning status**
- **Table 6.6 Wanted fertility rates**

Table 6.1 Fertility preferences according to number of living children

Percent distribution of currently married women and currently married men age 15-49 by desire for children, according to number of living children, Zambia DHS 2018

Desire for children	Number of living children							Total 15-49	Total 50-59	Total 15-59
	0	1	2	3	4	5	6+			
					WOMEN[1]					
Have another soon[2]	81.4	29.5	21.9	17.9	10.4	8.7	3.8	17.0	na	na
Have another later[3]	3.6	58.5	53.3	42.2	32.4	23.5	8.0	35.3	na	na
Have another, undecided when	2.6	4.7	4.9	3.6	3.7	2.2	0.7	3.3	na	na
Undecided	2.3	1.1	3.9	5.4	8.3	6.7	6.7	5.2	na	na
Want no more	2.5	4.4	14.1	29.0	41.7	55.0	75.1	35.9	na	na
Sterilised[4]	0.3	0.4	0.6	0.8	1.9	1.7	3.7	1.5	na	na
Declared infecund	7.3	1.3	1.2	1.1	1.6	2.2	2.0	1.7	na	na
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	na	na
Number of women	198	1,136	1,524	1,246	1,112	860	1,573	7,648	na	na
					MEN[5]					
Have another soon[2]	68.1	29.2	17.7	18.7	16.9	12.7	12.7	18.9	8.4	17.5
Have another later[3]	15.7	63.6	61.1	54.8	43.2	39.9	27.4	46.7	4.8	41.1
Have another, undecided when	1.5	2.3	4.5	0.8	0.4	0.7	1.0	1.7	0.6	1.6
Undecided	2.3	1.0	5.7	4.5	7.7	8.1	4.0	4.9	2.3	4.5
Want no more	3.7	2.7	10.3	20.4	31.0	37.3	53.5	26.7	74.2	33.0
Sterilised[4]	3.9	0.1	0.5	0.3	0.4	0.5	0.4	0.4	1.7	0.6
Declared infecund	4.8	1.1	0.2	0.5	0.4	0.8	0.9	0.8	7.9	1.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of men	129	829	1,062	868	739	610	1,336	5,572	856	6,428

na = Not applicable
[1] The number of living children includes the current pregnancy.
[2] Wants next birth within 2 years
[3] Wants to delay next birth for 2 or more years
[4] Includes both female and male sterilisation
[5] The number of living children includes one additional child if the respondent's wife is pregnant (or if any wife is pregnant for men with more than one current wife).

Table 6.2.1 Desire to limit childbearing: Women

Percentage of currently married women age 15-49 who want no more children, by number of living children, according to background characteristics, Zambia DHS 2018

Background characteristic	Number of living children[1]							Total
	0	1	2	3	4	5	6+	
Residence								
Urban	3.7	6.0	19.2	42.5	58.6	73.9	90.5	39.9
Rural	2.0	3.7	10.1	17.7	33.3	48.4	75.4	35.9
Province								
Central	*	3.7	11.3	19.2	43.6	47.5	77.9	35.8
Copperbelt	*	5.9	15.5	43.7	55.5	76.2	86.4	41.7
Eastern	*	3.0	14.1	27.9	38.7	59.7	83.2	38.4
Luapula	*	6.3	10.3	22.3	31.7	55.3	79.2	38.6
Lusaka	(1.8)	6.2	19.7	41.5	70.7	70.3	91.1	41.1
Muchinga	*	3.3	12.2	12.2	39.2	59.8	84.7	41.3
Northern	*	3.2	6.6	18.7	23.3	47.2	75.4	33.5
North Western	*	0.7	12.9	19.3	24.7	36.5	76.3	32.6
Southern	*	6.4	17.6	23.1	32.0	40.7	62.8	31.2
Western	*	3.9	9.7	20.1	30.8	55.7	73.3	34.6
Education								
No education	*	12.2	16.3	26.0	39.1	50.3	74.1	47.3
Primary	1.5	4.3	12.5	23.6	37.9	54.2	78.3	40.8
Secondary	1.7	4.9	13.2	32.9	50.3	69.0	85.9	29.8
Higher	*	2.0	31.5	51.0	72.3	*	*	37.9
Wealth quintile								
Lowest	2.2	4.2	8.3	13.9	21.0	44.0	74.2	30.7
Second	(0.0)	4.6	11.6	16.3	32.7	51.0	72.4	37.3
Middle	2.6	1.8	9.6	21.4	40.6	56.6	80.8	39.6
Fourth	(1.8)	5.5	15.7	36.8	54.9	65.2	87.1	36.7
Highest	(5.5)	7.1	23.8	47.1	64.8	73.3	93.5	43.3
Total	2.8	4.8	14.7	29.8	43.6	56.7	78.7	37.5

Note: Women who have been sterilised or whose husband has been sterilised are considered to want no more children. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] The number of living children includes the current pregnancy.

Table 6.2.2 Desire to limit childbearing: Men

Percentage of currently married men age 15-49 who want no more children, by number of living children, according to background characteristics, Zambia DHS 2018

Background characteristic	Number of living children[1]							Total
	0	1	2	3	4	5	6+	
Residence								
Urban	14.5	1.6	13.7	28.1	37.9	44.4	60.6	27.0
Rural	1.6	3.9	7.9	15.3	27.1	34.0	52.0	27.2
Province								
Central	*	1.1	7.8	18.8	37.7	52.4	61.0	30.8
Copperbelt	*	1.9	16.8	19.9	40.5	(60.1)	56.1	29.1
Eastern	*	7.7	9.1	16.6	36.5	42.5	56.1	30.5
Luapula	*	1.5	4.2	5.1	12.7	20.7	43.9	19.4
Lusaka	*	1.6	14.4	30.9	33.4	34.6	64.3	25.6
Muchinga	*	0.9	19.7	23.1	33.8	42.6	65.3	35.0
Northern	*	3.8	7.6	16.1	33.0	22.2	58.8	26.9
North Western	*	6.7	5.4	19.8	33.3	(36.4)	54.6	31.2
Southern	*	1.3	6.8	26.8	20.9	39.0	45.9	24.1
Western	*	(4.1)	(3.2)	8.0	13.4	(14.9)	33.2	16.7
Education								
No education	*	*	(5.9)	(22.8)	(26.2)	(36.5)	54.3	32.7
Primary	(1.9)	2.4	11.0	12.5	26.6	28.3	49.4	27.3
Secondary	11.0	2.2	8.4	22.0	33.0	45.2	59.2	24.9
Higher	*	4.8	20.5	38.5	52.0	(55.9)	(74.2)	33.6
Wealth quintile								
Lowest	(0.0)	2.2	6.0	11.7	16.1	23.9	46.8	20.5
Second	*	3.5	8.1	12.4	28.1	26.0	49.2	26.1
Middle	(0.0)	2.6	7.5	13.2	29.2	43.9	61.6	31.0
Fourth	(21.6)	3.5	10.6	27.7	37.3	40.8	49.8	25.4
Highest	(9.8)	2.2	18.7	36.0	44.7	57.5	74.8	33.6
Total 15-49	7.6	2.8	10.8	20.7	31.4	37.8	53.9	27.1
50-59	*	*	(67.6)	(64.1)	76.8	81.3	78.0	75.9
Total 15-59	9.7	3.9	12.4	22.6	34.5	44.2	61.3	33.6

Note: Men who have been sterilised or who state in response to the question about desire for children that their wife has been sterilised are considered to want no more children. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] The number of living children includes one additional child if the respondent's wife is pregnant (or if any wife is pregnant for men with more than one current wife).

Table 6.3 Ideal number of children according to number of living children

Percent distribution of women and men age 15-49 by ideal number of children, and mean ideal number of children for all respondents and for currently married respondents, according to number of living children, Zambia DHS 2018

Ideal number of children	Number of living children							Total
	0	1	2	3	4	5	6+	
				WOMEN[1]				
0	2.7	0.8	1.0	0.9	0.7	0.9	2.0	1.4
1	1.3	1.8	1.0	0.4	0.3	0.3	0.3	0.9
2	16.5	11.5	7.0	5.3	2.9	2.4	1.3	8.3
3	23.3	24.7	15.0	10.5	5.8	3.8	2.6	14.6
4	34.6	35.6	43.4	36.0	28.8	14.7	10.6	30.9
5	11.9	13.4	16.1	21.8	19.3	21.0	11.8	15.5
6+	7.0	10.3	15.2	23.9	40.4	54.2	66.9	26.0
Non-numeric responses	2.6	1.9	1.3	1.0	1.8	2.8	4.6	2.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	3,228	2,393	2,107	1,651	1,390	1,081	1,834	13,683
Mean ideal number of children for:[2]								
All women	3.6	3.9	4.2	4.6	5.2	5.7	6.5	4.6
Number of women	3,143	2,349	2,080	1,633	1,364	1,051	1,750	13,370
Currently married women	4.1	4.0	4.3	4.7	5.2	5.8	6.5	5.1
Number of currently married women	188	1,115	1,506	1,232	1,092	838	1,501	7,473
				MEN[3]				
0	1.1	0.1	1.0	0.3	0.7	0.5	1.2	0.9
1	0.6	1.2	0.6	0.2	0.5	0.4	0.3	0.6
2	10.4	7.5	6.2	5.0	2.3	2.4	1.7	7.0
3	18.4	22.3	13.7	8.6	4.4	5.2	3.0	13.9
4	32.9	33.3	36.7	28.7	22.6	14.1	11.4	28.6
5	18.7	17.2	23.7	27.2	24.7	20.2	11.4	19.4
6+	16.1	16.8	17.5	29.1	44.2	56.2	68.6	28.1
Non-numeric responses	1.9	1.7	0.7	0.9	0.6	1.1	2.4	1.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of men	4,920	1,285	1,233	941	783	651	1,365	11,177
Mean ideal number of children for men 15-49:[2]								
All men	4.3	4.2	4.5	5.1	5.4	5.8	7.5	4.9
Number of men	4,828	1,263	1,224	933	778	644	1,332	11,002
Currently married men	4.2	4.3	4.5	5.1	5.4	5.9	7.5	5.5
Number of currently married men	128	809	1,054	860	734	605	1,303	5,493
Mean ideal number of children for men 15-59:[2]								
All men	4.3	4.2	4.5	5.1	5.4	5.9	7.5	5.1
Number of men	4,857	1,299	1,271	980	838	748	1,918	11,910
Currently married men	4.2	4.2	4.5	5.1	5.4	5.9	7.5	5.7
Number of currently married men	134	835	1,085	899	789	705	1,868	6,316

[1] The number of living children includes the current pregnancy.
[2] Means are calculated excluding respondents who gave non-numeric responses.
[3] The number of living children includes one additional child if the respondent's wife is pregnant (or if any wife is pregnant for men with more than one current wife).

Table 6.4 Mean ideal number of children according to background characteristics

Mean ideal number of children for all women age 15-49, according to background characteristics, Zambia DHS 2018

Background characteristic	Mean	Number of women[1]
Age		
15-19	3.7	2,906
20-24	4.1	2,695
25-29	4.4	2,205
30-34	4.8	1,835
35-39	5.2	1,657
40-44	5.8	1,205
45-49	6.1	867
Residence		
Urban	4.0	6,306
Rural	5.0	7,064
Province		
Central	4.7	1,147
Copperbelt	4.2	2,164
Eastern	4.4	1,541
Luapula	5.2	1,012
Lusaka	4.0	2,708
Muchinga	4.9	748
Northern	5.1	1,021
North Western	4.8	702
Southern	4.9	1,561
Western	4.8	764
Education		
No education	5.6	1,002
Primary	5.1	5,853
Secondary	4.0	5,762
Higher	3.5	753
Wealth quintile		
Lowest	5.2	2,323
Second	5.2	2,309
Middle	4.8	2,421
Fourth	4.3	2,983
Highest	3.8	3,333
Total	4.6	13,370

[1] Number of women who gave a numeric response

Table 6.5 Fertility planning status

Percent distribution of births to women age 15-49 in the 5 years preceding the survey (including current pregnancies), by planning status of the birth, according to birth order and mother's age at birth, Zambia DHS 2018

Birth order and mother's age at birth	Planning status of birth			Total	Number of births
	Wanted then	Wanted later	Wanted no more		
Birth order					
1	51.5	47.0	1.5	100.0	2,767
2	66.8	31.3	1.9	100.0	2,169
3	71.5	26.7	1.8	100.0	1,679
4+	61.7	28.1	10.3	100.0	4,364
Mother's age at birth					
<20	47.7	50.6	1.7	100.0	2,213
20-24	65.1	32.9	2.0	100.0	3,021
25-29	68.9	28.7	2.4	100.0	2,306
30-34	66.1	27.6	6.3	100.0	1,865
35-39	59.3	26.2	14.6	100.0	1,134
40-44	59.0	14.0	27.0	100.0	405
45-49	(32.2)	(22.8)	(45.1)	(100.0)	36
Total	61.6	33.3	5.1	100.0	10,979

Note: Figures in parentheses are based on 25-49 unweighted cases.

Table 6.6 Wanted fertility rates

Total wanted fertility rates and total fertility rates for the 3 years preceding the survey, according to background characteristics, Zambia DHS 2018

Background characteristic	Total wanted fertility rate	Total fertility rate
Residence		
Urban	2.9	3.4
Rural	5.0	5.8
Province		
Central	4.0	4.8
Copperbelt	3.0	3.4
Eastern	4.7	5.5
Luapula	5.3	6.0
Lusaka	2.9	3.5
Muchinga	4.9	5.7
Northern	4.9	5.6
North Western	4.4	4.9
Southern	4.4	5.5
Western	4.6	5.4
Education		
No education	5.6	6.4
Primary	4.8	5.6
Secondary	3.2	3.7
Higher	2.2	2.4
Wealth quintile		
Lowest	5.9	6.7
Second	5.1	5.9
Middle	4.2	4.9
Fourth	3.1	3.7
Highest	2.6	3.0
Total	4.0	4.7

Note: Rates are calculated based on births to women age 15-49 in the period 1-36 months preceding the survey. The total fertility rates are the same as those presented in Table 5.2.

FAMILY PLANNING 7

Key Findings

- ***Contraceptive use:*** The contraceptive prevalence rate (CPR) among currently married women age 15-49 is 50%.
- ***Contraceptive discontinuation:*** In the 5 years preceding the survey, 36% of episodes of contraceptive use were discontinued within 12 months. The most common reason for discontinuation was wanting to become pregnant (30%).
- ***Demand for family planning:*** Total demand for family planning among currently married women increased from 45% in 1992 to 69% in 2018.
- ***Unmet need for family planning:*** Twenty percent of currently married women have an unmet need for family planning.
- ***Future use of contraception:*** Sixty percent of currently married women who are not using contraception intend to use family planning in the future.

Couples can use contraceptive methods to limit or space the number of children they have. This chapter presents information on knowledge of contraceptive methods, use and sources of contraceptive methods, informed choice of methods, unmet need for family planning, and rates and reasons for discontinuing contraceptives. It also examines the potential demand for family planning and how much contact nonusers have with family planning providers.

In 2012, Zambia committed to increasing the use of modern contraceptives among married women from 33% in that year to 58% in 2020. To operationalise the commitments made at the London Summit in 2012, the country developed the Integrated Family Planning Scale-up Plan 2013-2020 (MOH 2013).

7.1 CONTRACEPTIVE KNOWLEDGE AND USE

Knowledge of contraceptive methods is nearly universal in Zambia, with more than 99% of currently married women and men age 15-49 knowing at least one method of contraception. Injectables, the pill, and male condoms are the most well-known methods of contraception among married women and men. For more information on contraceptive knowledge by method and by background characteristics, see **Tables 7.1** and **7.2**.

Contraceptive prevalence rate

Percentage of women who use any contraceptive method

Sample: All women age 15-49, currently married women age 15-49, and sexually active unmarried women age 15-49

The contraceptive prevalence rate (CPR) among currently married women age 15-49 is 50%, with 48% using a modern method. Among sexually active unmarried women, 44% use a contraceptive method and 43% use a modern method (**Table 7.3**).

Modern methods

Include male and female sterilisation, injectables, intrauterine devices (IUDs), contraceptive pills, implants, female and male condoms, the standard days method, the lactational amenorrhoea method, and emergency contraception

Injectables (26%) are the most common method of contraception among currently married women in Zambia, followed by implants and the pill (8% each) and male condoms (3%). Among sexually active unmarried women, the most popular methods are injectables (21%), implants (9%), and male condoms (7%) (**Table 7.3** and **Figure 7.1**).

Trends: Use of any modern method of contraception among currently married women increased from 9% in 1992 to 33% in 2007 and 48% in 2018 (**Figure 7.2**).

Figure 7.1 Contraceptive use

Percentage of women age 15-49 currently using a contraceptive method

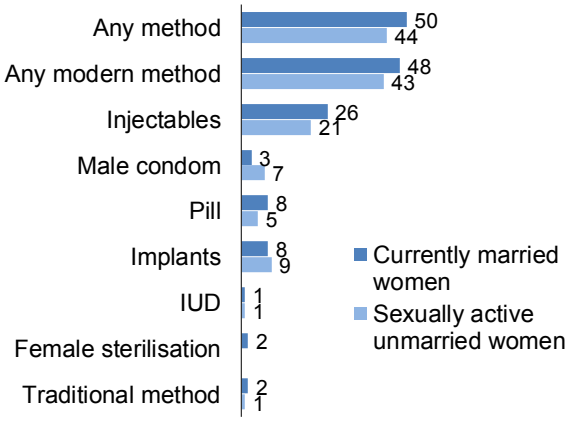
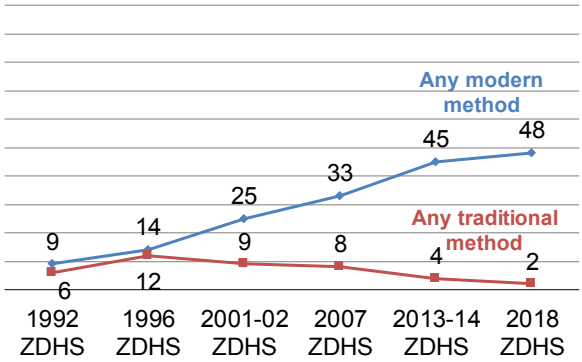


Figure 7.2 Trends in contraceptive use

Percentage of currently married women currently using a contraceptive method

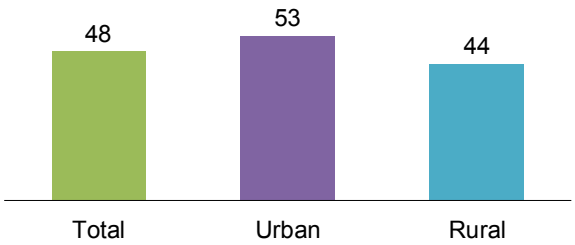


Patterns by background characteristics

- Among currently married women and sexually active unmarried women, use of modern contraception is higher among those in urban areas (53%) than those in rural areas (44%) (**Table 7.4** and **Figure 7.3**).

Figure 7.3 Use of modern methods by residence

Percentage of currently married women age 15-49 using a modern method by residence



- By province, modern contraceptive use ranges from 30% in Western to 54% in Lusaka and Eastern.
- Modern contraceptive use among women increases with increasing education up to the secondary level, from 36% among those with no education to 53% among those with a secondary education. However, use of modern contraception decreases to 47% among women with a higher education.
- Similarly, modern contraceptive use increases from 38% among women in the lowest wealth quintile to 54% among those in the fourth wealth quintile before decreasing to 51% among those in the highest quintile.

Knowledge of the Fertile Period

Only 21% of women age 15-49 have correct knowledge about the fertile period during the ovulatory cycle (halfway between two menstrual periods) (**Table 7.5**). The most common misconceptions are that the fertile period is right after a woman's menstrual period has ended (29%) and just before her menstrual period begins (22%). Twenty-five percent of women age 30-34 and 35-39 have correct knowledge of the fertile period (**Table 7.6**).

7.2 SOURCE OF MODERN CONTRACEPTIVE METHODS

Source of modern contraceptives

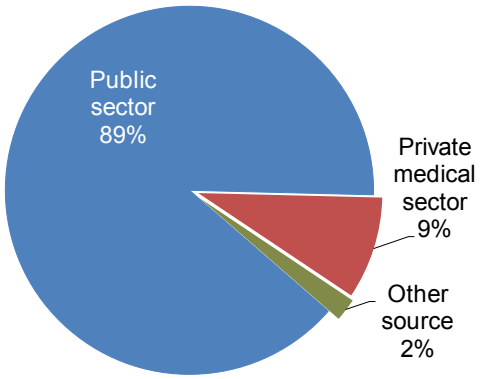
The place where the modern method currently being used was obtained the last time it was acquired

Sample: Women age 15-49 currently using a modern contraceptive method

The public sector (89%) remains the major source of modern contraceptive methods among women age 15-49 in Zambia. Modern contraceptive users are most likely to obtain their method from government health centres (65%), followed by government health posts (13%) and government hospitals (8%). The private sector distributes 9% of modern contraceptives, with other sources accounting for 2% (**Table 7.8** and **Figure 7.4**).

***Figure 7.4* Source of modern contraceptive methods**

Percent distribution of current users of modern methods age 15-49 by most recent source of method



7.3 INFORMED CHOICE

Informed choice

Informed choice indicates that women were informed about the method's side effects, about what to do if they experience side effects, and about other methods they could use.

Sample: Women age 15-49 who are currently using selected modern contraceptive methods and who started the last episode of use within the 5 years before the survey

Eighty-two percent of all women currently using modern methods of contraception were informed about side effects or other problems associated with the method they use, and 77% were informed about what to do if they experienced side effects (**Table 7.10**). Eighty-four percent of women who obtained a method were informed by a health or family planning worker about other methods that could be used for contraception. Overall, 73% of women currently using modern contraceptives were provided with all three types of information making up the method information index (the side effects of the method, what to do if they experience side effects, and other available methods) at the time they started the current episode of contraceptive use. Women obtaining a method from the public sector were more likely to be informed of all three types of information (75%) than those who obtained their method from the private sector (56%).

7.4 DISCONTINUATION OF CONTRACEPTIVES

Contraceptive discontinuation rate

Percentage of contraceptive use episodes discontinued within 12 months

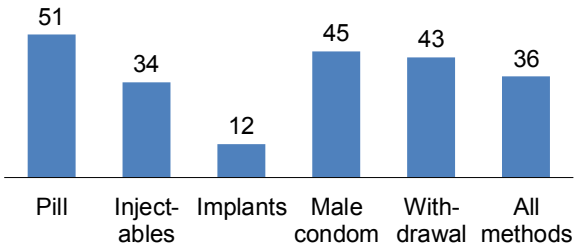
Sample: Episodes of contraceptive use in the 5 years before the survey, experienced by women who are currently age 15-49 (one woman may contribute more than one episode)

Among women age 15-49 who started an episode of contraceptive use in the 5 years preceding the survey, 36% of the episodes were discontinued within 12 months (**Table 7.11**). Contraceptive discontinuation rates are highest for pills (51%) and male condoms (45%) and lowest for implants (12%) (**Figure 7.5**).

The most common reason for discontinuation is wanting to become pregnant (30%), followed by health concerns or side effects (29%) (**Table 7.12**).

***Figure 7.5* Contraceptive discontinuation rates**

Percentage of contraceptive episodes discontinued within 12 months among women age 15-49



7.5 DEMAND FOR FAMILY PLANNING

Unmet need for family planning

Proportion of women who (1) are not pregnant and not postpartum amenorrhoeic and are considered fecund and want to postpone their next birth for 2 or more years or stop childbearing altogether but are not using a contraceptive method, or (2) have a mistimed or unwanted current pregnancy, or (3) are postpartum amenorrhoeic and their last birth in the last 2 years was mistimed or unwanted.

Sample: All women age 15-49, currently married women age 15-49, and sexually active unmarried women age 15-49

Demand for family planning:

Unmet need for family planning + current contraceptive use (any method)

Proportion of demand satisfied:

$$\frac{\text{Current contraceptive use (any method)}}{\text{Unmet need + current contraceptive use (any method)}}$$

Proportion of demand satisfied by modern methods:

$$\frac{\text{Current contraceptive use (any modern method)}}{\text{Unmet need + current contraceptive use (any method)}}$$

Sixty-nine percent of currently married women have a demand for family planning; 42% want to space births and 28% want to limit births. Twenty percent of currently married women have an unmet need for family planning. Seventy-two percent of the family planning demand of currently married women is being satisfied (69% of the demand is satisfied by a modern method) (**Table 7.13.1** and **Figure 7.6**).

Trends: Total demand for family planning among currently married women increased from 45% in 1992 to 69% in 2018. In the same period, unmet need decreased from 30% to 20%.

Patterns by background characteristics

- Unmet need for family planning among currently married women is higher in rural areas (21%) than in urban areas (17%) (**Figure 7.7**).
- By province, the percentages of women with an unmet need for family planning are highest in Western (27%) and Luapula (26%) and lowest in Muchinga (15%) (**Figure 7.8**).
- Unmet need for family planning among currently married women decreases with increasing education, from 24% among those with no education to 15% among those with a higher education.
- Similarly, unmet need decreases with increasing household wealth, from 23% among women in the lowest wealth quintile to 17% among those in the highest quintile.
- Demand satisfied by modern methods is lowest in Western (52%) and Northern (58%) and highest in Lusaka (75%) and Central (73%).

7.5.1 Decision Making about Family Planning

Seventy-four percent of currently married women who are using family planning reported that the decision to use contraception was made jointly with their husband. Fifteen percent said that it was mainly their own decision, and 11% said that it was mainly their husband's decision. Among currently married women who are not using family planning, 55% reported that the decision to not use contraception was made jointly with their husband, whereas

***Figure 7.6* Demand for family planning**

Percent distribution of currently married women age 15-49 by need for family planning

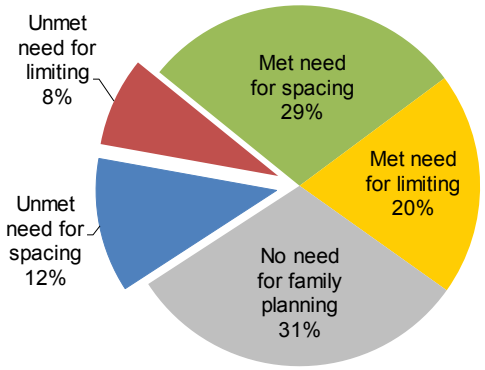


***Figure 7.7* Unmet need by residence**

Percentage of currently married women age 15-49 with unmet need

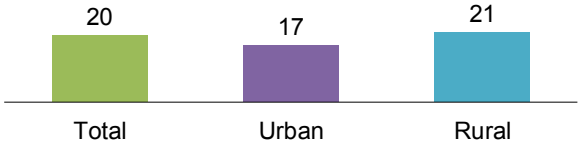
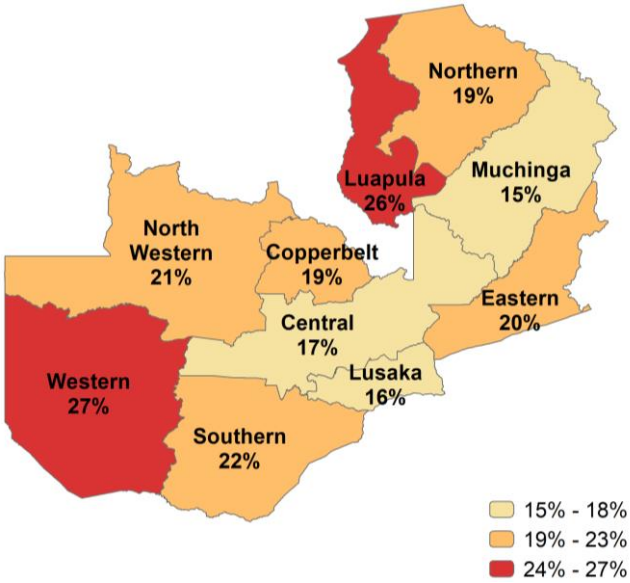


***Figure 7.8* Unmet need by province**

Percentage of currently married women age 15-49 with unmet need for family planning



29% reported that it was mainly their own decision and 12% reported that it was mainly their husband's decision (**Table 7.14**).

7.5.2 Future Use of Contraception

Sixty percent of currently married women who are non-users of contraception intend to use family planning in the future, while 36% do not intend to do so. The proportion of women who intend to use contraception in the future among non-users is lowest among those with no living children (47%) and highest among those with one living child (69%) (**Table 7.15**).

7.5.3 Exposure to Family Planning Messages in the Media

The survey also collected information on exposure to family planning messages in the media and other sources among women and men age 15-49. Radio is the most common source for family planning messages in Zambia, with 18% of women and 27% of men having heard a family planning message on the radio in the past few months. Thirteen percent of women report having seen a family planning message on television, while 5% saw one in a newspaper or magazine. Three percent of women and 8% of men were exposed to a family planning message on a mobile phone. However, 77% of women and 64% of men have not been exposed to family planning messages through any of these four media sources in the past few months (**Table 7.16**).

7.6 Contact of Nonusers with Family Planning Providers

Contact of nonusers with family planning providers

Respondent discussed family planning in the 12 months before the survey with a fieldworker or during a visit to a health facility.

Sample: Women age 15-49 who are not currently using any contraceptive methods

Women age 15-49 who are not currently using contraception were asked if they had discussed family planning in the 12 months before the survey with a health worker or during a visit to a health facility. Thirty-six percent of women visited a health facility but did not discuss family planning during the visit, while 22% of women who visited a health facility discussed family planning. Five percent of women were visited by a fieldworker who discussed family planning with them. About three quarters (77%) of women who are not using a contraceptive method said that they did not discuss family planning either with a fieldworker or at a health facility in the 12 months before the survey (**Table 7.17**).

Patterns by background characteristics

- In all age groups, at least one-third of respondents visited a health facility but did not discuss family planning with a health facility worker.
- Eighty-two percent of women in urban areas did not discuss family planning with a fieldworker or at a health facility in the 12 months before the survey, as compared with 72% of their rural counterparts.
- Over 70% of women at all levels of education and wealth did not discuss family planning with a fieldworker or health facility worker (**Table 7.17**).

7.7 Exposure to Specific Radio and Television Programmes

The survey also collected information on exposure to specific radio and television programmes in the past 6 months among women age 15-49. Fifteen percent of women said that they had listened to "Your Health Matters" on the radio, while 14% had watched "Your Health Matters" on TV (**Table 7.18**).

Patterns by background characteristics

- More women in urban areas saw or heard "Your Health Matters" on television (27%) or radio (21%) than their rural counterparts (3% and 9%, respectively).
- The percentage of women who heard "Your Health Matters" on the radio ranged from 6% in North Western and Southern to 23% in Luapula. The percentage of women who watched the programme on television ranged from 5% in Central, Eastern, and Western to 27% in Copperbelt.
- The percentage of women who heard "Your Health Matters" on the radio increases with increasing education, from 6% among those with no education to 39% among those with a higher education. A similar pattern is observed among those who watched the programme on television (2% among those with no education and 52% among those with a higher education).
- The percentage of women who heard "Your Health Matters" on the radio also increases with increasing household wealth, from 6% among those in the lowest quintile to 28% among those in the highest quintile. Again, a similar pattern is seen among those who saw the programme on television (less than 1% among those in the lowest wealth quintile and 39% among those in the highest quintile).

List of Tables

For more information on family planning, see the following tables:

- **Table 7.1 Knowledge of contraceptive methods**
- **Table 7.2 Knowledge of contraceptive methods according to background characteristics**
- **Table 7.3 Current use of contraception according to age**
- **Table 7.4 Current use of contraception according to background characteristics**
- **Table 7.5 Knowledge of fertile period**
- **Table 7.6 Knowledge of fertile period by age**
- **Table 7.7 Timing of sterilisation**
- **Table 7.8 Source of modern contraception methods**
- **Table 7.9 Use of social marketing brand pills and condoms**
- **Table 7.10 Informed choice**
- **Table 7.11 Twelve-month contraceptive discontinuation rates**
- **Table 7.12 Reasons for discontinuation**
- **Table 7.13.1 Need and demand for family planning among currently married women**
- **Table 7.13.2 Need and demand for family planning for all women and for sexually active unmarried women**
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- **Table 7.17 Contact of nonusers with family planning providers**
- **Table 7.18 Exposure to specific radio and television programmes**

Table 7.1 Knowledge of contraceptive methods

Percentage of all respondents, currently married respondents, and sexually active unmarried respondents age 15-49 who have heard of any contraceptive method, by specific method, Zambia DHS 2018

	Women			Men		
Method	All women	Currently married women	Sexually active unmarried women[1]	All men	Currently married men	Sexually active unmarried men[1]
Any method	**98.7**	**99.7**	**99.4**	**99.1**	**99.9**	**99.8**
Any modern method	**98.7**	**99.7**	**99.4**	**99.1**	**99.9**	**99.8**
Female sterilisation	63.1	70.9	61.1	48.6	59.5	46.7
Male sterilisation	23.4	25.6	21.9	25.2	30.5	20.7
Pill	95.2	98.4	94.7	90.0	97.6	89.8
IUD	63.6	73.5	63.9	34.9	44.5	32.6
Injectables	94.7	98.8	94.3	88.4	97.8	90.3
Implants	88.5	95.2	89.6	67.6	83.5	64.3
Male condom	97.1	98.6	98.3	98.6	99.7	99.4
Female condom	87.4	90.5	88.5	85.4	91.7	88.4
Emergency contraception	30.3	31.4	32.5	25.0	31.5	23.1
Standard days method (SDM)	33.0	38.4	31.9	25.6	35.9	21.6
Lactational amenorrhoea method (LAM)	47.0	57.5	38.4	23.2	34.0	20.1
Other modern method	0.7	0.9	0.4	0.2	0.3	0.4
Any traditional method	**74.0**	**84.9**	**69.9**	**72.5**	**89.8**	**70.0**
Rhythm	38.9	44.4	36.9	40.4	51.9	41.5
Withdrawal	71.4	82.7	66.2	69.3	87.6	66.2
Other traditional method	4.0	5.3	3.7	1.2	2.0	0.5
Mean number of methods known by respondents 15-49	8.4	9.1	8.2	7.2	8.5	7.1
Number of respondents	13,683	7,648	835	11,177	5,572	1,306
Mean number of methods known by respondents 15-59	na	na	na	7.4	8.5	7.1
Number of respondents	na	na	na	12,132	6,428	1,316

na = Not applicable
[1] Had last sexual intercourse within 30 days preceding the survey

Table 7.2 Knowledge of contraceptive methods according to background characteristics

Percentage of currently married women and currently married men age 15-49 who have heard of at least one contraceptive method and who have heard of at least one modern method, according to background characteristics, Zambia DHS 2018

Background characteristic	Women			Men		
	Heard of any method	Heard of any modern method[1]	Number	Heard of any method	Heard of any modern method[1]	Number
Age						
15-19	98.1	98.1	437	(96.1)	(96.1)	31
20-24	99.9	99.9	1,438	99.5	99.5	459
25-29	99.8	99.8	1,544	99.9	99.9	1,090
30-34	99.9	99.8	1,396	99.9	99.9	1,138
35-39	99.8	99.8	1,307	99.9	99.9	1,104
40-44	99.7	99.5	908	100.0	100.0	968
45-49	99.9	99.9	618	100.0	100.0	781
Residence						
Urban	100.0	100.0	3,080	100.0	100.0	2,170
Rural	99.6	99.5	4,568	99.9	99.9	3,402
Province						
Central	99.9	99.9	654	100.0	100.0	486
Copperbelt	100.0	100.0	1,043	99.9	99.9	728
Eastern	99.7	99.7	1,075	100.0	100.0	857
Luapula	99.7	99.7	611	100.0	100.0	429
Lusaka	100.0	100.0	1,384	100.0	100.0	1,022
Muchinga	100.0	100.0	470	98.4	98.4	332
Northern	99.0	98.6	668	100.0	100.0	475
North Western	99.8	99.8	359	100.0	100.0	271
Southern	99.8	99.8	993	100.0	100.0	704
Western	98.6	98.6	392	100.0	100.0	267
Education						
No education	98.9	98.6	743	99.8	99.8	276
Primary	99.7	99.7	3,881	99.9	99.9	2,263
Secondary	100.0	100.0	2,635	99.9	99.9	2,492
Higher	100.0	100.0	389	100.0	100.0	541
Wealth quintile						
Lowest	99.1	98.9	1,553	99.7	99.7	1,168
Second	99.6	99.6	1,509	99.9	99.9	1,087
Middle	100.0	100.0	1,468	99.9	99.9	1,119
Fourth	100.0	100.0	1,620	100.0	100.0	1,187
Highest	100.0	100.0	1,499	100.0	100.0	1,011
Total 15-49	99.7	99.7	7,648	99.9	99.9	5,572
50-59	na	na	na	100.0	100.0	856
Total 15-59	na	na	na	99.9	99.9	6,428

Note: Figures in parentheses are based on 25-49 unweighted cases.
na = Not applicable
[1] Female sterilisation, male sterilisation, pill, IUD, injectables, implants, male condom, female condom, emergency contraception, standard days method (SDM), lactational amenorrhoea method (LAM), and other modern methods

Table 7.3 Current use of contraception according to age

Percent distribution of all women, currently married women, and sexually active unmarried women age 15-49 by contraceptive method currently used, according to age, Zambia DHS 2018

			Modern method									Any tradi-	Traditional method					
Age	Any method	Any modern method	Female sterili-sation	Pill	IUD	Inject-ables	Im-plants	Male condom	SDM	LAM	Other[1]	tional method	Rhythm	With-drawal	Other	Not current-ly using	Total	Number of women
								ALL WOMEN										
15-19	12.1	12.0	0.0	0.9	0.0	7.8	1.6	1.6	0.0	0.1	0.0	0.1	0.0	0.1	0.0	87.9	100.0	3,000
20-24	35.8	35.1	0.0	3.4	0.1	21.8	6.6	2.7	0.0	0.4	0.1	0.8	0.0	0.7	0.1	64.2	100.0	2,733
25-29	46.7	45.5	0.0	6.5	0.5	25.6	8.0	3.3	0.5	0.8	0.3	1.2	0.1	1.1	0.0	53.3	100.0	2,237
30-34	48.6	46.9	0.7	7.8	0.8	25.0	8.1	3.7	0.3	0.6	0.0	1.7	0.1	1.5	0.0	51.4	100.0	1,862
35-39	47.0	45.3	1.8	8.2	1.1	21.1	8.1	4.1	0.2	0.7	0.0	1.7	0.4	1.3	0.1	53.0	100.0	1,697
40-44	38.9	36.2	3.4	6.6	1.0	13.9	7.2	3.4	0.0	0.5	0.1	2.7	0.3	2.1	0.3	61.1	100.0	1,253
45-49	29.1	25.9	4.5	4.4	1.1	7.0	4.9	3.1	0.7	0.0	0.1	3.2	0.8	2.0	0.4	70.9	100.0	900
Total	35.4	34.1	0.9	4.9	0.5	18.0	6.1	3.0	0.2	0.4	0.1	1.3	0.2	1.0	0.1	64.6	100.0	13,683
								CURRENTLY MARRIED WOMEN										
15-19	38.3	37.8	0.0	4.0	0.0	26.7	4.3	2.3	0.0	0.6	0.0	0.4	0.2	0.2	0.0	61.7	100.0	437
20-24	48.6	47.4	0.0	5.2	0.0	31.8	7.9	1.6	0.0	0.7	0.1	1.2	0.0	1.1	0.0	51.4	100.0	1,438
25-29	54.2	52.7	0.0	8.2	0.6	30.2	9.2	2.8	0.7	1.0	0.0	1.5	0.2	1.4	0.0	45.8	100.0	1,544
30-34	54.0	51.9	0.7	8.9	0.6	29.2	8.0	3.5	0.4	0.6	0.0	2.1	0.2	1.9	0.1	46.0	100.0	1,396
35-39	52.5	50.3	2.2	9.8	1.3	23.3	8.4	4.3	0.3	0.7	0.0	2.3	0.5	1.7	0.1	47.5	100.0	1,307
40-44	46.2	42.6	4.5	8.3	1.3	16.3	8.1	3.2	0.0	0.8	0.2	3.5	0.4	2.9	0.3	53.8	100.0	908
45-49	37.4	32.7	6.0	5.9	1.5	8.8	6.2	3.2	1.1	0.0	0.1	4.6	1.2	2.9	0.6	62.6	100.0	618
Total	49.6	47.5	1.5	7.6	0.7	25.6	7.9	3.0	0.3	0.7	0.1	2.1	0.3	1.7	0.1	50.4	100.0	7,648
								SEXUALLY ACTIVE UNMARRIED WOMEN[2]										
15-19	30.4	30.1	0.0	1.7	0.0	17.7	5.3	5.4	0.0	0.0	0.0	0.4	0.0	0.4	0.0	69.6	100.0	225
20-24	48.9	47.6	0.0	4.7	0.0	24.6	8.9	8.7	0.0	0.0	0.7	1.4	0.0	0.8	0.6	51.1	100.0	227
25+	48.9	48.1	0.0	7.2	1.4	20.1	10.9	6.5	0.2	0.2	1.6	0.7	0.1	0.6	0.0	51.1	100.0	383
Total	43.9	43.1	0.0	5.0	0.6	20.7	8.8	6.8	0.1	0.1	0.9	0.8	0.1	0.6	0.2	56.1	100.0	835

Note: If more than one method is used, only the most effective method is considered in this tabulation.
SDM = Standard days method
LAM = Lactational amenorrhoea method
[1] Other modern methods include male sterilisation, female condom, and emergency contraception
[2] Women who have had sexual intercourse within 30 days preceding the survey

Table 7.4 Current use of contraception according to background characteristics

Percent distribution of currently married and sexually active unmarried women age 15-49 by contraceptive method currently used, according to background characteristics, Zambia DHS 2018

Background characteristic	Any method	Any modern method	Modern method: Female sterilisation	Pill	IUD	Injectables	Implants	Male condom	SDM	LAM	Other[1]	Any traditional method	Traditional method: Rhythm	Withdrawal	Other	Not currently using	Total	Number of women
Number of living children																		
0	4.5	4.5	0.0	0.9	0.0	2.3	0.0	1.1	0.0	0.0	0.2	0.0	0.0	0.0	0.0	95.5	100.0	327
1-2	47.7	46.8	0.5	7.0	0.3	28.1	6.7	3.4	0.1	0.6	0.1	1.0	0.2	0.7	0.0	52.3	100.0	2,689
3-4	57.0	54.7	1.4	10.8	0.7	27.5	9.2	3.4	0.7	0.9	0.1	2.3	0.2	2.1	0.1	43.0	100.0	2,282
5+	50.8	47.3	3.1	6.2	1.3	24.0	9.2	2.5	0.3	0.8	0.0	3.5	0.6	2.7	0.3	49.2	100.0	2,349
Residence																		
Urban	54.3	52.6	1.2	10.7	1.2	24.4	9.5	4.6	0.4	0.5	0.1	1.7	0.4	1.2	0.1	45.7	100.0	3,080
Rural	46.4	44.0	1.8	5.6	0.4	26.4	6.9	2.0	0.3	0.8	0.0	2.4	0.2	2.0	0.1	53.6	100.0	4,568
Province																		
Central	50.9	49.7	0.3	7.3	0.7	27.0	8.4	3.5	0.2	2.3	0.1	1.2	0.1	1.1	0.0	49.1	100.0	654
Copperbelt	53.5	52.8	0.7	9.6	1.1	26.4	10.0	4.4	0.1	0.4	0.0	0.7	0.3	0.5	0.0	46.5	100.0	1,043
Eastern	55.0	53.7	4.1	5.2	0.5	32.8	8.1	2.6	0.1	0.4	0.0	1.3	0.0	1.2	0.1	45.0	100.0	1,075
Luapula	39.1	38.6	1.5	3.8	0.4	24.1	7.1	1.0	0.0	0.6	0.1	0.5	0.3	0.1	0.1	60.9	100.0	611
Lusaka	56.5	54.3	1.4	11.7	1.6	24.6	8.4	4.8	0.6	1.0	0.3	2.1	0.5	1.6	0.0	43.5	100.0	1,384
Muchinga	58.0	52.0	1.7	6.9	0.5	23.5	13.5	3.5	0.1	2.3	0.0	6.0	0.3	5.5	0.3	42.0	100.0	470
Northern	43.9	36.5	0.3	5.4	0.5	22.8	6.1	1.1	0.1	0.1	0.0	7.4	0.0	7.1	0.3	56.1	100.0	668
North Western	46.8	45.9	4.9	6.6	0.1	25.0	7.8	1.4	0.1	0.0	0.0	0.9	0.0	0.5	0.4	53.2	100.0	359
Southern	43.9	42.4	0.7	7.8	0.4	23.7	5.7	2.7	1.2	0.2	0.0	1.5	0.9	0.3	0.2	56.1	100.0	993
Western	31.2	30.0	0.1	6.3	0.0	19.4	2.8	1.4	0.0	0.0	0.0	1.2	0.0	1.0	0.1	68.8	100.0	392
Education																		
No education	37.7	35.9	2.7	3.6	0.3	19.7	7.2	1.5	0.0	1.0	0.0	1.8	0.0	1.6	0.2	62.3	100.0	743
Primary	48.8	46.1	1.5	6.8	0.6	26.7	7.5	2.0	0.3	0.7	0.1	2.7	0.2	2.3	0.2	51.2	100.0	3,881
Secondary	54.2	52.9	1.2	9.0	0.9	27.3	9.4	4.2	0.3	0.6	0.1	1.3	0.3	0.9	0.0	45.8	100.0	2,635
Higher	49.1	46.6	2.4	14.5	1.5	14.0	3.3	7.4	2.0	1.5	0.1	2.5	1.2	1.3	0.0	50.9	100.0	389
Wealth quintile																		
Lowest	40.8	38.0	0.9	4.1	0.3	24.1	6.3	1.4	0.1	0.6	0.0	2.8	0.1	2.5	0.2	59.2	100.0	1,553
Second	45.9	43.4	2.0	4.8	0.3	26.4	6.4	2.2	0.3	1.0	0.0	2.5	0.4	1.9	0.2	54.1	100.0	1,509
Middle	53.0	51.1	1.9	7.1	0.5	28.5	9.9	1.9	0.4	0.8	0.0	1.9	0.2	1.6	0.0	47.0	100.0	1,468
Fourth	54.6	53.6	0.7	8.4	1.1	29.9	9.7	3.3	0.0	0.4	0.1	0.9	0.1	0.8	0.1	45.4	100.0	1,620
Highest	53.8	51.3	2.3	13.8	1.3	18.7	7.3	6.1	0.8	0.8	0.2	2.5	0.7	1.8	0.0	46.2	100.0	1,499
Total	49.6	47.5	1.5	7.6	0.7	25.6	7.9	3.0	0.3	0.7	0.1	2.1	0.3	1.7	0.1	50.4	100.0	7,648
SEXUALLY ACTIVE UNMARRIED WOMEN[2]																		
Residence																		
Urban	47.6	46.7	0.0	6.7	1.2	17.0	10.2	9.6	0.2	0.2	1.6	0.9	0.0	0.8	0.1	52.4	100.0	437
Rural	39.9	39.2	0.0	3.2	0.0	24.8	7.4	3.7	0.0	0.0	0.1	0.7	0.1	0.3	0.2	60.1	100.0	399
Total	43.9	43.1	0.0	5.0	0.6	20.7	8.8	6.8	0.1	0.1	0.9	0.8	0.1	0.6	0.2	56.1	100.0	835

Note: If more than one method is used, only the most effective method is considered in this tabulation.
SDM = Standard days method
LAM = Lactational amenorrhoea method
[1] Other modern methods include male sterilisation, female condom, and emergency contraception
[2] Women who have had sexual intercourse within 30 days preceding the survey.

Table 7.5 Knowledge of fertile period

Percent distribution of all women age 15-49 by knowledge of the fertile period during the ovulatory cycle, Zambia DHS 2018

Perceived fertile period	All women
Just before her menstrual period begins	21.5
During her menstrual period	0.8
Right after her menstrual period has ended	28.7
Halfway between two menstrual periods	21.1
Other	0.3
No specific time	10.7
Don't know	16.9
Total	100.0
Number of women	13,683

Table 7.6 Knowledge of fertile period by age

Percentage of women age 15-49 with correct knowledge of the fertile period during the ovulatory cycle, according to age, Zambia DHS 2018

Age	Percentage with correct knowledge of the fertile period	Number of women
15-19	13.2	3,000
20-24	21.8	2,733
25-29	23.3	2,237
30-34	25.0	1,862
35-39	25.2	1,697
40-44	21.7	1,253
45-49	22.8	900
Total	21.1	13,683

Note: Correct knowledge of the fertile period is defined as "halfway between two menstrual periods."

Table 7.7 Timing of sterilisation

Percent distribution of sterilised women age 15-49 by age at the time of sterilisation and median age at sterilisation, Zambia DHS 2018

	Age at time of sterilisation						Total	Number of women	Median age[1]
	<25	25-29	30-34	35-39	40-44	45-49			
Total	8.1	8.9	25.5	32.8	22.6	2.1	100.0	126	34.9

[1] Median age at sterilisation is calculated only for women sterilised before age 40 to avoid problems of censoring.

Table 7.8 Source of modern contraception methods

Percent distribution of users of modern contraceptive methods age 15-49 by most recent source of method, according to method, Zambia DHS 2018

Source	Female sterilisation	IUD	Injectables	Implants	Pill	Male condom	Other modern method[1]	Total
Public sector	**64.2**	**96.3**	**95.7**	**95.7**	**71.3**	**73.5**	**(37.7)**	**88.8**
Government hospital	57.8	11.5	5.7	11.1	5.7	8.6	(0.0)	8.4
Government health centre	3.0	80.8	71.6	71.8	53.8	53.6	(26.8)	65.3
Government health post	1.4	1.9	15.4	10.9	10.3	8.9	(10.9)	12.6
Mobile hospital/clinic	1.3	2.1	1.1	1.8	0.6	0.5	(0.0)	1.1
Community-based agent/fieldworker	0.0	0.0	1.9	0.1	0.9	1.2	(0.0)	1.3
Other public sector	0.7	0.0	0.0	0.0	0.0	0.6	(0.0)	0.1
Private sector	**34.8**	**3.7**	**4.3**	**4.3**	**22.9**	**15.8**	**(24.2)**	**9.0**
Private hospital/clinic	1.2	0.0	1.2	2.0	3.3	0.2	(4.8)	1.6
Mission hospital/clinic	31.8	0.0	1.3	1.5	1.1	0.3	(0.0)	2.0
Pharmacy	0.0	0.0	0.0	0.0	17.2	15.1	(17.8)	4.0
Private doctor's office	0.0	2.8	0.1	0.0	0.3	0.1	(0.0)	0.2
Mobile hospital/clinic	1.9	0.9	0.6	0.7	0.5	0.0	(0.0)	0.6
Community-based agent/ fieldworker	0.0	0.0	1.0	0.0	0.6	0.0	(1.6)	0.7
Other private medical	0.0	0.0	0.0	0.0	0.0	0.0	(0.0)	0.0
Other source	**0.0**	**0.0**	**0.0**	**0.0**	**5.5**	**10.0**	**(24.2)**	**1.9**
Shop	0.0	0.0	0.0	0.0	5.3	9.0	(3.8)	1.6
Church	0.0	0.0	0.0	0.0	0.0	0.0	(5.7)	0.1
Friend/relative	0.0	0.0	0.0	0.0	0.2	1.0	(14.8)	0.3
Other	0.9	0.0	0.0	0.0	0.2	0.7	(11.6)	0.3
Don't know	0.0	0.0	0.0	0.0	0.0	0.0	(2.3)	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	(100.0)	100.0
Number of women	126	67	2,464	830	672	404	42	4,604

Note: Total includes other modern methods but excludes lactational amenorrhoea method (LAM). Figures in parentheses are based on 25-49 unweighted cases.

[1] Includes male sterilisation, female condom, emergency contraception, and standard days method (SDM)

Table 7.9 Use of social marketing brand pills and condoms

Percentage of pill and condom users age 15-49 using a social marketing brand, by background characteristics, Zambia DHS 2018

	Among pill users							Among condom users[1]							
Background characteristic	SafePlan	Micro-gynon	Microlut	Logynon	Oralcon F	Other	Number of women	Maxi-mum classic	Maxi-mum scented	Rough rider	Durex	Reality	Public sector un-branded (white colour foil)	Other	Number of women
Age															
15-19	(24.0)	(50.2)	(9.7)	(0.0)	(16.2)	(0.0)	27	(25.9)	(10.1)	(0.0)	(0.0)	(12.1)	(51.9)	(0.0)	38
20-24	21.8	54.9	5.7	0.0	15.3	0.0	91	32.5	9.1	4.6	4.2	2.1	46.8	0.0	68
25-29	17.3	42.4	6.6	0.0	27.2	0.0	144	26.5	5.3	6.9	7.3	0.0	54.1	0.0	66
30-34	35.4	42.4	3.5	0.3	16.7	0.0	144	25.2	9.6	5.6	1.1	0.0	55.3	0.0	66
35-39	21.7	59.7	3.4	0.0	14.4	0.0	138	39.8	6.0	0.0	0.0	0.0	54.2	0.0	66
40-44	24.4	50.7	1.5	0.0	22.6	0.0	82	(22.6)	(11.8)	(1.9)	(1.9)	(0.0)	(61.7)	(0.0)	41
45-49	(19.9)	(54.5)	(5.9)	(0.0)	(16.3)	(0.0)	38	*	*	*	*	*	*	*	22
Residence															
Urban	27.1	45.4	2.9	0.1	20.6	0.0	390	36.4	10.9	4.9	3.2	2.5	41.1	0.0	244
Rural	19.7	55.9	6.9	0.0	16.6	0.0	276	14.4	2.6	1.3	1.9	0.0	79.2	0.0	124
Province															
Central	17.9	62.7	2.7	0.0	15.3	0.0	53	(30.6)	(2.7)	(0.0)	(2.5)	(0.0)	(64.2)	(0.0)	28
Copperbelt	18.1	45.2	5.4	0.0	31.3	0.0	117	(35.8)	(12.7)	(3.0)	(0.0)	(0.0)	(48.5)	(0.0)	56
Eastern	35.2	36.4	19.9	0.9	7.6	0.0	58	13.8	2.1	0.0	0.0	0.0	82.6	0.0	51
Luapula	(11.2)	(70.7)	(6.9)	(0.0)	(11.2)	(0.0)	28	*	*	*	*	*	*	*	9
Lusaka	32.0	36.6	1.6	0.0	22.2	0.0	187	37.6	11.3	7.5	5.1	4.3	33.2	0.0	138
Muchinga	15.8	54.9	6.0	0.0	23.3	0.0	35	(2.7)	(2.5)	(0.0)	(12.0)	(0.0)	(80.4)	(0.0)	20
Northern	(5.7)	(78.5)	(0.0)	(0.0)	(14.0)	(0.0)	36	*	*	*	*	*	*	*	9
North Western	(20.7)	(72.3)	(2.4)	(0.0)	(4.5)	(0.0)	30	*	*	*	*	*	*	*	6
Southern	18.3	61.2	2.4	0.0	16.1	0.0	86	(13.9)	(4.7)	(4.1)	(0.0)	(0.0)	(77.3)	(0.0)	38
Western	(47.5)	(38.1)	(3.6)	(0.0)	(10.9)	(0.0)	34	*	*	*	*	*	*	*	12
Education															
No education	(4.0)	(64.1)	(10.8)	(0.0)	(21.1)	(0.0)	29	*	*	*	*	*	*	*	12
Primary	15.8	57.8	5.8	0.0	19.9	0.0	287	24.4	0.0	4.0	1.4	0.0	70.2	0.0	115
Secondary	34.1	40.6	3.0	0.0	17.9	0.0	278	30.3	13.1	0.9	0.4	3.4	50.9	0.0	178
Higher	26.0	47.3	3.4	0.7	18.6	0.0	72	37.0	10.3	12.0	12.5	0.0	26.0	0.0	62
Wealth quintile															
Lowest	9.8	62.9	12.1	0.0	15.3	0.0	74	(10.5)	(0.0)	(0.0)	(2.4)	(0.0)	(87.0)	(0.0)	32
Second	22.0	56.3	4.6	0.0	17.1	0.0	78	(12.1)	(1.5)	(1.8)	(0.0)	(0.0)	(84.6)	(0.0)	42
Middle	23.3	55.7	5.8	0.0	14.4	0.0	110	(15.3)	(0.0)	(4.2)	(2.1)	(0.0)	(76.6)	(0.0)	41
Fourth	24.0	52.0	4.0	0.0	19.6	0.0	168	41.5	7.5	0.0	0.7	0.0	49.5	0.0	94
Highest	29.6	39.1	2.1	0.2	22.4	0.0	236	33.4	14.0	7.1	4.9	3.8	35.8	0.0	158
Total	24.0	49.7	4.6	0.1	19.0	0.0	665	29.0	8.1	3.7	2.7	1.6	53.9	0.0	367

Note: Table excludes pill and condom users who do not know the brand name. Condom use is based on women's reports.
Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Among condom users not also using the pill.

Table 7.10 Informed choice

Among current users of modern methods age 15-49 who started the last episode of use within the 5 years preceding the survey, percentage who were informed about possible side effects or problems of that method, percentage who were informed about what to do if they experienced side effects, percentage who were informed about other methods they could use, and percentage who were informed of all three, according to method and initial source, Zambia DHS 2018

	Among women who started last episode of modern contraceptive method within 5 years preceding the survey:				
Method/source	Percentage who were informed about side effects or problems of method used	Percentage who were informed about what to do if they experienced side effects	Percentage who were informed by a health or family planning worker of other methods that could be used	Percentage who were informed of all three (method information index)	Number of women
Method					
Female sterilisation	74.8	71.8	78.4	66.3	62
IUD	(98.7)	(79.0)	(87.4)	(75.5)	43
Injectables	79.8	75.0	83.4	71.1	2,319
Implants	88.7	85.7	89.0	80.8	778
Pill	79.0	73.9	82.2	71.7	595
Initial source of method[1]					
Public sector	*83.0*	*78.5*	*85.8*	*74.7*	*3,507*
Government hospital	81.0	78.0	88.2	76.2	310
Government health centre	84.1	79.5	86.6	75.8	2,587
Government health post	78.2	73.6	80.4	69.3	511
Mobile hospital/clinic	87.5	79.6	85.5	72.9	47
Community-based agent/ fieldworker	(77.8)	(73.5)	(82.9)	(65.4)	49
Other public sector	*	*	*	*	3
Private sector	*66.9*	*60.9*	*68.3*	*56.0*	*264*
Private hospital/clinic	(81.1)	(64.6)	(74.9)	(59.4)	51
Mission hospital/clinic	88.6	85.6	90.5	79.7	63
Pharmacy	34.6	32.5	44.5	32.2	94
Private doctor's office	*	*	*	*	5
Mobile hospital/clinic	(70.7)	(59.2)	(79.2)	(56.1)	26
Community-based agent/ fieldworker	*	*	*	*	21
Other private medical	*	*	*	*	3
Other source	*(48.0)*	*(42.6)*	*(50.7)*	*(33.1)*	*25*
Shop	(48.0)	(42.6)	(50.7)	(33.1)	25
Other	*	*	*	*	2
Total	81.6	77.0	84.3	73.1	3,798

Note: Table includes users of only the methods listed individually. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Source at start of current episode of use

Table 7.11 Twelve-month contraceptive discontinuation rates

Among episodes of contraceptive use experienced within the 5 years preceding the survey, percentage of episodes discontinued within 12 months, according to reason for discontinuation and specific method, Zambia DHS 2018

	Reason for discontinuation									
Method	Method failure	Desire to become pregnant	Other fertility-related reasons[1]	Side effects/ health concerns	Wanted more effective method	Other method-related reasons[2]	Other reasons	Any reason[3]	Switched to another method[4]	Number of episodes of use[5]
Injectables	1.4	7.6	2.8	15.2	1.5	2.2	3.4	34.0	3.8	4,327
Implants	0.3	1.7	0.7	7.0	0.8	0.1	1.0	11.6	2.2	1,144
Pill	3.1	9.0	5.5	19.2	4.1	5.3	5.2	51.3	11.1	1,594
Male condom	0.6	4.6	9.5	1.4	17.2	5.3	6.5	45.2	16.7	699
Withdrawal	8.0	8.1	2.1	0.0	20.1	2.9	1.9	43.1	19.0	365
Other[6]	1.5	3.7	1.8	4.1	14.3	3.5	2.6	31.6	11.9	436
All methods	1.8	6.7	3.5	12.5	4.6	2.9	3.6	35.5	7.1	8,565

Note: Figures are based on life table calculations using information on episodes of use that occurred 3-62 months preceding the survey.
[1] Includes infrequent sex/husband away, difficult to get pregnant/menopausal, and marital dissolution/separation
[2] Includes lack of access/too far, costs too much, and inconvenient to use
[3] Reasons for discontinuation are mutually exclusive and add to the total given in this column.
[4] A woman is considered to have switched to another method if she used a different method in the month following discontinuation or if she gave "wanted a more effective method" as the reason for discontinuation and started another method within 2 months of discontinuation.
[5] All episodes of use that occurred within the 5 years preceding the survey are included. Episodes of use include both episodes that were discontinued during the period of observation and episodes that were not discontinued during the period of observation.
[6] Includes female sterilisation, male sterilisation, IUD, female condom, emergency contraception, periodic abstinence, and lactational amenorrhoea method (LAM)

Table 7.12 Reasons for discontinuation

Percent distribution of discontinuations of contraceptive methods in the 5 years preceding the survey by main reason stated for discontinuation, according to specific method, Zambia DHS 2018

Reason	IUD	Injectables	Implants	Pill	Male condom	Withdrawal	Other[1]	All methods
Became pregnant while using	(4.0)	6.3	3.9	9.7	5.0	21.7	5.6	7.5
Wanted to become pregnant	(22.2)	33.4	24.7	28.0	18.0	32.5	25.4	29.6
Husband/partner disapproved	(15.7)	4.4	1.8	2.5	7.9	4.4	3.0	4.0
Wanted a more effective method	(1.1)	3.6	4.4	6.7	27.5	31.6	42.6	9.0
Side effects/health concerns	(51.8)	34.2	49.5	29.0	2.5	0.0	2.5	29.4
Lack of access/too far	(0.0)	5.8	0.3	3.8	2.1	0.0	1.5	4.0
Cost too much	(0.0)	0.1	0.1	1.2	0.0	0.0	0.2	0.4
Inconvenient to use	(3.0)	0.9	0.7	4.6	6.6	3.8	5.9	2.5
Up to God/fatalistic	(0.0)	0.3	0.1	0.2	0.0	0.0	1.4	0.3
Difficult to get pregnant/ menopausal	(0.0)	0.2	0.0	0.2	0.4	0.1	0.2	0.2
Infrequent sex/husband away	(1.7)	5.9	4.1	8.2	22.2	2.7	5.6	7.3
Marital dissolution/ separation	(0.0)	0.7	0.5	0.9	1.6	1.6	0.0	0.8
Other	(0.7)	3.6	9.4	5.1	4.6	1.7	6.0	4.5
Don't know	(0.0)	0.6	0.3	0.1	1.7	0.0	0.0	0.5
Missing	(0.0)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of discontinuations	77	2,944	579	1,438	470	306	198	6,012

Note: Figures in parentheses are based on 25-49 unweighted cases.
[1] Female condom, emergency contraception, standard days method, periodic abstinence, and lactational amenorrhoea method (LAM)

Table 7.13.1 Need and demand for family planning among currently married women

Percentage of currently married women age 15-49 with unmet need for family planning, percentage with met need for family planning, total demand for family planning, and percentage of the demand for family planning that is satisfied, according to background characteristics, Zambia DHS 2018

Background characteristic	Unmet need for family planning			Met need for family planning (currently using)			Total demand for family planning[1]			Number of women	Percentage of demand satisfied[2]	Percentage of demand satisfied by modern methods[3]
	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total			
Age												
15-19	20.4	1.2	21.5	36.6	1.7	38.3	56.9	2.8	59.8	437	64.0	63.3
20-24	17.3	2.0	19.3	45.1	3.5	48.6	62.4	5.5	67.9	1,438	71.6	69.8
25-29	13.2	2.4	15.7	43.7	10.4	54.2	57.0	12.9	69.8	1,544	77.6	75.4
30-34	12.7	6.1	18.8	33.5	20.6	54.0	46.2	26.7	72.9	1,396	74.2	71.2
35-39	10.6	12.8	23.3	18.4	34.2	52.5	28.9	46.9	75.9	1,307	69.3	66.3
40-44	6.1	18.2	24.2	5.5	40.7	46.2	11.5	58.9	70.4	908	65.6	60.5
45-49	1.8	14.9	16.7	1.6	35.8	37.4	3.4	50.6	54.0	618	69.1	60.6
Residence												
Urban	8.8	8.5	17.4	31.2	23.1	54.3	40.1	31.6	71.7	3,080	75.8	73.4
Rural	14.3	6.9	21.2	28.2	18.2	46.4	42.5	25.2	67.7	4,568	68.6	65.1
Province												
Central	10.0	7.1	17.0	31.6	19.3	50.9	41.6	26.3	67.9	654	74.9	73.2
Copperbelt	9.4	10.0	19.4	29.0	24.6	53.5	38.4	34.6	73.0	1,043	73.4	72.3
Eastern	14.2	5.6	19.8	31.8	23.1	55.0	46.0	28.8	74.8	1,075	73.5	71.8
Luapula	18.3	7.3	25.7	23.0	16.0	39.1	41.3	23.4	64.7	611	60.4	59.6
Lusaka	7.4	9.0	16.4	33.2	23.3	56.5	40.6	32.2	72.8	1,384	77.5	74.6
Muchinga	7.8	7.0	14.8	32.2	25.8	58.0	40.0	32.8	72.9	470	79.6	71.4
Northern	12.1	6.7	18.8	25.5	18.4	43.9	37.7	25.1	62.8	668	70.0	58.1
North Western	13.5	7.4	20.9	29.5	17.4	46.8	43.0	24.8	67.7	359	69.1	67.8
Southern	16.9	5.2	22.1	29.7	14.2	43.9	46.6	19.4	66.0	993	66.5	64.2
Western	15.4	11.2	26.6	19.9	11.4	31.2	35.3	22.5	57.8	392	54.0	52.0
Education												
No education	14.1	10.1	24.2	15.9	21.9	37.7	30.0	32.0	61.9	743	60.9	58.0
Primary	13.0	8.5	21.5	27.2	21.6	48.8	40.2	30.1	70.3	3,881	69.5	65.6
Secondary	10.9	5.6	16.5	36.7	17.5	54.2	47.6	23.0	70.6	2,635	76.7	74.9
Higher	7.7	7.1	14.8	27.8	21.4	49.1	35.5	28.4	63.9	389	76.9	73.0
Wealth quintile												
Lowest	15.7	7.3	23.0	27.5	13.2	40.8	43.3	20.5	63.8	1,553	63.9	59.5
Second	16.3	6.5	22.9	27.3	18.6	45.9	43.6	25.1	68.7	1,509	66.7	63.1
Middle	11.3	6.9	18.2	30.2	22.8	53.0	41.5	29.7	71.2	1,468	74.4	71.7
Fourth	8.9	8.5	17.4	34.1	20.5	54.6	43.1	28.9	72.0	1,620	75.8	74.5
Highest	8.1	8.7	16.9	27.8	26.1	53.8	35.9	34.8	70.7	1,499	76.2	72.6
Total	12.1	7.6	19.7	29.4	20.2	49.6	41.5	27.8	69.3	7,648	71.6	68.5

Note: Numbers in this table correspond to the revised definition of unmet need described in Bradley et al. 2012.
[1] Total demand is the sum of unmet need and met need.
[2] Percentage of demand satisfied is met need divided by total demand.
[3] Modern methods include female sterilisation, male sterilisation, pill, IUD, injectables, implants, male condom, female condom, emergency contraception, standard days method (SDM), lactational amenorrhoea method (LAM), and other modern methods.

Table 7.13.2 Need and demand for family planning for all women and for sexually active unmarried women

Percentage of all women and sexually active unmarried women age 15-49 with unmet need for family planning, percentage with met need for family planning, total demand for family planning, and percentage of the demand for family planning that is satisfied, according to background characteristics, Zambia DHS 2018

Background characteristic	Unmet need for family planning			Met need for family planning (currently using)			Total demand for family planning[1]			Number of women	Percentage of demand satisfied[2]	Percentage of demand satisfied by modern methods[3]
	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total			
ALL WOMEN												
Age												
15-19	12.5	0.4	12.9	11.4	0.7	12.1	23.9	1.1	25.0	3,000	48.4	48.0
20-24	14.8	1.6	16.4	32.7	3.1	35.8	47.5	4.7	52.2	2,733	68.6	67.1
25-29	13.2	2.2	15.4	37.4	9.2	46.7	50.6	11.5	62.1	2,237	75.2	73.3
30-34	11.4	5.5	16.9	29.1	19.6	48.6	40.5	25.0	65.6	1,862	74.2	71.6
35-39	9.6	11.1	20.7	16.2	30.8	47.0	25.7	41.9	67.7	1,697	69.5	66.9
40-44	5.1	14.8	19.9	5.2	33.7	38.9	10.2	48.5	58.8	1,253	66.2	61.6
45-49	1.3	10.6	11.9	1.3	27.8	29.1	2.6	38.4	41.0	900	71.0	63.2
Residence												
Urban	8.2	5.0	13.1	21.3	13.8	35.1	29.5	18.8	48.3	6,374	72.8	70.8
Rural	13.7	5.0	18.7	22.0	13.5	35.6	35.7	18.5	54.2	7,309	65.6	62.7
Province												
Central	10.3	4.4	14.7	21.9	13.4	35.3	32.2	17.8	50.0	1,165	70.6	69.2
Copperbelt	8.4	5.6	14.0	19.0	14.6	33.6	27.4	20.2	47.6	2,201	70.6	69.5
Eastern	13.7	4.2	17.8	25.9	18.1	43.9	39.5	22.2	61.7	1,605	71.1	69.8
Luapula	16.5	4.8	21.3	17.1	11.1	28.2	33.6	15.9	49.5	1,071	57.0	56.2
Lusaka	6.3	5.5	11.8	23.3	14.3	37.6	29.6	19.8	49.4	2,733	76.1	73.8
Muchinga	7.8	5.1	12.9	22.8	17.6	40.4	30.6	22.7	53.2	754	75.8	68.6
Northern	10.9	4.7	15.7	17.9	13.1	31.0	28.8	17.8	46.6	1,054	66.4	56.3
North Western	13.9	4.5	18.4	24.8	11.0	35.7	38.6	15.5	54.1	718	66.1	65.2
Southern	16.7	3.9	20.6	22.9	11.1	34.0	39.6	15.0	54.6	1,574	62.3	60.5
Western	14.3	6.5	20.9	19.9	8.8	28.7	34.2	15.3	49.5	808	57.8	55.7
Education												
No education	12.6	8.2	20.7	12.9	18.3	31.2	25.5	26.5	52.0	1,054	60.1	57.6
Primary	12.1	6.5	18.6	21.3	16.4	37.7	33.5	22.9	56.3	6,059	67.0	63.8
Secondary	10.3	3.0	13.3	23.4	10.1	33.6	33.7	13.1	46.9	5,816	71.7	70.3
Higher	7.5	3.8	11.3	23.0	12.8	35.8	30.5	16.6	47.1	755	76.1	72.2
Wealth quintile												
Lowest	14.2	5.2	19.4	22.1	11.0	33.2	36.4	16.2	52.6	2,442	63.1	59.6
Second	15.6	4.9	20.6	21.3	13.9	35.3	37.0	18.9	55.8	2,387	63.2	60.3
Middle	12.4	4.9	17.3	22.8	15.9	38.7	35.2	20.8	55.9	2,477	69.1	66.9
Fourth	8.5	5.4	14.0	24.4	13.9	38.3	32.9	19.4	52.3	3,011	73.3	72.1
Highest	7.1	4.5	11.6	18.4	13.6	32.0	25.5	18.0	43.5	3,367	73.4	70.5
Total	11.1	5.0	16.1	21.7	13.7	35.4	32.8	18.6	51.5	13,683	68.7	66.2
SEXUALLY ACTIVE UNMARRIED WOMEN[4]												
Age												
15-19	58.3	0.5	58.8	29.1	1.3	30.4	87.4	1.8	89.2	225	34.1	33.7
20-24	34.4	3.9	38.3	43.3	5.6	48.9	77.7	9.5	87.3	227	56.1	54.5
25-29	30.3	4.9	35.3	45.5	7.0	52.5	75.8	11.9	87.8	150	59.8	58.0
30-34	21.0	11.4	32.3	30.5	21.1	51.5	51.5	32.4	83.9	104	61.4	60.9
35-39	16.3	18.9	35.3	19.0	26.9	45.9	35.3	45.8	81.1	63	56.5	56.5
40-44	(10.2)	(32.1)	(42.3)	(11.0)	(31.4)	(42.4)	(21.2)	(63.4)	(84.7)	45	(50.1)	(50.1)
45-49	*	*	*	*	*	*	*	*	*	21	*	*
Residence												
Urban	33.2	7.8	41.0	35.6	12.0	47.6	68.8	19.8	88.7	437	53.7	52.7
Rural	37.0	6.2	43.2	31.5	8.4	39.9	68.4	14.6	83.0	399	48.0	47.2
Province												
Central	40.5	7.1	47.7	18.9	18.4	37.3	59.4	25.5	85.0	61	43.9	43.9
Copperbelt	38.9	8.5	47.4	31.7	12.0	43.7	70.6	20.5	91.1	137	48.0	45.4
Eastern	38.6	3.8	42.4	31.5	10.9	42.4	70.1	14.7	84.8	94	50.0	50.0
Luapula	42.5	4.8	47.3	26.4	5.9	32.3	68.9	10.8	79.6	52	40.6	38.6
Lusaka	28.2	9.8	38.0	36.2	12.7	48.8	64.4	22.5	86.8	161	56.2	56.2
Muchinga	(37.2)	(8.6)	(45.9)	(32.1)	(9.4)	(41.5)	(69.3)	(18.0)	(87.3)	25	(47.5)	(45.0)
Northern	(56.0)	(0.0)	(56.0)	(15.6)	(7.2)	(22.8)	(71.7)	(7.2)	(78.8)	29	(29.0)	(29.0)
North Western	33.7	6.2	39.8	47.0	6.3	53.3	80.7	12.4	93.1	72	57.3	57.3
Southern	35.4	9.5	44.9	33.8	8.9	42.7	69.2	18.4	87.6	94	48.7	48.7
Western	25.1	4.8	30.0	41.8	6.6	48.4	66.9	11.5	78.4	111	61.7	59.3
Education												
No education	(32.5)	(20.0)	(52.5)	(12.3)	(9.8)	(22.2)	(44.8)	(29.9)	(74.7)	40	(29.7)	(29.7)
Primary	30.6	10.8	41.5	26.2	13.0	39.2	56.8	23.9	80.7	340	48.6	47.7
Secondary	38.6	3.2	41.8	39.9	9.2	49.2	78.5	12.4	91.0	390	54.1	53.8
Higher	38.0	2.1	40.1	48.0	2.4	50.4	86.0	4.5	90.5	65	55.7	50.0
Wealth quintile												
Lowest	27.7	4.3	32.1	34.4	10.6	45.0	62.1	14.9	77.0	138	58.4	56.8
Second	40.1	8.3	48.4	28.5	6.9	35.4	68.5	15.2	83.8	141	42.2	42.2
Middle	37.7	8.2	45.9	28.5	11.1	39.6	66.2	19.3	85.5	153	46.3	46.0
Fourth	32.2	9.6	41.8	31.5	13.4	44.9	63.7	23.0	86.8	202	51.8	51.2
Highest	37.3	4.4	41.7	42.7	8.7	51.4	80.0	13.1	93.2	201	55.2	53.3
Total	35.0	7.0	42.0	33.6	10.3	43.9	68.6	17.3	86.0	835	51.1	50.2

Note: Numbers in this table correspond to the revised definition of unmet need described in Bradley et al. 2012. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Total demand is the sum of unmet need and met need.

[2] Percentage of demand satisfied is met need divided by total demand.

[3] Modern methods include female sterilisation, male sterilisation, pill, IUD, injectables, implants, male condom, female condom, emergency contraception, standard days method (SDM), lactational amenorrhoea method (LAM), and other modern methods.

[4] Women who have had sexual intercourse within 30 days preceding the survey

Table 7.14 Decision making about family planning

Among currently married women age 15-49 who are current users of family planning, percent distribution by who makes the decision to use family planning, and among currently married women who are not currently using family planning, percent distribution by who makes the decision not to use family planning, according to background characteristics, Zambia DHS 2018

Background characteristic	Among currently married women who are current users of family planning						Among currently married women who are not currently using family planning					
	Mainly wife	Wife and husband jointly	Mainly husband	Other/ don't know/ missing	Total	Number of women	Mainly wife	Wife and husband jointly	Mainly husband	Other/ don't know/ missing	Total	Number of women
Age												
15-19	12.3	73.0	14.6	0.0	100.0	167	23.7	57.4	15.6	3.2	100.0	164
20-24	11.8	79.5	8.6	0.1	100.0	699	24.1	57.4	15.6	2.8	100.0	466
25-29	13.2	73.2	13.6	0.0	100.0	837	26.3	56.2	15.6	1.9	100.0	507
30-34	18.1	71.7	10.0	0.3	100.0	755	31.2	56.3	8.9	3.6	100.0	489
35-39	18.0	71.0	10.7	0.3	100.0	687	36.3	49.9	11.9	1.8	100.0	497
40-44	17.4	72.0	10.3	0.3	100.0	419	31.8	53.7	11.8	2.8	100.0	457
45-49	11.3	78.1	10.0	0.6	100.0	231	27.2	59.1	7.3	6.4	100.0	384
Number of living children												
0	*	*	*	*	*	15	26.7	58.6	8.8	5.9	100.0	183
1-2	12.9	76.3	10.6	0.3	100.0	1,284	26.5	56.6	14.5	2.4	100.0	988
3-4	16.4	71.9	11.4	0.2	100.0	1,302	28.9	55.8	12.1	3.3	100.0	772
5+	16.2	73.3	10.4	0.1	100.0	1,194	32.8	53.4	10.7	3.1	100.0	1,021
Residence												
Urban	18.0	70.6	11.4	0.0	100.0	1,672	28.0	55.0	13.9	3.1	100.0	1,096
Rural	12.8	76.4	10.5	0.3	100.0	2,121	30.0	55.6	11.3	3.1	100.0	1,868
Province												
Central	7.8	79.4	12.9	0.0	100.0	333	15.8	70.3	12.1	1.9	100.0	244
Copperbelt	19.7	65.4	14.8	0.0	100.0	558	25.6	53.8	16.1	4.5	100.0	371
Eastern	13.5	74.4	11.6	0.4	100.0	591	34.3	50.8	13.5	1.5	100.0	354
Luapula	13.5	83.5	3.0	0.0	100.0	239	39.2	53.9	4.5	2.5	100.0	288
Lusaka	21.1	67.4	11.3	0.3	100.0	781	28.9	56.0	11.4	3.7	100.0	466
Muchinga	11.2	75.8	12.9	0.1	100.0	273	20.5	54.7	22.9	1.9	100.0	144
Northern	14.7	75.7	9.5	0.0	100.0	294	23.8	65.4	9.8	1.0	100.0	299
North Western	10.8	74.1	14.7	0.4	100.0	168	15.9	67.0	16.0	1.1	100.0	148
Southern	11.9	81.0	6.7	0.4	100.0	435	41.1	39.8	11.7	7.3	100.0	423
Western	12.9	81.5	5.7	0.0	100.0	122	29.5	58.9	10.5	1.1	100.0	227
Education												
No education	17.5	70.8	11.0	0.6	100.0	280	33.9	53.0	9.2	3.9	100.0	378
Primary	15.7	73.1	10.9	0.2	100.0	1,895	31.2	54.4	11.5	2.9	100.0	1,536
Secondary	13.7	74.7	11.6	0.1	100.0	1,428	25.8	56.3	15.0	2.9	100.0	904
Higher	15.8	78.9	5.4	0.0	100.0	191	18.5	66.7	10.8	4.1	100.0	146
Wealth quintile												
Lowest	13.4	75.5	10.6	0.5	100.0	633	29.5	54.6	13.7	2.3	100.0	716
Second	13.4	75.1	11.0	0.4	100.0	692	31.2	56.2	10.3	2.3	100.0	617
Middle	12.5	77.6	9.9	0.0	100.0	778	32.4	53.0	9.0	5.6	100.0	541
Fourth	19.4	69.0	11.6	0.0	100.0	884	30.9	54.6	11.2	3.3	100.0	523
Highest	15.5	73.1	11.2	0.2	100.0	807	22.4	58.7	16.5	2.5	100.0	566
Total	15.1	73.8	10.9	0.2	100.0	3,794	29.3	55.4	12.2	3.1	100.0	2,964

Note: Table excludes women who are currently pregnant. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 7.15 Future use of contraception

Percent distribution of currently married women age 15-49 who are not using a contraceptive method by intention to use in the future, according to number of living children, Zambia DHS 2018

	Number of living children[1]					
Intention to use in the future	0	1	2	3	4+	Total
Intends to use	47.4	69.2	67.3	62.7	53.1	59.6
Unsure	10.6	4.7	5.4	4.2	3.8	4.7
Does not intend to use	41.9	26.1	27.3	33.1	43.1	35.7
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	183	599	777	568	1,727	3,854

[1] Includes current pregnancy

Table 7.16 Exposure to family planning messages

Percentage of women and men age 15-49 who heard or saw a family planning message on radio, on television, in a newspaper or magazine, or on a mobile phone in the past few months, according to background characteristics, Zambia DHS 2018

	Women						Men					
Background characteristic	Radio	Television	News-paper/ magazine	Mobile phone	None of these four media sources	Number of women	Radio	Television	News-paper/ magazine	Mobile phone	None of these four media sources	Number of men
Age												
15-19	11.7	8.3	3.8	1.1	83.1	3,000	13.1	7.6	5.5	3.3	80.4	2,781
20-24	17.6	14.6	6.0	3.6	75.1	2,733	24.8	15.1	11.2	7.3	65.5	2,032
25-29	18.9	15.2	5.6	3.7	74.6	2,237	29.5	18.3	12.3	8.8	60.6	1,721
30-34	21.5	15.3	6.5	3.8	72.8	1,862	32.1	20.8	13.9	7.9	57.5	1,383
35-39	19.8	14.6	5.8	4.8	74.5	1,697	36.9	24.3	15.9	9.6	54.1	1,280
40-44	21.2	13.7	5.0	2.5	74.8	1,253	39.8	21.6	14.0	12.1	53.2	1,097
45-49	18.3	10.9	5.2	2.7	76.6	900	38.3	21.3	16.8	9.8	53.6	883
Residence												
Urban	22.0	24.3	9.0	5.6	67.0	6,374	31.4	28.9	17.5	10.9	54.6	5,013
Rural	13.9	3.3	2.1	0.9	84.7	7,309	24.2	6.6	6.7	4.8	71.7	6,165
Province												
Central	13.8	6.0	4.0	1.8	82.9	1,165	21.6	12.2	10.4	10.2	72.2	979
Copperbelt	21.4	22.1	7.6	4.7	68.6	2,201	32.2	26.7	20.3	14.2	51.5	1,727
Eastern	23.3	5.1	4.9	1.7	74.2	1,605	21.5	6.7	9.1	4.8	74.1	1,476
Luapula	26.0	8.7	3.8	1.9	70.9	1,071	43.2	15.3	14.8	15.7	48.9	849
Lusaka	19.4	24.6	9.4	5.5	69.9	2,733	35.0	33.1	19.3	9.0	50.6	2,166
Muchinga	18.3	9.6	2.4	1.3	78.8	754	31.3	8.9	3.8	2.5	66.3	599
Northern	11.6	5.6	3.2	1.9	85.6	1,054	29.0	6.6	2.6	2.2	69.4	855
North Western	9.3	8.9	2.7	1.6	87.1	718	12.2	11.1	2.0	0.6	82.3	556
Southern	11.0	9.6	2.9	2.7	84.3	1,574	19.5	9.1	4.1	2.4	75.0	1,395
Western	13.3	5.1	2.8	1.7	84.0	808	14.0	5.5	7.6	4.8	79.5	574
Education												
No education	9.2	2.0	0.6	0.4	89.7	1,054	20.1	7.5	1.3	1.8	77.5	446
Primary	13.2	4.9	0.9	0.7	84.6	6,059	20.6	6.1	3.3	3.6	76.0	4,206
Secondary	21.5	18.9	7.9	4.7	70.4	5,816	30.3	20.0	14.6	9.4	58.8	5,618
Higher	36.3	49.6	28.0	13.0	39.4	755	44.9	48.8	35.2	16.7	33.9	907
Wealth quintile												
Lowest	9.9	0.7	1.0	0.2	89.8	2,442	18.2	1.8	2.8	2.1	79.8	1,827
Second	13.9	1.2	1.3	0.7	85.4	2,387	25.0	3.2	6.3	5.3	71.5	1,952
Middle	15.1	3.3	1.9	1.5	83.2	2,477	25.9	6.9	7.9	5.6	70.1	2,218
Fourth	19.5	17.2	5.6	3.5	73.3	3,011	29.3	23.6	13.5	9.3	59.5	2,552
Highest	26.4	34.0	13.7	7.6	58.3	3,367	35.3	38.4	22.6	12.9	46.7	2,629
Total 15-49	17.7	13.1	5.4	3.1	76.5	13,683	27.4	16.6	11.5	7.5	64.0	11,177
50-59	na	na	na	na	na	na	37.9	19.1	16.2	9.9	55.4	955
Total 15-59	na	na	na	na	na	na	28.3	16.8	11.9	7.7	63.3	12,132

na = Not applicable

Table 7.17 Contact of nonusers with family planning providers

Among women age 15-49 who are not using contraception, percentage who during the past 12 months were visited by a fieldworker who discussed family planning, percentage who visited a health facility and discussed family planning, percentage who visited a health facility but did not discuss family planning, and percentage who did not discuss family planning either with a fieldworker or at a health facility, according to background characteristics, Zambia DHS 2018

Background characteristic	Percentage of women who were visited by a fieldworker who discussed family planning	Percentage of women who visited a health facility in the past 12 months and who:		Percentage of women who did not discuss family planning either with a fieldworker or at a health facility	Number of women
		Discussed family planning	Did not discuss family planning		
Age					
15-19	1.8	8.9	33.0	89.9	2,637
20-24	5.7	27.6	35.3	70.1	1,754
25-29	6.3	31.7	36.3	66.7	1,193
30-34	5.9	29.5	35.7	68.9	956
35-39	7.1	29.2	35.9	68.7	899
40-44	6.0	20.2	37.6	77.5	766
45-49	4.1	18.0	40.9	79.9	638
Residence					
Urban	4.4	16.5	34.3	81.8	4,135
Rural	4.9	26.1	36.5	72.1	4,709
Province					
Central	2.8	15.1	28.9	84.0	754
Copperbelt	4.2	13.1	34.2	85.1	1,462
Eastern	7.9	33.4	42.8	64.3	900
Luapula	2.2	26.5	34.2	72.2	769
Lusaka	5.1	16.8	31.5	81.1	1,706
Muchinga	6.8	16.8	41.0	80.7	450
Northern	3.5	19.3	30.4	79.5	727
North Western	2.0	26.6	38.6	72.4	461
Southern	4.8	29.7	40.1	69.0	1,039
Western	7.1	29.4	40.6	67.8	576
Education					
No education	4.1	22.0	33.7	76.5	725
Primary	4.7	25.2	34.4	73.3	3,772
Secondary	5.0	17.8	36.0	80.1	3,862
Higher	3.0	23.5	41.8	75.5	485
Wealth quintile					
Lowest	5.3	27.4	36.1	70.6	1,631
Second	5.0	27.6	36.1	70.9	1,545
Middle	3.8	22.5	36.7	76.0	1,519
Fourth	5.7	19.5	31.7	78.5	1,858
Highest	3.7	14.7	36.8	83.7	2,291
Total	4.7	21.6	35.5	76.6	8,844

Table 7.18 Exposure to specific radio and television programmes

Percentage of women age 15-49 who heard or saw specific radio or television programmes in the past 6 months, according to background characteristics, Zambia DHS 2018

Background characteristic	Radio		TV		Number of women
	"Your Health Matters"	Other programmes	"Your Health Matters"	Other programmes	
Age					
15-19	10.4	7.9	10.5	5.3	3,000
20-24	14.1	10.0	13.6	6.3	2,733
25-29	16.2	11.0	16.6	7.6	2,237
30-34	18.3	11.6	17.1	8.2	1,862
35-39	16.1	13.0	15.6	8.6	1,697
40-44	16.0	11.7	13.9	7.5	1,253
45-49	15.7	14.2	12.3	8.0	900
Residence					
Urban	21.2	12.9	26.7	13.1	6,374
Rural	9.1	8.8	3.1	1.8	7,309
Province					
Central	10.2	5.1	5.1	3.3	1,165
Copperbelt	20.5	9.3	27.2	10.2	2,201
Eastern	17.2	14.0	5.1	3.2	1,605
Luapula	22.7	27.8	9.3	8.3	1,071
Lusaka	19.1	11.4	25.7	14.2	2,733
Muchinga	12.6	10.4	10.4	6.0	754
Northern	8.6	7.3	5.7	3.9	1,054
North Western	6.2	3.2	8.4	4.7	718
Southern	6.2	5.8	9.2	2.5	1,574
Western	9.0	12.5	5.0	2.4	808
Education					
No education	6.0	4.7	2.2	1.0	1,054
Primary	8.8	7.3	4.2	2.1	6,059
Secondary	19.3	13.4	21.6	10.4	5,816
Higher	39.1	25.9	51.7	29.9	755
Wealth quintile					
Lowest	5.6	6.0	0.4	0.2	2,442
Second	8.4	9.3	0.7	0.5	2,387
Middle	10.1	9.1	2.8	1.5	2,477
Fourth	16.6	10.7	17.8	8.8	3,011
Highest	27.5	16.4	38.5	19.2	3,367
Total	14.7	10.7	14.1	7.1	13,683

INFANT AND CHILD MORTALITY 8

Key Findings

- ***Current levels:*** In the 5 years before the survey, neonatal, infant, and under-5 mortality rates were 27, 42, and 61 deaths per 1,000 live births, respectively.
- ***Trends:*** Neonatal mortality increased from 24 deaths per 1,000 live births in 2013-14 to 27 deaths per 1,000 live births in 2018. Under-5 mortality declined from 75 deaths per 1,000 live births to 61 deaths per 1,000 live births over the same period.
- ***Perinatal mortality:*** The perinatal mortality rate for the 5 years before the survey was 33 deaths per 1,000 pregnancies.

Information on infant and child mortality is relevant to a demographic assessment of a country's population and is an important indicator of the country's socioeconomic development and quality of life. It can also help identify children who may be at higher risk of death and lead to strategies to reduce this risk, such as promoting birth spacing.

This chapter presents information on levels, trends, and differentials in perinatal, neonatal, infant, and under-5 mortality rates. It also examines biodemographic factors and fertility behaviours that increase mortality risks for infants and children. The information was collected as part of a retrospective birth history in which female respondents listed all of the children to whom they had given birth, along with each child's date of birth, survivorship status, and current age or age at death.

The quality of mortality estimates calculated from birth histories depends on the mother's ability to recall all of the children she has given birth to, as well as their birth dates and ages at death. Potential data quality problems include:

- The selective omission from birth histories of those births that did not survive, which can result in underestimation of childhood mortality.
- The displacement of birth dates, which may distort mortality trends. This can occur if an interviewer knowingly records a birth as occurring in a different year than the one in which it occurred. This may happen if an interviewer is trying to cut down on his or her overall workload, because live births occurring during the 5 years before the interview are the subject of a lengthy set of additional questions.
- The quality of reporting of age at death. Misreporting the child's age at death may distort the age pattern of mortality, especially if the net effect of the age misreporting is to transfer deaths from one age bracket to another.
- Any method of measuring childhood mortality that relies on mothers' reports (e.g., birth histories) assumes that female adult mortality is not high or, if it is high, that there is little or no correlation between the mortality risks of mothers and those of their children.

Selected indicators of the quality of the mortality data on which the estimates of mortality in this chapter are based are presented in Appendix C, Tables C.3-C.6.

8.1 INFANT AND CHILD MORTALITY

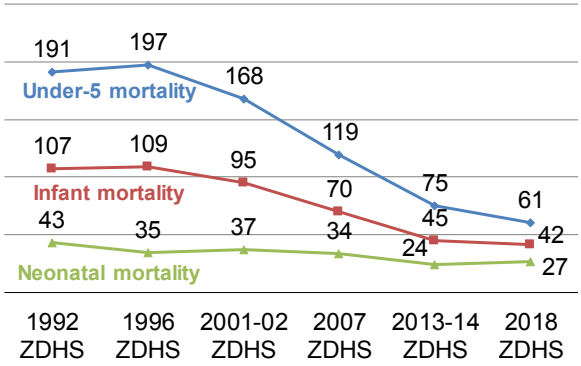
Neonatal mortality
The probability of dying within the first month of life
Postneonatal mortality
The probability of dying between the first month of life and the first birthday (computed as the difference between infant and neonatal mortality)
Infant mortality
The probability of dying between birth and the first birthday
Child mortality
The probability of dying between the first and fifth birthday
Under-5 mortality
The probability of dying between birth and the fifth birthday

Childhood mortality is represented primarily by three indicators, namely neonatal, infant, and under-5 mortality. The 2018 ZDHS results show that, in the 5-year period prior to the survey, the neonatal mortality rate was 27 deaths per 1,000 live births. The infant mortality rate in the same period was 42 deaths per 1,000 live births, while the under-5 mortality rate was 61 deaths per 1,000 live births. It is important to note that these results indicate that over two-thirds of the deaths (69%) that occurred during the first 5 years of life took place between birth and the first birthday (**Table 8.1**).

Trends: Neonatal mortality increased from 24 deaths per 1,000 live births in 2013-14 to 27 deaths per 1,000 live births in 2018. Over the same period, infant mortality decreased from 45 to 42 deaths per 1,000 live births, while under-5 mortality decreased from 75 to 61 deaths per 1,000 live births (**Figure 8.1**).

Figure 8.1 **Trends in early childhood mortality rates**

Deaths per 1,000 live births in the 5-year period before the survey

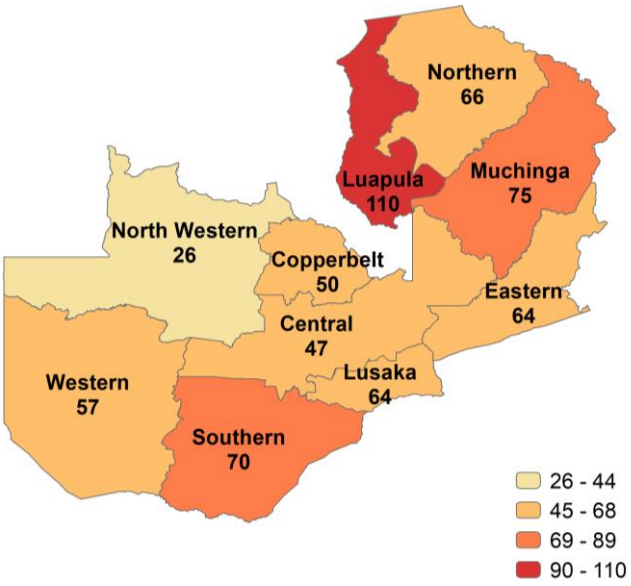


Patterns by background characteristics

- Infant mortality is slightly higher in urban areas (44 deaths per 1,000 live births) than in rural areas (41 deaths per 1,000 live births). A similar pattern is observed for under-5 mortality (64 deaths per 1,000 live births in urban areas and 58 deaths per 1,000 live births in rural areas) (**Table 8.2**).
- By province, under-5 mortality is highest in Luapula (110 deaths per 1,000 live births) and lowest in North Western (26 deaths per 1,000 live births) (**Table 8.3** and **Figure 8.2**).

Figure 8.2 Under-5 mortality by province

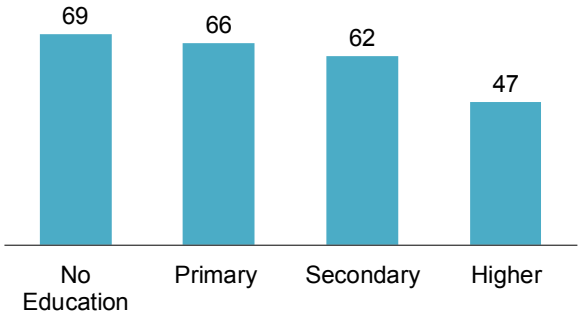
Deaths per 1,000 live births for the 10-year period before the survey



- Under-5 mortality is higher among children born to women with no education (69 deaths per 1,000 live births) or a primary education (66 deaths per 1,000 live births) than among children born to women with a secondary (62 deaths per 1,000 live births) or higher (47 deaths per 1,000 live births) education (**Figure 8.3**).

Figure 8.3 Under-5 mortality by mother's education

Deaths per 1,000 live births for the 10-year period before the survey



8.2 Biodemographic Risk Factors

The risk of childhood death is influenced by specific biodemographic factors related to inherent congenital characteristics of children themselves or their mothers. The sex of the child, the age of the mother at birth, and other factors such as birth order, previous birth interval, and birth size all have implications for a child's survivability (Maniruzzaman et al. 2018).

Patterns by background characteristics

- The 2018 ZDHS results show that mortality rates are lower among female children than among their male counterparts, with differences of at least 10 deaths per 1,000 live births for all three indicators (neonatal mortality: 22 versus 33; infant mortality: 36 versus 48; under-5 mortality: 53 versus 67) (**Table 8.2**).
- The infant mortality rate is higher (58 deaths per 1,000 live births) among infants born to women under age 20 than among infants born to women in other age groups (**Table 8.3**).
- Both infant and under-5 mortality rates are higher when the reported previous birth interval is less than 2 years (86 and 116 deaths per 1,000 live births, respectively).
- Under-5 mortality is highest among first-order births (73 deaths per 1,000 live births) and births of order 7 or higher (70 deaths per 1,000 live births) (**Table 8.3**).

8.3 PERINATAL MORTALITY

Perinatal mortality rate

Perinatal deaths comprise stillbirths (pregnancy loss that occurs after 7 months of gestation) and early neonatal deaths (deaths of live births within the first 7 days of life). The perinatal mortality rate is calculated as the number of perinatal deaths per 1,000 pregnancies of 7 or more months' duration.

Sample: Number of pregnancies of 7 or more months' duration to women age 15-49 in the 5 years before the survey.

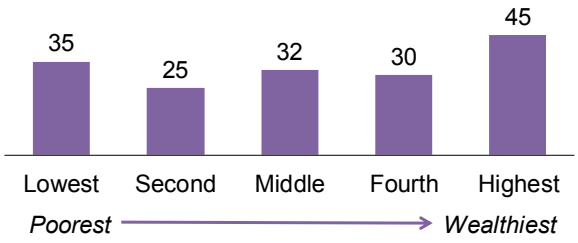
The causes of stillbirths and early neonatal deaths are closely linked, and it can be difficult to determine whether a death is attributable to one cause or the other. The perinatal mortality rate encompasses both stillbirths and early neonatal deaths and offers a better measure of the level of mortality and quality of service at delivery. During the 5-year period preceding the 2018 ZDHS, the perinatal mortality rate was 33 deaths per 1,000 pregnancies (**Table 8.4**).

Patterns by background characteristics

- Perinatal mortality is highest among children whose mothers were less than age 20 (47 deaths per 1,000 pregnancies) or age 40-49 (41 deaths per 1,000 pregnancies) at the time of the birth.
- The perinatal mortality rate is high for first pregnancies (44 deaths per 1,000 pregnancies) and among women with a pregnancy interval of less than 15 months (51 deaths per 1,000 pregnancies).
- Perinatal mortality is slightly higher in urban areas (37 deaths per 1,000 pregnancies) than in rural areas (31 deaths per 1,000 pregnancies).
- Perinatal mortality is highest among children born to women with a secondary education (42 deaths per 1,000 pregnancies) and lowest among children born to women with a primary education (27 deaths per 1,000 pregnancies) (**Table 8.4**).
- Perinatal mortality is higher among children from the highest wealth quintile (45 deaths per 1,000 pregnancies) than among children from the second quintile (25 deaths per 1,000 pregnancies) or the lowest quintile (35 deaths per 1,000 pregnancies) (**Figure 8.4**).

Figure 8.4 **Perinatal mortality by household wealth**

Deaths per 1,000 pregnancies of 7 or more months' duration in the 5-year period before the survey



8.4 HIGH-RISK FERTILITY BEHAVIOUR

Findings from scientific studies have confirmed a strong relationship between a child's chance of dying and specific fertility behaviours, meaning that the survival of infants and children depends in part on the demographic and biological characteristics of their mothers. The probability of dying in infancy is much greater among children born to mothers who are too young (under age 18) or too old (over age 34), children born after a short birth interval (less than 24 months after the preceding birth), and children born to mothers of high parity (more than three children). The risk is elevated when a child is born to a mother who has a combination of these risk characteristics.

The risk ratio (RR) shows the relationship between risk factors and actual child mortality. A risk ratio greater than one means that exposure to a certain factor increases risk, while a risk ratio less than one means that exposure decreases that risk.

- The 2018 ZDHS results show that 29% of births in the 5 years preceding the survey were not in any high-risk fertility behaviour category; however, over half (55%) of births were in an avoidable high-risk category (with an associated risk ratio of 1.12) (**Table 8.5**).
- Thirty-six percent of births were in a single high-risk category. However, the risk ratio of 0.95 suggests that births in this category were comparatively more protected.
- Eighteen percent of births occurred in a multiple high-risk category, with a corresponding elevated risk ratio of 1.45.
- In general, and based on the avoidable high-risk category, the 2018 ZDHS findings show that childhood mortality risk is elevated in the case of birth intervals below 24 months (RR: 2.17) and mother's age below 18 years (RR: 1.52) (**Table 8.5**).

List of Tables

For more information on infant and child mortality, see the following tables:

- **Table 8.1 Early childhood mortality rates**
- **Table 8.2 Five-year early childhood mortality rates according to background characteristics**
- **Table 8.3 Ten-year early childhood mortality rates according to additional characteristics**
- **Table 8.4 Perinatal mortality**
- **Table 8.5 High-risk fertility behaviour**

Table 8.1 Early childhood mortality rates

Neonatal, postneonatal, infant, child, and under-5 mortality rates for 5-year periods preceding the survey, Zambia DHS 2018

Years preceding the survey	Approximate time period of estimated rates	Neonatal mortality (NN)	Postneonatal mortality (PNN)[1]	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under-5 mortality ($_5q_0$)
0-4	2014-2018	27	14	42	19	61
5-9	2009-2013	22	20	43	27	68
10-14	2004-2008	21	27	48	42	88

[1] Computed as the difference between the infant and neonatal mortality rates

Table 8.2 Five-year early childhood mortality rates according to background characteristics

Neonatal, postneonatal, infant, child, and under-5 mortality rates for the 5-year period preceding the survey, according to background characteristics, Zambia DHS 2018

Background characteristic	Neonatal mortality (NN)	Postneonatal mortality (PNN)[1]	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under-5 mortality ($_5q_0$)
Child's sex					
Male	33	14	48	21	67
Female	22	14	36	18	53
Residence					
Urban	30	14	44	22	64
Rural	26	15	41	18	58
Total	27	14	42	19	61

[1] Computed as the difference between the infant and neonatal mortality rates

Table 8.3 Ten-year early childhood mortality rates according to additional characteristics

Neonatal, postneonatal, infant, child, and under-5 mortality rates for the 10-year period preceding the survey, according to additional characteristics, Zambia DHS 2018

Background characteristic	Neonatal mortality (NN)	Postneonatal mortality (PNN)[1]	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under-5 mortality ($_5q_0$)
Mother's age at birth					
<20	34	24	58	23	80
20-29	22	16	38	23	60
30-39	24	14	38	22	60
40-49	15	26	41	(28)	(68)
Birth order					
1	30	21	51	23	73
2-3	24	17	41	24	64
4-6	22	13	36	20	55
7+	25	19	45	26	70
Previous birth interval[2]					
<2 years	52	34	86	33	116
2 years	16	11	27	22	49
3 years	14	15	29	23	52
4+ years	22	12	34	15	49
Birth size[3]					
Small/very small	52	21	74	na	na
Average or larger	24	13	37	na	na
Don't know/missing	(52)	*	*	na	na
Province					
Central	16	14	30	18	47
Copperbelt	19	14	33	17	50
Eastern	25	15	40	25	64
Luapula	32	35	67	46	110
Lusaka	27	20	47	18	64
Muchinga	33	18	51	25	75
Northern	22	16	39	28	66
North Western	9	10	19	7	26
Southern	33	13	46	25	70
Western	25	17	42	16	57
Mother's education					
No education	21	21	42	29	69
Primary	24	18	42	25	66
Secondary	28	16	44	19	62
Higher	31	8	39	7	47
Wealth quintile					
Lowest	26	18	44	23	67
Second	20	19	39	29	67
Middle	22	14	35	18	53
Fourth	33	19	52	25	76
Highest	26	16	41	17	57

Note: Figures in parentheses are based on 250-499 unweighted person-years of exposure to the risk of death. An asterisk indicates that a rate is based fewer than 250 unweighted person-years of exposure to the risk of death and has been suppressed.
na = Not available
[1] Computed as the difference between the infant and neonatal mortality rates
[2] Excludes first-order births
[3] Rates for the 5-year period before the survey

Table 8.4 Perinatal mortality

Number of stillbirths and early neonatal deaths, and the perinatal mortality rate for the 5-year period preceding the survey, according to background characteristics, Zambia DHS 2018

Background characteristic	Number of stillbirths[1]	Number of early neonatal deaths[2]	Perinatal mortality rate[3]	Number of pregnancies of 7+ months' duration
Mother's age at birth				
<20	38	58	47	2,039
20-29	46	93	29	4,738
30-39	24	49	27	2,683
40-49	11	6	41	409
Previous pregnancy interval in months[4]				
First pregnancy	36	72	44	2,438
<15	16	31	51	922
15-26	15	34	27	1,831
27-38	12	25	22	1,658
39+	40	45	28	3,019
Residence				
Urban	42	88	37	3,495
Rural	76	119	31	6,373
Province				
Central	10	18	32	858
Copperbelt	12	19	26	1,203
Eastern	18	23	31	1,325
Luapula	18	19	38	959
Lusaka	18	52	45	1,536
Muchinga	5	19	40	606
Northern	11	21	36	895
North Western	7	3	18	530
Southern	11	21	24	1,312
Western	10	12	34	645
Mother's education				
No education	11	19	30	993
Primary	56	78	27	5,016
Secondary	48	97	42	3,471
Higher	4	11	40	389
Wealth quintile				
Lowest	36	51	35	2,476
Second	24	30	25	2,168
Middle	20	39	32	1,833
Fourth	15	40	30	1,838
Highest	24	46	45	1,553
Total	119	206	33	9,869

[1] Stillbirths are foetal deaths in pregnancies lasting 7 or more months.
[2] Early neonatal deaths are deaths at age 0-6 days among live-born children.
[3] The sum of the number of stillbirths and early neonatal deaths divided by the number of pregnancies of 7 or more months' duration, expressed per 1,000
[4] Category cutoffs correspond to birth intervals of <24 months, 24-35 months, 36-47 months, and 48+ months assuming a pregnancy duration of 9 months.

Table 8.5 High-risk fertility behaviour

Percent distribution of children born in the 5 years preceding the survey by category of elevated risk of mortality and the risk ratio, and percent distribution of currently married women by category of risk if they were to conceive a child at the time of the survey, Zambia DHS 2018

Risk category	Births in the 5 years preceding the survey		Percentage of currently married women[1]
	Percentage of births	Risk ratio	
Not in any high-risk category	**28.7**	**1.00**	**21.5[a]**
Unavoidable risk category			
First-order births between age 18 and age 34	16.8	1.14	3.0
In any avoidable high-risk category	**54.5**	**1.12**	**75.5**
Single high-risk category			
Mother's age <18 only	9.1	1.33	0.4
Mother's age >34 only	0.7	2.00	3.2
Birth interval <24 months only	4.1	1.38	8.9
Birth order >3 only	22.4	0.67	17.7
Subtotal	36.4	0.95	30.2
Multiple high-risk category			
Age <18 and birth interval <24 months[2]	0.4	(5.82)	0.3
Age >34 and birth interval <24 months	0.1	*	0.2
Age >34 and birth order >3	11.8	0.79	29.6
Age >34 and birth interval <24 months and birth order >3	1.5	2.02	5.1
Birth interval <24 months and birth order >3	4.3	2.65	10.0
Subtotal	18.1	1.45	45.3
Total	100.0	na	100.0
Subtotals by individual avoidable high-risk category			
Mother's age <18	9.5	1.52	0.6
Mother's age >34	14.1	1.00	38.2
Birth interval <24 months	10.4	2.17	24.5
Birth order >3	40.0	0.97	62.5
Number of births/women	9,841	na	7,648

Note: Risk ratio is the ratio of the proportion dead among births in a specific high-risk category to the proportion dead among births not in any high-risk category. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
na = Not applicable
[1] Women are assigned to risk categories according to the status they would have at the birth of a child if they were to conceive at the time of the survey: current age less than 17 years and 3 months or older than 34 years and 2 months, latest birth less than 15 months ago, or latest birth being of order 3 or higher.
[2] Includes the category age <18 and birth order >3
[a] Includes sterilised women

MATERNAL HEALTH CARE 9

Key Findings

- ***Antenatal care:*** The majority of women (97%) age 15-49 who had a live birth in the 5 years preceding the survey received antenatal care (ANC) from a skilled provider during their most recent birth. Sixty-four percent had at least four ANC visits.
- ***Components of antenatal care:*** Most women who received antenatal care for their most recent pregnancy had a blood sample taken (96%), had their blood pressure measured (95%), and had a urine sample taken (65%).
- ***Delivery services:*** More than 8 in 10 live births in the past 5 years were delivered in a health facility (84%).
- ***Postnatal care:*** Seventy percent of mothers and 72% of newborns had a postnatal check during the first 2 days after delivery.

Health care services during pregnancy and childbirth and after delivery are important for the survival and well-being of both the mother and the infant. Implementation of proven interventions along the continuum of care, inclusive of skilled care during pregnancy, childbirth, and the postpartum period, remains a priority with respect to reducing maternal and neonatal morbidity and mortality. To this end, the Government of the Republic of Zambia has developed the Seventh National Development Plan to increase access to quality health care and scale up provision of maternal and newborn services (MNDP 2017). Furthermore, maternal and newborn health is one of the public health priorities of the Ministry of Health (MOH 2017), which continues to implement programmes aimed at reducing maternal and neonatal morbidity and mortality.

This chapter presents information on providers of antenatal care (ANC), number and timing of ANC visits, and different components of maternal health care during and after ANC and birth, including places of delivery, assistance during delivery, types of delivery, postnatal care for mothers and newborns, and problems women report in accessing maternal health care.

9.1 ANTENATAL CARE COVERAGE AND CONTENT

9.1.1 Skilled Providers

Antenatal care (ANC) from a skilled provider

Pregnancy care received from skilled providers, such as doctors, nurses/midwives, and clinical officers.

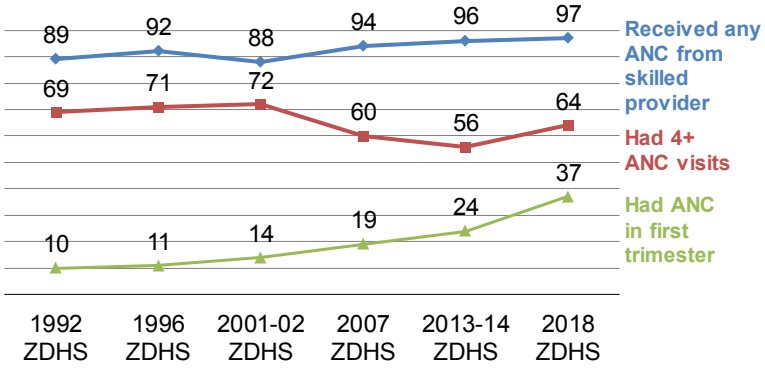
Sample: Women age 15-49 who had a live birth in the 5 years before the survey

The majority of women (97%) age 15-49 who had a live birth in the 5 years preceding the survey received ANC from a skilled provider at least once for their most recent birth (**Table 9.1**). Most women (93%) received ANC from a nurse/midwife, while 3% received care from a doctor.

Trends: The percentage of women in Zambia receiving ANC from a skilled provider at least once for the most recent birth in the 5 years preceding the survey has shown steady progress over the past 26 years, although there was a slight drop between 1996 and 2001-02 (from 92% to 88%). The percentage increased from 94% in 2007 to 97% in 2018 (**Figure 9.1**).

Figure 9.1 **Trends in antenatal care coverage**

Percentage of women age 15-49 who had a live birth in the 5 years before the survey (for the most recent birth)



Patterns by background characteristics

- Slightly more women in urban areas (99%) reported receiving antenatal care from a skilled provider than women in rural areas (96%) (**Table 9.1**).
- Women in urban areas are more likely than women in rural areas to receive ANC from a doctor (5% and 1%, respectively).
- Across the provinces, the percentage of women receiving ANC from a skilled provider ranges from 91% in Luapula to 99% in Copperbelt and Lusaka.
- The higher a woman's educational level, the more likely she is to receive ANC from a doctor. Seventeen percent of women with a higher education received ANC from a doctor, as compared with 1% of women with no education or a primary education.
- Women from households in the highest wealth quintile are more likely (9%) to receive ANC from a doctor than those in the lowest quintile (1%).

9.1.2 Timing and Number of ANC Visits

In the 5 years preceding the survey, 64% of women age 15-49 had at least four ANC visits during their last pregnancy resulting in a live birth, while 33% of women had two to three ANC visits and 1% had one visit (**Table 9.2**). Another 1% of women had no ANC visit during their last pregnancy. Rural women were more likely to have at least four antenatal care visits (65%) than urban women (61%). Over 3 in 10 women (37%) had their first ANC visit during the first trimester of their pregnancy; 48% had their first visit during the fourth or fifth month of their pregnancy, while 13% received ANC during their sixth and seventh month of pregnancy. Only 1% of women had their first ANC visit in the eighth month or later. The median gestational age at which women made their first ANC visit was 4.4 months.

Trends: The percentage of women who had at least four ANC visits has fluctuated over the years. The percentage increased from 69% in 1992 to 71% in 1996 and 72% in 2001-02 and then decreased markedly to 60% in 2007. The percentage decreased again to 56% in 2013-14 before increasing to 64% in 2018 (**Figure 9.1**). The percentage of women who had ANC in the first trimester increased from 10% in 1992 to 37% in 2018.

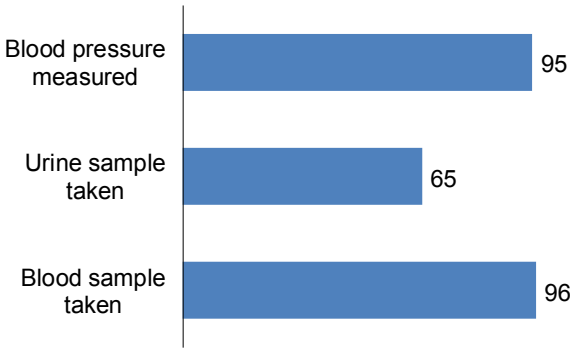
9.2 Components of ANC Visits

During ANC, women are more likely to have a blood sample taken (96%) and their blood pressure measured (95%) than to have a urine sample taken (65%) (**Figure 9.2**).

Trends: The percentage of pregnant women who had a blood sample taken has increased over time, from 44% in 2001-02 and 59% in 2007 to 94% in 2013-14 and 96% in 2018. The percentage of women whose blood pressure was measured declined from 87% in 2001-02 to 80% in 2007 before increasing to 89% in 2013-14 and 95% in 2018. The percentage of women who had a urine sample taken increased from 25% in 2001-02 to 65% in 2018.

***Figure 9.2* Components of antenatal care**

Among women who received ANC for their most recent birth, the percentage with selected services



Women with a live birth in the 5 years preceding the survey were asked if they took iron tablets or syrup and intestinal parasite drugs for their most recent live birth. Overall, 97% of women took iron tablets or syrup during the pregnancy of their most recent live birth, and nearly 8 in 10 (77%) took intestinal parasite medication at least once (**Table 9.3**).

9.3 Protection against Neonatal Tetanus

Protection against neonatal tetanus

The number of tetanus toxoid injections needed to protect a baby from neonatal tetanus depends on the mother's vaccinations. A birth is protected against neonatal tetanus if the mother has received any of the following:

- Two tetanus toxoid injections during the pregnancy
- Two or more injections, the last one within 3 years of the birth
- Three or more injections, the last one within 5 years of the birth
- Four or more injections, the last one within 10 years of the birth
- Five or more injections at any time prior to the birth

Sample: Last live births in the 5 years before the survey to women age 15-49

Neonatal tetanus is a serious problem in areas where home deliveries without sterile procedures are common. It can also be a serious problem in areas with poor immunisation coverage and unsafe childbirth and cord care practices. Tetanus injections are given to the mother to prevent neonatal tetanus. Overall, 79% of women received sufficient doses of tetanus toxoid to protect their most recent live birth against neonatal tetanus; however, only 28% of mothers received two or more injections during the pregnancy for their last live birth (**Table 9.4**).

Trends: The percentage of births protected against neonatal tetanus increased from 79% in 2007 to 82% in 2013-14 before declining again to 79% in 2018.

Patterns by background characteristics

- The percentage of women whose last birth was protected from tetanus increases with mother's age at birth, from 65% among women less than age 20, to 82% among those age 20-34, to 83% among those age 35-39 (**Table 9.4**).
- First-order births (67%) are less likely to be protected against neonatal tetanus than second- and higher-order births (82% to 83%).

- By province, the percentage of women whose last birth was protected from tetanus ranges from 66% in Western to 88% in Copperbelt.
- The percentage of women whose last birth was protected from tetanus increases with increasing mother's education, from 68% among with no education to 89% among those with a higher education. A similar pattern is observed with increasing wealth.

9.4 DELIVERY SERVICES

9.4.1 Institutional Deliveries

Institutional deliveries
Deliveries that occur in a health facility.
Sample: All live births in the 5 years before the survey

Institutional deliveries increase the chances of skilled birth attendance as well as increasing mothers' access to essential equipment and supplies. Overall, 84% of live births in the 5 years preceding the survey were delivered in a health facility (**Table 9.5**).

Trends: Health facility deliveries declined from 51% in 1992 to 44% in 2001-02 before increasing to 48% in 2007 and 84% in 2018 (**Figure 9.3**).

Patterns by background characteristics

- The percentage of births delivered in a health facility decreases with increasing mother's age at birth (**Table 9.5**).
- The higher the birth order, the less likely a woman will deliver at a health facility: 92% of first-order births are delivered in a health facility, as compared with 75% of sixth- or higher-order births.
- Women in urban areas are more likely to deliver in a health facility (93%) than women in rural areas (79%).
- The percentage of health facility deliveries by province ranges from 72% in Central and Northern to 91% in Lusaka and Copperbelt (**Figure 9.4**).

Figure 9.3 **Trends in place of birth**

Percentage of live births in the 5 years before the survey

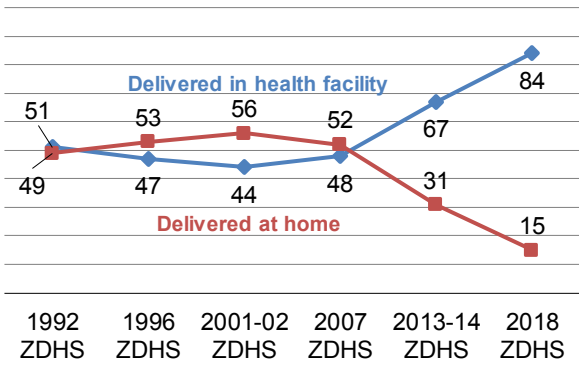
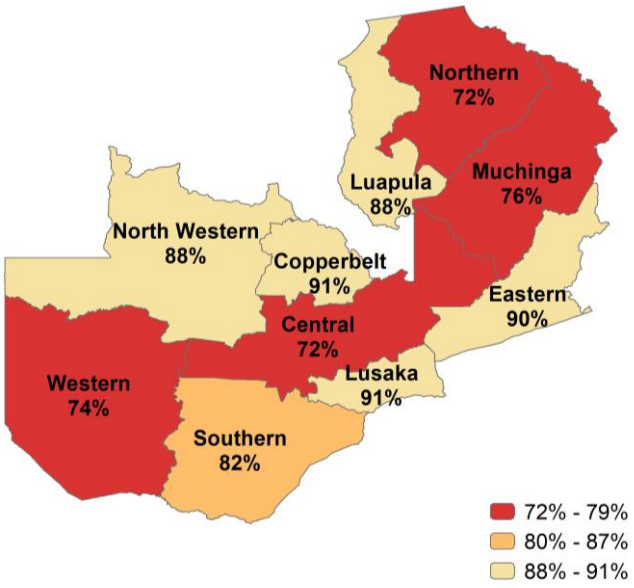


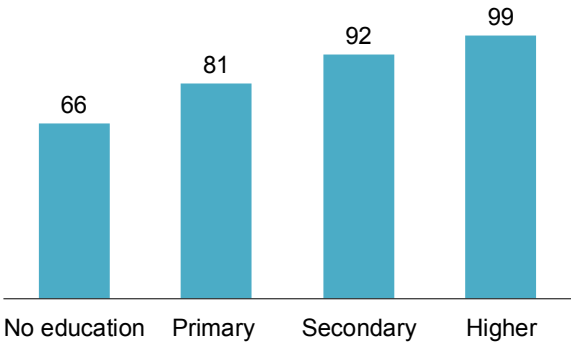
Figure 9.4 **Health facility births by province**



- The percentage of births that take place in a health facility increases with increasing mother's education, from 66% among births to mothers with no education to 99% among births to mothers with a higher education (**Figure 9.5**).
- Similarly, the percentage of health facility deliveries increases with increasing household wealth, from 73% in the lowest wealth quintile to 96% in the highest quintile (**Table 9.5**).

***Figure 9.5* Health facility births by education**

Percentage of live births in the 5 years before the survey that were delivered in a health facility



9.4.2 Skilled Assistance during Delivery

Skilled assistance during delivery

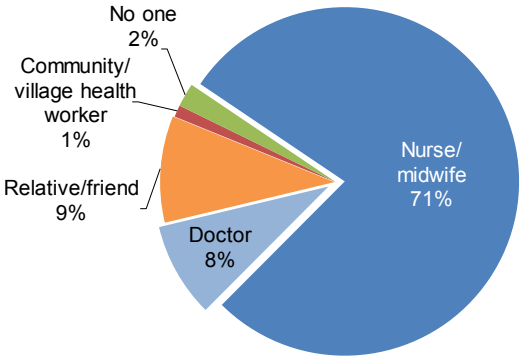
Births delivered with the assistance of doctors, nurses/midwives, and clinical officers.

Sample: All live births in the 5 years before the survey

Obstetric care from a health professional during delivery is recognised as a critical element in managing complications that may arise during childbirth and reducing maternal and neonatal mortality. Women who deliver at home are usually more likely to do so without assistance from a trained provider, whereas women who deliver at a health facility are more likely to be assisted by a trained health professional. In the 5 years preceding the survey, 80% of births were delivered by a skilled provider. Among the births assisted at delivery, 71% were delivered by a nurse/midwife, whereas 9% were delivered by a relative/friend and 8% by a doctor (**Table 9.6** and **Figure 9.6**).

***Figure 9.6* Assistance during delivery**

Percent distribution of births in the 5 years before the survey



Trends: The percentage of births with skilled assistance during delivery declined from 50% in 1992 to 42% in 2001-02. Thereafter, the percentage has increased steadily, from 47% in 2007 to 80% in 2018.

Patterns by background characteristics

- The percentage of births attended by a skilled provider decreases with increasing mother's age at birth, from 84% among births to women less than age 20 to 76% among births to women age 35-49.
- The percentage of deliveries attended by a skilled provider decreases with increasing birth order; 89% of first-order births are delivered by a skilled provider, as compared with 71% of sixth- or higher-order births (**Table 9.6**).
- Women with no ANC visits are less likely to be assisted by a skilled provider than women with one or more visits.

- Births delivered somewhere other than a health facility are less likely (4%) to be attended by a skilled provider than births delivered in a health facility (95%).
- Women in urban areas are more likely to be assisted by a skilled provider (93%) than women in rural areas (73%).
- By province, the percentage of births delivered by a skilled provider ranges from 70% in Northern to 91% in Copperbelt and Lusaka. Women in Luapula and North Western are more likely to be assisted by a traditional birth attendant (18% and 17%, respectively) than women in other provinces.
- The more highly educated a woman is, the more likely she will be assisted by a skilled provider during delivery.
- Women in the highest wealth quintile are more likely (96%) to be assisted by a skilled provider during delivery than those in the lowest quintile (67%).

9.4.3 Delivery by Caesarean

Caesarean section (C-section) deliveries can reduce maternal and neonatal mortality. Caesarean section is a surgical intervention to prevent or treat life-threatening maternal or perinatal complications. While most C-sections are performed inlight of medical or obstetrical indications, some women may request them in the absence of such signs. Five percent of the live births in the 5 years preceding the survey were delivered by C-section (**Table 9.7**). Of these births, 1% were planned before the onset of labour, while 4% were decided on after the onset of labour.

Trends: The C-section rate declined from 3% in 1992 to 2% in 1996, where it remained stagnant through 2001-02. Thereafter, the rate increased to 3% in 2007, 4% in 2013-14, and 5% in 2018.

Patterns by background characteristics

- C-section deliveries are more common among first-order births (7%) than among fourth- or higher-order births (3%).
- C-sections are more common in private facilities (14%) than public facilities (5%).
- Among the provinces, caesarean rates range from a low of 2% in Western to a high of 8% in Lusaka.
- The probability of undergoing a caesarean section increases with increasing education. The caesarean rate for births to women with a higher education is 22%, as compared with 4% for births to women with no education.
- The caesarean rate in the highest wealth quintile is seven times higher (14%) than the rate in the lowest quintile (2%).

9.5 Postnatal Care

9.5.1 Postnatal Health Check for Mothers

The postpartum period is particularly important for women, as during this period they may develop serious, life-threatening complications such as postpartum haemorrhage. A postnatal care visit is an ideal time to educate a new mother on how to care for herself and her newborn and can help reduce mortality and morbidity among mothers and their babies.

In Zambia, 70% of mothers received a postnatal check within the first 2 days after birth (**Table 9.9**). A majority of mothers had their first postnatal check within 4 hours (55%), and a further 13% had a check between 4 and 23 hours. Twenty-two percent of mothers did not have any postnatal health check.

Trends: The percentage of mothers who received a postnatal check during the first 2 days after their most recent birth has increased markedly over time, from 32% in 2007 to 63% in 2013-14 and 70% in 2018.

Patterns by background characteristics

- Women who deliver in a health facility have a higher likelihood of receiving their first postnatal check within 2 days of delivery (77%) than those who deliver elsewhere (21%).
- Urban women are more likely to receive a postnatal check within 2 days of delivery (82%) than rural women (64%).
- By province, the percentage of women receiving a postnatal check within 2 days of delivery is highest in Lusaka (84%) and lowest in Northern (54%).
- The percentage of women receiving a postnatal check within 2 days increases with increasing education, from 50% among those with no education to 84% among those with a higher education.
- Similarly, the percentage of women who receive a postnatal check within 2 days after birth increases with increasing wealth, from 57% among those in the lowest quintile to 84% among those in the highest quintile.

Type of Provider

The skill level of the provider who performs the first postnatal checkup also has important implications for maternal and neonatal health. Sixty-eight percent of women received their first postnatal health check during the first 2 days after delivery from a doctor, nurse/midwife, or clinical officer. One percent received their first postnatal check from a traditional birth attendant, and less than 1% received a postnatal checkup from a community/village health assistant (**Table 9.10**).

9.5.2 Postnatal Health Check for Newborns

The probability of neonatal death is particularly high during the first 48 hours from birth, making postnatal checks in this period particularly important. A majority of newborns in Zambia (72%) received a postnatal check within 2 days after birth. Twenty-one percent received a postnatal check less than 1 hour after delivery, and 38% received a check within 1-3 hours after delivery. Twenty-one percent of newborns did not receive a postnatal health check (**Table 9.11**).

Patterns by background characteristics

- Newborns delivered in a health facility were much more likely to receive a postnatal health check during the first 2 days after birth than those delivered elsewhere (80% versus 20%).
- Newborns delivered in urban areas were more likely to receive postnatal checks within 2 days of delivery (82%) than those delivered in rural areas (67%).
- The percentage of newborns who received a postnatal check within 2 days increases with increasing mother's education, from 55% among those born to women with no education to 81% among those born to women with a secondary or higher education.
- The percentage of newborns who received a postnatal check within 2 days also increases with increasing household wealth, from 61% in the lowest wealth quintile to 84% in the highest wealth quintile.

Type of Provider and Care

Seven in 10 newborns (71%) received a postnatal check from a doctor, nurse/midwife, or clinical officer. One percent received a postnatal check from a traditional birth attendant, and less than 1% received postnatal care from a community/village health assistant. Twenty-eight percent of newborns did not receive any postnatal check during the 2 days after birth (**Table 9.12**).

Components of Newborn Postnatal Care

Table 9.13 presents information on components of postnatal care such as signal functions performed within 2 days after birth and whether the mother was informed of danger signs in newborns. Two-thirds (66%) of newborns had at least two signal functions performed within 2 days after birth. Eighty-three percent of newborns were weighed at birth, 60% had their cord examined, and 59% of mothers received counselling on breastfeeding. The signal function least often performed was that of mothers receiving counselling on danger signs (54%).

Patterns by background characteristics

- The percentage of newborns with at least two signal functions performed within 2 days of birth increases with increasing mother's education, from 50% among those born to women with no education to 83% among those born to women with a higher education. The same pattern exists for wealth.

9.6 Problems in Accessing Health Care

Problems in accessing health care

Women were asked whether each of the following factors is a big problem in seeking medical advice or treatment for themselves when they are sick:

- Getting permission to go to the doctor
- Getting money for advice or treatment
- Distance to a health facility
- Not wanting to go alone
- Having to take transport
- Concern that there may not be any health provider
- Concern that there may not be a female health provider
- Rude attitude of health provider

Sample: Women age 15-49

Five in 10 (51%) women age 15-49 reported at least one problem in accessing health care for themselves (**Table 9.14**). Women in rural areas had a higher likelihood of reporting at least one problem in accessing health care for themselves (62%) than women in urban areas (39%). The most mentioned problem in accessing health care was distance to a health facility (29%), and the least mentioned problem was getting permission to go for treatment (4%).

Patterns by background characteristics

- By province, the percentage of women who mentioned at least one problem is highest in Northern (72%) and lowest in Copperbelt (34%).
- The percentage of women who mentioned at least one problem decreases with increasing household wealth, from 68% among those in the lowest wealth quintile to 38% among those in the highest quintile.

9.7 OBSTETRIC FISTULA

Obstetric fistula is a hole between the vagina and rectum or bladder that causes urinary or faecal incontinence. Fistula typically results from problems during labour, surgical error, or trauma. In Zambia, only 3 in 10 women age 15-49 (31%) have heard of the symptoms of obstetric fistula. Less than 1% of women reported that they have ever experienced symptoms of fistula (**Table 9.15**).

LIST OF TABLES

For more information on maternal health care, see the following tables:

- **Table 9.1 Antenatal care**
- **Table 9.2 Number of antenatal care visits and timing of first visit**
- **Table 9.3 Components of antenatal care**
- **Table 9.4 Tetanus toxoid injections**
- **Table 9.5 Place of delivery**
- **Table 9.6 Assistance during delivery**
- **Table 9.7 Caesarean section**
- **Table 9.8 Duration of stay in health facility after birth**
- **Table 9.9 Timing of first postnatal check for the mother**
- **Table 9.10 Type of provider of first postnatal check for the mother**
- **Table 9.11 Timing of first postnatal check for the newborn**
- **Table 9.12 Type of provider of first postnatal check for the newborn**
- **Table 9.13 Content of postnatal care for newborns**
- **Table 9.14 Problems in accessing health care**
- **Table 9.15 Knowledge of fistula and experience of fistula-like symptoms**

Table 9.1 Antenatal care

Percent distribution of women age 15-49 who had a live birth in the 5 years preceding the survey by antenatal care (ANC) provider during the pregnancy for the most recent birth and percentage receiving antenatal care from a skilled provider for the most recent birth, according to background characteristics, Zambia DHS 2018

Background characteristic	Antenatal care provider							No ANC	Total	Percentage receiving antenatal care from a skilled provider[1]	Number of women
	Doctor	Nurse/ midwife	Clinical officer	Village health assistant	Traditional birth attendant	Community/ village health worker	Other				
Mother's age at birth											
<20	1.9	94.0	1.7	0.6	0.5	0.2	0.3	0.8	100.0	97.6	1,417
20-34	3.0	93.2	0.7	0.9	1.0	0.1	0.1	1.0	100.0	96.9	4,747
35-49	2.5	92.2	1.3	1.0	0.8	0.2	0.1	1.9	100.0	96.0	1,160
Birth order											
1	3.2	93.0	1.3	0.5	0.6	0.1	0.2	1.0	100.0	97.6	1,836
2-3	3.3	93.2	0.7	0.9	0.8	0.1	0.2	0.8	100.0	97.2	2,499
4-5	2.5	93.5	0.9	0.9	1.0	0.0	0.2	1.1	100.0	96.9	1,577
6+	1.4	93.0	1.1	1.1	1.1	0.5	0.1	1.7	100.0	95.5	1,412
Residence											
Urban	5.2	93.9	0.1	0.1	0.0	0.0	0.0	0.7	100.0	99.2	2,811
Rural	1.2	92.8	1.5	1.3	1.4	0.3	0.3	1.3	100.0	95.5	4,513
Province											
Central	3.6	92.0	1.6	0.5	0.3	0.1	0.0	2.0	100.0	97.2	640
Copperbelt	4.4	94.9	0.1	0.1	0.2	0.0	0.0	0.3	100.0	99.4	969
Eastern	1.9	94.3	0.2	1.5	1.3	0.4	0.2	0.2	100.0	96.4	983
Luapula	1.0	88.8	1.7	3.5	4.1	0.0	0.4	0.7	100.0	91.4	640
Lusaka	5.5	92.9	0.2	0.0	0.0	0.0	0.0	1.3	100.0	98.6	1,219
Muchinga	0.2	92.0	0.9	0.1	3.6	0.8	0.6	2.0	100.0	93.0	433
Northern	0.6	96.3	1.4	0.2	0.0	0.0	0.2	1.2	100.0	98.4	615
North Western	1.6	95.7	0.0	0.5	0.5	0.0	0.0	1.7	100.0	97.2	404
Southern	2.7	93.5	1.9	0.7	0.2	0.1	0.1	0.8	100.0	98.1	946
Western	1.0	90.2	3.2	2.3	0.0	0.6	0.6	2.2	100.0	94.4	477
Education											
No education	1.1	88.7	1.3	1.8	2.6	0.7	0.0	3.8	100.0	91.1	689
Primary	1.4	94.1	1.1	1.0	0.9	0.2	0.3	1.1	100.0	96.6	3,595
Secondary	3.3	94.4	0.8	0.5	0.5	0.0	0.1	0.5	100.0	98.4	2,726
Higher	16.6	82.7	0.5	0.0	0.0	0.0	0.0	0.2	100.0	99.8	316
Wealth quintile											
Lowest	1.0	90.9	1.8	1.9	1.7	0.3	0.3	2.1	100.0	93.7	1,676
Second	1.3	93.3	1.4	1.2	1.1	0.2	0.3	1.2	100.0	96.1	1,527
Middle	2.0	94.4	0.8	0.7	1.2	0.2	0.1	0.7	100.0	97.2	1,390
Fourth	2.1	96.3	0.5	0.1	0.2	0.0	0.0	0.8	100.0	98.9	1,471
Highest	8.5	91.1	0.1	0.0	0.0	0.0	0.0	0.3	100.0	99.6	1,262
Total	2.7	93.2	1.0	0.8	0.9	0.2	0.2	1.1	100.0	96.9	7,325

Note: If more than one source of ANC was mentioned, only the provider with the highest qualifications is considered in this tabulation.
[1] Skilled provider includes doctor, nurse, midwife, and clinical officer.

Table 9.2 Number of antenatal care visits and timing of first visit

Percent distribution of women age 15-49 who had a live birth in the 5 years preceding the survey by number of antenatal care (ANC) visits for the most recent live birth and by the timing of the first visit, and among women with ANC, median months pregnant at first visit, according to residence, Zambia DHS 2018

Number of ANC visits and timing of first visit	Residence		Total
	Urban	Rural	
Number of ANC visits			
None	0.7	1.3	1.1
1	1.2	1.5	1.4
2-3	37.0	30.8	33.2
4+	60.7	65.3	63.5
Don't know/missing	0.4	1.1	0.9
Total	100.0	100.0	100.0
Number of months pregnant at time of first ANC visit			
No antenatal care	0.7	1.3	1.1
<4	30.3	40.8	36.7
4-5	51.2	45.7	47.8
6-7	16.3	11.3	13.2
8+	1.4	0.7	1.0
Don't know/missing	0.2	0.2	0.2
Total	100.0	100.0	100.0
Number of women	2,811	4,513	7,325
Median months pregnant at first visit (for those with ANC)	4.7	4.3	4.4
Number of women with ANC	2,792	4,453	7,245

Table 9.3 Components of antenatal care

Among women age 15-49 with a live birth in the 5 years preceding the survey, percentage who took iron tablets or syrup and drugs for intestinal parasites during the pregnancy of the most recent live birth, and among women receiving antenatal care (ANC) for the most recent live birth in the 5 years preceding the survey, percentage receiving specific antenatal services, according to background characteristics, Zambia DHS 2018

	Among women with a live birth in the past 5 years, percentage who during the pregnancy of their most recent live birth:			Among women who received antenatal care for their most recent birth in the past 5 years, percentage with selected services:			
Background characteristic	Took iron tablets or syrup	Took intestinal parasite drugs	Number of women with a live birth in the past 5 years	Blood pressure measured	Urine sample taken	Blood sample taken	Number of women with ANC for their most recent birth
Mother's age at birth							
<20	97.4	74.7	1,417	94.2	62.8	95.1	1,406
20-34	97.5	78.8	4,747	95.3	65.6	96.2	4,701
35-49	96.3	74.7	1,160	95.8	65.6	96.4	1,138
Birth order							
1	97.2	77.5	1,836	95.7	66.3	95.9	1,818
2-3	97.6	78.7	2,499	95.5	68.3	96.9	2,479
4-5	97.6	78.4	1,577	94.3	62.9	95.9	1,560
6+	96.7	73.7	1,412	95.1	60.1	94.6	1,388
Residence							
Urban	98.3	81.7	2,811	99.1	76.2	98.3	2,792
Rural	96.7	74.6	4,513	92.7	58.1	94.5	4,453
Province							
Central	96.6	80.2	640	96.9	71.7	98.3	627
Copperbelt	99.1	82.6	969	99.6	73.9	98.8	965
Eastern	98.5	82.6	983	95.5	72.2	97.1	981
Luapula	94.9	73.7	640	93.8	41.6	96.0	635
Lusaka	97.9	85.0	1,219	99.1	78.1	97.7	1,203
Muchinga	93.5	64.0	433	85.6	49.3	90.0	425
Northern	97.2	74.6	615	90.6	46.9	85.0	607
North Western	96.6	78.8	404	96.8	50.3	97.4	397
Southern	98.4	72.6	946	97.3	75.6	98.5	938
Western	96.2	61.3	477	84.2	51.0	93.8	466
Education							
No education	91.8	70.9	689	88.5	54.7	89.0	662
Primary	97.5	75.7	3,595	94.3	60.9	95.6	3,556
Secondary	98.4	80.4	2,726	97.5	71.1	98.1	2,711
Higher	98.7	83.3	316	99.7	81.7	97.3	315
Wealth quintile							
Lowest	95.3	71.9	1,676	89.0	50.6	92.3	1,640
Second	96.8	73.8	1,527	93.2	56.9	94.8	1,509
Middle	97.8	78.4	1,390	97.3	69.1	97.0	1,379
Fourth	98.3	80.7	1,471	99.0	73.0	98.6	1,459
Highest	98.8	83.8	1,262	98.9	80.3	98.2	1,258
Total	97.3	77.4	7,325	95.2	65.1	96.0	7,245

Table 9.4 Tetanus toxoid injections

Among mothers age 15-49 with a live birth in the 5 years preceding the survey, percentage receiving two or more tetanus toxoid injections during the pregnancy for the most recent live birth and percentage whose most recent live birth was protected against neonatal tetanus, according to background characteristics, Zambia DHS 2018

Background characteristic	Percentage receiving two or more injections during the pregnancy for the last live birth	Percentage whose most recent live birth was protected against neonatal tetanus[1]	Number of mothers
Mother's age at birth			
<20	33.2	65.3	1,417
20-34	27.8	81.5	4,747
35-49	19.0	82.6	1,160
Birth order			
1	33.8	67.2	1,836
2-3	29.2	82.2	2,499
4-5	24.0	82.3	1,577
6+	19.9	82.8	1,412
Residence			
Urban	25.4	84.4	2,811
Rural	28.7	75.0	4,513
Province			
Central	18.5	73.0	640
Copperbelt	21.0	88.2	969
Eastern	35.4	69.8	983
Luapula	41.9	73.3	640
Lusaka	25.8	86.1	1,219
Muchinga	31.1	78.2	433
Northern	34.1	77.4	615
North Western	34.4	85.2	404
Southern	17.2	79.9	946
Western	23.4	66.2	477
Education			
No education	25.6	67.8	689
Primary	27.8	76.7	3,595
Secondary	27.3	82.5	2,726
Higher	28.9	88.9	316
Wealth quintile			
Lowest	32.2	72.0	1,676
Second	28.9	75.0	1,527
Middle	29.1	78.1	1,390
Fourth	21.7	81.8	1,471
Highest	24.3	88.4	1,262
Total	27.5	78.6	7,325

[1] Includes mothers with two injections during the pregnancy of her most recent live birth, or two or more injections (the last within 3 years of the most recent live birth), or three or more injections (the last within 5 years of the most recent live birth), or four or more injections (the last within 10 years of the most recent live birth), or five or more injections at any time prior to the most recent birth

Table 9.5 Place of delivery

Percent distribution of live births in the 5 years preceding the survey by place of delivery and percentage delivered in a health facility, according to background characteristics, Zambia DHS 2018

Background characteristic	Health facility		Home	Other	Total	Percentage delivered in a health facility	Number of births
	Public sector	Private sector					
Mother's age at birth							
<20	81.6	5.7	11.4	1.2	100.0	87.4	2,022
20-34	78.2	5.5	15.3	1.0	100.0	83.7	6,430
35-49	73.1	6.2	19.4	1.4	100.0	79.3	1,389
Birth order							
1	85.3	6.5	7.4	0.9	100.0	91.8	2,520
2-3	79.1	5.9	14.1	0.9	100.0	85.0	3,382
4-5	76.2	4.0	18.7	1.2	100.0	80.2	2,112
6+	69.2	5.8	23.3	1.7	100.0	75.0	1,827
Antenatal care visits[1]							
None	21.1	0.0	75.9	3.1	100.0	21.1	80
1-3	77.6	4.3	17.0	1.1	100.0	81.9	2,531
4+	82.4	6.6	9.7	1.2	100.0	89.1	4,651
Don't know/missing	77.9	11.1	11.0	0.0	100.0	89.0	63
Residence							
Urban	88.6	4.6	6.4	0.4	100.0	93.2	3,489
Rural	72.5	6.2	19.8	1.5	100.0	78.7	6,352
Province							
Central	70.5	1.5	26.7	1.3	100.0	72.0	855
Copperbelt	88.0	2.5	8.6	0.9	100.0	90.5	1,209
Eastern	77.7	12.6	7.4	2.4	100.0	90.3	1,321
Luapula	82.6	5.4	11.4	0.5	100.0	88.1	950
Lusaka	87.3	3.9	8.6	0.2	100.0	91.2	1,532
Muchinga	70.8	5.3	22.1	1.9	100.0	76.0	605
Northern	71.2	1.0	27.2	0.6	100.0	72.2	890
North Western	74.0	13.8	11.7	0.5	100.0	87.8	531
Southern	75.2	6.9	16.8	1.2	100.0	82.1	1,308
Western	69.2	4.5	24.2	2.1	100.0	73.7	641
Mother's education							
No education	61.7	4.7	31.6	2.0	100.0	66.4	996
Primary	75.2	5.4	18.1	1.4	100.0	80.5	5,008
Secondary	87.0	5.0	7.5	0.5	100.0	92.0	3,448
Higher	82.0	17.0	0.9	0.2	100.0	98.9	389
Wealth quintile							
Lowest	66.2	6.3	25.7	1.8	100.0	72.5	2,466
Second	73.7	6.5	18.4	1.4	100.0	80.2	2,168
Middle	79.6	5.4	13.8	1.2	100.0	85.0	1,823
Fourth	88.8	3.2	7.7	0.3	100.0	92.0	1,840
Highest	89.4	6.5	3.7	0.4	100.0	95.9	1,545
Total	78.2	5.6	15.1	1.1	100.0	83.8	9,841

[1] Includes only the most recent birth in the 5 years preceding the survey

Table 9.6 Assistance during delivery

Percent distribution of live births in the 5 years preceding the survey by person providing assistance during delivery, percentage of births assisted by a skilled provider, and percentage with skin-to-skin contact immediately after birth, according to background characteristics, Zambia DHS 2018

Background characteristic	Person providing assistance during delivery										Percentage delivered by a skilled provider[1]	Percentage with skin-to-skin contact immediately after birth	Number of births
	Doctor	Nurse/ midwife	Clinical officer	Community/ village health assistant	Traditional birth attendant	Community/ village health worker	Relative/ friend	Other	No one	Total			
Mother's age at birth													
<20	7.7	74.6	1.7	1.1	4.8	1.1	8.3	0.4	0.4	100.0	84.0	55.8	2,022
20-34	7.8	71.1	1.3	1.0	6.5	0.8	9.0	0.3	2.1	100.0	80.3	56.1	6,430
35-49	7.4	67.6	0.7	0.6	7.8	0.7	9.5	0.1	5.7	100.0	75.7	50.7	1,389
Birth order													
1	10.3	77.0	1.5	0.8	4.0	0.6	5.3	0.3	0.2	100.0	88.8	59.0	2,520
2-3	8.4	71.3	1.5	0.9	6.1	1.1	8.5	0.4	1.8	100.0	81.2	56.4	3,382
4-5	5.9	69.8	1.3	1.4	7.4	1.1	11.4	0.1	1.7	100.0	77.0	55.3	2,112
6+	5.2	65.3	0.7	0.9	8.7	0.7	11.9	0.2	6.4	100.0	71.3	47.9	1,827
Antenatal care visits[1]													
None	1.8	18.3	0.0	0.0	16.9	0.0	47.4	0.9	14.7	100.0	20.1	19.9	80
1-3	7.6	70.9	1.2	0.7	5.6	0.6	10.4	0.3	2.7	100.0	79.8	55.9	2,531
4+	9.1	74.7	1.4	1.1	5.1	0.9	5.8	0.2	1.6	100.0	85.2	58.5	4,651
Don't know/ missing	9.1	70.2	1.6	0.0	12.2	0.0	6.9	0.0	0.0	100.0	80.9	37.9	63
Place of delivery													
Health facility	9.2	84.4	1.6	0.8	3.0	0.3	0.1	0.3	0.2	100.0	95.2	63.5	8,250
Public facility	8.3	85.1	1.7	0.8	3.2	0.3	0.1	0.3	0.2	100.0	95.0	63.6	7,696
Private facility	22.6	75.5	0.0	0.9	0.8	0.2	0.0	0.0	0.0	100.0	98.1	61.8	554
Elsewhere	0.1	3.5	0.1	1.9	23.2	3.7	54.6	0.1	12.9	100.0	3.7	12.5	1,591
Residence													
Urban	13.3	79.6	0.3	0.2	1.4	0.3	3.5	0.3	1.2	100.0	93.1	68.5	3,489
Rural	4.7	66.8	1.9	1.4	9.0	1.2	11.9	0.3	2.8	100.0	73.4	48.0	6,352
Province													
Central	5.9	64.5	0.9	0.8	5.7	1.1	17.1	0.2	3.8	100.0	71.3	51.5	855
Copperbelt	11.6	79.0	0.0	0.2	2.1	0.8	4.1	0.4	1.8	100.0	90.7	63.8	1,209
Eastern	7.8	76.3	0.1	2.5	7.1	1.5	3.4	0.1	1.1	100.0	84.2	46.0	1,321
Luapula	5.0	64.9	2.5	1.7	17.9	0.6	5.1	0.1	2.1	100.0	72.4	49.0	950
Lusaka	12.5	77.9	0.5	0.5	2.1	0.3	4.4	0.3	1.7	100.0	90.8	72.2	1,532
Muchinga	5.0	69.8	0.1	0.2	5.7	0.4	12.8	0.6	5.4	100.0	74.9	46.0	605
Northern	3.5	65.4	1.1	0.4	10.5	0.8	15.9	0.6	1.8	100.0	70.0	47.8	890
North Western	5.1	73.9	0.0	0.6	16.5	0.9	2.3	0.0	0.7	100.0	79.0	55.7	531
Southern	9.3	67.6	4.3	1.0	1.6	0.6	12.2	0.0	3.2	100.0	81.3	60.1	1,308
Western	2.9	64.9	3.4	1.4	2.0	2.2	20.7	1.0	1.6	100.0	71.1	41.0	641
Mother's education													
No education	6.1	54.2	1.9	1.0	11.7	1.4	17.1	0.2	6.4	100.0	62.2	41.1	996
Primary	4.9	70.0	1.3	1.3	7.8	1.1	10.8	0.3	2.4	100.0	76.2	51.5	5,008
Secondary	10.5	77.9	1.3	0.6	3.2	0.4	4.8	0.3	1.0	100.0	89.8	64.0	3,448
Higher	24.7	73.2	0.6	0.0	0.3	0.1	0.3	0.1	0.6	100.0	98.6	62.8	389
Wealth quintile													
Lowest	3.2	62.9	1.3	1.5	10.5	1.6	15.3	0.3	3.5	100.0	67.4	42.6	2,466
Second	5.3	65.6	2.8	1.5	9.5	0.6	11.5	0.4	2.9	100.0	73.7	48.2	2,168
Middle	6.2	74.8	1.0	0.9	6.0	1.3	8.0	0.2	1.6	100.0	82.0	57.4	1,823
Fourth	9.3	81.2	0.7	0.4	2.1	0.3	4.5	0.3	1.1	100.0	91.2	68.4	1,840
Highest	18.5	77.0	0.4	0.1	0.7	0.2	1.6	0.2	1.3	100.0	95.9	67.2	1,545
Total	7.8	71.3	1.3	1.0	6.3	0.9	8.9	0.3	2.2	100.0	80.4	55.3	9,841

Note: If the respondent mentioned more than one person attending during delivery, only the most qualified person is considered in this tabulation.
[1] Skilled provider includes doctor, nurse/midwife, and clinical officer.
[2] Includes only the most recent birth in the 5 years preceding the survey

Table 9.7 Caesarean section

Percentage of live births in the 5 years preceding the survey delivered by caesarean section (C-section), percentage delivered by C-section planned before the onset of labour pains, and percentage delivered by C-section decided on after the onset of labour pains, according to background characteristics, Zambia DHS 2018

Background characteristic	Percentage delivered by C-section	Timing of decision to conduct C-section		Number of births
		Planned before onset of labour pains	Decided after onset of labour pains	
Mother's age at birth				
<20	4.9	1.3	3.6	2,022
20-34	4.9	1.4	3.5	6,430
35-49	5.4	1.7	3.7	1,389
Birth order				
1	7.2	1.9	5.3	2,520
2-3	5.3	1.7	3.6	3,382
4-5	3.3	0.8	2.5	2,112
6+	3.4	1.1	2.4	1,827
Antenatal care visits[1]				
None	0.0	0.0	0.0	80
1-3	4.7	1.7	3.0	2,531
4+	6.0	1.6	4.4	4,651
Don't know/missing	6.1	6.1	0.0	63
Place of delivery				
Health facility	5.9	1.7	4.2	8,250
Public facility	5.3	1.4	3.9	7,696
Private facility	14.4	5.6	8.7	554
Elsewhere	0.0	0.0	0.0	1,591
Residence				
Urban	8.8	2.9	5.9	3,489
Rural	2.9	0.6	2.3	6,352
Province				
Central	4.0	2.3	1.7	855
Copperbelt	6.9	1.9	5.1	1,209
Eastern	5.1	1.1	4.0	1,321
Luapula	3.8	0.5	3.3	950
Lusaka	7.6	3.0	4.6	1,532
Muchinga	3.6	0.5	3.2	605
Northern	2.6	0.3	2.4	890
North Western	4.5	1.0	3.5	531
Southern	5.6	1.6	4.0	1,308
Western	1.8	0.2	1.5	641
Mother's education				
No education	3.9	0.9	3.0	996
Primary	2.8	0.6	2.2	5,008
Secondary	6.5	1.9	4.6	3,448
Higher	21.9	8.4	13.4	389
Wealth quintile				
Lowest	2.2	0.5	1.8	2,466
Second	2.7	0.5	2.2	2,168
Middle	3.3	0.7	2.6	1,823
Fourth	5.6	1.4	4.2	1,840
Highest	13.8	5.1	8.7	1,545
Total	5.0	1.4	3.6	9,841

Note: The question on C-section was asked only of women who delivered in a health facility. In this table, it is assumed that women who did not give birth in a health facility did not receive a C-section.

[1] Includes only the most recent birth in the 5 years preceding the survey

Table 9.8 Duration of stay in health facility after birth

Among women with a birth in the 5 years preceding the survey who delivered their most recent live birth in a health facility, percent distribution by duration of stay in the health facility following their most recent live birth, according to type of delivery, Zambia DHS 2018

Type of delivery	<6 hours	6-11 hours	12-23 hours	1-2 days	3+ days	Missing	Total	Number of women
Vaginal birth	14.4	32.7	12.0	33.3	6.6	1.0	100.0	5,887
Caesarean section	0.8	1.2	0.3	14.5	82.6	0.5	100.0	401

Table 9.9 Timing of first postnatal check for the mother

Among women age 15-49 giving birth in the 2 years preceding the survey, percent distribution of the mother's first postnatal check for the most recent live birth by time after delivery, and percentage of women with a live birth during the 2 years preceding the survey who received a postnatal check in the first 2 days after giving birth, according to background characteristics, Zambia DHS 2018

Background characteristic	Time after delivery of mother's first postnatal check[1]						No postnatal check[2]	Total	Percentage of women with a postnatal check during the first 2 days after birth[1]	Number of women
	Less than 4 hours	4-23 hours	1-2 days	3-6 days	7-41 days	Don't know/ missing				
Mother's age at birth										
<20	50.6	13.5	1.5	7.1	1.6	2.7	22.9	100.0	65.7	828
20-34	56.9	13.2	1.2	3.3	1.4	2.8	21.2	100.0	71.3	2,476
35-49	55.1	10.3	3.6	2.1	0.7	1.9	26.3	100.0	68.9	602
Birth order										
1	55.8	14.8	1.3	5.9	1.2	3.2	17.7	100.0	71.9	1,020
2-3	59.1	13.1	1.2	3.0	1.4	2.7	19.6	100.0	73.3	1,332
4-5	53.5	13.2	1.8	3.6	1.8	2.5	23.6	100.0	68.5	825
6+	49.6	9.2	2.6	3.4	0.8	1.9	32.5	100.0	61.4	726
Place of delivery										
Health facility	61.7	14.3	1.4	4.2	1.2	3.0	14.2	100.0	77.4	3,370
Elsewhere	14.6	3.8	2.9	2.3	2.1	0.5	73.9	100.0	21.3	535
Residence										
Urban	64.0	15.4	2.0	3.0	1.3	3.4	10.8	100.0	81.5	1,340
Rural	50.7	11.5	1.4	4.5	1.4	2.2	28.4	100.0	63.6	2,564
Province										
Central	47.2	13.6	0.5	3.6	1.6	1.3	32.3	100.0	61.2	343
Copperbelt	64.0	17.0	2.1	0.8	1.7	5.6	8.9	100.0	83.1	473
Eastern	52.8	15.2	1.5	6.5	1.6	4.7	17.6	100.0	69.6	569
Luapula	60.2	8.7	0.6	3.9	1.8	2.7	22.1	100.0	69.4	375
Lusaka	72.3	10.2	1.1	2.3	1.8	2.6	9.8	100.0	83.6	558
Muchinga	57.3	9.2	2.6	3.8	1.5	0.5	24.9	100.0	69.2	227
Northern	38.4	15.2	0.8	2.9	0.2	1.1	41.4	100.0	54.4	347
North Western	42.9	26.5	1.3	2.5	1.1	2.9	22.8	100.0	70.7	219
Southern	48.6	12.3	4.1	8.3	0.8	0.7	25.1	100.0	65.0	525
Western	56.4	0.7	0.5	2.0	1.1	2.0	37.3	100.0	57.6	269
Education										
No education	39.2	9.1	2.0	3.6	1.4	4.4	40.3	100.0	50.3	371
Primary	53.9	10.8	1.4	3.9	1.6	2.2	26.2	100.0	66.1	1,970
Secondary	60.5	16.1	1.8	4.4	1.0	2.2	13.9	100.0	78.5	1,410
Higher	63.9	17.7	1.8	0.7	1.2	7.1	7.5	100.0	83.5	153
Wealth quintile										
Lowest	45.7	10.1	1.2	3.4	2.0	2.5	35.1	100.0	57.1	1,002
Second	53.1	11.3	1.6	4.6	0.9	1.9	26.7	100.0	66.0	873
Middle	54.2	12.8	1.4	6.4	1.1	2.1	22.1	100.0	68.4	738
Fourth	62.8	16.4	2.5	3.7	0.8	2.8	10.9	100.0	81.7	672
Highest	66.8	15.6	1.6	1.3	1.9	4.4	8.4	100.0	84.0	620
Total	55.3	12.8	1.6	3.9	1.4	2.6	22.4	100.0	69.7	3,905

[1] Includes women who received a check from a doctor, midwife, nurse, community village health assistant, community village health worker, or traditional birth attendant
[2] Includes women who received a check after 41 days

Table 9.10 Type of provider of first postnatal check for the mother

Among women age 15-49 giving birth in the 2 years preceding the survey, percent distribution by type of provider of the mother's first postnatal health check during the 2 days after the most recent live birth, according to background characteristics, Zambia DHS 2018

Background characteristic	Type of health provider of mother's first postnatal check						No postnatal check during the first 2 days after birth	Total	Number of women
	Doctor	Nurse/ midwife	Clinical officer	Community/ village health assistant	Community/ village health worker	Traditional birth attendant			
Mother's age at birth									
<20	6.1	56.8	1.3	0.2	0.2	1.0	34.3	100.0	828
20-34	4.7	64.5	0.9	0.2	0.2	0.8	28.7	100.0	2,476
35-49	8.0	58.4	0.3	0.8	0.4	1.1	31.1	100.0	602
Birth order									
1	7.7	62.3	1.0	0.2	0.1	0.5	28.1	100.0	1,020
2-3	4.8	66.2	1.2	0.2	0.3	0.6	26.7	100.0	1,332
4-5	4.3	61.0	0.7	0.5	0.4	1.6	31.5	100.0	825
6+	5.1	54.6	0.2	0.4	0.0	1.1	38.6	100.0	726
Place of delivery									
Health facility	6.3	69.2	1.0	0.3	0.2	0.5	22.6	100.0	3,370
Elsewhere	0.4	16.6	0.0	0.5	0.5	3.4	78.7	100.0	535
Residence									
Urban	10.1	70.5	0.7	0.1	0.0	0.1	18.5	100.0	1,340
Rural	3.1	57.5	1.0	0.4	0.3	1.3	36.4	100.0	2,564
Province									
Central	2.9	56.7	0.5	0.0	0.3	0.8	38.8	100.0	343
Copperbelt	13.8	68.3	0.3	0.1	0.0	0.6	16.9	100.0	473
Eastern	4.6	63.4	0.0	0.5	0.4	0.5	30.4	100.0	569
Luapula	4.4	59.6	2.3	0.2	0.1	2.8	30.6	100.0	375
Lusaka	7.1	74.5	1.5	0.3	0.0	0.3	16.4	100.0	558
Muchinga	3.2	64.7	0.0	0.0	0.0	1.3	30.8	100.0	227
Northern	1.4	52.3	0.5	0.0	0.0	0.2	45.6	100.0	347
North Western	4.5	63.2	0.7	0.5	0.2	1.6	29.3	100.0	219
Southern	5.5	57.1	1.3	0.0	0.4	0.8	35.0	100.0	525
Western	2.7	50.3	1.5	1.6	0.7	0.9	42.4	100.0	269
Education									
No education	4.3	44.4	0.2	0.0	0.1	1.4	49.7	100.0	371
Primary	3.4	59.4	1.1	0.5	0.3	1.2	33.9	100.0	1,970
Secondary	6.8	70.5	0.7	0.0	0.1	0.3	21.5	100.0	1,410
Higher	23.7	58.7	1.0	0.0	0.0	0.0	16.5	100.0	153
Wealth quintile									
Lowest	2.4	51.2	1.1	0.4	0.6	1.4	42.9	100.0	1,002
Second	2.5	60.6	1.1	0.4	0.0	1.4	34.0	100.0	873
Middle	5.2	60.9	0.8	0.3	0.3	0.9	31.6	100.0	738
Fourth	6.7	74.3	0.2	0.3	0.0	0.2	18.3	100.0	672
Highest	13.9	69.0	1.1	0.0	0.0	0.0	16.0	100.0	620
Total	5.5	61.9	0.9	0.3	0.2	0.9	30.3	100.0	3,905

Table 9.11 Timing of first postnatal check for the newborn

Percent distribution of most recent live births in the 2 years preceding the survey by time after birth of first postnatal check, and percentage of births with a postnatal check during the first 2 days after birth, according to background characteristics, Zambia DHS 2018

Background characteristic	Time after delivery of newborn's first postnatal check[1]						No postnatal check[2]	Total	Percentage of births with a postnatal check during the first 2 days after birth[1]	Number of births
	Less than 1 hour	1-3 hours	4-23 hours	1-2 days	3-6 days	Don't know				
Mother's age at birth										
<20	19.8	36.8	13.6	1.3	5.3	2.1	21.1	100.0	71.5	828
20-34	20.4	38.7	12.0	1.5	4.4	2.4	20.6	100.0	72.6	2,476
35-49	21.9	34.5	10.4	3.8	5.4	1.7	22.2	100.0	70.6	602
Birth order										
1	22.7	38.8	14.3	1.3	4.1	2.5	16.3	100.0	77.1	1,020
2-3	19.7	39.7	12.0	2.0	3.9	2.6	20.1	100.0	73.4	1,332
4-5	19.5	37.1	12.4	1.0	6.5	2.0	21.6	100.0	70.0	825
6+	19.8	32.8	8.9	3.2	5.3	1.6	28.3	100.0	64.8	726
Place of delivery										
Health facility	23.4	41.9	13.5	1.6	4.3	2.6	12.7	100.0	80.4	3,370
Elsewhere	2.2	10.7	3.3	3.6	7.6	0.0	72.7	100.0	19.7	535
Residence										
Urban	19.4	45.7	14.8	1.9	2.7	3.3	12.1	100.0	81.9	1,340
Rural	21.0	33.4	10.7	1.8	5.8	1.7	25.6	100.0	66.9	2,564
Province										
Central	30.7	19.8	12.4	2.3	8.9	1.6	24.4	100.0	65.2	343
Copperbelt	24.4	35.8	19.3	2.4	1.0	5.4	11.7	100.0	82.0	473
Eastern	32.6	28.5	10.5	1.3	4.8	3.6	18.6	100.0	73.0	569
Luapula	6.0	62.1	8.5	0.8	5.2	3.0	14.4	100.0	77.4	375
Lusaka	14.2	56.8	9.6	0.8	2.7	2.0	13.9	100.0	81.4	558
Muchinga	23.2	37.0	9.4	2.6	3.7	0.2	23.9	100.0	72.2	227
Northern	19.1	21.4	15.7	2.7	9.0	0.7	31.3	100.0	58.9	347
North Western	6.3	35.5	24.2	0.5	3.0	2.7	27.8	100.0	66.5	219
Southern	11.4	42.0	11.7	3.4	6.5	0.5	24.4	100.0	68.6	525
Western	36.7	23.5	1.2	1.1	2.9	1.3	33.4	100.0	62.4	269
Mother's education										
No education	16.5	29.3	8.0	1.3	5.5	3.2	36.2	100.0	55.1	371
Primary	19.7	37.1	10.1	1.6	5.4	1.7	24.4	100.0	68.5	1,970
Secondary	22.0	40.5	15.8	2.2	3.8	2.2	13.5	100.0	80.5	1,410
Higher	26.0	38.1	13.8	2.9	3.4	7.8	7.9	100.0	80.9	153
Wealth quintile										
Lowest	19.4	29.6	9.9	1.6	5.4	1.8	32.3	100.0	60.5	1,002
Second	21.9	36.8	10.0	1.6	5.5	1.4	22.7	100.0	70.4	873
Middle	19.9	37.8	11.5	2.0	7.4	1.9	19.4	100.0	71.3	738
Fourth	21.4	40.6	17.1	2.5	2.6	2.6	13.2	100.0	81.6	672
Highest	19.8	48.5	13.8	1.6	1.9	4.2	10.2	100.0	83.6	620
Total	20.5	37.6	12.1	1.8	4.7	2.3	20.9	100.0	72.0	3,905

[1] Includes newborns who received a check from a doctor, midwife, nurse, community village health assistant, community village health worker, or traditional birth attendant

[2] Includes newborns who received a check after the first week of life

Table 9.12 Type of provider of first postnatal check for the newborn

Percent distribution of most recent live births in the 2 years preceding the survey by type of provider of the newborn's first postnatal health check during the 2 days after the most recent live birth, according to background characteristics, Zambia DHS 2018

Background characteristic	Type of health provider of newborn's first postnatal check						No postnatal check during the first 2 days after birth	Total	Number of births
	Doctor	Nurse/ midwife	Clinical officer	Community/ village health assistant	Community/ village health worker	Traditional birth attendant			
Mother's age at birth									
<20	4.9	63.5	1.7	0.4	0.1	0.9	28.5	100.0	828
20-34	4.4	66.0	1.0	0.2	0.1	1.0	27.4	100.0	2,476
35-49	7.9	60.3	0.2	0.7	0.4	1.2	29.4	100.0	602
Birth order									
1	7.0	67.4	1.4	0.4	0.1	0.9	22.9	100.0	1,020
2-3	4.3	67.2	1.2	0.1	0.2	0.5	26.6	100.0	1,332
4-5	3.3	63.3	0.9	0.4	0.3	1.8	30.0	100.0	825
6+	5.4	57.3	0.3	0.7	0.0	1.1	35.2	100.0	726
Place of delivery									
Health facility	5.7	72.4	1.1	0.4	0.1	0.6	19.6	100.0	3,370
Elsewhere	0.4	15.5	0.2	0.2	0.1	3.4	80.3	100.0	535
Residence									
Urban	9.0	71.9	0.6	0.0	0.0	0.4	18.1	100.0	1,340
Rural	2.9	60.7	1.2	0.5	0.2	1.3	33.1	100.0	2,564
Province									
Central	4.3	58.6	1.3	0.0	0.0	1.0	34.8	100.0	343
Copperbelt	10.6	70.9	0.0	0.0	0.0	0.5	18.0	100.0	473
Eastern	3.4	67.0	0.0	0.9	0.7	1.0	27.0	100.0	569
Luapula	3.5	67.5	2.4	0.4	0.1	3.5	22.6	100.0	375
Lusaka	5.9	73.0	1.6	0.0	0.0	1.0	18.6	100.0	558
Muchinga	2.2	69.8	0.0	0.0	0.0	0.3	27.8	100.0	227
Northern	0.8	57.7	0.5	0.0	0.0	0.0	41.1	100.0	347
North Western	3.1	62.0	0.0	0.3	0.2	0.8	33.5	100.0	219
Southern	8.1	57.4	1.9	0.3	0.0	0.8	31.4	100.0	525
Western	3.0	55.1	1.8	1.6	0.3	0.6	37.6	100.0	269
Mother's education									
No education	3.7	49.8	0.2	0.3	0.1	1.1	44.9	100.0	371
Primary	3.0	62.1	1.4	0.6	0.2	1.2	31.5	100.0	1,970
Secondary	6.9	72.1	0.7	0.0	0.0	0.8	19.5	100.0	1,410
Higher	16.6	63.2	1.0	0.0	0.0	0.0	19.1	100.0	153
Wealth quintile									
Lowest	2.3	54.7	1.6	0.5	0.2	1.3	39.5	100.0	1,002
Second	2.1	65.2	1.1	0.5	0.2	1.4	29.6	100.0	873
Middle	5.0	63.8	0.9	0.5	0.3	0.8	28.7	100.0	738
Fourth	7.4	73.6	0.1	0.0	0.0	0.5	18.4	100.0	672
Highest	11.1	70.9	0.9	0.0	0.0	0.7	16.4	100.0	620
Total	5.0	64.6	1.0	0.3	0.1	1.0	28.0	100.0	3,905

Table 9.13 Content of postnatal care for newborns

Among most recent live births in the 2 years preceding the survey, percentage for whom selected functions were performed during the first 2 days after birth and percentage with at least two signal functions performed during the first 2 days after birth, according to background characteristics, Zambia DHS 2018

Background characteristic	Among most recent live births in the 2 years preceding the survey, percentage for whom the selected function was performed during the first 2 days after birth:						Percentage with at least two signal functions performed during the first 2 days after birth	Number of births
	Cord examined	Temperature measured	Counselling on danger signs	Counselling on breast-feeding	Observation of breast-feeding	Weighed[1]		
Mother's age at birth								
<20	60.6	57.3	54.1	60.7	56.3	84.3	68.8	828
20-34	61.3	56.4	54.8	59.2	56.8	83.6	66.4	2,476
35-49	54.0	51.4	48.1	54.3	49.9	80.8	59.8	602
Birth order								
1	63.3	60.3	57.3	63.5	59.6	87.9	71.2	1,020
2-3	63.4	58.5	56.4	61.3	58.6	85.3	68.1	1,332
4-5	56.8	50.8	50.9	55.4	52.9	80.6	62.4	825
6+	52.9	50.3	46.4	51.2	47.8	76.5	58.3	726
Place of delivery								
Health facility	63.8	60.4	57.6	63.0	59.8	93.1	70.8	3,370
Elsewhere	36.3	27.2	28.2	32.2	29.8	21.7	35.2	535
Residence								
Urban	68.4	68.2	64.3	70.2	65.9	95.5	74.9	1,340
Rural	55.6	49.3	48.0	52.7	50.3	77.0	61.2	2,564
Province								
Central	56.4	55.7	54.9	56.9	58.0	77.1	62.9	343
Copperbelt	70.6	68.2	66.3	69.7	62.4	93.6	73.6	473
Eastern	70.8	65.2	59.6	67.5	74.0	86.7	81.7	569
Luapula	65.9	57.7	53.9	58.1	55.3	85.8	67.7	375
Lusaka	74.3	76.7	73.5	79.3	76.2	94.6	85.0	558
Muchinga	55.0	46.4	48.4	58.7	49.8	73.4	62.0	227
Northern	43.1	35.1	39.8	45.1	42.9	64.4	48.7	347
North Western	62.6	53.4	54.3	53.7	43.9	85.4	64.6	219
Southern	48.8	43.9	37.0	43.9	34.9	81.8	50.0	525
Western	31.1	28.3	29.2	32.4	30.8	73.6	37.7	269
Mother's education								
No education	45.7	40.8	38.2	44.5	41.3	61.7	49.7	371
Primary	55.9	51.1	49.1	54.0	52.5	79.0	62.4	1,970
Secondary	67.8	64.1	62.7	67.3	62.2	93.6	73.3	1,410
Higher	75.8	76.0	64.6	75.4	71.1	98.3	82.5	153
Wealth quintile								
Lowest	50.9	43.4	42.7	48.4	48.0	68.4	57.0	1,002
Second	53.9	48.7	46.9	51.7	49.3	80.0	59.6	873
Middle	61.1	57.2	56.2	59.3	53.9	86.8	66.2	738
Fourth	68.9	66.8	61.6	69.4	64.2	93.2	74.5	672
Highest	72.4	72.4	68.9	73.3	69.9	97.5	79.3	620
Total	60.0	55.8	53.6	58.8	55.6	83.3	65.9	3,905

[1] Captures newborns who were weighed "at birth." May exclude some newborns who were weighed during the 2 days after birth.

Table 9.14 Problems in accessing health care

Percentage of women age 15-49 who reported that they have serious problems in accessing health care for themselves when they are sick, by type of problem, according to background characteristics, Zambia DHS 2018

Background characteristic	Problems in accessing health care									
	Getting permission to go for treatment	Getting money for treatment	Distance to health facility	Not wanting to go alone	Having to take transport	Concern that there may not be any health provider	Concern that there may not be a female health provider	Rude attitude of health provider	At least one problem accessing health care	Number of women
Age										
15-19	3.7	18.6	27.2	15.5	23.1	16.3	11.4	21.5	48.3	3,000
20-34	3.8	19.3	27.3	12.4	23.1	16.9	10.4	26.3	51.2	6,833
35-49	4.0	24.2	32.7	13.5	28.1	17.0	10.7	24.3	53.6	3,850
Number of living children										
0	3.3	15.4	23.9	14.7	19.9	16.8	12.1	24.5	47.8	3,489
1-2	4.0	18.7	24.7	11.2	20.3	15.4	8.6	24.6	48.6	4,427
3-4	4.2	23.6	29.7	12.4	26.3	16.5	10.8	25.9	52.5	2,945
5+	3.9	26.6	40.3	16.3	34.9	19.3	12.1	23.8	58.4	2,821
Marital status										
Never married	3.5	16.2	23.0	13.7	19.3	16.3	11.4	24.8	47.1	4,272
Married or living together	4.1	21.7	32.2	13.3	27.1	16.9	10.5	24.4	53.2	7,648
Divorced/separated/ widowed	3.8	26.0	28.0	13.1	25.7	17.5	9.8	25.8	52.9	1,762
Employed last 12 months										
Not employed	4.7	21.9	29.4	13.9	25.0	18.1	11.7	25.8	51.7	6,547
Employed for cash	2.7	18.0	26.6	11.2	22.2	14.8	8.7	24.3	50.0	5,696
Employed not for cash	4.4	24.1	34.6	19.8	31.5	18.3	13.9	21.2	54.4	1,440
Residence										
Urban	2.4	12.1	12.0	6.7	10.1	12.1	7.6	23.8	38.9	6,374
Rural	5.1	27.9	43.4	19.2	37.0	20.9	13.4	25.5	62.1	7,309
Province										
Central	1.6	10.9	19.9	10.1	19.7	20.7	4.9	22.9	42.1	1,165
Copperbelt	2.0	8.5	14.8	8.5	12.2	7.0	5.1	16.6	33.8	2,201
Eastern	2.7	24.9	43.6	9.9	33.6	15.7	12.3	19.2	61.1	1,605
Luapula	1.2	16.8	26.3	10.7	23.6	20.2	10.0	23.5	50.5	1,071
Lusaka	3.4	14.3	16.6	7.5	12.8	15.2	9.8	27.6	42.3	2,733
Muchinga	3.6	19.7	49.0	29.6	42.5	10.3	8.9	12.5	56.7	754
Northern	8.2	24.8	45.9	32.7	44.9	44.6	30.0	44.8	72.3	1,054
North Western	3.6	25.3	25.8	11.3	21.0	11.9	12.5	37.8	57.3	718
Southern	5.5	41.5	38.3	14.5	31.3	13.3	7.0	27.9	66.9	1,574
Western	11.1	34.3	37.7	21.6	33.8	21.6	16.8	19.4	55.3	808
Education										
No education	5.5	30.9	43.4	19.6	37.0	21.6	15.9	22.3	59.6	1,054
Primary	4.6	25.4	36.3	16.7	32.4	18.3	12.2	23.4	56.5	6,059
Secondary	3.0	15.4	20.3	9.8	16.2	14.5	8.4	25.0	44.8	5,816
Higher	2.7	6.5	13.0	6.3	7.7	15.4	8.5	35.9	46.5	755
Wealth quintile										
Lowest	6.8	33.3	51.3	25.8	47.0	25.7	18.2	25.7	67.6	2,442
Second	4.4	26.5	42.2	18.0	36.0	20.4	13.0	24.3	61.3	2,387
Middle	4.9	26.8	34.6	14.1	29.2	16.2	9.7	24.9	57.0	2,477
Fourth	2.4	14.9	15.8	7.5	13.4	12.3	7.1	22.3	40.7	3,011
Highest	1.9	7.5	10.4	5.9	6.5	12.2	7.5	26.2	37.5	3,367
Total	3.8	20.5	28.8	13.4	24.5	16.8	10.7	24.7	51.3	13,683

Table 9.15 Knowledge of fistula and experience of fistula-like symptoms

Percentage of women age 15-49 who have heard of fistula symptoms and percentage who have ever had fistula symptoms, according to background characteristics, Zambia DHS 2018

Background characteristic	Percentage of women who: Have ever heard of fistula	Have ever had fistula symptoms	Number of women
Age			
15-19	16.6	0.0	3,000
20-24	27.3	0.2	2,733
25-29	31.7	0.2	2,237
30-34	37.6	0.3	1,862
35-39	40.0	0.4	1,697
40-44	42.9	0.2	1,253
45-49	47.9	0.3	900
Marital status			
Never married	19.7	0.1	4,272
Married or living together	36.5	0.2	7,648
Divorced/separated/ widowed	38.1	0.4	1,762
Residence			
Urban	30.1	0.2	6,374
Rural	32.6	0.2	7,309
Province			
Central	26.2	0.1	1,165
Copperbelt	24.5	0.0	2,201
Eastern	39.9	0.4	1,605
Luapula	43.3	0.6	1,071
Lusaka	28.8	0.2	2,733
Muchinga	46.9	0.4	754
Northern	29.3	0.1	1,054
North Western	28.3	0.0	718
Southern	32.8	0.2	1,574
Western	22.8	0.3	808
Education			
No education	32.9	0.1	1,054
Primary	32.7	0.2	6,059
Secondary	28.1	0.2	5,816
Higher	45.3	0.4	755
Wealth quintile			
Lowest	32.8	0.3	2,442
Second	32.0	0.3	2,387
Middle	32.1	0.1	2,477
Fourth	30.1	0.1	3,011
Highest	30.8	0.1	3,367
Total	31.4	0.2	13,683

CHILD HEALTH 10

Key Findings

- ***Birth weight:*** Information on birth weight was obtained for 80% of the births in the last 5 years. Among births with a reported birth weight, 9% had a low birth weight (less than 2.5 kg).
- ***Vaccinations:*** Overall, 75% of children age 12-23 months had received all basic vaccinations by the time of the survey, and 46% had received all age-appropriate vaccinations.
- ***Symptoms of acute respiratory infection (ARI):*** Two percent of children under age 5 had symptoms of ARI in the 2 weeks before the survey. Advice or treatment was sought for 76% of children with ARI symptoms; 40% were taken for advice or treatment the same or next day.
- ***Diarrhoea:*** Fifteen percent of children under age 5 had diarrhoea in the 2 weeks before the survey, and advice or treatment was sought for 69% of these children. Seventy-eight percent of children with diarrhoea received oral rehydration therapy (ORT), and 34% received a combination of oral rehydration salts (ORS) and zinc. Fifteen percent of children with diarrhoea received no treatment.

Information on child health and survival can help policymakers and programme managers assess the efficacy of current strategies, formulate appropriate interventions to prevent deaths from childhood illnesses, and improve the health of children in Zambia.

This chapter presents information on birth weight and vaccination status for young children. It also looks at the prevalence of, and treatment practices for, three common childhood illnesses: symptoms of acute respiratory infection (ARI), fever, and diarrhoea. Because appropriate sanitary practices can help prevent and reduce the severity of diarrhoeal disease, information is also provided on the disposal of children's faecal matter.

10.1 BIRTH WEIGHT

Low birth weight

Percentage of births with a reported birth weight below <2.5 kilograms regardless of gestational age

Sample: Live births in the 5 years before the survey that have a reported birth weight, from either a written record or else a mother's report

Low birth weight is closely associated with infant morbidity and mortality. Infants weighing less than 2.5 kilograms (kg) at birth or who are reported to be very small or smaller than average are at increased risk of early childhood death. For births in the 5 years preceding the survey, birth weight was collected through either a written record or the mother's recall. Because birth weight may not be known for many children,

mothers' estimates of their baby's size at birth were also obtained. Although these estimates are subjective, they can be a useful proxy for birth weight.

Eighty-six percent of births were reported as average or larger than average, 9% as smaller than average, and 2% as very small. Of the 80% of births with a reported birth weight, 9% weighed less than 2.5 kg (**Table 10.1**).

Patterns by background characteristics

- Women under age 20 are more likely to give birth to children with a low birth weight (12%) than women age 20-34 and age 35-49 (8% each).
- Mothers who smoke have a higher percentage of babies weighing less than 2.5 kg (15%) than their counterparts who do not smoke (9%).
- By province, the percentage of births weighing less than 2.5 kg is highest in Muchinga (10%) and lowest in Northern (6%).
- Women with no education or a primary education (9% each) are more likely to give birth to children with a low birth weight than women with a higher education (6%) (**Table 10.1**).

10.2 VACCINATION OF CHILDREN

Universal immunisation of children against common vaccine-preventable diseases is crucial to reducing infant and child morbidity and mortality. Zambia has conducted routine childhood immunisations since the inception of the Expanded Programme on Immunisation in 1975 and has been actively implementing the Universal Childhood Immunisation Programme since 1984. In scaling up immunisation efforts, the country has developed the Strengthened Expanded Programme on Immunisation Vaccination Manual coupled with integrated management of childhood illnesses (IMCI) (MOH 2017). The IMCI strategy ensures that when children come in contact with a health worker, their immunisation status is checked and they are given any necessary vaccines.

In Zambia, routine childhood vaccines include BCG (tuberculosis), DPT-HepB-Hib or pentavalent (diphtheria, tetanus, pertussis, hepatitis B, and *Haemophilus influenzae* type b), oral polio vaccine or OPV (poliomyelitis), PCV (pneumococcal), rotavirus or RV, and measles and rubella or MR.[1] A second dose of MR was introduced in June 2017 and is given to children at age 18 months.

Historically, an important measure of vaccination coverage has been the proportion of children receiving all "basic" vaccinations. Children are considered to have received all basic vaccinations if they have received the BCG vaccine, three doses each of the DPT and polio vaccines, and a single dose of the measles vaccine. In Zambia, the BCG vaccine is usually given at birth or at first clinic contact, while the DPT vaccine is given in combination with HepB and Hib (DPT-HepB-Hib) at approximately age 6, 10, and 14 weeks. A first measles vaccination (which was given in combination with rubella beginning in June 2017) should be given at or soon after age 9 months.

The 2018 ZDHS collected information on vaccinations for all children born in the 3 years before the survey. For each of these children, mothers were asked whether they had a health card for the child and, if so, whether the interviewer could see it. When a mother was able to show the health card to the interviewer, the dates of vaccinations received were copied from the card to the questionnaire. If a child

[1] Zambia introduced inactivated polio vaccine in mid-2018 immediately prior to the start of data collection. As the age cohorts for tabulation exceed the age of the children who would have received the vaccine, it was excluded from data collection.

never received a health card or if the mother was unable to show the card to the interviewer, the mother was asked specific questions about whether the child had received each vaccine.

All basic vaccinations coverage

Percentage of children age 12-23 months who received specific vaccines at any time before the survey (according to a vaccination card or the mother's report). To have received all basic vaccinations, a child must receive at least:

- One dose of BCG vaccine, which protects against tuberculosis
- Three doses of DPT vaccine, which protects against diphtheria, pertussis (whooping cough), and tetanus
- Three doses of polio vaccine
- One dose of measles vaccine

Sample: Living children age 12-23 months

In Zambia, 75% of children age 12-23 months and 72% of children age 24-35 months have received all basic vaccinations. Seventy percent of children age 12-23 months and 63% of those age 24-35 months received all basic vaccines by age 12 months (**Table 10.2**).

Forty-six percent of children age 12-23 months and 33% of children age 24-35 months have received all age-appropriate vaccinations (**Table 10.3**). Similarly, 43% of children age 12-23 months and 28% of children age 24-35 months were vaccinated by their appropriate age (**Table 10.2**). However, because MR2 was introduced in June 2017 and fieldwork began in July 2018, it is unsurprising that many children age 24-35 months did not receive the vaccination, thus lowering the overall percentage of children in this age group receiving all age-appropriate vaccinations.

Figure 10.1 **Childhood vaccinations**

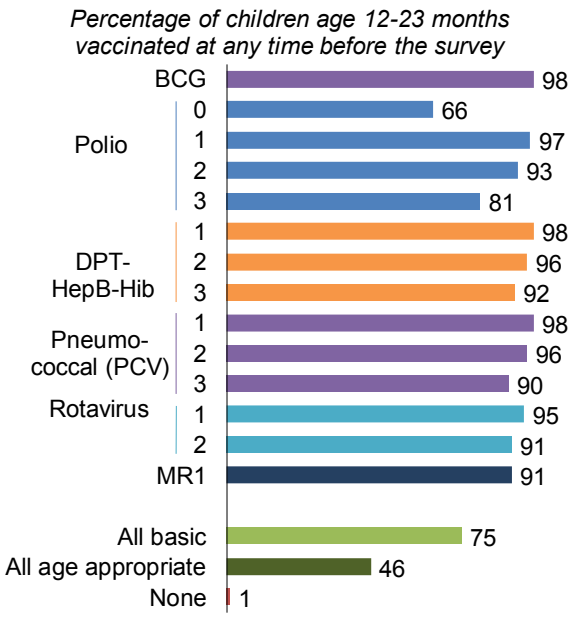
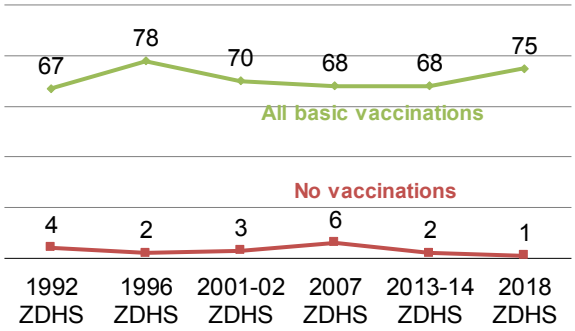


Figure 10.1 shows coverage of all age-appropriate vaccinations among children age 12-23 months. Coverage is highest for the BCG vaccine and the first dose of the DPT-HepB-Hib and PCV vaccines (98% each). In the case of multi-dose vaccines, coverage is highest for the first dose and falls in subsequent doses. Although coverage rates among children age 12-23 months for the first doses of DPT-HepB-Hib, PCV, and RV were 98%, 98%, and 95%, respectively, only 92% of children received the third dose of DPT-HepB-Hib, 90% received the third dose of PCV, and 91% received the second dose of RV (**Table 10.2**).

Trends: The 2018 ZDHS results show improvements in basic vaccination coverage. The percentage of children age 12-23 months who received all basic vaccination increased from 68% in both 2007 and 2013-14 to 75% in 2018. The percentage of children age 12-23 months with no vaccinations decreased from 6% in 2007 to 2% in 2013-14 and 1% in 2018 (**Figure 10.2**).

Figure 10.2 Trends in childhood vaccinations

Percentage of children age 12-23 months who received all basic vaccinations at any time before the survey

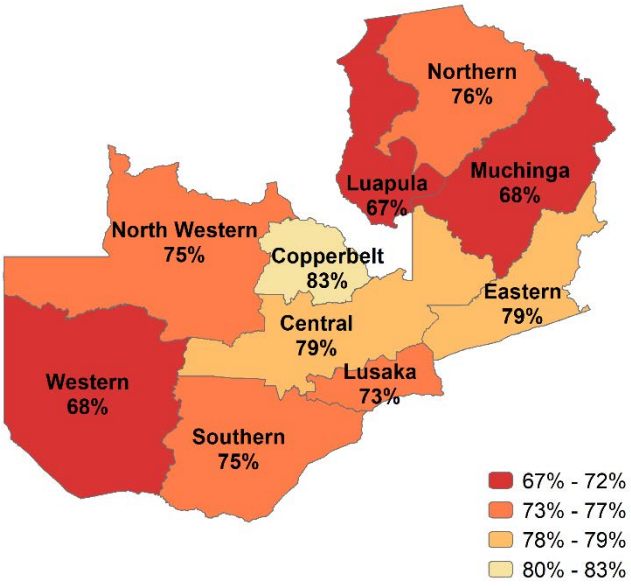


Patterns by background characteristics

- By province, basic vaccination coverage is highest in Copperbelt (83%) and lowest in Luapula (67%) (**Figure 10.3**).
- Basic vaccination coverage increases with increasing mother's education. Sixty-six percent of children born to mothers with no education received all basic vaccinations, as compared with 88% of those born to mothers with a higher education (**Table 10.3**).

Figure 10.3 Vaccination coverage by province

Percentage of children age 12-23 months who received all basic vaccines at any time before the survey



Vaccination Card Ownership and Availability

Vaccination cards are a critical tool in ensuring that a child receives all recommended vaccinations on schedule. Among children age 12-23 months and 24-35 months, 97% were reported to have ever had a vaccination card (**Table 10.4**). However, not all mothers were able to produce their child's vaccination card at the time of the interview. Only 77% of children age 12-23 months and 68% of those age 24-35 months had vaccination cards available at the time of the interview.

10.3 Symptoms of Acute Respiratory Infection

Acute respiratory infection (ARI), predominantly pneumonia, is a major cause of childhood morbidity and mortality.

Treatment of symptoms of acute respiratory infection (ARI)

Children with symptoms of ARI for whom advice or treatment was sought. ARI symptoms consist of short, rapid breathing that is chest-related, and/or difficult breathing that is chest-related.

Sample: Children under age 5 with symptoms of ARI in the 2 weeks before the survey

Two percent of children under age 5 had ARI symptoms in the 2 weeks prior to the survey. Advice or treatment was sought for 76% of children with ARI symptoms; however, advice or treatment was sought the same or next day for only 40% of children (**Table 10.5**).

Among children under age 5 with symptoms of ARI for whom advice or treatment was sought, the vast majority (89%) received advice or treatment from the public sector, including 66% who were taken to a government health centre (**Table 10.6**).

10.4 FEVER

Fever is a symptom of malaria but is also associated with other childhood illnesses that may contribute to high levels of malnutrition, morbidity, and mortality. Data from the 2018 ZDHS relating to malaria are presented in Chapter 12.

Treatment of fever

Children with fever for whom advice or treatment was sought.

Sample: Children under age 5 with fever in the 2 weeks before the survey

Sixteen percent of children under age 5 had a fever in the 2 weeks preceding the survey. The prevalence of fever among children is highest in Luapula (30%) and lowest in Lusaka (9%). Patterns of care seeking are similar to those for ARI symptoms: 77% of children were taken for advice or treatment, and 48% were taken for advice or treatment the same or next day. One-third (34%) of children with a fever received antibiotics (**Table 10.7**).

10.5 DIARRHOEAL DISEASE

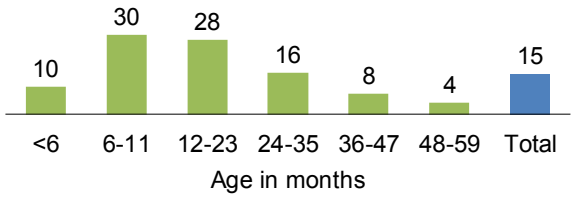
10.5.1 Prevalence of Diarrhoea and Treatment-seeking Behaviour

Mothers reported that 15% of children under age 5 had a diarrhoeal episode in the 2 weeks before the survey. Advice or treatment was sought for 69% of these children, and 62% were taken for advice or treatment within 2 days of the onset of the diarrhoea (**Table 10.8**).

Ninety-three percent of children with diarrhoea are taken to public sector health facilities for advice or treatment, while only 6% are taken to private sector facilities (**Table 10.9**). The most common source of advice or treatment is a government health centre (67%), followed by a government health post (18%).

Figure 10.4 **Diarrhoea prevalence by age**

Percentage of children under age 5 who had diarrhoea in the 2 weeks before the survey



Patterns by background characteristics

- The prevalence of diarrhoea peaks among children age 6-23 months (28%-30%). This corresponds to the time when children start losing protection from maternal antibodies through breastfeeding, begin to walk, and are at increased risk of becoming ill as a result of environmental contaminants (**Table 10.8** and **Figure 10.4**).

- The prevalence of diarrhoea is slightly higher among children in households with an unimproved drinking water source (17%) than among those in households with an improved drinking water source (14%). The prevalence is also slightly higher among children whose households engage in open defecation (17%) or use an unimproved facility (16%) than among those in households who use improved toilet facilities (14%).
- By province, the prevalence of diarrhoea among children is highest in Western (23%) and lowest in Central (11%). Children with diarrhoea in Luapula are most likely to be taken for treatment (80%); children from Lusaka are least likely to be taken for treatment (61%).
- Children from the highest wealth quintile are least likely to have diarrhoea (13%); however, they are also least likely to be taken for advice or treatment within 2 days of the onset of diarrhoea (55%).

10.5.2 Feeding Practices

Appropriate feeding practices

Children with diarrhoea are given more liquids than usual, and as much food or more than usual.

Sample: Children under age 5 with diarrhoea in the 2 weeks before the survey

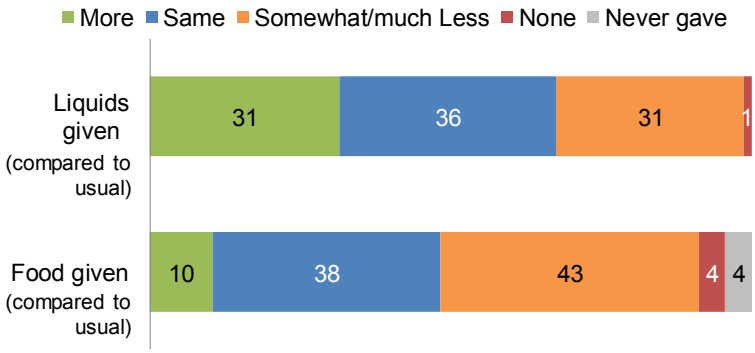
To reduce dehydration and minimise the effects of diarrhoea on nutritional status, mothers are encouraged to continue normal feeding or increase feeding of children with diarrhoea and to increase the amount of fluids given.

Only 31% of children under age 5 with diarrhoea in the 2 weeks before the survey were given more liquids than usual, as recommended. Thirty-six percent received the same amount of liquids. It is of concern that 20% of children were given somewhat less fluid than usual, and 11% were given much less than usual (**Figure 10.5**). Children who were breastfeeding were more likely than nonbreastfeeding children to receive more or the same amount of fluid as usual (71% versus 63%) (**Table 10.10**).

Less than half (48%) of children with diarrhoea were fed according to the recommended practice of giving the same amount of food or more food than usual. Forty-three percent of children were given much less or somewhat less food than usual, while 4% received no food during the diarrhoea episode (**Figure 10.5**).

***Figure 10.5* Feeding practices during diarrhoea**

Percentage of children under age 5 with diarrhoea in the 2 weeks before the survey



10.5.3 Oral Rehydration Therapy and Other Treatments

Severe dehydration may lead to death if body fluids and salts are not replenished. As noted, all children with diarrhoea should receive increased fluids and continued feeding; they should also be given oral zinc. Oral rehydration therapy (ORT) is the most commonly used and most simple therapy for treating diarrhoea. Depending on the severity, treatment may involve administration of antibiotics, oral rehydration therapy, and intravenous solutions. Zinc supplementation helps reduce the severity, frequency, and duration of diarrhoea episodes. Antimotility drugs are also sometimes given; they are not recommended, however, as they are considered contraindicated in children.

Oral rehydration therapy

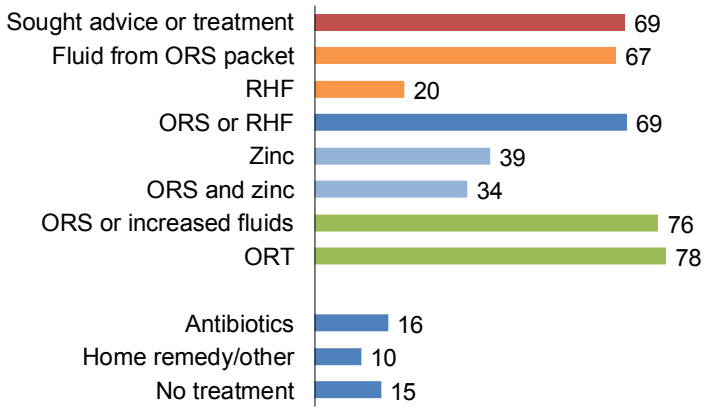
Children with diarrhoea are given increased fluids, or a fluid made from a special packet of oral rehydration salts (ORS), or government-recommended homemade fluids (RHF).

Sample: Children under age 5 with diarrhoea in the 2 weeks before the survey

Seventy-eight percent of children under age 5 with diarrhoea in the 2 weeks prior to the survey received some form of ORT. Two in five children (39%) received zinc, one in three (34%) received a combination of ORS and zinc, and 16% were given antibiotics. Ten percent of children received some form of home remedy, while 15% did not receive any treatment at all (**Table 10.11** and **Figure 10.6**). Mothers' knowledge of ORS packets as a treatment for diarrhoea is universal (98%) (**Table 10.12**).

***Figure 10.6* Treatment of diarrhoea**

Percentage of children under age 5 with diarrhoea in the 2 weeks before the survey



Trends: The percentage of children under age 5 with diarrhoea who were given ORT has increased over time, from 67% in 2001-02 to 78% in 2018. The percentage of children not receiving any treatment decreased slightly between 1992 and 2018, from 19% to 15%.

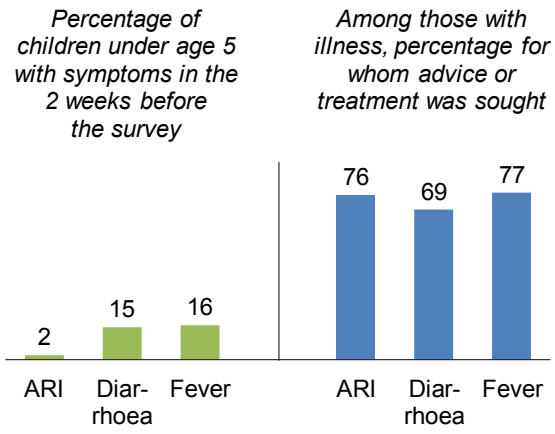
Patterns by background characteristics

- Urban children are more likely than rural children to be given zinc (42% versus 37%), ORS and zinc (39% versus 31%), and continued feeding and ORT (67% versus 52%) (**Table 10.11**).

10.6 Treatment of Childhood Illness

During the 2 weeks preceding the survey, fever (16%) and diarrhoea (15%) were much more common than ARI symptoms (2%). However, children with ARI symptoms (76%) or a fever (77%) were more likely to be taken for advice or treatment than children with diarrhoea (69%) (**Figure 10.7**).

***Figure 10.7* Prevalence and treatment of childhood illness**



10.7 Disposal of Children's Stools

Appropriate disposal of children's stools

The child's last stools were put or rinsed into a toilet or latrine, buried, or the child used a toilet or latrine.

Sample: Youngest child under age 2 living with the mother

Proper disposal of children's faeces is important to prevent the spread of disease. Seventy-nine percent of children had their last stool disposed of appropriately (the children used a toilet, their stool was rinsed or put in a toilet or latrine, or the stool was buried) (**Table 10.13**).

Patterns by background characteristics

- Children's stools are less likely to be disposed of safely in households that engage in open defecation (55%) than in households with either an improved or unimproved sanitation facility (82% each).
- Eighty-six percent of children in urban areas have their stools disposed of appropriately, as compared with 75% of children in rural areas.
- By province, the percentage of children whose last stool was disposed of safely ranges from 70% in Eastern and Western to 90% in North Western (**Table 10.13**).

List of Tables

For more information on low birth weight, vaccinations, childhood illness, and disposal of children's stools, see the following tables:

- **Table 10.1 Child's size and weight at birth**
- **Table 10.2 Vaccinations by source of information**
- **Table 10.3 Vaccinations by background characteristics**
- **Table 10.4 Possession and observation of vaccination cards, according to background characteristics**
- **Table 10.5 Prevalence and treatment of symptoms of ARI**
- **Table 10.6 Source of advice or treatment for children with symptoms of ARI**
- **Table 10.7 Prevalence and treatment of fever**
- **Table 10.8 Prevalence and treatment of diarrhoea**
- **Table 10.9 Source of advice or treatment for children with diarrhoea**
- **Table 10.10 Feeding practices during diarrhoea**
- **Table 10.11 Oral rehydration therapy, zinc, and other treatments for diarrhoea**
- **Table 10.12 Knowledge of ORS packets**
- **Table 10.13 Disposal of children's stools**

Table 10.1 Child's size and weight at birth

Percent distribution of live births in the 5 years preceding the survey by mother's estimate of baby's size at birth, percentage of live births in the 5 years preceding the survey that have a reported birth weight, and among live births in the 5 years preceding the survey with a reported birth weight, percentage less than 2.5 kg, according to background characteristics, Zambia DHS 2018

Background characteristic	Percent distribution of births by size of baby at birth					Percentage of births that have a reported birth weight[1]	Number of births	Among births with a reported birth weight[1]	
	Very small	Smaller than average	Average or larger	Don't know	Total			Percentage less than 2.5 kg	Number of births
Mother's age at birth									
<20	2.9	12.9	81.5	2.7	100.0	82.8	2,022	11.6	1,673
20-34	2.0	8.5	87.4	2.1	100.0	80.2	6,430	7.7	5,159
35-49	2.1	7.3	87.1	3.5	100.0	76.6	1,389	7.6	1,065
Birth order									
1	2.7	12.9	82.5	1.9	100.0	86.8	2,520	11.6	2,188
2-3	2.0	8.0	87.7	2.2	100.0	81.7	3,382	8.3	2,762
4-5	1.8	7.5	88.0	2.7	100.0	76.4	2,112	5.7	1,614
6+	2.3	8.2	86.1	3.4	100.0	72.9	1,827	7.4	1,332
Mother's smoking status									
Smokes cigarettes/ tobacco	2.9	16.2	81.0	0.0	100.0	65.1	76	14.7	49
Does not smoke	2.2	9.1	86.2	2.5	100.0	80.4	9,765	8.5	7,847
Residence									
Urban	1.8	8.2	89.2	0.8	100.0	94.0	3,489	8.6	3,278
Rural	2.4	9.7	84.5	3.4	100.0	72.7	6,352	8.5	4,619
Province									
Central	4.1	6.5	86.3	3.1	100.0	70.5	855	9.2	603
Copperbelt	1.2	7.7	89.3	1.9	100.0	92.0	1,209	7.7	1,112
Eastern	1.2	12.5	82.0	4.3	100.0	84.0	1,321	9.1	1,109
Luapula	0.8	10.3	82.7	6.2	100.0	80.4	950	8.8	763
Lusaka	1.6	6.9	90.0	1.5	100.0	93.3	1,532	8.9	1,430
Muchinga	3.5	6.7	89.5	0.3	100.0	66.7	605	10.3	404
Northern	2.7	3.7	93.2	0.4	100.0	61.2	890	5.8	544
North Western	1.2	5.8	90.2	2.8	100.0	83.8	531	7.4	445
Southern	2.0	16.0	80.0	1.9	100.0	80.3	1,308	9.1	1,050
Western	6.5	11.5	80.5	1.5	100.0	68.2	641	8.3	437
Mother's education									
No education	2.3	10.6	81.3	5.8	100.0	56.9	996	9.2	567
Primary	2.2	9.4	85.4	3.0	100.0	75.5	5,008	9.1	3,782
Secondary	2.1	9.1	87.8	1.0	100.0	91.8	3,448	8.0	3,166
Higher	2.8	3.8	93.3	0.2	100.0	98.3	389	6.3	382
Wealth quintile									
Lowest	3.0	9.3	83.8	3.8	100.0	63.6	2,466	9.1	1,569
Second	1.4	10.3	84.5	3.8	100.0	74.8	2,168	8.0	1,622
Middle	2.6	10.5	84.7	2.2	100.0	83.5	1,823	9.6	1,521
Fourth	1.8	8.5	88.6	1.1	100.0	91.7	1,840	8.6	1,688
Highest	2.0	6.7	90.9	0.4	100.0	96.9	1,545	7.3	1,497
Total	2.2	9.2	86.2	2.5	100.0	80.2	9,841	8.5	7,897

[1] Based on either a written record or the mother's recall

Table 10.2 Vaccinations by source of information

Percentage of children age 12-23 months and children age 24-35 months who received specific vaccines at any time before the survey, by source of information (vaccination card or mother's report), and percentage who received specific vaccines by the appropriate age, Zambia DHS 2018

	Children age 12-23 months				Children age 24-35 months			
	Vaccinated at any time before the survey according to:			Vaccinated by appropriate age[2,3]	Vaccinated at any time before the survey according to:			Vaccinated by appropriate age[3,4]
Vaccine	Vaccination card[1]	Mother's report	Either source		Vaccination card[1]	Mother's report	Either source	
BCG	75.9	21.6	97.5	97.0	66.6	30.7	97.3	96.1
DPT-HepB-Hib								
1	76.4	21.5	97.9	97.6	67.3	30.2	97.5	97.0
2	75.8	20.1	95.9	95.4	67.0	28.7	95.7	94.5
3	73.8	18.3	92.1	91.4	64.8	26.1	90.9	88.7
Polio								
0 (birth dose)	49.4	17.0	66.4	66.4	42.9	24.4	67.3	67.1
1	76.4	20.1	96.5	96.2	67.1	28.8	95.9	95.5
2	75.5	17.8	93.3	92.9	66.5	25.9	92.4	91.4
3	72.8	8.4	81.2	80.6	63.6	13.6	77.2	75.3
Pneumococcal								
1	76.3	21.3	97.6	97.4	66.8	29.7	96.5	95.8
2	75.6	19.9	95.5	95.0	66.2	27.9	94.2	93.1
3	72.0	17.8	89.8	89.2	62.8	24.9	87.7	86.1
Rotavirus								
1	75.4	20.1	95.4	95.2	65.5	27.8	93.3	92.3
2	72.7	17.9	90.6	89.6	62.9	25.8	88.7	85.8
Measles and rubella								
1	71.7	19.2	90.9	85.6	64.2	28.9	93.1	82.6
2	na	na	na	na	45.4	18.4	63.8	62.0
All basic vaccinations[5]	68.0	7.0	75.0	70.3	60.4	11.9	72.3	62.8
All age-appropriate vaccinations[6]	42.1	3.9	46.0	42.9	27.6	5.6	33.1	28.4
No vaccinations	0.1	1.3	1.3	na	0.1	1.4	1.5	na
Number of children	1,450	440	1,891	1,891	1,258	604	1,862	1,862

na = Not applicable
BCG = Bacille Calmette-Guérin
DPT = Diphtheria-pertussis-tetanus
HepB = Hepatitis B
Hib = *Haemophilus influenzae* type b
[1] Vaccination card, booklet, or other home-based record
[2] Received by age 12 months
[3] For children whose vaccination information is based on the mother's report, date of vaccination is not collected. The proportions of vaccinations given during the first and second years of life are assumed to be the same as for children with a written record of vaccination.
[4] Received by age 12 months for all vaccines except measles and rubella (MR) 2, which should be received by age 24 months
[5] BCG, three doses of DPT-HepB-Hib, three doses of oral polio vaccine (excluding polio vaccine given at birth), and one dose of MR vaccine
[6] For children age 12-23 months: BCG, three doses of DPT-HepB-Hib, four doses of oral polio vaccine, three doses of pneumococcal vaccine, two doses of rotavirus vaccine, and one dose of MR vaccine. For children age 24-35 months, all of the just-mentioned vaccinations plus a second dose of MR.

Table 10.3 Vaccinations by background characteristics

Percentage of children age 12-23 months and children age 24-35 months who received specific vaccines at any time before the survey (according to a vaccination card or the mother's report), percentage with all basic vaccinations, and percentage with all age-appropriate vaccinations, according to background characteristics, Zambia DHS 2018

	Children age 12-23 months:																		Children age 24-35 months:		
		DPT-HepB-Hib[1]			Polio[2]				Pneumococcal			Rotavirus		Measles and rubella (MR1)	All basic vaccinations[3]	All age-appropriate vaccinations[4]	No vaccinations	Number of children	Measles and rubella (MR2)	All age-appropriate vaccinations[5]	Number of children
Background characteristic	BCG	1	2	3	0 (birth dose)	1	2	3	1	2	3	1	2								
Sex																					
Male	97.4	98.2	96.5	91.6	66.1	96.5	93.1	81.7	97.8	95.5	89.7	95.7	91.0	91.7	75.9	46.9	1.1	961	66.5	34.1	907
Female	97.5	97.6	95.4	92.6	66.8	96.5	93.5	80.7	97.5	95.4	89.9	95.2	90.3	90.1	74.1	45.1	1.5	930	61.2	32.2	955
Birth order																					
1	97.8	98.1	95.9	92.1	72.6	95.6	92.2	80.3	97.3	95.6	90.1	95.3	91.4	93.4	76.3	52.0	0.9	469	68.0	37.3	450
2-3	98.5	98.5	96.6	94.1	70.2	97.7	95.0	82.8	98.3	96.4	92.4	96.4	92.8	92.7	76.7	50.4	1.1	645	62.5	32.8	653
4-5	97.0	98.1	96.5	92.1	63.2	95.7	92.3	82.4	98.1	95.6	88.3	95.8	89.0	88.4	75.2	42.3	1.3	405	65.8	31.8	413
6+	95.8	96.3	94.1	88.7	55.9	96.3	92.9	78.3	96.3	93.4	86.7	93.6	87.7	87.4	70.4	34.8	2.4	372	58.4	29.9	345
Vaccination card[6]																					
Seen	98.9	99.6	98.8	96.2	64.4	99.5	98.4	94.9	99.5	98.5	93.9	98.3	94.8	93.5	88.6	54.8	0.1	1,450	67.2	40.8	1,258
Not seen/no card	92.6	92.3	86.4	78.6	73.2	86.5	76.4	36.0	91.5	85.3	76.3	86.2	76.7	82.6	30.2	16.9	5.4	440	56.8	17.2	604
Residence																					
Urban	99.6	98.5	97.0	94.7	85.5	96.8	94.7	82.4	98.6	96.8	91.5	97.0	92.7	91.8	77.0	60.1	0.2	666	64.1	43.4	658
Rural	96.3	97.6	95.3	90.7	56.1	96.4	92.6	80.6	97.1	94.7	88.9	94.6	89.4	90.5	73.9	38.3	1.9	1,225	63.6	27.5	1,204
Province																					
Central	98.9	99.3	99.0	93.5	67.6	99.3	97.9	85.8	99.3	98.5	92.8	97.4	92.1	91.6	78.8	48.3	0.3	171	74.7	27.5	156
Copperbelt	98.9	98.2	96.6	95.6	87.9	96.8	94.3	91.4	98.2	95.7	93.3	96.8	92.2	88.2	82.6	69.1	0.0	241	68.5	49.8	215
Eastern	97.1	98.5	97.0	94.4	55.5	98.3	95.4	84.6	98.7	97.1	92.1	98.0	93.8	93.2	79.1	42.4	1.2	274	70.7	35.5	232
Luapula	97.3	98.5	97.5	91.3	70.5	98.6	95.3	76.4	97.9	96.3	90.3	95.3	88.5	90.8	66.7	42.5	1.0	174	66.2	30.8	176
Lusaka	99.7	98.2	96.7	94.6	90.6	95.7	93.1	76.6	99.3	97.8	89.1	98.0	93.7	94.7	72.9	58.4	0.3	267	68.7	46.9	304
Muchinga	93.4	95.2	92.3	86.8	51.2	93.7	88.4	76.0	95.1	91.1	86.3	91.1	88.4	85.4	67.9	33.9	4.3	113	59.9	27.6	123
Northern	96.2	96.2	93.2	88.7	53.8	97.0	92.4	81.7	95.7	92.8	85.8	94.4	88.7	88.5	76.2	43.0	3.0	155	51.5	24.6	176
North Western	98.1	98.1	94.7	90.6	66.0	96.4	91.7	81.3	96.3	92.9	88.3	92.6	90.8	87.2	74.7	43.7	1.9	109	59.2	23.8	102
Southern	98.0	98.9	98.1	93.0	51.8	95.0	93.9	79.0	98.8	96.8	90.9	97.4	91.4	94.5	74.9	29.4	0.8	257	57.6	26.7	263
Western	92.4	95.1	88.1	82.6	50.5	92.3	84.5	73.4	91.3	87.9	82.2	83.4	78.1	86.8	68.1	35.8	3.6	130	51.3	14.0	116
Mother's education																					
No education	89.7	92.1	89.2	83.2	47.6	90.7	87.9	75.2	91.3	89.7	82.4	88.5	84.5	80.3	66.2	31.3	7.3	182	48.9	18.5	196
Primary	97.4	98.1	95.2	90.7	60.6	96.1	92.3	80.7	97.7	94.5	88.8	95.3	88.8	90.1	73.3	40.0	1.0	966	60.7	29.3	952
Secondary	99.4	99.0	98.3	95.7	77.4	98.4	95.7	82.8	99.0	98.1	92.6	97.2	94.4	94.2	78.5	55.5	0.3	670	70.7	39.7	658
Higher	100.0	100.0	100.0	99.1	90.6	98.1	98.1	88.0	99.3	97.4	95.3	98.5	94.8	98.1	88.0	74.5	0.0	73	87.9	72.2	55
Wealth quintile																					
Lowest	94.7	96.9	94.1	88.4	51.5	95.7	90.7	78.3	95.4	93.6	87.7	93.9	88.5	88.5	71.6	35.5	2.5	483	53.2	19.7	479
Second	97.3	97.5	95.3	90.6	54.8	96.4	94.2	81.2	97.4	95.0	89.0	94.7	90.5	91.0	74.2	35.7	2.1	414	67.6	34.2	369
Middle	97.2	98.2	96.4	93.0	65.0	96.8	93.3	84.5	98.4	95.5	88.8	94.6	87.7	90.7	77.5	46.4	1.1	342	65.3	28.7	355
Fourth	99.8	98.4	98.4	94.6	81.4	98.1	95.6	83.9	98.4	97.7	94.3	97.7	94.3	90.5	76.3	57.6	0.0	348	64.5	38.7	375
Highest	99.6	99.0	96.4	96.0	90.5	95.8	93.7	79.2	99.5	96.5	90.4	97.4	93.2	95.6	77.3	62.9	0.1	304	74.1	52.6	284
Total	97.5	97.9	95.9	92.1	66.4	96.5	93.3	81.2	97.6	95.5	89.8	95.4	90.6	90.9	75.0	46.0	1.3	1,891	63.8	33.1	1,862

Note: Children are considered to have received the vaccine if it was either written on the child's vaccination card or reported by the mother. For children whose vaccination information is based on the mother's report, date of vaccination is not collected. The proportions of vaccinations given during the first and second years of life are assumed to be the same as for children with a written record of vaccination.
BCG = Bacille Calmette-Guérin
DPT = Diphtheria-pertussis-tetanus
HepB = Hepatitis B
Hib = *Haemophilus influenzae* type b
[1] DPT-HepB-Hib is sometimes referred to as pentavalent.
[2] Polio 0 is the polio vaccination given at birth.
[3] Basic vaccinations are defined as BCG, three doses of DPT-HepB-Hib, three doses of oral polio vaccine (excluding polio vaccine given at birth), and one dose of measles and rubella (MR) vaccine.
[4] BCG, three doses of DPT-HepB-Hib, four doses of oral polio vaccine, three doses of pneumococcal vaccine, two doses of rotavirus vaccine, and one dose of MR vaccine
[5] BCG, three doses of DPT-HepB-Hib, four doses of oral polio vaccine, three doses of pneumococcal vaccine, two doses of rotavirus vaccine, and two doses of MR vaccine
[6] Vaccination card, booklet, or other home-based record

Table 10.4 Possession and observation of vaccination cards, according to background characteristics

Percentage of children age 12-23 months and children age 24-35 months who ever had a vaccination card, and percentage with a vaccination card seen, according to background characteristics, Zambia DHS 2018

Background characteristic	Children age 12-23 months			Children age 24-35 months		
	Percentage who ever had a vaccination card[1]	Percentage with a vaccination card seen[1]	Number of children	Percentage who ever had a vaccination card[1]	Percentage with a vaccination card seen[1]	Number of children
Sex						
Male	97.7	78.5	961	97.1	68.7	907
Female	97.2	74.9	930	97.2	66.5	955
Birth order						
1	98.2	74.2	469	98.2	66.6	450
2-3	97.4	79.6	645	98.3	67.4	653
4-5	98.2	77.8	405	97.2	71.7	413
6+	95.8	73.7	372	93.6	64.3	345
Residence						
Urban	98.6	79.2	666	98.6	68.2	658
Rural	96.7	75.4	1,225	96.3	67.2	1,204
Province						
Central	98.1	83.8	171	97.1	61.1	156
Copperbelt	99.1	80.0	241	97.8	72.1	215
Eastern	98.4	78.1	274	99.0	71.2	232
Luapula	93.2	67.9	174	89.4	61.5	176
Lusaka	97.8	75.6	267	99.3	73.7	304
Muchinga	95.7	76.3	113	92.2	60.1	123
Northern	97.0	75.4	155	98.6	65.1	176
North Western	94.5	76.8	109	98.1	72.8	102
Southern	99.7	79.1	257	98.8	64.5	263
Western	96.2	69.2	130	96.4	67.8	116
Mother's education						
No education	89.4	65.9	182	89.4	61.0	196
Primary	97.8	75.4	966	97.2	67.1	952
Secondary	98.7	81.7	670	99.2	69.6	658
Higher	100.0	74.9	73	98.9	74.8	55
Wealth quintile						
Lowest	95.5	74.2	483	93.8	62.4	479
Second	97.1	74.2	414	98.1	69.5	369
Middle	97.9	79.2	342	97.7	70.7	355
Fourth	98.7	78.9	348	97.9	68.2	375
Highest	98.7	78.9	304	99.8	69.0	284
Total	97.4	76.7	1,891	97.1	67.6	1,862

[1] Vaccination card, booklet, or other home-based record

Table 10.5 Prevalence and treatment of symptoms of ARI

Among children under age 5, percentage who had symptoms of acute respiratory infection (ARI) in the 2 weeks preceding the survey, and among children with symptoms of ARI in the 2 weeks preceding the survey, percentage for whom advice or treatment was sought, according to background characteristics, Zambia DHS 2018

	Among children under age 5:		Among children under age 5 with symptoms of ARI:		
Background characteristic	Percentage with symptoms of ARI[1]	Number of children	Percentage for whom advice or treatment was sought[2]	Percentage for whom treatment was sought same or next day	Number of children
Age in months					
<6	1.1	1,036	*	*	11
6-11	2.3	924	*	*	21
12-23	2.8	1,891	(78.4)	(39.8)	52
24-35	2.0	1,862	(83.0)	(57.1)	38
36-47	1.3	1,866	(74.9)	(47.5)	23
48-59	0.9	1,782	*	*	15
Sex					
Male	1.6	4,666	81.1	38.8	75
Female	1.8	4,695	71.6	41.8	86
Mother's smoking status					
Smokes cigarettes/ tobacco	9.1	70	*	*	6
Does not smoke	1.7	9,291	76.2	40.7	155
Cooking fuel					
Electricity	0.8	646	*	*	5
Solar power	(0.0)	26	*	*	0
Kerosene	*	0	*	*	0
Coal/lignite	*	2	*	*	0
Charcoal	1.2	3,516	(91.4)	(47.5)	43
Wood	2.2	5,169	69.1	36.9	113
Animal dung	*	0	*	*	0
Other	*	1	*	*	0
Residence					
Urban	1.2	3,307	(88.9)	(53.7)	39
Rural	2.0	6,054	71.9	36.1	122
Province					
Central	1.5	819	*	*	12
Copperbelt	0.9	1,166	*	*	10
Eastern	1.4	1,266	*	*	17
Luapula	2.3	877	*	*	21
Lusaka	0.3	1,446	*	*	5
Muchinga	0.8	569	*	*	5
Northern	3.8	846	(56.9)	(27.8)	32
North Western	0.0	517	*	*	0
Southern	3.2	1,242	*	*	39
Western	3.3	613	(84.2)	(33.9)	20
Mother's education					
No education	2.1	951	*	*	20
Primary	1.6	4,763	64.4	26.5	78
Secondary	1.8	3,276	(87.7)	(52.7)	59
Higher	1.2	371	*	*	5
Wealth quintile					
Lowest	2.4	2,343	69.4	35.5	57
Second	1.9	2,079	(79.7)	(41.0)	40
Middle	1.2	1,735	(59.7)	(28.9)	21
Fourth	1.4	1,733	*	*	25
Highest	1.2	1,469	*	*	18
Total	1.7	9,361	76.0	40.4	161

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Symptoms of ARI include short, rapid breathing that is chest-related and/or difficult breathing that is chest-related.
[2] Includes advice or treatment from the public and private health sectors, pharmacies, shops, markets, and itinerant drug sellers. Excludes advice or treatment from a traditional practitioner.

Table 10.6 Source of advice or treatment for children with symptoms of ARI

Percentage of children under age 5 with symptoms of ARI in the 2 weeks preceding the survey for whom advice or treatment was sought from specific sources, and among children under age 5 with symptoms of ARI in the 2 weeks preceding the survey for whom advice or treatment was sought, percentage for whom advice or treatment was sought from specific sources, Zambia DHS 2018

	Percentage for whom advice or treatment was sought from each source:	
Source	Among children with symptoms of ARI[1]	Among children with symptoms of ARI for whom advice or treatment was sought[1]
Public sector	**67.3**	**88.5**
Government hospital	5.7	7.5
Government health centre	50.1	65.9
Government health post	10.4	13.7
Fieldworker/CHW	1.1	1.4
Private sector	**8.4**	**11.0**
Private hospital/clinic	1.4	1.8
Mission hospital/clinic	0.4	0.5
Other private medical sector	6.6	8.7
Other private sector	**0.8**	**1.1**
Shop	0.8	1.1
Number of children	161	122

CHW = Community health worker
[1] Symptoms of ARI include short, rapid breathing that is chest-related and/or difficult breathing that is chest-related.

Table 10.7 Prevalence and treatment of fever

Among children under age 5, percentage who had a fever in the 2 weeks preceding the survey, and among children with a fever in the 2 weeks preceding the survey, percentage for whom advice or treatment was sought and percentage who received antibiotics as treatment, according to background characteristics, Zambia DHS 2018

	Among children under age 5:		Among children under age 5 with fever:			
Background characteristic	Percentage with fever	Number of children	Percentage for whom advice or treatment was sought[1]	Percentage for whom treatment was sought same or next day	Percentage who took antibiotic drugs	Number of children with fever
Age in months						
<6	10.3	1,036	76.7	49.2	36.0	106
6-11	24.9	924	80.5	48.3	42.8	230
12-23	20.4	1,891	74.5	40.0	36.4	385
24-35	17.9	1,862	80.6	51.8	30.2	333
36-47	12.9	1,866	76.4	53.4	38.6	240
48-59	10.3	1,782	73.8	46.2	18.1	184
Sex						
Male	16.4	4,666	79.4	51.1	35.7	766
Female	15.2	4,695	74.9	43.8	32.2	712
Residence						
Urban	12.9	3,307	75.9	44.6	50.0	426
Rural	17.4	6,054	77.7	48.8	27.6	1,052
Province						
Central	11.0	819	77.6	44.7	40.5	90
Copperbelt	15.1	1,166	72.0	37.4	41.9	177
Eastern	20.2	1,266	84.9	59.6	44.9	256
Luapula	30.1	877	85.5	46.3	15.1	264
Lusaka	9.0	1,446	71.8	46.7	42.4	130
Muchinga	14.2	569	79.3	59.7	33.2	81
Northern	17.8	846	66.9	45.8	23.8	150
North Western	14.6	517	83.4	59.4	24.3	76
Southern	10.0	1,242	71.3	37.2	36.8	124
Western	21.3	613	70.0	40.9	43.0	131
Mother's education						
No education	17.2	951	77.5	50.7	25.1	164
Primary	16.9	4,763	75.0	45.7	29.6	806
Secondary	13.9	3,276	81.3	48.5	42.8	456
Higher	14.2	371	74.2	59.3	54.4	53
Wealth quintile						
Lowest	20.3	2,343	73.6	45.5	27.7	476
Second	17.9	2,079	79.4	52.1	25.2	372
Middle	12.8	1,735	84.2	49.9	36.3	222
Fourth	13.6	1,733	75.4	41.8	48.8	236
Highest	11.7	1,469	75.7	48.5	47.4	172
Total	15.8	9,361	77.2	47.6	34.0	1,478

[1] Includes advice or treatment from the public and private health sectors, pharmacies, shops, markets, and itinerant drug sellers. Excludes advice or treatment from a traditional practitioner.

Table 10.8 Prevalence and treatment of diarrhoea

Percentage of children under age 5 who had diarrhoea in the 2 weeks preceding the survey, and among children with diarrhoea in the 2 weeks preceding the survey, percentage for whom advice or treatment was sought and percentage for whom advice or treatment was sought within 2 days, according to background characteristics, Zambia DHS 2018

Background characteristic	Percentage with diarrhoea	Number of children	Among children under age 5 with diarrhoea: Percentage for whom advice or treatment was sought[1]	Among children under age 5 with diarrhoea: Percentage for whom advice or treatment was sought within 2 days	Among children under age 5 with diarrhoea: Number of children with diarrhoea
Age in months					
<6	10.4	1,036	50.9	37.6	108
6-11	29.7	924	73.7	65.9	275
12-23	27.9	1,891	76.5	67.6	528
24-35	15.6	1,862	62.9	57.0	291
36-47	7.7	1,866	64.2	59.1	144
48-59	4.3	1,782	64.0	59.7	77
Sex					
Male	15.4	4,666	68.5	61.8	719
Female	15.0	4,695	70.1	61.2	703
Source of drinking water[2]					
Improved	14.1	6,352	68.0	61.7	898
Unimproved	17.4	3,008	71.6	61.3	524
Type of toilet facility[3]					
Improved sanitation facility	14.2	4,728	66.4	59.7	673
Unimproved facility	15.9	3,564	71.4	63.9	568
Open defecation	16.9	1,070	73.8	61.1	181
Residence					
Urban	14.9	3,307	60.9	54.5	493
Rural	15.3	6,054	73.8	65.3	929
Province					
Central	10.7	819	78.5	65.4	88
Copperbelt	14.0	1,166	66.9	60.6	164
Eastern	14.7	1,266	78.5	73.3	186
Luapula	17.3	877	80.0	70.3	152
Lusaka	13.8	1,446	61.3	55.8	200
Muchinga	18.4	569	61.6	54.1	105
Northern	14.0	846	69.3	61.1	118
North Western	15.2	517	75.2	69.3	78
Southern	15.5	1,242	56.6	48.6	192
Western	22.7	613	74.0	62.9	139
Mother's education					
No education	17.2	951	60.3	50.9	163
Primary	14.8	4,763	72.9	65.6	703
Secondary	15.9	3,276	66.9	58.6	521
Higher	9.3	371	(75.0)	(73.7)	34
Wealth quintile					
Lowest	17.2	2,343	73.5	65.8	403
Second	15.0	2,079	74.6	64.0	311
Middle	15.1	1,735	68.3	60.8	262
Fourth	14.8	1,733	61.8	57.3	256
Highest	13.0	1,469	63.3	55.3	190
Total	15.2	9,361	69.3	61.5	1,422

Note: Figures in parentheses are based on 25-49 unweighted cases.
[1] Includes advice or treatment from the public and private health sectors, pharmacies, shops, markets, and itinerant drug sellers. Excludes advice or treatment from a traditional practitioner.
[2] See Table 2.1.1 for definition of categories.
[3] See Table 2.3.1 for definition of categories.

Table 10.9 Source of advice or treatment for children with diarrhoea

Percentage of children under age 5 with diarrhoea in the 2 weeks preceding the survey for whom advice or treatment was sought from specific sources; among children under age 5 with diarrhoea in the 2 weeks preceding the survey for whom advice or treatment was sought, percentage for whom advice or treatment was sought from specific sources; and among children with diarrhoea who received ORS, percentage for whom advice or treatment was sought from specific sources, Zambia DHS 2018

	Percentage for whom advice or treatment was sought from each source:		
Source	Among children with diarrhoea	Among children with diarrhoea for whom advice or treatment was sought	Among children with diarrhoea who received ORS[1]
Public sector	**64.9**	**93.2**	**83.2**
Government hospital	4.1	6.0	5.4
Government health centre	46.2	66.5	59.8
Government health post	12.7	18.2	16.2
Mobile hospital/clinic	0.3	0.4	0.4
Fieldworker/CHW	1.8	2.5	1.8
Other public sector	0.2	0.3	0.3
Private sector	**3.9**	**5.6**	**4.4**
Private hospital/clinic	0.8	1.1	0.7
Mission hospital/clinic	1.4	2.1	2.1
Pharmacy	1.1	1.5	1.1
Private doctor	0.1	0.2	0.2
Fieldworker/CHW	0.5	0.7	0.4
Other private sector	**0.7**	**1.1**	**0.3**
Shop	0.3	0.5	0.0
Traditional practitioner	0.3	0.5	0.2
Market	0.1	0.1	0.1
Other	0.2	0.3	0.0
Number of children	1,422	989	950

ORS = Oral rehydration salts
CHW = Community health worker
[1] Fluids from ORS packet

Table 10.10 Feeding practices during diarrhoea

Percent distribution of children under age 5 who had diarrhoea in the 2 weeks preceding the survey by amount of liquids and food offered compared with normal practice, according to background characteristics, Zambia DHS 2018

Background characteristic	Amount of liquids given							Amount of food given								Number of children with diarrhoea
	More	Same as usual	Some-what less	Much less	None	Don't know	Total	More	Same as usual	Some-what less	Much less	None	Never gave food	Don't know	Total	
Age in months																
<6	34.9	48.1	7.4	4.1	5.1	0.4	100.0	18.4	25.5	3.9	4.3	1.3	46.5	0.0	100.0	108
6-11	31.4	38.9	17.6	9.1	3.0	0.0	100.0	9.1	43.1	21.2	16.9	6.9	2.9	0.0	100.0	275
12-23	30.2	35.6	21.4	12.2	0.5	0.1	100.0	12.2	34.1	29.4	17.9	5.7	0.7	0.0	100.0	528
24-35	33.4	27.8	24.9	11.5	0.3	2.1	100.0	6.5	37.4	32.4	19.5	2.5	0.0	1.7	100.0	291
36-47	28.4	38.4	17.3	12.5	0.8	2.5	100.0	9.7	41.8	23.9	19.9	2.4	0.8	1.4	100.0	144
48-59	29.8	34.0	20.2	15.6	0.0	0.4	100.0	6.5	54.0	21.3	16.1	2.1	0.0	0.0	100.0	77
Sex																
Male	29.1	37.8	21.1	10.0	0.8	1.2	100.0	10.5	37.9	26.2	15.4	4.6	4.6	0.6	100.0	719
Female	33.4	33.7	18.6	12.2	1.8	0.4	100.0	10.2	37.5	24.7	18.8	4.2	4.2	0.4	100.0	703
Breastfeeding status																
Breastfeeding	30.3	40.3	18.0	9.2	2.0	0.3	100.0	10.9	36.4	23.5	14.7	6.2	8.3	0.0	100.0	724
Not breastfeeding	32.2	31.1	21.8	13.1	0.6	1.3	100.0	9.7	39.2	27.6	19.5	2.6	0.4	1.0	100.0	698
Residence																
Urban	32.4	41.3	17.2	7.2	0.2	1.6	100.0	15.0	42.2	24.1	11.5	1.4	5.0	0.9	100.0	493
Rural	30.6	32.8	21.2	13.1	1.9	0.3	100.0	7.9	35.4	26.2	20.1	6.0	4.1	0.3	100.0	929
Province																
Central	19.2	32.9	32.8	13.0	2.2	0.0	100.0	4.7	27.6	33.1	17.0	16.6	1.0	0.0	100.0	88
Copperbelt	31.4	46.9	14.5	7.2	0.0	0.0	100.0	11.9	54.7	23.1	9.9	0.0	0.2	0.0	100.0	164
Eastern	44.3	18.9	20.3	16.5	0.0	0.0	100.0	8.7	30.2	28.6	23.1	8.6	0.8	0.0	100.0	186
Luapula	25.7	44.2	20.3	9.5	0.0	0.3	100.0	1.7	40.0	24.6	20.1	5.9	7.7	0.0	100.0	152
Lusaka	38.7	33.3	19.1	6.2	0.0	2.6	100.0	19.0	35.0	27.4	11.9	0.2	4.6	1.8	100.0	200
Muchinga	62.9	23.7	7.1	3.3	3.0	0.0	100.0	19.1	28.6	22.7	23.7	2.8	3.2	0.0	100.0	105
Northern	33.7	36.8	22.0	7.2	0.0	0.3	100.0	9.0	50.4	25.9	4.9	4.8	4.9	0.0	100.0	118
North Western	27.7	40.5	13.4	18.3	0.0	0.0	100.0	15.8	45.1	13.4	23.8	0.7	1.2	0.0	100.0	78
Southern	22.6	34.5	25.9	11.5	4.5	1.0	100.0	11.7	34.2	28.5	12.0	2.1	10.6	1.0	100.0	192
Western	4.3	48.7	21.1	20.3	3.4	2.2	100.0	0.7	32.5	22.0	30.4	6.8	6.5	1.2	100.0	139
Mother's education																
No education	30.7	39.6	17.6	11.3	0.5	0.3	100.0	4.6	37.9	17.4	24.9	5.2	10.1	0.0	100.0	163
Primary	29.0	36.7	19.8	12.7	1.4	0.4	100.0	8.5	38.6	25.0	18.5	6.2	3.1	0.1	100.0	703
Secondary	33.4	33.5	21.2	9.0	1.4	1.5	100.0	12.9	36.5	29.2	13.4	2.1	4.7	1.2	100.0	521
Higher	(46.8)	(32.7)	(12.3)	(8.2)	(0.0)	(0.0)	100.0	(37.7)	(38.3)	(18.2)	(5.7)	(0.0)	(0.0)	(0.0)	100.0	34
Wealth quintile																
Lowest	31.2	36.5	19.0	12.1	1.2	0.0	100.0	6.1	38.2	25.6	19.3	7.7	3.1	0.0	100.0	403
Second	30.6	35.3	19.5	11.8	2.0	0.7	100.0	10.3	35.5	24.0	20.5	4.5	4.6	0.6	100.0	311
Middle	29.3	35.1	18.4	13.3	1.7	2.1	100.0	10.4	34.7	23.7	17.3	3.2	8.9	1.8	100.0	262
Fourth	36.1	32.5	22.3	7.5	1.2	0.4	100.0	14.3	41.5	24.6	14.7	2.6	2.3	0.0	100.0	256
Highest	28.4	40.2	20.8	9.4	0.0	1.2	100.0	14.1	39.4	31.1	9.9	1.4	3.8	0.3	100.0	190
Total	31.2	35.8	19.9	11.1	1.3	0.8	100.0	10.3	37.7	25.5	17.1	4.4	4.4	0.5	100.0	1,422

Note: It is recommended that children be given more liquids to drink during diarrhoea and that food not be reduced. Figures in parentheses are based on 25-49 unweighted cases.

Table 10.11 Oral rehydration therapy, zinc, and other treatments for diarrhoea

Among children under age 5 who had diarrhoea in the 2 weeks preceding the survey, percentage given fluid from an ORS packet, recommended homemade fluids (RHF), ORS or RHF, zinc, ORS and zinc, ORS or increased fluids, oral rehydration therapy (ORT), continued feeding and ORT, and other treatments, and percentage given no treatment, according to background characteristics, Zambia DHS 2018

	Percentage of children with diarrhoea who were given:														
									Other treatments						
Background characteristic	Fluid from ORS packets	Recommended home fluids (RHF)	Either ORS or RHF	Zinc	ORS and zinc	ORS or increased fluids	ORT (ORS, RHF, or increased fluids)	Continued feeding and ORT[1]	Anti-biotic drugs	Anti-motility drugs	Intra-venous solution	Home remedy/ other	Don't know	No treatment	Number of children with diarrhoea
Age in months															
<6	38.2	7.5	39.3	21.7	16.5	62.0	63.1	34.1	7.2	0.9	0.0	9.0	0.0	29.6	108
6-11	65.7	17.0	67.8	40.1	35.4	72.6	74.2	52.0	15.1	6.7	0.5	9.5	0.0	18.4	275
12-23	72.4	24.1	75.9	41.0	35.9	79.1	81.1	60.1	15.7	7.2	0.2	11.5	0.2	12.2	528
24-35	69.8	21.3	73.7	42.8	36.8	82.8	85.8	65.6	17.9	6.3	0.3	10.0	0.6	7.5	291
36-47	63.6	14.5	63.6	35.8	31.3	70.6	70.6	51.4	21.2	3.0	0.0	10.6	0.0	19.8	144
48-59	66.9	19.5	67.9	28.4	26.5	77.5	77.5	64.7	19.8	10.4	0.0	9.1	0.0	15.3	77
Sex															
Male	67.7	19.5	70.0	39.0	34.6	75.4	76.7	56.6	18.0	5.4	0.2	10.9	0.0	16.2	719
Female	65.8	19.8	68.9	38.0	32.4	77.3	79.5	57.5	14.3	7.0	0.3	9.9	0.4	13.1	703
Residence															
Urban	69.8	21.5	72.4	41.5	38.5	79.0	80.9	66.7	17.1	4.2	0.6	7.0	0.0	13.6	493
Rural	65.2	18.7	67.9	36.9	30.9	75.0	76.6	52.0	15.7	7.2	0.1	12.2	0.3	15.2	929
Province															
Central	68.8	36.8	71.1	52.4	44.1	75.8	77.5	48.9	16.9	8.3	0.7	14.2	0.0	7.7	88
Copperbelt	66.9	27.5	68.9	37.9	35.1	74.4	76.3	68.0	19.6	0.0	0.0	1.9	0.0	16.4	164
Eastern	66.4	18.6	72.9	39.5	32.9	80.4	84.8	55.9	28.8	2.6	0.0	14.5	0.6	9.8	186
Luapula	71.3	16.3	74.4	49.1	43.3	75.8	77.1	46.4	4.7	6.3	0.4	9.3	0.0	15.7	152
Lusaka	80.7	23.7	83.7	49.7	46.8	88.4	90.7	72.2	15.9	4.8	0.0	9.8	0.0	8.9	200
Muchinga	54.4	6.3	57.5	31.3	25.6	83.4	84.1	58.1	19.4	5.1	0.5	11.5	0.0	11.0	105
Northern	66.7	14.9	68.0	25.8	23.1	71.8	73.1	63.2	7.9	16.7	0.0	7.0	0.0	17.0	118
North Western	62.3	20.3	62.7	35.4	30.9	74.7	75.0	59.9	14.8	0.7	0.4	17.9	0.0	13.2	78
Southern	55.0	15.7	56.3	29.3	22.7	66.6	67.2	53.3	11.0	8.3	0.3	13.7	1.0	25.0	192
Western	69.1	18.3	70.7	32.3	27.4	69.8	71.4	38.7	20.1	10.7	0.7	8.0	0.0	18.0	139
Mother's education															
No education	60.0	20.0	62.1	32.2	28.9	70.2	71.4	43.9	14.5	4.5	0.0	8.8	0.0	23.4	163
Primary	65.9	17.7	69.5	36.2	30.1	75.3	77.7	55.1	17.2	7.1	0.4	10.8	0.2	13.7	703
Secondary	70.2	22.2	71.9	42.1	38.0	79.5	80.7	62.9	13.3	5.6	0.1	10.8	0.4	13.7	521
Higher	(64.9)	(19.4)	(64.9)	(61.8)	(57.9)	(79.6)	(79.6)	(73.9)	(46.0)	(4.3)	(0.0)	(3.4)	(0.0)	(8.1)	34
Wealth quintile															
Lowest	64.1	16.5	66.7	39.4	30.7	73.3	75.3	49.8	15.0	6.5	0.0	8.0	0.3	15.1	403
Second	67.8	15.5	69.9	32.3	30.0	78.0	78.8	55.8	16.4	9.4	0.3	18.3	0.6	14.3	311
Middle	62.1	21.3	65.0	34.6	30.6	73.1	74.7	53.3	16.8	5.2	0.8	9.4	0.0	16.8	262
Fourth	67.6	25.6	71.9	38.2	32.9	78.6	82.2	65.1	15.9	2.5	0.0	7.5	0.0	13.7	256
Highest	76.2	23.2	77.2	52.5	50.2	81.6	82.2	69.0	17.8	6.4	0.3	7.9	0.0	13.0	190
Total	66.8	19.7	69.4	38.5	33.5	76.4	78.1	57.1	16.2	6.2	0.2	10.4	0.2	14.7	1,422

Note: Figures in parentheses are based on 25-49 unweighted cases.
ORS = Oral rehydration salts
[1] Continued feeding includes children who were given more, the same as usual, or somewhat less food during the diarrhoea episode.

Table 10.12 Knowledge of ORS packets

Percentage of women age 15-49 with a live birth in the 5 years preceding the survey who know about ORS packets for treatment of diarrhoea, according to background characteristics, Zambia DHS 2018

Background characteristic	Percentage of women who know about ORS packets	Number of women
Age		
15-19	95.9	719
20-24	97.9	1,887
25-34	98.6	3,020
35-49	98.0	1,699
Residence		
Urban	99.1	2,811
Rural	97.4	4,513
Province		
Central	98.4	640
Copperbelt	98.8	969
Eastern	98.9	983
Luapula	96.3	640
Lusaka	99.2	1,219
Muchinga	91.6	433
Northern	97.1	615
North Western	99.1	404
Southern	99.5	946
Western	96.7	477
Education		
No education	95.5	689
Primary	97.7	3,595
Secondary	99.0	2,726
Higher	99.2	316
Wealth quintile		
Lowest	96.2	1,676
Second	97.7	1,527
Middle	98.0	1,390
Fourth	99.3	1,471
Highest	99.3	1,262
Total	98.0	7,325

ORS = Oral rehydration salts

Table 10.13 Disposal of children's stools

Percent distribution of youngest children under age 2 living with their mother by the manner of disposal of the child's last faecal matter, and percentage of children whose stools are disposed of appropriately, according to background characteristics, Zambia DHS 2018

Background characteristic	Manner of disposal of children's stools							Total	Percentage of children whose stools are disposed of appropri-ately[1]	Number of children
	Child used toilet or latrine	Put/rinsed into toilet or latrine	Buried	Put/rinsed into drain or ditch	Thrown into garbage	Left in the open	Other			
Age of child in months										
0-1	1.0	63.6	2.6	17.1	8.4	1.3	6.1	100.0	67.1	366
2-3	0.4	56.8	1.9	20.2	13.7	1.0	6.1	100.0	59.0	308
4-5	0.8	74.1	1.7	10.4	8.6	1.3	3.2	100.0	76.6	345
6-8	0.7	70.3	4.7	7.8	12.5	0.7	3.2	100.0	75.8	445
9-11	0.9	74.6	5.0	9.7	6.4	0.9	2.5	100.0	80.5	468
12-17	1.4	75.0	6.9	5.5	8.7	0.8	1.7	100.0	83.3	931
18-23	2.7	77.6	6.3	4.2	7.3	0.9	1.1	100.0	86.6	886
6-23	1.6	75.0	6.0	6.2	8.5	0.8	1.9	100.0	82.7	2,730
Type of toilet facility[2]										
Improved sanitation facility	1.6	79.3	0.8	5.2	9.7	0.4	3.1	100.0	81.7	1,906
Unimproved facility	1.4	77.7	2.9	9.3	5.8	0.9	1.9	100.0	82.1	1,398
Open defecation	0.5	25.3	29.2	22.4	15.6	3.3	3.8	100.0	55.0	445
Residence										
Urban	2.4	82.2	0.9	5.4	7.7	0.0	1.3	100.0	85.6	1,289
Rural	0.9	67.1	7.0	10.5	9.6	1.4	3.5	100.0	75.0	2,461
Province										
Central	1.7	71.5	1.2	7.9	15.2	0.7	1.7	100.0	74.5	329
Copperbelt	2.0	84.8	0.5	5.1	6.2	0.0	1.4	100.0	87.3	458
Eastern	1.3	66.3	2.6	14.0	12.5	1.9	1.3	100.0	70.2	543
Luapula	0.0	82.5	0.8	8.1	1.5	0.0	7.1	100.0	83.3	357
Lusaka	3.3	76.3	0.7	7.3	10.8	0.0	1.6	100.0	80.3	535
Muchinga	3.7	69.0	4.3	4.5	15.1	2.6	0.7	100.0	77.1	217
Northern	0.6	78.8	0.2	7.0	5.1	1.2	7.3	100.0	79.5	336
North Western	0.6	87.5	1.7	3.5	2.3	0.6	3.8	100.0	89.9	207
Southern	0.2	70.1	7.1	10.5	9.4	1.9	0.7	100.0	77.4	507
Western	0.0	28.2	41.9	16.0	8.8	0.4	4.8	100.0	70.1	260
Mother's education										
No education	2.3	60.0	10.3	11.1	10.6	0.8	4.9	100.0	72.6	357
Primary	1.1	70.2	5.5	10.4	8.3	1.2	3.3	100.0	76.9	1,902
Secondary	1.3	78.9	3.1	6.5	8.1	0.7	1.4	100.0	83.4	1,347
Higher	2.9	68.2	1.3	3.1	21.5	0.0	3.0	100.0	72.4	144
Wealth quintile										
Lowest	0.9	58.8	9.8	13.7	11.1	1.7	3.9	100.0	69.5	960
Second	1.2	71.4	5.7	7.7	8.3	1.7	4.0	100.0	78.3	852
Middle	0.6	75.6	5.1	10.0	6.5	0.6	1.6	100.0	81.3	700
Fourth	1.1	85.1	0.9	5.3	5.5	0.0	2.1	100.0	87.1	643
Highest	3.7	77.7	0.2	4.6	12.7	0.0	1.1	100.0	81.6	594
Total	1.4	72.3	4.9	8.8	8.9	0.9	2.8	100.0	78.6	3,749

[1] Children's stools are considered to be disposed of appropriately if the child used a toilet or latrine, if the faecal matter was put/rinsed into a toilet or latrine, or if it was buried.
[2] See Table 2.3.1 for definition of categories.

NUTRITION OF CHILDREN AND WOMEN 11

Key Findings

- ***Nutritional status of children:*** Thirty-five percent of children under age 5 are stunted (short for their age), 4% are wasted (thin for their height), 12% are underweight (thin for their age), and 5% are overweight (heavy for their height).
- ***Breastfeeding:*** Almost all children (98%) born in the 2 years before the survey were breastfed at some point. Seven in 10 children age 0-5 months are exclusively breastfed.
- ***Minimum acceptable diet:*** Overall, 13% of children age 6-23 months were fed a minimum acceptable diet in the 24 hours before the survey.
- ***Anaemia:*** The prevalence of anaemia in children age 6-59 months is 58%. One-third (31%) of women age 15-49 are anaemic.

To accelerate the reduction of malnutrition, the Government of the Republic of Zambia has prioritised nutrition in national development policies and plans such as the National Food and Nutrition Policy (2006), the National Food and Nutrition Strategic Plan 2017-2021 and the National Health and Strategic Plan 2017-2021. At the programmatic level, several programmes and strategies have been put in place. One measure to improve nutrition in the country was the launch of the first 1,000 Most Critical Days Programme. This programme is aimed at operationalising the first strategic direction of the National Food and Nutrition Strategy, whose efforts prioritise the strengthening and expansion of interventions aimed at preventing stunting in children under age 2.
In order to efficiently address nutritional problems, the government encourages investment in well-tested, low-cost, and effective nutrition interventions as the best strategy to save lives and enhance human development.

This chapter reports on nutritional status and anaemia among children and women. It also reports on infant and young child feeding practices, including breastfeeding and complementary feeding, as well as micronutrient supplementation and deworming for children and pregnant women. Anthropometry measurements for adults were not included in the survey.

11.1 NUTRITIONAL STATUS OF CHILDREN

The distribution of height and weight among children under age 5 was compared against the WHO Child Growth Standards reference population (WHO 2006). A well-nourished population will be similar to the reference population, while a poorly nourished population will differ from the reference population. Three indices—height-for-age, weight-for-height, and weight-for-age—can be expressed in standard deviation units (Z-scores) from the median of the reference population, with values greater than two standard deviations from the median of the WHO Child Growth Standards used to define malnutrition.

Stunting, or low height-for-age, is a sign of chronic undernutrition that reflects failure to receive adequate nutrition over a long period of time. The most direct causes of stunting are inadequate nutrition (not eating

enough or eating foods that lack growth-promoting nutrients) and recurrent infections or chronic diseases that lead to poor nutrient intake, absorption, and utilisation.

Wasting, or low weight-for-height, is a measure of acute undernutrition and represents the failure to receive adequate nutrition in the period immediately before the survey. Wasting may result from inadequate food intake or from a recent episode of illness or infection causing weight loss.

Overweight, or high weight-for-height, is a measure of overnutrition and results from an imbalance between energy consumed (too much) and energy expended (too little).

Underweight, or low weight-for-age, is a composite index of weight-for-height and height-for-age reflecting both acute (wasting) and chronic (stunting) undernutrition.

Stunting (assessed via height-for-age)

Height-for-age is a measure of linear growth retardation and cumulative growth deficits. Children whose height-for-age Z-score is below minus two standard deviations (-2 SD) from the median of the reference population are considered short for their age (stunted), or chronically undernourished. Children who are below minus three standard deviations (-3 SD) are considered severely stunted.

Sample: Children under age 5

Wasting (assessed via weight-for-height)

The weight-for-height index measures body mass in relation to body height or length and describes acute nutritional status. Children whose Z-score is below minus two standard deviations (-2 SD) from the median of the reference population are considered thin (wasted), or acutely undernourished. Children whose weight-for-height Z-score is below minus three standard deviations (-3 SD) from the median of the reference population are considered severely wasted.

Sample: Children under age 5

Underweight (assessed via weight-for-age)

Weight-for-age is a composite index of height-for-age and weight-for-height. It takes into account both acute and chronic undernutrition. Children whose weight-for-age Z-score is below minus two standard deviations (-2 SD) from the median of the reference population are classified as underweight. Children whose weight-for-age Z-score is below minus three standard deviations (-3 SD) from the median are considered severely underweight.

Sample: Children under age 5

Overweight (assessed via weight-for-height)

Children whose weight-for-height Z-score is more than 2 standard deviations (+2 SD) above the median of the reference population are considered overweight.

Sample: Children under age 5

The means of the Z-scores for height-for-age, weight-for-height, and weight-for-age are also calculated as summary statistics representing the nutritional status of children in a population. These mean scores describe the nutritional status of the entire population of children without the use of a cutoff point. A mean Z-score of less than 0 (i.e., a negative mean value for stunting, wasting, or underweight) suggests a downward shift in the entire sample population's nutritional status relative to the reference population. The farther away mean Z-scores are from 0, the higher the prevalence of malnutrition.

11.1.1 Anthropometry Training and Data Collection

Health technicians were trained to measure the height and weight of children. Training on child height measurement included practice standardisation exercises. Children younger than age 24 months were measured lying down (recumbent length); older children were measured standing up (height). Weight measurements were taken using SECA 878U scales designed for mobile use with a digital display. Height and length were measured with a ShorrBoard® measuring board.

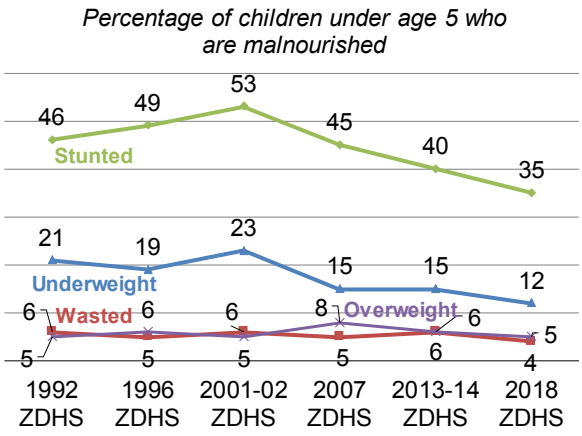
The survey identified a total of 10,094 (unweighted) children under age 5 who were eligible for height and weight measurements. Valid height-for-age measurements were obtained for 95% of eligible children. Similarly, valid weight-for-height measurements were obtained for 95% of eligible children. Valid weight-for-age measurements were obtained for 96% of eligible children. Table C.9 provides additional information on the completeness and quality of anthropometry data for children.

11.1.2 Levels of Child Malnutrition

Table 11.1 shows that 35% of children under age 5 are stunted (too short for their age). Four percent are wasted (too thin for their height), another 12% are underweight (they weigh less than would be expected for their age), and 5% are overweight (they weigh more than would be expected for their height).

Trends: Stunting and underweight among children under age 5 decreased considerably between 1992 and 2018, from 46% to 35% and from 21% to 12%, respectively. Over the same period, changes in wasting and overweight were minimal (**Figure 11.1**).

Figure 11.1 **Trends in nutritional status of children**



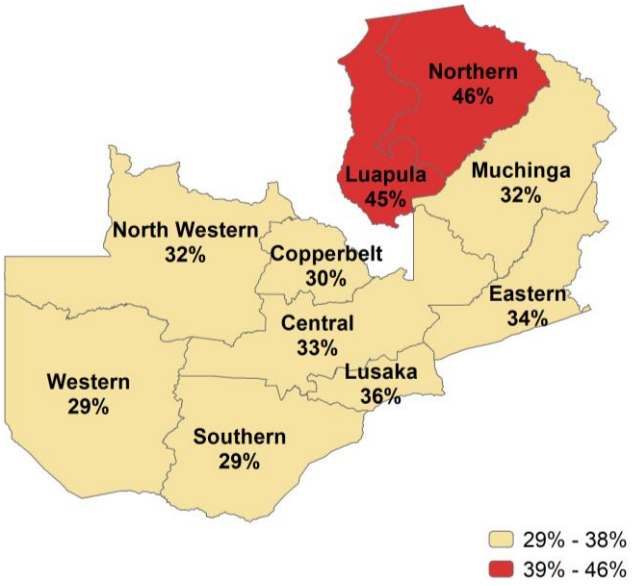
Patterns by background characteristics

- The prevalence of stunting increases from 19% among children age 0-6 months to a peak of 46% among children age 18-23 months. This highlights the importance of optimal nutrition in the first 1,000 days of life. Conversely, the prevalence of wasting peaks at 7% among children age 9-11 months (**Table 11.1**).
- The prevalence of stunting is higher among children in rural areas (36%) than among children in urban areas (32%).
- Stunting is higher in boys (38%) than in girls (31%).

- There is provincial variation in the percentage of children who are stunted. The percentage is highest in Northern (46%) and Luapula (45%) and lowest in Western and Southern (29% each) (**Figure 11.2**).
- Wasting among children under age 5 is highest in Muchinga (8%) and lowest in Eastern, North Western, and Southern (2% each).
- Children who are born small or very small have a higher prevalence of stunting, wasting, and underweight than children average or larger at birth. For example, the prevalence of stunting among children reported to be very small at birth is 50%, as compared with 33% among children reported to be average or larger at birth.

Figure 11.2 **Stunting in children by province**

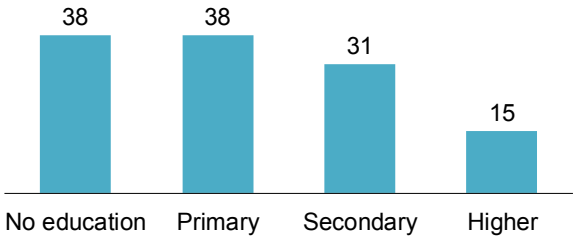
Percentage of children under age 5 who are stunted



- Children whose mothers have no education have a higher prevalence of stunting (38%) than those whose mothers have a higher education (15%) (**Figure 11.3**). The opposite is true for overweight. Five percent of children whose mothers have no education are overweight, compared with 7% of those whose mothers have a higher education.
- Patterns of stunting, wasting, and overweight vary according to household wealth.

Figure 11.3 **Stunting in children by mother's education**

Percentage of children under age 5 who are stunted



11.2 Infant and Young Child Feeding Practices

Appropriate infant and young child feeding (IYCF) practices include early initiation of breastfeeding (within the first hour of life), exclusively breastfeeding for the first 6 months of life, continued breastfeeding for 2 years or more, and introduction of safe, appropriate, and adequate complementary foods at age 6 months (WHO 2008).

11.2.1 Early Initiation of Breastfeeding

Initiation of breastfeeding within the first hour of life is important for both the mother and the child. The first breast milk contains colostrum, which is highly nutritious and has antibodies that protect the newborn from diseases. Early initiation of breastfeeding also encourages bonding between the mother and her newborn, facilitating the production of regular breast milk.

Early initiation of breastfeeding
Initiation of breastfeeding within 1 hour of birth.
Sample: Last-born children who were born in the 2 years before the survey

Table 11.2 shows that 98% of last-born children who were born in the 2 years preceding the survey were breastfed at some point. Seventy-six percent were breastfed within 1 hour after birth, while 96% were breastfed within 24 hours after delivery. Only 7% of infants received a prelacteal feed.

Trends: The percentage of children ever breastfed remained at 98% from 1992 to 2018. The percentage of children who started breastfeeding within 1 hour of birth has increased by 10% since 2013-14. Prelacteal feeding declined steadily from 26% in 2001 to 4% in 2013-14 before increasing slightly to 7% in 2018.

Patterns by background characteristics

- Seventy-seven percent of children born at a health facility start breastfeeding within 1 hour of birth, as compared with 65% of those delivered at home or any other place.
- The percentage of infants who are breastfed within 1 hour of birth varies across the provinces, ranging from a low of 65% in Northern to a high of 86% in North Western.
- Early initiation of breastfeeding is lowest among mothers with a higher education.
- The percentage of children given a prelacteal food is twice as high in urban areas (11%) as in rural areas (5%) and twice as high among children born in locations other than health facilities (14%) as among those born in health facilities (7%).
- The percentage of children given a prelacteal food is almost three times as high among children whose mothers have a higher education (20%) as among those whose mothers have no education (7%) and is higher among children from the highest wealth quintile (14%) than among those from the lower quintiles (between 4% and 7%).

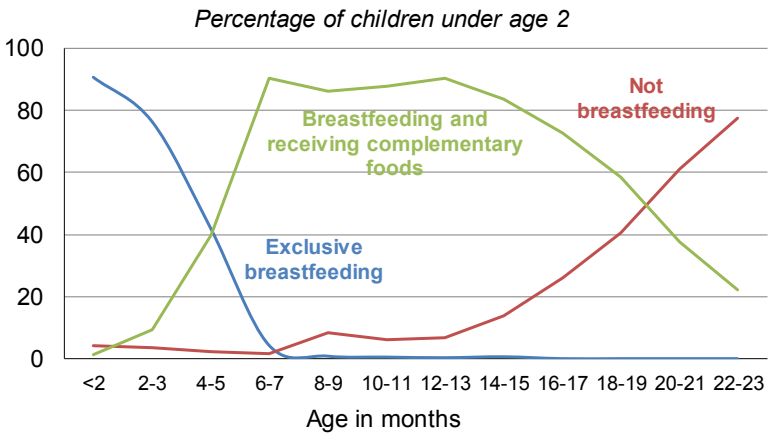
11.2.2 Exclusive Breastfeeding

Breast milk contains all of the nutrients needed by children during their first 6 months of life. It is recommended that children be exclusively breastfed in the first 6 months of their life; that is, they should be given nothing but breast milk. Exclusive breastfeeding for 6 months prevents infections such as diarrhoea and respiratory illnesses and provides all of the nutrients and liquid an infant requires for optimal growth and development. Feeding complementary foods within the first 6 months will have the adverse effect of reducing breast milk output, because the production and release of breast milk are modulated by the frequency and intensity of suckling.

Exclusive breastfeeding
Proportion of children age 0-5 months who are fed exclusively with breast milk.
Sample: Last-born children who were born in the 2 years before the survey

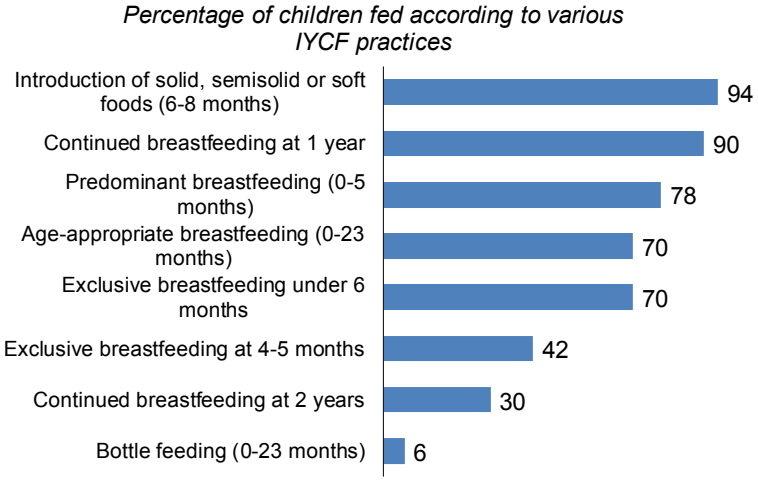
Table 11.3 and **Figure 11.4** show breastfeeding status by child's age. Seven in 10 children age 0-5 months are exclusively breastfed. Exclusive breastfeeding declines with increasing age, from 91% among children age 0-1 months to 76% among those age 2-3 months and 42% among those age 4-5 months. Seventeen percent of children under age 6 months receive complementary foods in addition to breast milk, a practice that tends to reduce the exclusive breastfeeding rate.

***Figure 11.4* Breastfeeding practices by age**



Among children under age 24 months, 70% are receiving age-appropriate breastfeeding. Ninety-four percent are introduced to solid, semisolid, or soft foods at age 6-8 months (**Table 11.4**). Continued breastfeeding at 1 year is high at 90%, while 30% of children continue breastfeeding until their second birthday. Six percent of children under age 2 are bottle-fed (**Figure 11.5**).

***Figure 11.5* Infant and young child feeding (IYCF) indicators on breastfeeding status**



Trends: Exclusive breastfeeding among children under age 6 months increased from 10% in 1992 to 73% in 2013-14 before declining slightly to 70% in 2018.

11.2.3 Median Duration of Breastfeeding

Table 11.5 shows that the median duration of any breastfeeding among children born in the 3 years preceding the survey is 19.4 months. Overall, the median duration of exclusive breastfeeding is 4.3 months, while the median duration of predominant breastfeeding (either exclusively breastfed or breastfed and receiving plain water and/or non-milk liquids) is 4.9 months.

Trends: The median duration of any breastfeeding declined from 20.1 months in 2013-14 to 19.4 months in 2018. Conversely, there were slight increases in the same period in the median durations of exclusive breastfeeding (from 4.1 months to 4.3 months) and predominant breastfeeding (from 4.8 months to 4.9 months).

Patterns by background characteristics

- The median duration of any breastfeeding is longer in rural areas (20.0 months) than in urban areas (18.0 months).
- By province, the median duration of any breastfeeding is highest in Northern (21.4 months) and Western (21.3 months) and lowest in Lusaka and Copperbelt (17.6 and 18.0 months, respectively).

- The median duration of any breastfeeding decreases with increasing household wealth, from 20.9 months in the lowest quintile to 17.1 months in the highest quintile.

11.2.4 Bottle Feeding

The nipple on a feeding bottle is susceptible to contamination and increases the risk of disease among children. Thus, bottle feeding is not recommended for children under age 2 (WHO 2005a).

Bottle feeding
Proportion of children age 0-23 months who are fed from a bottle with a nipple.
Sample: Last-born children who were born in the 2 years before the survey

Four percent of children age 0-1 months are fed using a bottle with a nipple. The proportion of children under age 2 using a bottle with a nipple peaks at age 4-5 months (12%). Overall, 6% of children age 0-23 months are fed from a bottle with a nipple (**Tables 11.3** and **11.4**).

11.2.5 Introduction of Complementary Foods

After the first 6 months, breast milk alone is no longer enough to meet the nutritional needs of infants; thus, appropriate complementary foods should be introduced while continuing with breastfeeding until age 2 or older. The transition from exclusive breastfeeding to feeding complementary and additional foods is a risk period for children because they can easily become undernourished; it is therefore important that they receive solid, semisolid, or soft foods.

Appropriate complementary feeding should include feeding children a variety of foods to ensure that nutrient requirements are met. Fruits and vegetables rich in vitamin A should be consumed daily. Eating a range of fruits and vegetables, in addition to those rich in vitamin A, is also important. Studies have shown that plant-based complementary foods by themselves are insufficient to meet the needs for certain micronutrients. Therefore, it has been recommended that meat, poultry, fish, or eggs be part of the daily diet or eaten as often as possible (WHO 2003).

Table 11.6 shows the types of foods and liquids consumed by children under age 2 living with their mother during the day and night preceding the interview, according to breastfeeding status and age. Generally, in each age group, consumption of all types of foods is higher among nonbreastfeeding children than among breastfeeding children.

Overall, the most common foods given to children age 6 to 23 months are foods made from grains (84% among breastfeeding children and 88% among nonbreastfeeding children), followed by fruits and vegetables rich in vitamin A (60% among breastfeeding children and 77% among nonbreastfeeding children) and meat, fish, and poultry (40% among breastfeeding children and 47% among nonbreastfeeding children). Eggs are less commonly given to children age 6 to 23 months (21% among breastfeeding children and 31% among nonbreastfeeding children). Consumption of infant formula is very low among both breastfeeding and nonbreastfeeding children (2% each).

11.2.6 Minimum Dietary Diversity, Minimum Meal Frequency, and Minimum Acceptable Diet

Infants and young children should be fed a minimum acceptable diet to ensure appropriate growth and development. Without adequate diversity and meal frequency, infants and young children are vulnerable to undernutrition, especially stunting and micronutrient deficiencies, and to increased morbidity and mortality. The WHO minimum acceptable diet recommendation is a combination of minimum dietary diversity and minimum meal frequency. The three indicators are defined in the box below.

Minimum dietary diversity is a proxy for adequate micronutrient density of foods. Consumption of food from at least five food groups means that the child has a high likelihood of consuming at least one animal source of food and at least one fruit or vegetable in addition to a staple food such as grains, roots, or tubers (WHO 2008). The five food groups should come from a list of eight food groups: breast milk; grains, roots, and tubers; legumes and nuts; dairy products (milk, yogurt, and cheese); flesh foods (meat, fish, poultry, and liver/organ meat); eggs; vitamin A-rich fruits and vegetables; and other fruits and vegetables.

Minimum meal frequency is a proxy for meeting energy requirements. Breastfed children age 6-8 months are considered to be fed with a minimum meal frequency if they receive solid, semisolid, or soft foods at least twice a day. Breastfed children age 6-23 months are considered to be fed with a minimum meal frequency if they receive solid, semisolid, or soft foods at least three times a day. Nonbreastfed children age 6-23 months are considered to be fed with a minimum meal frequency if they receive solid, semisolid, or soft foods or milk feeds at least four times a day and if at least one of the feeds is a solid, semisolid, or soft food.

Minimum dietary diversity

Proportion of children age 6–23 months who receive a minimum of 5 out of 8 food groups during the previous day.

Minimum meal frequency

Proportion of children age 6-23 months who received solid, semi-solid, or soft food (including milk feeds for nonbreastfed children) the minimum number of times or more during the previous day.

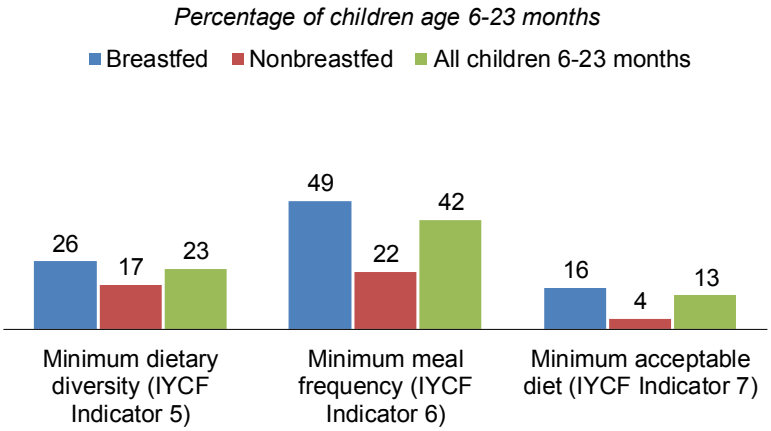
Minimum acceptable diet

Proportion of children age 6–23 months who receive a minimum acceptable diet. This indicator is a composite of children that have met minimum dietary diversity and minimum meal frequency.

Sample: Youngest children age 6-23 months living with their mother

Minimum dietary diversity, minimum meal frequency, and appropriate milk feeds together constitute a child's minimum acceptable diet. **Table 11.7** and **Figure 11.6** show the percentage of children age 6-23 months who are fed according to minimum recommended standards by breastfeeding status. Overall, 13% of children were fed a minimum acceptable diet in the 24 hours preceding the interview. Four in 10 (42%) children were fed the minimum number of times appropriate for their age, and about 2 in 10 (23%) received an adequately diverse diet in which they had been given foods from at least five food groups.

Figure 11.6 **IYCF indicators on minimum acceptable diet**



Patterns by background characteristics

- The percentage of children age 6-23 months who are fed a minimum acceptable diet is higher among breastfed children (16%) than among nonbreastfed children (4%).
- Children in urban areas (18%) are more likely to be fed a minimum acceptable diet than those in rural areas (9%).

- There are remarkable differences by province in the percentage of children who are fed a minimum acceptable diet. Lusaka (19%) has the highest percentage of children receiving a minimum acceptable diet, while Western (5%) has the lowest.
- The percentage of children who are fed a minimum acceptable diet rises with increasing mother's education, from 6% among children whose mothers have no education to 31% among children whose mothers have a higher education. Similarly, the percentage rises with increasing household wealth, from 6% to 25%.

11.3 ANAEMIA PREVALENCE IN CHILDREN

Anaemia in children

Anaemia status	Haemoglobin level in grams/decilitre*
Anaemic	<11.0
Mildly anaemic	10.0-10.9
Moderately anaemic	7.0-9.9
Severely anaemic	<7.0
Not anaemic	11.0 or higher
*Haemoglobin levels are adjusted for altitude in enumeration areas that are above 1,000 metres.	

Sample: Children age 6-59 months

Anaemia is a condition that is marked by low levels of haemoglobin in the blood. Iron deficiency is a common cause of anaemia and is estimated to be responsible for half of all anaemia cases in women and children globally. Causes of iron deficiency include malaria, hookworm, other helminths, and other nutritional deficiencies that have a bearing on haemoglobin production. Anaemia has other causes such as chronic infections and genetic conditions such as thalassemia. This report concentrates on anaemia caused by iron deficiency. Anaemia is a serious concern for children because it can impair cognitive development and is associated with long-term health and economic consequences (Balarajan et al. 2011). Severe anaemia leads to increased mortality. In the 2018 ZDHS, the HemoCue® Hb 201+ device was used to measure haemoglobin levels from a finger-stick blood sample, which was then used to determine anaemia levels in the population. All children age 6-59 months were eligible for testing. A weighted total of 8,623 children had blood tested for haemoglobin levels.

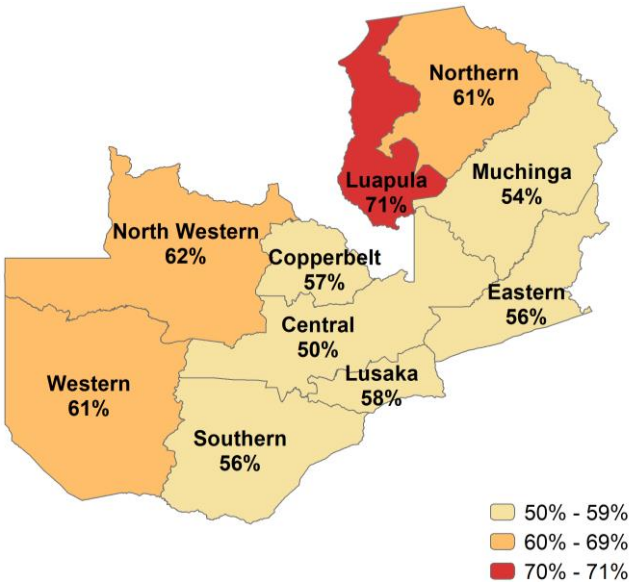
Table 11.8 shows that the prevalence of anaemia in children age 6-59 months is 58%, with 29% mildly anaemic, 28% moderately anaemic, and 2% severely anaemic.

Patterns by background characteristics

- The prevalence of anaemia is higher among younger (age 6-23 months) than older (age 24-59 months) children, with a peak prevalence of 77% among children age 9-11 and 12-17 months.
- Anaemia prevalence is the same in urban and rural areas (58%).
- By province, Luapula has the highest percentage of anaemia cases (71%), while Central has the lowest (50%) (**Figure 11.7**).
- The prevalence of anaemia generally decreases with increasing mother's education and household wealth.

Figure 11.7 **Anaemia in children by province**

Percentage of children age 6-59 months with any anaemia



11.4 MICRONUTRIENT INTAKE AND SUPPLEMENTATION AMONG CHILDREN

Micronutrient deficiencies are a major contributor to childhood morbidity and mortality. Micronutrients are available in foods and can also be provided through direct supplementation. Breastfeeding children benefit from supplements given to their mother.

The information collected on food consumption among children age 6-23 months is useful in assessing the extent to which children are consuming food groups rich in two key micronutrients—iron and vitamin A—in their daily diet. Iron plays an important role in numerous biological systems and iron deficiency is one of the primary causes of anaemia, which has serious health consequences for children. Vitamin A supports the immune system and plays an important role in maintaining the epithelial tissue in the body. Severe vitamin A deficiency (VAD) can cause eye damage and is the leading cause of childhood blindness. VAD also increases the severity of infections such as measles and diarrhoeal disease and slows recovery from illness. VAD is commonly found in dry places where fresh fruits and vegetables are rare.

The Ministry of Health implements biannual child health weeks. Vitamin A supplementation and providing deworming medication to children are the main interventions aimed at preventing iron and vitamin A deficiencies.

Table 11.9 presents information on consumption of foods rich in vitamin A and iron in the 24 hours preceding the survey among last-born children age 6-23 months who are living with their mother. It also provides information on micronutrient supplementation and deworming among children age 6-59 months. Overall, 79% of children age 6-23 months consumed foods rich in vitamin A in the 24 hours before the survey, and more than half (54%) consumed foods rich in iron. Seventy-three percent of children age 6-59 months received vitamin A supplementation and 64% were given deworming medication in the past 6 months.

Clinical treatment for severely wasted children (with no medical complications) involves ready-to-use therapeutic foods alongside other interventions (WHO 2013). In Zambia, 2% of children age 6-35 months received Plumpy'nut (a ready-to-use therapeutic food) in the 7 days prior to the survey (**Table 11.10**).

Trends: The percentage of children age 6-23 months who consumed foods rich in vitamin A decreased from 84% in 2007 to 79% in 2018. Over the same period, the percentage of children consuming foods rich

in iron decreased from 63% to 54%. There were increases from 2007 to 2018 in the percentages of children age 6-59 months who received vitamin A supplements (from 63% to 73%) and deworming medication (from 60% to 64%). The percentage of children receiving iron supplements increased from 7% in 2013-14 to 11% in 2018.

Patterns by background characteristics

- Rural children are less likely to receive deworming medication (63%) than urban children (66%) (**Table 11.9**).
- Supplementation is higher among nonbreastfeeding children than among breastfeeding children. Twelve percent of nonbreastfeeding children age 6-59 months are given iron supplements, as compared with 9% of breastfeeding children. Similarly, 74% of nonbreastfeeding children are given vitamin A supplements, compared with 70% of breastfeeding children.
- The percentage of children 6-59 months given deworming medication is notably higher (71%) among those who are not breastfed than among those who are breastfed (43%).
- There is provincial variation in provision of vitamin A and iron supplements. The percentages of children given vitamin A supplementation are highest in Copperbelt and Northern (81%) and lowest in Western (57%), while the percentages given iron supplementation are highest in Luapula (30%) and lowest in Northern and Muchinga (6% each).
- Consumption of foods rich in vitamin A is highest in Copperbelt (86%) and Lusaka (84%) and lowest in Muchinga (60%). Similarly, consumption of iron-rich foods is highest in Lusaka (74%) and Copperbelt (63%) and lowest in Muchinga (31%).
- Consumption of foods rich in vitamin A and iron, vitamin A supplements, and deworming medication tends to increase with increasing mother's education and household wealth.
- The majority of children receiving Plumpy'nut are severely wasted (10%) (**Table 11.10**).
- Four percent of children age 6-35 months in urban areas received Plumpy'nut, as compared with 1% of children in rural areas.
- The percentage of children receiving Plumpy'nut is highest in Lusaka (8%), followed by Southern (4%), and is low in the remaining provinces (0%-1%).
- In general, the percentage of children given Plumpy'nut increases with increasing mother's education (from 2% to 6%) and household wealth (from 1% to 5%).

11.5 Anaemia Prevalence in Women

Haemoglobin levels below which women are considered anaemic

Respondents	Haemoglobin level in grams/decilitre*
Non-pregnant women age 15-49	Less than 12.0
Pregnant women age 15-49	Less than 11.0
*Haemoglobin levels are adjusted for cigarette smoking and for altitude in enumeration areas that are above 1,000 metres.	

In the 2018 ZDHS, all women age 15-49 were eligible to be tested for anaemia. The testing followed similar procedures used for children age 6-59 months, except that capillary blood was collected exclusively from a finger prick.

Anaemia is a major concern among women, leading to increased maternal mortality and poor birth outcomes as well as reductions in work productivity. **Table 11.11** shows that 31% of women age 15-49 are anaemic, with 16% being mildly anaemic, 14% being moderately anaemic, and 1% being severely anaemic.

Patterns by background characteristics

- Anaemia prevalence is higher in urban areas (32%) than in rural areas (30%).
- There is provincial variation in the prevalence of anaemia, from a low of 24% in Central to a high of 38% in Western.
- The prevalence of anaemia is lower among breastfeeding women (28%) than among pregnant women (41%) and women who are neither pregnant nor breastfeeding (31%).
- Women with a higher education (35%) have a higher prevalence of anaemia than those with less education (31%). Similarly, the prevalence of anaemia is slightly higher among women in the highest wealth quintile (33%) than among those in the lower wealth quintiles (30%-31%).

11.6 Micronutrient Supplementation and Deworming During Pregnancy

During pregnancy, women are at a higher risk of anaemia due to an increase in blood volume. Severe anaemia can place both the mother and the baby in danger through increased risk of blood loss during labour, preterm delivery, low birth weight, and perinatal mortality. To prevent anaemia, pregnant women are advised to take iron folate supplements, eat iron-rich foods, and prevent intestinal worms.

The 2018 ZDHS asked women age 15-49 who gave birth in the 5 years before the survey whether they took iron supplements and/or deworming medication during their most recent pregnancy. The results show that, overall, 73% of pregnant women took iron supplementation for 90 days or more, while 77% took deworming medication. Only 3% of women did not take any iron supplements (**Table 11.12**).

Trends: Both micronutrient supplementation and deworming during pregnancy have improved substantially over the past decade. The percentage of women taking iron supplementation for 90 days or more increased from 44% in 2007 to 59% in 2013-14 and 73% in 2018. The percentage of women who did not take any iron supplementation decreased over the same period (from 10% in 2007 to 5% in 2013-14 and 3% in 2018). Finally, the percentage of women taking deworming medication during pregnancy increased from 36% in 2007 to 64% in 2013-14 and 77% in 2018.

Patterns by background characteristics

- Women in urban areas were more likely than those in rural areas to have taken iron supplements for at least 90 days (75% versus 71%) and to have taken deworming tablets (82% versus 75%).
- The percentage of women using deworming medication increases with increasing education, from 71% among those with no education to 83% among those with a higher education. Wealth follows a similar pattern, rising from 72% to 84%.
- The percentage of women taking iron tablets for 90 days or more during the pregnancy of their last birth increases with rising education, from 64% among those with no education to 86% among those with a higher education. Again, wealth follows a similar pattern, rising from 69% to 78%.
- By province, North Western (84%) has the highest percentage of women taking iron supplementation for at least 90 days, whereas Luapula (51%) has the lowest percentage.

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Table 11.1 Nutritional status of children

Percentage of children under age 5 classified as malnourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height, and weight-for-age, according to background characteristics, Zambia DHS 2018

Background characteristic	Height-for-age[1]				Weight-for-height					Weight-for-age				
	Percent-age below -3 SD	Percent-age below -2 SD[2]	Mean Z-score (SD)	Number of children	Percent-age below -3 SD	Percent-age below -2 SD[2]	Percent-age above +2 SD	Mean Z-score (SD)	Number of children	Percent-age below -3 SD	Percent-age below -2 SD[2]	Percent-age above +2 SD	Mean Z-score (SD)	Number of children
Age in months														
<6	6.7	18.7	-0.8	997	2.4	5.1	15.0	0.5	968	2.1	7.6	3.3	-0.3	1,015
6-8	7.1	22.5	-1.0	459	0.8	3.7	5.9	0.1	454	2.4	10.1	2.0	-0.6	467
9-11	9.8	28.5	-1.2	476	1.2	6.6	5.6	-0.1	476	2.1	12.7	0.8	-0.8	482
12-17	13.6	36.2	-1.5	962	2.3	6.0	5.2	-0.1	964	3.2	13.4	0.6	-0.8	969
18-23	20.0	46.3	-1.8	946	1.2	4.6	5.2	-0.0	949	2.8	15.8	0.8	-0.9	953
24-35	14.6	42.7	-1.7	1,959	1.7	4.2	4.3	0.2	1,959	2.4	12.1	0.5	-0.8	1,980
36-47	11.6	38.0	-1.6	1,983	1.1	2.8	3.7	0.1	1,988	2.7	12.4	0.4	-0.8	1,991
48-59	8.3	28.5	-1.4	1,827	1.3	3.7	2.5	-0.0	1,835	1.4	10.5	0.1	-0.9	1,832
Sex														
Male	13.6	38.3	-1.6	4,750	1.6	4.8	5.4	0.1	4,743	2.7	13.5	0.8	-0.8	4,801
Female	10.1	31.0	-1.3	4,860	1.4	3.7	5.0	0.1	4,850	2.0	10.2	0.8	-0.7	4,889
Birth interval in months[3]														
First birth[4]	11.2	35.0	-1.5	2,132	1.8	4.6	5.1	0.1	2,114	3.2	13.2	0.7	-0.8	2,155
<24	14.8	42.1	-1.7	877	0.9	4.1	4.9	0.1	877	3.8	17.0	0.6	-0.9	886
24-47	11.8	35.1	-1.5	3,599	1.3	3.5	4.8	0.1	3,585	1.8	10.7	0.7	-0.8	3,619
48+	10.6	30.5	-1.3	2,155	1.8	5.3	6.5	0.1	2,146	2.0	10.5	1.3	-0.7	2,173
Size at birth[3]														
Very small	14.9	49.9	-1.9	166	1.8	6.4	3.5	-0.3	167	6.7	24.6	1.0	-1.3	168
Small	16.3	46.5	-1.8	788	1.6	6.1	3.9	-0.2	785	4.8	21.6	0.5	-1.2	794
Average or larger	11.0	33.0	-1.4	7,598	1.5	4.0	5.6	0.1	7,563	2.0	10.4	0.9	-0.7	7,663
Missing	13.3	37.7	-1.6	207	2.4	6.4	3.1	-0.1	206	4.0	19.8	0.0	-1.0	207
Mother's interview status														
Interviewed	11.7	34.6	-1.5	8,762	1.5	4.3	5.3	0.1	8,723	2.4	11.9	0.9	-0.8	8,833
Not interviewed but in household	12.4	34.6	-1.3	205	1.7	2.8	5.1	0.2	207	2.8	11.9	0.0	-0.6	205
Not interviewed and not in the household[5]	13.9	33.8	-1.4	642	1.7	4.2	4.2	0.1	663	1.4	10.6	0.9	-0.7	651
Residence														
Urban	10.3	32.1	-1.3	3,320	2.1	5.0	5.7	0.1	3,307	2.2	10.8	0.7	-0.7	3,341
Rural	12.6	35.9	-1.5	6,289	1.2	3.8	5.0	0.1	6,287	2.4	12.4	0.9	-0.8	6,348
Province														
Central	13.5	33.4	-1.3	866	2.2	4.6	3.9	-0.0	860	2.4	11.4	1.2	-0.8	875
Copperbelt	8.9	29.7	-1.2	1,230	2.3	5.4	5.0	0.0	1,226	3.0	12.1	0.5	-0.7	1,236
Eastern	11.1	34.2	-1.5	1,266	0.7	2.2	5.0	0.2	1,262	1.9	9.2	1.0	-0.7	1,269
Luapula	16.9	44.9	-1.8	892	2.2	6.2	5.2	0.1	895	2.9	15.2	0.7	-0.9	904
Lusaka	12.3	35.6	-1.4	1,476	2.2	5.5	8.1	0.2	1,463	1.6	10.6	1.0	-0.6	1,485
Muchinga	10.2	32.1	-1.4	595	3.7	8.2	3.5	-0.2	597	3.4	15.3	0.8	-0.9	604
Northern	19.4	45.8	-1.9	860	0.3	3.1	8.3	0.3	860	2.9	14.1	1.3	-0.9	876
North Western	10.5	31.9	-1.5	536	1.2	2.4	3.3	0.1	536	2.5	10.4	0.5	-0.7	545
Southern	7.9	29.4	-1.4	1,274	0.3	2.3	3.8	0.1	1,278	1.1	9.7	0.6	-0.7	1,279
Western	8.3	29.0	-1.4	615	0.3	3.0	3.0	-0.1	615	3.2	14.1	0.8	-0.9	616
Mother's education[6]														
No education	14.6	38.2	-1.6	907	1.0	4.7	5.3	0.1	911	4.0	15.7	0.8	-0.9	921
Primary	12.8	37.6	-1.6	4,599	1.3	3.6	5.2	0.1	4,572	2.4	12.5	0.7	-0.8	4,625
Secondary	9.8	31.3	-1.3	3,098	1.8	4.9	5.3	0.1	3,082	2.1	10.3	0.9	-0.7	3,125
Higher	5.1	15.4	-0.8	359	2.1	5.0	6.9	0.2	360	1.3	8.6	1.9	-0.3	364
Missing	*	*	*	4	*	*	*	*	4	*	*	*	*	4
Wealth quintile														
Lowest	15.2	40.1	-1.7	2,352	1.3	4.3	5.8	0.0	2,352	3.3	15.0	0.7	-0.9	2,370
Second	12.5	36.6	-1.6	2,162	1.3	3.9	4.4	0.1	2,156	2.8	13.2	0.9	-0.8	2,180
Middle	10.1	32.9	-1.4	1,831	1.1	3.0	4.5	0.1	1,831	1.4	9.3	0.7	-0.7	1,851
Fourth	12.0	35.3	-1.4	1,792	2.1	4.8	5.6	0.1	1,788	2.1	10.8	0.7	-0.7	1,801
Highest	7.2	23.9	-1.1	1,472	1.9	5.6	6.1	0.1	1,466	1.6	9.1	1.3	-0.5	1,487
Total	11.8	34.6	-1.5	9,609	1.5	4.2	5.2	0.1	9,593	2.3	11.8	0.8	-0.8	9,689

Notes: Each of the indices is expressed in standard deviation units (SD) from the median of the WHO Child Growth Standards. Total includes four children (five unweighted) for whom information on mother's education is missing. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Recumbent length is measured for children under age 2; standing height is measured for all other children.

[2] Includes children who are below -3 standard deviations (SD) from the WHO Child Growth standards population median

[3] Excludes children whose mothers were not interviewed

[4] First-born twins (triplets, etc.) are counted as first births because they do not have a previous birth interval.

[5] Includes children whose mothers are deceased

[6] For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire

Table 11.2 Initial breastfeeding

Among last-born children who were born in the 2 years preceding the survey, percentage who were ever breastfed and percentages who started breastfeeding within 1 hour and within 1 day of birth, and among last-born children born in the 2 years preceding the survey who were ever breastfed, percentage who received a prelacteal feed, according to background characteristics, Zambia DHS 2018

	Among last-born children born in the past 2 years:				Among last-born children born in the past 2 years who were ever breastfed:	
Background characteristic	Percentage ever breastfed	Percentage who started breastfeeding within 1 hour of birth	Percentage who started breastfeeding within 1 day of birth[1]	Number of last-born children	Percentage who received a prelacteal feed[2]	Number of last-born children ever breastfed
Sex						
Male	97.8	76.2	95.3	1,983	6.7	1,940
Female	98.0	74.8	95.9	1,922	6.8	1,883
Assistance at delivery						
Health personnel[3]	98.0	77.3	95.7	3,262	7.0	3,195
Traditional birth attendant	96.7	68.6	95.1	183	3.9	177
Community/village health assistant	(95.3)	(84.2)	(95.3)	30	(1.8)	29
Community/village health worker	98.5	67.4	94.9	304	6.9	300
Friend/relative	(100.0)	(75.9)	(100.0)	25	(9.9)	25
Other	*	*	*	9	*	9
No one	97.1	49.0	94.7	92	5.6	89
Place of delivery						
Health facility	98.0	77.2	95.8	3,370	6.9	3,303
At home	97.3	64.7	94.6	484	5.4	471
Other	97.2	64.7	92.2	51	13.6	49
Residence						
Urban	97.6	74.1	95.0	1,340	10.8	1,308
Rural	98.1	76.2	95.9	2,564	4.7	2,515
Province						
Central	97.9	79.2	95.1	343	2.7	335
Copperbelt	98.2	76.0	94.4	473	10.7	464
Eastern	99.0	75.7	97.9	569	7.5	563
Luapula	98.5	73.2	96.3	375	1.4	369
Lusaka	96.5	74.0	94.0	558	13.7	539
Muchinga	97.6	70.4	93.7	227	4.6	222
Northern	99.0	65.2	96.8	347	2.8	343
North Western	97.2	86.3	97.1	219	6.9	213
Southern	96.8	76.1	94.2	525	4.8	508
Western	99.0	83.5	97.2	269	7.8	266
Mother's education						
No education	98.9	73.8	96.0	371	6.7	368
Primary	98.4	77.0	96.2	1,970	5.4	1,938
Secondary	96.9	75.1	95.1	1,410	7.4	1,367
Higher	98.8	63.6	90.3	153	19.9	151
Wealth quintile						
Lowest	98.5	74.9	96.2	1,002	4.6	986
Second	98.5	76.8	97.1	873	4.4	860
Middle	97.9	78.9	96.0	738	6.7	722
Fourth	97.6	73.4	94.4	672	6.9	655
Highest	96.7	72.9	93.1	620	13.9	600
Total	97.9	75.5	95.6	3,905	6.8	3,823

Notes: Table is based on last-born children born in the 2 years preceding the survey regardless of whether the children are living or dead at the time of the interview. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Includes children who started breastfeeding within 1 hour of birth
[2] Children given something other than breast milk during the first 3 days of life
[3] Doctor, nurse/midwife, or clinical officer

Table 11.3 Breastfeeding status by age

Percent distribution of youngest children under age 2 who are living with their mother by breastfeeding status and percentage currently breastfeeding, and percentage of all children under age 2 using a bottle with a nipple, according to age in months, Zambia DHS 2018

		Breastfeeding status									
Age in months	Not breast-feeding	Exclusively breastfed	Breast-feeding and consuming plain water only	Breast-feeding and consuming non-milk liquids[1]	Breast-feeding and consuming other milk	Breast-feeding and consuming comple-mentary foods	Total	Percentage currently breast-feeding	Number of youngest children under age 2 living with their mother	Percentage using a bottle with a nipple	Number of all children under age 2
0-1	4.3	90.6	1.8	0.9	1.2	1.2	100.0	95.7	366	4.1	373
2-3	3.5	76.4	7.9	1.2	1.8	9.2	100.0	96.5	308	4.9	313
4-5	2.2	42.1	8.6	5.6	1.5	40.0	100.0	97.8	345	11.8	350
6-8	2.9	3.0	2.3	0.7	0.2	90.9	100.0	97.1	445	7.0	452
9-11	7.7	0.8	5.2	0.8	0.0	85.5	100.0	92.3	468	4.8	472
12-17	15.2	0.3	1.4	0.5	0.1	82.4	100.0	84.8	931	6.2	957
18-23	59.8	0.0	0.9	0.0	0.0	39.3	100.0	40.2	886	4.5	934
0-3	3.9	84.1	4.6	1.0	1.5	4.9	100.0	96.1	674	4.5	686
0-5	3.4	69.9	6.0	2.6	1.5	16.8	100.0	96.6	1,020	6.9	1,036
6-9	5.0	2.5	3.2	0.8	0.2	88.3	100.0	95.0	615	7.1	625
12-15	10.2	0.5	1.8	0.3	0.2	87.1	100.0	89.8	633	5.6	649
12-23	37.0	0.2	1.1	0.3	0.1	61.4	100.0	63.0	1,817	5.4	1,891
20-23	69.6	0.0	0.8	0.0	0.0	29.6	100.0	30.4	588	4.5	629

Note: Breastfeeding status refers to a "24-hour" period (yesterday and last night). Children who are classified as breastfeeding and consuming plain water only consumed no liquid or solid supplements. The categories of not breastfeeding, exclusively breastfed, breastfeeding and consuming plain water, non-milk liquids, other milk, and complementary foods (solids and semisolids) are hierarchical and mutually exclusive, and their percentages add to 100%. Thus, children who receive breast milk and non-milk liquids and who do not receive other milk and who do not receive complementary foods are classified in the non-milk liquid category even though they may also get plain water. Any children who get complementary food are classified in that category as long as they are breastfeeding as well.

[1] Non-milk liquids include juice, juice drinks, clear broth, or other liquids.

Table 11.4 Infant and young child feeding (IYCF) indicators on breastfeeding status

Percentage of children fed according to various IYCF practices, Zambia DHS 2018

Indicator	Percentage	Number
Exclusive breastfeeding under 6 months	69.9	1,020
Exclusive breastfeeding at 4-5 months	42.1	345
Continued breastfeeding at 1 year (12-15 months)	89.8	633
Introduction of solid, semisolid, or soft foods (6-8 months)	93.6	445
Continued breastfeeding at 2 years	30.4	588
Age-appropriate breastfeeding (0-23 months)	70.2	3,749
Predominant breastfeeding (0-5 months)	78.4	1,020
Mixed breast and non-breast milk feeding (0-5 months)	3.0	1,020
Bottle feeding (0-23 months)	5.9	3,850

Table 11.5 Median duration of breastfeeding

Median duration of any breastfeeding, exclusive breastfeeding, and predominant breastfeeding among children born in the 3 years preceding the survey, according to background characteristics, Zambia DHS 2018

Background characteristic	Median duration (months) of breastfeeding among children born in the past 3 years[1]		
	Any breastfeeding	Exclusive breastfeeding	Predominant breastfeeding[2]
Sex			
Male	19.2	4.4	5.0
Female	19.5	4.1	4.8
Residence			
Urban	18.0	4.2	4.8
Rural	20.0	4.3	4.9
Province			
Central	19.5	4.8	5.4
Copperbelt	18.0	4.4	5.2
Eastern	20.0	3.7	4.3
Luapula	19.4	4.2	4.6
Lusaka	17.6	3.9	4.4
Muchinga	21.1	4.3	4.7
Northern	21.4	4.1	4.8
North Western	18.9	*	3.5
Southern	19.1	5.0	5.7
Western	21.3	5.2	5.9
Mother's education			
No education	20.8	4.8	5.3
Primary	19.9	4.3	4.8
Secondary	18.3	4.2	5.0
Higher	(15.8)	*	(3.7)
Wealth quintile			
Lowest	20.9	4.2	4.9
Second	19.9	4.3	4.9
Middle	19.0	4.4	5.4
Fourth	18.9	4.5	4.8
Highest	17.1	4.0	4.5
Total	19.4	4.3	4.9
Mean for all children	19.3	5.2	6.1

Notes: Median and mean durations are based on breastfeeding status of the child at the time of the survey (current status). Includes living and deceased children. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed

[1] For last-born children under age 24 months who live with their mother and are breastfeeding, information to determine exclusive and predominant breastfeeding comes from a 24-hour dietary recall. Tabulations assume that last-born children age 24 months or older who live with their mother and are breastfeeding are neither exclusively nor predominantly breastfed. It is assumed that last-born children not currently living with their mother and all non-last-born children are not currently breastfeeding.

[2] Either exclusively breastfed or received breast milk and plain water and/or non-milk liquids only

Table 11.6 Foods and liquids consumed by children in the day or night preceding the interview

Percentage of youngest children under age 2 who are living with their mother by type of foods consumed in the day or night preceding the interview, according to breastfeeding status and age, Zambia DHS 2018

	Liquids			Solid or semisolid foods											
Age in months	Infant formula	Other milk[1]	Other liquids[2]	Fortified baby foods	Food made from grains[3]	Fruits and vege-tables rich in vitamin A[4]	Other fruits and vege-tables	Food made from roots and tubers	Food made from legumes and nuts	Meat, fish, poultry	Eggs	Cheese, yogurt, other milk products	Cater-pillar	Any solid or semi-solid food	Number of children under age 2
BREASTFEEDING CHILDREN															
0-1	1.1	0.8	1.4	0.5	1.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	351
2-3	1.5	1.0	3.5	3.1	7.4	0.0	1.8	0.0	0.0	0.0	0.0	0.2	0.0	9.6	297
4-5	3.6	2.6	15.8	14.5	37.2	4.1	2.2	0.4	3.7	3.1	1.8	3.8	0.0	40.9	338
6-8	2.1	3.8	42.7	21.6	84.0	36.4	16.4	5.6	14.9	24.9	17.0	6.0	2.6	92.8	432
9-11	1.7	3.2	45.4	16.1	82.5	60.7	22.5	7.5	22.6	34.6	22.9	5.5	2.2	92.2	432
12-17	1.4	4.0	51.2	13.7	85.0	67.4	30.0	11.6	22.2	45.3	21.5	6.2	2.4	96.2	789
18-23	1.2	5.7	44.7	15.9	84.5	69.1	25.6	15.6	30.9	50.1	22.9	8.2	4.1	96.6	356
6-23	1.6	4.1	47.0	16.3	84.2	59.6	24.7	10.1	22.3	39.5	21.0	6.4	2.7	94.7	2,009
Total	1.7	3.2	33.8	12.9	61.5	40.5	17.0	6.9	15.3	26.8	14.3	4.7	1.8	69.2	2,995
NONBREASTFEEDING CHILDREN															
0-1	*	*	*	*	*	*	*	*	*	*	*	*	*	*	16
2-3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	11
4-5	*	*	*	*	*	*	*	*	*	*	*	*	*	*	8
6-8	*	*	*	*	*	*	*	*	*	*	*	*	*	*	13
9-11	(7.3)	(12.7)	(60.0)	(23.7)	(88.1)	(70.2)	(43.1)	(2.8)	(16.0)	(40.7)	(50.8)	(21.8)	(4.1)	(97.9)	36
12-17	5.2	10.7	55.3	14.2	90.4	71.4	43.5	15.2	29.8	42.0	34.8	16.0	5.4	98.9	142
18-23	0.3	7.4	61.5	16.0	87.9	80.0	32.8	15.4	25.5	48.4	28.4	8.1	3.7	97.4	529
6-23	2.1	8.4	60.1	16.6	88.2	76.9	35.1	14.7	25.5	46.5	30.7	10.5	3.9	97.7	720
Total	2.4	8.2	57.4	16.3	84.7	73.4	33.7	14.0	24.3	44.4	29.3	10.2	3.8	93.8	755

Notes: Breastfeeding status and food consumed refer to a "24-hour" period (yesterday and last night). Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Other milk includes fresh, tinned, and powdered cow or other animal milk.

[2] Does not include plain water. Includes juice, juice drinks, clear broth, or other non-milk liquids.

[3] Includes fortified baby food

[4] Includes pumpkin, carrots, squash, sweet potatoes that are yellow or orange inside, dark green leafy vegetables, cassava leaves, ripe mangoes, ripe papayas, apricot, watermelon, and other locally grown fruits and vegetables that are rich in vitamin A

Table 11.7 Minimum acceptable diet

Percentage of youngest children age 6-23 months living with their mother who are fed a minimum acceptable diet based on breastfeeding status, number of food groups, and times they are fed during the day or night preceding the survey, according to background characteristics, Zambia DHS 2018

	Among breastfed children age 6-23 months, percentage fed:				Among nonbreastfed children age 6-23 months, percentage fed:					Among all children age 6-23 months, percentage fed:				
Background characteristic	Minimum dietary diversity[1]	Minimum meal frequency[2]	Minimum acceptable diet[3]	Number of breastfed children age 6-23 months	Minimum milk feeding frequency[4]	Minimum dietary diversity[1]	Minimum meal frequency[5]	Minimum acceptable diet[6]	Number of nonbreastfed children age 6-23 months	Breastmilk, milk, or milk products[7]	Minimum dietary diversity[1]	Minimum meal frequency[8]	Minimum acceptable diet[9]	Number of all children age 6-23 months
Age in months														
6-11	19.2	55.9	13.2	864	(24.4)	(13.4)	(26.4)	(8.7)	49	95.9	18.9	54.4	12.9	913
6-8	14.8	70.6	12.0	432	*	*	*	*	13	97.9	14.4	69.4	11.6	445
9-11	23.6	41.3	14.4	432	(23.2)	(18.1)	(25.8)	(11.7)	36	94.1	23.1	40.1	14.2	468
12-17	29.3	44.8	18.3	789	11.3	20.2	25.2	5.6	142	86.5	27.9	41.8	16.4	931
18-23	33.3	40.9	15.2	356	6.0	15.7	20.3	2.8	529	43.8	22.8	28.6	7.8	886
Sex														
Male	25.4	49.4	15.5	1,000	9.5	18.6	24.1	4.6	375	75.3	23.6	42.5	12.6	1,374
Female	25.9	48.4	15.6	1,010	7.0	14.1	19.1	2.8	345	76.3	22.9	40.9	12.4	1,355
Residence														
Urban	41.7	54.5	24.6	618	13.8	27.2	31.0	6.5	321	70.5	36.7	46.5	18.4	939
Rural	18.5	46.4	11.6	1,392	3.8	7.8	14.2	1.5	399	78.6	16.1	39.2	9.3	1,790
Province														
Central	29.9	50.9	20.4	169	6.7	12.0	22.4	1.1	67	73.6	24.8	42.8	14.9	236
Copperbelt	38.8	55.5	26.4	205	12.5	19.2	26.8	5.4	128	66.4	31.3	44.5	18.3	333
Eastern	20.7	68.4	16.4	321	4.6	11.3	18.4	2.1	89	79.3	18.7	57.5	13.3	410
Luapula	22.5	27.1	9.4	195	2.0	12.5	2.7	2.0	57	77.7	20.2	21.5	7.7	252
Lusaka	44.3	64.0	25.4	257	14.6	31.2	32.0	7.1	137	70.3	39.8	52.9	19.1	393
Muchinga	14.7	39.5	7.3	120	(3.2)	(6.5)	(9.3)	(1.6)	31	79.9	13.0	33.2	6.1	152
Northern	18.5	37.2	12.1	200	(2.5)	(5.6)	(13.7)	(0.0)	41	83.5	16.3	33.2	10.1	241
North Western	10.6	51.9	8.8	115	2.8	4.0	17.8	1.5	48	71.5	8.7	41.9	6.6	163
Southern	27.7	46.6	13.3	272	9.4	19.7	24.2	6.0	91	77.3	25.7	41.0	11.4	363
Western	12.2	23.9	5.7	155	(6.3)	(6.0)	(20.2)	(0.0)	31	84.1	11.2	23.3	4.8	186
Mother's education														
No education	15.8	40.1	7.2	202	6.5	14.7	15.5	2.5	51	81.2	15.5	35.2	6.2	252
Primary	21.2	43.6	12.3	1,054	2.3	8.7	11.2	0.8	342	76.1	18.1	35.7	9.5	1,396
Secondary	32.4	58.1	21.1	684	11.9	20.3	28.4	4.9	291	73.7	28.8	49.2	16.2	975
Higher	54.9	62.8	34.6	70	(37.3)	(61.5)	(75.2)	(24.2)	36	78.5	57.2	67.0	31.1	107
Wealth quintile														
Lowest	13.0	38.2	7.5	566	1.8	3.3	4.9	0.0	130	81.7	11.2	31.9	6.1	695
Second	22.6	46.5	13.7	481	0.6	4.4	12.7	0.0	138	77.9	18.5	39.0	10.7	619
Middle	22.4	52.3	13.2	372	6.3	12.5	16.9	3.3	132	75.5	19.8	43.1	10.6	504
Fourth	35.2	54.9	20.4	318	7.6	22.9	25.5	3.8	162	68.8	31.1	45.0	14.8	479
Highest	50.6	63.6	33.3	273	22.5	34.3	43.2	10.4	159	71.4	44.6	56.1	24.9	432
Total	25.6	48.9	15.6	2,009	8.3	16.5	21.7	3.8	720	75.8	23.2	41.7	12.5	2,730

Notes: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed

[1] Children receive foods from five or more of the following eight food groups: a. breast milk; b. infant formula, milk other than breast milk, cheese or yogurt or other milk products; c. foods made from grains, roots, and tubers, including porridge and fortified baby food from grains; d. vitamin A-rich fruits and vegetables; e. other fruits and vegetables; f. eggs; g. meat, poultry, fish, and shellfish (and organ meats); h. legumes and nuts

[2] For breastfed children, minimum meal frequency is receiving solid, semisolid, or soft food at least twice a day for infants age 6-8 months and at least three times a day for children age 9-23 months.

[3] Breastfed children age 6-23 months are considered to be fed a minimum acceptable diet if they are fed the minimum dietary diversity as described in footnote 1 and the minimum meal frequency as defined in footnote 2.

[4] Includes two or more feedings of commercial infant formula; fresh, tinned, and powdered animal milk; and yogurt

[5] For nonbreastfed children age 6-23 months, minimum meal frequency is receiving solid, semisolid, or soft food or milk feeds at least four times a day. At least one of the feeds must be a solid, semisolid, or soft feed.

[6] Nonbreastfed children age 6-23 months are considered to be fed a minimum acceptable diet if they receive other milk or milk products at least twice a day, receive the minimum meal frequency as defined in footnote 5, and receive solid, semisolid, or soft foods from at least four food groups not including the milk or milk products food group.

[7] Breastfeeding, or not breastfeeding and receiving two or more feedings of commercial infant formula; fresh, tinned, and powdered animal milk; and yogurt

[8] Children are fed the minimum recommended number of times per day according to their age and breastfeeding status as described in footnotes 2 and 5.

[9] Children age 6-23 months are considered to be fed a minimum acceptable diet if they receive breast milk, receive other milk or milk products as described in footnote 7, are fed the minimum dietary diversity as described in footnote 1, and are fed the minimum meal frequency as described in footnotes 2 and 5.

Table 11.8 Prevalence of anaemia in children

Percentage of children age 6-59 months classified as having anaemia, according to background characteristics, Zambia DHS 2018

Background characteristic	Anaemia status by haemoglobin level				
	Any anaemia (<11.0 g/dl)	Mild anaemia (10.0-10.9 g/dl)	Moderate anaemia (7.0-9.9 g/dl)	Severe anaemia (<7.0 g/dl)	Number of children age 6-59 months
Age in months					
6-8	73.1	28.8	42.2	2.2	451
9-11	77.1	25.4	48.8	3.0	479
12-17	76.6	30.9	43.1	2.6	960
18-23	71.8	33.8	36.8	1.2	944
24-35	59.1	30.3	27.3	1.5	1,968
36-47	49.5	28.6	19.4	1.5	1,988
48-59	41.1	24.0	16.8	0.3	1,834
Sex					
Male	59.7	28.4	29.5	1.8	4,268
Female	56.6	28.9	26.5	1.2	4,355
Mother's interview status					
Interviewed	59.0	28.9	28.7	1.5	7,756
Not interviewed but in household	48.4	23.2	22.6	2.6	199
Not interviewed and not in the household[1]	50.6	27.4	21.9	1.3	667
Residence					
Urban	58.1	27.8	28.7	1.6	2,982
Rural	58.2	29.1	27.6	1.4	5,641
Province					
Central	50.0	28.4	21.2	0.3	773
Copperbelt	57.2	26.1	29.7	1.4	1,104
Eastern	55.9	28.9	25.8	1.2	1,134
Luapula	70.7	29.7	38.2	2.8	796
Lusaka	57.9	28.7	27.7	1.5	1,334
Muchinga	53.5	27.4	25.1	0.9	535
Northern	61.3	29.0	29.5	2.7	773
North Western	61.6	31.7	28.8	1.1	492
Southern	55.7	28.6	25.9	1.1	1,145
Western	60.9	30.2	29.1	1.6	537
Mother's education[2]					
No education	63.9	27.7	32.9	3.3	815
Primary	57.5	29.3	26.8	1.4	4,081
Secondary	59.9	27.9	30.9	1.1	2,742
Higher	52.8	32.3	19.2	1.3	314
Missing	*	*	*	*	4
Wealth quintile					
Lowest	61.0	30.0	29.2	1.9	2,088
Second	57.4	27.0	28.9	1.4	1,933
Middle	57.8	30.7	25.8	1.3	1,646
Fourth	56.8	26.5	29.1	1.2	1,628
Highest	56.8	29.0	26.4	1.5	1,327
Total	58.1	28.7	28.0	1.5	8,623

Notes: Table is based on children who stayed in the household on the night before the interview and who were tested for anaemia. Prevalence of anaemia, based on haemoglobin levels, is adjusted for altitude using formulas in CDC 1998. Haemoglobin is in grams per decilitre (g/dl). An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed

[1] Includes children whose mothers are deceased

[2] For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire.

Table 11.9 Micronutrient intake among children

Among youngest children age 6-23 months who are living with their mother, percentages who consumed vitamin A-rich and iron-rich foods in the 24 hours preceding the survey, and among all children age 6-59 months, percentages who were given vitamin A supplements in the 6 months preceding the survey, who were given iron supplements in the 7 days preceding the survey, and who were given deworming medication in the 6 months preceding the survey, according to background characteristics, Zambia DHS 2018

	Among youngest children age 6-23 months living with their mother:			Among all children age 6-59 months:			
Background characteristic	Percentage who consumed foods rich in vitamin A in last 24 hours[1]	Percentage who consumed foods rich in iron in last 24 hours[2]	Number of children	Percentage given iron supplements in past 7 days[3]	Percentage given vitamin A supplements in past 6 months[4]	Percentage given deworming medication in past 6 months[3,5]	Number of children
Age in months							
6-8	54.6	36.5	445	5.4	44.2	11.9	452
9-11	74.7	48.3	468	7.2	72.0	22.5	472
12-17	84.1	57.5	931	10.1	80.8	58.5	957
18-23	89.2	61.2	886	10.9	78.3	71.5	934
24-35	na	na	na	12.8	77.1	73.0	1,862
36-47	na	na	na	11.6	70.5	70.8	1,866
48-59	na	na	na	12.4	72.9	69.9	1,782
Sex							
Male	79.8	54.1	1,374	10.6	74.0	64.7	4,150
Female	78.8	53.3	1,355	11.8	72.4	62.9	4,175
Breastfeeding status							
Breastfeeding	75.5	50.6	2,009	9.3	70.3	43.4	2,114
Not breastfeeding	90.1	62.3	720	11.8	74.2	70.8	6,211
Mother's age							
15-19	76.8	53.3	352	14.1	70.7	48.6	553
20-29	79.4	53.0	1,352	11.1	73.4	64.3	4,221
30-39	79.6	55.3	852	10.4	73.6	65.2	2,848
40-49	82.4	51.6	174	12.4	72.2	67.2	704
Residence							
Urban	84.7	67.8	939	10.6	73.3	65.5	2,951
Rural	76.5	46.3	1,790	11.5	73.1	62.9	5,374
Province							
Central	81.7	54.2	236	15.9	69.3	62.3	724
Copperbelt	86.0	62.9	333	9.1	80.6	75.0	1,039
Eastern	82.6	39.4	410	9.1	79.3	65.4	1,132
Luapula	82.6	58.7	252	29.6	77.1	68.8	772
Lusaka	84.4	74.2	393	7.6	67.0	58.3	1,303
Muchinga	60.2	30.6	152	5.7	76.7	68.4	502
Northern	77.4	52.6	241	5.8	81.4	71.0	749
North Western	73.9	50.3	163	9.0	69.5	56.4	470
Southern	80.5	52.8	363	8.1	69.2	61.8	1,095
Western	62.4	43.2	186	16.3	57.2	43.8	539
Mother's education							
No education	72.4	40.2	252	9.3	64.7	57.3	846
Primary	78.7	49.4	1,396	11.5	73.2	63.8	4,251
Secondary	81.9	61.3	975	11.3	74.7	65.0	2,896
Higher	80.2	71.9	107	11.4	81.3	71.5	332
Wealth quintile							
Lowest	72.2	39.0	695	9.7	70.6	58.4	2,074
Second	80.2	48.5	619	14.9	74.3	64.8	1,844
Middle	79.5	54.4	504	11.1	73.5	64.6	1,536
Fourth	82.1	61.1	479	9.5	72.9	66.3	1,567
Highest	86.3	75.9	432	10.5	75.7	67.2	1,305
Total	79.3	53.7	2,730	11.2	73.2	63.8	8,325

na = Not applicable
[1] Includes pumpkin, carrots, squash, sweet potatoes that are yellow or orange inside, dark green leafy vegetables, cassava leaves, ripe mangoes, ripe papayas, apricot, watermelon, and other locally grown fruits and vegetables that are rich in vitamin A
[2] Includes meat (and organ meat), fish, poultry, and eggs
[3] Based on mother's recall
[4] Based on both mother's recall and the vaccination card (where available)
[5] Deworming for intestinal parasites is commonly done for helminthes and for schistosomiasis.

Table 11.10 Therapeutic foods

Among children age 6-35 months, percentage who received Plumpy'nut in the 7 days preceding the survey, according to background characteristics, Zambia DHS 2018

Background characteristic	Percentage who received Plumpy'nut in the past 7 days	Number of children
Age in months		
6-8	2.1	452
9-11	1.5	472
12-17	2.9	957
18-23	2.9	934
24-35	1.5	1,862
Sex		
Male	2.1	2,322
Female	2.2	2,354
Breastfeeding status		
Breastfeeding	2.2	2,086
Not breastfeeding	2.1	2,591
Wasting status[1]		
Severe acute malnutrition[2]	9.8	65
Moderate acute malnutrition[3]	2.2	146
Not wasted[4]	2.0	4,214
Mother's age		
15-19	2.4	482
20-29	2.0	2,360
30-39	2.2	1,516
40-49	2.4	319
Residence		
Urban	4.1	1,628
Rural	1.1	3,049
Province		
Central	0.6	398
Copperbelt	0.8	555
Eastern	0.4	654
Luapula	0.5	434
Lusaka	8.1	711
Muchinga	0.6	282
Northern	0.0	421
North Western	0.4	274
Southern	3.8	640
Western	1.0	307
Mother's education		
No education	1.6	459
Primary	1.7	2,386
Secondary	2.5	1,660
Higher	6.0	171
Wealth quintile		
Lowest	0.5	1,196
Second	1.7	1,004
Middle	1.5	874
Fourth	3.0	870
Highest	5.3	733
Total	2.1	4,677

[1] Restricted to children with valid data for weight and height
[2] Children with severe acute malnutrition are those whose weight-for-height Z-score is below -3 standard deviations (SD) from the WHO Growth Standards population median.
[3] Children with moderate acute malnutrition are those whose weight-for-height Z-score is between -3 standard deviations and -2 standard deviations (SD) from the WHO Growth Standards population median.
[4] Children whose weight-for-height Z-score is ≥-2 standard deviations (SD) from the WHO Growth Standards population median

Table 11.11 Prevalence of anaemia in women

Percentage of women age 15-49 with anaemia, according to background characteristics, Zambia DHS 2018

Background characteristic	Anaemia status by haemoglobin level				Number of women
	Any (NP <12.0 g/dl/ P <11.0 g/dl)	Mild (NP 11.0-11.9 g/dl/ P 10.0-10.9 g/dl)	Moderate (NP 8.0-10.9 g/dl/ P 7.0-9.9 g/dl)	Severe (NP <8.0 g/dl/ P <7.0 g/dl)	
Age					
15-19	33.4	19.0	13.1	1.3	2,903
20-29	28.6	15.6	11.7	1.3	4,815
30-39	31.3	15.6	14.2	1.5	3,435
40-49	33.1	14.5	17.0	1.7	2,082
Number of children ever born					
0	34.7	18.8	13.8	2.1	3,233
1	32.9	16.2	15.1	1.6	2,236
2-3	28.8	14.7	13.0	1.0	3,324
4-5	30.2	15.9	13.5	0.8	2,254
6+	28.1	14.6	12.1	1.4	2,187
Maternity status					
Pregnant	41.2	21.3	19.1	0.8	1,083
Breastfeeding	27.6	16.5	10.3	0.8	2,985
Neither	31.0	15.4	13.9	1.7	9,166
Using IUD					
Yes	(35.7)	(3.5)	(29.7)	(2.6)	64
No	31.0	16.2	13.4	1.4	13,171
Cigarette use[1]					
Smokes cigarettes	25.0	13.3	11.4	0.3	115
Does not smoke cigarettes	31.1	16.2	13.5	1.4	13,119
Residence					
Urban	32.1	15.4	15.0	1.8	6,131
Rural	30.2	16.8	12.2	1.1	7,104
Province					
Central	23.8	12.6	10.5	0.7	1,145
Copperbelt	29.2	15.6	12.0	1.5	2,114
Eastern	27.6	16.0	11.0	0.6	1,555
Luapula	29.8	17.5	11.3	1.0	978
Lusaka	35.6	15.7	17.7	2.2	2,686
Muchinga	27.6	15.5	11.6	0.5	745
Northern	28.0	17.0	10.4	0.6	1,048
North Western	32.2	17.1	13.7	1.5	696
Southern	35.3	18.3	14.7	2.3	1,501
Western	37.9	17.2	18.8	1.9	767
Education					
No education	30.7	15.8	13.9	0.9	1,004
Primary	30.6	16.7	12.6	1.3	5,895
Secondary	31.1	15.5	14.1	1.6	5,622
Higher	35.1	17.4	16.1	1.5	713
Wealth quintile					
Lowest	30.2	16.4	13.2	0.7	2,358
Second	30.6	18.1	11.3	1.2	2,320
Middle	30.5	16.2	12.9	1.4	2,406
Fourth	30.6	14.4	14.2	1.9	2,945
Highest	32.8	16.1	15.0	1.7	3,205
Total	31.1	16.2	13.5	1.4	13,235

Notes: Prevalence is adjusted for altitude and for smoking status if known using formulas in CDC 1998. Figures in parentheses are based on 25-49 unweighted cases.

[1] Includes manufactured cigarettes and hand-rolled cigarettes

Table 11.12 Micronutrient intake among mothers

Among women age 15-49 with a child born in the 5 years preceding the survey, percent distribution by number of days they took iron tablets or syrup during the pregnancy of the last child, and percentage who took deworming medication during the pregnancy of the last child, according to background characteristics, Zambia DHS 2018

Background characteristic	Number of days women took iron tablets or syrup during pregnancy of last birth						Percentage of women who took deworming medication during pregnancy of last birth	Number of women
	None	<60	60-89	90+	Don't know/ missing	Total		
Age								
15-19	2.4	6.5	8.9	72.9	9.3	100.0	75.3	719
20-29	2.6	7.0	9.0	72.6	8.7	100.0	77.5	3,564
30-39	2.2	8.6	7.3	73.2	8.8	100.0	78.7	2,397
40-49	4.2	7.0	8.5	69.0	11.3	100.0	73.8	645
Residence								
Urban	1.7	7.2	9.3	74.6	7.2	100.0	81.7	2,811
Rural	3.2	7.6	7.8	71.2	10.2	100.0	74.6	4,513
Province								
Central	3.0	8.6	11.6	72.7	4.2	100.0	80.2	640
Copperbelt	0.9	6.9	9.8	76.3	6.1	100.0	82.6	969
Eastern	1.3	6.1	6.3	75.7	10.7	100.0	82.6	983
Luapula	5.1	12.4	5.7	51.2	25.6	100.0	73.7	640
Lusaka	2.1	5.6	11.8	76.9	3.6	100.0	85.0	1,219
Muchinga	6.5	7.8	8.2	77.5	0.0	100.0	64.0	433
Northern	2.8	11.9	7.0	77.6	0.6	100.0	74.6	615
North Western	3.4	3.8	7.4	83.9	1.5	100.0	78.8	404
Southern	1.6	7.1	6.5	70.8	14.0	100.0	72.6	946
Western	3.8	5.9	7.1	57.4	25.8	100.0	61.3	477
Education								
No education	8.2	9.8	7.5	64.3	10.2	100.0	70.9	689
Primary	2.5	7.9	8.8	71.0	9.8	100.0	75.7	3,595
Secondary	1.5	6.5	8.8	75.0	8.1	100.0	80.4	2,726
Higher	1.0	5.3	1.6	85.5	6.6	100.0	83.3	316
Wealth quintile								
Lowest	4.6	8.9	8.4	68.8	9.3	100.0	71.9	1,676
Second	3.0	7.1	7.4	70.9	11.6	100.0	73.8	1,527
Middle	2.2	7.1	8.1	72.9	9.6	100.0	78.4	1,390
Fourth	1.6	7.1	10.5	73.5	7.3	100.0	80.7	1,471
Highest	1.0	6.8	7.5	77.6	7.1	100.0	83.8	1,262
Total	2.6	7.5	8.4	72.5	9.1	100.0	77.4	7,325

MALARIA 12

Key Findings

- ***Household possession of mosquito nets:*** Although the percentage of households with at least one insecticide-treated net (ITN) increased from 12% in 2001-02 to 78% in 2018, there remains a gap with respect to the availability of sufficient nets to cover all household members, with only 41% of households reporting having at least one ITN for every two residents.
- ***Use of mosquito nets by children:*** Sixty-four percent of children under age 5 in households with at least one ITN slept under an ITN the night prior to the survey.
- ***Indoor residual spraying (IRS) against mosquitoes:*** Sixty-one percent of households had at least one ITN for every two persons and/or IRS in the past 12 months.
- ***Use of intermittent preventive treatment (IPTp) by women during pregnancy:*** Ninety-four percent of pregnant women received one or more doses of SP/Fansidar, 81% received two or more doses, and only 59% received three or more doses.
- ***Prevalence, diagnosis, and prompt treatment of children with fever:*** Sixteen percent of children under age 5 had a fever in the 2 weeks prior to the survey.
- ***Type of antimalarial drugs used:*** Ninety-seven percent of children with fever who took an antimalarial took artemisinin-based combination therapy (ACT).
- ***Haemoglobin <8.0 g/dl in children:*** Four percent of children age 6-59 months have haemoglobin levels below 8.0 g/dl.

In Zambia, malaria remains a major public health concern, and its elimination has been prioritised in the national universal health coverage agenda through deployment of cost-effective preventive and curative interventions (NMEC 2017). The key preventive interventions deployed include insecticide-treated bed nets, indoor residual spraying, and use of intermittent preventive treatment among pregnant women. The curative interventions include prompt parasitological diagnosis and treatment with efficacious antimalarial medicines.

This chapter presents data that are useful for assessing how well malaria control strategies are being implemented, including indoor residual spraying of dwellings with insecticides, availability and use of mosquito nets, prophylactic and therapeutic use of antimalarial drugs, diagnostic testing of children with fever, and prevalence of anaemia among children under age 5.

12.1 OWNERSHIP OF INSECTICIDE-TREATED NETS

Ownership of insecticide-treated nets

Households that have at least 1 insecticide-treated net (ITN). An ITN is defined as a factory-treated net that does not require any further treatment.

Sample: Households

Full household ITN coverage

Percentage of households with at least one ITN for every 2 people.

Sample: Households

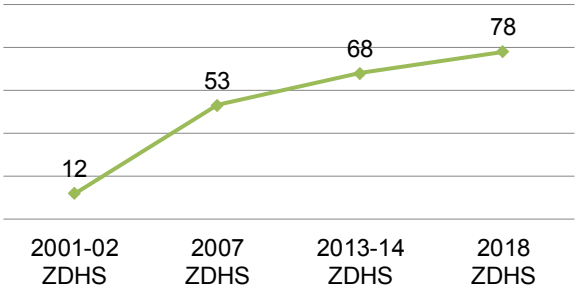
Insecticide-treated nets (ITNs) have been the backbone of vector control in Zambia. In order to achieve and maintain required coverage levels, ITNs are primarily distributed through mass distribution campaigns and routine means such as antenatal care (ANC) and under-5 clinic visits. For the 2018 ZDHS the current ITN was previously known as a LLIN in surveys conducted prior to 2018.

Eighty percent of households have at least one mosquito net, while 78% have at least one ITN. The average number of ITNs per household is 1.7. Only 41% of households have achieved full household ITN coverage, meaning that there is at least one net for every two people who stayed in the household the night before the survey (**Table 12.1**).

Trends: In Zambia, ITN ownership increased from 12% in 2001-02 to 78% in 2018 (**Figure 12.1**). Over the same period, full household ITN coverage increased from 2% to 41%.

Figure 12.1 **Trends in household ownership of ITNs**

Percentage of households owning at least one insecticide-treated net (ITN)



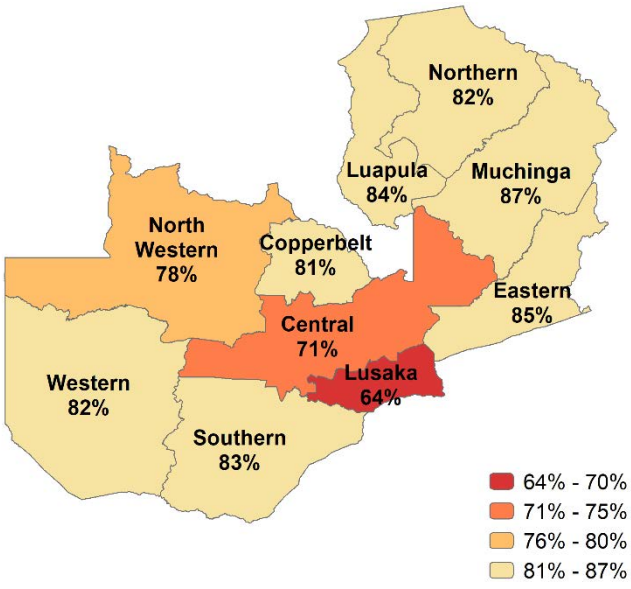
Note: The definition of an ITN in surveys conducted prior to 2018 included nets that had been soaked with insecticides within the past 12 months.

Patterns by background characteristics

- A higher percentage of households in rural areas have at least one ITN (82%) than households in urban areas (73%).
- The percentage of households with at least one ITN is lowest in Lusaka (64%) and highest in Muchinga (87%) (**Figure 12.2**).

Figure 12.2 **ITN ownership by province**

Percentage of households with at least one ITN



- The percentage of households with at least one ITN for every two persons increases with increasing household wealth, from 36% in the lowest wealth quintile to 47% in the highest wealth quintile (**Figure 12.3**).

Source of Nets

Ninety-two percent of ITNs are obtained through mass distribution campaigns , while 3% are obtained from a shop or market and 2% are obtained during ANC or under-5 clinic visits. One percent or less of ITNs are obtained from other sources (**Table 12.2** and **Figure 12.4**).

***Figure 12.3* Full household ITN coverage by household wealth**

Percentage of households with at least one ITN for every two persons

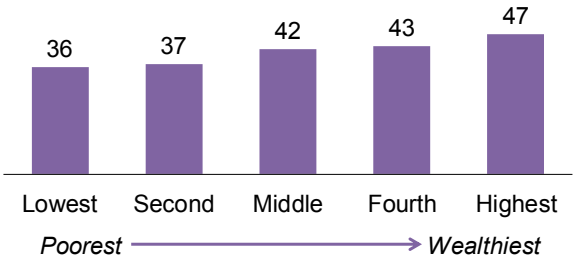
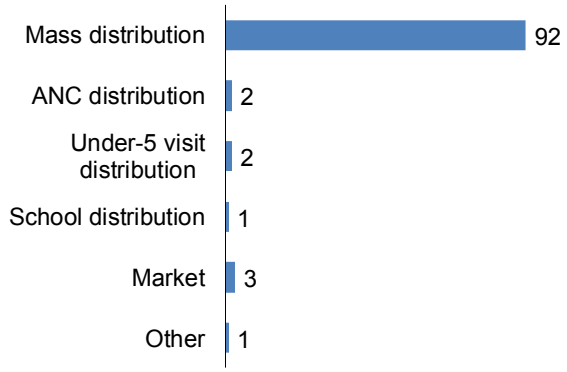


***Figure 12.4* Source of ITNs**

Percent distribution of ITNs in interviewed households



12.2 HOUSEHOLD ACCESS TO AND USE OF ITNS

Access to an ITN

Percentage of the population that could sleep under an ITN if each ITN in the household were used by up to 2 people.

Sample: De facto household population

Use of ITNs

Percentage of population that slept under an ITN the night before the survey.

Sample: De facto household population

Table 12.4 shows that 60% of the de facto population has access to ITNs, although a smaller percentage (46%) slept under an ITN the night before the survey (**Table 12.5**). In households with at least one ITN, 58% of the de facto population slept under an ITN the night before the survey. Sixty-four percent of existing ITNs were used the night prior to the survey (**Table 12.6**).

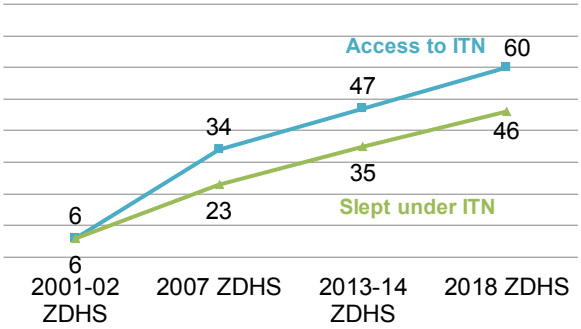
Trends: The proportion of the de facto population with access to an ITN increased from 6% in 2001-02 to 60% in 2018 (**Figure 12.5**). During the same period, the proportion of the de facto population that slept under an ITN the night before the survey increased from 6% to 46%.

Patterns by background characteristics

- Access to an ITN is higher in rural areas (61%) than in urban areas (59%) (**Figure 12.6**).
- Across the provinces, the percentage of the population with access to an ITN ranges from 51% in Lusaka to 66% in Muchinga (**Figure 12.7**).
- Generally, the percentage of the population that slept under an ITN the previous night decreases with increasing wealth, from 50% in the lowest wealth quintile to 42% in the highest wealth quintile.

Figure 12.5 Trends in ITN access and use

Percentage of the household population with access to an ITN and percentage of the population that slept under an ITN the night before the survey



Note: The definition of an ITN in surveys conducted prior to 2018 included nets that had been soaked with insecticides within the past 12 months.

Figure 12.6 Access to and use of ITNs by residence

Percentage of the household population with access to an ITN and who slept under an ITN the night before the survey

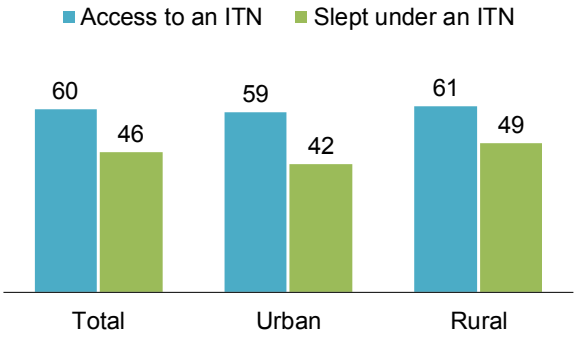
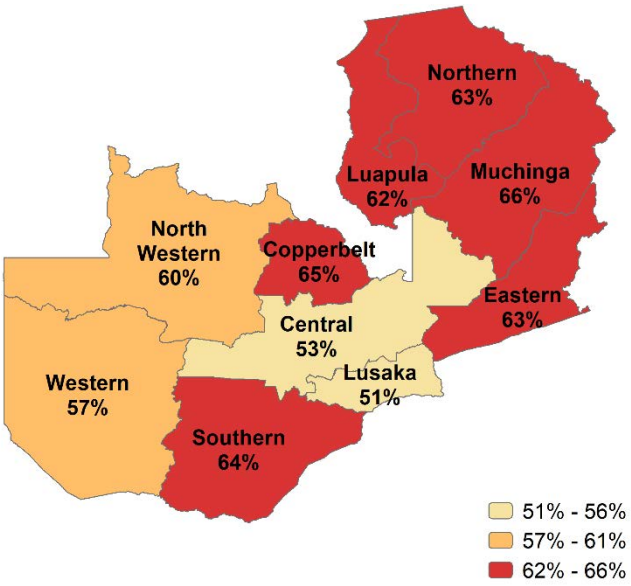


Figure 12.7 ITN access by province

Percent of the household population that could sleep under an ITN if each ITN in the household were used by up to 2 people



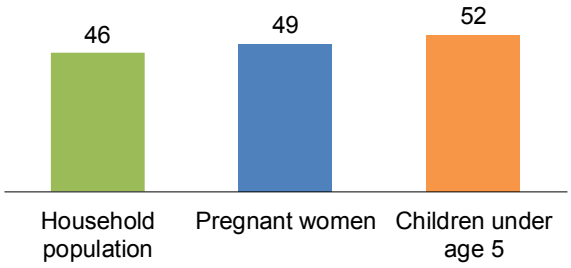
12.3 USE OF ITNS BY CHILDREN AND PREGNANT WOMEN

Children and pregnant women are particularly vulnerable to malaria. Fifty-two percent of children under age 5 slept under an ITN the night prior to the survey (**Table 12.7**). Similarly, 49% of pregnant women age 15-49 slept under an ITN the night before the survey (**Table 12.8** and **Figure 12.8**).

Trends: The percentage of children under age 5 who slept under an ITN the night before the survey increased from 7% in 2001-02 to 52% in 2018. There was a similar trend among pregnant women, with an increase from 9% in 2001-02 to 49% in 2018.

Figure 12.8 ITN use

Percentage who slept under an ITN the night before the survey



Patterns by background characteristics

- ITN use by children under age 5 in households with at least one ITN is highest in Luapula (75%) and lowest in Lusaka (49%).
- The percentage of children who slept under an ITN the night preceding the survey generally decreases with age, from 55% among those less than age 12 months to 46% among those age 36-47 months.
- ITN use by pregnant women age 15-49 in households with at least one ITN is highest in Luapula (85%) and lowest in Southern (45%).

12.4 INDOOR RESIDUAL SPRAYING

Indoor residual spraying

Application of a long-lasting, residual insecticide to potential malaria vector resting surfaces such as internal walls, eaves, and ceilings in all houses or structures where such vectors might come into contact with the insecticide.

Sample: Households

Indoor residual spraying (IRS) is another key vector control intervention in Zambia conducted in all districts meeting the deployment criteria. IRS is conducted through annual campaigns that take place prior to the onset of the rains. The choice of insecticides used in IRS is guided by the National Insecticide Resistance Management Plan (NMEC 2018).

Thirty-five percent of households received IRS in the 12 months prior to the survey. Eighty-three percent of households had at least one vector control intervention (i.e., at least one ITN and/or IRS in the 12 months prior to the survey). Sixty-one percent of households had full household ITN coverage and/or IRS in the 12 months prior to the survey (**Table 12.9**).

Trends: The percentage of households that received IRS increased from 28% in 2013-14 to 35% in 2018. Similarly, the percentage of households with at least one ITN and/or IRS in the past 12 months increased from 12% in 2001-02 to 83% in 2018, while the percentage with at least one ITN for every two persons and/or IRS in the past 12 months, increased from 2% to 61% over the same period.

Patterns by background characteristics

- Rural areas have a greater percentage (62%) of households with full household ITN coverage and/or IRS in the 12 months prior to the survey than urban areas (59%).
- The percentage of households with at least one ITN for every two persons and/or IRS in the past 12 months is lowest in Lusaka (42%) and highest in Luapula (74%).
- IRS coverage is lowest in Lusaka (14%) and highest in Luapula (58%).

12.5 MALARIA IN PREGNANCY

Intermittent preventive treatment (IPTp) during pregnancy

Percentage of women who took at least 3 doses of SP/Fansidar during their last pregnancy.

Sample: Women age 15-49 with a live birth in the 2 years before the survey

Malaria infection during pregnancy is a major public health problem in Zambia, with substantial risks for the mother, her foetus, and the neonate. Intermittent preventive treatment of malaria in pregnancy (IPTp) is a full therapeutic course of antimalarial medicine given to pregnant women at routine antenatal care visits to prevent malaria. IPTp helps prevent maternal malaria episodes, maternal and foetal anaemia, placental parasitaemia, low birth weight, and neonatal mortality.

The World Health Organization (WHO) recommends a three-pronged approach for reducing the negative health effects associated with malaria in pregnancy: prompt diagnosis and treatment of confirmed infection, use of long-lasting insecticidal nets (LLINs), and IPTp (WHO 2004).

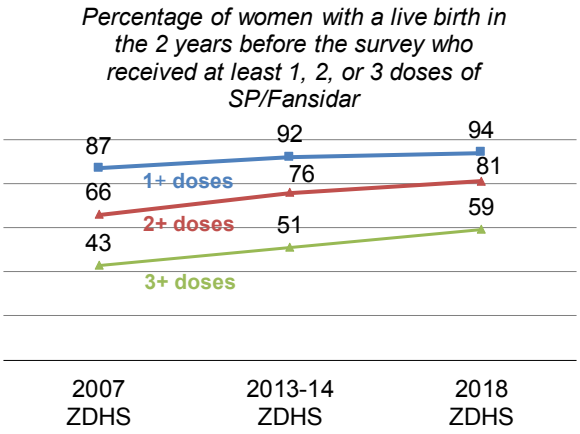
Sulfadoxine-pyrimethamine (SP), also known as Fansidar, is the recommended drug for IPTp in Zambia. The Ministry of Health defines IPTp as the provision of three or more doses of sulfadoxine-pyrimethamine (SP)/Fansidar, with at least 1 month between doses, to protect the mother and her child from malaria

during routine antenatal care visits in the second and third trimesters of pregnancy (IPTp3+) until delivery (NMEC 2014). The indicator used to measure coverage of this intervention is the percentage of women with a live birth in the 2 years preceding the survey who received three or more doses of SP/Fansidar to prevent malaria during their most recent pregnancy (IPTp3+).

The percentage of IPTp uptake decreases with the number of doses. Ninety-four percent of pregnant women received one or more doses, while 81% received two or more doses and only 59% received three or more doses (**Table 12.10**).

Trends: IPTp coverage for all doses has increased over the years. The percentage of women receiving at least one dose increased from 87% in 2007 to 94% in 2018, while the percentage receiving at least two doses increased from 66% to 81% and the percentage receiving at least three doses increased from 43% to 59% over the same period (**Figure 12.9**).

***Figure 12.9* Trends in IPTp use by pregnant women**



Patterns by background characteristics

- The percentage of pregnant women who received three or more doses of SP/Fansidar is higher in urban areas (65%) than in rural areas (56%) (**Table 12.9**).
- By province, IPTp coverage of three or more doses is lowest in Southern (42%) and highest in Copperbelt (70%).
- The percentage of women who received three or more doses of SP/Fansidar during pregnancy increases with increasing education, from 52% among those with no education to 76% among those with a higher education.

12.6 Case Management of Malaria in Children

Care seeking for children under 5 with fever

Percentage of children under 5 with a fever in the 2 weeks before the survey for whom advice or treatment was sought from a health provider, a health facility, or a pharmacy.

Sample: Children under 5 with a fever in the 2 weeks before the survey

Diagnosis of malaria in children under 5 with fever

Percentage of children under 5 with a fever in the 2 weeks before the survey who had blood taken from a finger or heel for testing. This is a proxy measure of diagnostic testing for malaria.

Sample: Children under 5 with a fever in the 2 weeks before the survey

Artemisinin-based combination therapy (ACT) for children under 5 with fever

Among children under 5 with a fever in the 2 weeks before the survey who took any antimalarial drugs, the percentage who took an artemisinin-based combination therapy (ACT).

Sample: Children under 5 with a fever in the 2 weeks before the survey

Sixteen percent of children under age 5 had a fever during the 2 weeks prior to the survey. Seventy-seven percent of these children were taken for advice or treatment, and 48% were taken for advice or treatment the same or next day. Sixty-three percent of children with a fever had blood taken from a finger or heel for testing (**Table 12.11**).

Among children with a fever for whom advice or treatment was sought, 93% went to public health facilities, while 6% went to private sector facilities (**Table 12.12**). Ninety-seven percent of children with fever who took an antimalarial medication took ACT, while the remaining children took SP/Fansidar, amodiaquine, quinine injections, artesunate injections, or other antimalarials (**Table 12.13**).

Trends: The percentage of children with a fever who had blood taken from a finger or heel for testing increased from 49% in 2013-14 to 63% in 2018. Similarly, the percentage of children taken for advice and treatment increased from 71% in 2001-02 to 77% in 2018.

Patterns by background characteristics

- Seventeen percent of children in rural areas had a fever in the 2 weeks preceding the survey, as compared with 13% of children in urban areas.
- Sixty-seven percent of rural children with a fever had blood taken from a finger or heel for testing, compared with 52% of urban children.
- By province, the percentage of children who had a fever in the 2 weeks prior to the survey was lowest in Lusaka (9%) and highest in Luapula (30%).
- The percentage of children with fever who had blood taken from a finger or heel for testing was lowest in Southern (21%) and highest in Luapula (80%).
- The percentage of children with fever who had blood taken from a finger or heel for testing decreases with increasing mother's education, from 68% among children whose mothers have no education to 48% among children whose mothers have a higher education (**Table 12.11**).

12.7 Prevalence of Low Haemoglobin in Children

Prevalence of low haemoglobin in children

Percentage of children age 6-59 months who had a haemoglobin measurement of less than 8 grams per decilitre (g/dl) of blood. The cutoff of 8 g/dl is often used to classify malaria-related anaemia. This is a different cutoff than was used to classify severe anaemia in Chapter 11 (7 g/dl).

Sample: Children age 6-59 months

Anaemia, defined as a reduced level of haemoglobin in the blood, decreases the amount of oxygen reaching the tissues and organs of the body and reduces their capacity to function. Anaemia is associated with impaired motor and cognitive development in children. The main causes of anaemia in children are malaria and inadequate intake of iron, folate, vitamin B12, and other nutrients. Other causes of anaemia include intestinal worms, haemoglobinopathy, and sickle cell disease. Although anaemia is not specific to malaria, trends in anaemia prevalence can reflect malaria morbidity, and they respond to changes in the coverage of malaria interventions. Malaria interventions have been associated with a 60% reduction in the risk of anaemia using a cutoff of 8 g/dl (Korenromp et al. 2004).

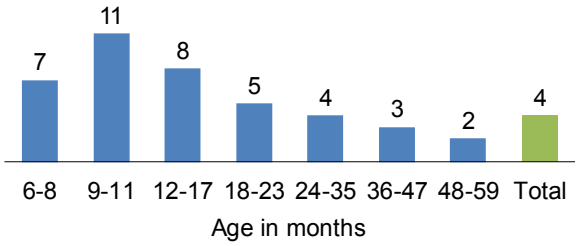
Overall, 4% of children age 6-59 months had haemoglobin lower than 8.0 g/dl (**Table 12.14**).

Patterns by background characteristics

- Boys (5%) are more likely than girls (4%) to have haemoglobin levels below 8.0 g/dl.
- The percentage of children with haemoglobin levels below 8.0 g/dl is highest among those age 9-11 months (11%) and lowest among those age 48-59 months (2%) (**Figure 12.10**).
- By province, the percentage of children with haemoglobin levels below 8.0 g/dl is lowest in Central (2%) and highest in Luapula (9%).

Figure 12.10 Low haemoglobin in children by age

Percentage of children age 6-59 months with haemoglobin lower than 8.0 g/dl



List of Tables

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- **Table 12.2 Source of mosquito nets**
- **Table 12.3 Access to an insecticide-treated net (ITN)**
- **Table 12.4 Access to an ITN**
- **Table 12.5 Use of mosquito nets by persons in the household**
- **Table 12.6 Use of existing ITNs**
- **Table 12.7 Use of mosquito nets by children**
- **Table 12.8 Use of mosquito nets by pregnant women**
- **Table 12.9 Indoor residue spraying against mosquitoes**
- **Table 12.10 Use of intermittent preventive treatment (IPTp) by women during pregnancy**
- **Table 12.11 Prevalence, diagnosis, and prompt treatment of children with fever**
- **Table 12.12 Source of advice or treatment for children with fever**
- **Table 12.13 Type of antimalarial drugs used**
- **Table 12.14 Haemoglobin <8.0 g/dl in children**

Table 12.1 Household possession of mosquito nets

Percentage of households with at least one mosquito net (treated or untreated) and insecticide-treated net (ITN), average number of nets and ITNs per household, and percentage of households with at least one net and ITN per two persons who stayed in the household last night, according to background characteristics, Zambia DHS 2018

Background characteristic	Percentage of households with at least one mosquito net		Average number of nets per household		Number of households	Percentage of households with at least one net for every two persons who stayed in the household last night		Number of households with at least one person who stayed in the household last night
	Any mosquito net	Insecticide-treated mosquito net (ITN)[1]	Any mosquito net	Insecticide-treated mosquito net (ITN)[1]		Any mosquito net	Insecticide-treated mosquito net (ITN)[1]	
Residence								
Urban	76.5	73.1	1.7	1.7	5,441	45.1	42.7	5,432
Rural	82.7	82.1	1.8	1.8	7,390	39.8	39.5	7,364
Province								
Central	71.8	71.4	1.6	1.6	1,134	38.0	37.5	1,133
Copperbelt	83.1	81.0	2.0	1.9	1,863	49.5	48.0	1,862
Eastern	85.0	84.7	1.9	1.9	1,556	39.4	39.0	1,551
Luapula	84.4	83.7	1.9	1.9	1,049	41.2	40.9	1,043
Lusaka	69.7	64.0	1.5	1.4	2,328	37.5	34.6	2,322
Muchinga	87.2	86.7	2.0	2.0	710	41.5	41.2	710
Northern	82.5	82.2	1.8	1.8	1,081	39.8	39.6	1,076
North Western	78.8	78.4	1.8	1.8	685	43.5	43.0	678
Southern	83.6	82.8	1.9	1.8	1,579	48.0	46.6	1,579
Western	84.1	81.5	1.6	1.6	846	40.6	38.9	841
Wealth quintile								
Lowest	79.9	79.7	1.5	1.5	2,651	35.5	35.5	2,639
Second	83.1	82.8	1.8	1.8	2,440	37.1	37.0	2,431
Middle	81.4	80.4	1.8	1.8	2,452	42.2	41.6	2,446
Fourth	75.5	73.1	1.7	1.6	2,758	44.6	43.1	2,753
Highest	80.9	75.9	2.1	2.0	2,530	50.7	47.1	2,526
Total	80.1	78.3	1.8	1.7	12,831	42.1	40.9	12,796

[1] An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2013-14 ZDHS, this was known as a long-lasting insecticidal net (LLIN).

Table 12.2 Source of mosquito nets

Percent distribution of mosquito nets by source of net, according to background characteristics, Zambia DHS 2018

Background characteristic	Mass distribution campaign	ANC visit	Under-5 visit	Pharmacy	Shop/ market	Community health worker	School	Other	Don't know/ missing	Total	Number of mosquito nets
Type of net											
ITN[1]	91.8	1.6	1.7	0.1	2.5	0.0	0.7	0.9	0.1	99.4	22,287
Other[2]	0.0	0.0	0.0	2.0	72.1	0.2	0.0	19.3	6.4	100.0	512
Residence											
Urban	85.2	1.0	1.8	0.4	8.1	0.0	0.2	2.2	0.4	99.3	9,438
Rural	93.0	1.9	1.7	0.0	1.2	0.0	1.0	0.7	0.1	99.4	13,361
Province											
Central	91.4	0.8	1.7	0.1	4.1	0.0	0.1	0.9	0.2	99.2	1,811
Copperbelt	90.9	0.7	2.1	0.2	3.9	0.0	0.1	1.2	0.3	99.4	3,662
Eastern	90.4	2.8	1.3	0.1	1.5	0.0	2.4	0.7	0.1	99.2	2,909
Luapula	91.7	2.2	3.2	0.0	1.0	0.0	0.7	0.8	0.2	99.9	1,971
Lusaka	79.6	0.9	1.7	0.7	12.6	0.1	0.5	3.0	0.6	99.6	3,518
Muchinga	91.8	2.7	2.7	0.1	1.3	0.0	1.0	0.3	0.1	100.0	1,392
Northern	93.0	2.4	1.4	0.0	0.7	0.0	0.0	0.3	0.1	97.9	1,985
North Western	90.8	0.9	1.4	0.0	3.4	0.0	1.5	1.8	0.1	99.9	1,253
Southern	94.8	0.9	0.7	0.1	1.8	0.0	0.3	0.9	0.1	99.6	2,927
Western	87.8	2.0	1.3	0.1	5.1	0.1	0.2	2.8	0.2	99.6	1,371
Wealth quintile											
Lowest	92.5	2.8	1.8	0.0	0.5	0.0	1.2	0.6	0.1	99.5	4,018
Second	93.5	1.8	2.0	0.1	0.6	0.0	0.9	0.7	0.0	99.5	4,325
Middle	92.9	1.4	1.9	0.0	1.5	0.0	0.7	0.9	0.1	99.3	4,480
Fourth	89.5	1.0	1.8	0.0	4.5	0.0	0.4	1.9	0.2	99.5	4,631
Highest	82.1	0.9	1.2	0.6	11.2	0.1	0.3	2.1	0.6	99.1	5,345
Total	89.7	1.5	1.7	0.2	4.0	0.0	0.7	1.3	0.2	99.4	22,799

ANC = Antenatal care
[1] An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2013-14 ZDHS, this was known as a long-lasting insecticidal net (LLIN).
[2] Any net that is not an ITN

Table 12.3 Access to an insecticide-treated net (ITN)

Percent distribution of the de facto household population by number of ITNs the household owns, and percentage with access to an ITN, according to number of persons who stayed in the household the night before the survey, Zambia DHS 2018

	Number of persons who stayed in the household the night before the survey								
Number of ITNs[1]	1	2	3	4	5	6	7	8+	Total
0	34.3	27.1	23.1	21.0	17.5	18.7	18.0	19.1	19.8
1	50.1	34.4	30.5	23.8	18.5	16.3	12.4	11.3	18.3
2	12.6	29.5	32.1	34.7	34.9	27.7	26.3	18.1	26.9
3	2.3	6.4	11.1	14.4	20.2	26.8	25.8	24.9	20.9
4	0.4	2.5	2.6	4.9	6.9	8.0	12.7	16.0	9.5
5	0.1	0.1	0.5	0.9	1.3	1.4	3.1	6.1	2.7
6	0.2	0.1	0.1	0.2	0.6	0.7	1.1	2.6	1.1
7	0.0	0.0	0.0	0.1	0.0	0.3	0.5	2.0	0.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	1,168	2,458	5,613	7,940	9,299	9,543	8,541	17,629	62,191
Percentage of the de facto population with access to an ITN[1,2]	65.7	72.9	66.7	67.1	64.5	61.2	58.1	50.1	59.9

[1] An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2013-14 ZDHS, this was known as a long-lasting insecticidal net (LLIN).
[2] Percentage of the de facto household population who could sleep under an ITN if each ITN in the household were used by up to two people

Table 12.4 Access to an ITN according to background characteristics

Percentage of the de facto population with access to an ITN in the household, by background characteristics, Zambia DHS 2018

Background characteristic	Percentage of the de facto population with access to an ITN[1]	Number of persons
Residence		
Urban	58.6	24,789
Rural	60.8	37,401
Province		
Central	53.3	5,650
Copperbelt	64.7	8,862
Eastern	62.9	7,963
Luapula	62.2	5,326
Lusaka	50.5	10,591
Muchinga	65.8	3,652
Northern	63.0	5,333
North Western	60.2	3,313
Southern	64.1	7,594
Western	56.7	3,908
Wealth quintile		
Lowest	56.3	12,374
Second	60.2	12,394
Middle	60.9	12,391
Fourth	59.0	12,560
Highest	63.1	12,472
Total	59.9	62,191

[1] Percentage of the de facto household population who could sleep under an ITN if each ITN in the household were used by up to two people

Table 12.5 Use of mosquito nets by persons in the household

Percentage of the de facto household population who slept the night before the survey under a mosquito net (treated or untreated) and under an insecticide-treated net (ITN), and among the de facto household population in households with at least one ITN, percentage who slept under an ITN the night before the survey, according to background characteristics, Zambia DHS 2018

	Household population			Household population in households with at least one ITN[1]	
Background characteristic	Percentage who slept under any mosquito net last night	Percentage who slept under an ITN[1] last night	Number of persons	Percentage who slept under an ITN[1] last night	Number of persons
Age					
<5	52.6	51.6	10,109	63.7	8,195
5-14	39.7	39.2	19,947	48.3	16,174
15-34	45.4	44.2	19,120	56.8	14,883
35-49	57.8	56.5	7,685	69.7	6,231
50+	58.2	57.4	5,235	69.9	4,302
Don't know/ missing	42.3	42.3	96	59.4	68
Sex					
Male	45.8	45.0	29,673	56.3	23,723
Female	48.8	47.7	32,517	59.4	26,129
Residence					
Urban	43.8	42.0	24,789	55.6	18,735
Rural	49.7	49.4	37,401	59.3	31,117
Province					
Central	36.2	35.8	5,650	49.9	4,057
Copperbelt	49.8	48.5	8,862	58.5	7,345
Eastern	54.2	53.9	7,963	62.7	6,846
Luapula	62.9	62.6	5,326	74.0	4,506
Lusaka	31.0	28.8	10,591	43.0	7,094
Muchinga	56.6	56.3	3,652	63.0	3,268
Northern	58.1	57.9	5,333	69.0	4,475
North Western	45.7	45.3	3,313	56.6	2,653
Southern	43.2	42.6	7,594	50.9	6,354
Western	52.9	51.0	3,908	61.2	3,255
Wealth quintile					
Lowest	49.6	49.5	12,374	61.2	10,004
Second	50.1	50.0	12,394	59.2	10,458
Middle	48.0	47.5	12,391	58.3	10,098
Fourth	44.6	43.6	12,560	57.5	9,507
Highest	44.4	41.7	12,472	53.2	9,786
Total	47.3	46.4	62,191	57.9	49,852

[1] An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2013-14 ZDHS, this was known as a long-lasting insecticidal net (LLIN).

Table 12.6 Use of existing ITNs

Percentage of insecticide-treated nets (ITNs) that were used by anyone the night before the survey, according to background characteristics, Zambia DHS 2018

Background characteristic	Percentage of existing ITNs[1] used last night	Number of ITNs[1]
Residence		
Urban	60.9	9,005
Rural	66.5	13,282
Province		
Central	57.8	1,797
Copperbelt	63.0	3,568
Eastern	70.8	2,892
Luapula	83.4	1,958
Lusaka	48.4	3,258
Muchinga	69.2	1,386
Northern	71.8	1,979
North Western	61.4	1,245
Southern	56.3	2,882
Western	75.6	1,320
Wealth quintile		
Lowest	68.9	4,008
Second	67.5	4,314
Middle	66.2	4,441
Fourth	62.0	4,510
Highest	57.9	5,013
Total	64.2	22,287

[1] An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2013-14 ZDHS, this was known as a long-lasting insecticidal net (LLIN).

Table 12.7 Use of mosquito nets by children

Percentage of children under age 5 who, the night before the survey, slept under a mosquito net (treated or untreated) and under an insecticide-treated net (ITN), and among children under age 5 in households with at least one ITN, percentage who slept under an ITN the night before the survey, according to background characteristics, Zambia DHS 2018

	Children under age 5 in all households			Children under age 5 in households with at least one ITN[1]	
Background characteristic	Percentage who slept under any mosquito net last night	Percentage who slept under an ITN[1] last night	Number of children	Percentage who slept under an ITN[1] last night	Number of children
Age in months					
<12	56.8	54.8	2,036	68.8	1,621
12-23	56.3	55.7	1,988	67.0	1,651
24-35	53.1	52.0	2,059	64.7	1,656
36-47	47.0	46.2	2,077	57.3	1,676
48-59	49.8	49.4	1,949	60.5	1,591
Sex					
Male	52.4	51.8	5,027	63.8	4,079
Female	52.7	51.5	5,082	63.5	4,115
Residence					
Urban	50.7	48.5	3,491	63.3	2,676
Rural	53.5	53.2	6,618	63.8	5,519
Province					
Central	39.9	39.4	890	54.6	642
Copperbelt	58.7	57.1	1,283	67.6	1,084
Eastern	59.6	59.2	1,354	68.4	1,173
Luapula	63.6	63.5	978	74.8	831
Lusaka	35.3	32.4	1,521	48.9	1,010
Muchinga	62.0	61.7	618	69.1	552
Northern	62.9	62.7	907	74.2	767
North Western	50.0	49.7	551	62.8	436
Southern	45.8	45.5	1,348	53.0	1,156
Western	59.8	57.6	659	69.8	544
Wealth quintile					
Lowest	55.3	55.2	2,499	67.6	2,042
Second	52.4	52.2	2,264	62.0	1,906
Middle	53.0	52.3	1,914	63.4	1,577
Fourth	49.9	48.5	1,851	63.6	1,413
Highest	51.2	47.9	1,580	60.2	1,257
Total	52.6	51.6	10,109	63.7	8,195

Note: Table is based on children who stayed in the household the night before the interview.
[1] An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2013-14 ZDHS, this was known as a long-lasting insecticidal net (LLIN).

Table 12.8 Use of mosquito nets by pregnant women

Percentage of pregnant women age 15-49 who, the night before the survey, slept under a mosquito net (treated or untreated) and under an insecticide-treated net (ITN), and among pregnant women age 15-49 in households with at least one ITN, percentage who slept under an ITN the night before the survey, according to background characteristics, Zambia DHS 2018

	Among pregnant women age 15-49 in all households			Among pregnant women age 15-49 in households with at least one ITN[1]	
Background characteristic	Percentage who slept under any mosquito net last night	Percentage who slept under an ITN[1] last night	Number of pregnant women	Percentage who slept under an ITN[1] last night	Number of pregnant women
Residence					
Urban	45.1	43.4	420	62.4	292
Rural	52.3	52.0	745	65.5	592
Province					
Central	38.3	38.3	102	57.1	68
Copperbelt	63.2	60.3	142	74.9	114
Eastern	56.0	56.0	163	66.6	137
Luapula	77.6	75.9	109	85.2	97
Lusaka	32.1	31.2	176	48.9	112
Muchinga	66.3	66.3	67	74.3	60
Northern	63.0	63.0	90	77.3	73
North Western	37.1	37.1	59	55.2	40
Southern	30.6	30.4	188	44.9	128
Western	53.9	52.6	70	66.4	55
Education					
No education	65.1	64.4	101	84.4	77
Primary	45.6	45.2	564	60.9	419
Secondary	50.0	49.2	440	63.6	340
Higher	60.0	55.4	61	(69.8)	48
Wealth quintile					
Lowest	55.5	55.0	266	67.9	215
Second	53.1	53.1	253	66.5	202
Middle	42.5	42.4	224	57.1	166
Fourth	44.0	43.0	257	70.6	157
Highest	53.6	50.8	165	58.4	144
Total	49.7	48.9	1,165	64.5	884

Note: Table is based on women who stayed in the household the night before the interview.
[1] An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2013-14 ZDHS, this was known as a long-lasting insecticidal net (LLIN).

Table 12.9 Indoor residual spraying against mosquitoes

Percentage of households in which someone has come into the dwelling to spray the interior walls against mosquitoes (IRS) in the past 12 months, percentage of households with at least one ITN and/or IRS in the past 12 months, and percentage of households with at least one ITN for every two persons and/or IRS in the past 12 months, by background characteristics, Zambia DHS 2018

Background characteristic	Percentage of households with IRS[1] in the past 12 months	Percentage of households with at least one ITN[2] and/or IRS in the past 12 months	Number of households	Percentage of households with at least one ITN[2] for every two persons and/or IRS in the past 12 months	Number of households with at least one person who stayed in the household last night
Residence					
Urban	31.0	78.2	5,441	58.9	5,432
Rural	38.5	87.1	7,390	61.7	7,364
Province					
Central	26.2	75.5	1,134	51.6	1,133
Copperbelt	46.5	87.7	1,863	72.7	1,862
Eastern	47.0	91.2	1,556	67.2	1,551
Luapula	57.5	92.3	1,049	74.4	1,043
Lusaka	14.4	67.2	2,328	42.2	2,322
Muchinga	37.8	90.1	710	63.6	710
Northern	55.2	89.0	1,081	71.5	1,076
North Western	35.0	83.1	685	61.1	678
Southern	24.4	85.8	1,579	58.1	1,579
Western	24.8	85.1	846	53.6	841
Wealth quintile					
Lowest	36.0	85.7	2,651	58.1	2,639
Second	41.1	88.1	2,440	62.1	2,431
Middle	39.3	85.6	2,452	63.3	2,446
Fourth	30.2	77.7	2,758	57.8	2,753
Highest	30.8	80.0	2,530	61.7	2,526
Total	35.3	83.3	12,831	60.5	12,796

[1] Indoor residual spraying (IRS) is limited to spraying conducted by a government, private, or nongovernmental organisation.
[2] An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2013-14 ZDHS, this was known as a long-lasting insecticidal net (LLIN).

Table 12.10 Use of intermittent preventive treatment (IPTp) by women during pregnancy

Percentage of women age 15-49 with a live birth in the 2 years preceding the survey who, during the pregnancy that resulted in the last live birth, received one or more doses of SP/Fansidar, received two or more doses of SP/Fansidar, and received three or more doses of SP/Fansidar, according to background characteristics, Zambia DHS 2018

Background characteristic	Percentage who received one or more doses of SP/Fansidar	Percentage who received two or more doses of SP/Fansidar	Percentage who received three or more doses of SP/Fansidar	Number of women with a live birth in the 2 years preceding the survey
Residence				
Urban	94.5	85.3	64.6	1,340
Rural	93.7	78.7	55.7	2,564
Province				
Central	91.9	78.5	60.8	343
Copperbelt	95.9	86.6	69.8	473
Eastern	96.3	84.1	64.5	569
Luapula	94.0	79.3	58.7	375
Lusaka	94.5	86.3	61.8	558
Muchinga	90.3	74.1	52.0	227
Northern	94.6	83.3	63.8	347
North Western	95.7	87.1	64.3	219
Southern	93.5	74.4	41.8	525
Western	89.2	69.5	45.7	269
Education				
No education	86.4	71.8	51.9	371
Primary	94.0	79.6	56.3	1,970
Secondary	95.7	84.4	62.0	1,410
Higher	96.4	89.3	75.7	153
Wealth quintile				
Lowest	91.3	76.4	53.2	1,002
Second	94.9	80.7	56.8	873
Middle	95.8	80.5	58.0	738
Fourth	93.0	82.1	59.0	672
Highest	95.9	88.2	70.9	620
Total	94.0	81.0	58.7	3,905

Table 12.11 Prevalence, diagnosis, and prompt treatment of children with fever

Percentage of children under age 5 with a fever in the 2 weeks preceding the survey, and among children under age 5 with a fever, percentage for whom advice or treatment was sought, percentage for whom advice or treatment was sought the same or next day following the onset of fever, and percentage who had blood taken from a finger or heel, by background characteristics, Zambia DHS 2018

	Children under age 5		Children under age 5 with fever			
Background characteristic	Percentage with a fever in the 2 weeks preceding the survey	Number of children	Percentage for whom advice or treatment was sought[1]	Percentage for whom advice or treatment was sought the same or next day	Percentage who had blood taken from a finger or heel for testing	Number of children
Age in months						
<12	17.1	1,960	79.3	48.6	60.9	336
12-23	20.4	1,891	74.5	40.0	60.9	385
24-35	17.9	1,862	80.6	51.8	64.9	333
36-47	12.9	1,866	76.4	53.4	65.1	240
48-59	10.3	1,782	73.8	46.2	65.0	184
Sex						
Male	16.4	4,666	79.4	51.1	64.4	766
Female	15.2	4,695	74.9	43.8	61.4	712
Residence						
Urban	12.9	3,307	75.9	44.6	52.0	426
Rural	17.4	6,054	77.7	48.8	67.4	1,052
Province						
Central	11.0	819	77.6	44.7	58.2	90
Copperbelt	15.1	1,166	72.0	37.4	56.4	177
Eastern	20.2	1,266	84.9	59.6	75.5	256
Luapula	30.1	877	85.5	46.3	79.9	264
Lusaka	9.0	1,446	71.8	46.7	42.3	130
Muchinga	14.2	569	79.3	59.7	73.3	81
Northern	17.8	846	66.9	45.8	66.6	150
North Western	14.6	517	83.4	59.4	73.8	76
Southern	10.0	1,242	71.3	37.2	21.3	124
Western	21.3	613	70.0	40.9	59.9	131
Mother's education						
No education	17.2	951	77.5	50.7	68.2	164
Primary	16.9	4,763	75.0	45.7	65.4	806
Secondary	13.9	3,276	81.3	48.5	58.6	456
Higher	14.2	371	74.2	59.3	48.2	53
Wealth quintile						
Lowest	20.3	2,343	73.6	45.5	67.1	476
Second	17.9	2,079	79.4	52.1	69.9	372
Middle	12.8	1,735	84.2	49.9	68.5	222
Fourth	13.6	1,733	75.4	41.8	47.0	236
Highest	11.7	1,469	75.7	48.5	51.5	172
Total	15.8	9,361	77.2	47.6	63.0	1,478

[1] Includes advice or treatment from the following sources: public medical sector, private medical sector, shop, market, and itinerant drug seller. Excludes advice or treatment from a traditional practitioner.

Table 12.12 Source of advice or treatment for children with fever

Percentage of children under age 5 with a fever in the 2 weeks preceding the survey for whom advice or treatment was sought from specific sources, and among children under age 5 with a fever in the 2 weeks preceding the survey for whom advice or treatment was sought, percentage for whom advice or treatment was sought from specific sources, Zambia DHS 2018

	Percentage for whom advice or treatment was sought from each source:	
Source	Among children with fever	Among children with fever for whom advice or treatment was sought
Public sector	**72.1**	**93.4**
Government hospital	5.0	6.4
Government health centre	50.5	65.5
Government health post	14.0	18.2
Mobile hospital/clinic	0.0	0.0
Fieldworker/CHW	3.1	4.0
Private sector	**4.4**	**5.7**
Private hospital/clinic	0.8	1.0
Mission hospital/clinic	2.1	2.8
Pharmacy	0.3	0.4
Private doctor	0.1	0.1
Mobile clinic	0.0	0.1
Fieldworker/CHW	1.1	1.5
Other private sector	**0.8**	**1.0**
Shop	0.8	1.0
Traditional practitioner	0.1	0.1
Other	0.1	0.1
Number of children	1,478	1,141

CHW = Community health worker

Table 12.13 Type of antimalarial drugs used

Among children under age 5 with a fever in the 2 weeks preceding the survey who took any antimalarial medication, percentage who took specific antimalarial drugs, according to background characteristics, Zambia DHS 2018

Background characteristic	Percentage of children who took:									Number of children with fever who took any antimalarial drug
	Any ACT	SP/ Fansidar	Chloro-quine	Amodia-quine	Quinine pills	Quinine injection	Artesunate rectal	Artesunate injection	Other anti-malarial	
Age in months										
<6	*	*	*	*	*	*	*	*	*	21
6-11	98.0	2.0	0.0	0.0	0.0	0.0	0.0	2.3	0.0	56
12-23	98.2	2.5	0.0	0.0	0.0	1.7	0.0	0.0	0.0	109
24-35	97.3	0.7	0.0	1.0	0.0	0.4	1.6	0.0	0.0	140
36-47	98.1	1.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	95
48-59	92.3	1.2	0.5	2.4	0.7	0.0	0.0	1.8	1.1	96
Sex										
Male	97.8	1.4	0.0	0.9	0.2	0.7	0.3	0.5	0.0	275
Female	95.9	1.3	0.2	0.5	0.0	0.6	0.6	0.7	0.4	242
Residence										
Urban	96.7	0.6	0.8	0.0	1.0	0.9	0.0	0.9	0.0	64
Rural	96.9	1.5	0.0	0.8	0.0	0.6	0.5	0.5	0.2	452
Province										
Central	*	*	*	*	*	*	*	*	*	16
Copperbelt	(100.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	41
Eastern	96.5	3.1	0.0	0.0	0.0	2.5	0.0	1.3	1.1	97
Luapula	98.9	0.5	0.0	0.0	0.0	0.0	0.0	0.6	0.0	193
Lusaka	*	*	*	*	*	*	*	*	*	4
Muchinga	89.2	1.5	0.0	0.0	0.0	2.2	5.7	1.4	0.0	40
Northern	96.8	2.2	0.0	0.0	1.0	0.0	0.0	0.0	0.0	70
North Western	97.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33
Southern	*	*	*	*	*	*	*	*	*	5
Western	*	*	*	*	*	*	*	*	*	18
Mother's education										
No education	98.4	0.0	0.0	0.8	0.0	1.1	0.0	0.8	0.0	73
Primary	96.4	1.1	0.2	0.9	0.2	0.7	0.7	0.3	0.3	332
Secondary	97.0	3.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	106
Higher	*	*	*	*	*	*	*	*	*	6
Wealth quintile										
Lowest	98.5	0.4	0.0	0.3	0.0	0.9	0.7	1.2	0.0	209
Second	96.4	2.4	0.0	1.2	0.0	0.0	0.5	0.0	0.0	162
Middle	95.9	1.6	0.5	0.0	0.0	1.5	0.0	0.0	1.1	95
Fourth	(91.2)	(2.9)	(0.0)	(3.9)	(0.0)	(0.0)	(0.0)	(2.0)	(0.0)	29
Highest	*	*	*	*	*	*	*	*	*	22
Total	96.9	1.3	0.1	0.7	0.1	0.6	0.4	0.6	0.2	516

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
ACT = Artemisinin-based combination therapy

Table 12.14 Haemoglobin <8.0 g/dl in children

Percentage of children age 6-59 months with haemoglobin lower than 8.0 g/dl, by background characteristics, Zambia DHS 2018

Background characteristic	Haemoglobin <8.0 g/dl	Number of children
Age in months		
6-8	7.1	451
9-11	10.7	479
12-17	8.3	960
18-23	5.4	944
24-35	4.0	1,968
36-47	2.9	1,988
48-59	1.8	1,834
Sex		
Male	5.0	4,268
Female	3.9	4,355
Mother's interview status		
Interviewed	4.5	7,756
Not interviewed but in household	5.0	199
Not interviewed and not in the household[1]	3.9	667
Residence		
Urban	4.7	2,982
Rural	4.3	5,641
Province		
Central	1.9	773
Copperbelt	3.6	1,104
Eastern	3.1	1,134
Luapula	8.9	796
Lusaka	5.0	1,334
Muchinga	3.7	535
Northern	7.0	773
North Western	4.5	492
Southern	3.4	1,145
Western	4.0	537
Mother's education[2]		
No education	6.4	815
Primary	4.0	4,081
Secondary	4.7	2,742
Higher	3.5	314
Wealth quintile		
Lowest	5.6	2,088
Second	4.0	1,933
Middle	3.6	1,646
Fourth	3.6	1,628
Highest	5.3	1,327
Total	4.4	8,623

Note: Table is based on children who stayed in the household the night before the interview. Haemoglobin levels are adjusted for altitude using CDC formulas (CDC 1998). Haemoglobin is measured in grams per decilitre (g/dl).

[1] Includes children whose mothers are deceased

[2] For women who are not interviewed, information on education is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire.

HIV/AIDS-RELATED KNOWLEDGE, ATTITUDES, AND BEHAVIOUR

13

Key Findings

- ***Comprehensive knowledge of HIV:*** Less than half (46%) of women and men age 15-49 have comprehensive knowledge about HIV.
- ***Knowledge of mother-to-child transmission of HIV:*** Sixty percent of women and 50% of men age 15-49 know that HIV can be transmitted during pregnancy, during labour/delivery, or by breastfeeding.
- ***Multiple sexual partners:*** Two percent of women and 15% of men age 15-49 reported having two or more sexual partners in the 12 months prior to the survey.
- ***Condom use:*** Thirty-five percent of women and 54% of men reported using a condom during their last sexual intercourse with a nonmarital or noncohabiting partner.
- ***Coverage of HIV testing:*** Eighty-five percent of women and 75% of men age 15-49 have ever been tested for HIV and received the test results.
- ***Male circumcision:*** Thirty-two percent of men age 15-49 are circumcised.

The HIV epidemic in Zambia is driven largely by unprotected heterosexual transmission. The primary factors in transmission include multiple and concurrent partnerships, low and inconsistent condom use, low coverage of medical male circumcision, and mother-to-child transmission (NAC 2017). Moreover, these factors are compounded by social drivers that further increase risk, decrease resilience, and lead to new HIV infections through high-risk behaviours such as intergenerational sex and transactional sex. These drivers include stigma and discrimination, nonacceptance of antiretroviral drugs (ARVs) and condom use, gender inequalities (including gender-based violence), and abuse of alcohol and other substances. Knowledge of HIV transmission and prevention methods is key to preventing the spread of HIV.

This chapter provides data on levels and trends in HIV/AIDS knowledge, attitudes, and behaviours, including knowledge of HIV prevention methods, stigma and discrimination, sexual behaviour, self-reported HIV testing, prevention of mother-to-child transmission, and voluntary medical male circumcision.

13.1 HIV/AIDS KNOWLEDGE, TRANSMISSION, AND PREVENTION METHODS

The 2018 ZDHS asked women and men age 15-49 whether they had heard of HIV. Those who reported having heard of HIV were then asked a number of questions about whether and how infection can be avoided. Overall, general awareness of HIV among the population is nearly universal, as 98% of women and 99% of men interviewed have heard of the disease (data not shown).

Table 13.1 shows that men tend to have greater knowledge of HIV prevention than women. Eighty-four percent of men age 15-49 know that HIV can be prevented by using condoms and limiting sexual

intercourse to one uninfected partner, as compared with 80% of women in the same age range. Ninety-one percent of men mentioned abstinence as an HIV prevention method, compared with 85% of women.

Trends: The percentage of women who know that using condoms consistently and limiting sexual intercourse to one uninfected partner can reduce the risk of HIV increased from 66% in 2001-02 to 80% in 2018. Among men, the percentage increased from 67% to 84% over the same period.

Patterns by background characteristics

- Seventy-six percent of young women age 15-24 reported that using condoms and limiting sexual intercourse to one uninfected partner can prevent HIV, as compared with 82% of young men.
- Knowledge of the two HIV prevention methods is higher among urban women (83%) than among rural women (77%).
- Among the provinces, women and men in Eastern are least likely to have knowledge of the two HIV prevention methods (69% and 76%, respectively). Central and Copperbelt have the highest percentage of women with knowledge of the two HIV prevention methods (86% each), while Central has the highest percentage of men with knowledge of the two methods (92%).
- Knowledge of the two HIV prevention methods increases with increasing education among both women and men. Sixty-nine percent of women with no education reported having knowledge of the two HIV prevention methods, compared with 92% of those with a higher education. The corresponding percentages among men are 76% and 90%.
- Among women, knowledge of the two HIV prevention methods increases with increasing wealth, from 74% among those in the lowest wealth quintile to 85% among those in the highest quintile. No such pattern is observed among men.

Comprehensive knowledge of HIV

Knowing that consistent use of condoms during sexual intercourse and having just one uninfected faithful partner can reduce the chances of getting HIV, knowing that a healthy-looking person can have HIV, and rejecting the two most common local misconceptions about transmission or prevention of HIV.

Sample: Women and men age 15-24 and 15-49

Tables 13.2.1 and **13.2.2** show that less than half (46%) of both women and men age 15-49 have comprehensive knowledge about HIV. Eighty-three percent of women and 90% of men know that a healthy-looking person can have HIV. The two most common local misconceptions are that HIV can be transmitted by mosquito bites (rejected by 69% of women and 65% of men) and that HIV can be transmitted by supernatural means (rejected by 81% of women and 83% of men).

Trends: The percentage of women age 15-49 with comprehensive knowledge of HIV increased from 36% in 2007 to 46% in 2018. Among men, however, comprehensive knowledge increased from 39% in 2007 to 49% in 2013-14 and then decreased slightly to 46% in 2018.

13.2 Knowledge about Mother-to-Child Transmission

Increasing the level of general knowledge about transmission of HIV from mother to child and reducing the risk of transmission using antiretroviral drugs are critical in reducing mother-to-child transmission (MTCT) of HIV. Zambia shares the international community's goal of achieving elimination of mother-to-child transmission of HIV (eMTCT), with the ambitious target of reducing the mother-to-child transmission rate to less than 1% by 2021 (NAC 2017).

To assess MTCT knowledge, respondents were asked whether HIV can be transmitted from a mother to her child during pregnancy, during delivery, or by breastfeeding and whether a mother with HIV can reduce the risk of transmission to her baby by taking certain drugs during pregnancy.

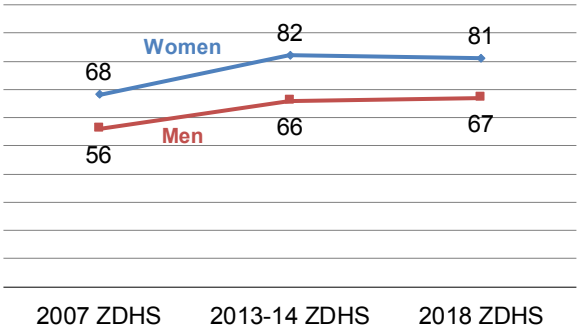
Sixty percent of women age 15-49 reported knowing that HIV can be transmitted by all three means: during pregnancy (67%), during delivery (83%), and by breastfeeding (87%). Similarly, 50% of men age 15-49 reported having knowledge of the three modes of transmission: during pregnancy (62%), during delivery (81%), and during breastfeeding (83%) (**Table 13.3**).

Eighty-one percent of women know that the risk of HIV transmission from mother to child can be reduced by taking special drugs, as compared with only 67% of men.

Trends: The percentage of women and men age 15-49 who know that the risk of mother-to-child transmission of HIV can be reduced by taking special drugs increased from 68% and 56% in 2007 to 82% and 66% in 2013-14 and then plateaued at 81% and 67% in 2018, respectively (**Figure 13.1**).

Figure 13.1 **Trends in knowledge of mother-to-child transmission (MTCT)**

Percentage of women and men age 15-49 who know that the risk of MTCT can be reduced by mother taking special drugs



Patterns by background characteristics

- Knowledge that medication can be taken to reduce the risk of MTCT is highest among women age 30-39 (88%) and men age 40-49 (77%) and lowest among women and men age 15-19 (65% and 52%, respectively).

13.3 Discriminatory Attitudes towards People Living with HIV

Widespread stigma and discrimination in a population can adversely affect both people's willingness to be tested and their adherence to antiretroviral therapy (ART). Thus, reduction of stigma and discrimination in a population is an important indicator of the success of programmes targeting HIV prevention and control.

Discriminatory attitudes towards people living with HIV

Women and men are asked two questions to assess discriminatory attitudes towards people living with HIV. Respondents with discriminatory attitudes towards people living with HIV are those who say that they would not buy fresh vegetables from a shopkeeper or vendor if they knew that person had HIV or who say that children living with HIV should not be allowed to attend school with children who do not have HIV.

Sample: Women and men age 15-49 who have heard of HIV or AIDS

Table 13.4 shows that 27% of women age 15-49 have discriminatory attitudes towards people living with HIV (PLHIV), as compared with 23% among men.

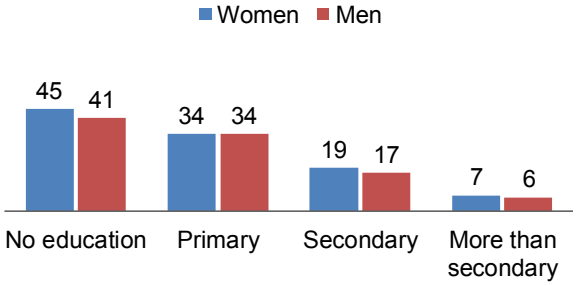
Patterns by background characteristics

- Differences in discriminatory attitudes towards PLHIV are observed between urban and rural areas; 20% of women and 17% of men in urban areas have discriminatory attitudes, compared with 33% of women and 28% of men in rural areas.

- Discriminatory attitudes are highest in Luapula (47% for women and 39% for men) and lowest in Copperbelt for women (17%) and Lusaka for men (16%).
- Discriminatory attitudes towards PLHIV decrease with increasing education among both women and men; 45% of women and 41% of men with no education have discriminatory attitudes, compared with 7% of women and 6% of men with a higher education (**Figure 13.2**).
- Similarly, the percentage of women and men with discriminatory attitudes towards PLHIV decreases with increasing wealth. Among women, the percentage decreases from 43% in the lowest wealth quintile to 15% in the highest wealth quintile. Among men, the percentage decreases from 34% in the lowest quintile to 13% in the highest quintile.

***Figure 13.2* Discriminatory attitudes towards people living with HIV by education**

Percentage among women and men age 15-49 who have heard of HIV



Note: Percentage who do not think that children living with HIV should be able to attend school with children who are HIV negative or would not buy fresh vegetables from a shopkeeper who has HIV

13.4 Multiple Sexual Partners

Given that most HIV infections in Zambia are acquired through heterosexual intercourse, information on number of sexual partners and use of safe sex practices is important in designing and monitoring programmes that control the spread of HIV.

Table 13.5.1 shows that 2% of women age 15-49 reported having two or more sexual partners in the 12 months prior to the survey, among whom 38% reported using a condom during their last sexual intercourse. Nineteen percent of women reported having sexual intercourse with a partner who neither was their husband nor lived with them, and among these women 35% reported using a condom during their last sexual intercourse with such a partner (**Figure 13.3**). The mean number of lifetime sexual partners among women is 2.3.

***Figure 13.3* Sex and condom use with non-regular partners**

Percentage of women and men age 15-49

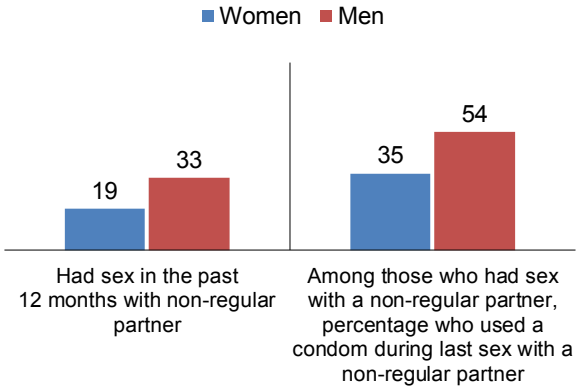


Table 13.5.2 shows that 15% of men age 15-49 reported having two or more sexual partners in the 12 months prior to the survey, among whom 28% reported using a condom during their last sexual intercourse. Thirty-three percent of men reported having sexual intercourse with a partner who neither was their wife nor lived with them, and among these men 54% reported using a condom during their last sexual intercourse with such a partner (**Figure 13.3**). The mean number of lifetime sexual partners among men is 6.5.

Patterns by background characteristics

- Women in urban areas are more likely to have had sexual intercourse with a person who neither was their husband nor lived with them than women in rural areas (22% versus 17%).

- Western has the highest percentage of women and men who reported having sexual intercourse with a nonmarital or noncohabiting partner (34% and 47%, respectively), while Northern and Muchinga have the lowest percentages (10% among women and 21% among men).
- The percentage of women who reported having sexual intercourse with a partner who neither was their husband nor lived with them increases with increasing education, from 11% among those with no education to 25% among those with a higher education. No such pattern is observed among men.
- Among both women and men, condom use at last sexual intercourse with a nonmarital or noncohabiting partner increases with increasing education, from 20% and 37%, respectively, among those with no education to 52% and 65%, respectively, among those with a higher education.

13.5 Paid Sex

The act of paying for sex introduces an uneven negotiating ground for safer sexual intercourse. This type of sexual intercourse is associated with a greater risk of contracting HIV and other sexually transmitted infections (STIs) because of compromised power relations and the likelihood of having multiple partners.

Fifteen percent of men age 15-49 report ever having paid for sexual intercourse, and 6% report that they paid for sexual intercourse in the 12 months preceding the survey. More than half (56%) of those who paid for sexual intercourse in the 12 months preceding the survey reported using a condom during their last paid sexual intercourse (**Table 13.6**).

Trends: The percentage of men age 15-49 who report having paid for sexual intercourse in the 12 months preceding the survey declined from 11% in 2001-02 to 5% in 2007 and 2013-14 and remained roughly the same at 6% in 2018. Use of a condom at last paid sex among men who reported having paid for sexual intercourse in the 12 months preceding the survey increased from 47% in 2001 to 60% in 2013-14 before declining to 56% in 2018.

Patterns by background characteristics

- The percentage of men reporting condom use at last paid sexual intercourse is highest among those age 25-29 (70%) and lowest among those age 15-19 (45%).

13.6 Coverage of HIV Testing Services

Knowledge of HIV status helps HIV-negative individuals make specific decisions to reduce risk and increase safer sex practices so that they can remain disease free. Among those who are living with HIV, knowledge of their status allows them to take action to protect their sexual partners, to access care, and to receive treatment.

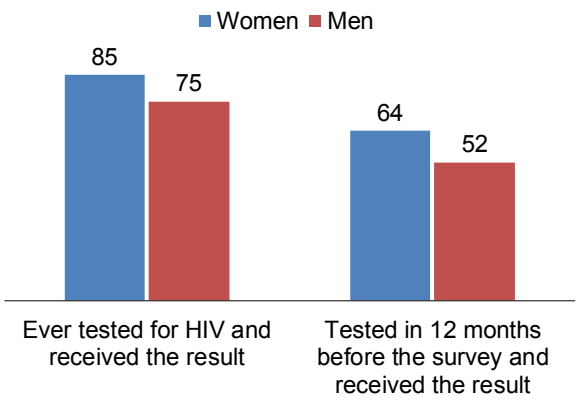
13.6.1 Awareness of HIV Testing Services and Experience with HIV Testing

Tables 13.7.1 and **13.7.2** show that a majority of both female and male respondents (96% each) know where to get an HIV test. Eighty-five percent of women report having ever been tested for HIV and receiving results, as compared with 75% of men in the same age group. Sixty-four percent of women report having been tested for HIV and receiving results in the last 12 months, compared with 52% of men (**Figure 13.4**).

Trends: There has been a steady increase in the percentage of women and men age 15-49 who were tested for HIV and received results in the 12 months preceding the survey, from 19% and 12% in 2007 to 64% and 52% in 2018, respectively (**Figure 13.5**).

***Figure 13.4* HIV testing**

Percentage of women and men age 15-49

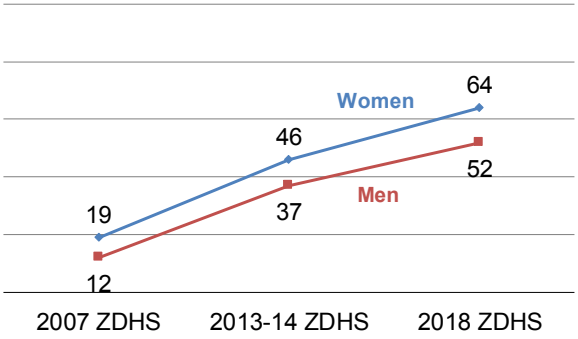


Patterns by background characteristics

- Across the provinces, the percentage of women who have ever been tested and received results ranges from 76% in Luapula to 92% in Southern.
- Among men, Muchinga has the lowest percentage who have ever been tested and received their HIV test result (64%), while Southern has the highest (83%).
- The percentage of both women and men age 15-49 who have ever been tested and received results increases with increasing education, from 78% and 67% among those with no education to 95% and 92% among those with a higher education, respectively.

***Figure 13.5* Trends in recent HIV testing**

Percentage of women and men age 15-49 who were tested for HIV in the year before the survey and received the results



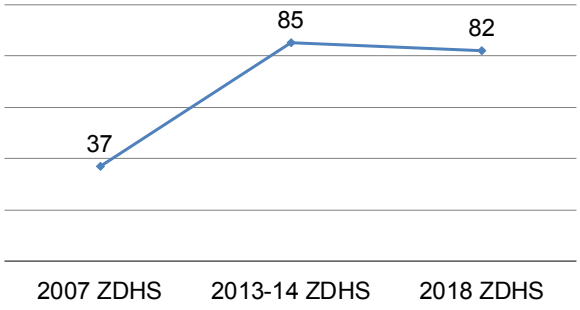
13.6.2 HIV Testing of Pregnant Women

Table 13.8 presents information on self-reported HIV testing during pregnancy or delivery among women age 15-49 who gave birth in the 2 years preceding the survey. Eighty-two percent of women received counselling on HIV, an HIV test, and the results during antenatal care (ANC). Ninety-three percent of women had an HIV test during an ANC visit or labour and received the test results.

Trends: The percentage of women who were counselled, tested, and received their results during ANC increased from 37% in 2007 to 85% in 2013-14 before declining to 82% in 2018 (**Figure 13.6**).

***Figure 13.6* Trends in HIV testing during pregnancy**

Percentage of women age 15-49 who gave birth in the 2 years before the survey who received counselling on HIV and an HIV test during ANC, and the results



Patterns by background characteristics

- The percentage of women who gave birth in the 2 years before the survey and received HIV counselling, testing, and results during ANC is higher in urban areas (89%) than in rural areas (78%).
- At the provincial level, the percentage of women who received HIV counselling, testing, and results during ANC ranges from 69% in Northern to 90% in Copperbelt and Lusaka.
- The percentage of women who were counselled, tested, and received their results during ANC increases with increasing education, from 67% among those with no education to 94% among those with a higher education.

13.6.3 Disclosure of HIV Test Results

Disclosure of HIV test results, particularly to partners, is encouraged and helps sexual partners decide to adopt safer sex practices. Individuals who know and disclose their HIV-positive status to loved ones can enhance their chances of accessing HIV prevention, treatment, and care services. In addition, they tend to have a stronger support system.

Table 13.9.1 shows the percentage of women who gave birth in the 2 years preceding the survey, were tested for HIV during ANC, and received their test results who disclosed their results to various individuals. Ninety-two percent of women reported disclosing their test results to anyone. Note that this percentage refers to women of any HIV status. Eighty percent disclosed their HIV test results to their husband or partner, and 40% disclosed to another family member; only 2% disclosed to a religious leader.

Table 13.9.2 shows that 88% of men age 15-49 who were ever tested for HIV disclosed the results of their most recent test to anyone. Fifty-eight percent disclosed their results to their wife or partner.

Patterns by background characteristics

- Ever-married women are more likely to disclose their HIV results to someone than never-married women (95% and 72%, respectively). A similar pattern is observed among men (94% and 76%, respectively).
- By province, the percentage of women who disclosed their HIV results to someone ranges from 86% in North Western to 96% in Northern. Among men, the percentage ranges from 79% in North Western to 92% in Central.

13.6.4 HIV Self-testing

In order to increase uptake of HIV testing services, especially for populations with low access and those at higher risk that would otherwise not get tested, HIV self-testing has recently been introduced as an additional testing strategy. HIV self-testing is when a person collects his or her own specimen (oral fluid or blood), performs an HIV test, and interprets the result, often in a private setting, either alone or with someone he or she trusts (WHO 2016).

Table 13.10 shows the percentage of women and men age 15-49 who have heard of HIV self-test kits and the percentage who have ever used them. About a quarter of men (25%) have heard of HIV self-test kits, as compared with 16% of women. Use of HIV self-test kits was reported by 3% of both women and men.

Patterns by background characteristics

- Differences in awareness of HIV self-testing are observed between urban and rural areas; 26% of women and 38% of men in urban areas had ever heard of HIV self-test kits, as compared with 8% of women and 15% of men in rural areas.

- Five percent of women and men in urban areas have used an HIV self-test kit, compared with 1% of women and men in rural areas.
- Knowledge of HIV self-testing kits increases with increasing education. Among women, knowledge increases from 6% among those with no education to 56% among those with a higher education. Among men, knowledge increases from 7% among those with no education to 68% among those with a higher education.
- Similarly, knowledge of HIV self-testing kits increases with increasing household wealth. Three percent of women in the lowest wealth quintile know about HIV self-testing, as compared with 33% of those in the highest quintile. Among men, knowledge of HIV self-testing increases from 9% among those in the lowest quintile to 49% among those in the highest quintile.
- The percentage of both men and women who report they ever used an HIV self-test kit increases with increasing education, from 1% among those with no education to 10% among those with a higher education.

13.7 Male Circumcision

Table 13.11 shows that 32% of men age 15-49 are circumcised.

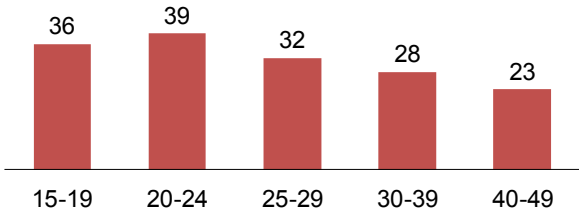
Trends: The percentage of men age 15-49 who are circumcised increased from 13% in 2007 to 22% in 2013-14 and 32% in 2018.

Patterns by background characteristics

- The percentage of men who are circumcised is highest among those age 20-24 (39%) and lowest among those age 40-49 (23%) (**Figure 13.7**).

Figure 13.7 **Male circumcision by age**

Percentage of men circumcised



- Forty percent of urban men are circumcised, as compared with only 25% of men in rural areas. Thirty-two percent of men in urban areas were circumcised by a health worker, compared with only 19% of men in rural areas.
- There is a notably wide range in terms of the percentage of men circumcised across provinces, with North Western having the highest percentage (78%) and Northern the lowest (14%). The percentage of men who were circumcised by a health worker is highest in Western (44%) and lowest in Northern (13%), followed by Eastern and Muchinga (14% each).
- Across different religions, the percentage circumcised by traditional practitioners is highest among Muslims (20%) and lowest among Catholics (4%) (**Table 13.11**).

13.8 Self-Reporting of Sexually Transmitted Infections

Sexually transmitted infections (STIs) and symptoms

Respondents who have ever had sex are asked whether they had an STI or symptoms of an STI (a bad-smelling, abnormal discharge from the vagina/penis or a genital sore or ulcer) in the 12 months before the survey.

Sample: Women and men age 15-49 who have ever had sex

STIs have been found to increase susceptibility to HIV infection (CDC 2014b). Overall, 5% of women and 8% of men age 15-49 reported having had an STI or symptoms of an STI in the 12 months prior to the survey (**Table 13.12**). Sixty-two percent of women and 73% of men who had an STI or STI symptoms sought advice or treatment from a clinic, hospital, private doctor, or other health professional (**Table 13.13**). However, 37% of women and 26% of men with an STI or symptoms did not seek any advice or treatment at all.

Trends: The percentage of women age 15-49 reporting having an STI and/or symptoms of an STI in the 12 months prior to the survey has remained relatively constant over time (6% in 2001-02, 5% in 2007, 4% in 2013-14, and 5% in 2018). Among men age 15-49, the percentage declined from 9% in 2001-02 to 6% in 2007 and 2013-14 before increasing to 8% in 2018.

Patterns by background characteristics

- By age, the percentage of men reporting an STI and/or symptoms of an STI is highest among those age 25-29 (10%). Among women, the percentage is highest among those age 25-39 (6%) (**Table 13.10**).
- By marital status, men and women who are divorced, separated, or widowed are most likely to report an STI and/or symptoms of an STI in the past 12 months (15% and 7%, respectively).
- There is only a minimal difference in the percentage of circumcised and uncircumcised men who reported an STI and/or symptoms of an STI (8% and 7%, respectively).
- Across the provinces, Eastern has the highest percentage of men reporting an STI and/or symptoms of an STI (12%), while Northern has the lowest (5%).

13.9 HIV/AIDS-RELATED KNOWLEDGE AND BEHAVIOUR AMONG YOUNG PEOPLE

This section addresses HIV/AIDS-related knowledge among young people age 15-24 and also assesses the extent to which young people are engaged in behaviours that may place them at risk of contracting HIV.

13.9.1 Knowledge

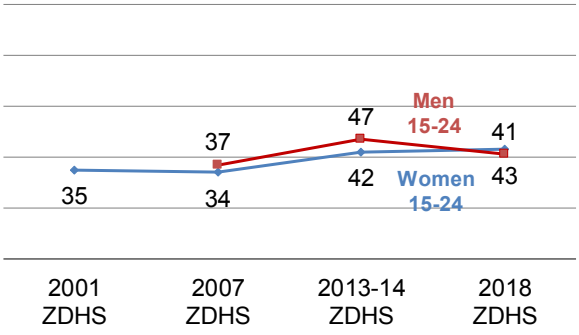
Knowledge of how HIV is transmitted is crucial to enabling people to avoid HIV infection, and this is especially true for young people, who are often at greater risk because they may have shorter relationships with more partners or engage in other risky behaviours.

The percentage of young people age 15-24 with comprehensive knowledge about HIV is 43% among young women and 41% among young men (**Table 13.14**).

Trends: The percentage of young men age 15-24 with comprehensive knowledge about HIV rose from 37% in 2007 to 47% in 2013-14 before decreasing to 41% in 2018. Among young women, the percentage increased from 34% in 2007 to 42% in 2013-14 and 43% in 2018 (**Figure 13.8**).

***Figure 13.8* Trends in comprehensive HIV knowledge among youth**

Percentage of young women and men age 15-24 who know how to prevent HIV transmission and reject local myths



Patterns by background characteristics

- Comprehensive knowledge about HIV is higher among urban young women and men (52% and 47%, respectively) than among their rural counterparts (35% each).

- Comprehensive knowledge about HIV increases with increasing education. Only 16% each of young women and men with no education have comprehensive knowledge, as compared with 70% and 63% of those with a higher education, respectively.

13.9.2 First Sex

Young people who initiate sex at an early age are typically at higher risk of becoming pregnant or contracting an STI than young people who initiate sex later. Consistent condom use may reduce such risks.

Table 13.15 shows that 14% of young women and 15% of young men had sex before age 15. More young women (61%) than young men (50%) report that they had sex before they were age 18.

Trends: The percentage of young women who reported having sex before age 15 declined from 22% in 1996 to 12% in 2013-14 and then increased to 14% in 2018. The percentage who had sex before age 18 declined from 71% in 1996 to 56% in 2013-14 before increasing to 61% in 2018. Among young men, the percentage who reported having sex before age 15 decreased from 36% in 1996 to 15% in 2018. The percentage who had sex before age 18 declined from 72% in 1996 to 50% in 2013-14 and 2018.

Patterns by background characteristics

- Twice as many young women in rural areas have sex before age 15 than their urban counterparts (18% and 9%, respectively). A similar pattern is observed among young men (19% and 10%, respectively).
- The percentage of young women who report having sex before age 15 declines with increasing education, from 31% among those with no education to 2% among those with a higher education.
- The percentage of young women reporting having sex before age 18 also declines with increasing education, from 80% among those with no education to 14% among those with a higher education. No such pattern was observed among young men.

13.9.3 Premarital Sex

The 2018 ZDHS also collected information on patterns of sexual activity among never-married young women and men age 15-24. **Table 13.16** shows that among never-married young people, 48% of young women and 41% of young men have never had sexual intercourse.

Patterns by background characteristics

- The percentage of never-married young women who report that they have never had sex is higher among those in urban areas (51%) than among their rural counterparts (45%).
- Similarly, the percentage of never-married young men who report that they have never had sex is higher in urban areas than in rural areas (47% versus 36%).

13.9.4 Multiple Sexual Partners

Individuals who have multiple sexual partners increase their risk of contracting HIV, as each new relationship introduces another pathway for HIV transmission.

Table 13.17.1 shows that 2% of women age 15-24 reported having two or more sexual partners in the 12 months prior to the survey, among whom 39% reported using a condom during their last sexual intercourse. Twenty-seven percent of young women age 15-24 reported having sexual intercourse in the past 12 months with a partner who neither was their husband nor lived with them, and among these women 34% reported using a condom during their last sexual intercourse with such a partner.

Table 13.17.2 shows that 11% of men age 15-24 reported having two or more sexual partners in the 12 months prior to the survey, among whom 41% reported using a condom during their last sexual intercourse. Forty-two percent of young men reported having sexual intercourse with a partner who neither was their wife nor lived with them, and among these men 49% reported using a condom during their last sexual intercourse with such a partner.

Patterns by background characteristics

- The percentage of young women who reported having sexual intercourse with a partner who neither was their husband nor lived with them increases with increasing education, from 18% among those with no education to 43% among those with a higher education. Among men, the percentage increases from 38% among those with no education to 52% among those with a higher education.

13.9.5 Coverage of HIV Testing Services

Seeking an HIV test may be more difficult for young people than adults, as many young people lack experience in accessing health services for themselves and there are often barriers to young people obtaining services. Overall, among young people age 15-24 who had sexual intercourse in the 12 months prior to the survey, 72% of young women and 54% of young men have been tested for HIV in the past 12 months and received the results of their last test (**Table 13.18**).

Trends: HIV testing among young women and men increased from 23% and 13% in 2007 to 72% and 54% in 2018, respectively.

Patterns by background characteristics

- Ever-married young women and men (74% and 65%, respectively) are more likely to have been tested for HIV in the 12 months prior to the survey and to have received their results than their never-married counterparts (70% and 52%, respectively).

13.9.6 Age-mixing in Sexual Relationships

In many societies, young women have sexual relationships with men who are considerably older than they are. This practice can contribute to the spread of HIV and other STIs because if a younger uninfected partner has sex with an older infected partner, this can introduce the virus into a younger uninfected cohort.

Table 13.19 shows that, in Zambia, 2% of women age 15-19 who had sexual intercourse in the 12 months prior to the survey had sex with a man who was 10 or more years older.

13.9.7 Drunkenness and Sexual Intercourse among Young People

Alcohol abuse reduces both the perception of risk and inhibitions regarding engaging in risky behaviours such as inconsistent condom use with casual partners.

Table 13.20 shows the percentage of young women and men who had sexual intercourse in the 12 months prior to the survey while drunk or had sexual intercourse when drunk or with a partner who was drunk. Less than 1% of young women had sexual intercourse when drunk, as compared with 4% of young men. Six percent of young women reported they had sexual intercourse in the 12 months prior to the survey when they or their partner were drunk, compared with 5% of young men.

Patterns by background characteristics

- Young urban women and men (7% each) were more likely to report that they had sexual intercourse when drunk or when their partner was drunk than young rural women and men (5% and 4%, respectively).

- Among young women, the percentage who had sexual intercourse in the 12 months prior to the survey when drunk or with a partner who was drunk declines with increasing education, from 9% among those with no education to 3% among those with a higher education.

- In contrast, among young men, the percentage reporting having sexual intercourse in the 12 months prior to the survey while drunk or with a partner who was drunk increases with increasing education, from 3% among those with no education to 7% among those with a higher education.

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Table 13.1 Knowledge of HIV prevention methods

Percentage of women and men age 15-49 who, in response to prompted questions, say that people can reduce the risk of getting HIV by using condoms every time they have sexual intercourse, by having one sex partner who is not infected and has no other partners, and by abstaining from sexual intercourse, according to background characteristics, Zambia DHS 2018

	Women					Men				
Background characteristic	Using condoms[1]	Limiting sexual intercourse to one uninfected partner[2]	Using condoms and limiting sexual intercourse to one uninfected partner[1,2]	Abstaining from sexual intercourse	Number of women	Using condoms[1]	Limiting sexual intercourse to one uninfected partner[2]	Using condoms and limiting sexual intercourse to one uninfected partner[1,2]	Abstaining from sexual intercourse	Number of men
Age										
15-24	80.3	89.1	75.8	81.1	5,733	86.1	91.9	81.6	89.8	4,813
15-19	76.4	86.3	71.0	78.6	3,000	84.8	91.1	80.1	89.2	2,781
20-24	84.6	92.2	81.2	83.9	2,733	87.8	93.0	83.6	90.5	2,032
25-29	85.1	94.3	83.2	85.9	2,237	87.9	95.7	85.5	91.3	1,721
30-39	85.9	94.2	83.1	88.0	3,559	89.0	95.9	86.9	91.7	2,663
40-49	84.5	93.3	81.5	87.9	2,153	87.9	96.7	86.1	90.8	1,981
Marital status										
Never married	81.5	89.3	76.6	82.8	4,272	86.6	92.0	82.1	89.9	5,142
Ever had sex	85.6	92.0	81.8	85.6	2,477	88.8	93.5	84.7	91.2	3,303
Never had sex	75.7	85.5	69.6	79.1	1,796	82.7	89.2	77.6	87.6	1,839
Married/living together	83.9	93.2	81.2	85.1	7,648	88.0	96.5	86.2	91.5	5,572
Divorced/separated/ widowed	84.5	93.0	81.4	88.0	1,762	88.0	93.1	84.2	87.5	463
Residence										
Urban	86.3	94.2	83.1	87.4	6,374	86.9	93.6	83.0	89.7	5,013
Rural	80.5	90.0	76.9	82.4	7,309	87.8	94.8	85.2	91.4	6,165
Province										
Central	88.4	95.1	86.0	87.6	1,165	93.8	96.9	92.2	92.8	979
Copperbelt	89.6	94.3	85.6	93.4	2,201	83.8	94.8	80.9	87.6	1,727
Eastern	72.7	86.2	68.5	78.1	1,605	79.5	93.8	76.3	88.9	1,476
Luapula	83.1	88.8	78.9	83.2	1,071	88.6	91.8	84.3	85.3	849
Lusaka	85.2	94.2	82.1	84.2	2,733	87.3	91.2	82.2	87.7	2,166
Muchinga	86.0	95.7	83.9	87.7	754	88.4	94.9	86.0	91.2	599
Northern	78.4	87.0	75.0	75.7	1,054	87.4	95.0	85.0	95.9	855
North Western	84.8	87.3	79.2	89.2	718	90.0	96.9	89.2	94.0	556
Southern	79.7	94.4	77.9	80.6	1,574	91.6	95.9	88.7	96.0	1,395
Western	81.9	91.3	77.7	87.3	808	92.0	96.7	90.1	94.7	574
Education										
No education	73.1	84.5	68.8	76.2	1,054	81.0	85.1	75.8	82.5	446
Primary	81.0	90.6	77.6	83.5	6,059	86.4	93.5	83.4	90.5	4,206
Secondary	86.0	94.0	82.6	86.6	5,816	87.7	95.4	84.6	91.4	5,618
Higher	93.3	97.5	91.5	92.1	755	92.6	95.7	90.2	90.7	907
Wealth quintile										
Lowest	77.5	87.8	73.7	81.2	2,442	87.5	94.4	85.0	90.5	1,827
Second	80.1	89.3	76.0	81.1	2,387	86.5	93.5	83.4	90.2	1,952
Middle	82.4	91.9	79.4	84.0	2,477	86.8	95.9	84.7	92.5	2,218
Fourth	85.8	93.6	82.7	87.2	3,011	86.8	94.8	83.9	90.5	2,552
Highest	87.8	95.4	84.7	88.2	3,367	89.0	92.9	84.2	89.6	2,629
Total 15-49	83.2	92.0	79.8	84.7	13,683	87.4	94.3	84.2	90.6	11,177
50-59	na	na	na	na	na	87.1	96.0	84.7	93.2	955
Total 15-59	na	na	na	na	na	87.4	94.4	84.3	90.8	12,132

na = Not applicable
[1] Using condoms every time they have sexual intercourse
[2] Partner who has no other partners

Table 13.2.1 Comprehensive knowledge about HIV: Women

Percentage of women age 15-49 who say that a healthy-looking person can have HIV and who, in response to prompted questions, correctly reject local misconceptions about transmission or prevention of HIV, and percentage with comprehensive knowledge about HIV, according to background characteristics, Zambia DHS 2018

Background characteristic	Percentage of respondents who say that:				Percentage who say that a healthy-looking person can have HIV and who reject the two most common local misconceptions[1]	Percentage with comprehensive knowledge about HIV[2]	Number of respondents
	A healthy-looking person can have HIV	HIV cannot be transmitted by mosquito bites	HIV cannot be transmitted by supernatural means	A person cannot become infected by sharing food with a person who has HIV			
Age							
15-24	80.2	68.6	80.6	82.1	51.3	42.6	5,733
15-19	76.7	70.0	80.1	80.0	50.8	40.5	3,000
20-24	84.0	67.2	81.2	84.5	51.9	44.9	2,733
25-29	85.9	71.9	79.7	82.9	55.5	48.8	2,237
30-39	86.5	70.3	81.4	83.9	55.3	48.3	3,559
40-49	84.6	67.3	81.0	83.4	52.1	45.4	2,153
Marital status							
Never married	81.6	74.2	82.1	85.0	56.1	46.7	4,272
Ever had sex	85.1	74.5	82.5	86.5	57.3	49.5	2,477
Never had sex	76.7	73.7	81.6	83.1	54.4	42.8	1,796
Married/living together	83.8	67.0	80.8	81.5	51.8	44.9	7,648
Divorced/separated/ widowed	86.3	68.1	77.2	84.1	52.2	45.5	1,762
Residence							
Urban	90.5	79.1	83.8	89.5	64.0	55.6	6,374
Rural	77.3	60.9	78.1	77.2	43.7	36.8	7,309
Province							
Central	79.5	76.0	88.5	88.6	59.6	54.4	1,165
Copperbelt	91.3	79.3	85.0	90.4	64.9	57.7	2,201
Eastern	77.9	56.7	83.8	78.5	45.1	34.7	1,605
Luapula	68.7	55.5	76.9	72.2	36.7	31.9	1,071
Lusaka	92.6	80.2	79.1	89.5	62.9	54.0	2,733
Muchinga	78.3	69.3	78.2	77.9	45.8	38.7	754
Northern	67.3	63.0	82.5	69.6	45.5	39.1	1,054
North Western	87.8	61.0	72.2	79.6	45.7	39.6	718
Southern	89.4	69.0	81.3	85.3	54.0	45.2	1,574
Western	77.3	56.6	68.9	75.3	38.8	31.8	808
Education							
No education	70.1	49.8	65.3	64.1	30.5	24.2	1,054
Primary	78.5	60.4	77.3	77.3	43.2	36.7	6,059
Secondary	89.1	79.2	85.8	90.5	63.5	54.4	5,816
Higher	98.1	93.0	91.4	96.1	84.9	78.3	755
Wealth quintile							
Lowest	70.7	54.4	74.0	69.4	35.5	29.3	2,442
Second	76.2	58.4	78.2	76.3	41.5	34.6	2,387
Middle	83.4	66.5	80.4	83.0	50.2	42.4	2,477
Fourth	89.6	75.7	81.2	88.8	59.6	51.6	3,011
Highest	92.3	84.5	87.2	92.2	70.7	62.0	3,367
Total	83.4	69.4	80.7	82.9	53.2	45.6	13,683

[1] Two most common local misconceptions: HIV can be transmitted by mosquito bites and HIV can be transmitted by supernatural means.
[2] Comprehensive knowledge means knowing that consistent use of condoms during sexual intercourse and having just one uninfected faithful partner can reduce the chance of getting HIV, knowing that a healthy-looking person can have HIV, and rejecting the two most common local misconceptions about transmission or prevention of HIV.

Table 13.2.2 Comprehensive knowledge about HIV: Men

Percentage of men age 15-49 who say that a healthy-looking person can have HIV and who, in response to prompted questions, correctly reject local misconceptions about transmission or prevention of HIV, and percentage with comprehensive knowledge about HIV, according to background characteristics, Zambia DHS 2018

Background characteristics	Percentage of respondents who say that:				Percentage who say that a healthy-looking person can have HIV and who reject the two most common local misconceptions[1]	Percentage with comprehensive knowledge about HIV[2]	Number of respondents
	A healthy-looking person can have HIV	HIV cannot be transmitted by mosquito bites	HIV cannot be transmitted by supernatural means	A person cannot become infected by sharing food with a person who has HIV			
Age							
15-24	86.1	63.1	80.7	83.2	48.0	40.6	4,813
15-19	82.9	62.5	79.1	81.4	46.0	38.6	2,781
20-24	90.4	63.9	82.7	85.5	50.7	43.2	2,032
25-29	92.4	64.0	83.3	87.3	54.3	47.1	1,721
30-39	93.2	66.8	84.3	86.6	56.9	50.4	2,663
40-49	92.6	68.8	83.7	86.5	57.7	50.8	1,981
Marital status							
Never married	87.0	65.8	81.1	84.0	51.0	43.5	5,142
Ever had sex	89.0	64.8	84.0	86.1	52.1	45.3	3,303
Never had sex	83.4	67.5	75.8	80.2	48.9	40.2	1,839
Married/living together	92.6	64.4	83.7	85.9	54.5	47.7	5,572
Divorced/separated/ widowed	90.0	66.5	83.0	89.8	52.5	46.8	463
Residence							
Urban	92.5	75.0	84.3	89.9	62.7	53.3	5,013
Rural	87.8	57.1	81.0	81.4	44.8	39.6	6,165
Province							
Central	91.4	67.1	78.2	88.0	53.0	49.1	979
Copperbelt	87.3	77.8	82.7	91.7	60.3	50.3	1,727
Eastern	90.2	52.1	87.0	84.3	44.8	35.3	1,476
Luapula	87.4	59.2	81.1	79.0	45.9	39.3	849
Lusaka	93.3	72.1	81.8	87.8	61.1	52.6	2,166
Muchinga	91.4	60.4	76.6	79.7	48.7	43.1	599
Northern	87.9	59.4	71.3	71.2	41.2	36.7	855
North Western	87.8	65.1	83.8	84.4	53.4	49.6	556
Southern	96.3	60.2	89.4	89.2	54.5	47.8	1,395
Western	73.3	65.0	86.6	80.1	46.7	43.5	574
Education							
No education	78.5	39.5	69.5	68.6	27.9	23.0	446
Primary	85.7	50.8	77.6	77.8	37.5	32.1	4,206
Secondary	92.8	73.6	85.6	90.3	61.4	52.9	5,618
Higher	96.9	91.2	92.4	96.2	83.3	75.7	907
Wealth quintile							
Lowest	83.6	52.3	77.0	74.8	37.6	33.3	1,827
Second	86.2	54.2	80.3	81.2	41.5	36.0	1,952
Middle	91.4	61.1	83.3	85.5	50.3	42.9	2,218
Fourth	91.7	69.0	82.0	87.4	56.2	48.8	2,552
Highest	94.0	81.7	87.7	93.0	70.6	60.9	2,629
Total 15-49	89.9	65.1	82.5	85.2	52.8	45.7	11,177
50-59	93.0	65.0	83.0	83.5	56.7	50.2	955
Total 15-59	90.1	65.1	82.5	85.1	53.1	46.1	12,132

[1] Two most common local misconceptions: HIV can be transmitted by mosquito bites and HIV can be transmitted by supernatural means.
[2] Comprehensive knowledge means knowing that consistent use of condoms during sexual intercourse and having just one uninfected faithful partner can reduce the chance of getting HIV, knowing that a healthy-looking person can have HIV, and rejecting the two most common local misconceptions about transmission or prevention of HIV.

Table 13.3 Knowledge of prevention of mother-to-child transmission of HIV

Percentage of women and men age 15-49 who know that HIV can be transmitted from mother to child during pregnancy, during delivery, by breastfeeding, and by all three means, and percentage who know that the risk of mother-to-child transmission (MTCT) of HIV can be reduced by the mother taking special drugs, according to age, Zambia DHS 2018

Age	Percentage who know that HIV can be transmitted from mother to child: During pregnancy	During delivery	By breastfeeding	By all three means	Percentage who know that the risk of MTCT can be reduced by mother taking special drugs	Number of respondents
			WOMEN			
15-24	64.3	76.5	83.1	54.9	72.8	5,733
15-19	59.5	69.6	78.9	48.8	65.2	3,000
20-24	69.6	84.0	87.7	61.5	81.2	2,733
25-29	69.3	86.5	89.6	64.5	85.7	2,237
30-39	70.3	90.0	90.5	66.1	88.1	3,559
40-49	67.1	86.2	87.6	60.6	86.0	2,153
Total 15-49	67.1	83.2	86.8	60.3	81.0	13,683
			MEN			
15-24	62.2	73.1	78.1	46.1	56.8	4,813
15-19	60.4	68.2	74.9	43.2	51.9	2,781
20-24	64.7	79.9	82.4	50.0	63.5	2,032
25-29	59.6	83.1	85.6	49.1	68.5	1,721
30-39	63.0	88.2	86.8	54.6	74.7	2,663
40-49	64.2	86.0	84.5	53.8	77.1	1,981
Total 15-49	62.4	80.5	82.5	49.9	66.5	11,177
50-59	70.8	85.8	84.5	59.7	77.8	955
Total 15-59	63.0	80.9	82.6	50.7	67.4	12,132

Table 13.4 Discriminatory attitudes towards people living with HIV

Among women and men age 15-49 who have heard of HIV or AIDS, percentage who do not think that children living with HIV should be able to attend school with children who are HIV negative, percentage who would not buy fresh vegetables from a shopkeeper who has HIV, and percentage with discriminatory attitudes towards people living with HIV, according to background characteristics, Zambia DHS 2018

	Women				Men			
Background characteristic	Percentage who do not think that children living with HIV should be able to attend school with children who are HIV negative	Percentage who would not buy fresh vegetables from a shopkeeper who has HIV	Percentage with discriminatory attitudes towards people living with HIV[1]	Number of respondents who have heard of AIDS	Percentage who do not think that children living with HIV should be able to attend school with children who are HIV negative	Percentage who would not buy fresh vegetables from a shopkeeper who has HIV	Percentage with discriminatory attitudes towards people living with HIV[1]	Number of respondents who have heard of AIDS
Age								
15-24	15.4	27.9	31.4	5,559	17.2	24.8	30.4	4,740
15-19	17.5	29.6	33.6	2,877	20.5	28.5	35.0	2,722
20-24	13.1	26.0	29.1	2,682	12.9	19.8	24.0	2,019
25-29	11.6	22.4	25.1	2,194	9.1	14.4	18.2	1,709
30-39	10.9	19.3	22.5	3,520	9.3	13.7	17.4	2,648
40-49	10.9	19.8	23.7	2,121	9.3	14.7	18.6	1,972
Marital status								
Never married	12.7	24.0	27.4	4,164	15.8	23.3	28.4	5,065
Ever had sex	11.0	21.4	24.6	2,431	16.0	22.2	27.5	3,279
Never had sex	15.1	27.8	31.4	1,733	15.5	25.4	30.0	1,786
Married/living together	13.4	24.5	27.8	7,494	9.8	14.8	18.8	5,545
Divorced/separated/ widowed	11.0	17.4	21.2	1,736	12.0	15.7	20.8	459
Residence								
Urban	7.3	17.0	19.5	6,338	8.1	13.9	17.4	4,972
Rural	17.9	29.2	33.4	7,056	16.4	22.7	28.1	6,097
Province								
Central	8.2	18.2	19.6	1,160	9.3	14.8	18.2	975
Copperbelt	7.3	14.6	17.0	2,198	11.4	16.7	19.6	1,705
Eastern	16.6	25.3	29.9	1,498	13.0	17.3	22.0	1,459
Luapula	26.4	39.3	46.6	1,013	20.6	30.5	38.7	836
Lusaka	6.6	20.6	22.4	2,720	5.3	13.5	16.0	2,146
Muchinga	17.7	32.0	35.7	747	15.9	15.3	22.0	595
Northern	28.4	36.8	43.1	1,001	17.7	24.6	29.2	850
North Western	14.3	28.9	31.0	704	16.4	23.4	27.5	549
Southern	9.4	17.0	20.2	1,557	14.9	18.9	25.8	1,385
Western	14.0	24.7	29.4	795	17.5	27.9	33.2	570
Education								
No education	26.1	39.4	45.1	976	22.9	33.0	40.6	424
Primary	18.2	29.3	33.9	5,885	20.0	27.6	33.7	4,153
Secondary	6.7	17.1	19.1	5,777	8.2	13.3	17.0	5,590
Higher	1.7	5.4	6.7	755	1.7	5.2	6.2	902
Wealth quintile								
Lowest	25.1	37.2	43.1	2,324	20.5	26.9	34.1	1,799
Second	18.8	31.3	35.7	2,302	18.0	25.2	31.1	1,928
Middle	12.3	22.4	25.9	2,418	14.6	20.1	24.4	2,201
Fourth	8.5	19.2	21.8	2,991	9.5	14.9	19.0	2,534
Highest	4.8	13.1	14.7	3,359	4.8	11.0	13.2	2,608
Total 15-49	12.9	23.5	26.8	13,394	12.7	18.7	23.3	11,069
50-59	na	na	na	na	10.8	18.3	22.3	952
Total 15-59	na	na	na	na	12.5	18.7	23.2	12,021

na = Not applicable

[1] Percentage who do not think that children living with HIV should be able to attend school with children who are HIV negative and/or would not buy fresh vegetables from a shopkeeper who has HIV

Table 13.5.1 Multiple sexual partners and higher-risk sexual intercourse in the past 12 months: Women

Among all women age 15-49, percentage who had sexual intercourse with more than one sexual partner in the past 12 months and percentage who had intercourse in the past 12 months with a person who neither was their husband nor lived with them; among women having more than one partner in the past 12 months, percentage reporting that a condom was used during last intercourse; among women age 15-49 who had sexual intercourse in the past 12 months with a person who neither was their husband nor lived with them, percentage who used a condom during last sexual intercourse with such a partner; and among women who ever had sexual intercourse, mean number of sexual partners during their lifetime, according to background characteristics, Zambia DHS 2018

	All women			Women who had 2+ partners in the past 12 months		Women who had intercourse in the past 12 months with a person who neither was their husband nor lived with them		Women who ever had sexual intercourse[1]	
Background characteristic	Percentage who had 2+ partners in the past 12 months	Percentage who had intercourse in the past 12 months with a person who neither was their husband nor lived with them	Number of women	Percentage who reported using a condom during last sexual intercourse	Number of women	Percentage who reported using a condom during last sexual intercourse with such a partner	Number of women	Mean number of sexual partners in lifetime	Number of women
Age									
15-24	1.7	26.5	5,733	39.4	95	33.7	1,520	1.9	4,001
15-19	0.9	26.2	3,000	(36.0)	28	29.6	786	1.6	1,490
20-24	2.4	26.8	2,733	40.9	67	38.1	733	2.1	2,511
25-29	1.6	19.0	2,237	(39.2)	35	36.2	425	2.3	2,189
30-39	1.7	13.1	3,559	36.5	59	34.3	466	2.6	3,526
40-49	0.8	9.8	2,153	*	17	37.5	211	2.5	2,138
Marital status									
Never married	2.3	41.6	4,272	42.0	98	35.4	1,778	2.1	2,474
Married/living together	0.7	1.4	7,648	(20.2)	53	22.8	103	2.2	7,635
Divorced/separated/ widowed	3.1	42.0	1,762	49.2	54	33.9	740	2.9	1,746
Residence									
Urban	1.9	22.1	6,374	46.4	118	41.0	1,410	2.3	5,305
Rural	1.2	16.6	7,309	27.2	88	27.0	1,212	2.3	6,549
Province									
Central	1.3	17.1	1,165	*	15	27.4	199	2.5	1,000
Copperbelt	1.7	19.3	2,201	(32.2)	38	38.3	425	2.2	1,779
Eastern	1.7	17.7	1,605	(34.1)	28	40.4	284	2.1	1,465
Luapula	0.9	15.7	1,071	*	10	29.2	169	2.1	927
Lusaka	1.8	21.2	2,733	(56.0)	48	47.2	581	2.2	2,323
Muchinga	1.6	9.9	754	*	12	26.7	74	2.0	640
Northern	1.5	9.6	1,054	*	16	34.8	101	2.0	900
North Western	1.1	26.0	718	*	8	27.4	187	2.8	634
Southern	0.9	20.7	1,574	*	14	22.8	325	2.5	1,445
Western	2.1	34.2	808	*	17	25.0	276	2.8	740
Education									
No education	1.3	11.3	1,054	*	14	20.3	119	2.1	1,008
Primary	1.4	14.9	6,059	30.8	85	28.7	902	2.3	5,416
Secondary	1.6	24.3	5,816	45.8	93	37.2	1,414	2.3	4,741
Higher	1.9	24.8	755	*	14	51.7	187	2.2	689
Wealth quintile									
Lowest	1.7	15.7	2,442	(30.3)	42	21.9	384	2.2	2,236
Second	1.5	16.7	2,387	(20.7)	36	24.9	400	2.4	2,148
Middle	1.1	19.7	2,477	(42.1)	26	31.6	488	2.5	2,210
Fourth	1.5	20.7	3,011	(41.6)	46	38.3	624	2.2	2,615
Highest	1.6	21.6	3,367	(50.8)	56	45.2	726	2.3	2,645
Total	1.5	19.2	13,683	38.2	206	34.5	2,622	2.3	11,854

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Means are calculated excluding respondents who gave non-numeric responses.

Table 13.5.2 Multiple sexual partners and higher-risk sexual intercourse in the past 12 months: Men

Among all men age 15-49, percentage who had sexual intercourse with more than one sexual partner in the past 12 months and percentage who had intercourse in the past 12 months with a person who neither was their wife nor lived with them; among men having more than one partner in the past 12 months, percentage reporting that a condom was used during last intercourse; among men age 15-49 who had sexual intercourse in the past 12 months with a person who neither was their wife nor lived with them, percentage who used a condom during last sexual intercourse with such a partner; and among men who ever had sexual intercourse, mean number of sexual partners during their lifetime, according to background characteristics, Zambia DHS 2018

	All men			Men who had 2+ partners in the past 12 months		Men who had intercourse in the past 12 months with a person who neither was their wife nor lived with them		Men who ever had sexual intercourse[1]	
Background characteristic	Percentage who had 2+ partners in the past 12 months	Percentage who had intercourse in the past 12 months with a person who neither was their wife nor lived with them	Number of men	Percentage who reported using a condom during last sexual intercourse	Number of men	Percentage who reported using a condom during last sexual intercourse with such a partner	Number of men	Mean number of sexual partners in lifetime	Number of men
Age									
15-24	10.6	41.7	4,813	40.6	508	49.1	2,007	4.5	3,035
15-19	5.9	31.9	2,781	41.0	165	45.6	887	3.4	1,257
20-24	16.9	55.1	2,032	40.3	343	51.9	1,119	5.4	1,779
25-29	21.5	39.8	1,721	34.0	370	62.8	686	6.6	1,653
30-39	18.9	24.8	2,663	19.3	504	60.9	661	7.4	2,609
40-49	16.9	16.6	1,981	14.2	334	46.6	328	8.1	1,912
Marital status									
Never married	10.3	47.6	5,142	50.1	532	50.9	2,450	4.8	3,287
Married/living together	20.0	16.8	5,572	15.9	1,116	62.2	939	7.0	5,470
Divorced/separated/ widowed	14.6	63.3	463	47.9	68	48.1	293	11.3	452
Type of union									
In polygynous union	87.6	15.4	272	11.7	238	(46.2)	42	11.6	271
In non-polygynous union	16.6	16.9	5,300	17.1	878	63.0	897	6.8	5,199
Not currently in union	10.7	48.9	5,605	49.8	600	50.6	2,743	5.6	3,739
Residence									
Urban	11.8	32.1	5,013	36.0	591	57.3	1,609	6.6	3,929
Rural	18.3	33.6	6,165	23.5	1,125	50.6	2,073	6.4	5,281
Province									
Central	12.2	31.2	979	22.7	119	50.5	306	6.3	799
Copperbelt	6.2	25.7	1,727	27.6	107	51.4	444	5.5	1,318
Eastern	24.6	40.6	1,476	26.7	363	60.0	600	5.8	1,338
Luapula	9.0	27.3	849	24.9	76	45.4	231	7.0	701
Lusaka	14.3	31.9	2,166	36.3	310	58.1	690	6.3	1,741
Muchinga	10.8	20.8	599	18.1	64	50.4	125	5.9	472
Northern	11.1	21.2	855	23.3	95	48.5	181	5.9	690
North Western	17.5	40.6	556	27.5	97	51.6	226	7.5	484
Southern	25.4	43.6	1,395	27.1	354	53.4	609	8.0	1,160
Western	22.5	47.1	574	27.2	129	48.2	270	7.2	507
Education									
No education	12.8	24.2	446	18.2	57	36.5	108	6.0	387
Primary	15.7	29.4	4,206	21.5	661	41.9	1,235	6.5	3,412
Secondary	15.4	36.1	5,618	32.4	867	59.8	2,031	6.4	4,572
Higher	14.4	33.9	907	33.1	130	65.4	308	6.8	838
Wealth quintile									
Lowest	15.3	28.2	1,827	19.3	279	43.5	515	6.3	1,622
Second	19.7	33.8	1,952	25.0	385	50.2	660	6.3	1,665
Middle	18.0	34.5	2,218	22.4	398	51.6	764	6.3	1,884
Fourth	13.8	34.6	2,552	31.8	352	57.0	883	7.1	2,029
Highest	11.5	32.7	2,629	41.5	301	60.2	860	6.2	2,010
Total 15-49	15.3	32.9	11,177	27.8	1,716	53.5	3,682	6.5	9,209
50-59	12.5	11.0	955	8.7	120	36.0	105	8.7	937
Total 15-59	15.1	31.2	12,132	26.5	1,835	53.1	3,787	6.7	10,146

Note: Figures in parentheses are based on 25-49 unweighted cases.
[1] Means are calculated excluding respondents who gave non-numeric responses.

Table 13.6 Payment for sexual intercourse and condom use at last paid sexual intercourse

Percentage of men age 15-49 who ever paid for sexual intercourse and percentage reporting payment for sexual intercourse in the past 12 months, and among them, percentage reporting that a condom was used the last time they paid for sexual intercourse, according to age, Zambia DHS 2018

	Among all men:			Among men who paid for sex in the past 12 months:	
Age	Percentage who ever paid for sexual intercourse	Percentage who paid for sexual intercourse in the past 12 months	Number of men	Percentage reporting condom use at last paid sexual intercourse	Number of men
15-24	9.9	6.0	4,813	46.9	290
15-19	6.6	4.7	2,781	45.4	131
20-24	14.3	7.8	2,032	48.1	159
25-29	18.8	6.8	1,721	70.1	117
30-39	19.8	6.0	2,663	58.8	160
40-49	17.3	4.8	1,981	58.2	95
Total 15-49	14.9	5.9	11,177	55.5	662
50-59	13.0	1.5	955	*	14
Total 15-59	14.8	5.6	12,132	55.5	677

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 13.7.1 Coverage of prior HIV testing: Women

Percentage of women age 15-49 who know where to get an HIV test, percent distribution of women by testing status and by whether they received the results of the last test, percentage of women ever tested, and percentage of women who were tested in the past 12 months and received the results of the last test, according to background characteristics, Zambia DHS 2018

Background characteristic	Percentage who know where to get an HIV test	Percent distribution of women by testing status and by whether they received the results of the last test			Total	Percentage ever tested	Percentage who have been tested for HIV in the past 12 months and received the results of the last test	Number of women
		Ever tested and received results	Ever tested, did not receive results	Never tested[1]				
Age								
15-24	93.2	74.3	1.7	24.0	100.0	76.0	59.3	5,733
15-19	89.3	59.1	1.8	39.1	100.0	60.9	47.4	3,000
20-24	97.4	91.0	1.7	7.3	100.0	92.7	72.4	2,733
25-29	97.7	93.4	1.6	5.0	100.0	95.0	72.0	2,237
30-39	98.5	94.5	1.5	3.9	100.0	96.1	70.3	3,559
40-49	97.7	90.1	1.9	7.9	100.0	92.1	58.1	2,153
Marital status								
Never married	92.6	68.3	1.4	30.3	100.0	69.7	52.8	4,272
Ever had sex	96.5	85.3	1.4	13.3	100.0	86.7	67.5	2,477
Never had sex	87.4	44.9	1.4	53.7	100.0	46.3	32.5	1,796
Married/living together	97.5	93.0	1.8	5.2	100.0	94.8	70.3	7,648
Divorced/separated/ widowed	97.6	92.2	1.7	6.1	100.0	93.9	64.3	1,762
Residence								
Urban	97.8	87.9	1.3	10.8	100.0	89.2	67.0	6,374
Rural	94.4	82.8	2.0	15.1	100.0	84.9	61.5	7,309
Province								
Central	97.8	84.0	2.4	13.6	100.0	86.4	65.4	1,165
Copperbelt	98.5	86.5	1.0	12.5	100.0	87.5	62.5	2,201
Eastern	92.1	84.8	1.7	13.4	100.0	86.6	63.3	1,605
Luapula	90.4	76.0	2.8	21.2	100.0	78.8	53.8	1,071
Lusaka	97.7	88.3	1.6	10.1	100.0	89.9	68.8	2,733
Muchinga	96.5	77.1	3.0	19.9	100.0	80.1	47.4	754
Northern	92.4	78.8	1.7	19.5	100.0	80.5	53.7	1,054
North Western	96.2	83.7	1.9	14.3	100.0	85.7	59.3	718
Southern	98.1	92.2	1.1	6.7	100.0	93.3	76.8	1,574
Western	96.1	89.0	1.0	10.0	100.0	90.0	73.8	808
Education								
No education	90.3	78.4	2.0	19.6	100.0	80.4	56.0	1,054
Primary	94.4	83.6	2.0	14.4	100.0	85.6	60.4	6,059
Secondary	98.2	86.8	1.4	11.8	100.0	88.2	68.5	5,816
Higher	100.0	94.9	0.7	4.5	100.0	95.5	70.7	755
Wealth quintile								
Lowest	93.0	80.4	2.1	17.5	100.0	82.5	56.9	2,442
Second	94.1	82.7	2.4	15.0	100.0	85.0	62.1	2,387
Middle	95.9	85.7	1.7	12.6	100.0	87.4	66.3	2,477
Fourth	97.7	89.7	1.4	8.9	100.0	91.1	69.8	3,011
Highest	98.1	86.0	1.1	12.8	100.0	87.2	63.9	3,367
Total	96.0	85.2	1.7	13.1	100.0	86.9	64.1	13,683

[1] Includes “don’t know/missing”

Table 13.7.2 Coverage of prior HIV testing: Men

Percentage of men age 15-49 who know where to get an HIV test, percent distribution of men by testing status and by whether they received the results of the last test, percentage of men ever tested, and percentage of men age 15-49 who were tested in the past 12 months and received the results of the last test, according to background characteristics, Zambia DHS 2018

Background characteristic	Percentage who know where to get an HIV test	Percent distribution of men by testing status and by whether they received the results of the last test			Total	Percentage ever tested	Percentage who have been tested for HIV in the past 12 months and received the results of the last test	Number of men
		Ever tested and received results	Ever tested, did not receive results	Never tested[1]				
Age								
15-24	92.1	59.2	2.3	38.5	100.0	61.5	43.1	4,813
15-19	88.9	46.0	2.5	51.5	100.0	48.5	31.8	2,781
20-24	96.5	77.3	2.0	20.7	100.0	79.3	58.6	2,032
25-29	98.6	86.9	2.6	10.5	100.0	89.5	64.7	1,721
30-39	98.9	88.5	1.4	10.1	100.0	89.9	59.3	2,663
40-49	99.2	87.3	2.5	10.1	100.0	89.9	54.9	1,981
Marital status								
Never married	92.4	59.6	2.6	37.8	100.0	62.2	43.2	5,142
Ever had sex	95.7	68.7	2.7	28.6	100.0	71.4	50.8	3,303
Never had sex	86.5	43.3	2.4	54.3	100.0	45.7	29.5	1,839
Married/living together	99.1	89.4	1.7	8.8	100.0	91.2	60.7	5,572
Divorced/separated/ widowed	98.3	82.5	2.8	14.6	100.0	85.4	54.0	463
Residence								
Urban	97.0	78.7	2.1	19.2	100.0	80.8	55.8	5,013
Rural	95.1	72.8	2.2	25.0	100.0	75.0	49.6	6,165
Province								
Central	97.3	75.5	2.5	22.0	100.0	78.0	53.4	979
Copperbelt	95.4	73.1	1.5	25.4	100.0	74.6	54.3	1,727
Eastern	94.7	77.4	1.5	21.1	100.0	78.9	53.7	1,476
Luapula	94.7	66.2	3.2	30.6	100.0	69.4	41.7	849
Lusaka	96.9	79.3	2.4	18.3	100.0	81.7	54.2	2,166
Muchinga	93.4	63.6	2.4	33.9	100.0	66.1	38.0	599
Northern	95.7	74.0	2.0	24.0	100.0	76.0	43.4	855
North Western	94.7	69.9	3.0	27.2	100.0	72.8	50.4	556
Southern	97.9	82.6	2.4	15.0	100.0	85.0	60.6	1,395
Western	97.2	78.5	1.8	19.7	100.0	80.3	60.7	574
Education								
No education	88.9	66.8	1.2	32.0	100.0	68.0	45.1	446
Primary	93.7	66.9	2.5	30.6	100.0	69.4	45.2	4,206
Secondary	97.8	79.8	2.2	18.0	100.0	82.0	56.3	5,618
Higher	99.2	92.4	0.7	6.9	100.0	93.1	65.1	907
Wealth quintile								
Lowest	94.2	70.4	2.0	27.5	100.0	72.5	43.6	1,827
Second	95.0	70.8	2.7	26.4	100.0	73.6	50.1	1,952
Middle	95.9	77.0	2.0	21.0	100.0	79.0	54.2	2,218
Fourth	96.8	79.0	1.6	19.4	100.0	80.6	56.7	2,552
Highest	97.2	77.5	2.5	20.0	100.0	80.0	54.6	2,629
Total 15-49	96.0	75.4	2.2	22.4	100.0	77.6	52.4	11,177
50-59	98.0	79.3	2.4	18.3	100.0	81.7	47.1	955
Total 15-59	96.1	75.7	2.2	22.1	100.0	77.9	52.0	12,132

[1] Includes “don’t know/missing”

Table 13.8 Pregnant women counselled and tested for HIV

Among all women age 15-49 who gave birth in the 2 years preceding the survey, percentage who received counselling on HIV during antenatal care, percentage who received an HIV test during antenatal care for their most recent birth by whether they received their results and post-test counselling, and percentage who received an HIV test during ANC or labour for their most recent birth by whether they received their test results, according to background characteristics, Zambia DHS 2018

Background characteristic	Percentage who received counselling on HIV during antenatal care[1]	Percentage who were tested for HIV during antenatal care and who:			Percentage who received counselling on HIV and an HIV test during ANC, and the results	Percentage who had an HIV test during ANC or labour and who:[2]		Number of women who gave birth in the past 2 years[3]
		Received results and received post-test counselling	Received results and did not receive post-test counselling	Did not receive results		Received results	Did not receive results	
Age								
15-24	78.8	88.6	3.6	1.3	77.4	92.7	1.2	1,666
15-19	71.2	84.9	4.1	1.7	69.0	89.8	1.5	585
20-24	82.9	90.7	3.3	1.2	81.9	94.3	1.0	1,080
25-29	85.8	88.5	3.0	1.2	83.2	92.2	1.0	835
30-39	87.9	90.2	3.0	1.3	86.0	93.9	1.0	1,177
40-49	87.6	92.5	1.6	1.6	85.0	94.9	1.6	227
Marital status								
Never married	78.6	89.2	3.7	2.2	76.5	93.9	1.7	582
Married or living together	84.5	89.7	3.0	1.2	82.6	93.2	1.0	2,982
Divorced/separated/ widowed	83.9	86.3	3.6	0.8	82.2	90.6	0.8	341
Residence								
Urban	90.4	93.3	3.6	0.7	89.1	97.5	0.5	1,340
Rural	80.0	87.2	3.0	1.6	77.8	90.8	1.4	2,564
Province								
Central	86.8	89.0	2.1	2.2	82.3	92.1	2.2	343
Copperbelt	91.0	95.9	2.0	0.9	89.6	98.3	0.7	473
Eastern	79.5	87.7	1.3	0.5	77.7	89.4	0.5	569
Luapula	84.3	80.3	7.1	4.4	80.3	88.0	3.8	375
Lusaka	91.5	89.9	5.7	1.2	89.5	96.9	0.5	558
Muchinga	77.0	81.7	6.9	1.4	74.8	89.0	1.7	227
Northern	70.9	85.3	3.4	1.0	69.1	89.0	1.0	347
North Western	87.0	93.5	1.3	0.6	86.6	96.6	0.0	219
Southern	83.9	95.4	1.5	0.2	83.7	97.0	0.2	525
Western	76.0	89.2	1.5	1.3	75.0	90.7	1.3	269
Education								
No education	69.2	76.4	2.4	1.8	66.8	79.7	1.3	371
Primary	81.7	89.6	2.2	1.5	79.6	92.5	1.3	1,970
Secondary	88.8	92.3	4.0	1.1	87.1	96.8	0.9	1,410
Higher	94.8	89.4	9.8	0.0	93.9	99.2	0.0	153
Wealth quintile								
Lowest	74.6	84.3	2.9	1.5	72.5	87.8	1.4	1,002
Second	81.2	87.6	3.5	2.3	78.7	91.7	2.0	873
Middle	83.3	90.7	2.1	1.1	81.5	93.4	1.0	738
Fourth	90.1	93.8	3.5	0.7	88.9	98.2	0.3	672
Highest	94.6	93.3	4.1	0.5	93.1	97.8	0.4	620
Total	83.6	89.3	3.2	1.3	81.7	93.1	1.1	3,905

[1] In this context, "counselling" means that someone talked with the respondent about all three of the following topics: (1) babies getting HIV from their mother, (2) preventing the virus, and (3) getting tested for HIV.
[2] Women were asked whether they received an HIV test during labour only if they gave birth in a health facility.
[3] Denominator for percentages includes women who did not receive antenatal care for their last birth in the past 2 years.

Table 13.9.1 Disclosure of HIV test results from ANC HIV test: Women

Among all women age 15-49 who gave birth in the 2 years preceding the survey, were tested for HIV during ANC, and received their results, percentage who disclosed their HIV results to various individuals and percentage who disclosed their results to anyone, by background characteristics, Zambia DHS 2018

Background characteristic	Percentage disclosing results to:				Percentage disclosing most recent HIV test results to anyone	Number of women receiving ANC HIV test result
	Husband/partner	Family member	Religious leader	Other		
Age						
15-24	69.8	47.4	2.0	13.9	89.0	1,544
15-19	52.7	50.3	1.3	14.6	82.5	526
20-24	78.6	45.8	2.4	13.5	92.4	1,019
25-29	85.9	36.1	2.2	11.8	93.4	770
30-39	89.5	33.4	2.3	12.8	94.5	1,106
40-49	88.8	36.6	3.8	11.1	93.5	216
Marital status						
Never married	19.8	63.7	1.0	19.5	72.1	547
Ever married	91.0	35.9	2.5	11.8	95.4	3,089
Residence						
Urban	77.6	42.1	2.4	14.1	91.5	1,307
Rural	81.8	38.9	2.2	12.3	92.1	2,328
Province						
Central	76.0	36.4	2.5	12.1	90.4	316
Copperbelt	73.7	42.1	2.0	10.0	90.0	465
Eastern	86.8	47.4	2.0	20.6	95.2	509
Luapula	80.8	29.3	0.8	9.4	90.8	330
Lusaka	81.4	43.2	3.1	13.6	93.7	541
Muchinga	84.9	38.5	5.6	15.9	94.3	202
Northern	90.2	46.9	3.2	12.7	96.3	309
North Western	72.4	23.1	0.8	2.4	85.5	211
Southern	81.9	28.9	1.2	11.9	90.7	509
Western	69.1	64.4	2.4	16.5	88.3	244
Education						
No education	85.2	37.4	2.3	9.9	91.5	296
Primary	82.9	39.4	2.2	12.7	92.9	1,822
Secondary	74.6	41.9	2.4	13.2	90.1	1,365
Higher	90.5	36.7	1.2	20.2	95.7	152
Total	80.3	40.1	2.3	13.0	91.9	3,636

Table 13.9.2 Disclosure of HIV test results from most recent test: Men

Among all men age 15-49 who have heard of HIV or AIDS and have ever been tested for HIV and received their results, percentage who disclosed their HIV results to various individuals and percentage who disclosed their results to anyone, by background characteristics, Zambia DHS 2018

Background characteristic	Percentage disclosing results to:				Percentage disclosing most recent HIV test results to anyone	Number of men receiving HIV test result
	Wife/partner	Family member	Religious leader	Other		
Age						
15-24	16.5	52.6	3.2	45.3	78.8	2,850
15-19	3.5	59.9	2.8	44.6	77.0	1,279
20-24	27.0	46.6	3.5	45.8	80.3	1,571
25-29	63.6	31.6	2.9	34.0	88.0	1,495
30-39	81.7	29.0	4.5	30.4	92.8	2,356
40-49	86.8	31.7	7.1	26.5	94.1	1,730
Marital status						
Never married	3.6	53.8	2.8	50.1	75.5	3,065
Ever married	88.2	28.9	5.1	26.8	94.3	5,366
Knows condom source[1]						
Yes	43.0	44.9	4.5	43.1	84.0	1,114
No	62.3	36.3	4.6	32.9	88.4	8,074
Residence						
Urban	49.3	42.4	4.1	42.9	86.4	3,945
Rural	64.7	34.1	4.4	28.5	88.4	4,485
Province						
Central	54.9	48.4	3.8	32.4	92.1	740
Copperbelt	47.9	45.3	6.0	40.1	88.9	1,262
Eastern	69.6	35.5	9.4	33.4	89.7	1,143
Luapula	61.2	40.4	3.6	25.8	90.2	562
Lusaka	54.5	45.7	3.5	51.1	87.7	1,718
Muchinga	65.0	28.2	1.6	21.5	83.4	381
Northern	62.6	23.1	2.9	19.6	83.4	633
North Western	57.8	23.3	3.6	27.4	78.8	388
Southern	56.8	28.0	0.7	29.9	84.8	1,153
Western	52.1	40.9	5.0	36.6	89.9	451
Education						
No education	73.6	35.3	9.8	31.0	92.3	298
Primary	66.1	34.8	4.5	26.7	88.4	2,813
Secondary	50.6	41.4	4.0	39.6	86.4	4,482
Higher	59.3	31.4	3.1	42.2	88.6	838
Total 15-49	57.5	38.0	4.3	35.2	87.5	8,431
50-59	87.4	30.3	8.1	21.9	91.7	757
Total 15-59	59.9	37.3	4.6	34.1	87.8	9,188

[1] For this table, the following responses are not considered a source for condoms: friends, family members, and home.

Table 13.10 Knowledge and coverage of self-testing for HIV

Percentage of women and men age 15-49 who have ever heard of HIV self-test kits, and percentage who have ever used an HIV self-test kit, according to background characteristics, Zambia DHS 2018

Background characteristic	Women			Men		
	Ever heard of HIV self-test kits	Ever used an HIV self-test kit	Number of women	Ever heard of HIV self-test kits	Ever used an HIV self-test kit	Number of men
Age						
15-24	14.1	2.5	5,733	19.4	2.4	4,813
15-19	11.0	1.8	3,000	14.7	1.5	2,781
20-24	17.6	3.4	2,733	25.9	3.8	2,032
25-29	19.4	3.5	2,237	28.9	4.3	1,721
30-39	18.4	3.2	3,559	30.1	2.6	2,663
40-49	15.6	2.5	2,153	29.1	2.9	1,981
Residence						
Urban	25.8	4.8	6,374	37.5	4.7	5,013
Rural	8.1	1.2	7,309	15.1	1.4	6,165
Education						
No education	5.8	1.3	1,054	6.7	0.6	446
Primary	9.3	1.7	6,059	13.1	0.9	4,206
Secondary	20.4	3.5	5,816	28.8	3.4	5,618
Higher	56.4	9.8	755	67.6	9.7	907
Wealth quintile						
Lowest	3.2	0.5	2,442	8.9	0.8	1,827
Second	6.2	1.1	2,387	13.5	0.8	1,952
Middle	10.3	1.4	2,477	17.0	1.6	2,218
Fourth	21.8	3.6	3,011	28.1	3.7	2,552
Highest	32.7	6.2	3,367	49.0	6.0	2,629
Total 15-49	16.3	2.9	13,683	25.1	2.9	11,177
50-59	na	na	na	23.2	1.6	955
Total 15-59	na	na	na	25.0	2.8	12,132

na = Not applicable

Table 13.11 Male circumcision

Percent distribution of men age 15-49 by circumcision status and provider of circumcision, and percentage of men circumcised, according to background characteristics, Zambia DHS 2018

Background characteristic	Circumcised by:			Not circumcised	Don't know/ missing circumcision status	Total	Percentage of men circumcised[1]	Number of men
	Health worker/ professional	Traditional practitioner/ family friend	Other/don't know/missing					
Age								
15-24	32.0	4.9	0.5	62.5	0.1	100.0	37.4	4,813
15-19	31.1	4.6	0.2	64.0	0.1	100.0	35.9	2,781
20-24	33.4	5.2	0.8	60.5	0.1	100.0	39.4	2,032
25-29	24.4	6.8	0.3	68.4	0.1	100.0	31.5	1,721
30-39	20.1	7.8	0.5	71.6	0.0	100.0	28.4	2,663
40-49	13.6	8.4	0.7	76.9	0.3	100.0	22.8	1,981
Residence								
Urban	32.0	7.1	0.7	60.0	0.1	100.0	39.9	5,013
Rural	18.8	6.0	0.4	74.7	0.1	100.0	25.2	6,165
Province								
Central	20.5	2.2	0.3	76.9	0.1	100.0	23.0	979
Copperbelt	34.4	6.9	1.0	57.7	0.0	100.0	42.3	1,727
Eastern	13.7	1.4	0.7	84.1	0.1	100.0	15.8	1,476
Luapula	35.4	2.4	0.1	62.1	0.0	100.0	37.9	849
Lusaka	24.0	5.4	0.7	69.7	0.2	100.0	30.1	2,166
Muchinga	14.4	0.9	0.4	83.9	0.3	100.0	15.8	599
Northern	12.6	0.9	0.1	86.4	0.0	100.0	13.6	855
North Western	34.1	43.3	0.8	21.8	0.0	100.0	78.2	556
Southern	22.5	5.1	0.1	72.3	0.0	100.0	27.7	1,395
Western	43.9	18.1	0.2	37.7	0.2	100.0	62.2	574
Religion								
Catholic	22.5	4.2	0.4	72.8	0.0	100.0	27.2	2,089
Protestant	25.4	6.9	0.5	67.0	0.1	100.0	32.9	8,917
Muslim	25.9	19.7	6.7	47.7	0.0	100.0	52.3	48
Other	13.1	8.3	0.0	78.7	0.0	100.0	21.3	123
Total 15-49	24.8	6.5	0.5	68.1	0.1	100.0	31.8	11,177
50-59	9.4	10.5	0.5	79.6	0.1	100.0	20.3	955
Total 15-59	23.5	6.8	0.5	69.0	0.1	100.0	30.9	12,132

[1] Includes all men who report they are circumcised, regardless of provider

Table 13.12 Self-reported prevalence of sexually transmitted infections (STIs) and STI symptoms

Among women and men age 15-49 who ever had sexual intercourse, percentage reporting having an STI and/or symptoms of an STI in the past 12 months, according to background characteristics, Zambia DHS 2018

	Percentage of women who reported having in the past 12 months:					Percentage of men who reported having in the past 12 months:				
Background characteristic	STI	Bad-smelling/ abnormal genital discharge	Genital sore or ulcer	STI/genital discharge/ sore or ulcer	Number of women who ever had sexual intercourse	STI	Bad-smelling/ abnormal discharge from penis	Genital sore or ulcer	STI/ abnormal discharge from penis/ sore or ulcer	Number of men who ever had sexual intercourse
Age										
15-24	1.5	2.3	2.4	4.5	4,005	4.7	3.6	3.8	7.5	3,042
15-19	0.5	1.7	2.2	3.6	1,490	2.7	1.8	2.1	4.8	1,259
20-24	2.0	2.6	2.5	5.0	2,514	6.2	4.8	4.9	9.4	1,782
25-29	2.7	2.8	2.7	5.5	2,191	7.4	4.8	5.4	10.0	1,675
30-39	2.5	3.0	3.0	6.1	3,543	4.3	3.5	4.1	6.9	2,646
40-49	1.3	2.3	2.3	4.5	2,148	3.6	1.7	3.4	6.7	1,975
Marital status										
Never married	1.4	2.1	2.2	4.0	2,477	5.2	3.9	3.6	7.7	3,303
Married/living together	2.0	2.7	2.5	5.2	7,648	4.2	2.9	4.1	7.0	5,572
Divorced/separated/ widowed	2.5	2.9	3.8	6.5	1,762	9.4	6.1	7.6	14.7	463
Circumcised										
Yes[1]	na	na	na	na	na	5.2	3.9	3.6	8.1	2,942
No	na	na	na	na	na	4.7	3.1	4.3	7.4	6,387
Don't know/missing	na	na	na	na	na	*	*	*	*	9
Residence										
Urban	2.1	2.7	2.5	5.4	5,331	4.8	3.0	4.1	7.6	4,017
Rural	1.8	2.5	2.7	5.0	6,556	4.9	3.7	4.1	7.6	5,321
Province										
Central	0.9	1.8	2.7	4.2	1,000	3.2	3.1	2.7	6.0	803
Copperbelt	1.7	3.3	2.6	5.6	1,792	3.6	1.8	4.0	6.4	1,328
Eastern	2.4	3.6	2.9	6.1	1,470	7.5	5.7	6.1	11.5	1,347
Luapula	2.2	4.1	6.0	8.8	928	4.7	3.7	3.3	6.6	704
Lusaka	2.1	1.3	1.8	4.0	2,326	5.4	3.9	5.4	9.2	1,763
Muchinga	3.1	4.2	3.0	7.2	640	5.7	3.3	2.5	6.2	472
Northern	1.4	2.5	2.8	4.2	900	2.6	1.6	3.1	4.6	700
North Western	2.2	1.5	1.3	3.2	634	5.6	4.9	3.0	8.2	490
Southern	2.1	2.1	1.9	4.2	1,446	5.2	2.3	3.6	6.9	1,207
Western	1.8	2.8	2.4	5.5	750	2.7	3.2	2.9	5.7	525
Education										
No education	2.2	2.7	3.2	5.3	1,009	3.4	2.0	3.1	5.5	394
Primary	1.8	2.6	2.9	5.3	5,435	4.8	3.7	4.3	8.0	3,460
Secondary	2.2	2.4	2.2	5.0	4,751	5.2	3.5	4.2	7.9	4,633
Higher	1.7	3.9	1.7	5.5	691	3.4	2.5	3.0	5.6	852
Wealth quintile										
Lowest	2.0	3.0	3.0	5.4	2,242	3.7	3.6	3.8	6.5	1,638
Second	1.9	2.3	3.1	5.2	2,150	5.1	3.7	4.2	8.1	1,683
Middle	1.9	2.2	2.6	4.9	2,214	5.7	4.1	3.8	7.8	1,891
Fourth	2.3	3.0	2.3	5.7	2,629	4.6	3.0	4.9	8.0	2,070
Highest	1.8	2.3	2.2	4.6	2,652	4.9	2.7	3.6	7.6	2,057
Total 15-49	2.0	2.6	2.6	5.2	11,887	4.8	3.4	4.1	7.6	9,338
50-59	na	na	na	na	na	1.2	1.4	1.7	3.3	952
Total 15-59	na	na	na	na	na	4.5	3.2	3.9	7.2	10,290

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
na = Not applicable
[1] Includes all men who report they are circumcised, regardless of provider

Table 13.13 Women and men seeking treatment for STIs

Percentage of women and men age 15-49 reporting an STI or symptoms of an STI in the past 12 months who sought advice or treatment, Zambia DHS 2018

Source of advice or treatment	Women	Men
Clinic/hospital/private doctor/ other health professional	61.5	73.0
Advice or medicine from shop/ pharmacy	0.5	0.2
Advice or treatment from any other source	1.6	0.6
No advice or treatment	36.7	26.4
Number with STI or symptoms of STI	613	711

Table 13.14 Comprehensive knowledge about HIV among young people

Percentage of young women and young men age 15-24 with comprehensive knowledge about HIV, according to background characteristics, Zambia DHS 2018

Background characteristic	Women		Men	
	Percentage with comprehensive knowledge of AIDS[1]	Number of respondents	Percentage with comprehensive knowledge of AIDS[1]	Number of respondents
Age				
15-19	40.5	3,000	38.6	2,781
15-17	38.8	1,735	38.0	1,619
18-19	42.9	1,265	39.4	1,162
20-24	44.9	2,733	43.2	2,032
20-22	44.2	1,736	43.2	1,310
23-24	46.0	997	43.2	722
Marital status				
Never married	44.9	3,617	41.2	4,289
Ever had sex	46.9	1,888	42.0	2,518
Never had sex	42.6	1,729	40.0	1,771
Ever married	38.7	2,116	35.3	523
Residence				
Urban	51.6	2,635	47.1	2,120
Rural	34.9	3,099	35.4	2,693
Education				
No education	16.2	206	16.0	147
Primary	30.9	2,236	28.6	1,837
Secondary	51.3	3,143	48.9	2,690
Higher	69.9	149	62.5	139
Total	42.6	5,733	40.6	4,813

[1] Comprehensive knowledge means knowing that consistent use of condoms during sexual intercourse and having just one uninfected faithful partner can reduce the chance of getting HIV, knowing that a healthy-looking person can have HIV, and rejecting the two most common local misconceptions about HIV transmission or prevention. The components of comprehensive knowledge are presented in Tables 13.1, 13.2.1, and 13.2.2.

Table 13.15 Age at first sexual intercourse among young people

Percentage of young women and young men age 15-24 who had sexual intercourse before age 15 and percentage of young women and young men age 18-24 who had sexual intercourse before age 18, according to background characteristics, Zambia DHS 2018

Background characteristic	Women				Men			
	Percentage who had sexual intercourse before age 15	Number of respondents (15-24)	Percentage who had sexual intercourse before age 18	Number of respondents (18-24)	Percentage who had sexual intercourse before age 15	Number of respondents (15-24)	Percentage who had sexual intercourse before age 18	Number of respondents (18-24)
Age								
15-19	12.7	3,000	na	na	16.3	2,781	na	na
15-17	12.9	1,735	na	na	15.7	1,619	na	na
18-19	12.4	1,265	57.9	1,265	17.0	1,162	54.0	1,162
20-24	15.4	2,733	62.6	2,733	13.0	2,032	47.7	2,032
20-22	15.0	1,736	62.6	1,736	13.0	1,310	48.1	1,310
23-24	15.9	997	62.4	997	13.0	722	47.1	722
Residence								
Urban	9.1	2,635	46.7	1,889	9.7	2,120	38.1	1,454
Rural	18.1	3,099	74.0	2,109	19.0	2,693	59.9	1,739
Education								
No education	30.8	206	80.4	145	17.9	147	49.1	106
Primary	21.0	2,236	79.8	1,414	19.0	1,837	59.3	972
Secondary	8.4	3,143	51.4	2,290	12.5	2,690	47.4	1,976
Higher	1.6	149	13.8	149	4.1	139	22.6	139
Total	14.0	5,733	61.1	3,998	14.9	4,813	50.0	3,194

na = Not applicable

Table 13.16 Premarital sexual intercourse among young people

Among never-married women and men age 15-24, percentage who have never had sexual intercourse, according to background characteristics, Zambia DHS 2018

	Women age 15-24						Men age 15-24					
Background characteristic	Percentage who have never had sexual intercourse	Number of never-married women	Percentage who have never had sexual intercourse who plan to wait until marriage	Number of never-married women who have never had sexual intercourse	Percentage who used a condom at first sexual intercourse	Number of never-married women who have had sexual intercourse	Percentage who have never had sexual intercourse	Number of never-married men	Percentage who have never had sexual intercourse who plan to wait until marriage	Number of never-married men who have never had sexual intercourse	Percentage who used a condom at first sexual intercourse	Number of never-married men who have had sexual intercourse
Age												
15-19	59.7	2,531	92.1	1,510	35.2	1,021	55.3	2,749	75.1	1,521	29.1	1,228
15-17	69.9	1,620	92.0	1,134	32.2	487	67.4	1,617	74.4	1,090	25.1	527
18-19	41.3	911	92.2	376	38.0	534	38.1	1,132	76.8	431	32.2	701
20-24	20.2	1,086	96.7	219	42.9	867	16.2	1,540	80.5	250	39.0	1,291
20-22	23.7	785	96.6	186	42.3	599	19.3	1,095	81.4	212	38.4	883
23-24	10.8	301	(97.5)	33	44.3	268	8.5	445	(75.4)	38	40.4	407
Residence												
Urban	50.6	1,954	93.3	989	42.5	966	47.4	2,006	80.8	950	42.3	1,056
Rural	44.5	1,663	91.8	740	34.8	923	36.0	2,283	70.2	821	28.3	1,462
Education												
No education	46.5	88	(76.4)	41	18.6	47	37.0	127	77.1	47	11.8	80
Primary	53.9	1,127	92.3	608	25.9	519	45.4	1,598	71.4	726	24.6	872
Secondary	45.8	2,275	93.3	1,042	42.8	1,233	39.7	2,429	78.8	963	39.2	1,466
Higher	30.2	127	(98.3)	38	68.7	89	25.5	135	*	35	62.1	101
Total	47.8	3,617	92.7	1,729	38.7	1,888	41.3	4,289	75.9	1,771	34.2	2,518

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 13.17.1 Multiple sexual partners and higher-risk sexual intercourse in the past 12 months among young people: Women

Among all young women age 15-24, percentage who had sexual intercourse with more than one sexual partner in the past 12 months and percentage who had intercourse in the past 12 months with a person who neither was their husband nor lived with them; among young women having more than one partner in the past 12 months, percentage reporting that a condom was used during last intercourse; and among young women who had sexual intercourse in the past 12 months with a person who neither was their husband nor lived with them, percentage who used a condom during last sexual intercourse with such a partner, according to background characteristics, Zambia DHS 2018

	Women age 15-24			Women age 15-24 who had 2+ partners in the past 12 months		Women age 15-24 who had intercourse in the past 12 months with a person who neither was their husband nor lived with them	
Background characteristic	Percentage who had 2+ partners in the past 12 months	Percentage who had intercourse in the past 12 months with a person who neither was their husband nor lived with them	Number of women	Percentage who reported using a condom during last sexual intercourse	Number of women	Percentage who reported using a condom during last sexual intercourse with such a partner	Number of women
Age							
15-19	0.9	26.2	3,000	(36.0)	28	29.6	786
15-17	0.9	22.0	1,735	*	16	26.7	381
18-19	1.0	32.0	1,265	*	12	32.4	405
20-24	2.4	26.8	2,733	40.9	67	38.1	733
20-22	1.8	26.7	1,736	(26.6)	31	38.0	464
23-24	3.6	27.0	997	(53.2)	36	38.2	269
Marital status							
Never married	1.9	38.5	3,617	44.1	70	34.2	1,392
Ever married	1.2	6.0	2,116	(26.8)	25	28.6	128
Residence							
Urban	1.9	28.2	2,635	(49.3)	49	41.3	742
Rural	1.5	25.1	3,099	(28.8)	46	26.4	778
Education							
No education	2.5	18.4	206	*	5	(8.5)	38
Primary	1.7	21.3	2,236	(25.7)	37	24.2	476
Secondary	1.5	30.0	3,143	(53.7)	47	37.1	942
Higher	3.5	43.0	149	*	5	68.9	64
Total 15-24	1.7	26.5	5,733	39.4	95	33.7	1,520

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 13.17.2 Multiple sexual partners and higher-risk sexual intercourse in the past 12 months among young people: Men

Among all young men age 15-24, percentage who had sexual intercourse with more than one sexual partner in the past 12 months and percentage who had intercourse in the past 12 months with a person who neither was their wife nor lived with them; among young men having more than one partner in the past 12 months, percentage reporting that a condom was used during last intercourse; and among young men who had sexual intercourse in the past 12 months with a person who neither was their wife nor lived with them, percentage who used a condom during last sexual intercourse with such a partner, according to background characteristics, Zambia DHS 2018

	Men age 15-24			Men age 15-24 who had 2+ partners in the past 12 months		Men age 15-24 who had intercourse in the past 12 months with a person who neither was their wife nor lived with them	
Background characteristic	Percentage who had 2+ partners in the past 12 months	Percentage who had intercourse in the past 12 months with a person who neither was their wife nor lived with them	Number of men	Percentage who reported using a condom during last sexual intercourse	Number of men	Percentage who reported using a condom during last sexual intercourse with such a partner	Number of men
Age							
15-19	5.9	31.9	2,781	41.0	165	45.6	887
15-17	3.4	22.1	1,619	28.8	56	39.9	358
18-19	9.4	45.6	1,162	47.3	109	49.4	530
20-24	16.9	55.1	2,032	40.3	343	51.9	1,119
20-22	15.8	55.7	1,310	39.5	207	50.5	729
23-24	18.9	54.0	722	41.6	136	54.5	390
Marital status							
Never married	9.2	43.6	4,289	47.0	395	48.8	1,872
Ever married	21.6	25.9	523	18.1	113	53.0	135
Residence							
Urban	6.8	35.2	2,120	53.3	144	56.8	746
Rural	13.5	46.8	2,693	35.5	364	44.6	1,261
Education							
No education	8.5	37.6	147	*	12	(24.4)	55
Primary	10.5	40.3	1,837	27.6	193	35.6	740
Secondary	10.7	42.4	2,690	51.0	287	57.9	1,140
Higher	11.3	51.6	139	*	16	66.9	72
Total 15-24	10.6	41.7	4,813	40.6	508	49.1	2,007

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 13.18 Recent HIV tests among young people

Among young women and young men age 15-24 who have had sexual intercourse in the past 12 months, percentage who were tested for HIV in the past 12 months and received the results of the last test, according background characteristics, Zambia DHS 2018

	Women age 15-24 who have had sexual intercourse in the past 12 months:		Men age 15-24 who have had sexual intercourse in the past 12 months:	
Background characteristic	Percentage who have been tested for HIV in the past 12 months and received the results of the last test	Number of women	Percentage who have been tested for HIV in the past 12 months and received the results of the last test	Number of men
Age				
15-19	65.3	1,230	40.4	912
15-17	59.3	490	33.6	360
18-19	69.4	740	44.8	553
20-24	76.0	2,198	63.1	1,479
20-22	75.3	1,334	60.9	891
23-24	77.1	864	66.3	588
Marital status				
Never married	69.5	1,393	51.5	1,873
Ever married	74.0	2,035	64.9	518
Total 15-24	72.2	3,428	54.4	2,391

Table 13.19 Age-mixing in sexual relationships among women age 15-19

Percentage of women age 15-19 who had higher-risk sexual intercourse in the past 12 months with a man who was 10 or more years older, by background characteristics, Zambia DHS 2018

Background characteristic	Women age 15-19 who had sexual intercourse in the past 12 months	
	Percentage of women who had higher-risk intercourse with a man 10+ years older[1]	Number of women who had higher-risk intercourse in the past 12 months
Age		
15-17	1.4	381
18-19	1.9	405
Marital status		
Never married	1.7	774
Ever married	*	13
Knows condom source[2]		
Yes	0.6	190
No	2.0	596
Residence		
Urban	0.9	312
Rural	2.2	475
Province		
Central	3.5	61
Copperbelt	1.1	95
Eastern	2.2	115
Luapula	1.3	65
Lusaka	0.0	107
Muchinga	(7.2)	27
Northern	(2.8)	38
North Western	0.0	68
Southern	1.6	115
Western	1.8	94
Education		
No education	*	17
Primary	2.1	328
Secondary	1.3	439
Higher	*	2
Total 15-24	1.7	786

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Sexual intercourse with a nonmarital, noncohabiting partner
[2] Friends, family members, and home are not considered sources for condoms.

Table 13.20 Drunkenness during sexual intercourse among youth

Among all young women and young men age 15-24, percentage who had sexual intercourse in the past 12 months while drunk and percentage who had sexual intercourse in the past 12 months when drunk or with a partner who was drunk, by background characteristics, Zambia DHS 2018

	Women			Men		
Background characteristic	Percentage who had sexual intercourse in the past 12 months when drunk	Percentage who had sexual intercourse in the past 12 months when drunk or with a partner who was drunk	Number of respondents	Percentage who had sexual intercourse in the past 12 months when drunk	Percentage who had sexual intercourse in the past 12 months when drunk or with a partner who was drunk	Number of respondents
Age						
15-19	0.0	2.2	3,000	1.0	1.4	2,781
15-17	0.0	1.4	1,735	0.4	0.5	1,619
18-19	0.0	3.3	1,265	1.8	2.6	1,162
20-24	0.5	9.6	2,733	7.5	10.7	2,032
20-22	0.6	8.1	1,736	5.4	8.1	1,310
23-24	0.2	12.2	997	11.3	15.5	722
Marital status						
Never married	0.2	3.1	3,617	3.0	4.5	4,289
Ever married	0.3	10.3	2,116	10.0	11.8	523
Residence						
Urban	0.3	6.9	2,635	4.6	7.0	2,120
Rural	0.2	4.7	3,099	3.0	4.0	2,693
Province						
Central	0.4	3.7	508	4.6	5.8	429
Copperbelt	0.8	9.9	931	6.6	8.8	737
Eastern	0.0	3.4	686	2.6	3.4	632
Luapula	0.0	4.7	450	2.9	3.5	392
Lusaka	0.0	7.2	1,064	4.6	8.0	844
Muchinga	0.0	10.9	323	3.4	5.0	268
Northern	0.0	4.5	457	2.7	3.7	367
North Western	0.0	2.5	339	4.3	5.7	257
Southern	0.5	4.1	638	1.5	2.2	618
Western	0.0	2.1	337	2.2	3.7	270
Education						
No education	0.0	9.2	206	2.1	2.9	147
Primary	0.1	6.3	2,236	3.0	3.7	1,837
Secondary	0.3	5.3	3,143	4.4	6.5	2,690
Higher	0.0	2.6	149	3.4	6.6	139
Total 15-24	0.2	5.7	5,733	3.7	5.3	4,813

HIV PREVALENCE 14

Key Findings

- ***HIV prevalence:*** Overall, 11.1% of women and men age 15-49 in Zambia are infected with HIV; HIV prevalence is higher among women than men (14.2% versus 7.5%).
- ***HIV prevalence by residence:*** HIV prevalence is twice as high in urban areas as in rural areas (15.9% versus 7.1%).
- ***HIV prevalence according to province:*** HIV prevalence is highest in Copperbelt (15.4%), where it is nearly three times as high as in Muchinga (5.4%) and Northern (5.6%).
- ***HIV prevalence among young people:*** Overall, 3.8% of young women and men age 15-24 are HIV positive. HIV prevalence is higher among young women than young men (5.6% versus 1.8%).
- ***HIV prevalence by circumcision:*** HIV prevalence is 5.9% among men age 15-49 who have been circumcised (by either traditional or medical practitioners) and 8.3% among men who have not been circumcised.

The 2018 ZDHS included HIV prevalence testing for women age 15-49 and men age 15-59. The specimen collection and HIV testing procedures are described in Chapter 1.

14.1 COVERAGE RATES FOR HIV TESTING

Ninety-three percent of women and 87% of men age 15-49 who were eligible for HIV testing were interviewed, consented to providing a blood specimen for HIV testing, and provided specimen (**Table 14.1**). Four percent of women and men eligible for HIV testing refused to provide a blood specimen. Men (8%) were far more likely than women (3%) to be absent for blood collection after repeated attempts to contact them.

HIV testing coverage rate

Percentage of women and men who are tested for HIV as part of the DHS survey.

Sample: Women and men who are in households selected for HIV testing and are within the eligible age range for HIV testing based on information collected in the Household Questionnaire.

The HIV testing coverage rate is calculated as follows:

$$\frac{\text{Women and men age 15-49 who were interviewed and whose blood sample underwent the complete HIV testing algorithm with a final result of positive, negative, indeterminate, or inconclusive}}{\text{All women and men age 15-49 in households selected for HIV testing}}$$

Trends: Participation in HIV testing has risen over time, from 75% in 2007 to 90% in 2018. Participation among women increased from 77% in 2007 to 93% in 2018, while participation among men increased from 72% to 87% over the same time period.

Patterns by background characteristics

- The HIV testing response rate is higher in rural areas than in urban areas among both women (94% versus 91%) and men (90% versus 83%) (**Table 14.1**).
- By province, the HIV testing response rate is highest among women and men in Central (97% and 95%, respectively) and lowest among those in Luapula (86% and 81%, respectively).
- Participation in HIV testing is lowest in the highest wealth quintile. Among women, participation declines from 93%-94% among those in the lower four wealth quintiles to 89% among those in the highest quintile. Participation follows a similar pattern among men, falling from 89%-90% in the lower three wealth quintiles to 82% in the highest quintile (**Table 14.2**).

14.2 HIV PREVALENCE

14.2.1 HIV Prevalence by Age and Sex

HIV prevalence

Percentage of women and men testing positive for HIV as part of the DHS survey.

Sample: Women and men age 15-49 who are tested for HIV as part of the survey

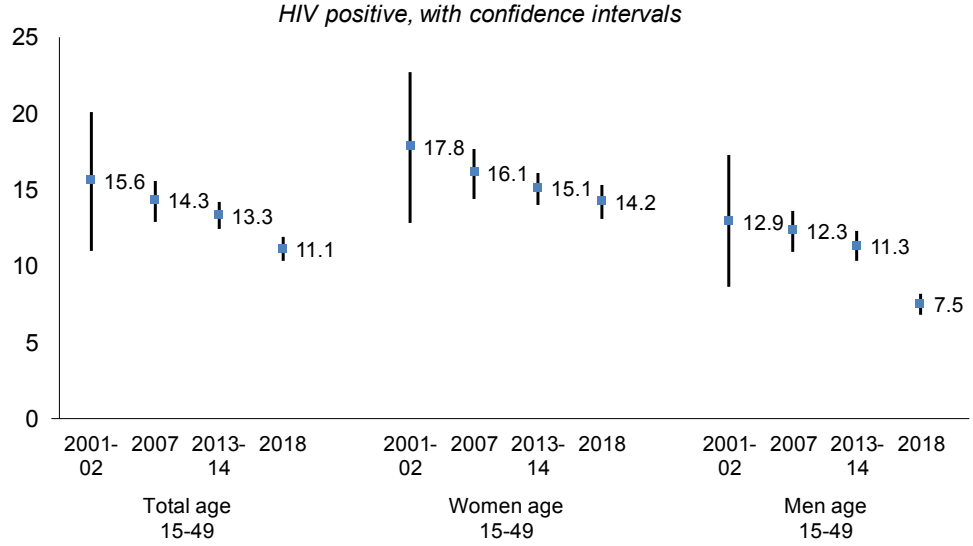
Table 14.3 shows that 11.1% of the population age 15-49 in Zambia are HIV positive. HIV prevalence is higher among women than men (14.2% versus 7.5%).

Trends: To assess trends in HIV prevalence over time, it is important to note that the HIV testing algorithm for the 2018 ZDHS differs from the algorithm used in the previous ZDHS surveys. The 2001-02, 2007, and 2013-14 ZDHS surveys used an algorithm in which specimens with positive results on two enzyme immunoassays (EIAs) were classified as positive (CSO et al. 2003; CSO et al. 2009; CSO et al. 2014). The new algorithm in the 2018 ZDHS reflects the change in the international recommendations for HIV testing. This change responded to concerns that the HIV testing algorithms previously used were likely to produce too many false positives and overestimate HIV prevalence (CDC 2014a; UNAIDS/WHO 2015). In accordance with the new guidelines, the 2018 ZDHS tested specimens that were positive on two EIAs with a highly specific third assay, the Geenius HIV 1/2 Supplemental Assay (Bio-Rad, France). The specimen was classified as positive only if the Geenius result was also positive. More details on the HIV testing algorithm can be found in Chapter 1.

As shown in **Figure 14.1**, the HIV prevalence among women and men age 15-49 age has decreased since 2013-14, from 13.3% (CI: 12.4%-14.2%) to 11.1% (CI: 10.3%-11.9%). The prevalence was 14.3% in 2007. It is important to note that some of the decrease between the 2013-14 survey and the 2018 survey could be due to the change in algorithm.

Figure 14.1 Trends in HIV prevalence

Percentage of women and men age 15-49 who are HIV positive, with confidence intervals



Patterns by background characteristics

- HIV prevalence generally rises with age group, increasing from 2.6% among women age 15-19 to 22.7% among women age 45-49 and from 1.2% among men age 15-19 to 18.0% among men age 50-59 (**Figure 14.2**).
- Among women and men combined, HIV prevalence is more than twice as high in urban areas as in rural areas (15.9% versus 7.1%) (**Table 14.4**). In urban areas, HIV prevalence is 20.3% among women and 10.6% among men, while the prevalence is 8.9% and 5.0%, respectively, in rural areas (**Figure 14.3**).

Figure 14.2 HIV prevalence by age

Percentage of women and men who are HIV positive

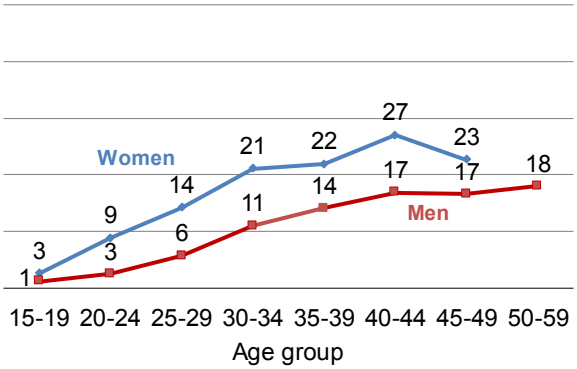
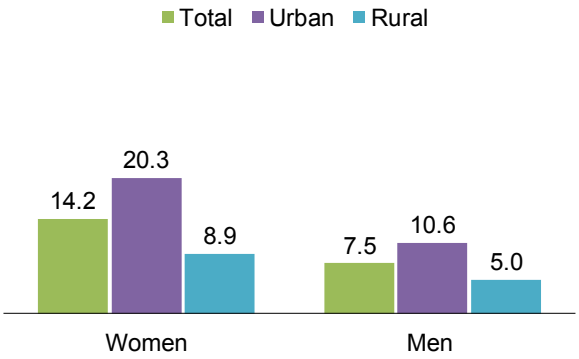


Figure 14.3 HIV prevalence by residence and sex

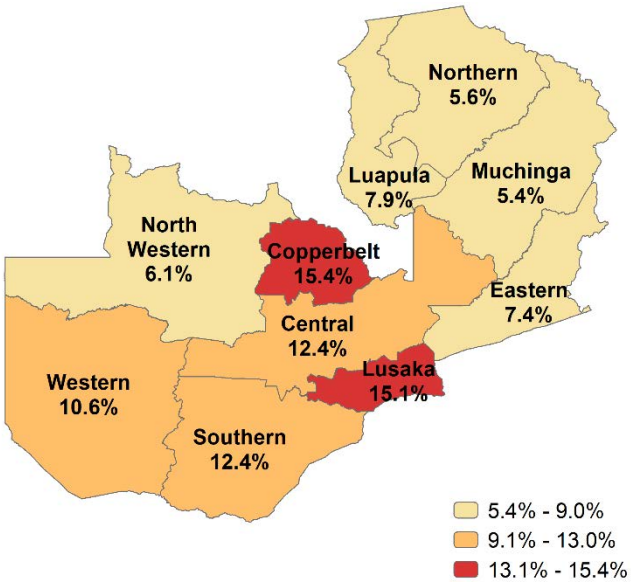
Percentage of women and men age 15-49 who are HIV positive



- HIV prevalence is highest in Copperbelt (15.4%), where it is nearly three times as high as in Muchinga (5.4%) and Northern (5.6%) (**Figure 14.4**).
- HIV prevalence increases with increasing education, from 9.3% among respondents with no education to 14.0% among those with a higher education. This trend is consistent among both women (rising from 10.8% to 15.5%) and men (rising from 5.8% to 12.9%) (**Table 14.4**).

***Figure 14.4* HIV prevalence by province**

Percentage of women and men age 15-49 who are HIV positive

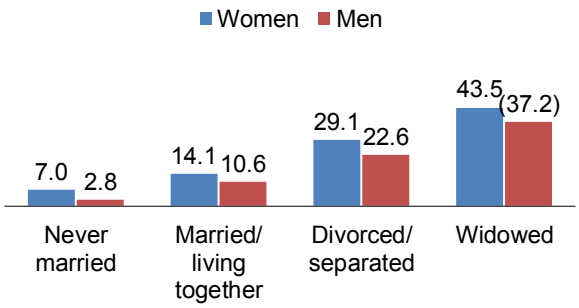


Patterns by other sociodemographic and health characteristics

- HIV prevalence varies notably by marital status; the prevalence is highest among women (43.5%) and men (37.2%) who are widowed, followed by those who are divorced or separated (29.1% and 22.6%, respectively). The prevalence is lowest among those who have never been married (7.0% and 2.8%, respectively) (**Table 14.5** and **Figure 14.5**).
- Women who are pregnant have a lower HIV prevalence (10.3%) than those who are not pregnant (14.6%).

***Figure 14.5* HIV prevalence by marital status**

Percentage of women and men age 15-49 who are HIV positive



Note: Figures in parentheses are based on 25-49 unweighted cases.

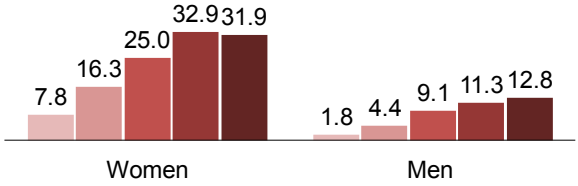
14.2.2 HIV Prevalence by Sexual Risk Behaviour

HIV prevalence is higher among women who first had sexual intercourse before age 18 than among women who first had sex at older ages. By contrast, HIV prevalence is slightly lower among men who first had sex before age 16 than among their counterparts who initiated sexual activity at older ages (**Table 14.6**).

HIV prevalence generally increases with number of lifetime sexual partners, rising from 7.8% among women with one lifetime sexual partner to 31.9% among those with 10 or more and from 1.8% among men with one lifetime sexual partner to 12.8% among those with 10 or more (**Figure 14.6**).

***Figure 14.6* HIV prevalence by number of lifetime partners**

Percentage of women and men age 15-49 who ever had sex and are HIV positive



14.2.3 HIV Prevalence among Young People

Tables 14.7 and **14.8** show HIV prevalence among young people age 15-24 according to background characteristics and sexual risk behaviours. Overall, 3.8% of young women and men age 15-24 are HIV positive. HIV prevalence is higher among young women than young men (5.6% versus 1.8%).

Patterns by background characteristics

- HIV prevalence increases with age among young women, from 1.7% among those age 15-17 to 11.9% among those age 23-24. Among young men, the prevalence increases slightly from 1.4% among those age 15-17 to 3.7% among those age 23-24.
- Young women who are divorced, separated, or widowed (13.4%) have a higher HIV prevalence than their currently married (6.2%) and never-married (4.8%) counterparts.
- HIV prevalence is higher among young women in urban areas (7.5%) than among those in rural areas (4.0%). A similar trend is seen among young men, with a prevalence of 2.7% in urban areas and 1.0% in rural areas.
- HIV prevalence is notably higher among young women with two or more sexual partners in the past 12 months (19.2%) than among their counterparts with one partner (7.2%) or no partners (6.0%). Among young men, by contrast, HIV prevalence is slightly lower among those with two or more sexual partners in the past 12 months (1.8%) than among those with one partner (2.3%) (**Table 14.8**).

14.2.4 HIV Prevalence by Other Characteristics Related to HIV Risk

As shown in **Table 14.9**, HIV prevalence is higher among women and men who reported having a sexually transmitted infection (STI) or symptoms of an STI in the past 12 months than among those who did not (21.2% versus 12.2%).

Among HIV-positive women and men, 91% reported having ever been tested for HIV and having received the result of their most recent test. Fifty-six percent of HIV-positive women and men were tested for HIV and received the result in the past 12 months, and 35% were tested more than 12 months ago and received the result. Only 2% of HIV-positive women and men have been tested for HIV but did not receive the result of their most recent test, and 6% have never been tested for HIV (**Table 14.10**).

HIV prevalence is 5.9% among men age 15-49 who have been circumcised (by either traditional or medical practitioners) and 8.3% among those who have not been circumcised (**Table 14.11**). HIV prevalence is lower among men who report that they were medically circumcised (5.7%) than among those who report that they were traditionally circumcised (6.5%).

14.2.5 HIV Prevalence among Couples

A total of 15.4% of the cohabitating couples interviewed in the 2018 ZDHS are affected by HIV, meaning that one or both members are HIV positive. This includes 7.8% of couples in which both members are HIV positive, 3.1% of couples in which the man is HIV positive and the woman is HIV negative, and 4.5% of couples in which the woman is HIV positive and the man is HIV negative (**Table 14.12**).

LIST OF TABLES

For more information on HIV prevalence, see the following tables:

- **Table 14.1 Coverage of HIV testing by residence and province**
- **Table 14.2 Coverage of HIV testing according to selected background characteristics**
- **Table 14.3 HIV prevalence by age**
- **Table 14.4 HIV prevalence by socioeconomic characteristics**
- **Table 14.5 HIV prevalence by demographic characteristics**
- **Table 14.6 HIV prevalence by sexual behaviour**
- **Table 14.7 HIV prevalence among young people by background characteristics**
- **Table 14.8 HIV prevalence among young people by sexual behaviour**
- **Table 14.9 HIV prevalence by other characteristics**
- **Table 14.10 Prior HIV testing by current HIV status**
- **Table 14.11 HIV prevalence by male circumcision**
- **Table 14.12 HIV prevalence among couples**

Table 14.1 Coverage of HIV testing by residence and province

Percent distribution of women and men age 15-49 eligible for HIV testing by testing status, according to residence and province (unweighted), Zambia DHS 2018

Residence and province	HIV test status								Total	Number
	DBS tested[1]		Refused to provide blood		Absent at the time of blood collection		Other/missing[2]			
	Interviewed	Not interviewed	Interviewed	Not interviewed	Interviewed	Not interviewed	Interviewed	Not interviewed		
WOMEN										
Residence										
Urban	90.9	0.0	3.6	1.1	0.5	2.8	0.6	0.5	100.0	5,766
Rural	93.9	0.0	2.7	0.5	0.2	2.0	0.1	0.5	100.0	8,423
Province										
Central	96.8	0.0	1.4	0.2	0.2	0.6	0.2	0.5	100.0	1,416
Copperbelt	89.2	0.0	3.9	1.4	0.4	3.0	1.8	0.4	100.0	1,695
Eastern	91.3	0.1	3.5	1.1	0.1	3.1	0.1	0.7	100.0	1,617
Luapula	86.3	0.0	8.5	1.2	0.8	2.2	0.3	0.7	100.0	1,474
Lusaka	96.4	0.0	1.3	0.6	0.1	1.2	0.2	0.2	100.0	1,811
Muchinga	96.4	0.1	1.4	0.4	0.0	1.2	0.0	0.5	100.0	1,209
Northern	94.1	0.1	0.9	0.7	0.2	3.8	0.0	0.2	100.0	1,301
North Western	95.8	0.0	2.3	0.5	0.2	1.1	0.0	0.2	100.0	1,100
Southern	92.2	0.0	3.2	0.8	0.3	2.7	0.1	0.8	100.0	1,407
Western	89.5	0.1	4.1	0.4	1.0	4.5	0.0	0.4	100.0	1,159
Total 15-49	92.7	0.0	3.1	0.8	0.3	2.3	0.3	0.5	100.0	14,189
MEN										
Residence										
Urban	82.8	0.1	3.9	1.4	1.5	8.8	0.7	0.8	100.0	4,715
Rural	89.8	0.0	2.5	0.6	0.8	5.4	0.1	0.8	100.0	7,421
Province										
Central	94.8	0.2	1.4	0.3	0.4	1.5	0.2	1.2	100.0	1,252
Copperbelt	82.8	0.0	3.8	2.2	1.0	7.5	1.6	1.2	100.0	1,472
Eastern	83.6	0.1	3.5	1.4	0.7	9.7	0.0	1.1	100.0	1,535
Luapula	80.9	0.1	6.5	0.9	3.8	6.8	0.6	0.6	100.0	1,243
Lusaka	91.1	0.0	1.4	0.6	0.8	5.7	0.2	0.3	100.0	1,514
Muchinga	93.2	0.0	2.5	0.4	0.5	2.5	0.1	0.8	100.0	1,005
Northern	87.7	0.1	1.0	0.2	0.4	10.1	0.1	0.5	100.0	1,095
North Western	92.0	0.0	3.1	0.4	0.1	3.4	0.0	0.9	100.0	889
Southern	84.2	0.0	4.0	1.1	0.7	9.0	0.0	1.0	100.0	1,256
Western	82.6	0.1	3.3	0.8	2.1	9.9	0.1	1.0	100.0	875
Total 15-49	87.1	0.1	3.1	0.9	1.0	6.7	0.3	0.8	100.0	12,136
50-59	87.7	0.0	3.5	1.1	0.7	6.3	0.3	0.4	100.0	1,115
Total 15-59	87.1	0.1	3.1	0.9	1.0	6.7	0.3	0.8	100.0	13,251
TOTAL										
Residence										
Urban	87.3	0.0	3.8	1.2	0.9	5.5	0.6	0.6	100.0	10,481
Rural	92.0	0.0	2.6	0.5	0.5	3.6	0.1	0.6	100.0	15,844
Province										
Central	95.9	0.1	1.4	0.3	0.3	1.0	0.2	0.8	100.0	2,668
Copperbelt	86.2	0.0	3.9	1.7	0.6	5.1	1.7	0.7	100.0	3,167
Eastern	87.6	0.1	3.5	1.3	0.4	6.3	0.0	0.9	100.0	3,152
Luapula	83.8	0.0	7.6	1.0	2.2	4.3	0.4	0.6	100.0	2,717
Lusaka	94.0	0.0	1.4	0.6	0.4	3.2	0.2	0.2	100.0	3,325
Muchinga	95.0	0.0	1.9	0.4	0.2	1.8	0.0	0.6	100.0	2,214
Northern	91.2	0.1	1.0	0.5	0.3	6.7	0.0	0.3	100.0	2,396
North Western	94.1	0.0	2.7	0.5	0.2	2.1	0.0	0.5	100.0	1,989
Southern	88.4	0.0	3.6	0.9	0.5	5.7	0.0	0.9	100.0	2,663
Western	86.5	0.1	3.7	0.6	1.5	6.8	0.0	0.7	100.0	2,034
Total 15-49	90.1	0.0	3.1	0.8	0.6	4.3	0.3	0.6	100.0	26,325

[1] Includes all Dried Blood Spot (DBS) specimens tested at the lab and for which there is a final result, i.e., positive, negative, or indeterminate
[2] Includes (1) other results of blood collection (e.g., technical problem in the field), (2) lost specimens, (3) noncorresponding bar codes, and (4) other lab results such as blood not tested for technical reason or not enough blood to complete the algorithm

Table 14.2 Coverage of HIV testing according to selected background characteristics

Percent distribution of women and men age 15-49 eligible for HIV testing by testing status, according to selected background characteristics (unweighted), Zambia DHS 2018

Background characteristic	HIV test status								Total	Number
	DBS tested[1]		Refused to provide blood		Absent at the time of blood collection		Other/missing[2]			
	Interviewed	Not interviewed	Interviewed	Not interviewed	Interviewed	Not interviewed	Interviewed	Not interviewed		
					WOMEN					
Age										
15-19	91.8	0.0	2.9	0.8	0.4	3.1	0.2	0.8	100.0	3,262
20-24	93.3	0.0	2.5	0.6	0.3	2.3	0.4	0.5	100.0	2,785
25-29	93.0	0.0	3.4	0.9	0.4	2.0	0.2	0.1	100.0	2,235
30-34	93.0	0.1	3.3	0.7	0.2	2.1	0.3	0.4	100.0	1,926
35-39	92.2	0.1	3.6	1.1	0.3	2.1	0.3	0.4	100.0	1,684
40-44	94.5	0.0	2.4	0.6	0.4	1.6	0.3	0.2	100.0	1,310
45-49	91.6	0.0	4.0	0.6	0.4	2.4	0.5	0.5	100.0	987
Education										
No education	90.7	0.1	4.1	0.8	0.3	1.6	0.4	2.1	100.0	1,199
Primary	94.4	0.0	2.5	0.6	0.3	1.8	0.1	0.3	100.0	6,395
Secondary	92.2	0.0	3.0	0.8	0.3	2.8	0.6	0.3	100.0	5,776
Higher	86.6	0.0	6.8	1.5	0.6	3.8	0.2	0.5	100.0	812
Missing	0.0	0.0	0.0	14.3	0.0	57.1	0.0	28.6	100.0	7
Wealth quintile										
Lowest	93.9	0.1	3.3	0.4	0.2	1.6	0.1	0.3	100.0	2,916
Second	94.3	0.0	2.4	0.5	0.2	1.8	0.1	0.7	100.0	2,760
Middle	93.7	0.0	2.4	0.7	0.1	2.5	0.1	0.6	100.0	2,788
Fourth	93.0	0.0	2.6	0.9	0.4	2.7	0.2	0.3	100.0	2,662
Highest	89.1	0.0	4.7	1.3	0.6	3.0	0.9	0.4	100.0	3,063
Total	92.7	0.0	3.1	0.8	0.3	2.3	0.3	0.5	100.0	14,189
					MEN					
Age										
15-19	88.2	0.0	2.5	0.8	1.2	6.0	0.3	1.0	100.0	3,095
20-24	88.6	0.2	2.0	0.7	1.0	6.2	0.4	0.9	100.0	2,168
25-29	87.4	0.1	3.3	0.8	0.7	6.9	0.3	0.6	100.0	1,779
30-34	85.7	0.1	3.4	1.5	0.8	7.6	0.2	0.7	100.0	1,505
35-39	85.1	0.0	3.5	1.0	0.9	8.2	0.5	0.8	100.0	1,426
40-44	84.8	0.0	4.2	0.9	1.7	7.2	0.3	0.7	100.0	1,202
45-49	87.6	0.0	4.2	0.6	0.8	5.6	0.3	0.8	100.0	961
Education										
No education	79.2	0.2	4.0	1.5	1.3	7.0	0.4	6.4	100.0	530
Primary	89.5	0.0	2.5	0.8	0.9	5.4	0.1	0.7	100.0	4,728
Secondary	87.1	0.1	2.9	0.7	1.1	7.3	0.4	0.4	100.0	5,885
Higher	81.9	0.0	6.4	1.9	0.7	7.7	0.6	0.7	100.0	968
Missing	0.0	0.0	0.0	20.0	0.0	68.0	0.0	12.0	100.0	25
Wealth quintile										
Lowest	89.4	0.0	2.9	0.7	1.0	5.0	0.2	0.8	100.0	2,281
Second	88.7	0.0	2.6	0.5	0.7	6.6	0.0	0.9	100.0	2,407
Middle	89.5	0.1	2.2	0.5	1.0	5.8	0.1	0.8	100.0	2,577
Fourth	85.7	0.2	2.7	1.0	1.2	7.8	0.3	0.9	100.0	2,323
Highest	82.3	0.0	4.8	1.7	1.3	8.2	0.9	0.7	100.0	2,548
Total	87.1	0.1	3.1	0.9	1.0	6.7	0.3	0.8	100.0	12,136

[1] Includes all Dried Blood Spot (DBS) specimens tested at the lab and for which there is a result, i.e., positive, negative, or indeterminate
[2] Includes (1) other results of blood collection (e.g., technical problem in the field), (2) lost specimens, (3) noncorresponding bar codes, and (4) other lab results such as blood not tested for technical reason or not enough blood to complete the algorithm

Table 14.3 HIV prevalence by age

Among de facto women age 15-49 and men age 15-59 who were interviewed and tested, percentage HIV positive, according to age, Zambia DHS 2018

	Women		Men		Total	
Age	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number
15-19	2.6	2,818	1.2	2,738	1.9	5,557
20-24	8.9	2,574	2.5	2,023	6.1	4,598
25-29	14.2	2,080	5.7	1,689	10.4	3,768
30-34	21.1	1,751	11.0	1,357	16.7	3,107
35-39	21.9	1,579	14.1	1,248	18.5	2,827
40-44	27.0	1,185	16.9	1,048	22.3	2,233
45-49	22.7	831	16.6	847	19.6	1,678
50-59	na	na	18.0	935	na	na
Total 15-49	14.2	12,817	7.5	10,950	11.1	23,767
Confidence interval	(13.1-15.3)		(6.8-8.2)		(10.3-11.9)	
Total 15-59	na	na	8.3	11,885	na	na
Confidence interval			(7.6-9.1)			

na = Not applicable

Table 14.4 HIV prevalence by socioeconomic characteristics

Percentage HIV positive among women and men age 15-49 who were tested, according to socioeconomic characteristics, Zambia DHS 2018

Socioeconomic characteristic	Women		Men		Total	
	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number
Religion						
Catholic	13.3	2,202	8.0	2,050	10.8	4,251
Protestant	14.3	10,398	7.2	8,736	11.0	19,133
Muslim	16.3	60	8.7	48	12.9	108
Other	22.0	159	24.1	116	22.9	275
Employment (past 12 months)						
Not employed	10.6	6,141	2.6	2,368	8.4	8,508
Employed	17.5	6,677	8.9	8,582	12.7	15,259
Residence						
Urban	20.3	5,971	10.6	4,915	15.9	10,886
Rural	8.9	6,846	5.0	6,035	7.1	12,881
Province						
Central	15.4	1,092	9.0	960	12.4	2,052
Copperbelt	19.8	2,062	10.1	1,691	15.4	3,752
Eastern	10.1	1,503	4.5	1,443	7.4	2,946
Luapula	9.9	1,003	5.4	832	7.9	1,835
Lusaka	19.2	2,560	10.2	2,128	15.1	4,688
Muchinga	6.4	707	4.3	587	5.4	1,293
Northern	6.7	987	4.4	837	5.6	1,824
North Western	8.5	672	3.1	545	6.1	1,218
Southern	15.8	1,474	8.8	1,365	12.4	2,839
Western	13.2	757	7.1	562	10.6	1,319
Education						
No education	10.8	971	5.8	426	9.3	1,396
Primary	13.7	5,721	6.9	4,145	10.8	9,866
Secondary	15.2	5,437	7.2	5,506	11.2	10,944
Higher	15.5	688	12.9	873	14.0	1,562
Wealth quintile						
Lowest	6.7	2,278	3.8	1,786	5.4	4,064
Second	9.3	2,249	5.7	1,912	7.7	4,161
Middle	13.4	2,339	6.6	2,181	10.1	4,520
Fourth	21.4	2,872	10.1	2,530	16.1	5,402
Highest	17.2	3,080	9.7	2,541	13.8	5,621
Total 15-49	14.2	12,817	7.5	10,950	11.1	23,767
50-59	na	na	18.0	935	na	na
Total 15-59	na	na	8.3	11,885	na	na

na = Not applicable

Table 14.5 HIV prevalence by demographic characteristics

Percentage HIV positive among women and men age 15-49 who were tested, according to demographic characteristics, Zambia DHS 2018

Demographic characteristic	Women		Men		Total	
	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number
Marital status						
Never married	7.0	3,993	2.8	5,081	4.6	9,074
Ever had sexual intercourse	10.7	2,322	3.5	3,271	6.5	5,593
Never had sexual intercourse	1.8	1,672	1.4	1,809	1.6	3,481
Married/living together	14.1	7,192	10.6	5,421	12.6	12,613
Divorced or separated	29.1	1,270	22.6	402	27.5	1,672
Widowed	43.5	363	(37.2)	46	42.8	409
Type of union						
In polygynous union	11.3	800	8.5	261	10.6	1,061
In non-polygynous union	14.4	6,314	10.7	5,160	12.7	11,474
Not currently in union	14.3	5,626	4.5	5,529	9.5	11,155
Don't know/missing	22.4	77	*	0	22.4	77
Times slept away from home in past 12 months						
None	13.8	7,747	6.6	5,886	10.7	13,633
1-2	14.8	3,455	8.0	2,843	11.7	6,297
3-4	14.4	949	8.2	1,117	11.1	2,065
5+	16.2	667	10.2	1,105	12.4	1,772
Time away in past 12 months						
Away for more than 1 month at a time	15.4	1,642	7.5	1,484	11.6	3,126
Away only for less than 1 month at a time	14.7	3,428	9.0	3,580	11.8	7,008
Not away	13.8	7,747	6.6	5,886	10.7	13,633
Currently pregnant						
Pregnant	10.3	1,056	na	na	na	na
Not pregnant or not sure	14.6	11,761	na	na	na	na
ANC for last birth in the last 3 years						
ANC provided by the public sector	10.7	4,887	na	na	na	na
ANC provided by other than the public sector	5.1	170	na	na	na	na
No ANC/no birth in last 3 years	16.6	7,761	na	na	na	na
Total 15-49	14.2	12,817	7.5	10,950	11.1	23,767
50-59	na	na	18.0	935	na	na
Total 15-59	na	na	8.3	11,885	na	na

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
na = Not applicable

Table 14.6 HIV prevalence by sexual behaviour

Percentage HIV positive among women and men age 15-49 who ever had sex and were tested for HIV, according to sexual behaviour characteristics, Zambia DHS 2018

Sexual behaviour characteristic	Women		Men		Total	
	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number
Age at first sexual intercourse						
<16	16.5	4,464	7.4	2,728	13.1	7,192
16-17	16.9	3,537	8.5	2,025	13.9	5,561
18-19	14.1	1,826	9.5	2,073	11.6	3,899
20+	14.4	1,104	9.5	2,231	11.2	3,335
Missing	18.3	215	15.7	84	17.6	299
Number of lifetime partners						
1	7.8	4,295	1.8	1,066	6.6	5,361
2	16.3	3,516	4.4	1,412	12.9	4,928
3-4	25.0	2,738	9.1	2,640	17.2	5,378
5-9	32.9	497	11.3	2,476	14.9	2,972
10+	31.9	69	12.8	1,436	13.7	1,506
Missing	(39.5)	31	12.0	110	18.1	142
Multiple sexual partners in past 12 months						
0	20.9	1,477	7.1	987	15.3	2,464
1	15.1	9,473	8.7	6,471	12.5	15,944
2+	27.2	196	9.9	1,682	11.7	1,878
Nonmarital, noncohabiting partners in past 12 months[1]						
0	15.2	8,681	9.7	5,495	13.1	14,176
1	18.8	2,330	7.5	2,984	12.5	5,314
2+	27.0	135	6.0	661	9.5	796
Condom use at last sexual intercourse in past 12 months						
Used condom	28.0	1,347	10.1	2,071	17.1	3,418
Did not use condom	13.3	8,322	8.5	6,082	11.3	14,404
No sexual intercourse in past 12 months	20.9	1,477	7.1	987	15.3	2,464
Condom use at last sexual intercourse with a nonmarital, noncohabiting partner in past in past 12 months[1]						
Used condom	24.0	842	7.0	1,945	12.2	2,786
Did not use condom	16.8	1,623	7.5	1,694	12.0	3,317
No sexual intercourse with any nonmarital, noncohabiting partners in past 12 months[1]	15.2	8,681	9.7	5,502	13.1	14,183
Paid for sexual intercourse in past 12 months						
Yes	na	na	10.4	613	na	na
Used condom	na	na	10.6	330	na	na
Did not use condom	na	na	10.3	284	na	na
No (no paid sexual intercourse/ no sexual intercourse in last 12 months)	na	na	8.6	8,527	na	na
Total 15-49	16.1	11,146	8.7	9,140	12.8	20,286
50-59	na	na	18.0	932	na	na
Total 15-59	na	na	9.6	10,073	na	na

na = Not applicable

[1] Any partner who was not a spouse and did not live with the respondent

Table 14.7 HIV prevalence among young people by background characteristics

Percentage HIV positive among women and men age 15-24 who were tested for HIV, according to background characteristics, Zambia DHS 2018

Background characteristic	Women		Men		Total	
	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number
Age						
15-19	2.6	2,818	1.2	2,738	1.9	5,557
15-17	1.7	1,632	1.4	1,593	1.6	3,226
18-19	3.8	1,186	0.9	1,145	2.4	2,331
20-24	8.9	2,574	2.5	2,023	6.1	4,598
20-22	7.2	1,633	1.9	1,307	4.8	2,940
23-24	11.9	941	3.7	716	8.4	1,657
Marital status						
Never married	4.8	3,395	1.7	4,253	3.1	7,648
Ever had sex	7.7	1,783	1.9	2,511	4.3	4,294
Never had sex	1.5	1,612	1.4	1,742	1.5	3,354
Married/living together	6.2	1,767	1.4	477	5.2	2,245
Divorced/separated/ widowed	13.4	231	(16.9)	31	13.9	262
Currently pregnant						
Pregnant	4.8	512	na	na	na	na
Not pregnant or not sure	5.7	4,881	na	na	na	na
Residence						
Urban	7.5	2,489	2.7	2,126	5.3	4,615
Rural	4.0	2,903	1.0	2,636	2.6	5,539
Province						
Central	6.5	477	2.3	422	4.5	898
Copperbelt	9.1	870	1.3	727	5.6	1,598
Eastern	2.8	645	0.2	627	1.5	1,273
Luapula	6.3	424	1.4	393	3.9	816
Lusaka	5.5	1,003	5.0	837	5.3	1,840
Muchinga	1.5	301	0.5	263	1.0	564
Northern	3.6	430	1.8	358	2.8	788
North Western	6.6	324	0.3	251	3.8	575
Southern	5.8	602	0.9	623	3.3	1,225
Western	4.9	316	1.1	261	3.2	577
Education						
No education	3.3	188	2.4	139	2.9	327
Primary	5.1	2,117	1.7	1,806	3.6	3,923
Secondary	6.2	2,947	1.6	2,679	4.0	5,626
Higher	3.6	140	5.1	138	4.4	278
Wealth quintile						
Lowest	2.6	960	0.6	710	1.8	1,670
Second	4.3	945	1.4	811	2.9	1,756
Middle	6.1	987	0.9	995	3.5	1,982
Fourth	8.8	1,222	2.1	1,100	5.6	2,322
Highest	5.4	1,279	3.2	1,145	4.4	2,424
Total	5.6	5,393	1.8	4,762	3.8	10,154

Note: Figures in parentheses are based on 25-49 unweighted cases.
na = Not applicable

Table 14.8 HIV prevalence among young people by sexual behaviour

Percentage HIV positive among women and men age 15-24 who have ever had sex and were tested for HIV, according to sexual behaviour characteristics, Zambia DHS 2018

	Women		Men		Total	
Sexual behaviour characteristic	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number
Multiple sexual partners in past 12 months						
0	6.0	543	1.1	644	3.3	1,187
1	7.2	3,148	2.3	1,878	5.4	5,026
2+	19.2	90	1.8	499	4.5	588
Nonmarital, noncohabiting partners in past 12 months[1]						
0	6.3	2,343	1.4	1,021	4.8	3,364
1	8.4	1,365	2.3	1,597	5.1	2,962
2+	21.1	72	2.0	403	4.9	475
Condom use at last sexual intercourse in past 12 months						
Used condom	13.3	596	1.5	998	5.9	1,594
Did not use condom	6.3	2,642	2.7	1,378	5.0	4,020
No sexual intercourse in past 12 months	6.0	543	1.1	644	3.3	1,187
Total	7.3	3,781	2.0	3,020	4.9	6,801

[1] Any partner who was not a spouse and did not live with the respondent

Table 14.9 HIV prevalence by other characteristics

Percentage HIV positive among women and men age 15-49 who have ever had sex and were tested for HIV, according to whether they had an STI in the past 12 months and prior testing for HIV, Zambia DHS 2018

	Women		Men		Total	
Characteristic	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number
Sexually transmitted infection in past 12 months						
Had STI or STI symptoms	28.1	583	15.4	684	21.2	1,267
No STI, no symptoms	15.4	10,558	8.2	8,453	12.2	19,010
Don't know/missing	*	5	*	3	*	9
Prior HIV testing						
Ever tested	16.6	10,386	9.5	7,667	13.6	18,053
Received results	16.5	10,238	9.5	7,472	13.5	17,709
Did not receive results	24.3	149	10.5	195	16.5	343
Never tested	9.2	760	4.6	1,474	6.1	2,233
Total 15-49	16.1	11,146	8.7	9,140	12.8	20,286

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 14.10 Prior HIV testing by current HIV status

Percent distribution of women and men age 15-49 who tested HIV positive and who tested HIV negative, according to HIV testing status prior to the survey, Zambia DHS 2018

	Women		Men		Total	
HIV testing prior to the survey	HIV positive	HIV negative	HIV positive	HIV negative	HIV positive	HIV negative
Ever tested for HIV and received the result of the most recent test	93.1	84.2	86.8	74.5	91.1	79.5
Tested in the past 12 months and received the result[1]	58.3	65.1	50.4	52.3	55.8	59.0
Tested 12 or more months ago and received the result[1]	34.8	19.1	36.4	22.2	35.3	20.6
Ever tested for HIV and did not receive the result of the most recent test	2.4	1.6	2.5	2.1	2.4	1.9
Not previously tested	4.5	14.2	10.7	23.4	6.4	18.6
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number	1,821	10,996	823	10,127	2,644	21,123

[1] Of the most recent HIV test

Table 14.11 HIV prevalence by male circumcision

Among men age 15-49 who were tested for HIV, percentage HIV positive by circumcision status, according to background characteristics, Zambia DHS 2018

	Circumcised							
	Circumcised by health worker/professional		Circumcised by traditional practitioner/ family/friend		All circumcised[1]		Uncircumcised	
Background characteristic	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number
Age								
15-19	0.9	861	0.0	126	0.8	993	1.4	1,743
20-24	1.9	679	2.9	104	2.0	801	2.9	1,221
25-29	4.5	413	0.0	102	3.6	519	6.6	1,168
30-34	9.6	284	8.9	99	9.2	391	11.8	966
35-39	17.8	253	11.2	106	16.6	365	13.0	883
40-44	14.8	154	17.4	66	15.5	225	17.5	817
45-49	20.8	111	10.9	84	15.8	205	16.8	643
Religion								
Catholic	4.3	470	8.2	83	4.9	562	9.2	1,488
Protestant	5.9	2,255	6.0	587	6.0	2,887	7.8	5,838
Muslim	*	13	*	9	(8.4)	25	*	24
Other	*	16	*	8	(15.6)	24	26.4	92
Residence								
Urban	6.8	1,605	6.9	327	6.9	1,966	13.0	2,943
Rural	4.1	1,150	6.0	360	4.6	1,531	5.2	4,498
Province								
Central	7.3	199	(22.5)	21	8.6	223	9.2	736
Copperbelt	4.3	589	11.4	117	5.7	722	13.4	969
Eastern	5.0	200	*	18	5.8	227	4.3	1,213
Luapula	4.2	305	(9.0)	18	4.4	324	6.1	508
Lusaka	6.8	521	10.0	113	7.2	650	11.5	1,473
Muchinga	3.8	85	*	6	4.0	93	4.4	491
Northern	3.0	106	*	8	3.3	114	4.5	723
North Western	4.0	188	1.2	237	2.6	429	5.2	116
Southern	9.2	320	(2.1)	50	8.4	372	8.9	993
Western	6.6	242	6.5	100	6.5	343	8.1	218
Education								
No education	(4.9)	41	(1.4)	20	3.6	63	6.3	361
Primary	5.3	730	7.5	237	5.8	983	7.3	3,159
Secondary	5.3	1,644	6.1	375	5.5	2,055	8.3	3,446
Higher	8.9	339	6.4	54	8.5	396	16.5	476
Wealth quintile								
Lowest	3.4	277	5.5	116	4.1	397	3.7	1,386
Second	4.8	375	6.6	119	5.2	500	5.9	1,412
Middle	6.8	421	2.7	136	5.8	567	6.9	1,611
Fourth	5.4	715	11.9	173	6.5	910	12.1	1,620
Highest	6.4	967	4.2	144	6.4	1,124	12.4	1,412
Total 15-49	5.7	2,755	6.5	687	5.9	3,498	8.3	7,441
50-59	16.4	90	25.4	101	20.9	195	17.2	739
Total 15-59	6.0	2,845	8.9	788	6.7	3,693	9.1	8,181

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Includes all men who report they are circumcised, including men circumcised by medical or traditional practitioners. Also includes those circumcised by other practitioners, those who don't know what practitioner performed their circumcision, and those who did not report a practitioner of circumcision, not shown separately.

Table 14.12 HIV prevalence among couples

Percent distribution of couples living in the same household, both of whom were tested for HIV, by HIV status, according to background characteristics, Zambia DHS 2018

Background characteristic	Both HIV positive	Man HIV positive, woman HIV negative	Woman HIV positive, man HIV negative	Both HIV negative	Either undetermined	Total	Number
Woman's age							
15-19	1.6	0.5	1.3	96.5	0.0	100.0	296
20-29	4.7	2.2	3.4	89.7	0.0	100.0	2,164
30-39	10.4	4.4	5.2	80.0	0.0	100.0	1,860
40-49	11.6	3.2	6.5	78.7	0.0	100.0	1,008
Man's age							
15-19	(0.0)	(0.0)	(1.6)	(98.4)	(0.0)	100.0	23
20-29	2.8	1.2	3.1	92.9	0.0	100.0	1,331
30-39	7.4	3.6	4.3	84.7	0.0	100.0	1,946
40-49	9.9	4.1	6.3	79.7	0.0	100.0	1,491
50-59	16.3	3.3	4.0	76.4	0.0	100.0	538
Age difference between partners							
Woman older	8.5	3.4	12.4	75.7	0.0	100.0	188
Same age/man older by 0-4 years	6.9	2.8	4.5	85.8	0.0	100.0	2,215
Man older by 5-9 years	6.4	2.7	3.8	87.0	0.0	100.0	2,096
Man older by 10-14 years	12.1	4.8	4.1	79.0	0.0	100.0	640
Man older by 15+ years	18.4	5.1	6.2	70.3	0.0	100.0	189
Type of union							
Non-polygynous	7.9	3.1	4.6	84.4	0.0	100.0	4,866
Polygynous	7.1	2.5	3.2	87.2	0.0	100.0	417
Don't know/missing	(6.6)	(12.5)	(2.3)	(78.6)	(0.0)	100.0	45
Multiple partners in past 12 months[1]							
Both no	7.7	2.9	4.4	85.0	0.0	100.0	4,242
Man yes, woman no	8.0	4.0	4.2	83.8	0.0	100.0	1,049
Woman yes, man no	*	*	*	*	*	100.0	25
Both yes	*	*	*	*	*	100.0	12
Residence							
Urban	13.1	3.9	7.6	75.4	0.0	100.0	1,987
Rural	4.7	2.6	2.7	90.1	0.0	100.0	3,342
Province							
Central	8.8	3.7	6.4	81.2	0.0	100.0	466
Copperbelt	12.1	2.8	5.1	79.9	0.0	100.0	670
Eastern	5.6	1.5	1.8	91.1	0.0	100.0	819
Luapula	4.1	4.3	3.2	88.4	0.0	100.0	410
Lusaka	11.0	4.3	11.1	73.7	0.0	100.0	953
Muchinga	4.3	1.4	2.0	92.3	0.0	100.0	347
Northern	3.7	2.1	1.0	93.2	0.0	100.0	477
North Western	2.5	2.5	2.8	92.1	0.0	100.0	247
Southern	10.6	3.7	2.4	83.3	0.0	100.0	682
Western	6.2	4.5	3.0	86.2	0.0	100.0	257
Woman's education							
No education	4.3	2.9	2.2	90.7	0.0	100.0	510
Primary	7.3	3.2	4.2	85.3	0.0	100.0	2,799
Secondary	9.5	3.2	5.3	82.0	0.0	100.0	1,789
Higher	8.3	2.0	7.6	82.1	0.0	100.0	230
Man's education							
No education	3.0	2.5	3.1	91.5	0.0	100.0	264
Primary	6.4	3.3	2.9	87.4	0.0	100.0	2,291
Secondary	8.7	3.0	5.8	82.5	0.0	100.0	2,302
Higher	13.1	3.1	6.7	77.1	0.0	100.0	472
Wealth quintile							
Lowest	2.9	1.9	1.9	93.4	0.0	100.0	1,144
Second	3.9	3.1	2.4	90.6	0.0	100.0	1,098
Middle	7.3	3.5	4.2	85.1	0.0	100.0	1,080
Fourth	13.3	3.4	4.9	78.4	0.0	100.0	1,093
Highest	12.8	3.8	10.4	73.0	0.0	100.0	913
Total	7.8	3.1	4.5	84.6	0.0	100.0	5,328

Note: Table is based on couples for whom a valid test result (positive or negative) is available for both partners. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] A respondent is considered to have had multiple sexual partners in the past 12 months if he or she had sexual intercourse with 2 or more people during this time period (respondents with multiple partners include polygynous men who had sexual intercourse with 2 or more wives).

ADULT AND MATERNAL MORTALITY 15

Key Findings

- ***Adult mortality:*** One hundred sixty-seven of every 1,000 women and 234 of every 1,000 men age 15 are expected to die before age 50.
- ***Maternal mortality:*** Maternal deaths account for 10% of all deaths among women age 15-49.
- ***Lifetime risk of maternal death:*** At current fertility and mortality rates, 1 in every 100 women in Zambia will die from maternal causes.
- ***Maternal mortality ratio:*** The maternal mortality ratio for the 7-year period before the 2018 ZDHS is estimated at 252 maternal deaths per 100,000 live births.
- ***Pregnancy-related mortality ratio:*** The estimated pregnancy-related mortality ratio for the 7-year period preceding the 2018 ZDHS is 278 deaths per 100,000 live births.

Adult and maternal mortality indicators can be used to assess the health status of a population. According to the 7th National Development Plan 2017-2021, the Government of the Republic of Zambia is committed to improving health services in the country, and reducing maternal mortality is one of the government's priorities. Particular emphasis has been placed on increasing the proportion of live births attended by skilled providers, understanding where pregnancy complications occur, and enhancing access to emergency obstetric care services (MNDP 2017). According to the Zambia National Health Strategic Plan 2017-2021, the target is to reduce the maternal mortality ratio from 398 deaths per 100,000 live births in 2013-14 to 100 deaths per 100,000 live births by 2021 (MOH 2016). The plan also aims to reduce adult mortality from 24 to 12 deaths per 1,000 population in the same period.

Estimation of mortality rates requires complete and accurate data on adult and maternal deaths. In the 2018 ZDHS, data were collected from all female respondents on the survival of their sisters and brothers to obtain an estimate of adult mortality. Questions were included to determine if any of the sisters' deaths were maternity-related, which permits an estimation of maternal mortality—a key indicator of maternal health and well-being.

This chapter presents information on the levels of and trends in adult mortality and maternal mortality in Zambia. The chapter includes a summary measure ($_{35}q_{15}$) that represents the probability of dying between exact ages 15 and 50—that is, between the 15th and 50th birthdays.

15.1 DATA

The 2018 ZDHS collected information on sibling history by asking each female respondent to list all children born to her biological mother, starting with the first born. The respondent was then asked whether each of these siblings was still alive. For living siblings, the interviewer asked the current age of each sibling. For deceased siblings, age at death and number of years since death were recorded. When a

respondent could not provide precise information on age at death or years since death, approximate but quantitative answers were accepted.

For every sister and brother who had died, the respondent was asked "Was [NAME]'s death due to an accident or violence?" Estimates of maternal mortality are refined by excluding deaths due to accidents or violence; however, other incidental deaths, such as HIV-related deaths, are not identified and are therefore not excluded. For sisters who died at age 12 or older, three questions were asked to determine whether the death was maternity-related: "Was [NAME OF SISTER] pregnant when she died?" and, if the response was negative, "Did she die during childbirth?" and, if not, "Did she die within 2 months after the end of a pregnancy or childbirth?"

15.2 Direct Estimates of Adult Mortality

Adult mortality rate

The number of adult deaths per 1,000 population age 15-49. Adult mortality rates by 5-year age groups are calculated as follows: the number of deaths to respondent's siblings in each age group are divided by the number of person-years of exposure to the risk of dying in that age group during the 7 years preceding the survey. The number of deaths is the number of siblings (brothers or sisters) reported as having died within the 7 years preceding the survey. The person-years of exposure in each age group are calculated for both surviving and dead siblings based on their current age (living siblings) or age at death and years since death (dead siblings).

Sample: Siblings (both living and dead) who were age 15-49 in the 7 years preceding the survey, by sex and 5-year age groups.

Evaluating the plausibility and stability of overall adult mortality is one way to assess the quality of the data used to estimate maternal mortality. If the estimated rates of overall adult mortality are implausible, rates based on a subset of deaths (maternal deaths in particular) may have serious problems.

The reported ages at death and years since death of the respondents' brothers and sisters are used to make direct estimates of adult mortality. Because of differentials in exposure to the risk of dying, this report presents age- and sex-specific death rates. To ensure a sufficiently large number of adult deaths to generate a robust estimate, rates are calculated for the 7-year period before the survey (roughly between mid- to late 2011 and mid- to late 2018). Nevertheless, age-specific mortality rates obtained in this manner are subject to considerable sampling variation. Use of this 7-year period is a compromise between the desire for the most recent data and the need to minimise the level of sampling error.

Figure 15.1 **Adult mortality rates by age**

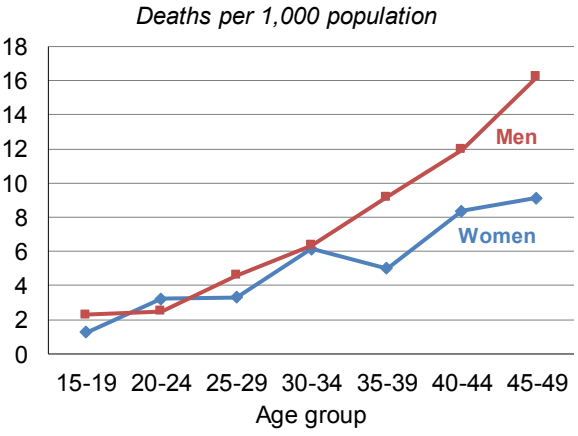


Table 15.1 and **Figure 15.1** show age-specific mortality rates among women and men age 15-49 for the 7 years before the 2018 ZDHS. Overall, the adult mortality rate is 5.11 per 1,000 population. Mortality is slightly lower among women (4.29 deaths per 1,000 population) than among men (5.92 deaths per 1,000 population). Adult mortality rates generally increase with increasing age and, except for the 20-24 age group, are higher for men than for women (**Figure 15.1**).

15.3 TRENDS IN ADULT MORTALITY

Table 15.2 shows the probability of dying between exact ages 15 and 50 ($_{35}q_{15}$) in the 7 years before the 2018, 2013-14, 2007, and 2001-02 ZDHS surveys; $_{35}q_{15}$ is the probability that a woman or man who was age 15 in the 7 years before the survey will have died before reaching age 50 (if the age- and gender-specific mortality rates in the 7 years before the survey hold constant). The 2018 ZDHS data show that 167 of every 1,000 women and 234 of every 1,000 men age 15 would be expected to die before age 50.

Since 1996, the probability of dying by age 50 has declined by more than half among women, from 353 per 1,000 to 167 per 1,000. The probability among men has declined by about 43% (from 407 per 1,000 to 234 per 1,000).

15.4 DIRECT ESTIMATES OF MATERNAL MORTALITY

Maternal mortality rate

The number of maternal deaths per 1,000 women age 15-49. Maternal mortality rates by 5-year age groups are calculated by dividing the number of maternal deaths to female siblings of respondents in each age group by the total person-years of exposure of the sisters to the risk of dying in that age group during the 7 years preceding the survey. The number of deaths is the number of sisters reported as having died in the 7 years preceding the survey either during pregnancy or delivery, or in the 42 days following the delivery or termination of a pregnancy, by their age group at the time of death; deaths due to accident or violence are excluded. The person-years of exposure in each age group are calculated for both surviving and dead sisters based on their reported current age (living sisters) or age at death and years since death (dead sisters).

Sample: Sisters (both living and dead) age 15-49 in the 7 years preceding the survey, by 5 year age groups.

Maternal mortality ratio

The number of maternal deaths per 100,000 live births. The maternal mortality ratio is calculated by dividing the age-standardised maternal mortality rate for women age 15-49 in the 7 years preceding the survey by the general fertility rate (GFR) for the same time period.

Maternal deaths are a subset of all female deaths; they are defined as any deaths that occur during pregnancy or childbirth or within 42 days after the birth or termination of a pregnancy. Maternal deaths do not include deaths due to accidents or violence. Two methods are generally used to estimate maternal mortality in developing countries: the indirect sisterhood method (Graham et al. 1989) and a direct variant of the sisterhood method (Rutenberg and Sullivan 1991; Stanton et al. 1997). In the 2018 ZDHS, the direct method of estimating maternal mortality was used.

Table 15.3 presents age-specific direct estimates of maternal mortality from the reported survivorship of sisters for the 7-year period prior to the 2018 ZDHS. These rates were calculated by dividing the number of maternal deaths by woman-years of exposure. To remove the effect of truncation bias (the lower boundary for eligibility among women interviewed in the survey is 15 years, and the upper boundary is 49 years), the overall rate for women age 15-49 was standardised by the age distribution of survey respondents.

- The rate of mortality associated with pregnancy and childbearing in Zambia is 0.40 maternal deaths per 1,000 woman-years of exposure.
- The estimated age-specific mortality rate is highest among women age 45-49 (0.84) and lowest among women age 15-19 (0.04).

- Maternal deaths represent 10% of all deaths among women age 15-49 during the 7-year period preceding the survey.
- The maternal mortality ratio for the 7-year period before the 2018 ZDHS is estimated at 252 maternal deaths per 100,000 live births; that is, for every 1,000 births in Zambia, about three women die during pregnancy, childbirth, or within 42 days of the end of a pregnancy from causes other than an accident or violence (**Table 15.4**). The confidence interval surrounding the maternal mortality estimate is 158 to 347 deaths per 100,000 live births.
- At current fertility and mortality rates, 1% of women in Zambia will die from maternal causes while in the reproductive age range (age 15-49).

15.5 TRENDS IN PREGNANCY-RELATED MORTALITY

Pregnancy-related mortality rate

The number of pregnancy-related deaths per 1,000 women age 15-49. Pregnancy-related mortality rates by 5-year age groups are calculated by dividing the number of pregnancy-related deaths to female siblings of respondents in each age group by the total person-years of exposure of the sisters to the risk of dying in that age group during the 7 years preceding the survey. The number of deaths is the number of sisters reported as having died in the 7 years preceding the survey either during pregnancy or delivery, or in the 2 months following the delivery or termination of a pregnancy, by their age group at the time of death. The person-years of exposure in each age group are calculated for both surviving and dead sisters based on their reported current age (living sisters) or age at death and years since death (dead sisters).

Sample: Sisters (both living and dead) age 15-49 in the 7 years preceding the survey, by 5-year age groups.

Pregnancy-related mortality ratio

The number of pregnancy-related deaths per 100,000 live births. The pregnancy-related mortality ratio is calculated by dividing the age-standardised pregnancy-related mortality rate for women age 15-49 in the 7 years preceding the survey by the general fertility rate (GFR) for the same time period.

The previous ZDHS surveys used a definition of maternal mortality that included deaths due to accidents or violence; thus, the results of those surveys cannot be compared with the 2018 ZDHS maternal mortality estimate presented in section 15.4. To produce an indicator suitable for comparison with estimates from previous ZDHS surveys, the 2018 ZDHS defines a pregnancy-related death as the death of a woman during pregnancy or childbirth or within 2 months of delivery or termination of a pregnancy, irrespective of the cause of death. What the current ZDHS defines as a pregnancy-related death had been labelled a maternal death in prior ZDHS surveys. Estimates of pregnancy-related mortality are therefore based solely on the timing of the death in relationship to the pregnancy. Note that this definition varies from the WHO definition of a pregnancy-related death, which limits the window to 42 days.

	Maternal mortality (MMR)	**Pregnancy-related mortality (PRMR)**
Comparing MMR and PRMR	Women who died when pregnant, during delivery, or within 42 days of delivery or the termination of a pregnancy, except when death was due to accident or violence	Women who died when pregnant, during delivery, or within 2 months of delivery or the termination of a pregnancy, including deaths due to accident or violence

The estimated pregnancy-related mortality ratio (PRMR) for the 7-year period preceding the 2018 ZDHS is 278 deaths per 100,000 live births; that is, for every 1,000 births in Zambia, about three women die during pregnancy or within 2 months of the end of a pregnancy from any cause, including accidents or violence (**Figure 15.2**).

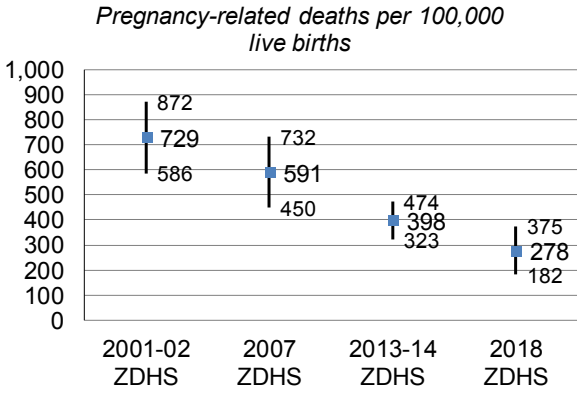
There has been an overall downward trend in the PRMR since 2001-02. However, the confidence intervals surrounding the 2018 ZDHS and 2013-14 ZDHS PRMR estimates overlap, meaning that the PRMR between the two surveys could have remained the same (**Table 15.5**).

LIST OF TABLES

For more information on adult and maternal mortality, see the following tables:

- **Table 15.1 Adult mortality rates**
- **Table 15.2 Adult mortality probabilities**
- **Table 15.3 Maternal mortality**
- **Table 15.4 Maternal mortality ratio**
- **Table 15.5 Pregnancy-related mortality trends**

***Figure 15.2* Trends in the pregnancy-related mortality ratio (PRMR) with confidence intervals**



Note: PRMR includes all deaths during pregnancy, delivery, and within 2 months of the end of a pregnancy; it includes deaths due to accident and violence during these time periods. This indicator is consistent with how data were collected in previous surveys but is different than the MMR estimate in Table 15.3.

Table 15.1 Adult mortality rates

Direct estimates of female, male, and total mortality rates for the 7 years preceding the survey, by 5-year age groups, Zambia DHS 2018

Age	Deaths	Exposure years	Mortality rates[1]
FEMALE			
15-19	38	29,965	1.25
20-24	106	32,845	3.22
25-29	102	30,732	3.31
30-34	165	26,776	6.16
35-39	99	19,782	5.02
40-44	104	12,418	8.36
45-49	67	7,354	9.13
Total 15-49	680	159,873	4.29[a]
MALE			
15-19	65	28,624	2.28
20-24	82	33,036	2.49
25-29	144	31,160	4.61
30-34	170	26,800	6.36
35-39	188	20,406	9.19
40-44	164	13,729	11.97
45-49	120	7,389	16.24
Total 15-49	934	161,144	5.92[a]
TOTAL			
15-19	103	58,590	1.75
20-24	188	65,881	2.86
25-29	245	61,893	3.97
30-34	335	53,576	6.26
35-39	287	40,189	7.14
40-44	268	26,146	10.26
45-49	187	14,743	12.70
Total 15-49	1,614	321,017	5.11[a]

[1] Expressed per 1,000 population
[a] Age-adjusted rate

Table 15.2 Adult mortality probabilities

The probability of dying between ages 15 and 50 for women and men during the 7 years preceding the survey, Zambia DHS 2018

Survey	Female ${}_{35}q_{15}$[1]	Male ${}_{35}q_{15}$[1]
2018 ZDHS	167	234
2013-14 ZDHS	294	330
2007 ZDHS	421	415
2001-02 ZDHS	446	471
1996 ZDHS	353	407

[1] The probability of dying between exact ages 15 and 50, expressed per 1,000 persons at age 15

Table 15.3 Maternal mortality

Direct estimates of maternal mortality rates for the 7 years preceding the survey, by 5-year age groups, Zambia DHS 2018

Age	Percentage of female deaths that are maternal	Maternal deaths[1]	Exposure years	Maternal mortality rate[2]
15-19	3.5	1	29,965	0.04
20-24	19.5	21	32,845	0.63
25-29	15.7	16	30,732	0.52
30-34	9.3	15	26,776	0.57
35-39	3.6	4	19,782	0.18
40-44	3.8	4	12,418	0.32
45-49	9.2	6	7,354	0.84
Total 15-49	9.8	67	159,873	0.40[a]

[1] A maternal death is defined as the death of a woman while pregnant or within 42 days of termination of pregnancy, from any cause except accidents or violence.
[2] Expressed per 1,000 woman-years of exposure
[a] Age-adjusted rate

Table 15.4 Maternal mortality ratio

Total fertility rate, general fertility rate, maternal mortality ratio, and lifetime risk of maternal death for the 7 years preceding the survey, Zambia DHS 2018

Total fertility rate (TFR)	5.0	
General fertility rate (GFR)[1]	160	
Maternal mortality ratio (MMR)[2]	252	CI: (158-347)
Lifetime risk of maternal death[3]	0.012	

CI: Confidence interval
[1] Age-adjusted rate, expressed per 1,000 women age 15-49
[2] Expressed per 100,000 live births; calculated as the age-adjusted maternal mortality rate (shown in Table 15.3) times 100 divided by the age-adjusted general fertility rate
[3] Calculated as $1-(1-MMR)^{TFR}$, where TFR represents the total fertility rate for the 7 years preceding the survey

Table 15.5 Pregnancy-related mortality trends

Direct estimates of pregnancy-related mortality rates for the 7 years preceding each survey, by 5-year age groups, Zambia DHS 2018

	Pregnancy-related mortality rates[1,2]		
Age	2011-2018	2006/7-2013/14	2000-2007
15-19	0.04	0.10	0.28
20-24	0.64	0.53	0.73
25-29	0.57	0.41	1.33
30-34	0.63	1.52	2.26
35-39	0.27	1.31	2.13
40-44	0.32	0.92	1.20
45-49	1.02	1.18	1.00
Total 15-49[a]	0.45	0.74	1.17
Total fertility rate (TFR)	5.0	5.3	6.2
General fertility rate (GFR)[3]	160	184	214
Pregnancy-related mortality ratio (PRMR)[4]	278	398	591
Confidence interval	(182-375)	(323-474)	(450-732)
Lifetime risk of pregnancy-related death[5]	0.014	0.023	0.035

[1] Pregnancy-related mortality is defined as the death of a woman while pregnant or within 2 months of termination of pregnancy from any cause, including accidents or violence.
[2] Expressed per 1,000 woman-years of exposure
[3] Age-adjusted rate, expressed per 1,000 women age 15-49
[4] Expressed per 100,000 live births; calculated as the age-adjusted pregnancy-related mortality rate times 100 divided by the age-adjusted general fertility rate
[5] Calculated as $1-(1-PRMR)^{TFR}$, where TFR represents the total fertility rate for the 7 years preceding the survey
[a] Age-adjusted rate

WOMEN'S EMPOWERMENT 16

Key Findings

- ***Decision on how wife's cash earnings are used:*** Thirty-one percent of married women mainly decide on their own how to use their cash earnings.
- ***Ownership of house and land:*** Among both women and men, ownership of a house or land is higher in rural areas than in urban areas.
- ***Women's participation in decision making:*** Fifty-seven percent of currently married women make decisions either alone or jointly with their husband about their own health care, daily household purchases, major household purchases, and visits to their family and relatives.
- ***Attitude towards wife beating:*** Forty-six percent of women agree with at least one specified reason justifying wife beating, as compared with 26% of men age 15-49.
- ***Negotiating sexual relations:*** Men (66%) are more likely than women (56%) to believe that a woman is justified in refusing sex when she knows that her husband has sex with other women.

This chapter explores women's empowerment in terms of employment, earnings, control over earnings, and magnitude of earnings relative to those of their partners. In addition, responses to specific questions are used to define two different indicators of women's empowerment: women's participation in household decision making and women's attitudes towards wife beating.

The Government of the Republic of Zambia is committed to promoting women's empowerment and has taken steps to do so through the Gender Equity and Equality Rights Act, 2015. This act is aimed at domesticating international human rights documents such as the Convention on the Elimination of All Forms of Discrimination Against Women; the Southern African Development Community Protocols on Gender and Development, 2008; and the Protocol to the African Charter on Human and People's Rights on the Rights of Women in Africa, 2003. Furthermore, the act gives effect to the Convention on the Elimination of All Forms of Discrimination against Women and is intended to implement women's empowerment targets that meet international standards with respect to political, social, economic, and cultural issues (MGCD 2015).

16.1 MARRIED WOMEN'S AND MEN'S EMPLOYMENT

Employment

Respondents are considered to be employed if they have done any work other than their housework in the 12 months before the survey.

Sample: Currently married women and men age 15-49

Earning cash for employment

Respondents are asked if they are paid for their labour in cash or in-kind. Only those who receive payment in cash only or in cash and in-kind are considered to earn cash for their employment.

Sample: Currently married women and men age 15-49 employed in the 12 months before the survey

Fifty-nine percent of currently married women age 15-49 were employed in the 12 months before the survey, as compared with 97% of currently married men in the same age group (**Table 16.1**). Women are less likely than men to be paid for their work in cash only (62% and 68%, respectively). Furthermore, 17% of women who were employed in the 12 months prior to the survey were not paid for the work, compared with 11% of men.

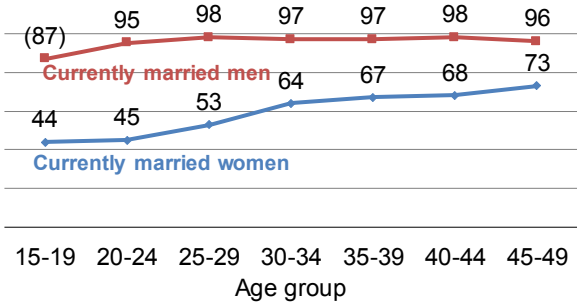
Trends: The percentage of currently married women who were employed in the 12 months prior to the survey increased from 51% in 1996 to 61% in 2007. However, it then declined to 59% in 2013-14 and remained the same in 2018. The percentage among currently married men increased from 95% in 1996 to 97% in 2018.

Patterns by background characteristics

- Among currently married women, employment rises with increasing age, from 44% among those age 15-19 to 73% among those age 45-49. However, no such clear pattern is observed among married men (**Figure 16.1**).
- The percentage of married women and men who are not paid for their employment is highest among those age 20-24 (24% and 15%, respectively).

Figure 16.1 **Employment by age**

Percentage of currently married women and men who were employed at any time in the 12 months before the survey



Note: Figures in parentheses are based on 25-49 unweighted cases.

16.2 CONTROL OVER WOMEN'S EARNINGS

Control over one's own cash earnings

Respondents are considered to have control over their own earnings if they participate in decisions alone or jointly with their spouse about how their own earnings will be used.

Sample: Currently married women and men age 15-49 who received cash earnings for employment during the 12 months before the survey

Women gain direct access to economic resources when they are employed for cash. However, this access is meaningless unless women also control how their earnings are used. This section analyses the percent distribution of currently married women who were employed and received cash earnings in the past 12 months according to the person who controls their earnings and the extent of their earnings in comparison to their husbands. Overall, 31% of women reported that they mainly decide how to use their earnings, 51%

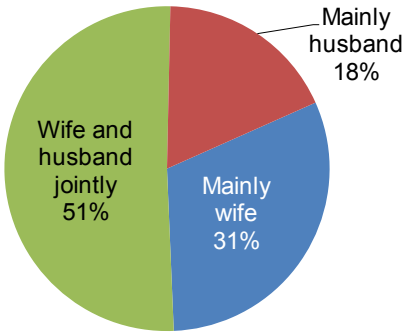
reported that they make decisions jointly with their husband, and 18% indicated that their husband mainly decides on how to use their earnings.

Ten percent of women reported that they earn more than their husbands, while 69% earn less than their husbands and 16% earn about the same. Four percent of women reported that their husband had no earnings (**Table 16.2.1** and **Figure 16.2**).

Trends: The percentage of married women who mainly decide on their own how their cash earnings are used has steadily declined over time, from 41% in 2001-02 to 31% in 2018. However, during the same period, the percentage of women who made joint decisions with their husband increased from 31% to 51%.

***Figure 16.2* Control over women's earnings**

Percent distribution of currently married women with cash earnings in the 12 months before the survey



Patterns by background characteristics

- The percentage of women who earn more than their husband increases with increasing age (**Table 16.2.1**).
- Women in rural areas (23%) are more likely than their urban counterparts (9%) to earn about the same as their husband.
- Women with a higher education are more likely to make joint decisions with their husband on how their cash earnings are spent (73%) than women at lower educational levels (47% to 49%).
- The percentage of women indicating that their husband mainly makes decisions on their earnings decreases with increasing education, from 30% among those with no education to 7% among those with a higher education.

16.3 Control over Men's Earnings

Married men with cash earnings and married women whose husbands have cash earnings were asked who makes decisions about how the man's earnings are used. Over half of both men and women report that decisions about the use of the man's earnings are made jointly (56% and 57%, respectively).

Approximately one-third of men (35%) and women (33%) say that the husband decides on how his earnings are used. Relatively few men or women report that the wife decides on how the husband's cash earnings will be used (9% and 10%, respectively) (**Table 16.2.2**).

Patterns by background characteristics

- More than half of married men in both urban (58%) and rural (54%) areas indicated that they make joint decisions on the use of their earnings, and at least one-third of urban (33%) and rural (37%) men mainly make their own decisions.
- Men with a higher education (78%) and those in the highest wealth quintile (69%) are most likely to make joint decisions with their wife on how their earnings are used.

Trends: The percentage of currently married men age 15-49 who report joint control of their earnings has declined over time, from 66% in 2007 to 56% in 2018. During the same period, the percentage of women reporting joint control of their husband's earnings has increased from 45% to 57%.

16.4 Women's and Men's Ownership of Assets

Ownership of a house or land

Respondents who own a house or land, whether alone or jointly with someone else

Sample: Women and men age 15-49

Ownership and control of assets such as land and housing provide multiple benefits to individuals and households, including a secure place to live, livelihoods, and collateral. The 2018 ZDHS collected information on women's and men's ownership of assets, regardless of whether the assets were self-owned or jointly owned. Overall, women are more likely to share ownership of a house (22%) than men (14%). Conversely, men (17%) are more likely than women (8%) to own a house alone . Similarly, a higher percentage of women than men reported sharing ownership of land (18% versus 12%), while a higher percentage of men than women own land alone (15% versus 6%) (**Tables 16.4.1** and **16.4.2**).

Patterns by background characteristics

- More men and women in rural areas own a house or land than their urban counterparts.
- By province, the percentage of women who do not own a house ranges from 39% in Eastern to 85% in Copperbelt. The pattern is similar among men, ranging from 44% in Eastern to 82% in Copperbelt and Lusaka.
- The percentage of women who do not own land ranges from 45% in Eastern to 92% in Copperbelt. Among men, the percentage ranges from 44% in Northern to 89% in Copperbelt.
- Generally, house and land ownership among men decreases with increasing education and household wealth.

16.4.1 Documentation of Ownership of Assets

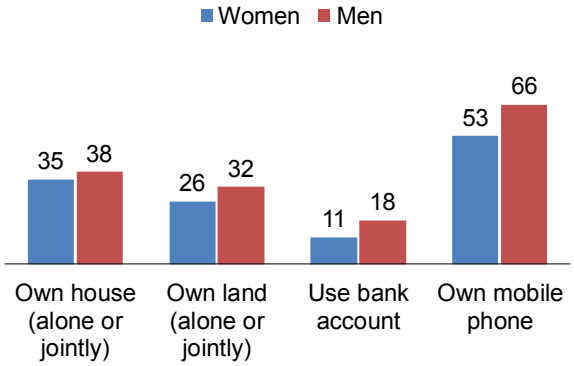
Documentation of ownership of assets is important for security of tenure and to leverage or liquidate assets. Eight in 10 women (81%) and 9 in 10 men (91%) age 15-49 who own a house do not possess a title or deed for the house. Similarly, 9 in 10 women (89%) and men (94%) who own land do not have a title or deed for their land (**Tables 16.5.1**, **16.5.2**, **16.6.1**, and **16.6.2**).

16.4.2 Bank Accounts and Mobile Phones

Ownership of a bank account and a mobile phone are reflections of autonomy and financial independence. Women and men interviewed in the 2018 ZDHS were asked if they have an account in a bank or other financial institution that they use and if they own a mobile phone. Those who own phones were also asked if they use the phone for financial transactions. Eleven percent of women age 15-49 have and use a bank account for financial transactions, as compared with 18% of men. More than half of women (53%) and men (66%) owned mobile phones at the time of the survey (**Tables 16.7.1** and **16.7.2**). Among those who owned mobile phones, 53% of both women and men reporting using their phones for financial transactions (**Figure 16.3**).

Figure 16.3 **Ownership of assets**

Percentage of women and men age 15-49 by ownership of specific items



16.5 WOMEN'S PARTICIPATION IN DECISION MAKING

Participation in major household decisions

Women are considered to participate in household decisions if they make decisions alone or jointly with their husband in all four of the following areas: (1) the woman's own health care, (2) daily household purchases, (3) major household purchases, and (4) visits to the woman's family or relatives.

Sample: Currently married women age 15-49

In many African countries, including Zambia, women are considered to have low decision-making power in their households. The overall development of women's empowerment depends on women's ability to make decisions that affect their personal welfare. The 2018 ZDHS collected information from currently married women on their participation in decisions about their own health care, daily household purchases, major household purchases, and visits to their family and relatives.

Overall, 57% of currently married women age 15-49 make decisions either alone or jointly with their husband in all four specified areas. Women were most likely to report making decisions on daily household purchases (86%) and decisions concerning their own health care (81%). Seventy-seven percent of women indicated that they participated in making decisions about visiting their family or relatives, while 68% made decisions on major household purchases (**Table 16.9.1**). Among currently married men age 15-49, 82% made decisions regarding their own health care and 87% made decisions concerning major household purchases (**Table 16.9.2**). These findings show that while men and women have similar decision-making power in certain respects, women lag behind in terms of having control over making major household purchases.

Patterns by background characteristics

- Sixty-one percent of women who are employed for cash make decisions in all four areas, as compared with 56% of those who are not employed and 42% of those who are employed but do not earn cash.
- Women in urban areas (68%) are more likely than those in rural areas (49%) to make decisions in all four areas.
- The percentage of women who make decisions in all four areas is higher in North Western (85%) and Lusaka (77%) than in other provinces.
- The higher their educational level, the more women tend to make decisions in all four areas. Similarly, women in the highest wealth quintile are most likely to make decisions in all four areas.

16.6 ATTITUDES TOWARD WIFE BEATING

Attitudes toward wife beating

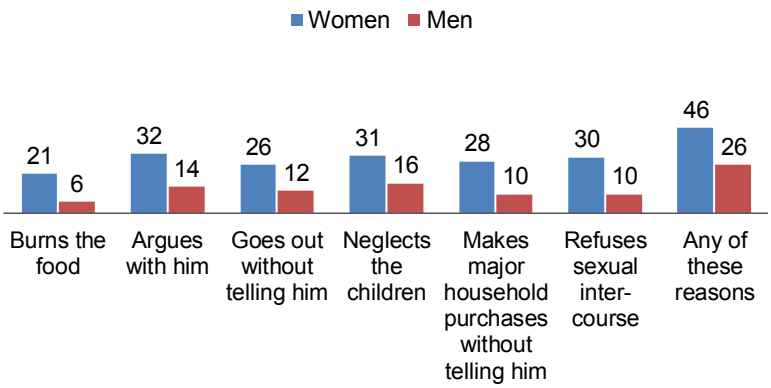
Respondents are asked if they agree that a husband is justified in hitting or beating his wife under each of the following five circumstances: she burns the food, she argues with him, she goes out without telling him, she neglects the children, and she refuses to have sex with him. If respondents answer "yes" in at least one circumstance, they are considered to have attitudes justifying wife beating.

Sample: Women and men age 15-49

A greater percentage of women (46%) than men (26%) age 15-49 agree that a husband is justified in hitting or beating his wife for at least one of the specified reasons (**Table 16.10.1**, **Table 16.10.2**, and **Figure 16.4**). Approximately one in three women agree that a husband is justified in hitting or beating his wife if she argues with him (32%), neglects the children (31%), or refuses to have sexual intercourse with him (30%). Twenty-eight percent of women believe that wife beating is justified if a wife makes major household purchases without telling her husband, 26% agree that wife beating is justified if she goes out without telling her husband, and 21% believe that wife beating is justified if she burns the food (**Table 16.10.1**).

***Figure 16.4* Attitudes towards wife beating**

Percentage of women and men age 15-49 who agree that a husband is justified in beating his wife for specific reasons



Trends: The percentage of women who agree that a husband is justified in hitting or beating his wife for at least one specific reason has declined over time, from 85% in 2002 to 46% in 2018. There has also been a decline in the percentage of women agreeing with each of the specified reasons.

Patterns by background characteristics

- Sixty percent of women who are employed but do not earn cash agree that a husband is justified in beating his wife for at least one specified reason.
- Fifty percent of women who are married or living together with a man agree that a husband is justified in hitting or beating his wife for at least one specified reason, as compared with 44% of divorced, separated, or widowed women and 40% of never-married women.
- Women in rural areas (54%) are more likely than those in urban areas (37%) to agree that a husband is justified in hitting or beating his wife for at least one specified reason.
- Women in Northern (72%), Luapula (70%), and Muchinga (64%) are most likely to agree that a husband is justified in hitting or beating his wife for at least one specified reason.
- The percentage of women who agree that a husband is justified in hitting or beating his wife for any specified reason generally declines with increasing education and household wealth.

16.7 Negotiating Sexual Relations

To assess attitudes toward negotiating safer sexual relations, women and men were asked whether they thought that a wife is justified in refusing to have sexual intercourse with her husband if she knows he has sex with other women or asking that he use a condom if she knows he has a sexually transmitted infection (STI). Women were also asked whether they thought it was justified for a wife to refuse sexual intercourse with her husband if she knows he has an STI. More men (66%) age 15-49 than women (56%) believe that a woman is justified in refusing to have sexual intercourse with her husband if she knows he has sex with other women. Similarly, 81% of men believe that a woman is justified in asking her husband to use a condom when she knows that he has an STI, as compared with 73% of women (**Table 16.11**).

Patterns by background characteristics

- Women (59%) and men (72%) in urban areas are more likely to believe that a woman is justified in refusing sexual intercourse with her husband when she knows that he has sex with other women than women (52%) and men (61%) in rural areas.

- Similarly, a greater percentage of men and women in urban areas (82% and 75%, respectively) than rural areas (80% and 71%, respectively) believe that a woman is justified in asking her husband to use a condom when she knows he has an STI.

Ability to Negotiate Sexual Relations with Husband

To assess the ability of women to actually negotiate safer sexual relations with their husbands, women were asked whether they can say no to their husband if they do not want to have sexual intercourse. Women were also asked whether they can ask their husband to use a condom.

Sixty-five percent of currently married women age 15-49 indicated that they can say no to their husbands if they do not want to have sexual intercourse, and 72% said that they can ask their husbands to use a condom (**Table 16.12**).

For information on women's empowerment indicators, see **Table 16.13**. For information on family planning, reproductive health care, and child mortality by women's empowerment indicators, see **Tables 16.14**, **16.15**, **16.16**, and **16.17**.

16.8 Widows Dispossessed of Property

Among ever-widowed women age 15-49, nearly half (47%) were dispossessed of their husband's property (that is, after their late husband's death, none of his assets went to them). For information on widows dispossessed of property, see **Table 16.18**.

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For more information on women's empowerment, see the following tables:

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- **Table 16.2.1 Control over women's cash earnings and relative magnitude of women's cash earnings**
- **Table 16.2.2 Control over men's cash earnings**
- **Table 16.3 Women's control over their own earnings and over those of their husbands**
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- **Table 16.18 Widows dispossessed of property**

Table 16.1 Employment and cash earnings of currently married women and men

Percentage of currently married women and men age 15-49 who were employed at any time in the past 12 months and percent distribution of currently married women and men employed in the past 12 months by type of earnings, according to age, Zambia DHS 2018

	Among currently married respondents:		Percent distribution of currently married respondents employed in the past 12 months, by type of earnings						
Age	Percentage employed in past 12 months	Number of respondents	Cash only	Cash and in-kind	In-kind only	Not paid	Missing/ don't know	Total	Number of respondents
				WOMEN					
15-19	43.5	437	46.3	26.9	3.8	22.9	0.0	100.0	190
20-24	45.2	1,438	52.8	20.8	2.4	24.0	0.0	100.0	650
25-29	53.0	1,544	63.5	19.2	1.7	15.7	0.0	100.0	818
30-34	63.9	1,396	66.4	17.7	0.7	15.2	0.0	100.0	893
35-39	67.0	1,307	68.5	15.6	1.0	15.0	0.0	100.0	876
40-44	67.8	908	62.2	22.2	1.1	14.5	0.0	100.0	615
45-49	73.2	618	56.4	21.2	2.6	19.8	0.0	100.0	452
Total 15-49	58.8	7,648	61.9	19.4	1.5	17.2	0.0	100.0	4,495
				MEN					
15-19	(87.3)	31	(40.8)	(45.6)	(0.0)	(13.6)	(0.0)	(100.0)	27
20-24	94.7	459	57.3	25.9	2.1	14.7	0.0	100.0	435
25-29	98.2	1,090	70.9	18.2	2.0	8.9	0.0	100.0	1,071
30-34	96.8	1,138	68.0	19.7	0.9	11.5	0.0	100.0	1,102
35-39	97.0	1,104	70.4	17.1	0.9	11.6	0.0	100.0	1,071
40-44	97.9	968	67.8	19.1	1.1	12.0	0.0	100.0	948
45-49	96.4	781	65.2	22.3	1.2	11.3	0.0	100.0	753
Total 15-49	97.0	5,572	67.6	19.8	1.3	11.3	0.0	100.0	5,406
50-59	91.8	856	56.4	23.9	1.9	17.7	0.0	100.0	787
Total 15-59	96.3	6,428	66.2	20.3	1.4	12.1	0.0	100.0	6,193

Note: Figures in parentheses are based on 25-49 unweighted cases.

Table 16.2.1 Control over women's cash earnings and relative magnitude of women's cash earnings

Percent distribution of currently married women age 15-49 who received cash earnings for employment in the 12 months preceding the survey by person who decides how the wife's cash earnings are used and by whether she earned more or less than her husband, according to background characteristics, Zambia DHS 2018

Background characteristic	Person who decides how the wife's cash earnings are used:					Wife's cash earnings compared with husband's cash earnings:						
	Mainly wife	Wife and husband jointly	Mainly husband	Other	Total	More	Less	About the same	Husband has no earnings	Don't know	Total	Number of women
Age												
15-19	22.3	37.7	38.8	1.2	100.0	4.1	61.5	28.5	4.8	1.0	100.0	139
20-24	25.2	50.2	24.5	0.1	100.0	6.7	73.3	13.8	4.2	2.0	100.0	479
25-29	31.6	52.3	15.8	0.2	100.0	7.2	74.2	14.7	3.0	0.9	100.0	676
30-34	32.2	51.4	16.0	0.3	100.0	10.3	71.3	15.2	2.2	0.9	100.0	751
35-39	32.1	52.1	15.7	0.0	100.0	10.0	68.7	15.9	3.7	1.7	100.0	736
40-44	33.1	47.3	19.5	0.0	100.0	12.0	62.7	18.0	4.1	3.2	100.0	519
45-49	32.7	51.8	15.5	0.0	100.0	13.7	59.5	19.5	5.4	1.8	100.0	351
Number of living children												
0	27.2	55.6	16.0	1.1	100.0	11.9	62.6	18.9	6.6	0.0	100.0	116
1-2	31.6	50.6	17.7	0.1	100.0	9.0	71.2	15.2	3.0	1.6	100.0	1,167
3-4	31.9	51.0	16.8	0.2	100.0	10.0	69.8	14.8	3.5	2.0	100.0	1,165
5+	29.8	49.4	20.7	0.0	100.0	9.4	66.3	18.9	4.0	1.4	100.0	1,204
Residence												
Urban	41.2	47.8	10.8	0.2	100.0	12.3	74.4	8.8	2.7	1.9	100.0	1,711
Rural	21.9	52.9	25.0	0.2	100.0	7.1	63.9	23.1	4.4	1.4	100.0	1,941
Province												
Central	30.2	60.5	9.3	0.0	100.0	8.5	67.5	21.1	1.7	1.2	100.0	330
Copperbelt	46.8	44.7	8.4	0.1	100.0	12.3	72.2	8.4	4.7	2.4	100.0	530
Eastern	24.6	44.0	30.9	0.4	100.0	7.1	68.3	20.0	2.2	2.5	100.0	473
Luapula	15.3	55.8	28.5	0.4	100.0	3.7	68.0	23.4	4.7	0.2	100.0	302
Lusaka	39.5	50.6	9.7	0.2	100.0	12.5	72.0	11.1	2.6	1.8	100.0	780
Muchinga	20.5	49.8	29.7	0.0	100.0	9.7	51.6	35.0	2.6	1.1	100.0	201
Northern	22.1	66.6	11.1	0.2	100.0	7.0	61.7	25.0	4.6	1.7	100.0	300
North Western	22.7	62.7	14.6	0.0	100.0	15.9	57.4	19.7	4.9	2.1	100.0	116
Southern	30.6	41.0	28.5	0.0	100.0	9.7	76.2	12.7	0.2	1.1	100.0	467
Western	23.2	47.7	29.1	0.0	100.0	5.6	69.9	3.5	20.1	0.9	100.0	154
Education												
No education	22.6	47.2	29.7	0.4	100.0	7.0	67.5	19.0	5.2	1.3	100.0	273
Primary	29.9	48.4	21.6	0.1	100.0	8.9	65.3	20.6	3.5	1.7	100.0	1,792
Secondary	37.0	48.6	14.3	0.2	100.0	8.8	76.5	9.5	3.8	1.5	100.0	1,275
Higher	19.8	73.4	6.8	0.0	100.0	18.5	59.2	18.1	2.2	1.9	100.0	312
Wealth quintile												
Lowest	21.5	49.0	29.0	0.5	100.0	6.5	61.1	24.1	6.2	2.1	100.0	573
Second	22.2	50.7	27.1	0.0	100.0	5.7	62.6	25.1	4.8	1.9	100.0	633
Middle	28.1	52.3	19.6	0.0	100.0	8.5	69.6	19.5	2.0	0.5	100.0	692
Fourth	40.8	46.1	12.8	0.3	100.0	10.3	74.5	9.3	3.7	2.1	100.0	799
Highest	36.3	53.7	10.0	0.0	100.0	14.1	72.3	9.7	2.3	1.6	100.0	954
Total	31.0	50.5	18.4	0.2	100.0	9.5	68.8	16.4	3.6	1.6	100.0	3,652

Table 16.2.2 Control over men's cash earnings

Percent distributions of currently married men age 15-49 who receive cash earnings and of currently married women age 15-49 whose husbands receive cash earnings, by person who decides how the husband's cash earnings are used, according to background characteristics, Zambia DHS 2018

	Men							Women					
Background characteristic	Mainly wife	Husband and wife jointly	Mainly husband	Other	Missing	Total	Number	Mainly wife	Husband and wife jointly	Mainly husband	Other	Total	Number
Age													
15-19	(8.3)	(69.3)	(22.4)	(0.0)	(0.0)	100.0	23	10.1	47.2	41.5	1.2	100.0	417
20-24	8.8	46.7	44.5	0.0	0.0	100.0	362	9.0	55.0	35.8	0.2	100.0	1,383
25-29	10.1	50.6	39.3	0.0	0.0	100.0	954	9.3	59.9	30.8	0.0	100.0	1,509
30-34	8.8	57.2	34.0	0.0	0.0	100.0	966	9.0	60.1	30.6	0.3	100.0	1,363
35-39	9.2	60.0	30.8	0.0	0.0	100.0	938	10.0	58.0	31.6	0.3	100.0	1,259
40-44	6.3	58.9	34.8	0.0	0.0	100.0	824	10.8	53.6	35.4	0.1	100.0	874
45-49	8.9	57.0	33.9	0.2	0.0	100.0	659	12.5	56.7	30.7	0.0	100.0	584
Number of living children													
0	5.6	56.4	38.0	0.0	0.0	100.0	202	11.5	57.7	29.5	1.3	100.0	314
1-2	9.3	53.9	36.8	0.0	0.0	100.0	1,678	10.1	59.1	30.5	0.3	100.0	2,610
3-4	9.3	58.3	32.3	0.1	0.0	100.0	1,335	9.9	57.6	32.4	0.2	100.0	2,215
5+	8.0	56.1	35.9	0.0	0.0	100.0	1,510	9.0	53.8	37.1	0.1	100.0	2,251
Residence													
Urban	9.1	58.1	32.7	0.1	0.0	100.0	2,110	13.2	62.3	24.3	0.2	100.0	3,004
Rural	8.4	54.2	37.4	0.0	0.0	100.0	2,615	7.4	53.3	39.0	0.3	100.0	4,386
Province													
Central	7.4	67.4	25.2	0.0	0.0	100.0	442	11.8	68.1	19.9	0.2	100.0	646
Copperbelt	16.4	58.7	24.9	0.0	0.0	100.0	689	13.7	62.6	23.4	0.3	100.0	1,006
Eastern	12.3	52.0	35.7	0.0	0.0	100.0	692	7.9	40.4	50.7	0.9	100.0	1,043
Luapula	7.2	61.2	31.6	0.0	0.0	100.0	424	3.8	53.3	42.9	0.0	100.0	594
Lusaka	6.7	61.4	31.8	0.2	0.0	100.0	1,004	12.7	68.9	18.1	0.3	100.0	1,331
Muchinga	3.5	43.3	53.1	0.0	0.0	100.0	213	6.4	43.5	50.0	0.2	100.0	457
Northern	3.0	37.5	59.5	0.0	0.0	100.0	388	5.7	65.2	29.1	0.0	100.0	628
North Western	11.3	68.1	20.6	0.0	0.0	100.0	180	10.4	73.9	15.7	0.0	100.0	353
Southern	6.7	40.7	52.6	0.0	0.0	100.0	520	9.7	46.7	43.6	0.0	100.0	991
Western	5.1	77.2	17.7	0.0	0.0	100.0	173	10.8	44.9	44.3	0.0	100.0	342
Education													
No education	13.8	47.1	39.1	0.0	0.0	100.0	197	6.1	45.4	47.9	0.7	100.0	712
Primary	8.7	51.3	40.0	0.0	0.0	100.0	1,798	9.7	52.5	37.5	0.3	100.0	3,743
Secondary	9.1	55.3	35.5	0.1	0.0	100.0	2,203	11.0	63.6	25.4	0.1	100.0	2,554
Higher	5.2	77.8	17.0	0.0	0.0	100.0	527	9.2	78.1	12.7	0.0	100.0	382
Wealth quintile													
Lowest	8.7	50.2	41.1	0.0	0.0	100.0	867	8.0	47.2	44.3	0.4	100.0	1,472
Second	8.6	52.5	38.9	0.0	0.0	100.0	808	7.3	51.4	41.2	0.1	100.0	1,451
Middle	8.7	53.8	37.4	0.0	0.0	100.0	924	9.8	55.5	34.6	0.2	100.0	1,432
Fourth	10.2	53.0	36.8	0.0	0.0	100.0	1,134	10.9	60.4	28.1	0.5	100.0	1,572
Highest	7.1	69.1	23.7	0.1	0.0	100.0	993	12.7	70.1	17.2	0.0	100.0	1,463
Total 15-49	8.7	55.9	35.3	0.0	0.0	100.0	4,725	9.8	57.0	33.0	0.2	100.0	7,390
50-59	5.9	65.6	28.5	0.0	0.0	100.0	632	na	na	na	na	na	na
Total 15-59	8.4	57.1	34.5	0.0	0.0	100.0	5,357	na	na	na	na	na	na

Note: Figures in parentheses are based on 25-49 unweighted cases.
na = Not applicable

Table 16.3 Women's control over their own earnings and over those of their husbands

Percent distribution of currently married women age 15-49 with cash earnings in the last 12 months by person who decides how the wife's cash earnings are used and percent distribution of currently married women age 15-49 whose husbands have cash earnings by person who decides how the husband's cash earnings are used, according to the relation between wife's and husband's cash earnings, Zambia DHS 2018

	Person who decides how the wife's cash earnings are used:						Person who decides how the husband's cash earnings are used:					
Woman's earnings relative to husband's earnings	Mainly wife	Wife and husband jointly	Mainly husband	Other	Total	Number of women	Mainly wife	Wife and husband jointly	Mainly husband	Other	Total	Number of women
More than husband	40.7	50.7	8.6	0.0	100.0	349	24.0	56.5	19.5	0.0	100.0	349
Less than husband	34.6	45.2	20.0	0.2	100.0	2,514	10.8	57.1	31.9	0.2	100.0	2,514
Same as husband	7.2	71.7	21.2	0.0	100.0	599	4.2	72.8	23.0	0.0	100.0	599
Husband has no cash earnings or did not work	30.7	63.6	4.8	1.0	100.0	132	na	na	na	na	na	0
Woman worked but has no cash earnings	na	na	na	na	na	0	8.3	46.5	45.2	0.0	100.0	793
Woman did not work	na	na	na	na	na	0	8.4	57.1	34.2	0.3	100.0	3,077
Total[1]	31.0	50.5	18.4	0.2	100.0	3,652	9.8	57.0	33.0	0.2	100.0	7,390

na = Not applicable
[1] Includes cases where a woman does not know whether she earned more or less than her husband

Table 16.4.1 Ownership of assets: Women

Percent distribution of women age 15-49 by ownership of housing and land, according to background characteristics, Zambia DHS 2018

	Percentage who own a house:					Percentage who own land:					
Background characteristic	Alone	Jointly	Alone and jointly	Percentage who do not own a house	Total	Alone	Jointly	Alone and jointly	Percentage who do not own land	Total	Number
Age											
15-19	1.2	5.3	1.1	92.4	100.0	0.7	4.4	0.4	94.5	100.0	3,000
20-24	3.7	17.7	2.8	75.8	100.0	1.9	15.3	1.9	80.9	100.0	2,733
25-29	5.6	24.3	6.4	63.8	100.0	4.2	20.7	3.4	71.6	100.0	2,237
30-34	9.0	27.2	5.3	58.5	100.0	7.2	22.1	2.5	68.3	100.0	1,862
35-39	12.9	33.8	6.6	46.7	100.0	8.9	25.6	3.6	61.9	100.0	1,697
40-44	19.8	32.9	8.7	38.6	100.0	14.5	26.8	3.9	54.8	100.0	1,253
45-49	24.7	34.8	7.7	32.9	100.0	17.0	30.7	3.4	49.0	100.0	900
Residence											
Urban	4.8	9.5	4.6	81.1	100.0	1.8	5.0	1.5	91.7	100.0	6,374
Rural	11.1	32.6	4.7	51.5	100.0	9.2	29.5	3.2	58.2	100.0	7,309
Province											
Central	9.2	23.8	4.3	62.6	100.0	5.5	20.8	1.2	72.5	100.0	1,165
Copperbelt	4.2	6.9	3.6	85.3	100.0	2.5	4.0	1.8	91.6	100.0	2,201
Eastern	12.0	42.3	6.4	39.3	100.0	11.3	37.9	5.6	45.2	100.0	1,605
Luapula	9.2	36.4	1.2	53.2	100.0	6.3	25.1	0.4	68.2	100.0	1,071
Lusaka	5.0	8.5	7.2	79.2	100.0	2.0	5.1	2.1	90.8	100.0	2,733
Muchinga	10.6	29.9	3.7	55.8	100.0	9.4	28.0	1.5	61.1	100.0	754
Northern	8.2	32.8	9.0	50.0	100.0	6.5	31.1	7.8	54.6	100.0	1,054
North Western	11.1	27.9	1.2	59.8	100.0	11.7	27.8	0.3	60.2	100.0	718
Southern	6.1	21.3	3.1	69.5	100.0	3.9	15.7	0.9	79.5	100.0	1,574
Western	18.4	19.3	1.9	60.4	100.0	9.9	17.1	1.2	71.9	100.0	808
Education											
No education	14.7	38.2	6.1	41.0	100.0	11.0	31.6	3.5	53.9	100.0	1,054
Primary	10.8	28.5	5.3	55.4	100.0	8.1	25.1	3.2	63.7	100.0	6,059
Secondary	4.5	13.0	3.6	78.9	100.0	2.5	9.4	1.4	86.8	100.0	5,816
Higher	6.5	14.4	6.0	73.1	100.0	5.3	9.9	2.2	82.6	100.0	755
Wealth quintile											
Lowest	17.6	34.8	5.4	42.2	100.0	13.2	32.1	3.8	50.9	100.0	2,442
Second	10.6	33.9	4.2	51.3	100.0	9.6	30.9	2.8	56.7	100.0	2,387
Middle	6.4	27.4	4.9	61.3	100.0	4.3	22.6	3.0	70.1	100.0	2,477
Fourth	4.2	10.2	3.8	81.8	100.0	1.8	7.0	1.2	89.9	100.0	3,011
Highest	4.3	10.5	5.1	80.1	100.0	2.1	5.3	1.7	90.9	100.0	3,367
Total	8.2	21.9	4.7	65.3	100.0	5.8	18.1	2.4	73.8	100.0	13,683

Table 16.4.2 Ownership of assets: Men

Percent distribution of men age 15-49 by ownership of housing and land, according to background characteristics, Zambia DHS 2018

Background characteristic	Percentage who own a house:					Percentage who own land:					
	Alone	Jointly	Alone and jointly	Percentage who do not own a house	Total	Alone	Jointly	Alone and jointly	Percentage who do not own land	Total	Number
Age											
15-19	3.4	1.3	0.2	95.1	100.0	2.1	1.3	0.1	96.4	100.0	2,781
20-24	12.7	7.2	3.6	76.4	100.0	10.4	5.6	3.1	80.9	100.0	2,032
25-29	17.2	15.3	6.8	60.6	100.0	14.7	14.4	5.9	64.9	100.0	1,721
30-34	21.8	22.1	10.2	45.9	100.0	20.9	19.2	9.1	50.9	100.0	1,383
35-39	27.6	22.7	9.8	39.9	100.0	22.7	17.5	8.5	51.2	100.0	1,280
40-44	30.8	26.5	12.3	30.4	100.0	28.1	21.3	10.3	40.4	100.0	1,097
45-49	33.0	23.5	15.9	27.5	100.0	26.2	21.5	12.4	40.0	100.0	883
Residence											
Urban	11.0	4.9	1.7	82.4	100.0	6.6	3.9	1.1	88.4	100.0	5,013
Rural	22.4	21.0	10.6	46.0	100.0	21.3	18.1	9.3	51.3	100.0	6,165
Province											
Central	8.2	17.9	10.1	63.7	100.0	8.1	16.3	9.1	66.5	100.0	979
Copperbelt	10.3	6.4	1.5	81.9	100.0	6.8	3.8	0.8	88.6	100.0	1,727
Eastern	14.6	23.2	18.4	43.8	100.0	13.4	19.7	14.8	52.1	100.0	1,476
Luapula	16.4	27.4	1.2	55.0	100.0	14.5	21.6	2.1	61.7	100.0	849
Lusaka	14.4	3.0	0.8	81.8	100.0	9.9	3.0	0.5	86.6	100.0	2,166
Muchinga	22.0	8.0	20.4	49.7	100.0	20.5	5.3	21.4	52.8	100.0	599
Northern	26.5	26.0	1.5	46.0	100.0	27.9	25.1	3.5	43.5	100.0	855
North Western	33.8	13.4	0.3	52.5	100.0	29.7	13.2	0.1	57.0	100.0	556
Southern	15.7	16.2	11.7	56.4	100.0	12.7	13.2	7.6	66.5	100.0	1,395
Western	42.5	8.0	2.6	46.9	100.0	36.1	7.5	1.8	54.5	100.0	574
Education											
No education	21.5	29.4	11.4	37.7	100.0	20.7	21.2	9.0	49.1	100.0	446
Primary	20.7	18.2	9.1	52.0	100.0	19.0	15.3	8.1	57.6	100.0	4,206
Secondary	14.9	10.1	4.9	70.1	100.0	11.3	9.0	3.9	75.7	100.0	5,618
Higher	14.1	8.7	3.6	73.6	100.0	13.0	7.1	2.6	77.3	100.0	907
Wealth quintile											
Lowest	29.3	24.0	13.7	33.0	100.0	29.0	20.8	11.5	38.7	100.0	1,827
Second	24.2	24.4	9.2	42.2	100.0	21.0	20.6	9.1	49.4	100.0	1,952
Middle	18.7	15.8	8.5	57.0	100.0	16.2	14.0	7.1	62.7	100.0	2,218
Fourth	9.8	6.3	2.9	80.9	100.0	6.9	4.5	1.7	86.8	100.0	2,552
Highest	9.9	4.4	1.7	83.9	100.0	6.4	3.9	1.4	88.2	100.0	2,629
Total 15-49	17.3	13.8	6.6	62.3	100.0	14.7	11.7	5.6	68.0	100.0	11,177
50-59	37.9	32.0	13.0	17.1	100.0	32.1	26.1	11.4	30.4	100.0	955
Total 15-59	18.9	15.2	7.1	58.7	100.0	16.1	12.9	6.1	65.0	100.0	12,132

Table 16.5.1 Ownership of title or deed for house: Women

Among women age 15-49 who own a house, percent distribution by whether the house owned has a title or deed and whether or not the woman's name appears on the title or deed, according to background characteristics, Zambia DHS 2018

Background characteristic	House has a title or deed and: Woman's name is on title/deed	House has a title or deed and: Woman's name is not on title/deed	Does not have a title/deed	Don't know/ missing[1]	Total	Number who own a house[2]
Age						
15-19	4.3	2.8	88.9	4.0	100.0	229
20-24	2.6	4.0	91.7	1.7	100.0	660
25-29	8.1	8.2	80.9	2.8	100.0	810
30-34	8.7	8.0	82.0	1.3	100.0	773
35-39	10.9	7.2	80.5	1.4	100.0	904
40-44	15.8	10.9	71.5	1.8	100.0	770
45-49	14.0	8.7	76.1	1.2	100.0	604
Residence						
Urban	29.1	22.9	43.2	4.8	100.0	1,207
Rural	3.2	2.4	93.6	0.8	100.0	3,545
Province						
Central	5.8	9.7	81.7	2.8	100.0	435
Copperbelt	27.3	19.5	49.5	3.7	100.0	323
Eastern	1.8	2.5	94.0	1.7	100.0	974
Luapula	2.6	3.4	93.8	0.2	100.0	501
Lusaka	30.1	18.5	45.0	6.3	100.0	568
Muchinga	4.5	4.7	90.2	0.6	100.0	334
Northern	11.1	2.5	85.9	0.6	100.0	527
North Western	5.7	1.6	91.9	0.8	100.0	289
Southern	9.5	14.8	75.5	0.3	100.0	481
Western	4.1	2.0	93.5	0.5	100.0	320
Education						
No education	4.1	1.8	93.0	1.0	100.0	622
Primary	6.3	4.3	88.4	1.0	100.0	2,700
Secondary	15.5	16.1	64.5	4.0	100.0	1,226
Higher	38.5	18.4	40.4	2.7	100.0	204
Wealth quintile						
Lowest	1.5	1.2	97.1	0.2	100.0	1,411
Second	1.7	1.2	96.2	0.9	100.0	1,162
Middle	5.4	4.9	88.5	1.3	100.0	959
Fourth	21.9	20.9	53.1	4.1	100.0	549
Highest	37.4	25.4	31.3	5.9	100.0	671
Total	9.8	7.6	80.8	1.8	100.0	4,751

[1] Includes women who have a house with a title/deed, but they do not know if their name is on it (or this information is missing), and women who do not know if there is a title/deed for the house (or this information is missing)
[2] Includes sole, joint, or sole and joint ownership

Table 16.5.2 Ownership of title or deed for house: Men

Among men age 15-49 who own a house, percent distribution by whether the house owned has a title or deed and whether or not the man's name appears on the title or deed, according to background characteristics, Zambia DHS 2018

Background characteristic	House has a title or deed and: Man's name is on title/deed	House has a title or deed and: Man's name is not on title/deed	Does not have a title/deed	Don't know/ missing[1]	Total	Number who own a house[2]
Age						
15-19	4.4	0.9	93.7	0.9	100.0	136
20-24	4.6	2.1	93.3	0.0	100.0	479
25-29	2.0	2.9	95.0	0.1	100.0	678
30-34	4.4	1.8	93.8	0.0	100.0	749
35-39	7.1	3.0	89.9	0.0	100.0	769
40-44	11.6	3.6	84.8	0.0	100.0	763
45-49	12.0	1.7	86.3	0.0	100.0	640
Residence						
Urban	27.4	8.0	64.4	0.2	100.0	885
Rural	1.6	1.1	97.4	0.0	100.0	3,330
Province						
Central	2.0	2.2	95.7	0.0	100.0	355
Copperbelt	25.0	8.4	66.2	0.4	100.0	313
Eastern	1.3	0.6	98.0	0.0	100.0	829
Luapula	0.8	1.7	97.5	0.0	100.0	382
Lusaka	25.1	7.5	67.4	0.0	100.0	395
Muchinga	1.9	1.5	96.5	0.0	100.0	302
Northern	3.0	3.2	93.9	0.0	100.0	462
North Western	5.7	1.9	92.4	0.0	100.0	264
Southern	8.6	0.8	90.6	0.0	100.0	608
Western	2.9	0.6	96.5	0.0	100.0	305
Education						
No education	4.8	0.8	94.4	0.0	100.0	278
Primary	2.5	1.5	96.0	0.0	100.0	2,017
Secondary	9.3	3.6	87.0	0.1	100.0	1,679
Higher	30.9	5.8	63.3	0.0	100.0	240
Wealth quintile						
Lowest	0.3	1.0	98.7	0.0	100.0	1,224
Second	0.8	0.7	98.5	0.0	100.0	1,129
Middle	2.7	2.2	95.1	0.0	100.0	953
Fourth	18.3	8.6	73.0	0.1	100.0	486
Highest	39.4	5.5	54.8	0.3	100.0	423
Total 15-49	7.0	2.5	90.5	0.0	100.0	4,215
50-59	16.0	1.6	82.3	0.0	100.0	792
Total 15-59	8.4	2.4	89.2	0.0	100.0	5,006

[1] Includes men who have a house with a title/deed, but they do not know if their name is on it (or this information is missing), and men who do not know if there is a title/deed for the house (or this information is missing)
[2] Includes sole, joint, or sole and joint ownership

Table 16.6.1 Ownership of title or deed for land: Women

Among women age 15-49 who own land, percent distribution by whether the land owned has a title or deed and whether or not the woman's name appears on the title or deed, according to background characteristics, Zambia DHS 2018

Background characteristic	Land has a title or deed and: Woman's name is on title/deed	Woman's name is not on title/deed	Does not have a title/deed	Don't know/ missing[1]	Total	Number who own land[2]
Age						
15-19	1.6	3.1	94.7	0.6	100.0	164
20-24	3.3	3.5	92.6	0.5	100.0	522
25-29	5.5	4.8	88.3	1.4	100.0	635
30-34	5.0	3.7	89.8	1.5	100.0	591
35-39	6.7	5.2	87.4	0.7	100.0	647
40-44	7.7	2.6	88.6	1.1	100.0	567
45-49	6.1	4.4	88.3	1.2	100.0	459
Residence						
Urban	21.9	11.8	63.8	2.6	100.0	527
Rural	2.8	2.7	93.7	0.8	100.0	3,057
Province						
Central	5.6	9.8	82.7	1.8	100.0	321
Copperbelt	22.2	6.7	71.1	0.0	100.0	184
Eastern	0.8	1.4	96.1	1.8	100.0	880
Luapula	3.7	5.2	90.7	0.5	100.0	340
Lusaka	16.4	8.5	71.2	3.9	100.0	251
Muchinga	3.6	2.6	93.7	0.1	100.0	294
Northern	7.4	3.5	88.5	0.6	100.0	479
North Western	1.7	1.3	97.0	0.0	100.0	286
Southern	6.6	4.6	88.5	0.3	100.0	323
Western	3.4	3.2	92.9	0.6	100.0	227
Education						
No education	2.5	2.2	94.7	0.6	100.0	485
Primary	3.4	3.0	92.5	1.0	100.0	2,199
Secondary	9.9	6.7	81.9	1.5	100.0	768
Higher	27.8	11.9	59.8	0.6	100.0	131
Wealth quintile						
Lowest	1.0	1.9	96.4	0.7	100.0	1,199
Second	2.0	2.5	95.0	0.4	100.0	1,033
Middle	5.5	4.1	89.3	1.2	100.0	740
Fourth	14.8	7.7	75.9	1.5	100.0	304
Highest	26.4	13.6	56.2	3.8	100.0	308
Total	5.6	4.0	89.3	1.1	100.0	3,584

[1] Includes women who have land with a title/deed, but they do not know if their name is on it (or this information is missing), and women who do not know if there is a title/deed for the land (or this information is missing)
[2] Includes sole, joint, or sole and joint ownership

Table 16.6.2 Ownership of title or deed for land: Men

Among men age 15-49 who own land, percent distribution by whether the land owned has a title or deed and whether or not the man's name appears on the title or deed, according to background characteristics, Zambia DHS 2018

Background characteristic	Land has a title or deed and: Man's name is on title/deed	Man's name is not on title/deed	Does not have a title/deed	Don't know/ missing[1]	Total	Number who own land[2]
Age						
15-19	0.0	1.3	96.4	2.4	100.0	101
20-24	2.2	2.4	94.6	0.8	100.0	388
25-29	2.7	2.3	95.0	0.0	100.0	604
30-34	4.1	2.6	93.2	0.0	100.0	679
35-39	1.8	3.2	94.9	0.1	100.0	624
40-44	4.0	1.8	94.1	0.0	100.0	654
45-49	3.1	2.4	94.5	0.0	100.0	530
Residence						
Urban	13.7	8.0	77.6	0.7	100.0	580
Rural	0.9	1.3	97.7	0.1	100.0	3,001
Province						
Central	1.6	2.8	95.6	0.0	100.0	328
Copperbelt	12.0	7.0	81.0	0.0	100.0	197
Eastern	0.8	0.6	98.6	0.0	100.0	707
Luapula	1.1	1.7	97.0	0.2	100.0	325
Lusaka	14.4	6.4	78.4	0.9	100.0	290
Muchinga	0.6	2.4	96.6	0.5	100.0	283
Northern	2.0	2.7	95.0	0.2	100.0	483
North Western	1.9	1.3	96.8	0.0	100.0	239
Southern	1.7	2.2	96.0	0.1	100.0	468
Western	1.3	0.8	97.9	0.0	100.0	261
Education						
No education	0.6	0.3	99.1	0.0	100.0	227
Primary	0.7	1.6	97.7	0.1	100.0	1,783
Secondary	3.4	3.5	92.9	0.2	100.0	1,365
Higher	22.5	5.1	71.2	1.3	100.0	205
Wealth quintile						
Lowest	0.3	0.8	98.9	0.1	100.0	1,121
Second	0.7	1.2	98.0	0.2	100.0	988
Middle	1.4	3.3	95.2	0.1	100.0	828
Fourth	7.3	5.3	87.3	0.0	100.0	336
Highest	19.6	6.9	72.5	1.0	100.0	309
Total 15-49	3.0	2.4	94.4	0.2	100.0	3,581
50-59	4.6	1.9	93.5	0.0	100.0	664
Total 15-59	3.2	2.3	94.3	0.1	100.0	4,245

[1] Includes men who have land with a title/deed, but they do not know if their name is on it (or this information is missing), and men who do not know if there is a title/deed for the land (or this information is missing)
[2] Includes sole, joint, or sole and joint ownership

Table 16.7.1 Ownership and use of bank accounts and mobile phones: Women

Percentage of women age 15-49 who have and use an account in a bank or other financial institution and percentage who own a mobile phone, and among women who own a mobile phone, percentage who use it for financial transactions, according to background characteristics, Zambia DHS 2018

Background characteristic	Have and use a bank account	Own a mobile phone	Number of women	Use mobile phone for financial transactions	Number of women who own a mobile phone
Age					
15-19	2.1	31.5	3,000	35.5	944
20-24	9.1	56.1	2,733	52.7	1,534
25-29	15.5	60.8	2,237	60.6	1,361
30-34	16.7	62.3	1,862	55.0	1,160
35-39	14.2	61.5	1,697	55.0	1,044
40-44	13.2	58.9	1,253	52.8	738
45-49	11.2	52.5	900	52.6	473
Residence					
Urban	19.4	75.0	6,374	62.5	4,780
Rural	3.2	33.8	7,309	33.7	2,472
Province					
Central	9.3	54.6	1,165	52.9	637
Copperbelt	13.7	72.0	2,201	56.5	1,584
Eastern	4.6	37.7	1,605	29.2	605
Luapula	3.8	32.1	1,071	57.5	344
Lusaka	24.2	77.6	2,733	65.2	2,121
Muchinga	2.9	29.7	754	48.6	224
Northern	3.5	27.5	1,054	50.5	290
North Western	8.0	44.1	718	45.7	316
Southern	8.0	52.4	1,574	41.1	825
Western	5.8	37.9	808	29.7	306
Education					
No education	1.1	23.2	1,054	30.5	244
Primary	2.6	36.0	6,059	36.4	2,181
Secondary	12.7	70.2	5,816	56.2	4,080
Higher	74.8	99.0	755	88.0	748
Wealth quintile					
Lowest	0.3	14.3	2,442	20.8	349
Second	1.1	28.9	2,387	26.1	691
Middle	2.3	49.7	2,477	34.5	1,230
Fourth	8.3	70.8	3,011	51.8	2,133
Highest	33.7	84.7	3,367	71.5	2,850
Total	10.8	53.0	13,683	52.7	7,253

Table 16.7.2 Ownership and use of bank accounts and mobile phones: Men

Percentage of men age 15-49 who have and use an account in a bank or other financial institution and percentage who own a mobile phone, and among men who own a mobile phone, percentage who use it for financial transactions, according to background characteristics, Zambia DHS 2018

Background characteristic	Have and use a bank account	Own a mobile phone	Number of men	Use mobile phone for financial transactions	Number of men who own a mobile phone
Age					
15-19	1.7	42.3	2,781	30.8	1,175
20-24	12.0	69.8	2,032	52.2	1,418
25-29	24.1	75.1	1,721	60.6	1,293
30-34	26.1	75.9	1,383	58.4	1,050
35-39	27.5	75.6	1,280	58.2	968
40-44	27.6	73.1	1,097	59.9	802
45-49	28.1	71.6	883	56.3	632
Residence					
Urban	30.6	77.6	5,013	67.7	3,889
Rural	7.0	56.0	6,165	36.6	3,449
Province					
Central	13.1	68.3	979	58.0	669
Copperbelt	28.2	72.9	1,727	68.9	1,259
Eastern	7.8	61.8	1,476	25.8	912
Luapula	8.5	49.2	849	51.6	418
Lusaka	35.7	77.8	2,166	66.8	1,685
Muchinga	7.5	54.1	599	46.0	324
Northern	6.6	48.2	855	49.0	412
North Western	19.8	56.6	556	53.2	315
Southern	9.6	74.2	1,395	45.8	1,036
Western	8.0	53.7	574	23.8	308
Education					
No education	5.9	39.4	446	23.4	176
Primary	3.8	49.6	4,206	30.9	2,087
Secondary	18.5	74.5	5,618	58.0	4,185
Higher	81.9	98.2	907	88.3	891
Wealth quintile					
Lowest	0.5	34.6	1,827	21.4	632
Second	2.6	55.9	1,952	29.9	1,090
Middle	7.5	67.1	2,218	40.1	1,489
Fourth	21.5	75.2	2,552	62.6	1,918
Highest	45.5	84.0	2,629	74.2	2,209
Total 15-49	17.6	65.7	11,177	53.1	7,338
50-59	28.2	70.0	955	47.7	668
Total 15-59	18.4	66.0	12,132	52.7	8,006

Table 16.8 Participation in decision making

Percent distribution of currently married women and currently married men age 15-49 by person who usually makes decisions about various issues, Zambia DHS 2018

Decision	Mainly wife	Wife and husband jointly	Mainly husband	Someone else	Other	Total	Number of women
			WOMEN				
Own health care	40.6	40.1	18.9	0.3	0.1	100.0	7,648
Daily household purchases	57.1	28.8	13.5	0.5	0.1	100.0	7,648
Major household purchases	11.9	55.7	32.0	0.4	0.1	100.0	7,648
Visits to her family or relatives	24.2	52.4	23.2	0.1	0.0	100.0	7,648
			MEN				
Own health care	17.6	36.3	45.5	0.5	0.0	100.0	5,572
Daily household purchases	54.4	31.6	13.7	0.3	0.0	100.0	5,572
Major household purchases	13.1	59.8	26.8	0.2	0.0	100.0	5,572

Table 16.9.1 Women's participation in decision making by background characteristics

Percentage of currently married women age 15-49 who usually make specific decisions either alone or jointly with their husband, according to background characteristics, Zambia DHS 2018

Background characteristic	Specific decisions				All four decisions	None of the four decisions	Number of women
	Woman's own health care	Daily household purchases	Major household purchases	Visits to her family or relatives			
Age							
15-19	68.7	67.9	54.5	63.6	38.8	13.3	437
20-24	77.0	82.9	62.6	71.2	50.9	6.9	1,438
25-29	81.4	87.6	70.5	76.9	59.3	5.6	1,544
30-34	84.2	87.5	69.2	81.6	60.8	5.8	1,396
35-39	82.5	87.8	71.7	78.1	59.4	4.5	1,307
40-44	81.9	88.4	66.5	78.0	56.6	4.9	908
45-49	83.4	90.7	69.8	81.3	61.3	4.0	618
Employment (past 12 months)							
Not employed	77.2	82.7	65.7	75.0	55.7	9.0	3,153
Employed for cash	85.1	90.0	71.9	79.8	60.9	3.3	3,652
Employed not for cash	75.5	80.6	55.5	68.9	42.1	5.9	843
Number of living children							
0	76.8	81.3	61.6	73.0	50.3	8.0	327
1-2	82.4	86.2	69.0	76.8	58.2	5.1	2,689
3-4	82.1	86.9	69.7	77.1	57.5	5.4	2,282
5+	78.1	85.5	64.5	76.5	55.0	7.0	2,349
Residence							
Urban	90.3	94.2	78.0	84.9	67.6	1.7	3,080
Rural	74.3	80.4	60.5	71.0	49.3	8.8	4,568
Province							
Central	85.9	88.6	76.4	84.3	64.9	3.6	654
Copperbelt	91.9	96.3	76.6	88.2	68.1	1.4	1,043
Eastern	62.2	73.8	48.2	56.9	34.1	14.0	1,075
Luapula	77.3	79.3	53.9	82.1	44.6	5.2	611
Lusaka	92.1	95.6	85.2	91.2	77.3	1.3	1,384
Muchinga	75.0	79.5	55.4	73.1	49.5	11.2	470
Northern	80.8	82.1	69.1	80.8	61.5	8.9	668
North Western	91.7	89.8	88.2	89.3	85.2	5.3	359
Southern	73.5	81.7	56.5	53.0	35.5	5.7	993
Western	73.7	85.1	61.7	72.1	48.5	6.9	392
Education							
No education	69.2	74.7	53.2	69.1	44.3	13.5	743
Primary	77.6	83.3	62.3	73.1	51.0	7.2	3,881
Secondary	86.5	91.2	76.2	81.5	64.8	2.7	2,635
Higher	95.2	98.4	88.7	93.4	82.2	0.2	389
Wealth quintile							
Lowest	71.7	76.2	56.1	68.3	46.3	11.4	1,553
Second	72.6	79.0	57.1	71.8	45.5	8.5	1,509
Middle	78.6	86.1	64.7	72.8	53.8	6.1	1,468
Fourth	87.9	93.1	74.5	82.7	63.0	2.4	1,620
Highest	92.7	95.4	85.1	87.3	74.7	1.2	1,499
Total	80.8	86.0	67.5	76.6	56.7	5.9	7,648

Table 16.9.2 Men's participation in decision making by background characteristics

Percentage of currently married men age 15-49 who usually make specific decisions either alone or jointly with their wife, according to background characteristics, Zambia DHS 2018

Background characteristic	Specific decisions			All three decisions	None of the three decisions	Number of men
	Man's own health	Daily household purchases	Major household purchases			
Age						
15-19	(74.7)	(37.8)	(85.3)	(31.8)	(11.4)	31
20-24	82.0	54.7	88.6	48.4	5.8	459
25-29	82.9	43.1	87.4	38.8	5.6	1,090
30-34	82.7	47.2	87.6	39.9	4.3	1,138
35-39	83.7	47.0	84.6	39.7	5.3	1,104
40-44	80.3	43.4	87.2	37.5	4.8	968
45-49	78.3	40.0	85.5	34.3	6.5	781
Employment (past 12 months)						
Not employed	79.8	47.4	76.6	42.4	12.4	165
Employed for cash	81.7	45.2	86.9	39.1	5.4	4,725
Employed not for cash	83.2	44.9	87.7	38.0	2.6	681
Number of living children						
0	81.0	51.1	87.1	44.9	6.5	237
1-2	82.5	46.2	87.6	40.2	5.2	1,897
3-4	81.5	45.7	86.0	38.8	5.4	1,560
5+	81.5	43.1	86.2	37.5	5.2	1,877
Residence						
Urban	82.5	41.0	85.1	33.7	5.1	2,170
Rural	81.4	47.9	87.7	42.5	5.4	3,402
Province						
Central	70.2	21.1	91.6	18.0	3.7	486
Copperbelt	68.4	38.8	82.2	33.9	10.5	728
Eastern	73.4	48.9	83.1	42.8	11.0	857
Luapula	91.7	52.0	91.0	47.8	4.0	429
Lusaka	81.3	42.3	85.0	30.1	4.6	1,022
Muchinga	86.0	51.0	86.5	44.5	3.4	332
Northern	93.9	61.7	91.4	56.4	1.4	475
North Western	94.8	57.1	88.3	53.2	0.5	271
Southern	92.4	47.6	86.5	43.7	2.2	704
Western	85.0	40.6	91.2	36.6	2.4	267
Education						
No education	77.1	43.6	84.7	37.3	8.4	276
Primary	81.1	47.3	87.2	41.8	5.6	2,263
Secondary	82.2	43.9	86.0	37.3	5.1	2,492
Higher	85.4	43.7	88.7	37.2	3.3	541
Wealth quintile						
Lowest	83.7	56.4	88.3	51.0	5.2	1,168
Second	82.3	46.5	88.4	42.1	4.9	1,087
Middle	78.6	40.7	85.8	34.8	6.5	1,119
Fourth	80.8	41.3	84.8	34.0	5.7	1,187
Highest	83.8	40.7	86.0	33.0	4.0	1,011
Total 15-49	81.8	45.2	86.7	39.1	5.3	5,572
50-59	84.4	50.4	87.8	43.9	2.8	856
Total 15-59	82.1	45.9	86.8	39.7	5.0	6,428

Note: Figures in parentheses are based on 25-49 unweighted cases.

Table 16.10.1 Attitude toward wife beating: Women

Percentage of all women age 15-49 who agree that a husband is justified in hitting or beating his wife for specific reasons, according to background characteristics, Zambia DHS 2018

Background characteristic	Husband is justified in hitting or beating his wife if she:						Percentage who agree with at least one specified reason	Number
	Burns the food	Argues with him	Goes out without telling him	Neglects the children	Makes major household purchases without telling him	Refuses to have sexual intercourse with him		
Age								
15-19	23.5	33.3	26.9	33.6	28.9	27.0	47.4	3,000
20-24	20.8	32.2	25.4	31.8	27.3	29.5	47.2	2,733
25-29	20.0	32.5	24.3	31.5	27.2	28.2	44.7	2,237
30-34	18.5	29.4	24.2	27.2	26.0	28.5	41.8	1,862
35-39	21.4	32.3	28.2	33.4	28.9	31.4	48.1	1,697
40-44	21.7	32.2	25.6	28.1	27.0	32.8	45.5	1,253
45-49	24.3	34.0	28.2	31.0	31.0	34.9	45.9	900
Employment (past 12 months)								
Not employed	20.4	30.9	24.3	31.1	26.4	26.8	44.8	6,547
Employed for cash	20.0	31.1	25.4	29.4	26.9	29.4	43.9	5,696
Employed not for cash	30.9	43.0	35.8	40.2	38.6	41.9	59.6	1,440
Number of living children								
0	18.3	27.2	20.8	27.5	22.4	20.6	40.2	3,489
1-2	21.0	32.5	25.8	31.5	27.4	30.0	46.5	4,427
3-4	20.6	32.3	26.5	31.0	28.9	31.6	47.1	2,945
5+	26.6	38.0	32.0	36.2	34.4	37.4	51.2	2,821
Marital status								
Never married	17.9	26.6	21.3	27.5	22.5	20.8	40.1	4,272
Married or living together	23.0	35.5	28.7	34.0	31.1	33.9	49.7	7,648
Divorced/separated/widowed	22.5	31.7	25.1	29.0	27.3	31.3	44.4	1,762
Residence								
Urban	12.9	23.9	18.2	23.8	18.1	20.8	37.4	6,374
Rural	28.7	39.5	32.7	37.9	36.4	37.0	53.5	7,309
Province								
Central	15.7	30.4	23.0	26.0	23.4	23.6	40.6	1,165
Copperbelt	17.3	33.4	21.3	27.2	23.0	26.1	44.3	2,201
Eastern	14.5	23.5	16.5	25.1	21.5	20.5	37.7	1,605
Luapula	45.2	62.0	46.9	52.1	55.5	58.8	70.0	1,071
Lusaka	5.5	13.4	10.7	15.9	9.4	14.2	26.6	2,733
Muchinga	39.1	53.2	43.2	48.6	44.7	48.5	63.5	754
Northern	48.4	60.4	49.8	55.7	54.7	52.9	71.6	1,054
North Western	20.1	23.0	24.8	22.4	24.2	22.5	32.5	718
Southern	19.4	27.9	31.6	37.9	30.0	30.8	57.1	1,574
Western	29.1	33.6	28.0	34.9	34.8	32.9	49.4	808
Education								
No education	31.6	40.7	33.7	38.4	38.7	42.0	53.2	1,054
Primary	28.6	40.6	32.7	37.4	35.5	38.0	54.4	6,059
Secondary	14.5	25.5	20.3	27.0	21.0	21.7	40.4	5,816
Higher	1.2	4.9	4.3	6.5	5.0	3.5	11.7	755
Wealth quintile								
Lowest	35.4	46.0	37.2	42.4	42.9	44.1	58.6	2,442
Second	33.7	44.1	37.5	42.6	41.5	40.6	58.0	2,387
Middle	23.1	35.8	30.1	35.9	31.0	32.7	51.2	2,477
Fourth	14.5	27.4	19.6	25.6	19.9	24.7	42.6	3,011
Highest	7.2	15.7	12.3	17.0	12.2	12.9	27.6	3,367
Total	21.3	32.2	26.0	31.3	27.9	29.5	46.0	13,683

Table 16.10.2 Attitude toward wife beating: Men

Percentage of all men age 15-49 who agree that a husband is justified in hitting or beating his wife for specific reasons, according to background characteristics, Zambia DHS 2018

Background characteristic	Husband is justified in hitting or beating his wife if she:						Percentage who agree with at least one specified reason	Number
	Burns the food	Argues with him	Goes out without telling him	Neglects the children	Makes major household purchases without telling him	Refuses to have sexual intercourse with him		
Age								
15-19	7.9	18.4	14.9	21.2	12.5	10.9	32.4	2,781
20-24	6.5	16.7	12.1	17.2	11.7	9.4	28.9	2,032
25-29	5.2	12.7	12.6	14.6	9.7	9.3	24.2	1,721
30-34	3.9	11.9	10.3	12.3	8.7	10.6	21.7	1,383
35-39	4.3	10.8	11.1	12.4	8.8	8.4	20.5	1,280
40-44	4.9	12.2	11.2	11.6	9.5	8.6	21.5	1,097
45-49	4.1	9.6	8.6	9.9	7.4	7.6	17.4	883
Employment (past 12 months)								
Not employed	5.7	13.0	12.2	15.4	9.5	8.2	24.8	2,394
Employed for cash	5.4	13.2	11.6	14.3	10.2	9.9	24.0	7,316
Employed not for cash	7.7	21.2	15.2	21.7	12.3	10.4	34.7	1,468
Number of living children								
0	7.0	16.4	12.7	18.1	10.8	9.6	28.3	5,028
1-2	5.2	13.6	12.4	14.5	11.0	9.5	25.0	2,523
3-4	4.2	10.5	10.6	11.4	7.8	9.3	20.4	1,678
5+	4.5	12.6	11.9	13.8	10.3	9.9	23.5	1,948
Marital status								
Never married	7.0	16.5	12.9	18.1	11.1	9.6	28.5	5,142
Married or living together	4.4	11.9	11.4	13.2	9.2	9.3	22.6	5,572
Divorced/separated/widowed	7.2	17.1	13.5	14.3	15.1	12.6	28.4	463
Residence								
Urban	4.6	12.4	9.2	12.2	7.6	7.2	21.0	5,013
Rural	6.6	15.7	14.5	18.2	12.6	11.5	29.3	6,165
Province								
Central	3.5	11.1	11.0	11.2	7.7	4.5	19.4	979
Copperbelt	9.3	20.3	14.2	18.5	11.6	12.9	30.6	1,727
Eastern	2.6	8.8	7.0	9.3	5.2	5.4	17.7	1,476
Luapula	7.5	11.3	13.9	25.0	20.7	23.8	43.3	849
Lusaka	1.6	6.5	5.1	5.8	3.5	3.4	12.0	2,166
Muchinga	9.7	22.1	16.7	20.7	12.7	19.3	33.1	599
Northern	14.1	25.5	21.2	29.2	22.8	19.6	37.5	855
North Western	5.2	15.8	18.1	16.9	8.7	6.4	26.5	556
Southern	4.7	17.2	15.8	19.5	12.6	5.8	30.7	1,395
Western	6.0	14.9	12.6	15.3	9.2	8.3	27.4	574
Education								
No education	5.4	13.4	12.0	14.2	9.8	11.7	23.5	446
Primary	8.3	17.2	16.1	19.0	13.3	12.6	30.7	4,206
Secondary	4.7	13.9	10.7	14.9	9.5	8.5	24.8	5,618
Higher	0.5	3.4	3.0	3.6	2.2	1.4	7.7	907
Wealth quintile								
Lowest	9.0	17.6	17.5	21.0	15.5	16.0	33.1	1,827
Second	7.2	16.3	15.0	19.9	13.4	12.0	32.2	1,952
Middle	6.0	16.2	13.3	16.7	11.5	10.2	27.7	2,218
Fourth	5.1	14.6	11.0	13.8	9.2	7.6	23.3	2,552
Highest	2.7	8.4	6.6	9.1	4.5	4.7	15.8	2,629
Total 15-49	5.7	14.2	12.2	15.5	10.3	9.6	25.6	11,177
50-59	4.3	10.2	8.6	9.8	8.2	8.5	17.6	955
Total 15-59	5.6	13.9	11.9	15.1	10.2	9.5	24.9	12,132

Table 16.11 Attitudes toward negotiating safer sexual relations with husband

Percentage of women and men age 15-49 who believe that a woman is justified in refusing to have sexual intercourse with her husband if she knows that he has sexual intercourse with other women, percentage who believe that a woman is justified in asking that they use a condom if she knows that her husband has a sexually transmitted infection (STI), and percentage of women age 15-49 who believe that a woman is justified in refusing to have sexual intercourse with her husband if she knows he has an STI according to background characteristics, Zambia DHS 2018

	Women				Men		
Background characteristic	Refusing to have sexual intercourse with her husband if she knows he has sex with other women	Asking that they use a condom if she knows that her husband has an STI	Refusing to have sexual intercourse with her husband if she knows he has an STI	Number of women	Refusing to have sexual intercourse with her husband if she knows he has sex with other women	Asking that they use a condom if she knows that her husband has an STI	Number of men
Age							
15-24	53.2	68.1	54.9	5,733	63.9	76.8	4,813
15-19	50.5	61.9	50.0	3,000	62.5	73.5	2,781
20-24	56.3	74.9	60.2	2,733	65.9	81.4	2,032
25-29	57.1	77.1	63.7	2,237	68.9	82.3	1,721
30-39	57.5	76.4	64.6	3,559	66.2	83.0	2,663
40-49	56.5	75.5	65.0	2,153	68.3	85.0	1,981
Marital status							
Never married	56.0	66.9	55.8	4,272	66.0	77.8	5,142
Ever had sex	61.8	77.0	64.9	2,477	68.9	83.0	3,303
Never had sex	47.8	53.0	43.2	1,796	60.7	68.4	1,839
Married or living together	55.0	75.0	62.1	7,648	66.0	83.2	5,572
Divorced/separated/ widowed	56.6	78.2	64.6	1,762	66.4	80.7	463
Residence							
Urban	59.3	74.9	62.6	6,374	72.2	81.5	5,013
Rural	52.2	71.1	58.5	7,309	61.0	79.8	6,165
Province							
Central	52.1	69.6	54.4	1,165	65.0	85.5	979
Copperbelt	62.3	76.3	68.3	2,201	60.0	69.3	1,727
Eastern	59.2	81.3	65.4	1,605	69.7	81.4	1,476
Luapula	49.3	70.9	59.9	1,071	47.4	61.0	849
Lusaka	58.0	71.9	61.0	2,733	80.2	87.4	2,166
Muchinga	50.9	61.1	46.1	754	54.4	74.7	599
Northern	43.0	51.7	43.8	1,054	65.8	78.0	855
North Western	60.4	67.6	57.1	718	72.4	87.1	556
Southern	53.7	85.8	65.2	1,574	60.0	88.4	1,395
Western	53.8	75.7	65.2	808	70.8	91.8	574
Education							
No education	48.0	62.5	50.9	1,054	63.3	75.5	446
Primary	51.0	70.4	57.8	6,059	61.3	78.1	4,206
Secondary	59.0	75.7	62.9	5,816	68.3	81.5	5,618
Higher	74.7	85.9	75.9	755	75.0	88.9	907
Wealth quintile							
Lowest	50.8	66.4	54.8	2,442	61.0	77.1	1,827
Second	50.2	70.1	58.1	2,387	59.3	78.7	1,952
Middle	52.5	74.0	60.2	2,477	62.8	81.5	2,218
Fourth	58.0	74.3	61.1	3,011	69.9	79.7	2,552
Highest	62.6	77.4	65.7	3,367	73.4	84.3	2,629
Total 15-49	55.5	72.9	60.4	13,683	66.0	80.6	11,177
50-59	na	na	na	na	66.2	82.0	955
Total 15-59	na	na	na	na	66.0	80.7	12,132

na = Not applicable

Table 16.12 Ability to negotiate sexual relations with husband

Percentage of currently married women age 15-49 who can say no to their husband if they do not want to have sexual intercourse, and percentage who can ask their husband to use a condom, according to background characteristics, Zambia DHS 2018

Background characteristic	Percentage who can say no to their husband if they do not want to have sexual intercourse	Percentage who can ask their husband to use a condom	Number of women
Age			
15-24	62.7	71.0	1,875
15-19	61.3	67.5	437
20-24	63.1	72.0	1,438
25-29	65.3	72.8	1,544
30-39	65.9	73.9	2,703
40-49	64.6	69.8	1,525
Residence			
Urban	66.7	74.5	3,080
Rural	63.4	70.5	4,568
Province			
Central	60.8	72.0	654
Copperbelt	57.1	66.2	1,043
Eastern	74.4	83.7	1,075
Luapula	58.5	64.7	611
Lusaka	73.0	75.5	1,384
Muchinga	47.7	59.1	470
Northern	50.5	55.0	668
North Western	78.4	78.4	359
Southern	68.0	79.8	993
Western	69.7	75.9	392
Education			
No education	59.0	63.1	743
Primary	61.8	69.1	3,881
Secondary	67.8	76.5	2,635
Higher	83.9	90.3	389
Wealth quintile			
Lowest	61.9	67.4	1,553
Second	62.9	70.4	1,509
Middle	61.8	71.6	1,468
Fourth	65.0	70.9	1,620
Highest	72.1	80.7	1,499
Total	64.7	72.1	7,648

Table 16.13 Indicators of women's empowerment

Percentage of currently married women age 15-49 who participate in all decision making, percentage who disagree with all of the reasons justifying wife beating, and percentage who agree with all of the reasons for refusing sexual intercourse with husband according to value on each of the indicators of women's empowerment, Zambia DHS 2018

Empowerment indicator	Percentage who participate in all decision making	Percentage who disagree with all of the reasons justifying wife beating	Percentage who agree with all of the reasons for refusing sexual intercourse with husband	Number of women
Number of decisions in which women participate[1]				
0	na	41.0	65.3	453
1-2	na	35.7	72.2	1,526
3-4	na	55.0	74.8	5,670
Number of reasons for which wife beating is justified[2]				
0	14.5	na	73.5	3,850
1-2	22.0	na	76.6	1,206
3-4	23.0	na	78.1	1,035
5-6	17.6	na	69.0	1,558

na = Not applicable
[1] See Table 16.9.1 for the list of decisions.
[2] See Table 16.10.1 for the list of reasons.

Table 16.14 Current use of contraception by women's empowerment

Percent distribution of currently married women age 15-49 by current contraceptive method, according to selected indicators of women's status, Zambia DHS 2018

Empowerment indicator	Any method	Modern methods					Any traditional method	Not currently using	Total	Number of women
		Any modern method[1]	Female sterili-sation	Male sterili-sation	Temporary modern female methods[2]	Male condom				
Number of decisions in which women participate[3]										
0	44.6	42.1	1.7	0.0	39.0	1.5	2.5	55.4	100.0	453
1-2	45.4	43.4	1.4	0.0	39.4	2.7	2.0	54.6	100.0	1,526
3-4	51.1	49.0	1.6	0.0	44.2	3.2	2.1	48.9	100.0	5,670
Number of reasons for which wife beating is justified[4]										
0	50.5	48.8	2.1	0.0	43.1	3.5	1.7	49.5	100.0	3,850
1-2	49.0	47.5	0.5	0.0	43.0	4.0	1.5	51.0	100.0	1,206
3-4	48.5	46.4	1.2	0.0	43.2	2.1	2.0	51.5	100.0	1,035
5-6	48.6	45.0	1.1	0.0	42.3	1.7	3.6	51.4	100.0	1,558
Total	49.6	47.5	1.5	0.0	42.9	3.0	2.1	50.4	100.0	7,648

Note: If more than one method is used, only the most effective method is considered in this tabulation.
[1] Female sterilisation, male sterilisation, pill, IUD, injectables, implants, male condom, female condom, emergency contraception, standard days method (SDM), lactational amenorrhoea method (LAM), and other modern methods
[2] Pill, IUD, injectables, implants, female condom, emergency contraception, standard days method, lactational amenorrhoea method, and other modern methods
[3] See Table 16.9.1 for the list of decisions.
[4] See Table 16.10.1 for the list of reasons.

Table 16.15 Ideal number of children and unmet need for family planning by women's empowerment

Mean ideal number of children for women age 15-49 and percentage of currently married women age 15-49 with an unmet need for family planning, according to indicators of women's empowerment, Zambia DHS 2018

Empowerment indicator	Mean ideal number of children[1]	Number of women	Percentage of currently married women with an unmet need for family planning[2]			Number of currently married women
			For spacing	For limiting	Total	
Number of decisions in which women participate[3]						
0	5.4	427	16.9	5.2	22.1	453
1-2	5.3	1,490	14.8	7.7	22.4	1,526
3-4	5.0	5,556	11.0	7.7	18.7	5,670
Number of reasons for which wife beating is justified[4]						
0	4.3	7,224	11.5	8.5	20.0	3,850
1-2	4.7	2,089	12.4	7.0	19.4	1,206
3-4	4.9	1,671	11.9	6.1	18.0	1,035
5-6	5.1	2,386	13.4	6.7	20.1	1,558
Total	4.6	13,370	12.1	7.6	19.7	7,648

[1] Mean excludes respondents who gave non-numeric responses.
[2] Figures for unmet need correspond to the revised definition described in Bradley et al. 2012.
[3] Restricted to currently married women. See Table 16.9.1 for the list of decisions.
[4] See Table 16.10.1 for the list of reasons.

Table 16.16 Reproductive health care by women's empowerment

Percentage of women age 15-49 with a live birth in the 5 years preceding the survey who received antenatal care, delivery assistance, and postnatal care from health personnel for the most recent birth, according to indicators of women's empowerment, Zambia DHS 2018

Empowerment indicator	Percentage receiving antenatal care from a skilled provider[1]	Percentage receiving delivery care from a skilled provider[1]	Percentage with a postnatal check during the first 2 days after birth[2]	Number of women with a live birth in the last 5 years
Number of decisions in which women participate[1]				
0	91.6	71.1	54.2	366
1-2	95.6	77.6	62.1	1,153
3-4	97.9	84.7	71.5	3,986
Number of reasons for which wife beating is justified[2]				
0	97.8	86.7	71.7	3,662
1-2	96.5	80.9	68.7	1,129
3-4	98.2	79.7	67.9	974
5-6	94.2	76.0	61.6	1,560
Total	96.9	82.6	68.6	7,325

[1] Skilled provider includes doctor, nurse, midwife, or clinical officer.
[2] Includes women who received a postnatal checkup from a doctor, nurse, midwife, community health worker, or traditional birth attendant (TBA) in the first 2 days after the birth. Includes women who gave birth in a health facility and those who did not give birth in a health facility.
[3] Restricted to currently married women. See Table 16.9.1 for the list of decisions.
[4] See Table 16.10.1 for the list of reasons.

Table 16.17 Early childhood mortality rates by indicators of women's empowerment

Infant, child, and under-5 mortality rates for the 10-year period preceding the survey, according to indicators of women's empowerment, Zambia DHS 2018

Empowerment indicator	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under-5 mortality ($_5q_0$)
Number of decisions in which women participate[1]			
0	40	28	66
1-2	47	22	68
3-4	39	21	59
Number of reasons for which wife beating is justified[2]			
0	43	21	63
1-2	48	24	71
3-4	32	27	58
5-6	43	23	66

[1] Restricted to currently married women. See Table 16.9.1 for the list of decisions.
[2] See Table 16.10.1 for the list of reasons.

Table 16.18 Widows dispossessed of property

Percentage of de facto women age 15-49 who have been widowed, and percentage of widowed women who have been dispossessed of property, according to background characteristics, Zambia DHS 2018

Background characteristic	Percentage of women who have been widowed	Number of women	Among ever-widowed women: Percentage who were dispossessed of property[1]	Among ever-widowed women: Number of women
Age				
15-19	0.0	3,000	*	0
20-29	0.8	4,971	(62.4)	39
30-39	3.4	3,559	49.1	122
40-49	10.7	2,153	43.2	231
Age of youngest child				
<18 years	3.3	9,936	46.7	327
18+ years	21.2	259	(50.7)	55
No children	0.3	3,489	*	10
Residence				
Urban	3.2	6,374	53.9	205
Rural	2.6	7,309	58.9	188
Province				
Central	2.8	1,165	(36.9)	33
Copperbelt	3.4	2,201	51.4	75
Eastern	2.4	1,605	(59.6)	38
Luapula	2.3	1,071	(51.4)	25
Lusaka	3.4	2,733	42.7	93
Muchinga	3.2	754	(46.1)	24
Northern	2.4	1,054	(39.5)	26
North Western	1.9	718	*	13
Southern	2.2	1,574	(54.5)	35
Western	3.8	808	(44.0)	31
Education				
No education	5.0	1,054	46.5	52
Primary	3.4	6,059	46.0	208
Secondary	1.9	5,816	51.5	113
Higher	2.4	755	*	18
Wealth quintile				
Lowest	3.2	2,442	48.4	79
Second	2.7	2,387	50.0	65
Middle	2.5	2,477	43.5	61
Fourth	3.2	3,011	45.4	96
Highest	2.7	3,367	47.6	90
Total	2.9	13,683	47.0	392

Note: Table is based only on women and men who slept in the household the night preceding the interview. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Dispossessed of property indicates that none of the late husband's assets went to the respondent.

DOMESTIC VIOLENCE 17

Key Findings

- ***Experience of violence:*** More than one-third (36%) of women age 15-49 have experienced physical violence at least once since age 15, and 18% experienced physical violence within the 12 months prior to the survey.
- ***Marital control:*** Thirty-two percent of ever-married women age 15-49 reported that their current or most recent husband or partner has ever exhibited at least three types of specified controlling behaviours.
- ***Spousal violence:*** Forty-seven percent of ever-married women have experienced physical, sexual, or emotional violence by their current or most recent husband or partner.
- ***Injuries due to spousal violence:*** Among ever-married women who had experienced spousal physical violence in the past 12 months, 35% reported having sustained physical injuries.
- ***Help seeking:*** More than half (52%) of women never sought help and never told anyone about the violence they had experienced.

Gender-based violence (GBV) against women has been acknowledged worldwide as a violation of basic human rights. Increasing research has highlighted the health burdens, intergenerational effects, and demographic consequences of such violence (United Nations 2006). GBV is defined by the United Nations as any act of violence that results in physical, sexual, or psychological harm or suffering to women, girls, men, and boys, as well as threats of such acts, coercion, or the arbitrary deprivation of liberty. This chapter focuses on domestic violence, a form of gender-based violence.

The Zambian government is committed to supporting programmes aimed at preventing GBV. GBV in Zambia has long been recognised as a problem that needs to be addressed. Women and girls face physical, emotional, and sexual abuses that undermine their health and ability to earn a living, disrupt their social systems and relationships, and rob them of their childhood and education. To combat GBV, the government has made it a priority to facilitate a review of the National Gender Policy, 2014 and enact the Anti-Gender Based Violence Act, No. 1 of 2011.

Domestic Violence Subsample

Accordingly, the 2018 ZDHS implemented a module of questions on domestic violence, the most common form of violence against women. In accord with the World Health Organization's guidelines on the ethical collection of information on domestic violence, only one eligible woman per household was randomly selected for interviewing, and the module was not implemented if privacy could not be obtained. These restrictions resulted in a total of 9,503 women being successfully interviewed. Specially constructed weights were used to adjust for the selection of only one woman per household and to ensure that the domestic violence subsample was nationally representative.

17.1 Measurement of Violence

In the 2018 ZDHS, information was obtained from never-married women on their experience of violence committed by anyone and from ever-married women on their experience of violence committed by their current and former husbands/partners and by others. More specifically, violence committed by the current husband/partner (for currently married women) and by the most recent husband/partner (for formerly married women) was measured by asking all ever-married women if their husband/partner ever did the following to them:

- **Physical spousal violence:** push you, shake you, or throw something at you; slap you; twist your arm or pull your hair; punch you with his fist or with something that could hurt you; kick you, drag you, or beat you up; try to choke you or burn you on purpose; or threaten or attack you with a knife, gun, or any other weapon
- **Sexual spousal violence:** physically force you to have sexual intercourse with him even when you did not want to, physically force you to perform any other sexual acts you did not want to, or force you with threats or in any other way to perform sexual acts you did not want to
- **Emotional spousal violence:** say or do something to humiliate you in front of others, threaten to hurt or harm you or someone close to you, or insult you or make you feel bad about yourself

In addition, information was obtained from all women (married and unmarried) about physical violence committed by anyone (other than a current or most recent husband/partner) since they were age 15 by asking if anyone had hit, slapped, kicked, or done something else to hurt them physically. Similarly, information was gathered on experiences of sexual violence committed by anyone (other than a current or most recent husband/partner) by asking women if at any time in their life, as a child or as an adult, they were forced in any way to have sexual intercourse or to perform any other sexual acts when they did not want to.

In this chapter, married women include both women who said they were married and women who said they were living with a man as if married. Correspondingly, husbands include both husbands of married women and partners of women who are not married but are living with a man as if married.

17.2 Women's Experience of Physical Violence

Physical violence by anyone

Percentage of women who have experienced any physical violence (committed by a husband or anyone else) since age 15 and in the 12 months before the survey.

Sample: Women age 15-49

17.2.1 Prevalence of Physical Violence

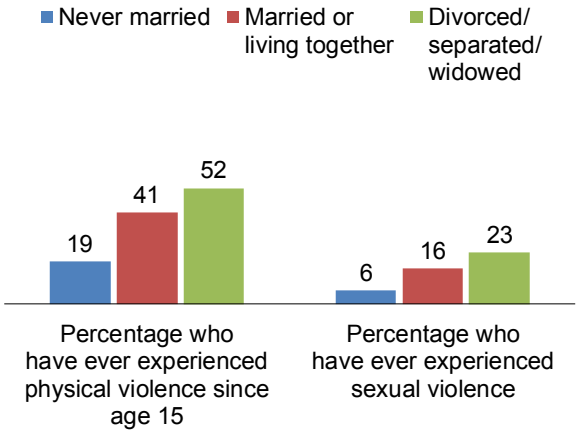
Thirty-six percent of women age 15-49 have experienced physical violence since age 15, and 18% experienced physical violence in the 12 months prior to the survey (**Table 17.1**).

Trends: The percentage of women who have experienced physical violence since age 15 declined from 47% in 2007 to 36% in 2018. The percentage of women who experienced physical violence in the 12 months prior to the survey declined from 32% to 18% over the same period.

Patterns by background characteristics

- The percentage of women who have ever experienced physical violence (52%) or sexual violence (23%) since age 15 were highest among those who are divorced, separated, or widowed (**Figure 17.1**).
- Experience of physical violence increases with increasing age, from 21% among women age 15-19 to 45% among those age 40-49 (**Table 17.1**).
- The percentage of women who have experienced physical violence since age 15 is higher in rural areas (37%) than in urban areas (34%). Also, rural women (18%) are slightly more likely than urban women (17%) to have experienced physical violence often or sometimes in the last 12 months.

Figure 17.1 **Women's experience of violence by marital status**



- By province, women's experience of physical violence since age 15 varies from 21% in North Western to 53% in Muchinga. Similarly, the percentage of women who experienced violence in the last 12 months is highest in Muchinga (28%) and lowest in North Western (8%).
- The likelihood of experiencing physical violence since age 15 is higher among women who are employed for cash (41%) than among those who are not employed (30%).

17.2.2 Perpetrators of Physical Violence

Table 17.2 shows perpetrators of physical violence according to women's marital status among those who have experienced physical violence since age 15. The most commonly reported perpetrators among ever-married women are current husbands/partners (65%).

Among never-married women who have experienced physical violence since age 15, the most reported perpetrators are mothers/stepmothers (27%), fathers/stepfathers (19%), sisters/brothers (18%), other relatives and other people (14% each), and teachers (12%) (**Table 17.2**).

17.3 Experience of Sexual Violence

Sexual violence

Percentage of women who have experienced any sexual violence (committed by a husband or anyone else) ever and in the 12 months before the survey.

Sample: Women age 15-49

17.3.1 Prevalence of Sexual Violence

Fourteen percent of women age 15-49 have experienced sexual violence, and 8% experienced such violence in the 12 months before the survey (**Table 17.3**). The percentage of women ever experiencing sexual violence increases with age. Less than 1% of women had experienced sexual violence by age 12 and 5% by age 22 (**Table 17.4**).

Patterns by background characteristics

- Women in rural areas (15%) are more likely to have ever experienced sexual violence than women in urban areas (13%). Similarly, a greater percentage of rural women (9%) than urban women (7%) experienced sexual violence in the 12 months prior to the survey.
- By province, the percentage of women who have ever experienced sexual violence is highest in Muchinga (24%) and lowest in North Western (6%). Similarly, women in Muchinga are most likely to have experienced sexual violence in the last 12 months (16%), while women in North Western are least likely to have experienced such violence (3%).
- Experience of sexual violence is more common among divorced/separated/widowed women (23%) than among those who are currently married or living with a partner (16%) and those who have never been married (6%).
- Women with a secondary or higher education are less likely to have experienced sexual violence (11% each) than women with no education (18%) and those with a primary education (16%).
- Similarly, women from households in the highest wealth quintile (11%) are less likely to experience sexual violence than those from households in the lowest and second quintiles (17%).

17.3.2 Perpetrators of Sexual Violence

Table 17.5 shows perpetrators of sexual violence among women age 15-49 who by marital status. Among ever-married women, the most common perpetrators are current husbands/partners (65%), followed by former husbands/partners (31%).

Among women who have never been married, the most common perpetrators of violence are current/former boyfriends (30%).

17.4 Experience of Different Forms of Violence

Women may experience a combination of different forms of violence. Overall, 39% of women age 15-49 experienced either physical or sexual violence. Twenty-six percent of women experienced only physical violence, 3% experienced only sexual violence, and 10% experienced both physical and sexual violence (**Table 17.6**).

17.5 Marital Control by Husband

Marital control

Percentage of women whose current husband/partner (if currently married) or most recent husband/partner (if formerly married) demonstrates at least one of the following controlling behaviours: is jealous or angry if she talks to other men; frequently accuses her of being unfaithful, does not permit her to meet her female friends, tries to limit her contact with her family, and insists on knowing where she is at all times.

Sample: Ever-married women age 15-49

Attempts by husbands to closely control and monitor their wives' behaviour are important warning signs and correlates of violence in a relationship. Because the concentration of behaviours is more significant than the display of any single behaviour, the proportion of women whose husbands/partners display at least three of the specified behaviours is also discussed.

Thirty-two percent of ever-married women age 15-49 reported that their husband/partner demonstrates three or more of the specific behaviours. Women were most likely to report that their husband/partner is

jealous or angry if they talk to other men (57%) and that he insists on knowing where they are at all times (52%) (**Table 17.8**).

Patterns by background characteristics

- About one-third (35%) of women in urban areas reported that their husband or partner displays three or more of the specified behaviours, as compared with 29% of those in rural areas.
- By province, the percentage of ever-married women reporting that their husband or partner displays three or more of the specified behaviours is highest in Muchinga (41%) and lowest in Central (22%).
- Women who are afraid of their husbands/partners are more likely to experience controlling behaviours than women who are not afraid of their husbands/partners. About 6 in 10 (64%) women who are afraid of their husband/partner most of the time reported experiencing at least three forms of controlling behaviours, compared with 19% of women who are never afraid of their husband/partner.

17.6 Forms of Spousal Violence

Spousal violence

Percentage of women who have experienced any of the specified acts of physical, sexual, or emotional violence committed by their current husband/partner (if currently married) or most recent husband/partner (if formerly married), ever and in the 12 months preceding the survey.

Sample: Ever-married women age 15-49

17.6.1 Prevalence of Spousal Violence

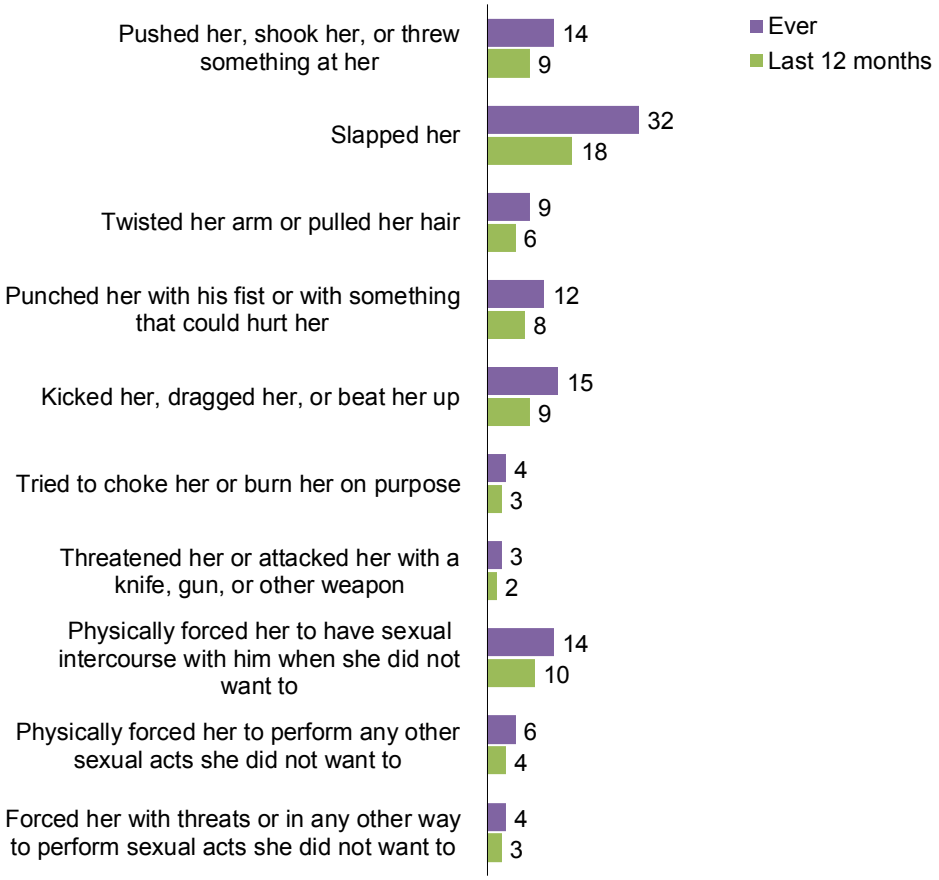
Forty-nine percent of ever-married women age 15-49 have ever experienced any form of emotional, physical, or sexual violence by an husband/partner. Thirty-nine percent have experienced physical violence, 16% experienced sexual violence, and 32% have experienced emotional violence (**Table 17.9**).

In the 12 months preceding the survey, 3 in 10 women (32%) experienced some form of physical, sexual, or emotional violence from a current or most recent husband/partner (**Table 17.12**). Among these women, 23% experienced emotional violence, 21% experienced physical violence, and 11% experienced sexual violence (**Table 17.9**).

Among specific kinds of non-emotional violence ever experienced from a current or most recent husband/partner, women were most likely to report being slapped (32%); being kicked, dragged, or beaten (15%); being physically forced to have sex when they did not want to (14%); and being pushed or shaken or having something thrown at them (14%) (**Figure 17.2**). With respect to emotional violence, women most commonly reported being insulted or made to feel bad about themselves (22%) (**Table 17.9**).

Figure 17.2 Forms of spousal violence

Percentage of ever-married women age 15-49 who have ever experienced specfic acts of violence by their husband/partner



Trends: The percentage of married women age 15-49 who have ever experienced physical, sexual, or emotional violence from their spouse declined from 54% in 2007 to 47% in 2013-14 before increasing to 49% in 2018. The percentage of women who experienced spousal violence in the last 12 months declined from 47% in 2007 to 31% in 2013-14 and remained stagnant at 32% in 2018.

Patterns by background characteristics

Table 17.10 provides further information on ever-married women's experience of physical, sexual, or emotional violence committed by their current or most recent spouse/partner.

- There is little variation between urban and rural areas (46% and 47%, respectively) in the percentage of women who have experienced physical, sexual, or emotional violence by their current or most recent husband/partner.
- By province, the percentage of women who have experienced physical, sexual, or emotional violence by their current or most recent husband or partner is highest in Muchinga (67%) and lowest in North Western (32%).
- Fifty-nine percent of divorced/separated/widowed women have experienced physical, sexual, or emotional violence by their current or most recent husband or partner, as compared with 44% of their counterparts who are currently married or living together with a partner.

- The percentage of women who have experienced physical, sexual, or emotional violence by their current or most recent husband/partner generally decreases with increasing education and household wealth.

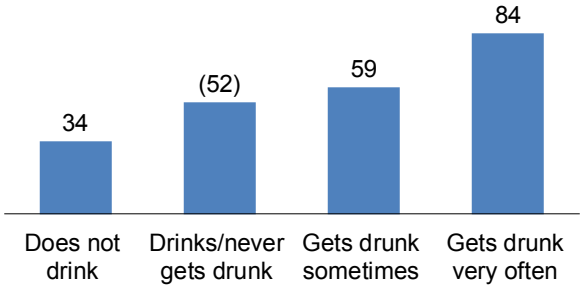
Patterns by husband's characteristics and empowerment indicators

Table 17.11 provides further information on ever-married women's experience of physical, sexual, or emotional violence committed by their current or most recent spouse/partner.

- Women whose husband/partner has no education or only a primary education (49% each) are more likely to experience spousal violence than women whose husband/partner has a secondary (42%) or higher (35%) education.
- Women whose husband/partner is often drunk are much more likely (84%) to experience spousal violence than women whose husband/partner is sometimes drunk (59%) or does not drink alcohol (34%) (**Figure 17.3**).

***Figure 17.3* Spousal violence by husband's alcohol consumption**

Percentage of ever-married women who have ever experienced spousal (physical, sexual, or emotional) violence by their husband/partner



Note: Figures in parentheses are based on 25-49 unweighted cases.

- Women's likelihood of experiencing spousal violence increases with the number of marital control behaviours exhibited by their husband. Twenty percent of women whose spouse exhibits no controlling behaviours have experienced spousal violence, as compared with 84% of women whose spouse exhibits all five controlling behaviours.
- Intergenerational effects of spousal violence are evident in Zambia. Women who report that their fathers beat their mothers are more likely (61%) to have experienced spousal violence themselves than women who report that their fathers did not beat their mothers (40%).

17.6.2 Experience of Spousal Violence by Duration of Marriage

Table 17.13 shows when spousal violence first occurred in relation to the start of marriage among women who have been married only once. Fourteen percent of women experienced violence by 2 years of marriage, 28% by 5 years of marriage, and 33% by 10 years of marriage. Only 1% of women experienced violence before marriage.

17.7 Injuries to Women due to Spousal Violence

Injuries due to spousal violence

Percentage of women who have the following types of injuries from spousal violence: cuts, bruises, or aches; eye injuries, sprains, dislocations, or burns; deep wounds, broken bones, broken teeth, or any other serious injury

Sample: Ever-married women age 15-49 who have experienced physical or sexual violence committed by their current husband (if currently married) or most recent husband (if formerly married)

Over one-third (34%) of ever-married women age 15-49 who have ever experienced physical or sexual violence committed by their current or most recent husband/partner have sustained injuries.

The most commonly reported injuries were cuts, bruises, or aches; 32% of women reported that they had ever experienced these injuries, and 34% reported that they had experienced them in the 12 months prior to the survey (**Table 17.14**).

Trends: The percentage of women reporting any form of injury resulting from spousal violence in the 12 months prior to the survey increased from 25% in 2007 to 38% in 2013-14 before declining to 35% in 2018.

17.8 Violence Initiated by Women against Husbands

Initiation of physical violence by wives

Percentage of women who have ever hit, slapped, kicked, or done anything else to physically hurt their current (if currently married) or most recent (if formerly married) husband at times when he was not already beating or physically hurting her.

Sample: Ever-married women age 15-49

Six percent of ever-married women age 15-49 have ever committed physical violence against their current or most recent husband/partner when he was not already beating or physically hurting them. Four percent of women reported having committed physical violence against their husband/partner in the 12 months prior to the survey (**Table 17.15**).

Trends: The percentage of ever-married women who have committed physical violence against their current or most recent husband/partner declined from 10% in 2007 to 6% in 2018. The percentage of women who committed physical violence against their husband in the last 12 months declined from 5% to 4% over the same period.

Patterns by background characteristics

- More women in urban areas (9%) than rural areas (4%) have committed physical violence against their current or most recent husband/partner when he was not already beating or physically hurting them.
- The percentage of women who have committed physical violence against their current or most recent husband/partner is highest in Copperbelt (10%) and lowest in Western and North Western (2% each).
- Women who are divorced, separated, or widowed (7%) are more likely to have committed physical violence against their current or most recent husband/partner than those who are married or living together with a partner (5%).

17.9 Help Seeking among Women Who Have Experienced Violence

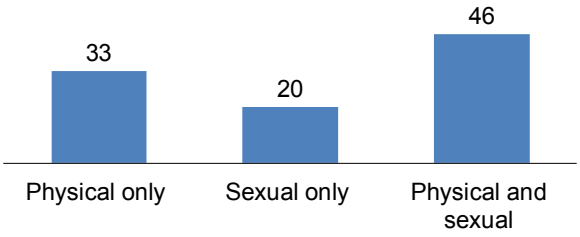
Overall, women age 15-49 who have experienced physical or sexual violence have a tendency not to seek help or tell someone. Only 3 in 10 women (35%) who ever experienced physical or sexual violence sought help, while 13% never sought help but told someone and 52% never sought help and never told anyone (52%) (**Table 17.17**).

Patterns by background characteristics

- Sexual violence is most likely to be underreported; only 20% of women who experienced sexual violence sought help, as compared with 33% of those who experienced physical violence and 46% of those who experienced both physical and sexual violence (**Figure 17.4**).
- More women in rural areas (38%) than urban areas (32%) sought help to stop violence.
- By province, the percentage of women who never sought help varies from 34% in Eastern to 66% in Muchinga.

Figure 17.4 Help seeking by type of violence experienced

Percentage of women age 15-49 who have experienced physical or sexual violence and sought help



- Women who are divorced, separated, or widowed are more likely to seek help (44%) than women who have never been married (27%) and those who are currently married or living with someone (35%).

Sources for Help

Women age 15-49 who ever experienced physical or sexual violence were most likely to seek help from their own family (63%) or their husband's/partner's family (45%). Fifteen percent of women who experienced physical or sexual violence sought help from the police (**Table 17.18**).

List of Tables

For more information on domestic violence, see the following tables:

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- **Table 17.2 Persons committing physical violence**
- **Table 17.3 Experience of sexual violence**
- **Table 17.4 Age at first experience of sexual violence**
- **Table 17.5 Persons committing sexual violence**
- **Table 17.6 Experience of different forms of violence**
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- **Table 17.8 Marital control exercised by husbands**
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Table 17.1 Experience of physical violence

Percentage of women age 15-49 who have experienced physical violence since age 15 and percentage who experienced physical violence during the 12 months preceding the survey, according to background characteristics, Zambia DHS 2018

Background characteristic	Percentage who have experienced physical violence since age 15[1]	Percentage who have experienced physical violence in the past 12 months			Number of women
		Often	Sometimes	Often or sometimes[2]	
Age					
15-19	20.9	0.9	10.6	11.5	2,036
20-24	34.2	2.8	15.5	18.3	1,863
25-29	40.1	4.1	15.3	19.5	1,611
30-39	41.3	5.1	15.2	20.4	2,487
40-49	44.7	4.2	13.9	18.3	1,507
Religion					
Catholic	36.9	2.4	14.2	16.6	1,642
Protestant	35.7	3.6	14.1	17.8	7,688
Muslim	(39.2)	(5.9)	(8.7)	(14.7)	45
Other	33.9	3.5	14.5	18.0	128
Residence					
Urban	34.2	2.9	13.9	16.8	4,383
Rural	37.2	3.9	14.2	18.3	5,120
Province					
Central	27.9	2.0	9.1	11.4	821
Copperbelt	41.7	3.2	17.6	20.9	1,481
Eastern	42.0	3.7	16.4	20.1	1,095
Luapula	44.0	1.8	17.6	19.6	745
Lusaka	27.6	2.8	11.2	14.0	1,931
Muchinga	53.1	8.3	19.4	27.8	535
Northern	33.9	2.5	10.2	12.7	727
North Western	20.9	2.6	5.7	8.3	521
Southern	38.7	5.1	19.0	24.3	1,105
Western	32.2	3.9	10.4	14.4	541
Marital status					
Never married	19.4	0.5	6.9	7.4	2,905
Married or living together	41.0	4.0	17.8	22.0	5,384
Divorced/separated/widowed	52.3	8.0	14.7	22.6	1,214
Employment					
Employed for cash	41.2	4.8	14.5	19.4	3,985
Employed not for cash	40.0	3.4	14.2	17.7	1,036
Not employed	30.1	2.3	13.6	15.9	4,482
Number of living children					
0	21.8	0.6	8.9	9.5	2,386
1-2	35.4	3.9	15.2	19.1	3,108
3-4	43.9	4.6	17.6	22.3	2,014
5+	45.2	5.0	15.1	20.2	1,995
Education					
No education	43.7	4.6	14.9	19.8	754
Primary	40.6	4.3	16.6	21.0	4,161
Secondary	30.7	2.6	12.5	15.1	4,052
Higher	27.0	1.4	5.5	6.9	536
Wealth quintile					
Lowest	40.4	4.8	15.6	20.5	1,704
Second	42.1	4.3	16.0	20.5	1,667
Middle	34.6	3.5	14.9	18.6	1,751
Fourth	36.0	3.5	17.1	20.6	2,076
Highest	28.8	1.7	8.2	9.9	2,306
Total	35.9	3.4	14.1	17.6	9,503

[1] Includes violence in the past 12 months. For women who were married before age 15 and reported physical violence only by their husband/partner, the violence could have occurred before age 15.
[2] Includes women who reported physical violence in the past 12 months but for whom frequency is not known

Table 17.2 Persons committing physical violence

Among women age 15-49 who have experienced physical violence since age 15, percentage who report specific persons who committed the violence, according to the respondent's current marital status, Zambia DHS 2018

	Marital status		
Person	Ever married	Never married	Total
Current husband/partner	65.0	na	54.2
Former husband/partner	29.2	na	24.3
Current boyfriend	0.0	4.6	0.8
Former boyfriend	1.8	9.0	3.0
Father/stepfather	2.7	18.6	5.3
Mother/stepmother	4.5	27.4	8.3
Sister/brother	3.6	17.6	5.9
Daughter/son	0.0	0.0	0.0
Other relative	3.6	14.4	5.4
Mother-in-law	0.1	na	0.1
Father-in-law	0.0	na	0.0
Other in-law	0.3	na	0.4
Teacher	0.8	12.0	2.6
Employer/someone at work	0.0	0.0	0.0
Police/soldier	0.2	0.0	0.2
Other	3.8	13.5	5.4
Number of women who have experienced physical violence since age 15	2,844	563	3,407

Note: Women can report more than one person who committed the violence.
na = Not applicable

Table 17.3 Experience of sexual violence

Percentage of women age 15-49 who have ever experienced sexual violence and percentage who experienced sexual violence in the 12 months preceding the survey, according to background characteristics, Zambia DHS 2018

Background characteristic	Percentage who have experienced sexual violence: Ever[1]	In the past 12 months	Number of women
Age			
15-19	6.7	2.8	2,036
20-24	14.2	8.5	1,863
25-29	14.4	9.9	1,611
30-39	16.2	10.2	2,487
40-49	17.7	9.2	1,507
Religion			
Catholic	13.3	6.7	1,642
Protestant	13.8	8.4	7,688
Muslim	(18.1)	(9.7)	45
Other	11.4	7.1	128
Residence			
Urban	12.7	7.0	4,383
Rural	14.5	9.1	5,120
Province			
Central	7.6	3.9	821
Copperbelt	17.5	8.9	1,481
Eastern	14.3	8.1	1,095
Luapula	20.1	11.1	745
Lusaka	7.5	3.6	1,931
Muchinga	24.2	16.2	535
Northern	19.2	10.7	727
North Western	5.8	3.3	521
Southern	13.8	12.2	1,105
Western	14.5	8.8	541
Marital status			
Never married	6.1	1.3	2,905
Married or living together	15.6	11.3	5,384
Divorced/separated/widowed	23.2	10.4	1,214
Employment			
Employed for cash	16.5	9.5	3,985
Employed not for cash	17.4	10.1	1,036
Not employed	10.4	6.4	4,482
Number of living children			
0	7.5	2.4	2,386
1-2	14.6	9.5	3,108
3-4	15.6	9.4	2,014
5+	17.7	11.4	1,995
Education			
No education	17.9	10.0	754
Primary	15.9	10.4	4,161
Secondary	11.0	5.8	4,052
Higher	11.1	4.5	536
Wealth quintile			
Lowest	17.0	11.1	1,704
Second	16.6	10.0	1,667
Middle	12.4	7.7	1,751
Fourth	12.4	8.5	2,076
Highest	11.2	4.5	2,306
Total	13.7	8.1	9,503

Note: Figures in parentheses are based on 25-49 unweighted cases.
[1] Includes violence in the past 12 months

Table 17.4 Age at first experience of sexual violence

Percentage of women age 15-49 who experienced sexual violence by specific exact ages, according to current age and current marital status, Zambia DHS 2018

Background characteristic	Percentage who first experienced sexual violence by exact age:					Percentage who have not experienced sexual violence	Number of women
	10	12	15	18	22		
Age							
15-19	0.0	0.0	0.1	na	na	93.3	2,036
20-24	0.0	0.1	0.5	3.4	na	85.8	1,863
25-29	0.0	0.0	0.6	2.8	6.6	85.6	1,611
30-39	0.2	0.4	1.1	2.6	5.8	83.8	2,487
40-49	0.3	0.3	1.0	3.0	5.0	82.3	1,507
Marital status							
Never married	0.0	0.0	0.0	0.0	0.0	93.9	2,905
Ever married	0.1	0.2	1.0	3.8	7.7	83.0	6,598
Total	0.1	0.2	0.7	2.6	5.3	86.3	9,503

na = Not applicable

Table 17.5 Persons committing sexual violence

Among women age 15-49 who have experienced sexual violence, percentage who report specific persons who committed the violence, according to respondent's current marital status, Zambia DHS 2018

Person	Marital status		Total
	Ever married	Never married	
Current husband/partner	64.5	na	55.7
Former husband/partner	31.2	na	26.9
Current/former boyfriend	3.0	29.9	6.7
Father/stepfather	0.1	3.6	0.6
Brother/stepbrother	0.3	0.1	0.3
Other relative	3.9	24.3	6.7
In-law	0.3	na	0.3
Own friend/acquaintance	1.4	19.1	3.9
Family friend	0.6	2.1	0.8
Teacher	0.1	2.7	0.4
Stranger	3.0	9.5	3.9
Other	0.9	8.6	2.0
Number of women who have experienced sexual violence	1,123	179	1,302

Note: Ever-married women can report up to three perpetrators: a current husband, former husband, or one other person who is not a current or former husband. Never-married women can report only the person who was the first to commit the violence.
na = Not applicable

Table 17.6 Experience of different forms of violence

Percentage of women age 15-49 who have ever experienced different forms of violence, by current age, Zambia DHS 2018

Age	Physical violence only	Sexual violence only	Physical and sexual violence	Physical or sexual violence	Number of women
15-19	17.2	3.0	3.7	23.9	2,036
15-17	16.8	3.0	3.0	22.8	1,149
18-19	17.6	2.9	4.7	25.2	886
20-24	24.9	4.9	9.3	39.1	1,863
25-29	28.3	2.6	11.8	42.7	1,611
30-39	28.1	3.0	13.1	44.3	2,487
40-49	30.1	3.1	14.5	47.8	1,507
Total	25.5	3.3	10.4	39.2	9,503

Table 17.7 Experience of violence during pregnancy

Among women age 15-49 who have ever been pregnant, percentage who have ever experienced physical violence during pregnancy, according to background characteristics, Zambia DHS 2018

Background characteristic	Percentage who experienced violence during pregnancy	Number of women who have ever been pregnant
Age		
15-19	3.8	605
20-24	6.0	1,452
25-29	6.4	1,454
30-39	5.9	2,427
40-49	4.1	1,478
Religion		
Catholic	4.9	1,262
Protestant	5.6	6,016
Muslim	(6.4)	42
Other	4.6	97
Residence		
Urban	5.3	3,153
Rural	5.6	4,262
Province		
Central	5.2	633
Copperbelt	6.0	1,047
Eastern	8.2	944
Luapula	3.6	596
Lusaka	4.9	1,379
Muchinga	8.8	432
Northern	4.8	577
North Western	2.8	411
Southern	4.0	935
Western	6.4	462
Marital status		
Never married	3.9	925
Married or living together	5.3	5,298
Divorced/separated/widowed	7.4	1,193
Number of living children		
0	5.0	299
1-2	5.4	3,108
3-4	6.4	2,014
5+	4.8	1,995
Education		
No education	7.3	699
Primary	5.9	3,538
Secondary	4.8	2,800
Higher	3.2	378
Wealth quintile		
Lowest	7.1	1,494
Second	5.5	1,431
Middle	4.6	1,413
Fourth	5.9	1,610
Highest	4.2	1,467
Total	5.5	7,416

Note: Figures in parentheses are based on 25-49 unweighted cases.

Table 17.8 Marital control exercised by husbands

Percentage of ever-married women age 15-49 whose husbands/partners have ever demonstrated specific types of controlling behaviours, according to background characteristics, Zambia DHS 2018

Background characteristic	Percentage of women whose husband/partner: Is jealous or angry if she talks to other men	Frequently accuses her of being unfaithful	Does not permit her to meet her female friends	Tries to limit her contact with her family	Insists on knowing where she is at all times	Displays 3 or more of the specific behaviours	Displays none of the specific behaviours	Number of ever-married women
Age								
15-19	50.0	21.9	11.1	12.4	46.6	24.7	34.6	319
20-24	60.8	32.4	21.5	15.4	54.3	33.8	26.8	1,160
25-29	56.8	30.9	19.9	15.7	52.7	32.7	30.4	1,307
30-39	58.8	31.2	17.8	14.2	54.4	32.0	28.7	2,353
40-49	54.2	28.9	18.3	14.6	48.2	30.2	33.4	1,459
Religion								
Catholic	57.1	32.5	18.5	16.0	54.9	32.9	29.0	1,076
Protestant	57.0	30.2	18.7	14.5	51.3	31.6	30.5	5,400
Muslim	(64.7)	(22.5)	(15.1)	(7.4)	(45.8)	(29.1)	(28.1)	39
Other	78.6	18.8	16.3	12.3	82.8	25.2	11.2	83
Residence								
Urban	58.8	30.9	24.9	16.0	55.7	34.9	27.8	2,740
Rural	56.2	30.1	14.2	13.7	49.8	29.4	31.6	3,858
Province								
Central	47.6	20.9	11.9	10.2	39.1	22.2	43.2	560
Copperbelt	56.9	30.9	25.9	17.5	58.5	35.9	25.6	923
Eastern	61.3	28.8	12.7	22.9	42.4	29.0	29.0	875
Luapula	70.6	38.0	15.6	10.8	67.2	37.2	16.8	527
Lusaka	53.2	23.3	22.2	13.0	45.3	26.7	37.0	1,250
Muchinga	63.2	34.8	32.2	21.3	63.6	40.9	18.6	412
Northern	63.2	40.6	18.9	18.8	70.1	40.0	18.0	535
North Western	46.8	35.3	14.9	7.3	36.5	27.8	46.6	318
Southern	61.0	35.5	15.3	11.2	58.1	34.9	26.3	839
Western	43.9	25.2	12.4	7.4	44.2	25.2	43.9	359
Marital status								
Married or living together	55.9	28.3	16.7	12.8	51.0	29.2	30.7	5,384
Divorced/separated/ widowed	63.4	39.8	27.2	23.0	57.8	42.9	27.1	1,214
Number of living children								
0	56.2	32.4	22.5	12.9	48.0	34.7	31.5	285
1-2	57.8	28.6	20.4	14.8	52.8	31.5	29.2	2,365
3-4	57.5	32.2	19.6	15.3	54.2	33.8	29.8	1,971
5+	56.7	30.5	15.1	14.1	50.4	29.5	31.0	1,976
Employment								
Employed for cash	58.0	31.1	18.8	14.1	52.6	32.2	30.3	3,337
Employed not for cash	62.6	37.2	15.6	15.8	61.3	37.8	23.5	745
Not employed	54.8	27.5	19.3	15.2	49.2	29.2	31.6	2,516
Education								
No education	55.8	34.1	20.4	14.6	51.9	33.6	31.1	673
Primary	58.5	32.6	17.9	15.7	52.2	32.6	28.9	3,334
Secondary	57.9	28.0	18.8	13.7	53.4	31.5	30.0	2,258
Higher	44.5	17.9	21.9	11.7	46.7	20.9	38.9	332
Wealth quintile								
Lowest	58.9	33.5	17.1	15.6	52.4	33.0	28.4	1,357
Second	57.4	33.2	15.3	14.8	52.0	31.9	30.0	1,285
Middle	56.7	29.8	15.2	12.4	51.8	29.0	30.3	1,269
Fourth	58.4	30.5	23.9	17.5	55.7	36.0	28.3	1,427
Highest	54.9	24.8	21.4	12.6	49.0	28.0	33.6	1,260
Woman afraid of husband/partner								
Afraid most of the time	81.0	58.5	37.9	32.4	79.8	64.2	9.4	1,060
Sometimes afraid	60.4	31.7	17.3	13.9	55.5	32.6	26.7	2,654
Never afraid	45.8	18.9	12.8	9.0	39.2	19.0	40.7	2,883
Total	57.3	30.4	18.7	14.7	52.3	31.7	30.0	6,598

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated, or widowed women. Figures in parentheses are based on 25-49 unweighted cases.

Table 17.9 Forms of spousal violence

Percentage of ever-married women age 15-49 who have experienced various forms of violence ever or in the 12 months preceding the survey committed by their current or most recent husband/partner, and any husband/partner, Zambia DHS 2018

Type of violence experienced	Ever experienced	Experienced in the past 12 months	Frequency in the past 12 months	
			Often	Sometimes
SPOUSAL VIOLENCE COMMITTED BY CURRENT OR MOST RECENT HUSBAND/PARTNER[1]				
Physical violence				
Any physical violence	36.6	21.0	4.6	16.4
Pushed her, shook her, or threw something at her	13.5	8.7	2.3	6.5
Slapped her	32.2	17.5	3.4	14.1
Twisted her arm or pulled her hair	9.2	5.7	1.4	4.2
Punched her with his fist or with something that could hurt her	12.4	7.5	1.9	5.6
Kicked her, dragged her, or beat her up	15.4	8.7	2.1	6.6
Tried to choke her or burn her on purpose	3.6	2.5	0.7	1.8
Threatened her or attacked her with a knife, gun, or other weapon	2.9	1.8	0.5	1.3
Sexual violence				
Any sexual violence	14.8	10.7	2.7	8.0
Physically forced her to have sexual intercourse with him when she did not want to	13.6	9.8	2.5	7.3
Physically forced her to perform any other sexual acts she did not want to	6.0	4.0	1.0	2.9
Forced her with threats or in any other way to perform sexual acts she did not want to	4.2	2.7	1.2	1.5
Emotional violence				
Any emotional violence	31.1	22.5	6.0	16.5
Said or did something to humiliate her in front of others	18.7	13.2	3.7	9.5
Threatened to hurt or harm her or someone she cared about	11.3	7.9	2.3	5.5
Insulted her or made her feel bad about herself	22.3	15.5	3.8	11.7
Any form of physical and/or sexual violence	40.2	25.1	6.0	19.1
Any form of emotional and/or physical and/or sexual violence	46.8	32.2	8.6	23.6
SPOUSAL VIOLENCE COMMITTED BY ANY HUSBAND/PARTNER				
Physical violence	38.7	21.1	na	na
Sexual violence	15.7	10.8	na	na
Emotional violence	32.2	22.6	na	na
Any form of physical or sexual violence	42.2	25.3	na	na
Any form of emotional or physical or sexual violence	48.5	32.3	na	na
Number of ever- married women	6,598	6,598	6,598	6,598

na = Not available

[1] Includes current husband/partner for currently married women and most recent husband/partner for divorced, separated, or widowed women

Table 17.10 Spousal violence by background characteristics

Percentage of ever-married women age 15-49 who have ever experienced emotional, physical, or sexual violence committed by their current or most recent husband/partner, according to background characteristics, Zambia DHS 2018

Background characteristic	Emotional violence	Physical violence	Sexual violence	Physical and sexual violence	Physical and sexual and emotional violence	Physical or sexual violence	Physical or sexual or emotional violence	Number of ever-married women
Age								
15-19	17.0	26.9	12.3	8.4	5.1	30.9	36.4	319
20-24	29.2	35.2	16.0	11.1	9.0	40.1	46.2	1,160
25-29	30.7	37.5	14.6	11.5	8.5	40.6	47.7	1,307
30-39	32.5	36.3	14.4	11.2	8.9	39.5	46.4	2,353
40-49	33.9	39.6	15.3	11.6	9.8	43.3	49.4	1,459
Religion								
Catholic	33.3	37.7	15.0	11.8	9.1	40.9	48.8	1,076
Protestant	30.7	36.4	14.8	11.1	8.7	40.1	46.5	5,400
Muslim	(39.2)	(26.6)	(11.3)	(3.9)	(3.4)	(34.1)	(46.0)	39
Other	25.8	40.7	15.1	13.7	12.3	42.2	42.4	83
Residence								
Urban	32.7	35.6	14.4	11.0	9.4	39.0	46.2	2,740
Rural	30.0	37.3	15.1	11.4	8.4	41.1	47.2	3,858
Province								
Central	18.7	29.5	7.9	5.6	3.7	31.8	35.5	560
Copperbelt	37.5	44.2	21.6	17.6	14.9	48.2	54.9	923
Eastern	34.9	37.3	14.2	10.2	8.4	41.2	49.2	875
Luapula	34.0	42.7	20.7	16.0	11.8	47.4	55.5	527
Lusaka	25.2	29.3	7.1	6.0	5.5	30.4	35.2	1,250
Muchinga	41.9	52.1	23.4	17.7	12.4	57.8	66.7	412
Northern	31.4	35.5	18.8	13.4	10.8	40.9	47.7	535
North Western	21.0	22.8	6.4	5.3	4.4	23.9	31.8	318
Southern	35.6	39.1	16.2	10.9	7.6	44.4	51.7	839
Western	26.8	33.0	16.8	12.2	9.2	37.6	43.2	359
Marital status								
Married or living together	27.9	34.2	13.4	9.7	7.2	37.9	44.2	5,384
Divorced/separated/widowed	45.5	47.4	21.2	18.0	16.1	50.6	58.6	1,214
Number of living children								
0	22.3	29.2	10.9	9.0	5.8	31.1	38.4	285
1-2	29.0	33.5	15.7	11.4	9.2	37.8	44.0	2,365
3-4	31.2	37.6	13.6	10.1	7.6	41.1	47.8	1,971
5+	34.8	40.4	15.6	12.4	10.0	43.5	50.3	1,976
Employment								
Employed for cash	33.8	37.1	15.6	11.8	9.7	40.9	47.8	3,337
Employed not for cash	35.9	40.5	18.6	14.0	10.2	45.1	54.2	745
Not employed	26.2	34.8	12.8	9.6	7.3	37.9	43.3	2,516
Education								
No education	33.4	40.1	16.1	11.4	9.3	44.7	52.4	673
Primary	33.1	39.7	16.3	12.6	9.7	43.4	49.6	3,334
Secondary	28.4	32.8	13.1	9.7	7.8	36.2	42.9	2,258
Higher	25.0	24.1	8.9	6.6	6.1	26.4	33.9	332
Wealth quintile								
Lowest	33.4	39.5	17.7	13.2	9.9	44.0	51.2	1,357
Second	31.4	41.1	16.7	12.6	9.4	45.2	51.0	1,285
Middle	32.1	36.3	12.9	10.1	7.9	39.1	46.2	1,269
Fourth	30.2	35.9	15.1	10.3	8.2	40.7	46.4	1,427
Highest	28.3	30.0	11.5	9.8	8.7	31.7	38.7	1,260
Total	31.1	36.6	14.8	11.2	8.8	40.2	46.8	6,598

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated, or widowed women. Figures in parentheses are based on 25-49 unweighted cases.

Table 17.11 Spousal violence by husband's characteristics and empowerment indicators

Percentage of ever-married women age 15-49 who have ever experienced emotional, physical, or sexual violence committed by their current or most recent husband/partner, according to the husband's characteristics and women's empowerment indicators, Zambia DHS 2018

Background characteristic	Emotional violence	Physical violence	Sexual violence	Physical and sexual violence	Physical and sexual and emotional violence	Physical or sexual violence	Physical or sexual or emotional violence	Number of ever-married women
Husband's/partner's education[1]								
No education	28.4	37.7	16.7	10.8	8.4	43.6	49.4	278
Primary	30.5	38.7	16.6	12.6	9.6	42.7	48.5	1,952
Secondary	26.2	31.7	11.4	7.8	5.4	35.3	41.7	2,467
Higher	22.8	24.4	7.2	4.9	4.1	26.7	35.2	484
Don't know/missing	34.6	38.7	17.5	14.3	11.5	41.8	46.4	202
Husband's/partner's alcohol consumption								
Does not drink alcohol	20.7	24.9	9.7	6.6	4.7	28.1	34.1	4,108
Drinks alcohol but is never drunk	(33.7)	(38.2)	(20.1)	(9.9)	(5.3)	(48.4)	(52.2)	35
Is sometimes drunk	38.4	47.4	17.2	12.7	9.3	51.9	59.4	1,617
Is often drunk	68.1	72.9	35.2	31.1	28.2	77.0	84.4	837
Spousal education difference[1]								
Husband better educated	28.3	34.7	13.3	9.9	7.3	38.1	45.0	3,112
Wife better educated	29.8	36.3	13.8	10.4	8.1	39.7	45.7	1,026
Both equally educated	22.9	28.4	12.5	7.3	5.1	33.6	38.4	889
Neither educated	27.1	39.8	13.2	8.5	6.3	44.5	52.0	115
Don't know/missing	32.5	36.6	15.3	12.3	10.0	39.6	44.2	243
Spousal age difference[1]								
Wife older	30.3	31.3	11.0	9.2	6.9	33.1	42.8	161
Wife is same age	30.8	39.8	25.6	18.5	11.8	46.9	48.5	166
Wife 1-4 years younger	29.7	35.3	13.2	9.4	7.2	39.1	45.9	2,008
Wife 5-9 years younger	26.3	34.8	13.8	9.9	7.3	38.7	43.9	2,116
Wife 10 or more years younger	26.6	29.9	10.9	8.2	6.3	32.6	40.4	933
Number of marital control behaviours displayed by husband/partner[2]								
0	9.7	14.4	4.2	2.3	1.4	16.3	19.5	1,981
1-2	26.5	35.4	12.7	8.4	5.7	39.6	46.1	2,523
3-4	53.4	57.3	25.5	20.7	17.2	62.0	71.0	1,707
5	73.3	67.2	36.5	32.9	30.0	70.8	84.2	386
Number of decisions in which women participate[3]								
0	21.6	29.6	12.5	10.4	7.9	31.8	35.7	312
1-2	34.7	39.8	19.0	11.9	8.5	46.9	54.2	1,043
3-4	26.6	33.1	12.0	9.0	6.8	36.0	42.2	4,029
Number of reasons for which wife beating is justified[4]								
0	26.0	29.0	10.0	7.6	6.5	31.4	37.7	3,478
1-2	34.0	43.7	18.1	12.4	9.1	49.3	55.4	1,152
3-4	37.3	46.0	22.2	17.0	12.5	51.2	56.8	1,060
5-6	39.8	45.6	20.8	16.6	13.1	49.8	59.1	908
Woman's father beat her mother								
Yes	41.9	48.9	21.9	16.9	12.8	53.9	61.4	1,881
No	25.9	30.5	11.7	8.7	6.9	33.6	39.8	4,255
Don't know/missing	35.4	42.3	14.4	11.1	9.8	45.6	52.1	461
Woman afraid of husband/partner								
Afraid most of the time	57.9	67.7	33.1	29.0	23.6	71.8	78.0	1,060
Sometimes afraid	34.6	39.8	14.8	10.7	8.3	43.9	51.4	2,654
Never afraid	18.1	22.2	8.1	5.1	3.9	25.2	31.1	2,883
Total	31.1	36.6	14.8	11.2	8.8	40.2	46.8	6,598

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated, or widowed women. Figures in parentheses are based on 25-49 unweighted cases.

[1] Includes only currently married women

[2] According to the wife's report. See Table 17.8 for list of behaviours.

[3] According to the wife's report. Includes only currently married women. See Table 16.9.1 for list of decisions.

[4] According to the wife's report. See Table 16.10.1 for list of reasons.

Table 17.12 Violence by any husband/partner in the last 12 months

Percentage of ever-married women who have experienced emotional, physical, or sexual violence by any husband/partner in the past 12 months, according to background characteristics, Zambia DHS 2018

Background characteristic	Emotional violence	Physical violence	Sexual violence	Physical and sexual violence	Physical and sexual and emotional violence	Physical or sexual violence	Physical or sexual or emotional violence	Number of ever-married women
Age								
15-19	16.3	22.9	11.4	7.7	5.1	26.7	33.5	319
20-24	23.6	24.4	12.7	8.1	6.6	29.0	35.1	1,160
25-29	24.9	22.3	10.6	6.1	4.6	26.8	35.3	1,307
30-39	22.6	20.8	10.7	6.8	5.4	24.6	31.4	2,353
40-49	21.1	17.5	9.3	5.0	4.4	21.8	28.8	1,459
Religion								
Catholic	23.5	20.0	9.8	5.8	4.4	24.0	33.0	1,076
Protestant	22.4	21.3	10.9	6.7	5.4	25.5	32.1	5,400
Muslim	(33.9)	(11.8)	(11.3)	(3.9)	(3.4)	(19.2)	(39.0)	39
Other	20.4	28.0	11.1	8.6	7.8	30.4	32.9	83
Residence								
Urban	24.3	21.2	9.7	6.1	5.2	24.8	32.3	2,740
Rural	21.4	21.0	11.5	6.9	5.3	25.6	32.3	3,858
Province								
Central	12.9	15.4	5.5	2.8	2.3	18.1	22.8	560
Copperbelt	26.6	23.7	13.6	9.2	7.9	28.1	35.2	923
Eastern	23.1	21.4	10.1	7.0	5.5	24.6	33.1	875
Luapula	24.9	24.0	15.4	9.7	6.9	29.8	38.2	527
Lusaka	18.6	18.9	4.8	3.7	3.5	19.9	24.5	1,250
Muchinga	31.4	28.7	18.1	10.6	8.8	36.2	46.3	412
Northern	20.9	15.7	13.3	6.4	4.9	22.6	30.2	535
North Western	13.2	9.7	5.1	3.6	3.1	11.2	17.9	318
Southern	30.8	28.3	14.0	7.2	5.0	35.0	43.5	839
Western	18.3	18.5	12.4	6.7	5.0	24.2	30.0	359
Marital status								
Married or living together	22.5	21.0	11.2	6.4	4.9	25.7	32.8	5,384
Divorced/separated/widowed	23.2	21.6	8.9	7.3	6.6	23.2	30.2	1,214
Number of living children								
0	16.8	19.3	8.2	5.1	2.7	22.4	28.5	285
1-2	22.6	21.7	11.6	7.2	5.9	26.1	33.0	2,365
3-4	22.9	22.0	9.6	6.3	4.7	25.4	32.3	1,971
5+	23.2	19.7	11.2	6.4	5.3	24.6	32.1	1,976
Employment								
Employed for cash	24.6	20.9	10.6	6.9	5.7	24.6	32.7	3,337
Employed not for cash	23.4	20.6	13.1	7.4	4.9	26.3	35.1	745
Not employed	19.7	21.5	10.3	5.9	4.7	25.9	31.1	2,516
Education								
No education	21.9	21.5	11.2	6.8	5.4	25.9	32.5	673
Primary	23.9	22.9	12.4	7.8	6.2	27.5	34.1	3,334
Secondary	22.0	20.0	9.0	5.3	4.3	23.8	31.5	2,258
Higher	15.9	9.8	4.8	2.4	1.7	12.2	19.6	332
Wealth quintile								
Lowest	22.6	23.0	13.5	8.6	6.6	27.8	34.2	1,357
Second	22.8	22.9	12.0	7.0	5.4	27.8	34.9	1,285
Middle	24.7	22.5	10.2	6.4	5.3	26.2	33.1	1,269
Fourth	23.4	23.1	12.0	7.2	5.8	27.9	34.7	1,427
Highest	19.5	13.7	5.7	3.3	2.9	16.1	24.2	1,260
Woman afraid of husband/partner								
Afraid most of the time	42.6	44.8	23.5	18.0	14.9	50.3	57.8	1,060
Sometimes afraid	26.0	23.6	11.1	6.2	5.0	28.5	36.6	2,654
Never afraid	12.2	10.1	5.8	2.7	1.9	13.2	19.0	2,883
Total	22.6	21.1	10.8	6.6	5.2	25.3	32.3	6,598

Note: Any husband/partner includes all current, most recent, and former husbands/partners. Figures in parentheses are based on 25-49 unweighted cases.

Table 17.13 Experience of spousal violence by duration of marriage

Among currently married women age 15-49 who have been married only once, percentage who first experienced physical or sexual violence committed by their current husband/partner by specific exact years since marriage, according to marital duration, Zambia DHS 2018

Years since marriage	Percentage who first experienced spousal physical or sexual violence by exact marital duration				Percentage who have not experienced sexual or physical violence	Number of currently married women who have been married only once
	Before marriage	2 years	5 years	10 years		
<2	1.0	na	na	na	70.5	515
2-4	0.6	18.4	na	na	69.3	635
5-9	0.3	14.4	33.5	na	60.8	1,046
10+	0.7	10.8	24.5	32.7	59.9	2,303
Total	0.7	14.3	27.6	33.2	62.6	4,498

na = Not applicable

Table 17.14 Injuries to women due to spousal violence

Among ever-married women age 15-49 who have experienced violence committed by their current or most recent husband/partner, percentage who have been injured as a result of the violence, by types of injuries, according to type of violence, Zambia DHS 2018

Type of violence experienced	Cuts, bruises, or aches	Eye injuries, sprains, dislocations, or burns	Deep wounds, broken bones, broken teeth, or any other serious injury	Any of these injuries	Number of ever-married women who have experienced physical or sexual violence
Physical violence[1]					
Ever[2]	34.5	12.3	6.4	36.1	2,414
Past 12 months	37.8	15.3	8.0	39.5	1,383
Sexual violence					
Ever[2]	37.9	14.3	7.5	39.3	979
Past 12 months	34.3	14.5	7.0	35.4	705
Physical or sexual violence[1]					
Ever[2]	32.3	11.2	6.1	33.8	2,654
Past 12 months	33.9	13.3	7.2	35.4	1,656

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated, or widowed women.
[1] Excludes women who reported violence only in response to a direct question on violence during pregnancy
[2] Includes in the past 12 months

Table 17.15 Violence by women against their husband by women's background characteristics

Percentage of ever-married women who have committed physical violence against their current or most recent husband/partner when he was not already beating or physically hurting them, ever and in the past 12 months, according to women's own experience of spousal violence and background characteristics, Zambia DHS 2018

Background characteristic	Percentage who committed physical violence against their husband/partner		Number of ever-married women
	Ever[1]	Past 12 months	
Woman's experience of spousal physical violence			
Ever[1]	12.4	8.5	2,414
In the past 12 months	14.5	12.2	1,383
Never	1.8	1.1	4,183
Age			
15-19	2.8	2.8	319
20-24	3.6	2.9	1,160
25-29	5.4	3.9	1,307
30-39	6.4	3.8	2,353
40-49	7.0	4.8	1,459
Religion			
Catholic	5.2	3.7	1,076
Protestant	5.7	3.8	5,400
Muslim	(2.7)	(0.6)	39
Other	8.2	7.5	83
Residence			
Urban	8.5	6.0	2,740
Rural	3.6	2.3	3,858
Province			
Central	2.6	1.8	560
Copperbelt	9.9	7.6	923
Eastern	4.5	3.0	875
Luapula	5.0	2.4	527
Lusaka	6.7	4.8	1,250
Muchinga	5.4	3.7	412
Northern	3.6	2.0	535
North Western	2.2	1.4	318
Southern	7.7	4.8	839
Western	1.7	1.1	359
Marital status			
Married or living together	5.3	3.8	5,384
Divorced/separated/widowed	7.2	3.8	1,214
Employment			
Employed for cash	6.6	4.1	3,337
Employed not for cash	4.2	2.7	745
Not employed	4.8	3.8	2,516
Number of living children			
0	4.0	3.7	285
1-2	5.9	4.3	2,365
3-4	6.6	4.2	1,971
5+	4.8	3.0	1,976
Education			
No education	4.4	2.1	673
Primary	5.2	3.8	3,334
Secondary	6.9	4.7	2,258
Higher	4.8	2.4	332
Wealth quintile			
Lowest	3.5	2.5	1,357
Second	4.5	3.2	1,285
Middle	3.5	2.1	1,269
Fourth	8.3	5.9	1,427
Highest	8.3	5.3	1,260
Total	5.7	3.8	6,598

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated, or widowed women. Figures in parentheses are based on 25-49 unweighted cases.

[1] Includes in the past 12 months

Table 17.16 Violence by women against their husband by husband's characteristics and empowerment indicators

Percentage of ever-married women who have committed physical violence against their current or most recent husband/partner when he was not already beating or physically hurting them, ever and in the past 12 months, according to their husband's characteristics and women's empowerment indicators, Zambia DHS 2018

Background characteristic	Percentage who committed physical violence against their husband/partner		Number of ever-married women
	Ever[1]	Past 12 months	
Husband's/partner's education[2]			
No education	4.8	3.6	278
Primary	4.5	3.4	1,952
Secondary	5.6	4.0	2,467
Higher	6.0	3.6	484
Don't know/missing	9.4	7.5	202
Husband's/partner's alcohol consumption			
Does not drink alcohol	2.9	1.7	4,108
Drinks alcohol but is never drunk	(2.4)	(0.0)	35
Is sometimes drunk	7.7	5.4	1,617
Is often drunk	15.5	11.3	837
Spousal education difference[2]			
Husband better educated	4.8	3.3	3,112
Wife better educated	5.0	4.1	1,026
Both equally educated	6.2	4.7	889
Neither educated	5.0	2.2	115
Don't know/missing	9.8	7.2	243
Spousal age difference[2]			
Wife older	3.6	2.9	161
Wife is same age	3.0	2.2	166
Wife 1-4 years younger	5.0	3.6	2,008
Wife 5-9 years younger	5.2	3.9	2,116
Wife 10 or more years younger	6.9	4.7	933
Number of marital control behaviours displayed by husband/partner[3]			
0	2.3	1.6	1,981
1-2	3.8	2.4	2,523
3-4	10.9	7.5	1,707
5	12.1	8.6	386
Number of decisions in which women participate[4]			
0	3.0	2.3	312
1-2	4.8	3.8	1,043
3-4	5.7	4.0	4,029
Number of reasons for which wife beating is justified[5]			
0	4.7	3.0	3,478
1-2	7.1	4.3	1,152
3-4	7.7	6.5	1,060
5-6	5.3	3.2	908
Woman's father beat her mother			
Yes	8.8	5.6	1,881
No	4.1	3.0	4,255
Don't know/missing	7.3	4.3	461
Woman afraid of husband/partner			
Afraid most of the time	9.2	6.3	1,060
Sometimes afraid	4.6	3.4	2,654
Never afraid	5.3	3.3	2,883
Total	5.7	3.8	6,598

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated, or widowed women. Figures in parentheses are based on 25-49 unweighted cases.

[1] Includes in the past 12 months

[2] Includes only currently married women

[3] According to the wife's report. See Table 17.8 for list of behaviours.

[4] According to the wife's report. Includes only currently married women. See Table 16.9.1 for list of decisions.

[5] According to the wife's report. See Table 16.10.1 for list of reasons.

Table 17.17 Help seeking to stop violence

Percent distribution of women age 15-49 who have ever experienced physical or sexual violence by their help-seeking behaviour, according to type of violence and background characteristics, Zambia DHS 2018

Type of violence/ background characteristic	Sought help to stop violence	Never sought help but told someone	Never sought help, never told anyone	Missing/ don't know	Total	Number of women who have ever experienced any physical or sexual violence
Type of violence experienced						
Physical only	32.5	13.2	54.4	0.0	100.0	2,422
Sexual only	19.5	12.4	68.1	0.0	100.0	317
Both physical and sexual	46.3	13.2	40.6	0.0	100.0	985
Age						
15-19	26.7	15.1	58.3	0.0	100.0	486
20-24	30.1	13.4	56.5	0.0	100.0	728
25-29	33.1	13.3	53.5	0.0	100.0	688
30-39	39.9	13.5	46.6	0.0	100.0	1,102
40-49	39.9	10.7	49.4	0.0	100.0	721
Religion						
Catholic	31.8	16.8	51.4	0.0	100.0	652
Protestant	35.4	12.4	52.2	0.0	100.0	3,009
Muslim	*	*	*	*	100.0	19
Other	(38.3)	(9.0)	(52.7)	(0.0)	100.0	45
Residence						
Urban	31.8	13.6	54.7	0.0	100.0	1,637
Rural	37.6	12.7	49.7	0.0	100.0	2,087
Province						
Central	31.5	16.9	51.6	0.0	100.0	248
Copperbelt	28.1	8.8	63.0	0.0	100.0	665
Eastern	50.0	15.6	34.4	0.0	100.0	499
Luapula	24.5	15.7	59.7	0.0	100.0	358
Lusaka	35.8	13.8	50.3	0.0	100.0	571
Muchinga	26.8	7.6	65.7	0.0	100.0	314
Northern	27.9	18.7	53.4	0.0	100.0	285
North Western	35.4	13.0	51.5	0.0	100.0	120
Southern	40.5	13.0	46.6	0.0	100.0	467
Western	51.6	10.3	38.1	0.0	100.0	197
Marital status						
Never married	26.5	16.5	57.0	0.0	100.0	654
Married or living together	34.9	10.8	54.3	0.0	100.0	2,396
Divorced/separated/widowed	43.7	18.0	38.3	0.0	100.0	674
Number of living children						
0	26.8	15.1	58.1	0.0	100.0	604
1-2	32.4	13.5	54.1	0.0	100.0	1,214
3-4	38.8	13.9	47.3	0.0	100.0	943
5+	39.7	10.5	49.8	0.0	100.0	963
Employment						
Employed for cash	38.1	14.2	47.6	0.0	100.0	1,773
Employed not for cash	43.7	11.3	44.9	0.0	100.0	456
Not employed	28.6	12.3	59.1	0.0	100.0	1,495
Education						
No education	34.5	12.0	53.5	0.0	100.0	359
Primary	38.3	12.9	48.8	0.0	100.0	1,825
Secondary	31.5	12.4	56.1	0.0	100.0	1,374
Higher	28.7	23.2	48.2	0.0	100.0	166
Wealth quintile						
Lowest	38.7	13.0	48.3	0.0	100.0	755
Second	37.9	11.7	50.3	0.0	100.0	767
Middle	34.0	15.9	50.1	0.0	100.0	651
Fourth	33.2	11.3	55.5	0.0	100.0	816
Highest	31.2	14.1	54.8	0.0	100.0	736
Total	35.0	13.1	51.9	0.0	100.0	3,724

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 17.18 Sources for help to stop the violence

Percentage of women age 15-49 who have experienced physical or sexual violence and sought help by sources from which they sought help, according to the type of violence that women reported, Zambia DHS 2018

	Type of violence experienced			Physical or sexual violence
Source	Physical only	Sexual only	Both physical and sexual	
Own family	61.4	68.6	63.5	62.5
Husband/partner's family	44.6	16.1	49.1	44.8
Husband/partner	0.4	2.5	3.0	1.4
Boyfriend	0.0	3.4	0.0	0.2
Friend	4.1	24.2	4.4	5.1
Neighbour	6.1	5.7	6.1	6.1
Religious leader	6.6	5.7	8.2	7.1
Doctor/medical personnel	4.4	0.0	3.8	4.0
Police	12.2	3.7	21.1	14.9
Lawyer	0.8	0.0	1.7	1.1
Social work organisation	2.1	0.0	3.5	2.5
Other	3.4	2.6	4.7	3.9
Number of women who have sought help	786	62	456	1,304

Note: Women can report more than one source from which they sought help.

REFERENCES

Balarajan, Y., U. Ramakrishnan, E. Özaltin, A. H. Shankar, and S. V. Subramanian. 2011. "Anaemia in Low-Income and Middle-Income Countries." *Lancet* 378(9809): 2123-2135.

Centers for Disease Control and Prevention (CDC). 1998. "Recommendations to Prevent and Control Iron Deficiency in the United States." *MMWR Morbidity and Mortality Weekly Report* 47(RR-3): 1-29.

Centers for Disease Control and Prevention (CDC), Division of Global HIV/AIDS (DGHA). 2014a. *Recommendations for HIV Serology Testing in Surveillance*. Atlanta: CDC.

Centers for Disease Control and Prevention (CDC). 2014b. *STDs and HIV—CDC Fact Sheet*. Atlanta: CDC.

Central Statistical Office (CSO) [Zambia], Central Board of Health/Zambia, and ORC Macro. 2003. *Zambia Demographic and Health Survey 2001-2002*. Calverton, Maryland, USA: CSO, Central Board of Health/Zambia, and ORC Macro.

Central Statistical Office (CSO) [Zambia], Ministry of Health (MOH) [Zambia], Tropical Diseases Research Centre (TDRC), University of Zambia, and Macro International Inc. 2009. *Zambia Demographic and Health Survey 2007*. Calverton, Maryland, USA: CSO and Macro International Inc.

Central Statistical Office (CSO) [Zambia], Ministry of Health (MOH) [Zambia], and ICF International. 2014. *Zambia Demographic and Health Survey 2013-14*. Rockville, Maryland, USA: CSO, MOH, and ICF International.

Graham, W., W. Brass, and R. W. Snow. 1989. "Indirect Estimation of Maternal Mortality: The Sisterhood Method." *Studies in Family Planning* 20(3): 125-135.

Joint United Nations Programme on HIV and AIDS (UNAIDS)/World Health Organization (WHO). 2015. *Monitoring the Impact of the HIV Epidemic Using Population-Based Surveys*. Geneva: UNAIDS and WHO.

Korenromp, E. L., Armstrong-Schellenberg, J. R., Williams, B. G., Nalhlen, B. L., and Snow, R. W. 2004. "Impact of Malaria Control on Childhood Anaemia in Africa—A Quantitative Review." *Tropical Medicine & International Health* 9: 1050-1065.

Lancet Commission on Global Surgery. The Commission Process. https://www.lancetglobalsurgery.org/background

Maniruzzaman, M., H. S. Suri, N. Kumar, M. M. Abedin, M. J. Rahman, A. El-Baz, M. Bhoot, J. S. Teji, and J. S. Suri. 2018. "Risk Factors of Neonatal Mortality and Child Mortality in Bangladesh." *J Glob Health* 8(1): 010417.

Ministry of Gender and Child Development (MGCD) [Zambia]. 2015. *The Gender Equity and Equality Act 22 of 2015*. Lusaka, Zambia: MGCD.

Ministry of Health (MOH) [Zambia]. 2013. *Integrated Family Planning Scale-up Plan 2013-2020*. Lusaka, Zambia: MOH.

Ministry of Health (MOH) [Zambia]. 2016. *National Health Strategic Plan 2017-2021*. Lusaka, Zambia: MOH.

Ministry of Health (MOH) [Zambia]. 2017. *Strengthened Expanded Immunisation Programme Implementation Manual 2017-2021*. Lusaka, Zambia: MOH.

Ministry of Health (MOH)/National AIDS Council (NAC) [Zambia]. 2017. *National HIV and AIDS Strategic Framework 2017-2021*. Lusaka, Zambia: MOH/NAC.

Ministry of Home Affairs (MHA) [Zambia]. 2017. *Birth Registration Coverage Survey*. Lusaka, Zambia: MHA.

Ministry of National Development Planning (MNDP) [Zambia]. 2017. *Seventh National Development Plan 2017-2021*. Volume I. Lusaka, Zambia: MNDP.

Ministry of Water Development, Sanitation and Environmental Protection (MWDSEP) [Zambia]. 2018. *2018-2021 Strategic Plan*. Lusaka, Zambia: MWDSEP.

National Malaria Elimination Centre (NMEC). 2014. *Guidelines for the Diagnosis and Treatment of Malaria in Zambia*. Lusaka, Zambia: NMEC, Ministry of Health.

National Malaria Elimination Centre (NMEC). 2017. *National Malaria Elimination Strategic Plan 2017-2021*. Lusaka, Zambia: NMEC, Ministry of Health.

National Malaria Elimination Centre (NMEC). 2018. *Indoor Residual Spraying Guidelines*. Lusaka, Zambia: NMEC, Ministry of Health.

Rutenberg, N., and J. Sullivan. 1991. "Direct and Indirect Estimates of Maternal Mortality from the Sisterhood Method." *Proceedings of the Demographic and Health Surveys World Conference* 3: 1669-1696. Columbia, Maryland, USA: IRD/Macro International Inc.

Stanton, C., N. Abderrahim, and K. Hill. 1997. DHS Maternal Mortality Indicators: An Assessment of Data Quality and Implications for Data Use. DHS Analytical Reports No. 4. Calverton, Maryland, USA: Macro International Inc.

United Nations. 2006. *Secretary-General's In-depth Study on All Forms of Violence against Women*. New York: United Nations.

World Health Organization (WHO). 2003. *Complementary Feeding: Report of the Global Consultation, and Summary of Guiding Principles for Complementary Feeding of the Breastfed Child.* Geneva: WHO.

World Health Organization (WHO). 2004. *A Strategic Framework for Malaria Prevention and Control During Pregnancy in The African Region*. Brazzaville, Congo: WHO Regional Office for Africa. AFR/MAL/04/01.

World Health Organization (WHO). 2005a. *Guiding Principles for Feeding Non-Breastfed Children 6-24 Months of Age.* Geneva: WHO.

World Health Organization (WHO). 2005b. *Report of a WHO Technical Consultation on Birth Spacing.* Geneva: WHO.

World Health Organization (WHO). 2006. *Child Growth Standards*. Geneva: WHO.

World Health Organization (WHO). 2008. *Indicators for Assessing Infant and Young Child Feeding Practices. Part 1 Definitions*. Geneva: WHO.

World Health Organization (WHO). 2013. *Guideline: Updates on the Management of Severe Acute Malnutrition in Infants and Children*. Geneva: WHO.

World Health Organization (WHO). 2016. *Guidelines on HIV Self-Testing and Partner Notification: Supplement to Consolidated Guidelines on HIV Testing Services*. Geneva: WHO.

SAMPLE DESIGN

Appendix A

A.1 INTRODUCTION

This appendix describes the objectives of the survey, the overall sample size, survey domains, and any subsamples used.

The 2018 Zambia Demographic and Health Survey (2018 ZDHS) is a nationwide survey with a nationally representative sample of approximately 13,625 selected households. All women age 15-49 and all men age 15-59 who are usual members of the selected households or who spent the night before the survey in the selected households were eligible for individual interviews. In all households, all women age 15-49 and all children under age 5 were eligible for height and weight measurements and anaemia testing. One woman age 15-49 was selected from each household to complete the domestic violence module. The survey was designed to produce reliable estimates for key indicators at the national level as well as for urban and rural areas and each of the 10 provinces: Central, Copperbelt, Eastern, Luapula, Lusaka, Muchinga, Northern, North Western, Southern, and Western.

A.2 SAMPLE FRAME

The sampling frame used for the 2018 ZDHS is based on the Census of Population and Housing of the Republic of Zambia (CPH) conducted in 2010, provided by the Zambia Statistics Agency. Zambia is divided into 10 provinces. Each province is subdivided into districts, each district into constituencies, and each constituency into wards. In addition to these administrative units, during the 2010 CPH each ward was subdivided into convenient areas called census supervisory areas (CSAs), and in turn each CSA was subdivided into standard enumeration areas (SEAs). An SEA is a geographical area, usually a city block in an urban area or a village in a rural area, consisting of an adequate number of households; each SEA serves as a counting unit for the population census. The current version of the SEA frame of the 2010 CPH has been updated to accommodate the changes in districts and constituencies that occurred between 2010 and 2017. The list of SEAs has census information on households and population counts. Each SEA has a sketch map delineating its boundaries, with identification information and a measure of size, which is the number of residential households enumerated in the 2010 CPH. This list of SEAs was used as the sampling frame of the 2018 ZDHS.

Table A.1 shows the percentage distribution of households by province and by type of residence according to the 2018 ZDHS sampling frame. The table indicates that 45.7% of households in Zambia are in Lusaka (18.3%), Copperbelt (15.2%), and Eastern (12.2%). In addition, 40.3% of households are in urban areas. The percentage of the household population in urban areas varies from 13.8% in Eastern to 82.1% in Lusaka. **Table A.2** indicates the distribution of SEAs and their average size in number of households by province and by type of residence. There are in total 25,631 SEAs; among them, 7,728 are in urban areas and 17,903 are in rural areas. The average SEA size is 110 households; urban SEAs are larger in size, with an average of 147 households per SEA, whereas rural SEAs have an average of 94 households.

Table A.1 Distribution of residential households by provinces and type of residence

Province	Residential households			Percentage	
	Urban	Rural	Total	Provinces	Urban
Central	76,002	198,744	274,746	9.8	27.7
Copperbelt	336,672	90,217	426,889	15.2	78.9
Eastern	47,371	295,534	342,905	12.2	13.8
Luapula	44,254	199,656	243,910	8.7	18.1
Lusaka	422,029	92,051	514,080	18.3	82.1
Muchinga	26,585	127,665	154,250	5.5	17.2
Northern	44,296	196,260	240,556	8.5	18.4
North Western	31,460	110,464	141,924	5.0	22.2
Southern	79,551	206,791	286,342	10.2	27.8
Western	27,196	163,099	190,295	6.8	14.3
Zambia	**1,135,416**	**1,680,481**	**2,815,897**	**100.0**	**40.3**

Source: The 2010 CPH conducted by the Zambia Statistics Agency.

Table A.2 Distribution of SEAs and their average size in number of households by provinces and type of residence

Province	Number of SEAs			Average SEA size		
	Urban	Rural	Total	Urban	Rural	Total
Central	593	2,234	2,827	128	89	97
Copperbelt	2,351	924	3,275	143	98	130
Eastern	245	3,279	3,524	193	90	97
Luapula	334	1,890	2,224	132	106	110
Lusaka	2,767	833	3,600	153	111	143
Muchinga	188	1,470	1,658	141	87	93
Northern	297	2,207	2,504	149	89	96
North Western	198	984	1,182	159	112	120
Southern	541	2,307	2,848	147	90	101
Western	214	1,775	1,989	127	92	96
Zambia	**7,728**	**17,903**	**25,631**	**147**	**94**	**110**

Source: The 2010 CPH conducted by the Zambia Statistics Agency.

A.3 SAMPLE DESIGN AND IMPLEMENTATION

The 2018 ZDHS sample is stratified and selected in two stages. Each province is stratified into urban and rural areas yielding 20 sampling strata. Samples of SEAs are selected independently in each stratum in two stages. Implicit stratification and proportional allocation are achieved at each of the lower administrative levels by sorting the sampling frame within each sampling stratum before sample selection according to administrative units in different levels and by using a probability proportional to size selection at the first stage of sampling.

In the first stage, 545 SEAs were selected with probability proportional to SEA size and with independent selection in each sampling stratum. The sample allocation is given in **Table A.3**. The SEA size is the number of residential households residing in the SEA based on the 2018 ZDHS sampling frame. A household listing operation was carried out in all of the selected sample SEAs, and the resulting lists of households served as the sampling frame for the selection of households in the next stage. Some of the selected SEAs were large in size. In order to minimise the task of household listing, for the selected SEAs with more than 300 households, each large SEA was segmented. Only one segment was selected for the survey with probability proportional to segment size. Household listing was conducted only in the selected segment. Thus, a 2018 ZDHS cluster is either an SEA or a segment of an SEA.

In the last stage of selection, a fixed number of 25 households per cluster was selected with an equal probability systematic selection from the newly created household listing. The survey interviewers interviewed only the pre-selected households. No replacements and no changes of the pre-selected households were allowed in the implementing stages in order to prevent bias. All women age 15-49 and men age 15-59 who are usual members of the selected households or who spent the night before the survey

in the selected households were eligible for the woman's questionnaire and the man's questionnaire, respectively.

Table A.3 shows the allocation of selected SEAs and households according to provinces and urban/rural areas, and **Table A.4** shows the expected number of completed interviews with women and men according to provinces and urban/rural areas. Based on a fixed sample of 25 households per cluster, the survey selected 545 SEAs, 198 in urban areas and 347 in rural areas. A total of 13,625 residential households were selected for the survey, 4,950 in urban areas and 8,675 in rural areas. The sample was expected to result in about 12,219 completed interviews with women age 15-49 (5,105 in urban areas and 7,114 in rural areas) and about 11,043 completed interviews with men age 15-59 (4,429 in urban areas and 6,614 in rural areas).

Table A.3 The 2018 ZDHS sample allocation of SEAs and households by provinces and type of residence

	Number of SEAs allocated			Number of households allocated		
Province	Urban	Rural	Total	Urban	Rural	Total
Central	18	37	55	450	925	1,375
Copperbelt	37	24	61	925	600	1,525
Eastern	15	47	62	375	1,175	1,550
Luapula	15	39	54	375	975	1,350
Lusaka	42	24	66	1,050	600	1,650
Muchinga	12	33	45	300	825	1,125
Northern	15	38	53	375	950	1,325
North Western	13	30	43	325	750	1,075
Southern	19	38	57	475	950	1,425
Western	12	37	49	300	925	1,225
Zambia	**198**	**347**	**545**	**4,950**	**8,675**	**13,625**

Table A.4 The 2018 ZDHS sample allocation of expected completed women and men interviews by province and type of residence

	Expected number of interviews with women age 15-49			Expected number of interviews with men age 15-59		
Province	Urban	Rural	Total	Urban	Rural	Total
Central	464	758	1,222	402	705	1,107
Copperbelt	954	492	1,446	827	457	1,284
Eastern	387	963	1,350	336	896	1,232
Luapula	387	800	1,187	336	743	1,079
Lusaka	1,083	492	1,575	940	457	1,397
Muchinga	309	676	985	268	629	897
Northern	387	780	1,167	336	725	1,061
North Western	335	615	950	291	572	863
Southern	490	780	1,270	425	725	1,150
Western	309	758	1,067	268	705	973
Zambia	**5,105**	**7,114**	**12,219**	**4,429**	**6,614**	**11,043**

The sample allocations were derived using information obtained from the 2013-14 ZDHS. The average number of women age 15-49 per household is 1.180 in urban areas and 0.988 in rural areas; the average number of men age 15-59 per household is 1.101 in urban areas and 0.954 in rural areas; the household completion rate is 91.1% in urban areas and 86.1% in rural areas; the response rate among women age 15-49 is 95.8% in urban areas and 96.5% in rural areas; and the response rate among men age 15-59 is 89.1% in urban areas and 92.9% in rural areas.

A.4 SAMPLE PROBABILITIES AND SAMPLING WEIGHTS

Due to the non-proportional allocation of the sample to different provinces and their urban and rural areas and the possible differences in response rates, sampling weights will be required for any analysis using the 2018 ZDHS data to ensure the actual representativeness of the survey results at the national level and as well as the domain level. Since the 2018 ZDHS sample is a two-stage stratified cluster sample, sampling weights were calculated based on sampling probabilities separately for each sampling stage and for each cluster. The following notations were used:

P_{1hi}: first-stage sampling probability of the i^{th} cluster in stratum h
P_{2hi}: second-stage sampling probability within the i^{th} cluster (households)
P_{hi}: overall sampling probability of any households of the i^{th} cluster in stratum h

Let a_h be the number of SEAs selected in stratum h, M_{hi} the number of households according to the sampling frame in the i^{th} SEA, and $\sum M_{hi}$ the total number of households in the stratum. The probability of selecting the i^{th} SEA in the 2018 ZDHS sample is calculated as follows:

$$\frac{a_h M_{hi}}{\sum M_{hi}}$$

Let b_{hi} be the proportion of households in the selected cluster relative to the total number of households in SEA i in stratum h if the SEA is segmented; otherwise, $b_{hi} = 1$. Then the probability of selecting cluster i in the sample is:

$$P_{1hi} = \frac{a_h M_{hi}}{\sum M_{hi}} \times b_{hi}$$

Let L_{hi} be the number of households listed in the household listing operation in cluster i in stratum h, and let g_{hi} be the number of households selected in the cluster. The second stage's selection probability for each household in the cluster is calculated as follows:

$$P_{2hi} = \frac{g_{hi}}{L_{hi}}$$

The overall selection probability of each household in cluster i of stratum h is therefore the product of the two-stage selection probabilities:

$$P_{hi} = P_{1hi} \times P_{2hi}$$

The sampling weight for each household in cluster i of stratum h is the inverse of its overall selection probability:

$$W_{hi} = 1 / P_{hi}$$

The design weights were adjusted for household non-response and individual non-response to obtain the sampling weights for households and for women and men, respectively. Non-response is adjusted at the sampling stratum level. For the household sampling weight, the household design weight is multiplied by the inverse of the household response rate by stratum. For women's individual sampling weight, the household sampling weight is multiplied by the inverse of women's individual response rate by stratum. After adjusting for non-response, the sampling weights are normalised to obtain the final standard weights that appear in the data files. The normalisation process is done to obtain a total number of unweighted cases equal to the total number of weighted cases at the national level for the total number of households, women, and men. Normalisation is done by multiplying the sampling weight by the estimated sampling fraction obtained from the survey for the household weight and the individual women's and men's weights. The normalised weights are relative weights that are valid for estimating means, proportions, ratios, and rates but are not valid for estimating population totals or for pooled data. A special weight for domestic violence was calculated that accounts for the selection of one woman per household and for module nonresponse. HIV weights were produced that accounted for HIV testing nonresponse among women and men separately.

Table A.5 Sample implementation: Women

Percent distribution of households and eligible women age 15-49 by results of the household and individual interviews, and household, eligible women, and overall women response rates, according to residence and province (unweighted), Zambia DHS 2018

	Residence		Province										
Result	Urban	Rural	Central	Copper-belt	Eastern	Luapula	Lusaka	Mu-chinga	Northern	North Western	Southern	Western	Total
Selected households													
Completed (C)	95.3	93.8	95.1	94.8	93.7	99.4	93.9	95.6	94.0	94.0	92.1	91.3	94.4
Household present but no competent respondent at home (HP)	0.6	0.5	0.7	0.3	0.7	0.0	0.5	0.1	0.9	0.5	1.1	0.4	0.5
Refused (R)	0.4	0.2	0.4	0.3	0.3	0.0	0.4	0.0	0.2	0.4	0.1	0.5	0.3
Dwelling not found (DNF)	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Household absent (HA)	1.1	2.1	1.4	1.0	1.7	0.3	1.5	0.6	1.9	2.0	1.6	5.3	1.7
Dwelling vacant/address not a dwelling (DV)	2.3	2.9	1.7	3.1	3.0	0.2	3.3	3.5	2.4	2.6	4.6	2.0	2.7
Dwelling destroyed (DD)	0.2	0.5	0.5	0.3	0.6	0.1	0.4	0.3	0.6	0.7	0.4	0.4	0.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of sampled households	4,944	8,651	1,375	1,525	1,550	1,350	1,645	1,125	1,325	1,075	1,400	1,225	13,595
Household response rate (HRR)[1]	98.9	99.3	98.7	99.2	98.9	100.0	99.0	99.9	98.9	99.1	98.6	99.0	99.1
Eligible women													
Completed (EWC)	95.6	97.0	98.7	95.3	95.0	95.9	98.0	97.8	95.2	98.3	95.7	94.6	96.4
Not at home (EWNH)	2.9	2.0	0.5	2.9	3.1	2.6	0.9	1.4	4.0	1.1	3.0	4.6	2.4
Postponed (EWP)	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Refused (EWR)	0.9	0.4	0.1	1.3	1.0	0.7	0.3	0.2	0.5	0.5	0.6	0.4	0.6
Partly completed (EWPC)	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Incapacitated (EWI)	0.3	0.4	0.5	0.4	0.7	0.3	0.3	0.4	0.2	0.0	0.5	0.4	0.4
Other (EWO)	0.3	0.1	0.2	0.1	0.1	0.3	0.4	0.1	0.0	0.1	0.0	0.0	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	5,766	8,423	1,416	1,695	1,617	1,474	1,811	1,209	1,301	1,100	1,407	1,159	14,189
Eligible women response rate (EWRR)[2]	95.6	97.0	98.7	95.3	95.0	95.9	98.0	97.8	95.2	98.3	95.7	94.6	96.4
Overall women response rate (ORR)[3]	94.5	96.3	97.4	94.6	94.0	95.9	97.1	97.8	94.2	97.4	94.4	93.6	95.6

[1] Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$\frac{100 * C}{C + HP + P + R + DNF}$$

[2] The eligible women response rate (EWRR) is equivalent to the percentage of interviews completed (EWC).
[3] The overall women response rate (OWRR) is calculated as: OWRR = HRR * EWRR/100.

Table A.6 Sample implementation: Men

Percent distribution of households and eligible men age 15-59 by results of the household and individual interviews, and household, eligible men, and overall men response rates, according to residence and province (unweighted), Zambia DHS 2018

	Residence		Province										
Result	Urban	Rural	Central	Copper-belt	Eastern	Luapula	Lusaka	Mu-chinga	Northern	North Western	Southern	Western	Total
Selected households													
Completed (C)	95.3	93.8	95.1	94.8	93.7	99.4	93.9	95.6	94.0	94.0	92.1	91.3	94.4
Household present but no competent respondent at home (HP)	0.6	0.5	0.7	0.3	0.7	0.0	0.5	0.1	0.9	0.5	1.1	0.4	0.5
Refused (R)	0.4	0.2	0.4	0.3	0.3	0.0	0.4	0.0	0.2	0.4	0.1	0.5	0.3
Dwelling not found (DNF)	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Household absent (HA)	1.1	2.1	1.4	1.0	1.7	0.3	1.5	0.6	1.9	2.0	1.6	5.3	1.7
Dwelling vacant/address not a dwelling (DV)	2.3	2.9	1.7	3.1	3.0	0.2	3.3	3.5	2.4	2.6	4.6	2.0	2.7
Dwelling destroyed (DD)	0.2	0.5	0.5	0.3	0.6	0.1	0.4	0.3	0.6	0.7	0.4	0.4	0.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of sampled households	4,944	8,651	1,375	1,525	1,550	1,350	1,645	1,125	1,325	1,075	1,400	1,225	13,595
Household response rate (HRR)[1]	98.9	99.3	98.7	99.2	98.9	100.0	99.0	99.9	98.9	99.1	98.6	99.0	99.1
Eligible men													
Completed (EMC)	88.6	93.4	96.8	89.3	87.8	91.8	93.2	96.6	89.3	95.4	88.8	88.3	91.6
Not at home (EMNH)	8.6	5.3	2.3	7.3	10.1	6.9	4.4	2.2	9.7	3.1	9.0	9.7	6.6
Postponed (EMP)	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.0
Refused (EMR)	1.5	0.5	0.1	2.3	0.8	0.7	0.7	0.9	0.2	0.6	1.4	1.1	0.9
Partly completed (EMPC)	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incapacitated (EMI)	0.7	0.7	0.7	1.0	1.0	0.6	0.5	0.4	0.7	0.7	0.8	0.7	0.7
Other (EMO)	0.5	0.0	0.1	0.0	0.3	0.0	1.3	0.0	0.0	0.1	0.0	0.1	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of men	5,078	8,173	1,377	1,592	1,647	1,362	1,630	1,112	1,219	960	1,380	972	13,251
Eligible men response rate (EMRR)[2]	88.6	93.4	96.8	89.3	87.8	91.8	93.2	96.6	89.3	95.4	88.8	88.3	91.6
Overall men response rate (ORR)[3]	87.6	92.7	95.6	88.6	86.8	91.8	92.3	96.5	88.3	94.6	87.5	87.4	90.8

[1] Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$\frac{100 * R}{C + HP + P + R + LNT}$$

[2] The eligible men response rate (EMRR) is equivalent to the percentage of interviews completed (EMC).
[3] The overall men response rate (OMRR) is calculated as: OMRR = HRR * EMRR/100.

Table A.7 Coverage of HIV testing by social and demographic characteristics: Women

Percent distribution of interviewed women age 15-49 by HIV testing status, according to social and demographic characteristics (unweighted), Zambia DHS 2018

	HIV test status					
Characteristic	DBS tested[1]	Refused to provide blood	Absent at the time of blood collection	Other/ missing[2]	Total	Number
Marital status						
Never married	95.6	3.5	0.4	0.5	100.0	4,321
Ever had sexual intercourse	95.9	3.2	0.4	0.5	100.0	2,520
Never had sexual intercourse	95.1	3.9	0.4	0.6	100.0	1,801
Married/living together	96.5	3.0	0.2	0.2	100.0	7,597
Divorced or separated	96.2	3.1	0.6	0.1	100.0	1,366
Widowed	95.0	3.8	0.3	1.0	100.0	399
Type of union						
In polygynous union	97.4	2.6	0.0	0.0	100.0	834
In non-polygynous union	96.4	3.1	0.3	0.3	100.0	6,696
Not currently in union	95.7	3.4	0.5	0.4	100.0	6,086
Don't know/missing	97.0	3.0	0.0	0.0	100.0	67
Ever had sexual intercourse						
Yes	96.3	3.1	0.3	0.3	100.0	11,882
No	95.1	3.9	0.4	0.6	100.0	1,801
Currently pregnant						
Pregnant	96.8	3.2	0.0	0.1	100.0	1,109
Not pregnant or not sure	96.1	3.2	0.4	0.3	100.0	12,574
Times slept away from home in past 12 months						
None	96.3	3.0	0.3	0.4	100.0	8,310
1-2	96.4	3.1	0.4	0.2	100.0	3,600
3-4	96.0	3.4	0.2	0.4	100.0	1,025
5+	93.2	5.7	0.9	0.1	100.0	748
Time away in past 12 months						
Away for more than 1 month at a time	95.9	3.5	0.4	0.1	100.0	1,832
Away only for less than 1 month at a time	95.8	3.5	0.4	0.3	100.0	3,541
No time away	96.3	3.0	0.3	0.4	100.0	8,310
Religion						
Catholic	95.5	3.5	0.6	0.3	100.0	2,351
Protestant	96.3	3.1	0.3	0.3	100.0	11,138
Muslim	95.1	4.9	0.0	0.0	100.0	61
Other	96.2	3.8	0.0	0.0	100.0	133
Total	96.1	3.2	0.3	0.3	100.0	13,683

[1] Includes all Dried Blood Samples (DBS) specimens tested at the lab and for which there is a result, i.e., positive, negative, or indeterminate.
[2] Includes (1) other results of blood collection (e.g., technical problem in the field), (2) lost specimens, (3) non-corresponding bar codes, and (4) other lab results such as blood not tested for technical reason, not enough blood to complete the algorithm, etc.

Table A.8 Coverage of HIV testing by social and demographic characteristics: Men

Percent distribution of interviewed men 15-49 by HIV testing status, according to social and demographic characteristics (unweighted), Zambia DHS 2018

Characteristic	HIV test status				Total	Number
	DBS tested[1]	Refused to provide blood	Absent at the time of blood collection	Other/ missing[2]		
Marital status						
Never married	95.6	2.8	1.2	0.4	100.0	5,129
Ever had sexual intercourse	95.8	2.9	1.1	0.3	100.0	3,329
Never had sexual intercourse	95.3	2.6	1.3	0.7	100.0	1,800
Married/living together	94.7	3.9	1.1	0.3	100.0	5,534
Divorced or separated	95.8	3.0	1.0	0.2	100.0	404
Widowed	97.3	0.0	2.7	0.0	100.0	37
Type of union						
In polygynous union	94.2	5.5	0.4	0.0	100.0	274
In non-polygynous union	94.7	3.8	1.1	0.3	100.0	5,260
Not currently in union	95.7	2.8	1.1	0.4	100.0	5,570
Ever had sexual intercourse						
Yes	95.2	3.5	1.1	0.3	100.0	9,304
No	95.3	2.6	1.3	0.7	100.0	1,800
Circumcised						
Yes	94.7	3.4	1.4	0.6	100.0	3,636
No	95.4	3.3	1.0	0.2	100.0	7,460
Don't know/missing	100.0	0.0	0.0	0.0	100.0	8
Times slept away from home in past 12 months						
None	95.3	3.1	1.2	0.4	100.0	6,115
1-2	95.3	3.4	1.0	0.3	100.0	2,766
3-4	94.5	4.2	1.1	0.2	100.0	1,155
5+	95.1	3.3	1.1	0.5	100.0	1,068
Time away in past 12 months						
Away for more than 1 month at a time	95.0	3.5	1.1	0.5	100.0	1,545
Away only for less than 1 month at a time	95.1	3.6	1.0	0.2	100.0	3,444
No time away	95.3	3.1	1.2	0.4	100.0	6,115
Religion						
Catholic	94.9	3.1	1.7	0.3	100.0	2,048
Protestant	95.3	3.3	1.0	0.4	100.0	8,889
Muslim	96.3	3.7	0.0	0.0	100.0	54
Other	90.3	8.8	0.9	0.0	100.0	113
Total 15-49	95.2	3.3	1.1	0.4	100.0	11,104
50-59	95.1	3.8	0.8	0.3	100.0	1,028
Total 15-59	95.2	3.4	1.1	0.3	100.0	12,132

[1] Includes all Dried Blood Spot (DBS) specimens tested at the lab and for which there is a result, i.e., positive, negative, or indeterminate.
[2] Includes (1) other results of blood collection (e.g., technical problem in the field), (2) lost specimens, (3) non-corresponding bar codes, and (4) other lab results such as blood not tested for technical reason, not enough blood to complete the algorithm, etc.

Table A.9 Coverage of HIV testing by sexual behaviour characteristics: Women

Percent distribution of interviewed women age 15-49 who ever had sexual intercourse by HIV test status, according to sexual behaviour characteristics (unweighted), Zambia DHS 2018

Sexual behaviour characteristic	HIV test status				Total	Number
	DBS tested[1]	Refused to provide blood	Absent at the time of blood collection	Other/ missing[2]		
Age at first sexual intercourse						
<16	97.0	2.5	0.3	0.2	100.0	4,940
16-17	96.4	3.2	0.2	0.1	100.0	3,659
18-19	96.0	3.1	0.4	0.6	100.0	1,924
20+	93.6	4.9	0.7	0.8	100.0	1,156
Missing	94.6	4.9	0.0	0.5	100.0	203
Number of lifetime partners						
1	95.9	3.4	0.3	0.4	100.0	4,645
2	96.7	2.7	0.4	0.2	100.0	3,671
3-4	96.3	3.2	0.3	0.2	100.0	2,892
5-9	96.8	2.3	0.5	0.4	100.0	554
10+	97.7	2.3	0.0	0.0	100.0	88
Missing	90.6	9.4	0.0	0.0	100.0	32
Multiple sexual partners in past 12 months						
0	95.0	4.2	0.5	0.3	100.0	1,645
1	96.5	2.9	0.3	0.3	100.0	10,032
2+	97.1	1.5	0.0	1.5	100.0	204
Don't know/missing	100.0	0.0	0.0	0.0	100.0	1
Nonmarital, noncohabiting partners in past 12 months[3]						
0	96.2	3.2	0.3	0.2	100.0	9,274
1	96.5	2.7	0.4	0.4	100.0	2,463
2+	96.6	2.1	0.0	1.4	100.0	145
Condom use at last sexual intercourse in past 12 months						
Used condom	95.6	3.6	0.2	0.6	100.0	1,406
Did not use condom	96.7	2.8	0.3	0.2	100.0	8,831
No sexual intercourse in past 12 months	95.0	4.2	0.5	0.3	100.0	1,645
Condom use at last sexual intercourse with a nonmarital, noncohabiting partner in past 12 months[3]						
Used condom	95.3	3.6	0.3	0.8	100.0	899
Did not use condom	97.1	2.2	0.5	0.2	100.0	1,709
No sexual intercourse with any nonmarital, noncohabiting partners in past 12 months[3]	96.2	3.2	0.3	0.2	100.0	9,274
Prior HIV testing						
Ever tested	96.5	2.9	0.3	0.3	100.0	10,970
Received results	96.5	2.9	0.3	0.3	100.0	10,808
Did not receive results	98.1	1.9	0.0	0.0	100.0	162
Never tested	93.9	5.3	0.7	0.2	100.0	912
Total	96.3	3.1	0.3	0.3	100.0	11,882

[1] Includes all Dried Blood (DBS) specimens tested at the lab and for which there is a result, i.e., positive, negative, or indeterminate.
[2] Includes (1) other results of blood collection (e.g., technical problem in the field), (2) lost specimens, (3) non-corresponding bar codes, and (4) other lab results such as blood not tested for technical reason, not enough blood to complete the algorithm, etc.
[3] Any partner who was not a spouse and did not live with the respondent

Table A.10 Coverage of HIV testing by sexual behaviour characteristics: Men

Percent distribution of interviewed men age 15-49 who ever had sexual intercourse by HIV test status, according to sexual behaviour characteristics (unweighted), Zambia DHS 2018

Sexual behaviour characteristic	HIV test status				Total	Number
	DBS tested[1]	Refused to provide blood	Absent at the time of blood collection	Other/ missing[2]		
Age at first sexual intercourse						
<16	95.4	3.4	1.1	0.1	100.0	2,864
16-17	95.4	3.5	1.0	0.1	100.0	2,141
18-19	95.8	2.5	1.3	0.4	100.0	2,014
20+	94.2	4.4	0.9	0.6	100.0	2,193
Missing	92.4	4.3	3.3	0.0	100.0	92
Number of lifetime partners						
1	95.4	3.7	0.7	0.2	100.0	1,076
2	94.4	3.8	1.5	0.3	100.0	1,436
3-4	95.0	3.6	1.0	0.4	100.0	2,682
5-9	95.9	2.8	1.0	0.2	100.0	2,511
10+	95.4	3.3	1.1	0.2	100.0	1,500
Missing	85.9	12.1	2.0	0.0	100.0	99
Multiple sexual partners in past 12 months						
0	94.4	4.0	1.1	0.5	100.0	997
1	95.2	3.5	1.1	0.3	100.0	6,659
2+	95.6	3.0	1.2	0.2	100.0	1,647
Don't know/missing	100.0	0.0	0.0	0.0	100.0	1
Nonmarital, noncohabiting partners in past 12 months[3]						
0	94.5	4.0	1.2	0.3	100.0	5,689
1	96.5	2.4	0.8	0.3	100.0	2,940
2+	94.5	3.6	1.8	0.1	100.0	675
Condom use at last sexual intercourse in past 12 months						
Used condom	95.2	3.6	1.0	0.3	100.0	2,096
Did not use condom	95.3	3.4	1.1	0.2	100.0	6,211
No sexual intercourse in past 12 months	94.4	4.0	1.1	0.5	100.0	997
Condom use at last sexual intercourse with a nonmarital, noncohabiting partner in past 12 months[3]						
Used condom	96.0	2.9	0.9	0.3	100.0	1,912
Did not use condom	96.5	2.2	1.1	0.2	100.0	1,695
No sexual intercourse with any nonmarital, noncohabiting partners in past 12 months[3]	94.5	4.1	1.2	0.3	100.0	5,697
Paid for sexual intercourse in past 12 months						
Yes	95.7	2.6	1.4	0.3	100.0	646
Used condom	94.8	3.5	1.5	0.3	100.0	344
Did not use condom	96.7	1.7	1.3	0.3	100.0	302
No (no paid sexual intercourse/ no sexual intercourse in last 12 months)	95.1	3.5	1.1	0.3	100.0	8,658
Prior HIV testing						
Ever tested	95.2	3.4	1.1	0.3	100.0	7,696
Received results	95.2	3.4	1.0	0.3	100.0	7,489
Did not receive results	94.2	3.9	1.9	0.0	100.0	207
Never tested	95.0	3.7	1.2	0.2	100.0	1,608
Total 15-49	95.2	3.5	1.1	0.3	100.0	9,304
50-59	95.1	3.8	0.8	0.3	100.0	1,025
Total 15-59	95.1	3.5	1.1	0.3	100.0	10,329

[1] Includes all Dried Blood (DBS) specimens tested at the lab and for which there is a result, i.e., positive, negative, or inconclusive.
[2] Includes (1) other results of blood collection (e.g., technical problem in the field), (2) lost specimens, (3) non-corresponding bar codes, and (4) other lab results such as blood not tested for technical reason, not enough blood to complete the algorithm, etc.
[3] Any partner who was not a spouse and did not live with the respondent

ESTIMATES OF SAMPLING ERRORS

Appendix B

The estimates from a sample survey are affected by two types of errors: nonsampling errors and sampling errors. Nonsampling errors are the results of mistakes made in implementing data collection and data processing, such as failure to locate and interview the correct household, misunderstanding of the questions on the part of either the interviewer or the respondent, and data entry errors. Although numerous efforts were made during the implementation of the 2018 Zambia Demographic and Health Survey (ZDHS) to minimise this type of error, nonsampling errors are impossible to avoid and difficult to evaluate statistically.

Sampling errors, on the other hand, can be evaluated statistically. The sample of respondents selected in the 2018 ZDHS is only one of many samples that could have been selected from the same population, using the same design and expected size. Each of these samples would yield results that differ somewhat from the results of the actual sample selected. Sampling errors are a measure of the variability among all possible samples. Although the degree of variability is not known exactly, it can be estimated from the survey results.

Sampling error is usually measured in terms of the standard error for a particular statistic (mean, percentage, etc.), which is the square root of the variance. The standard error can be used to calculate confidence intervals within which the true value for the population can reasonably be assumed to fall. For example, for any given statistic calculated from a sample survey, the value of that statistic will fall within a range of plus or minus two times the standard error of that statistic in 95% of all possible samples of identical size and design.

If the sample of respondents had been selected as a simple random sample, it would have been possible to use straightforward formulas for calculating sampling errors. However, the 2018 ZDHS sample is the result of a multi-stage stratified design, and, consequently, it was necessary to use more complex formulas. Sampling errors are computed in SAS, using programs developed by ICF. These programs use the Taylor linearisation method to estimate variances for survey estimates that are means, proportions, or ratios. The Jackknife repeated replication method is used for variance estimation of more complex statistics such as fertility and mortality rates.

The Taylor linearisation method treats any percentage or average as a ratio estimate, $r = y/x$, where y represents the total sample value for variable y and x represents the total number of cases in the group or subgroup under consideration. The variance of r is computed using the formula given below, with the standard error being the square root of the variance:

$$SE^2(r) = var(r) = \frac{1-f}{x^2}\sum_{h=1}^{H}\left[\frac{m_h}{m_h-1}\left(\sum_{i=1}^{m_h} z_{hi}^2 - \frac{z_h^2}{m_h}\right)\right]$$

in which

$$z_{hi} = y_{hi} - rx_{hi}\text{, and } z_h = y_h - rx_h$$

where h represents the stratum, which varies from 1 to H;
m_h is the total number of clusters selected in the h^{th} stratum;
y_{hi} is the sum of the weighted values of variable y in the i^{th} cluster in the h^{th} stratum;
x_{hi} is the sum of the weighted number of cases in the i^{th} cluster in the h^{th} stratum; and
f is the overall sampling fraction, which is so small that it is ignored.

The Jackknife repeated replication method derives estimates of complex rates from each of several replications of the parent sample and calculates standard errors for these estimates using simple formulae. Each replication considers *all but one* cluster in the calculation of the estimates. Pseudo-independent replications are thus created. In the 2018 ZDHS, there were 545 non-empty clusters. Hence, 545 replications were created. The variance of a rate r is calculated as follows:

$$SE^2(r) = var(r) = \frac{1}{k(k-1)} \sum_{i=1}^{k} (r_i - r)^2$$

in which

$$r_i = kr - (k-1)r_{(i)}$$

where r is the estimate computed from the full sample of 545 clusters,
$r_{(i)}$ is the estimate computed from the reduced sample of 544 clusters (i^{th} cluster excluded), and
k is the total number of clusters.

In addition to the standard error, the design effect (DEFT) for each estimate is also calculated. The design effect is defined as the ratio between the standard error using the given sample design and the standard error that would result if a simple random sample had been used. A DEFT value of 1.0 indicates that the sample design is as efficient as a simple random sample, while a value greater than 1.0 indicates the increase in the sampling error due to the use of a more complex and less statistically efficient design. Relative standard errors and confidence limits for the estimates are also calculated.

Sampling errors for the 2018 ZDHS are calculated for selected variables considered to be of primary interest. The results are presented in this appendix for the country as a whole, for urban and rural areas, and for each of the 10 provinces. For each variable, the type of statistic (mean, proportion, or rate) and the base population are given in **Table B.1**. **Tables B.2** through **B.14** present the value of the statistic (R), its standard error (SE), the number of unweighted (N) and weighted (WN) cases, the design effect (DEFT), the relative standard error (SE/R), and the 95% confidence limits (R±2SE) for each selected variable. The DEFT is considered undefined when the standard error considering a simple random sample is zero (when the estimate is close to 0 or 1).

The confidence interval (e.g., as calculated for *ideal number of children*) can be interpreted as follows: the overall average from the national sample is 4.567, and its standard error is 0.032. Therefore, to obtain the 95% confidence limits, one adds and subtracts twice the standard error to the sample estimate, that is, 4.567 ± 2 × 0.032. There is a high probability (95%) that the true ideal number of children is between 4.503 and 4.631.

For the total sample, the value of the DEFT, averaged over all indicators in the appendix, is about 1.5. This means that, due to multi-stage clustering of the sample, the average standard error is increased by a factor of 1.5 over that in an equivalent simple random sample.

Table B.1 List of selected variables for sampling errors, Zambia DHS 2018

Variable	Estimate	Base population
HOUSEHOLDS AND POPULATION		
Ownership of at least one ITN	Proportion	Households
Access to an ITN	Proportion	De facto household population
Use of an ITN	Proportion	De facto household population
WOMEN		
Urban residence	Proportion	Women 15-49
Literacy	Proportion	Women 15-49
No education	Proportion	Women 15-49
Secondary education or higher	Proportion	Women 15-49
Never married/never in union	Proportion	Women 15-49
Currently married/in union	Proportion	Women 15-49
Married before age 18	Proportion	Women 20-49
Had sexual intercourse before age 18	Proportion	Women 20-49
Currently pregnant	Proportion	Women 15-49
Know any contraceptive method	Proportion	Currently married women 15-49
Know a modern method	Proportion	Currently married women 15-49
Currently using any method	Proportion	Currently married women 15-49
Currently using a modern method	Proportion	Currently married women 15-49
Currently using IUD	Proportion	Currently married women 15-49
Currently using pill	Proportion	Currently married women 15-49
Currently using male condoms	Proportion	Currently married women 15-49
Currently using injectables	Proportion	Currently married women 15-49
Currently using implants	Proportion	Currently married women 15-49
Currently using female sterilisation	Proportion	Currently married women 15-49
Currently using withdrawal	Proportion	Currently married women 15-49
Currently using rhythm	Proportion	Currently married women 15-49
Used public sector source	Proportion	Current users of modern method
Want no more children	Proportion	Currently married women 15-49
Want to delay next birth at least 2 years	Proportion	Currently married women 15-49
Ideal number of children	Mean	Women 15-49
Mothers protected against tetanus for last birth	Proportion	Women with a live birth in last 5 years
Mothers received antenatal care for last birth	Proportion	Women with a live birth in last 5 years
Births with skilled attendant at delivery	Proportion	Births occurring 1-59 months before survey
Received 3+ doses of SP/Fansidar	Proportion	Last birth of women 15-49 with live births in the last 2 years
Treated with ORS	Proportion	Children under 5 with diarrhoea in past 2 weeks
Sought treatment	Proportion	Children under 5 with diarrhoea in past 2 weeks
Ever had vaccination card	Proportion	Children 12-23 months
Received BCG vaccination	Proportion	Children 12-23 months
Received DPT-HepB-Hib vaccination (3 doses)	Proportion	Children 12-23 months
Received birth dose polio 0 vaccination	Proportion	Children 12-23 months
Received polio vaccination (3 doses)	Proportion	Children 12-23 months
Received pneumococcal vaccination (3 doses)	Proportion	Children 12-23 months
Received rotavirus vaccination (2 doses)	Proportion	Children 12-23 months
Received measles/rubella vaccination	Proportion	Children 12-23 months
Received all basic vaccinations	Proportion	Children 12-23 months
Received all age-appropriate vaccinations (12-23 months)	Proportion	Children 12-23 months
Received measles/rubella vaccination	Proportion	Children 24-35 months
Received all age-appropriate vaccinations (24-35 months)	Proportion	Children 24-35 months
Height-for-age (-2 SD)	Proportion	Children under 5 who are measured
Weight-for-height (-2 SD)	Proportion	Children under 5 who are measured
Weight-for-age (-2 SD)	Proportion	Children under 5 who are measured
Prevalence of anaemia (children 6-59 months)	Proportion	Children 6-59 months who were tested
Prevalence of anaemia (women 15-49)	Proportion	Women 15-49 who were tested
Ever experienced any physical violence since age 15	Proportion	Women 15-49
Ever experienced any sexual violence	Proportion	Women 15-49
Ever experienced any physical/sexual violence by husband/partner	Proportion	Women 15-49
Ever experienced any emotional/physical/sexual violence by any husband/partner	Proportion	Women 15-49
Experienced any emotional/physical/sexual violence in the last 12 months by any husband/partner	Proportion	Women 15-49
Had 2+ sexual partners in past 12 months	Proportion	Women 15-49
Condom use at last sex	Proportion	Women 15-49 with nonmarital, noncohabiting partner in past 12 months
Abstinence among young people (never had sex)	Proportion	Never-married women 15-24
Had an HIV test and received results in past 12 months	Proportion	Women 15-49
Discriminatory attitudes towards people with HIV	Proportion	Women who have heard of HIV/AIDS
Total fertility rate (3 years)	Rate	Woman-years of exposure to childbearing
Neonatal mortality rate[1]	Rate	Children exposed to the risk of mortality
Postneonatal mortality rate[1]	Rate	Children exposed to the risk of mortality
Infant mortality rate[1]	Rate	Children exposed to the risk of mortality
Child mortality rate[1]	Rate	Children exposed to the risk of mortality
Under-5 mortality rate[1]	Rate	Children exposed to the risk of mortality
HIV prevalence among women 15-49	Proportion	Interviewed women with Dried Blood Spot (DBS) specimen tested at the lab
HIV prevalence among pregnant women 15-49	Proportion	Interviewed pregnant women 15-49 with DBS tested at the lab
HIV prevalence among young women 15-24	Proportion	Interviewed women 15-24 with DBS tested at the lab

Continued…

Table B.1—*Continued*

Variable	Estimate	Base population
		MEN
Urban residence	Proportion	Men 15-49
Literacy	Proportion	Men 15-49
No education	Proportion	Men 15-49
Secondary education or higher	Proportion	Men 15-49
Never married/never in union	Proportion	Men 15-49
Currently married/in union	Proportion	Men 15-49
Had sexual intercourse before age 18	Proportion	Men 20-49
Know any contraceptive method	Proportion	Currently married men 15-49
Know a modern method	Proportion	Currently married men 15-49
Want no more children	Proportion	Currently married men 15-49
Want to delay next birth at least 2 years	Proportion	Currently married men 15-49
Ideal number of children	Mean	Men 15-49
Had 2+ sexual partners in past 12 months	Proportion	Men 15-49
Condom use at last sex	Proportion	Men 15-49 with nonmarital, noncohabiting partners in past 12 months
Abstinence among young people (never had sex)	Proportion	Never-married men 15-24
Paid for sexual intercourse in past 12 months	Proportion	Men 15-49
Had an HIV test and received results in past 12 months	Proportion	Men 15-49
Discriminatory attitudes towards people with HIV	Proportion	Men who have heard of HIV/AIDS
HIV prevalence among men 15-49	Proportion	Interviewed men with Dried Blood Spot (DBS) specimen tested at the lab
HIV prevalence among young men 15-24	Proportion	Interviewed men 15-24 with DBS tested at the lab
HIV prevalence among men 15-59	Proportion	Interviewed men 15-59 with DBS tested at the lab
		WOMEN AND MEN
HIV prevalence among respondents 15-49	Proportion	Interviewed women and men 15-49 with DBS tested at the lab
HIV prevalence among respondents 15-24	Proportion	Interviewed women and men 15-24 with DBS tested at the lab

[1] The mortality rates are calculated for 5 years before the survey for the national, urban, and rural samples and for the 10 years before the survey for provincial samples.

Table B.2 Sampling errors: Total sample, Zambia DHS 2018

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative standard error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
HOUSEHOLDS AND POPULATION								
Ownership of at least one ITN	0.783	0.006	12,831	12,831	1.672	0.008	0.771	0.795
De facto population with access to an ITN	0.599	0.007	62,342	62,191	1.944	0.012	0.585	0.613
Household population that slept under an ITN last night	0.464	0.008	62,342	62,191	1.989	0.017	0.448	0.480
WOMEN								
Urban residence	0.466	0.014	13,683	13,683	3.311	0.030	0.438	0.494
Literacy	0.664	0.009	13,683	13,683	2.113	0.013	0.647	0.681
No education	0.077	0.005	13,683	13,683	1.976	0.058	0.068	0.086
Secondary or higher education	0.480	0.011	13,683	13,683	2.466	0.022	0.459	0.501
Never married (never in union)	0.312	0.007	13,683	13,683	1.853	0.024	0.298	0.327
Currently married (in union)	0.559	0.008	13,683	13,683	1.783	0.014	0.544	0.574
Married before age 18	0.366	0.008	10,571	10,683	1.704	0.022	0.351	0.382
Had sexual intercourse before age 18	0.671	0.009	10,571	10,683	1.960	0.013	0.653	0.688
Currently pregnant	0.083	0.004	13,683	13,683	1.565	0.044	0.076	0.091
Know any contraceptive method	0.997	0.001	7,597	7,648	1.228	0.001	0.996	0.999
Know a modern method	0.997	0.001	7,597	7,648	1.257	0.001	0.995	0.998
Currently using any method	0.496	0.008	7,597	7,648	1.350	0.016	0.481	0.512
Currently using a modern method	0.475	0.008	7,597	7,648	1.336	0.016	0.460	0.490
Currently using IUD	0.007	0.001	7,597	7,648	1.281	0.173	0.005	0.010
Currently using pill	0.076	0.004	7,597	7,648	1.205	0.048	0.069	0.084
Currently using male condoms	0.030	0.002	7,597	7,648	1.249	0.081	0.025	0.035
Currently using injectables	0.256	0.007	7,597	7,648	1.304	0.026	0.243	0.269
Currently using implants	0.079	0.005	7,597	7,648	1.498	0.059	0.070	0.088
Currently using female sterilisation	0.015	0.002	7,597	7,648	1.403	0.129	0.011	0.019
Currently using withdrawal	0.017	0.002	7,597	7,648	1.198	0.104	0.014	0.021
Currently using rhythm	0.003	0.001	7,597	7,648	1.240	0.263	0.001	0.004
Using public sector source	0.888	0.008	4,567	4,604	1.616	0.008	0.873	0.903
Want no more children	0.375	0.007	7,597	7,648	1.181	0.018	0.362	0.388
Want to delay next birth at least 2 years	0.353	0.008	7,597	7,648	1.510	0.023	0.336	0.370
Ideal number of children	4.567	0.032	13,340	13,370	1.882	0.007	4.503	4.631
Mothers protected against tetanus for last birth	0.786	0.007	7,372	7,325	1.432	0.009	0.772	0.800
Mothers received antenatal care for last birth	0.969	0.004	7,372	7,325	1.880	0.004	0.961	0.977
Births with skilled attendant at delivery	0.804	0.009	9,959	9,841	2.051	0.012	0.785	0.823
Received 3+ doses of SP/Fansidar	0.587	0.011	3,958	3,905	1.350	0.018	0.566	0.609
Treated with ORS	0.668	0.017	1,432	1,422	1.349	0.026	0.633	0.702
Sought medical treatment for diarrhoea	0.693	0.021	1,432	1,422	1.673	0.030	0.652	0.734
Ever had vaccination card	0.974	0.004	1,928	1,891	1.231	0.005	0.965	0.983
Received BCG vaccination	0.975	0.004	1,928	1,891	1.183	0.004	0.966	0.983
Received DPT-HepB-Hib vaccination (3 doses)	0.921	0.009	1,928	1,891	1.379	0.009	0.904	0.938
Received birth dose polio 0 vaccination	0.664	0.015	1,928	1,891	1.387	0.023	0.634	0.695
Received polio vaccination (3 doses)	0.812	0.012	1,928	1,891	1.288	0.014	0.789	0.836
Received pneumococcal vaccination (3 doses)	0.898	0.010	1,928	1,891	1.415	0.011	0.878	0.918
Received rotavirus vaccination (2 doses)	0.906	0.009	1,928	1,891	1.329	0.010	0.888	0.924
Received measles and rubella vaccination	0.909	0.008	1,928	1,891	1.253	0.009	0.893	0.926
Received all basic vaccinations (12-23 months)	0.750	0.012	1,928	1,891	1.188	0.016	0.726	0.774
Received all age-appropriate vaccinations (12-23 months)	0.460	0.017	1,928	1,891	1.476	0.037	0.426	0.494
Received measles 2 vaccination	0.638	0.019	1,885	1,862	1.715	0.030	0.599	0.677
Received all age-appropriate vaccinations (24-35 months)	0.331	0.015	1,885	1,862	1.347	0.045	0.301	0.361
Height-for-age (-2 SD)	0.346	0.006	9,593	9,609	1.214	0.018	0.333	0.358
Weight-for-height (-2 SD)	0.042	0.003	9,586	9,593	1.410	0.071	0.036	0.048
Weight-for-age (-2 SD)	0.118	0.005	9,680	9,689	1.314	0.038	0.109	0.127
Prevalence of anaemia (children 6-59 months)	0.581	0.008	8,607	8,623	1.392	0.013	0.566	0.596
Prevalence of anaemia (women 15-49)	0.311	0.007	13,226	13,235	1.783	0.023	0.296	0.325
Ever experienced any physical violence since age 15	0.359	0.008	9,503	9,503	1.697	0.023	0.342	0.375
Ever experienced any sexual violence	0.137	0.007	9,503	9,503	1.881	0.048	0.124	0.150
Ever experienced any physical/sexual violence by husband/partner	0.402	0.010	7,358	6,598	1.728	0.025	0.383	0.422
Ever experienced any emotional/physical/sexual violence by any husband/partner	0.485	0.010	7,358	6,598	1.793	0.022	0.465	0.506
Experienced any emotional/physical/sexual violence in the last 12 months by any husband/partner	0.323	0.010	7,358	6,598	1.773	0.030	0.304	0.343
Had 2+ sexual partners in past 12 months	0.015	0.001	13,683	13,683	1.225	0.085	0.012	0.018
Condom use at last sex	0.382	0.040	205	206	1.188	0.106	0.301	0.463
Abstinence among never-married youth (never had sex)	0.478	0.011	3,681	3,617	1.284	0.022	0.457	0.499
Had an HIV test and received results in past 12 months	0.641	0.008	13,683	13,683	1.853	0.012	0.625	0.656
Discriminatory attitudes towards people living with HIV	0.268	0.007	13,370	13,394	1.805	0.026	0.255	0.282
Total fertility rate (last 3 years)	4.685	0.104	38,080	38,250	1.638	0.022	4.477	4.893
Neonatal mortality (last 0-4 years)	27.441	2.178	9,936	9,814	1.220	0.079	23.084	31.798
Postneonatal mortality (last 0-4 years)	14.459	1.395	9,956	9,836	1.148	0.096	11.669	17.249
Infant mortality (last 0-4 years)	41.900	2.563	9,946	9,828	1.192	0.061	36.775	47.025
Child mortality (last 0-4 years)	19.416	2.119	9,804	9,730	1.261	0.109	15.178	23.654
Under-5 mortality (last 0-4 years)	60.503	3.376	10,020	9,899	1.218	0.056	53.751	67.255
HIV prevalence among women 15-49	0.142	0.006	13,155	12,817	1.827	0.039	0.131	0.153
HIV prevalence among pregnant women 15-49	0.103	0.013	1,073	1,056	1.409	0.127	0.077	0.129
HIV prevalence among young women 15-24	0.056	0.006	5,593	5,393	1.876	0.103	0.044	0.067

Continued…

Table B.2—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative standard error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
MEN								
Urban residence	0.448	0.016	11,104	11,177	3.302	0.035	0.417	0.480
Literacy	0.818	0.006	11,104	11,177	1.615	0.007	0.806	0.830
No education	0.040	0.003	11,104	11,177	1.749	0.081	0.033	0.046
Secondary or higher education	0.584	0.009	11,104	11,177	2.026	0.016	0.565	0.603
Never married (in union)	0.460	0.006	11,104	11,177	1.358	0.014	0.447	0.473
Currently married (in union)	0.499	0.006	11,104	11,177	1.340	0.013	0.486	0.511
Had first sexual intercourse before age 18	0.440	0.009	8,252	8,396	1.685	0.021	0.422	0.459
Knows any contraceptive method	0.999	0.000	5,534	5,572	0.939	0.000	0.998	1.000
Knows any modern contraceptive method	0.999	0.000	5,534	5,572	0.939	0.000	0.998	1.000
Want no more children	0.271	0.009	5,534	5,572	1.441	0.032	0.254	0.288
Want to delay birth at least 2 years	0.467	0.009	5,534	5,572	1.291	0.019	0.450	0.484
Ideal number of children	4.916	0.047	10,961	11,002	1.881	0.010	4.822	5.010
Had 2+ sexual partners in past 12 months	0.153	0.005	11,104	11,177	1.547	0.034	0.143	0.164
Condom use at last sex	0.278	0.013	1,648	1,716	1.151	0.046	0.252	0.303
Abstinence among never-married youth (never had sex)	0.413	0.011	4,296	4,289	1.400	0.025	0.392	0.434
Had paid sex in past 12 months	0.059	0.003	11,104	11,177	1.478	0.056	0.053	0.066
Had HIV test and received results in past 12 months	0.524	0.008	11,104	11,177	1.667	0.015	0.508	0.540
Discriminatory attitudes towards people living with HIV	0.233	0.007	10,991	11,069	1.669	0.029	0.219	0.246
HIV prevalence among men 15-49	0.075	0.003	10,569	10,950	1.355	0.046	0.068	0.082
HIV prevalence among young men 15-24	0.018	0.002	4,651	4,762	1.284	0.140	0.013	0.023
HIV prevalence among men 15-59	0.083	0.004	11,547	11,885	1.427	0.044	0.076	0.091
WOMEN AND MEN								
HIV prevalence among respondents 15-49	0.111	0.004	23,724	23,767	1.936	0.036	0.103	0.119
HIV prevalence among respondents 15-24	0.038	0.003	10,244	10,154	1.723	0.086	0.032	0.045

Table B.3 Sampling errors: Urban sample, Zambia DHS 2018

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative standard error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
HOUSEHOLDS AND POPULATION								
Ownership of at least one ITN	0.731	0.010	4,714	5,441	1.591	0.014	0.710	0.751
De facto population with access to an ITN	0.586	0.011	21,676	24,789	1.715	0.019	0.564	0.608
Household population that slept under an ITN last night	0.420	0.012	21,676	24,789	1.825	0.029	0.395	0.445
WOMEN								
Urban residence	1.000	0.000	5,513	6,374	na	0.000	1.000	1.000
Literacy	0.805	0.012	5,513	6,374	2.261	0.015	0.781	0.829
No education	0.033	0.004	5,513	6,374	1.629	0.118	0.025	0.041
Secondary or higher education	0.688	0.016	5,513	6,374	2.561	0.023	0.656	0.720
Never married (never in union)	0.381	0.014	5,513	6,374	2.104	0.036	0.353	0.409
Currently married (in union)	0.483	0.014	5,513	6,374	2.112	0.029	0.455	0.512
Married before age 18	0.274	0.014	4,296	5,051	2.039	0.051	0.246	0.302
Had sexual intercourse before age 18	0.571	0.016	4,296	5,051	2.151	0.028	0.538	0.603
Currently pregnant	0.064	0.007	5,513	6,374	2.113	0.108	0.050	0.078
Know any contraceptive method	1.000	0.000	2,595	3,080	0.739	0.000	0.999	1.000
Know a modern method	1.000	0.000	2,595	3,080	0.739	0.000	0.999	1.000
Currently using any method	0.543	0.013	2,595	3,080	1.363	0.025	0.516	0.570
Currently using a modern method	0.526	0.013	2,595	3,080	1.283	0.024	0.501	0.551
Currently using IUD	0.012	0.003	2,595	3,080	1.185	0.209	0.007	0.017
Currently using pill	0.107	0.007	2,595	3,080	1.227	0.070	0.092	0.121
Currently using male condoms	0.046	0.005	2,595	3,080	1.309	0.117	0.035	0.057
Currently using injectables	0.244	0.010	2,595	3,080	1.238	0.043	0.223	0.265
Currently using implants	0.095	0.008	2,595	3,080	1.418	0.086	0.078	0.111
Currently using female sterilisation	0.012	0.003	2,595	3,080	1.271	0.226	0.007	0.017
Currently using withdrawal	0.012	0.002	2,595	3,080	1.118	0.195	0.008	0.017
Currently using rhythm	0.004	0.001	2,595	3,080	1.151	0.370	0.001	0.006
Using public sector source	0.839	0.014	1,862	2,162	1.588	0.016	0.812	0.866
Want no more children	0.399	0.011	2,595	3,080	1.140	0.027	0.377	0.421
Want to delay next birth at least 2 years	0.313	0.015	2,595	3,080	1.634	0.048	0.284	0.343
Ideal number of children	4.050	0.038	5,451	6,306	1.692	0.009	3.973	4.126
Mothers protected against tetanus for last birth	0.844	0.010	2,411	2,811	1.383	0.012	0.823	0.864
Mothers received antenatal care for last birth	0.992	0.003	2,411	2,811	1.462	0.003	0.987	0.997
Births with skilled attendant at delivery	0.931	0.008	2,987	3,489	1.605	0.009	0.914	0.948
Received 3+ doses of SP/Fansidar	0.646	0.019	1,179	1,340	1.324	0.029	0.608	0.683
Treated with ORS	0.698	0.030	413	493	1.328	0.044	0.637	0.759
Sought medical treatment for diarrhoea	0.609	0.043	413	493	1.792	0.071	0.523	0.695
Ever had vaccination card	0.986	0.005	590	666	1.061	0.005	0.976	0.997
Received BCG vaccination	0.996	0.002	590	666	0.728	0.002	0.992	1.000
Received DPT-HepB-Hib vaccination (3 doses)	0.947	0.011	590	666	1.206	0.012	0.924	0.970
Received birth dose polio 0 vaccination	0.855	0.029	590	666	1.954	0.034	0.797	0.913
Received polio vaccination (3 doses)	0.824	0.020	590	666	1.229	0.024	0.785	0.864
Received pneumococcal vaccination (3 doses)	0.915	0.016	590	666	1.407	0.018	0.882	0.948
Received rotavirus vaccination (2 doses)	0.927	0.013	590	666	1.121	0.014	0.902	0.953
Received measles and rubella vaccination	0.918	0.013	590	666	1.121	0.014	0.892	0.943
Received all basic vaccinations (12-23 months)	0.770	0.019	590	666	1.045	0.024	0.733	0.807
Received all age-appropriate vaccinations (12-23 months)	0.601	0.037	590	666	1.793	0.062	0.526	0.675
Received measles 2 vaccination	0.641	0.042	572	658	2.045	0.065	0.558	0.725
Received all age-appropriate vaccinations (24-35 months)	0.434	0.033	572	658	1.541	0.076	0.368	0.499
Height-for-age (-2 SD)	0.321	0.011	2,849	3,320	1.211	0.035	0.299	0.344
Weight-for-height (-2 SD)	0.050	0.006	2,843	3,307	1.498	0.124	0.037	0.062
Weight-for-age (-2 SD)	0.108	0.009	2,871	3,341	1.522	0.084	0.089	0.126
Prevalence of anaemia (children 6-59 months)	0.581	0.014	2,557	2,982	1.402	0.024	0.553	0.609
Prevalence of anaemia (women 15-49)	0.321	0.013	5,293	6,131	1.979	0.040	0.296	0.346
Ever experienced any physical violence since age 15	0.342	0.013	3,477	4,383	1.617	0.038	0.316	0.368
Ever experienced any sexual violence	0.127	0.011	3,477	4,383	2.000	0.089	0.105	0.150
Ever experienced any physical/sexual violence by husband/partner	0.390	0.016	2,459	2,740	1.657	0.042	0.358	0.423
Ever experienced any emotional/physical/sexual violence by any husband/partner	0.473	0.018	2,459	2,740	1.754	0.037	0.438	0.509
Experienced any emotional/physical/sexual violence in the last 12 months by any husband/partner	0.323	0.018	2,459	2,740	1.901	0.056	0.287	0.359
Had 2+ sexual partners in past 12 months	0.019	0.002	5,513	6,374	1.251	0.123	0.014	0.023
Condom use at last sex	0.464	0.056	111	118	1.177	0.121	0.352	0.576
Abstinence among never-married youth (never had sex)	0.506	0.015	1,758	1,954	1.229	0.029	0.477	0.535
Had an HIV test and received results in past 12 months	0.670	0.011	5,513	6,374	1.782	0.017	0.647	0.692
Discriminatory attitudes towards people living with HIV	0.195	0.011	5,458	6,338	1.981	0.055	0.174	0.216
Total fertility rate (last 3 years)	3.410	0.091	15,436	17,980	1.493	0.027	3.229	3.592
Neonatal mortality (last 0-4 years)	29.858	4.411	2,983	3,486	1.281	0.148	21.036	38.680
Postneonatal mortality (last 0-4 years)	13.683	2.425	2,991	3,500	1.123	0.177	8.834	18.532
Infant mortality (last 0-4 years)	43.541	5.024	2,985	3,489	1.253	0.115	33.493	53.589
Child mortality (last 0-4 years)	21.896	4.839	2,993	3,539	1.452	0.221	12.218	31.574
Under-5 mortality (last 0-4 years)	64.483	6.999	3,010	3,517	1.271	0.109	50.485	78.482
HIV prevalence among women 15-49	0.203	0.009	5,242	5,971	1.644	0.045	0.185	0.221
HIV prevalence among pregnant women 15-49	0.173	0.033	302	372	1.499	0.189	0.108	0.239
HIV prevalence among young women 15-24	0.075	0.011	2,235	2,489	1.934	0.144	0.053	0.096

Continued…

Table B.3—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative standard error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
MEN								
Urban residence	1.000	0.000	4,191	5,013	na	0.000	1.000	1.000
Literacy	0.910	0.007	4,191	5,013	1.592	0.008	0.896	0.924
No education	0.015	0.003	4,191	5,013	1.415	0.177	0.010	0.020
Secondary or higher education	0.774	0.012	4,191	5,013	1.795	0.015	0.750	0.797
Never married (in union)	0.511	0.011	4,191	5,013	1.399	0.021	0.490	0.533
Currently married (in union)	0.433	0.011	4,191	5,013	1.372	0.024	0.412	0.454
Had first sexual intercourse before age 18	0.349	0.013	3,171	3,858	1.524	0.037	0.323	0.375
Knows any contraceptive method	1.000	0.000	1,780	2,170	0.600	0.000	0.999	1.000
Knows any modern contraceptive method	1.000	0.000	1,780	2,170	0.600	0.000	0.999	1.000
Want no more children	0.270	0.017	1,780	2,170	1.631	0.064	0.236	0.304
Want to delay birth at least 2 years	0.454	0.015	1,780	2,170	1.265	0.033	0.424	0.484
Ideal number of children	4.235	0.049	4,165	4,961	1.713	0.012	4.136	4.334
Had 2+ sexual partners in past 12 months	0.118	0.007	4,191	5,013	1.313	0.056	0.105	0.131
Condom use at last sex	0.360	0.026	524	591	1.237	0.072	0.308	0.412
Abstinence among never-married youth (never had sex)	0.474	0.017	1,709	2,006	1.395	0.036	0.440	0.507
Had paid sex in past 12 months	0.051	0.005	4,191	5,013	1.480	0.098	0.041	0.061
Had HIV test and received results in past 12 months	0.558	0.014	4,191	5,013	1.794	0.025	0.530	0.586
Discriminatory attitudes towards people living with HIV	0.174	0.009	4,161	4,972	1.512	0.051	0.156	0.192
HIV prevalence among men 15-49	0.106	0.006	3,903	4,915	1.247	0.058	0.093	0.118
HIV prevalence among young men 15-24	0.027	0.005	1,724	2,126	1.318	0.190	0.017	0.038
HIV prevalence among men 15-59	0.115	0.006	4,181	5,237	1.306	0.056	0.102	0.127
WOMEN AND MEN								
HIV prevalence among respondents 15-49	0.159	0.007	9,145	10,886	1.719	0.041	0.146	0.172
HIV prevalence among respondents 15-24	0.053	0.006	3,959	4,615	1.757	0.118	0.040	0.065

na = Not applicable

Table B.4 Sampling errors: Rural sample, Zambia DHS 2018

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative standard error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
HOUSEHOLDS AND POPULATION								
Ownership of at least one ITN	0.821	0.008	8,117	7,390	1.797	0.009	0.806	0.836
De facto population with access to an ITN	0.608	0.009	40,666	37,401	2.129	0.015	0.589	0.626
Household population that slept under an ITN last night	0.494	0.011	40,666	37,401	2.176	0.022	0.472	0.516
WOMEN								
Urban residence	0.000	0.000	8,170	7,309	na	na	0.000	0.000
Literacy	0.541	0.010	8,170	7,309	1.888	0.019	0.520	0.562
No education	0.115	0.007	8,170	7,309	2.086	0.064	0.100	0.130
Secondary or higher education	0.299	0.010	8,170	7,309	1.977	0.033	0.279	0.319
Never married (never in union)	0.252	0.007	8,170	7,309	1.393	0.027	0.239	0.266
Currently married (in union)	0.625	0.008	8,170	7,309	1.429	0.012	0.610	0.640
Married before age 18	0.449	0.009	6,275	5,632	1.370	0.019	0.432	0.466
Had sexual intercourse before age 18	0.760	0.008	6,275	5,632	1.456	0.010	0.744	0.776
Currently pregnant	0.100	0.004	8,170	7,309	1.180	0.039	0.092	0.107
Know any contraceptive method	0.996	0.001	5,002	4,568	1.311	0.001	0.993	0.998
Know a modern method	0.995	0.001	5,002	4,568	1.338	0.001	0.992	0.998
Currently using any method	0.464	0.010	5,002	4,568	1.383	0.021	0.445	0.484
Currently using a modern method	0.440	0.010	5,002	4,568	1.403	0.022	0.421	0.460
Currently using IUD	0.004	0.001	5,002	4,568	1.321	0.306	0.001	0.006
Currently using pill	0.056	0.004	5,002	4,568	1.173	0.068	0.048	0.064
Currently using male condoms	0.020	0.002	5,002	4,568	1.164	0.117	0.015	0.024
Currently using injectables	0.264	0.008	5,002	4,568	1.343	0.032	0.247	0.280
Currently using implants	0.069	0.005	5,002	4,568	1.491	0.078	0.058	0.079
Currently using female sterilisation	0.018	0.003	5,002	4,568	1.478	0.156	0.012	0.023
Currently using withdrawal	0.020	0.002	5,002	4,568	1.227	0.121	0.015	0.025
Currently using rhythm	0.002	0.001	5,002	4,568	1.306	0.376	0.001	0.004
Using public sector source	0.931	0.008	2,705	2,442	1.619	0.008	0.916	0.947
Want no more children	0.359	0.008	5,002	4,568	1.194	0.023	0.342	0.375
Want to delay next birth at least 2 years	0.380	0.009	5,002	4,568	1.243	0.022	0.363	0.397
Ideal number of children	5.028	0.037	7,889	7,064	1.586	0.007	4.953	5.103
Mothers protected against tetanus for last birth	0.750	0.009	4,961	4,513	1.533	0.013	0.731	0.769
Mothers received antenatal care for last birth	0.955	0.006	4,961	4,513	2.011	0.006	0.943	0.967
Births with skilled attendant at delivery	0.734	0.013	6,972	6,352	2.109	0.017	0.709	0.760
Received 3+ doses of SP/Fansidar	0.557	0.013	2,779	2,564	1.388	0.023	0.531	0.583
Treated with ORS	0.652	0.021	1,019	929	1.389	0.032	0.610	0.694
Sought medical treatment for diarrhoea	0.738	0.018	1,019	929	1.299	0.024	0.702	0.774
Ever had vaccination card	0.967	0.006	1,338	1,225	1.306	0.007	0.955	0.980
Received BCG vaccination	0.963	0.006	1,338	1,225	1.255	0.007	0.950	0.976
Received DPT-HepB-Hib vaccination (3 doses)	0.907	0.011	1,338	1,225	1.449	0.013	0.884	0.930
Received birth dose polio 0 vaccination	0.561	0.018	1,338	1,225	1.336	0.032	0.525	0.597
Received polio vaccination (3 doses)	0.806	0.014	1,338	1,225	1.334	0.018	0.777	0.835
Received pneumococcal vaccination (3 doses)	0.889	0.012	1,338	1,225	1.421	0.014	0.865	0.913
Received rotavirus vaccination (2 doses)	0.894	0.012	1,338	1,225	1.436	0.013	0.870	0.918
Received measles and rubella vaccination	0.905	0.011	1,338	1,225	1.338	0.012	0.883	0.926
Received all basic vaccinations (12-23 months)	0.739	0.015	1,338	1,225	1.283	0.021	0.709	0.770
Received all age-appropriate vaccinations (12-23 months)	0.383	0.018	1,338	1,225	1.342	0.047	0.348	0.419
Received measles 2 vaccination	0.636	0.019	1,313	1,204	1.453	0.031	0.597	0.675
Received all age-appropriate vaccinations (24-35 months)	0.275	0.016	1,313	1,204	1.309	0.059	0.243	0.307
Height-for-age (-2 SD)	0.359	0.007	6,744	6,289	1.207	0.020	0.344	0.373
Weight-for-height (-2 SD)	0.038	0.003	6,743	6,287	1.334	0.084	0.032	0.045
Weight-for-age (-2 SD)	0.124	0.005	6,809	6,348	1.180	0.040	0.114	0.134
Prevalence of anaemia (children 6-59 months)	0.582	0.009	6,050	5,641	1.390	0.015	0.564	0.599
Prevalence of anaemia (women 15-49)	0.302	0.007	7,933	7,104	1.455	0.025	0.287	0.317
Ever experienced any physical violence since age 15	0.372	0.011	6,026	5,120	1.770	0.030	0.350	0.394
Ever experienced any sexual violence	0.145	0.008	6,026	5,120	1.727	0.054	0.130	0.161
Ever experienced any physical/sexual violence by husband/partner	0.411	0.012	4,899	3,858	1.771	0.030	0.386	0.436
Ever experienced any emotional/physical/sexual violence by any husband/partner	0.494	0.013	4,899	3,858	1.802	0.026	0.468	0.520
Experienced any emotional/physical/sexual violence in the last 12 months by any husband/partner	0.323	0.011	4,899	3,858	1.578	0.033	0.302	0.344
Had 2+ sexual partners in past 12 months	0.012	0.001	8,170	7,309	1.145	0.115	0.009	0.015
Condom use at last sex	0.272	0.053	94	88	1.150	0.195	0.166	0.379
Abstinence among never-married youth (never had sex)	0.445	0.015	1,923	1,663	1.328	0.034	0.415	0.475
Had an HIV test and received results in past 12 months	0.615	0.010	8,170	7,309	1.856	0.016	0.595	0.635
Discriminatory attitudes towards people living with HIV	0.334	0.010	7,912	7,056	1.831	0.029	0.315	0.354
Total fertility rate (last 3 years)	5.832	0.112	22,644	20,270	1.541	0.019	5.608	6.056
Neonatal mortality (last 0-4 years)	26.108	2.354	6,953	6,329	1.159	0.090	21.401	30.815
Postneonatal mortality (last 0-4 years)	14.898	1.709	6,965	6,336	1.177	0.115	11.479	18.317
Infant mortality (last 0-4 years)	41.006	2.863	6,961	6,339	1.146	0.070	35.280	46.732
Child mortality (last 0-4 years)	18.004	1.873	6,811	6,191	1.044	0.104	14.259	21.750
Under-5 mortality (last 0-4 years)	58.272	3.507	7,010	6,381	1.152	0.060	51.257	65.287
HIV prevalence among women 15-49	0.089	0.005	7,913	6,846	1.517	0.055	0.079	0.099
HIV prevalence among pregnant women 15-49	0.065	0.010	771	684	1.148	0.157	0.045	0.086
HIV prevalence among young women 15-24	0.040	0.005	3,358	2,903	1.394	0.118	0.030	0.049

Continued…

Table B.4—Continued

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative standard error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
MEN								
Urban residence	0.000	0.000	6,913	6,165	na	na	0.000	0.000
Literacy	0.743	0.009	6,913	6,165	1.659	0.012	0.725	0.760
No education	0.060	0.006	6,913	6,165	1.947	0.093	0.049	0.071
Secondary or higher education	0.429	0.011	6,913	6,165	1.836	0.025	0.407	0.451
Never married (in union)	0.418	0.008	6,913	6,165	1.275	0.018	0.403	0.434
Currently married (in union)	0.552	0.008	6,913	6,165	1.309	0.014	0.536	0.568
Had first sexual intercourse before age 18	0.518	0.011	5,081	4,539	1.529	0.021	0.496	0.539
Knows any contraceptive method	0.999	0.001	3,754	3,402	1.028	0.001	0.997	1.000
Knows any modern contraceptive method	0.999	0.001	3,754	3,402	1.028	0.001	0.997	1.000
Want no more children	0.272	0.009	3,754	3,402	1.220	0.033	0.254	0.289
Want to delay birth at least 2 years	0.475	0.010	3,754	3,402	1.286	0.022	0.454	0.496
Ideal number of children	5.475	0.071	6,796	6,041	1.958	0.013	5.333	5.617
Had 2+ sexual partners in past 12 months	0.183	0.008	6,913	6,165	1.620	0.041	0.167	0.198
Condom use at last sex	0.235	0.014	1,124	1,125	1.107	0.060	0.207	0.263
Abstinence among never-married youth (never had sex)	0.360	0.013	2,587	2,283	1.386	0.036	0.333	0.386
Had paid sex in past 12 months	0.066	0.004	6,913	6,165	1.450	0.066	0.057	0.074
Had HIV test and received results in past 12 months	0.496	0.008	6,913	6,165	1.370	0.017	0.480	0.513
Discriminatory attitudes towards people living with HIV	0.281	0.009	6,830	6,097	1.691	0.033	0.262	0.299
HIV prevalence among men 15-49	0.050	0.004	6,666	6,035	1.333	0.071	0.043	0.057
HIV prevalence among young men 15-24	0.010	0.002	2,927	2,636	1.056	0.194	0.006	0.014
HIV prevalence among men 15-59	0.059	0.004	7,366	6,648	1.347	0.063	0.051	0.066
WOMEN AND MEN								
HIV prevalence among respondents 15-49	0.071	0.004	14,579	12,881	1.727	0.052	0.064	0.078
HIV prevalence among respondents 15-24	0.026	0.003	6,285	5,539	1.313	0.102	0.020	0.031

na = Not applicable

Table B.5 Sampling errors: Central sample, Zambia DHS 2018

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative standard error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
HOUSEHOLDS AND POPULATION								
Ownership of at least one ITN	0.714	0.023	1,308	1,134	1.834	0.032	0.668	0.760
De facto population with access to an ITN	0.533	0.027	6,468	5,650	2.181	0.051	0.478	0.587
Household population that slept under an ITN last night	0.358	0.019	6,468	5,650	1.613	0.054	0.319	0.397
WOMEN								
Urban residence	0.323	0.018	1,397	1,165	1.452	0.056	0.286	0.359
Literacy	0.739	0.021	1,397	1,165	1.766	0.028	0.697	0.780
No education	0.062	0.010	1,397	1,165	1.604	0.167	0.041	0.083
Secondary or higher education	0.487	0.027	1,397	1,165	2.012	0.055	0.433	0.541
Never married (never in union)	0.307	0.015	1,397	1,165	1.220	0.049	0.277	0.337
Currently married (in union)	0.561	0.017	1,397	1,165	1.305	0.031	0.527	0.596
Married before age 18	0.398	0.019	1,041	869	1.280	0.049	0.359	0.437
Had sexual intercourse before age 18	0.683	0.023	1,041	869	1.621	0.034	0.636	0.729
Currently pregnant	0.084	0.006	1,397	1,165	0.866	0.077	0.071	0.096
Know any contraceptive method	0.999	0.001	774	654	1.076	0.001	0.996	1.001
Know a modern method	0.999	0.001	774	654	1.076	0.001	0.996	1.001
Currently using any method	0.509	0.024	774	654	1.324	0.047	0.461	0.556
Currently using a modern method	0.497	0.024	774	654	1.309	0.047	0.450	0.544
Currently using IUD	0.007	0.003	774	654	1.027	0.449	0.001	0.013
Currently using pill	0.073	0.011	774	654	1.152	0.148	0.051	0.094
Currently using male condoms	0.035	0.006	774	654	0.975	0.183	0.022	0.048
Currently using injectables	0.270	0.021	774	654	1.329	0.079	0.228	0.313
Currently using implants	0.084	0.013	774	654	1.312	0.156	0.057	0.110
Currently using female sterilisation	0.003	0.002	774	654	0.942	0.580	0.000	0.007
Currently using withdrawal	0.011	0.004	774	654	0.981	0.337	0.004	0.018
Currently using rhythm	0.001	0.001	774	654	0.782	1.011	0.000	0.002
Using public sector source	0.928	0.012	456	386	0.986	0.013	0.904	0.952
Want no more children	0.358	0.018	774	654	1.042	0.050	0.322	0.394
Want to delay next birth at least 2 years	0.293	0.025	774	654	1.524	0.085	0.243	0.343
Ideal number of children	4.745	0.103	1,376	1,147	1.825	0.022	4.538	4.952
Mothers protected against tetanus for last birth	0.731	0.025	748	640	1.553	0.034	0.681	0.781
Mothers received antenatal care for last birth	0.972	0.012	748	640	1.903	0.012	0.949	0.995
Births with skilled attendant at delivery	0.713	0.034	998	855	2.079	0.048	0.645	0.782
Received 3+ doses of SP/Fansidar	0.608	0.030	396	343	1.219	0.049	0.549	0.668
Treated with ORS	0.688	0.042	109	88	0.878	0.060	0.605	0.771
Sought medical treatment for diarrhoea	0.785	0.042	109	88	1.016	0.054	0.700	0.870
Ever had vaccination card	0.981	0.011	198	171	1.117	0.011	0.959	1.002
Received BCG vaccination	0.989	0.008	198	171	1.088	0.008	0.973	1.005
Received DPT-HepB-Hib vaccination (3 doses)	0.935	0.022	198	171	1.279	0.024	0.891	0.980
Received birth dose polio 0 vaccination	0.676	0.045	198	171	1.351	0.067	0.586	0.766
Received polio vaccination (3 doses)	0.858	0.026	198	171	1.028	0.030	0.806	0.909
Received pneumococcal vaccination (3 doses)	0.928	0.024	198	171	1.323	0.026	0.879	0.976
Received rotavirus vaccination (2 doses)	0.921	0.019	198	171	0.985	0.020	0.884	0.959
Received measles and rubella vaccination	0.916	0.025	198	171	1.220	0.027	0.866	0.966
Received all basic vaccinations (12-23 months)	0.788	0.033	198	171	1.097	0.041	0.723	0.853
Received all age-appropriate vaccinations (12-23 months)	0.483	0.049	198	171	1.366	0.101	0.385	0.580
Received measles 2 vaccination	0.747	0.038	190	156	1.175	0.051	0.670	0.823
Received all age-appropriate vaccinations (24-35 months)	0.275	0.041	190	156	1.238	0.151	0.192	0.358
Height-for-age (-2 SD)	0.334	0.019	976	866	1.219	0.057	0.296	0.371
Weight-for-height (-2 SD)	0.046	0.009	971	860	1.227	0.185	0.029	0.063
Weight-for-age (-2 SD)	0.114	0.012	986	875	1.092	0.102	0.091	0.137
Prevalence of anaemia (children 6-59 months)	0.500	0.025	873	773	1.466	0.050	0.449	0.550
Prevalence of anaemia (women 15-49)	0.238	0.014	1,372	1,145	1.230	0.059	0.210	0.267
Ever experienced any physical violence since age 15	0.279	0.037	929	821	2.473	0.131	0.206	0.352
Ever experienced any sexual violence	0.076	0.012	929	821	1.361	0.156	0.052	0.099
Ever experienced any physical/sexual violence by husband/partner	0.318	0.042	703	560	2.407	0.133	0.233	0.403
Ever experienced any emotional/physical/sexual violence by any husband/partner	0.376	0.048	703	560	2.616	0.128	0.280	0.472
Experienced any emotional/physical/sexual violence in the last 12 months by any husband/partner	0.228	0.029	703	560	1.806	0.126	0.171	0.286
Had 2+ sexual partners in past 12 months	0.013	0.003	1,397	1,165	1.137	0.267	0.006	0.020
Condom use at last sex	0.393	0.125	16	15	0.995	0.319	0.142	0.643
Abstinence among never-married youth (never had sex)	0.504	0.030	392	320	1.175	0.059	0.444	0.563
Had an HIV test and received results in past 12 months	0.654	0.018	1,397	1,165	1.433	0.028	0.618	0.691
Discriminatory attitudes towards people living with HIV	0.196	0.020	1,389	1,160	1.828	0.099	0.157	0.235
Total fertility rate (last 3 years)	4.753	0.300	3,847	3,212	1.546	0.063	4.153	5.352
Neonatal mortality (last 0-9 years)	16.210	3.102	1,942	1,662	1.026	0.191	10.006	22.413
Postneonatal mortality (last 0-9 years)	13.659	3.061	1,939	1,660	1.077	0.224	7.537	19.780
Infant mortality (last 0-9 years)	29.868	4.667	1,944	1,664	1.103	0.156	20.535	39.202
Child mortality (last 0-9 years)	17.803	3.497	1,923	1,645	1.134	0.196	10.808	24.798
Under-5 mortality (last 0-9 years)	47.139	5.567	1,951	1,669	1.051	0.118	36.005	58.273
HIV prevalence among women 15-49	0.154	0.010	1,371	1,092	1.053	0.067	0.133	0.175
HIV prevalence among pregnant women 15-49	0.080	0.024	119	91	0.977	0.304	0.031	0.129
HIV prevalence among young women 15-24	0.065	0.009	601	477	0.897	0.139	0.047	0.083

Continued…

Table B.5—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative standard error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
MEN								
Urban residence	0.282	0.019	1,211	979	1.445	0.066	0.245	0.320
Literacy	0.776	0.023	1,211	979	1.927	0.030	0.730	0.822
No education	0.028	0.006	1,211	979	1.196	0.202	0.017	0.040
Secondary or higher education	0.552	0.029	1,211	979	2.014	0.052	0.494	0.609
Never married (in union)	0.464	0.019	1,211	979	1.292	0.040	0.427	0.501
Currently married (in union)	0.496	0.018	1,211	979	1.266	0.037	0.460	0.533
Had first sexual intercourse before age 18	0.384	0.019	887	717	1.171	0.050	0.345	0.422
Knows any contraceptive method	1.000	0.000	592	486	na	0.000	1.000	1.000
Knows any modern contraceptive method	1.000	0.000	592	486	na	0.000	1.000	1.000
Want no more children	0.308	0.020	592	486	1.042	0.064	0.268	0.348
Want to delay birth at least 2 years	0.428	0.025	592	486	1.216	0.058	0.379	0.478
Ideal number of children	5.088	0.183	1,208	977	2.647	0.036	4.722	5.453
Had 2+ sexual partners in past 12 months	0.122	0.012	1,211	979	1.266	0.098	0.098	0.145
Condom use at last sex	0.227	0.033	143	119	0.943	0.146	0.160	0.293
Abstinence among never-married youth (never had sex)	0.450	0.026	468	375	1.120	0.057	0.398	0.502
Had paid sex in past 12 months	0.037	0.008	1,211	979	1.517	0.221	0.021	0.054
Had HIV test and received results in past 12 months	0.534	0.018	1,211	979	1.284	0.034	0.497	0.571
Discriminatory attitudes towards people living with HIV	0.182	0.024	1,205	975	2.113	0.129	0.135	0.229
HIV prevalence among men 15-49	0.090	0.011	1,187	960	1.330	0.122	0.068	0.113
HIV prevalence among young men 15-24	0.023	0.006	524	422	0.962	0.277	0.010	0.035
HIV prevalence among men 15-59	0.102	0.011	1,305	1,054	1.327	0.109	0.080	0.124
WOMEN AND MEN								
HIV prevalence among respondents 15-49	0.124	0.009	2,558	2,052	1.377	0.072	0.106	0.142
HIV prevalence among respondents 15-24	0.045	0.006	1,125	898	0.928	0.127	0.034	0.057

na = Not applicable

Table B.6 Sampling errors: Copperbelt sample, Zambia DHS 2018

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative standard error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
HOUSEHOLDS AND POPULATION								
Ownership of at least one ITN	0.810	0.014	1,445	1,863	1.372	0.018	0.781	0.838
De facto population with access to an ITN	0.647	0.016	6,802	8,862	1.547	0.025	0.614	0.680
Household population that slept under an ITN last night	0.485	0.018	6,802	8,862	1.577	0.038	0.448	0.522
WOMEN								
Urban residence	0.864	0.015	1,615	2,201	1.810	0.018	0.833	0.895
Literacy	0.771	0.020	1,615	2,201	1.935	0.026	0.730	0.811
No education	0.027	0.008	1,615	2,201	1.944	0.290	0.011	0.043
Secondary or higher education	0.651	0.030	1,615	2,201	2.507	0.046	0.592	0.711
Never married (never in union)	0.385	0.020	1,615	2,201	1.616	0.051	0.346	0.424
Currently married (in union)	0.474	0.020	1,615	2,201	1.615	0.042	0.434	0.514
Married before age 18	0.266	0.019	1,252	1,710	1.527	0.072	0.228	0.304
Had sexual intercourse before age 18	0.573	0.022	1,252	1,710	1.548	0.038	0.529	0.616
Currently pregnant	0.063	0.006	1,615	2,201	1.020	0.098	0.051	0.075
Know any contraceptive method	1.000	0.000	790	1,043	na	0.000	1.000	1.000
Know a modern method	1.000	0.000	790	1,043	na	0.000	1.000	1.000
Currently using any method	0.535	0.022	790	1,043	1.266	0.042	0.490	0.580
Currently using a modern method	0.528	0.022	790	1,043	1.224	0.041	0.484	0.571
Currently using IUD	0.011	0.004	790	1,043	1.130	0.389	0.002	0.019
Currently using pill	0.096	0.013	790	1,043	1.228	0.134	0.071	0.122
Currently using male condoms	0.044	0.009	790	1,043	1.203	0.199	0.027	0.062
Currently using injectables	0.264	0.015	790	1,043	0.953	0.057	0.234	0.294
Currently using implants	0.100	0.012	790	1,043	1.097	0.117	0.076	0.123
Currently using female sterilisation	0.007	0.004	790	1,043	1.185	0.493	0.000	0.014
Currently using withdrawal	0.005	0.003	790	1,043	1.079	0.561	0.000	0.010
Currently using rhythm	0.003	0.002	790	1,043	0.991	0.665	0.000	0.007
Using public sector source	0.877	0.016	537	723	1.125	0.018	0.846	0.909
Want no more children	0.417	0.016	790	1,043	0.922	0.039	0.385	0.449
Want to delay next birth at least 2 years	0.369	0.020	790	1,043	1.159	0.054	0.329	0.409
Ideal number of children	4.246	0.082	1,583	2,164	1.818	0.019	4.082	4.411
Mothers protected against tetanus for last birth	0.882	0.015	732	969	1.267	0.017	0.851	0.912
Mothers received antenatal care for last birth	0.994	0.003	732	969	0.954	0.003	0.989	1.000
Births with skilled attendant at delivery	0.907	0.015	925	1,209	1.374	0.017	0.876	0.937
Received 3+ doses of SP/Fansidar	0.698	0.040	350	473	1.650	0.058	0.617	0.779
Treated with ORS	0.669	0.047	126	164	1.072	0.070	0.576	0.763
Sought medical treatment for diarrhoea	0.669	0.039	126	164	0.901	0.058	0.592	0.746
Ever had vaccination card	0.991	0.007	176	241	1.014	0.007	0.976	1.005
Received BCG vaccination	0.989	0.008	176	241	1.040	0.008	0.973	1.005
Received DPT-HepB-Hib vaccination (3 doses)	0.956	0.018	176	241	1.181	0.019	0.920	0.992
Received birth dose polio 0 vaccination	0.879	0.033	176	241	1.372	0.038	0.812	0.946
Received polio vaccination (3 doses)	0.914	0.027	176	241	1.265	0.029	0.861	0.967
Received pneumococcal vaccination (3 doses)	0.933	0.027	176	241	1.467	0.029	0.878	0.988
Received rotavirus vaccination (2 doses)	0.922	0.023	176	241	1.166	0.025	0.876	0.969
Received measles and rubella vaccination	0.882	0.023	176	241	0.942	0.026	0.837	0.928
Received all basic vaccinations (12-23 months)	0.826	0.026	176	241	0.933	0.032	0.773	0.879
Received all age-appropriate vaccinations (12-23 months)	0.691	0.045	176	241	1.307	0.065	0.601	0.782
Received measles 2 vaccination	0.685	0.051	169	215	1.364	0.075	0.583	0.788
Received all age-appropriate vaccinations (24-35 months)	0.498	0.052	169	215	1.303	0.105	0.393	0.602
Height-for-age (-2 SD)	0.297	0.020	936	1,230	1.333	0.067	0.257	0.337
Weight-for-height (-2 SD)	0.054	0.008	932	1,226	1.114	0.148	0.038	0.070
Weight-for-age (-2 SD)	0.121	0.013	941	1,236	1.117	0.104	0.096	0.146
Prevalence of anaemia (children 6-59 months)	0.572	0.016	836	1,104	0.936	0.028	0.540	0.603
Prevalence of anaemia (women 15-49)	0.292	0.019	1,547	2,114	1.645	0.065	0.254	0.330
Ever experienced any physical violence since age 15	0.417	0.022	1,065	1,481	1.474	0.053	0.372	0.461
Ever experienced any sexual violence	0.175	0.016	1,065	1,481	1.384	0.092	0.143	0.207
Ever experienced any physical/sexual violence by husband/partner	0.482	0.028	790	923	1.547	0.057	0.427	0.537
Ever experienced any emotional/physical/sexual violence by any husband/partner	0.562	0.033	790	923	1.893	0.060	0.495	0.629
Experienced any emotional/physical/sexual violence in the last 12 months by any husband/partner	0.352	0.031	790	923	1.838	0.089	0.290	0.415
Had 2+ sexual partners in past 12 months	0.017	0.004	1,615	2,201	1.279	0.239	0.009	0.026
Condom use at last sex	0.322	0.108	26	38	1.153	0.337	0.105	0.538
Abstinence among never-married youth (never had sex)	0.538	0.026	500	709	1.153	0.048	0.487	0.590
Had an HIV test and received results in past 12 months	0.625	0.017	1,615	2,201	1.389	0.027	0.592	0.659
Discriminatory attitudes towards people living with HIV	0.170	0.016	1,610	2,198	1.661	0.092	0.139	0.201
Total fertility rate (last 3 years)	3.421	0.152	4,529	6,190	1.115	0.044	3.118	3.724
Neonatal mortality (last 0-9 years)	19.488	4.216	1,813	2,371	1.213	0.216	11.055	27.920
Postneonatal mortality (last 0-9 years)	13.713	2.500	1,807	2,351	0.881	0.182	8.713	18.712
Infant mortality (last 0-9 years)	33.201	5.053	1,815	2,374	1.147	0.152	23.094	43.307
Child mortality (last 0-9 years)	16.929	3.480	1,798	2,342	1.075	0.206	9.969	23.889
Under-5 mortality (last 0-9 years)	49.568	5.990	1,821	2,381	1.119	0.121	37.587	61.549
HIV prevalence among women 15-49	0.199	0.017	1,512	2,062	1.700	0.088	0.164	0.234
HIV prevalence among pregnant women 15-49	0.163	0.038	102	131	1.033	0.233	0.087	0.239
HIV prevalence among young women 15-24	0.091	0.026	641	870	2.251	0.281	0.040	0.143

Table B.6—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative standard error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
MEN								
Urban residence	0.826	0.019	1,313	1,727	1.841	0.023	0.787	0.864
Literacy	0.898	0.013	1,313	1,727	1.538	0.014	0.872	0.924
No education	0.016	0.004	1,313	1,727	1.116	0.245	0.008	0.023
Secondary or higher education	0.758	0.022	1,313	1,727	1.893	0.030	0.713	0.802
Never married (in union)	0.519	0.017	1,313	1,727	1.239	0.033	0.485	0.553
Currently married (in union)	0.422	0.017	1,313	1,727	1.270	0.041	0.387	0.456
Had first sexual intercourse before age 18	0.301	0.021	992	1,315	1.465	0.071	0.259	0.344
Knows any contraceptive method	0.999	0.001	558	728	0.675	0.001	0.998	1.001
Knows any modern contraceptive method	0.999	0.001	558	728	0.675	0.001	0.998	1.001
Want no more children	0.291	0.017	558	728	0.906	0.060	0.256	0.326
Want to delay birth at least 2 years	0.455	0.028	558	728	1.320	0.061	0.399	0.511
Ideal number of children	4.490	0.093	1,306	1,718	1.637	0.021	4.303	4.677
Had 2+ sexual partners in past 12 months	0.062	0.007	1,313	1,727	0.989	0.106	0.049	0.075
Condom use at last sex	0.276	0.049	84	107	1.002	0.178	0.178	0.374
Abstinence among never-married youth (never had sex)	0.538	0.028	521	697	1.260	0.051	0.482	0.593
Had paid sex in past 12 months	0.035	0.007	1,313	1,727	1.376	0.201	0.021	0.048
Had HIV test and received results in past 12 months	0.543	0.019	1,313	1,727	1.359	0.034	0.506	0.581
Discriminatory attitudes towards people living with HIV	0.196	0.017	1,295	1,705	1.503	0.085	0.163	0.230
HIV prevalence among men 15-49	0.101	0.011	1,219	1,691	1.293	0.111	0.078	0.123
HIV prevalence among young men 15-24	0.013	0.005	524	727	1.107	0.428	0.002	0.023
HIV prevalence among men 15-59	0.112	0.011	1,322	1,813	1.311	0.101	0.090	0.135
WOMEN AND MEN								
HIV prevalence among respondents 15-49	0.155	0.012	2,731	3,752	1.782	0.080	0.130	0.179
HIV prevalence among respondents 15-24	0.056	0.015	1,165	1,598	2.198	0.266	0.026	0.085

na = Not applicable

Table B.7 Sampling errors: Eastern sample, Zambia DHS 2018

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative standard error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
HOUSEHOLDS AND POPULATION								
Ownership of at least one ITN	0.847	0.015	1,452	1,556	1.539	0.017	0.818	0.876
De facto population with access to an ITN	0.629	0.020	7,332	7,963	2.037	0.031	0.589	0.668
Household population that slept under an ITN last night	0.539	0.024	7,332	7,963	2.133	0.045	0.491	0.587
WOMEN								
Urban residence	0.132	0.017	1,536	1,605	1.923	0.126	0.098	0.165
Literacy	0.497	0.018	1,536	1,605	1.448	0.037	0.460	0.534
No education	0.132	0.014	1,536	1,605	1.661	0.109	0.103	0.161
Secondary or higher education	0.259	0.020	1,536	1,605	1.761	0.076	0.220	0.298
Never married (never in union)	0.216	0.013	1,536	1,605	1.199	0.058	0.191	0.242
Currently married (in union)	0.670	0.016	1,536	1,605	1.322	0.024	0.638	0.701
Married before age 18	0.505	0.019	1,210	1,263	1.354	0.039	0.467	0.544
Had sexual intercourse before age 18	0.766	0.018	1,210	1,263	1.444	0.023	0.731	0.802
Currently pregnant	0.101	0.010	1,536	1,605	1.247	0.095	0.082	0.120
Know any contraceptive method	0.997	0.002	997	1,075	0.998	0.002	0.994	1.000
Know a modern method	0.997	0.002	997	1,075	0.998	0.002	0.994	1.000
Currently using any method	0.550	0.019	997	1,075	1.181	0.034	0.513	0.587
Currently using a modern method	0.537	0.018	997	1,075	1.134	0.033	0.501	0.573
Currently using IUD	0.005	0.002	997	1,075	0.998	0.468	0.000	0.009
Currently using pill	0.052	0.008	997	1,075	1.159	0.157	0.036	0.068
Currently using male condoms	0.026	0.006	997	1,075	1.118	0.219	0.014	0.037
Currently using injectables	0.328	0.017	997	1,075	1.169	0.053	0.293	0.363
Currently using implants	0.081	0.014	997	1,075	1.601	0.171	0.054	0.109
Currently using female sterilisation	0.041	0.010	997	1,075	1.602	0.245	0.021	0.061
Currently using withdrawal	0.012	0.003	997	1,075	0.953	0.275	0.005	0.018
Currently using rhythm	0.000	0.000	997	1,075	na	na	0.000	0.000
Using public sector source	0.892	0.021	659	685	1.716	0.023	0.850	0.933
Want no more children	0.384	0.020	997	1,075	1.274	0.051	0.344	0.423
Want to delay next birth at least 2 years	0.384	0.021	997	1,075	1.335	0.054	0.343	0.425
Ideal number of children	4.422	0.068	1,476	1,541	1.493	0.015	4.286	4.559
Mothers protected against tetanus for last birth	0.698	0.024	898	983	1.550	0.034	0.651	0.745
Mothers received antenatal care for last birth	0.964	0.010	898	983	1.695	0.011	0.943	0.985
Births with skilled attendant at delivery	0.842	0.021	1,192	1,321	1.946	0.025	0.800	0.885
Received 3+ doses of SP/Fansidar	0.645	0.024	511	569	1.151	0.037	0.597	0.693
Treated with ORS	0.664	0.046	170	186	1.244	0.069	0.573	0.756
Sought medical treatment for diarrhoea	0.785	0.035	170	186	1.131	0.044	0.715	0.854
Ever had vaccination card	0.984	0.009	249	274	1.205	0.010	0.966	1.003
Received BCG vaccination	0.971	0.012	249	274	1.132	0.012	0.947	0.995
Received DPT-HepB-Hib vaccination (3 doses)	0.944	0.014	249	274	0.997	0.015	0.915	0.973
Received birth dose polio 0 vaccination	0.555	0.035	249	274	1.100	0.062	0.485	0.624
Received polio vaccination (3 doses)	0.846	0.027	249	274	1.208	0.032	0.791	0.900
Received pneumococcal vaccination (3 doses)	0.921	0.019	249	274	1.141	0.021	0.883	0.960
Received rotavirus vaccination (2 doses)	0.938	0.022	249	274	1.390	0.023	0.894	0.981
Received measles and rubella vaccination	0.932	0.018	249	274	1.151	0.020	0.895	0.968
Received all basic vaccinations (12-23 months)	0.791	0.029	249	274	1.134	0.037	0.733	0.849
Received all age-appropriate vaccinations (12-23 months)	0.424	0.030	249	274	0.953	0.070	0.365	0.484
Received measles 2 vaccination	0.707	0.043	209	232	1.312	0.060	0.622	0.792
Received all age-appropriate vaccinations (24-35 months)	0.355	0.034	209	232	1.041	0.096	0.287	0.424
Height-for-age (-2 SD)	0.342	0.015	1,129	1,266	1.020	0.044	0.312	0.372
Weight-for-height (-2 SD)	0.022	0.005	1,128	1,262	1.189	0.227	0.012	0.033
Weight-for-age (-2 SD)	0.092	0.010	1,132	1,269	1.085	0.107	0.072	0.111
Prevalence of anaemia (children 6-59 months)	0.559	0.020	1,013	1,134	1.287	0.035	0.519	0.598
Prevalence of anaemia (women 15-49)	0.276	0.017	1,484	1,555	1.472	0.062	0.242	0.310
Ever experienced any physical violence since age 15	0.420	0.020	1,108	1,095	1.342	0.047	0.380	0.460
Ever experienced any sexual violence	0.143	0.015	1,108	1,095	1.406	0.104	0.113	0.172
Ever experienced any physical/sexual violence by husband/partner	0.412	0.019	947	875	1.213	0.047	0.373	0.451
Ever experienced any emotional/physical/sexual violence by any husband/partner	0.515	0.023	947	875	1.396	0.044	0.470	0.560
Experienced any emotional/physical/sexual violence in the last 12 months by any husband/partner	0.331	0.025	947	875	1.615	0.075	0.282	0.381
Had 2+ sexual partners in past 12 months	0.017	0.003	1,536	1,605	0.981	0.189	0.011	0.024
Condom use at last sex	0.341	0.107	26	28	1.119	0.313	0.128	0.554
Abstinence among never-married youth (never had sex)	0.414	0.038	326	319	1.378	0.091	0.339	0.490
Had an HIV test and received results in past 12 months	0.633	0.023	1,536	1,605	1.870	0.036	0.587	0.679
Discriminatory attitudes towards people living with HIV	0.299	0.018	1,442	1,498	1.529	0.062	0.262	0.336
Total fertility rate (last 3 years)	5.493	0.245	4,303	4,489	1.440	0.045	5.003	5.983
Neonatal mortality (last 0-9 years)	24.889	3.523	2,314	2,547	1.060	0.142	17.843	31.934
Postneonatal mortality (last 0-9 years)	15.493	2.664	2,314	2,546	1.055	0.172	10.164	20.822
Infant mortality (last 0-9 years)	40.382	4.429	2,316	2,550	1.019	0.110	31.524	49.239
Child mortality (last 0-9 years)	24.573	3.593	2,272	2,502	1.120	0.146	17.388	31.759
Under-5 mortality (last 0-9 years)	63.963	5.432	2,333	2,567	1.016	0.085	53.099	74.827
HIV prevalence among women 15-49	0.101	0.010	1,477	1,503	1.258	0.098	0.082	0.121
HIV prevalence among pregnant women 15-49	0.078	0.023	138	152	1.005	0.295	0.032	0.124
HIV prevalence among young women 15-24	0.028	0.006	640	645	0.951	0.221	0.016	0.041

Continued…

Table B.7—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative standard error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
MEN								
Urban residence	0.112	0.012	1,346	1,476	1.442	0.111	0.087	0.137
Literacy	0.667	0.021	1,346	1,476	1.663	0.032	0.624	0.709
No education	0.131	0.020	1,346	1,476	2.151	0.151	0.092	0.171
Secondary or higher education	0.360	0.023	1,346	1,476	1.730	0.063	0.315	0.406
Never married (in union)	0.392	0.019	1,346	1,476	1.445	0.049	0.354	0.431
Currently married (in union)	0.581	0.019	1,346	1,476	1.403	0.033	0.543	0.619
Had first sexual intercourse before age 18	0.595	0.026	1,030	1,130	1.723	0.044	0.542	0.648
Knows any contraceptive method	1.000	0.000	765	857	na	0.000	1.000	1.000
Knows any modern contraceptive method	1.000	0.000	765	857	na	0.000	1.000	1.000
Want no more children	0.305	0.022	765	857	1.316	0.072	0.261	0.348
Want to delay birth at least 2 years	0.471	0.026	765	857	1.412	0.054	0.420	0.522
Ideal number of children	4.749	0.092	1,304	1,425	1.705	0.019	4.565	4.932
Had 2+ sexual partners in past 12 months	0.246	0.017	1,346	1,476	1.489	0.071	0.211	0.281
Condom use at last sex	0.267	0.026	315	363	1.058	0.099	0.214	0.319
Abstinence among never-married youth (never had sex)	0.247	0.027	469	506	1.347	0.109	0.193	0.301
Had paid sex in past 12 months	0.045	0.008	1,346	1,476	1.458	0.182	0.029	0.062
Had HIV test and received results in past 12 months	0.537	0.018	1,346	1,476	1.303	0.033	0.502	0.573
Discriminatory attitudes towards people living with HIV	0.220	0.019	1,330	1,459	1.695	0.088	0.181	0.259
HIV prevalence among men 15-49	0.045	0.006	1,283	1,443	1.032	0.133	0.033	0.057
HIV prevalence among young men 15-24	0.002	0.002	557	627	0.887	0.825	0.000	0.005
HIV prevalence among men 15-59	0.054	0.006	1,381	1,561	0.985	0.111	0.042	0.066
WOMEN AND MEN								
HIV prevalence among respondents 15-49	0.074	0.007	2,760	2,946	1.331	0.090	0.061	0.087
HIV prevalence among respondents 15-24	0.015	0.003	1,197	1,273	0.898	0.208	0.009	0.022

na = Not applicable

Table B.8 Sampling errors: Luapula sample, Zambia DHS 2018

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative standard error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
HOUSEHOLDS AND POPULATION								
Ownership of at least one ITN	0.837	0.018	1,342	1,049	1.761	0.021	0.802	0.873
De facto population with access to an ITN	0.622	0.022	6,818	5,326	2.066	0.035	0.579	0.666
Household population that slept under an ITN last night	0.626	0.022	6,818	5,326	1.918	0.035	0.582	0.670
WOMEN								
Urban residence	0.235	0.022	1,414	1,071	1.911	0.092	0.192	0.278
Literacy	0.504	0.030	1,414	1,071	2.264	0.060	0.443	0.564
No education	0.110	0.018	1,414	1,071	2.149	0.163	0.074	0.146
Secondary or higher education	0.326	0.028	1,414	1,071	2.270	0.087	0.269	0.383
Never married (never in union)	0.298	0.016	1,414	1,071	1.337	0.055	0.265	0.330
Currently married (in union)	0.570	0.016	1,414	1,071	1.196	0.028	0.539	0.602
Married before age 18	0.411	0.023	1,076	817	1.554	0.057	0.365	0.458
Had sexual intercourse before age 18	0.681	0.022	1,076	817	1.564	0.033	0.637	0.726
Currently pregnant	0.099	0.010	1,414	1,071	1.230	0.099	0.079	0.119
Know any contraceptive method	0.997	0.003	794	611	1.413	0.003	0.992	1.003
Know a modern method	0.997	0.003	794	611	1.413	0.003	0.992	1.003
Currently using any method	0.391	0.026	794	611	1.487	0.066	0.339	0.442
Currently using a modern method	0.386	0.025	794	611	1.464	0.066	0.335	0.436
Currently using IUD	0.004	0.003	794	611	1.305	0.712	0.000	0.010
Currently using pill	0.038	0.009	794	611	1.373	0.246	0.019	0.056
Currently using male condoms	0.010	0.004	794	611	1.062	0.373	0.003	0.018
Currently using injectables	0.241	0.020	794	611	1.289	0.081	0.202	0.280
Currently using implants	0.071	0.017	794	611	1.823	0.235	0.038	0.104
Currently using female sterilisation	0.015	0.005	794	611	1.206	0.351	0.004	0.025
Currently using withdrawal	0.001	0.001	794	611	0.738	0.727	0.000	0.003
Currently using rhythm	0.003	0.002	794	611	1.075	0.718	0.000	0.007
Using public sector source	0.936	0.016	410	294	1.303	0.017	0.904	0.968
Want no more children	0.386	0.025	794	611	1.465	0.066	0.336	0.437
Want to delay next birth at least 2 years	0.404	0.020	794	611	1.135	0.049	0.365	0.444
Ideal number of children	5.188	0.083	1,351	1,012	1.577	0.016	5.021	5.355
Mothers protected against tetanus for last birth	0.733	0.019	829	640	1.226	0.026	0.696	0.771
Mothers received antenatal care for last birth	0.914	0.015	829	640	1.558	0.017	0.884	0.944
Births with skilled attendant at delivery	0.724	0.025	1,215	950	1.674	0.034	0.674	0.774
Received 3+ doses of SP/Fansidar	0.587	0.045	479	375	2.036	0.077	0.497	0.678
Treated with ORS	0.713	0.045	195	152	1.394	0.063	0.623	0.802
Sought medical treatment for diarrhoea	0.800	0.041	195	152	1.422	0.051	0.718	0.882
Ever had vaccination card	0.932	0.020	228	174	1.223	0.022	0.891	0.973
Received BCG vaccination	0.973	0.012	228	174	1.126	0.012	0.949	0.997
Received DPT-HepB-Hib vaccination (3 doses)	0.913	0.023	228	174	1.242	0.025	0.867	0.960
Received birth dose polio 0 vaccination	0.705	0.045	228	174	1.469	0.063	0.616	0.795
Received polio vaccination (3 doses)	0.764	0.037	228	174	1.322	0.049	0.689	0.839
Received pneumococcal vaccination (3 doses)	0.903	0.023	228	174	1.162	0.025	0.858	0.949
Received rotavirus vaccination (2 doses)	0.885	0.024	228	174	1.125	0.027	0.838	0.933
Received measles and rubella vaccination	0.908	0.027	228	174	1.395	0.030	0.854	0.961
Received all basic vaccinations (12-23 months)	0.667	0.047	228	174	1.494	0.070	0.573	0.761
Received all age-appropriate vaccinations (12-23 months)	0.425	0.051	228	174	1.541	0.121	0.322	0.527
Received measles 2 vaccination	0.662	0.036	223	176	1.135	0.054	0.591	0.733
Received all age-appropriate vaccinations (24-35 months)	0.308	0.034	223	176	1.109	0.110	0.240	0.375
Height-for-age (-2 SD)	0.449	0.023	1,112	892	1.469	0.052	0.402	0.495
Weight-for-height (-2 SD)	0.062	0.013	1,116	895	1.726	0.216	0.035	0.089
Weight-for-age (-2 SD)	0.152	0.010	1,128	904	0.938	0.068	0.132	0.173
Prevalence of anaemia (children 6-59 months)	0.707	0.021	999	796	1.451	0.030	0.664	0.749
Prevalence of anaemia (women 15-49)	0.298	0.015	1,284	978	1.209	0.052	0.267	0.329
Ever experienced any physical violence since age 15	0.440	0.035	988	745	2.199	0.079	0.371	0.510
Ever experienced any sexual violence	0.201	0.018	988	745	1.442	0.092	0.164	0.237
Ever experienced any physical/sexual violence by husband/partner	0.474	0.034	774	527	1.881	0.071	0.406	0.542
Ever experienced any emotional/physical/sexual violence by any husband/partner	0.581	0.035	774	527	1.993	0.061	0.510	0.652
Experienced any emotional/physical/sexual violence in the last 12 months by any husband/partner	0.382	0.026	774	527	1.514	0.069	0.329	0.435
Had 2+ sexual partners in past 12 months	0.009	0.003	1,414	1,071	1.333	0.363	0.003	0.016
Condom use at last sex	0.235	0.132	14	10	1.111	0.561	0.000	0.499
Abstinence among never-married youth (never had sex)	0.500	0.035	387	283	1.360	0.069	0.431	0.569
Had an HIV test and received results in past 12 months	0.538	0.020	1,414	1,071	1.474	0.036	0.499	0.577
Discriminatory attitudes towards people living with HIV	0.466	0.022	1,344	1,013	1.583	0.046	0.422	0.509
Total fertility rate (last 3 years)	5.966	0.330	3,913	2,968	1.606	0.055	5.305	6.627
Neonatal mortality (last 0-9 years)	32.338	4.618	2,334	1,811	1.140	0.143	23.102	41.575
Postneonatal mortality (last 0-9 years)	34.619	4.986	2,330	1,804	1.209	0.144	24.648	44.590
Infant mortality (last 0-9 years)	66.957	7.197	2,335	1,812	1.226	0.107	52.564	81.351
Child mortality (last 0-9 years)	46.431	6.167	2,309	1,787	1.374	0.133	34.097	58.765
Under-5 mortality (last 0-9 years)	110.279	9.936	2,351	1,824	1.373	0.090	90.408	130.150
HIV prevalence among women 15-49	0.099	0.008	1,272	1,003	0.977	0.082	0.083	0.116
HIV prevalence among pregnant women 15-49	0.059	0.029	122	99	1.354	0.493	0.001	0.117
HIV prevalence among young women 15-24	0.063	0.012	544	424	1.115	0.185	0.040	0.086

Continued…

Table B.8—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative standard error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
MEN								
Urban residence	0.239	0.020	1,140	849	1.563	0.083	0.200	0.279
Literacy	0.804	0.018	1,140	849	1.554	0.023	0.767	0.840
No education	0.042	0.011	1,140	849	1.921	0.273	0.019	0.065
Secondary or higher education	0.482	0.024	1,140	849	1.613	0.050	0.435	0.530
Never married (in union)	0.465	0.017	1,140	849	1.172	0.037	0.431	0.500
Currently married (in union)	0.506	0.017	1,140	849	1.160	0.034	0.471	0.540
Had first sexual intercourse before age 18	0.432	0.021	817	611	1.209	0.049	0.390	0.474
Knows any contraceptive method	1.000	0.000	566	429	na	0.000	1.000	1.000
Knows any modern contraceptive method	1.000	0.000	566	429	na	0.000	1.000	1.000
Want no more children	0.194	0.020	566	429	1.190	0.102	0.155	0.234
Want to delay birth at least 2 years	0.570	0.023	566	429	1.106	0.040	0.523	0.616
Ideal number of children	5.567	0.150	1,140	849	1.669	0.027	5.268	5.867
Had 2+ sexual partners in past 12 months	0.090	0.012	1,140	849	1.395	0.132	0.066	0.113
Condom use at last sex	0.249	0.041	98	76	0.942	0.166	0.167	0.332
Abstinence among never-married youth (never had sex)	0.404	0.028	478	351	1.240	0.069	0.348	0.460
Had paid sex in past 12 months	0.064	0.011	1,140	849	1.504	0.171	0.042	0.086
Had HIV test and received results in past 12 months	0.417	0.022	1,140	849	1.522	0.053	0.373	0.462
Discriminatory attitudes towards people living with HIV	0.387	0.023	1,123	836	1.591	0.060	0.340	0.433
HIV prevalence among men 15-49	0.054	0.008	1,005	832	1.126	0.148	0.038	0.070
HIV prevalence among young men 15-24	0.014	0.006	481	393	1.114	0.429	0.002	0.026
HIV prevalence among men 15-59	0.063	0.009	1,102	918	1.194	0.139	0.046	0.081
WOMEN AND MEN								
HIV prevalence among respondents 15-49	0.079	0.006	2,277	1,835	1.130	0.081	0.066	0.092
HIV prevalence among respondents 15-24	0.039	0.007	1,025	816	1.137	0.176	0.025	0.053

na = Not applicable

Table B.9 Sampling errors: Lusaka sample, Zambia DHS 2018

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative standard error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
HOUSEHOLDS AND POPULATION								
Ownership of at least one ITN	0.640	0.018	1,545	2,328	1.467	0.028	0.604	0.676
De facto population with access to an ITN	0.505	0.017	7,014	10,591	1.481	0.034	0.471	0.539
Household population that slept under an ITN last night	0.288	0.018	7,014	10,591	1.607	0.062	0.253	0.324
WOMEN								
Urban residence	0.874	0.016	1,775	2,733	2.032	0.018	0.842	0.906
Literacy	0.800	0.020	1,775	2,733	2.086	0.025	0.761	0.840
No education	0.046	0.007	1,775	2,733	1.351	0.146	0.033	0.060
Secondary or higher education	0.671	0.026	1,775	2,733	2.287	0.038	0.620	0.722
Never married (never in union)	0.357	0.018	1,775	2,733	1.580	0.050	0.321	0.393
Currently married (in union)	0.506	0.017	1,775	2,733	1.412	0.033	0.473	0.540
Married before age 18	0.287	0.021	1,464	2,258	1.814	0.075	0.244	0.330
Had sexual intercourse before age 18	0.555	0.027	1,464	2,258	2.067	0.048	0.501	0.609
Currently pregnant	0.062	0.005	1,775	2,733	0.834	0.077	0.053	0.072
Know any contraceptive method	1.000	0.000	927	1,384	0.667	0.000	0.999	1.000
Know a modern method	1.000	0.000	927	1,384	0.667	0.000	0.999	1.000
Currently using any method	0.565	0.022	927	1,384	1.357	0.039	0.520	0.609
Currently using a modern method	0.543	0.021	927	1,384	1.294	0.039	0.501	0.586
Currently using IUD	0.016	0.004	927	1,384	1.033	0.270	0.007	0.024
Currently using pill	0.117	0.011	927	1,384	1.039	0.094	0.095	0.139
Currently using male condoms	0.048	0.008	927	1,384	1.100	0.161	0.033	0.064
Currently using injectables	0.246	0.020	927	1,384	1.385	0.080	0.207	0.285
Currently using implants	0.084	0.014	927	1,384	1.575	0.171	0.056	0.113
Currently using female sterilisation	0.014	0.005	927	1,384	1.178	0.323	0.005	0.023
Currently using withdrawal	0.016	0.004	927	1,384	1.035	0.264	0.008	0.025
Currently using rhythm	0.005	0.003	927	1,384	1.108	0.512	0.000	0.010
Using public sector source	0.797	0.024	647	982	1.531	0.030	0.749	0.846
Want no more children	0.411	0.018	927	1,384	1.110	0.044	0.375	0.447
Want to delay next birth at least 2 years	0.304	0.019	927	1,384	1.266	0.063	0.265	0.342
Ideal number of children	3.971	0.058	1,747	2,708	1.506	0.015	3.855	4.087
Mothers protected against tetanus for last birth	0.861	0.017	825	1,219	1.366	0.019	0.827	0.894
Mothers received antenatal care for last birth	0.986	0.006	825	1,219	1.354	0.006	0.975	0.997
Births with skilled attendant at delivery	0.908	0.011	1,050	1,532	1.075	0.012	0.887	0.930
Received 3+ doses of SP/Fansidar	0.618	0.027	387	558	1.076	0.044	0.563	0.672
Treated with ORS	0.807	0.040	120	200	1.122	0.050	0.726	0.888
Sought medical treatment for diarrhoea	0.613	0.062	120	200	1.443	0.100	0.490	0.737
Ever had vaccination card	0.978	0.011	191	267	0.952	0.011	0.956	0.999
Received BCG vaccination	0.997	0.003	191	267	0.697	0.003	0.992	1.003
Received DPT-HepB-Hib vaccination (3 doses)	0.946	0.020	191	267	1.167	0.021	0.907	0.986
Received birth dose polio 0 vaccination	0.906	0.021	191	267	0.940	0.023	0.865	0.948
Received polio vaccination (3 doses)	0.766	0.035	191	267	1.071	0.045	0.697	0.835
Received pneumococcal vaccination (3 doses)	0.891	0.029	191	267	1.233	0.033	0.833	0.949
Received rotavirus vaccination (2 doses)	0.937	0.020	191	267	0.995	0.021	0.898	0.976
Received measles and rubella vaccination	0.947	0.019	191	267	1.093	0.020	0.910	0.984
Received all basic vaccinations (12-23 months)	0.729	0.034	191	267	1.019	0.047	0.660	0.798
Received all age-appropriate vaccinations (12-23 months)	0.584	0.040	191	267	1.055	0.068	0.505	0.663
Received measles 2 vaccination	0.687	0.048	205	304	1.446	0.070	0.591	0.783
Received all age-appropriate vaccinations (24-35 months)	0.469	0.041	205	304	1.123	0.087	0.388	0.550
Height-for-age (-2 SD)	0.356	0.016	1,010	1,476	0.980	0.045	0.324	0.388
Weight-for-height (-2 SD)	0.055	0.011	1,005	1,463	1.421	0.196	0.033	0.076
Weight-for-age (-2 SD)	0.106	0.015	1,017	1,485	1.457	0.137	0.077	0.136
Prevalence of anaemia (children 6-59 months)	0.579	0.025	910	1,334	1.447	0.044	0.528	0.630
Prevalence of anaemia (women 15-49)	0.356	0.019	1,745	2,686	1.696	0.055	0.317	0.395
Ever experienced any physical violence since age 15	0.276	0.015	1,184	1,931	1.159	0.055	0.246	0.306
Ever experienced any sexual violence	0.075	0.010	1,184	1,931	1.253	0.128	0.056	0.094
Ever experienced any physical/sexual violence by husband/partner	0.304	0.020	891	1,250	1.275	0.065	0.264	0.343
Ever experienced any emotional/physical/sexual violence by any husband/partner	0.362	0.020	891	1,250	1.254	0.056	0.321	0.402
Experienced any emotional/physical/sexual violence in the last 12 months by any husband/partner	0.245	0.017	891	1,250	1.166	0.069	0.212	0.279
Had 2+ sexual partners in past 12 months	0.018	0.004	1,775	2,733	1.129	0.199	0.011	0.025
Condom use at last sex	0.560	0.100	32	48	1.114	0.178	0.361	0.760
Abstinence among never-married youth (never had sex)	0.518	0.027	467	752	1.154	0.052	0.464	0.571
Had an HIV test and received results in past 12 months	0.688	0.014	1,775	2,733	1.261	0.020	0.660	0.716
Discriminatory attitudes towards people living with HIV	0.224	0.020	1,763	2,720	1.982	0.088	0.185	0.263
Total fertility rate (last 3 years)	3.451	0.159	5,053	7,790	1.464	0.046	3.133	3.768
Neonatal mortality (last 0-9 years)	27.111	5.599	2,048	3,021	1.286	0.207	15.913	38.309
Postneonatal mortality (last 0-9 years)	20.124	4.039	2,057	3,041	1.244	0.201	12.046	28.202
Infant mortality (last 0-9 years)	47.235	7.696	2,049	3,024	1.447	0.163	31.844	62.627
Child mortality (last 0-9 years)	17.510	3.339	2,057	3,040	1.042	0.191	10.832	24.188
Under-5 mortality (last 0-9 years)	63.918	7.802	2,060	3,037	1.280	0.122	48.313	79.523
HIV prevalence among women 15-49	0.192	0.014	1,745	2,560	1.446	0.071	0.165	0.219
HIV prevalence among pregnant women 15-49	0.202	0.057	113	162	1.497	0.283	0.088	0.317
HIV prevalence among young women 15-24	0.055	0.011	680	1,003	1.217	0.194	0.033	0.076

Continued…

Table B.9—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative standard error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
MEN								
Urban residence	0.860	0.017	1,415	2,166	1.856	0.020	0.826	0.895
Literacy	0.896	0.010	1,415	2,166	1.208	0.011	0.877	0.916
No education	0.016	0.004	1,415	2,166	1.101	0.226	0.009	0.024
Secondary or higher education	0.736	0.018	1,415	2,166	1.556	0.025	0.700	0.773
Never married (in union)	0.466	0.019	1,415	2,166	1.444	0.041	0.428	0.505
Currently married (in union)	0.472	0.018	1,415	2,166	1.359	0.038	0.436	0.508
Had first sexual intercourse before age 18	0.352	0.022	1,123	1,719	1.550	0.063	0.308	0.396
Knows any contraceptive method	1.000	0.000	681	1,022	na	0.000	1.000	1.000
Knows any modern contraceptive method	1.000	0.000	681	1,022	na	0.000	1.000	1.000
Want no more children	0.256	0.019	681	1,022	1.140	0.075	0.218	0.294
Want to delay birth at least 2 years	0.464	0.025	681	1,022	1.286	0.053	0.415	0.513
Ideal number of children	4.146	0.067	1,384	2,127	1.466	0.016	4.012	4.279
Had 2+ sexual partners in past 12 months	0.143	0.012	1,415	2,166	1.253	0.082	0.120	0.166
Condom use at last sex	0.363	0.033	195	310	0.946	0.090	0.298	0.428
Abstinence among never-married youth (never had sex)	0.493	0.027	498	781	1.205	0.055	0.439	0.547
Had paid sex in past 12 months	0.064	0.010	1,415	2,166	1.498	0.153	0.044	0.083
Had HIV test and received results in past 12 months	0.542	0.017	1,415	2,166	1.309	0.032	0.507	0.576
Discriminatory attitudes towards people living with HIV	0.160	0.014	1,399	2,146	1.447	0.089	0.132	0.189
HIV prevalence among men 15-49	0.102	0.011	1,379	2,128	1.294	0.104	0.081	0.123
HIV prevalence among young men 15-24	0.050	0.012	538	837	1.256	0.237	0.026	0.074
HIV prevalence among men 15-59	0.104	0.010	1,475	2,248	1.314	0.100	0.083	0.125
WOMEN AND MEN								
HIV prevalence among respondents 15-49	0.151	0.011	3,124	4,688	1.667	0.071	0.130	0.172
HIV prevalence among respondents 15-24	0.053	0.008	1,218	1,840	1.299	0.158	0.036	0.069

na = Not applicable

Table B.10 Sampling errors: Muchinga sample, Zambia DHS 2018

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative standard error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
HOUSEHOLDS AND POPULATION								
Ownership of at least one ITN	0.867	0.016	1,075	710	1.511	0.018	0.836	0.898
De facto population with access to an ITN	0.658	0.017	5,431	3,652	1.563	0.026	0.624	0.692
Household population that slept under an ITN last night	0.563	0.015	5,431	3,652	1.130	0.027	0.533	0.594
WOMEN								
Urban residence	0.198	0.023	1,183	754	1.978	0.116	0.152	0.244
Literacy	0.522	0.040	1,183	754	2.723	0.076	0.443	0.602
No education	0.154	0.038	1,183	754	3.585	0.245	0.079	0.230
Secondary or higher education	0.311	0.031	1,183	754	2.325	0.101	0.248	0.373
Never married (never in union)	0.250	0.018	1,183	754	1.428	0.072	0.214	0.286
Currently married (in union)	0.624	0.023	1,183	754	1.659	0.038	0.577	0.670
Married before age 18	0.469	0.019	892	563	1.143	0.041	0.431	0.507
Had sexual intercourse before age 18	0.704	0.026	892	563	1.704	0.037	0.652	0.756
Currently pregnant	0.085	0.009	1,183	754	1.093	0.105	0.067	0.102
Know any contraceptive method	1.000	0.000	723	470	na	0.000	1.000	1.000
Know a modern method	1.000	0.000	723	470	na	0.000	1.000	1.000
Currently using any method	0.580	0.024	723	470	1.297	0.041	0.533	0.628
Currently using a modern method	0.520	0.024	723	470	1.309	0.047	0.471	0.569
Currently using IUD	0.005	0.002	723	470	0.937	0.500	0.000	0.010
Currently using pill	0.069	0.009	723	470	0.940	0.128	0.051	0.087
Currently using male condoms	0.035	0.010	723	470	1.439	0.283	0.015	0.054
Currently using injectables	0.235	0.024	723	470	1.491	0.100	0.188	0.282
Currently using implants	0.135	0.016	723	470	1.236	0.116	0.104	0.167
Currently using female sterilisation	0.017	0.005	723	470	0.999	0.286	0.007	0.026
Currently using withdrawal	0.055	0.010	723	470	1.232	0.190	0.034	0.076
Currently using rhythm	0.003	0.002	723	470	0.974	0.720	0.000	0.006
Using public sector source	0.922	0.016	420	263	1.197	0.017	0.891	0.953
Want no more children	0.413	0.020	723	470	1.118	0.050	0.372	0.454
Want to delay next birth at least 2 years	0.408	0.022	723	470	1.188	0.053	0.364	0.451
Ideal number of children	4.868	0.082	1,174	748	1.442	0.017	4.704	5.031
Mothers protected against tetanus for last birth	0.782	0.040	661	433	2.506	0.051	0.702	0.862
Mothers received antenatal care for last birth	0.930	0.041	661	433	4.168	0.044	0.847	1.013
Births with skilled attendant at delivery	0.749	0.050	916	605	2.846	0.066	0.650	0.849
Received 3+ doses of SP/Fansidar	0.520	0.039	339	227	1.480	0.076	0.442	0.599
Treated with ORS	0.544	0.067	159	105	1.631	0.123	0.410	0.678
Sought medical treatment for diarrhoea	0.616	0.077	159	105	1.949	0.124	0.462	0.769
Ever had vaccination card	0.957	0.031	164	113	1.998	0.032	0.895	1.018
Received BCG vaccination	0.934	0.032	164	113	1.682	0.034	0.871	0.998
Received DPT-HepB-Hib vaccination (3 doses)	0.868	0.061	164	113	2.370	0.070	0.746	0.990
Received birth dose polio 0 vaccination	0.512	0.063	164	113	1.632	0.124	0.385	0.639
Received polio vaccination (3 doses)	0.760	0.060	164	113	1.847	0.079	0.640	0.880
Received pneumococcal vaccination (3 doses)	0.863	0.061	164	113	2.329	0.070	0.742	0.985
Received rotavirus vaccination (2 doses)	0.884	0.052	164	113	2.148	0.059	0.779	0.988
Received measles and rubella vaccination	0.854	0.054	164	113	2.006	0.063	0.746	0.962
Received all basic vaccinations (12-23 months)	0.679	0.059	164	113	1.651	0.087	0.561	0.797
Received all age-appropriate vaccinations (12-23 months)	0.339	0.059	164	113	1.612	0.175	0.220	0.458
Received measles 2 vaccination	0.599	0.054	190	123	1.506	0.090	0.491	0.707
Received all age-appropriate vaccinations (24-35 months)	0.276	0.048	190	123	1.466	0.174	0.180	0.372
Height-for-age (-2 SD)	0.321	0.023	856	595	1.434	0.072	0.275	0.368
Weight-for-height (-2 SD)	0.082	0.015	857	597	1.429	0.177	0.053	0.111
Weight-for-age (-2 SD)	0.153	0.015	868	604	1.202	0.098	0.123	0.183
Prevalence of anaemia (children 6-59 months)	0.535	0.030	770	535	1.640	0.056	0.475	0.595
Prevalence of anaemia (women 15-49)	0.276	0.028	1,167	745	2.109	0.100	0.221	0.331
Ever experienced any physical violence since age 15	0.531	0.027	839	535	1.542	0.050	0.478	0.584
Ever experienced any sexual violence	0.242	0.026	839	535	1.747	0.107	0.190	0.294
Ever experienced any physical/sexual violence by husband/partner	0.578	0.030	695	412	1.587	0.051	0.519	0.638
Ever experienced any emotional/physical/sexual violence by any husband/partner	0.689	0.026	695	412	1.492	0.038	0.636	0.741
Experienced any emotional/physical/sexual violence in the last 12 months by any husband/partner	0.463	0.022	695	412	1.172	0.048	0.419	0.508
Had 2+ sexual partners in past 12 months	0.016	0.004	1,183	754	1.006	0.229	0.009	0.023
Condom use at last sex	0.368	0.112	21	12	1.034	0.304	0.144	0.591
Abstinence among never-married youth (never had sex)	0.622	0.039	290	180	1.363	0.063	0.544	0.700
Had an HIV test and received results in past 12 months	0.474	0.034	1,183	754	2.361	0.073	0.405	0.542
Discriminatory attitudes towards people living with HIV	0.357	0.025	1,174	747	1.792	0.070	0.307	0.407
Total fertility rate (last 3 years)	5.666	0.314	3,253	2,066	1.286	0.055	5.039	6.294
Neonatal mortality (last 0-9 years)	32.542	6.187	1,857	1,218	1.253	0.190	20.167	44.916
Postneonatal mortality (last 0-9 years)	18.171	4.147	1,869	1,224	1.358	0.228	9.877	26.464
Infant mortality (last 0-9 years)	50.712	7.250	1,861	1,220	1.289	0.143	36.212	65.213
Child mortality (last 0-9 years)	25.487	4.223	1,868	1,226	1.118	0.166	17.040	33.933
Under-5 mortality (last 0-9 years)	74.907	8.400	1,873	1,228	1.282	0.112	58.108	91.706
HIV prevalence among women 15-49	0.064	0.009	1,166	707	1.264	0.142	0.046	0.082
HIV prevalence among pregnant women 15-49	0.082	0.023	99	60	0.833	0.282	0.036	0.128
HIV prevalence among young women 15-24	0.015	0.006	492	301	1.120	0.408	0.003	0.027

Continued…

Table B.10—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative standard error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
MEN								
Urban residence	0.198	0.024	968	599	1.873	0.121	0.150	0.246
Literacy	0.766	0.023	968	599	1.657	0.029	0.721	0.811
No education	0.034	0.012	968	599	2.015	0.346	0.010	0.057
Secondary or higher education	0.492	0.034	968	599	2.117	0.069	0.424	0.560
Never married (in union)	0.414	0.019	968	599	1.188	0.045	0.376	0.452
Currently married (in union)	0.554	0.020	968	599	1.278	0.037	0.514	0.595
Had first sexual intercourse before age 18	0.357	0.024	687	426	1.305	0.067	0.309	0.405
Knows any contraceptive method	0.984	0.007	527	332	1.229	0.007	0.971	0.998
Knows any modern contraceptive method	0.984	0.007	527	332	1.229	0.007	0.971	0.998
Want no more children	0.350	0.020	527	332	0.949	0.056	0.310	0.389
Want to delay birth at least 2 years	0.363	0.027	527	332	1.294	0.075	0.309	0.417
Ideal number of children	4.814	0.132	964	597	1.648	0.027	4.550	5.078
Had 2+ sexual partners in past 12 months	0.108	0.013	968	599	1.326	0.123	0.081	0.134
Condom use at last sex	0.181	0.043	107	64	1.136	0.235	0.096	0.266
Abstinence among never-married youth (never had sex)	0.553	0.040	369	225	1.533	0.072	0.474	0.633
Had paid sex in past 12 months	0.061	0.010	968	599	1.330	0.167	0.041	0.082
Had HIV test and received results in past 12 months	0.380	0.034	968	599	2.185	0.090	0.312	0.448
Discriminatory attitudes towards people living with HIV	0.220	0.024	961	595	1.762	0.107	0.173	0.268
HIV prevalence among men 15-49	0.043	0.008	937	587	1.253	0.192	0.027	0.060
HIV prevalence among young men 15-24	0.005	0.003	423	263	0.997	0.690	0.000	0.012
HIV prevalence among men 15-59	0.052	0.009	1,040	652	1.244	0.165	0.035	0.069
WOMEN AND MEN								
HIV prevalence among respondents 15-49	0.054	0.008	2,103	1,293	1.527	0.139	0.039	0.070
HIV prevalence among respondents 15-24	0.010	0.004	915	564	1.081	0.349	0.003	0.018

na = Not applicable

Table B.11 Sampling errors: Northern sample, Zambia DHS 2018

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative standard error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
HOUSEHOLDS AND POPULATION								
Ownership of at least one ITN	0.822	0.016	1,246	1,081	1.486	0.020	0.790	0.855
De facto population with access to an ITN	0.630	0.020	6,152	5,333	1.882	0.032	0.589	0.670
Household population that slept under an ITN last night	0.579	0.023	6,152	5,333	1.854	0.040	0.533	0.626
WOMEN								
Urban residence	0.202	0.027	1,239	1,054	2.381	0.135	0.148	0.256
Literacy	0.473	0.025	1,239	1,054	1.793	0.054	0.422	0.524
No education	0.109	0.017	1,239	1,054	1.896	0.154	0.076	0.143
Secondary or higher education	0.280	0.027	1,239	1,054	2.100	0.096	0.226	0.334
Never married (never in union)	0.259	0.015	1,239	1,054	1.170	0.056	0.230	0.288
Currently married (in union)	0.634	0.016	1,239	1,054	1.201	0.026	0.601	0.667
Married before age 18	0.497	0.021	949	806	1.315	0.043	0.454	0.539
Had sexual intercourse before age 18	0.674	0.022	949	806	1.423	0.032	0.631	0.718
Currently pregnant	0.084	0.008	1,239	1,054	1.027	0.096	0.068	0.100
Know any contraceptive method	0.990	0.006	758	668	1.720	0.006	0.978	1.003
Know a modern method	0.986	0.007	758	668	1.657	0.007	0.971	1.000
Currently using any method	0.439	0.028	758	668	1.555	0.064	0.383	0.496
Currently using a modern method	0.365	0.030	758	668	1.723	0.083	0.305	0.425
Currently using IUD	0.005	0.005	758	668	1.944	0.991	0.000	0.015
Currently using pill	0.054	0.011	758	668	1.283	0.195	0.033	0.075
Currently using male condoms	0.011	0.004	758	668	1.112	0.377	0.003	0.020
Currently using injectables	0.228	0.022	758	668	1.425	0.095	0.184	0.271
Currently using implants	0.061	0.013	758	668	1.466	0.209	0.036	0.087
Currently using female sterilisation	0.003	0.001	758	668	0.763	0.520	0.000	0.006
Currently using withdrawal	0.071	0.013	758	668	1.359	0.178	0.046	0.097
Currently using rhythm	0.000	0.000	758	668	na	na	0.000	0.000
Using public sector source	0.956	0.013	323	276	1.098	0.013	0.931	0.981
Want no more children	0.335	0.020	758	668	1.167	0.060	0.295	0.375
Want to delay next birth at least 2 years	0.441	0.023	758	668	1.297	0.053	0.394	0.488
Ideal number of children	5.089	0.091	1,198	1,021	1.483	0.018	4.908	5.271
Mothers protected against tetanus for last birth	0.774	0.024	692	615	1.515	0.031	0.726	0.821
Mothers received antenatal care for last birth	0.984	0.007	692	615	1.373	0.007	0.971	0.997
Births with skilled attendant at delivery	0.700	0.045	1,006	890	2.636	0.065	0.610	0.791
Received 3+ doses of SP/Fansidar	0.638	0.033	401	347	1.365	0.051	0.573	0.704
Treated with ORS	0.667	0.044	141	118	1.070	0.066	0.579	0.754
Sought medical treatment for diarrhoea	0.693	0.047	141	118	1.153	0.067	0.599	0.786
Ever had vaccination card	0.970	0.018	188	155	1.439	0.019	0.933	1.007
Received BCG vaccination	0.962	0.019	188	155	1.325	0.020	0.925	1.000
Received DPT-HepB-Hib vaccination (3 doses)	0.887	0.041	188	155	1.747	0.047	0.804	0.970
Received birth dose polio 0 vaccination	0.538	0.050	188	155	1.352	0.094	0.437	0.639
Received polio vaccination (3 doses)	0.817	0.048	188	155	1.676	0.059	0.720	0.914
Received pneumococcal vaccination (3 doses)	0.858	0.040	188	155	1.533	0.047	0.778	0.938
Received rotavirus vaccination (2 doses)	0.887	0.035	188	155	1.462	0.039	0.817	0.956
Received measles and rubella vaccination	0.885	0.026	188	155	1.096	0.030	0.833	0.938
Received all basic vaccinations (12-23 months)	0.762	0.047	188	155	1.464	0.061	0.669	0.856
Received all age-appropriate vaccinations (12-23 months)	0.430	0.047	188	155	1.262	0.109	0.336	0.523
Received measles 2 vaccination	0.515	0.056	183	176	1.569	0.108	0.404	0.627
Received all age-appropriate vaccinations (24-35 months)	0.246	0.054	183	176	1.764	0.217	0.139	0.354
Height-for-age (-2 SD)	0.458	0.019	962	860	1.171	0.041	0.420	0.496
Weight-for-height (-2 SD)	0.031	0.005	960	860	0.964	0.170	0.020	0.041
Weight-for-age (-2 SD)	0.141	0.013	981	876	1.109	0.092	0.115	0.167
Prevalence of anaemia (children 6-59 months)	0.613	0.024	868	773	1.434	0.039	0.564	0.661
Prevalence of anaemia (women 15-49)	0.280	0.020	1,228	1,048	1.549	0.071	0.241	0.320
Ever experienced any physical violence since age 15	0.339	0.020	916	727	1.271	0.059	0.299	0.379
Ever experienced any sexual violence	0.192	0.026	916	727	2.004	0.136	0.140	0.244
Ever experienced any physical/sexual violence by husband/partner	0.409	0.031	743	535	1.696	0.075	0.347	0.470
Ever experienced any emotional/physical/sexual violence by any husband/partner	0.511	0.027	743	535	1.457	0.052	0.458	0.565
Experienced any emotional/physical/sexual violence in the last 12 months by any husband/partner	0.302	0.021	743	535	1.242	0.069	0.260	0.344
Had 2+ sexual partners in past 12 months	0.015	0.003	1,239	1,054	0.999	0.231	0.008	0.022
Condom use at last sex	0.480	0.140	20	16	1.209	0.292	0.199	0.760
Abstinence among never-married youth (never had sex)	0.597	0.042	304	251	1.475	0.070	0.514	0.680
Had an HIV test and received results in past 12 months	0.537	0.024	1,239	1,054	1.708	0.045	0.488	0.585
Discriminatory attitudes towards people living with HIV	0.431	0.026	1,178	1,001	1.816	0.061	0.378	0.483
Total fertility rate (last 3 years)	5.562	0.307	3,428	2,919	1.384	0.055	4.947	6.176
Neonatal mortality (last 0-9 years)	22.080	4.258	1,996	1,758	1.221	0.193	13.565	30.596
Postneonatal mortality (last 0-9 years)	16.449	4.414	1,991	1,751	1.438	0.268	7.621	25.278
Infant mortality (last 0-9 years)	38.530	7.537	1,997	1,758	1.593	0.196	23.455	53.604
Child mortality (last 0-9 years)	28.090	5.979	1,979	1,741	1.446	0.213	16.132	40.048
Under-5 mortality (last 0-9 years)	65.537	11.308	2,012	1,772	1.776	0.173	42.921	88.154
HIV prevalence among women 15-49	0.067	0.010	1,224	987	1.458	0.155	0.046	0.088
HIV prevalence among pregnant women 15-49	0.040	0.023	100	84	1.154	0.572	0.000	0.085
HIV prevalence among young women 15-24	0.036	0.008	536	430	1.044	0.233	0.019	0.053

Continued…

Table B.11—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative standard error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
MEN								
Urban residence	0.222	0.035	976	855	2.649	0.159	0.151	0.293
Literacy	0.830	0.019	976	855	1.598	0.023	0.791	0.868
No education	0.035	0.007	976	855	1.240	0.209	0.020	0.049
Secondary or higher education	0.477	0.030	976	855	1.892	0.063	0.417	0.538
Never married (in union)	0.429	0.020	976	855	1.272	0.047	0.389	0.470
Currently married (in union)	0.556	0.020	976	855	1.251	0.036	0.516	0.595
Had first sexual intercourse before age 18	0.468	0.033	727	628	1.762	0.070	0.403	0.534
Knows any contraceptive method	1.000	0.000	536	475	na	0.000	1.000	1.000
Knows any modern contraceptive method	1.000	0.000	536	475	na	0.000	1.000	1.000
Want no more children	0.269	0.022	536	475	1.155	0.082	0.224	0.313
Want to delay birth at least 2 years	0.540	0.019	536	475	0.861	0.034	0.502	0.577
Ideal number of children	5.327	0.108	961	841	1.743	0.020	5.111	5.544
Had 2+ sexual partners in past 12 months	0.111	0.014	976	855	1.427	0.129	0.083	0.140
Condom use at last sex	0.233	0.038	110	95	0.946	0.164	0.157	0.310
Abstinence among never-married youth (never had sex)	0.466	0.037	370	325	1.430	0.080	0.392	0.540
Had paid sex in past 12 months	0.027	0.006	976	855	1.223	0.234	0.014	0.040
Had HIV test and received results in past 12 months	0.434	0.020	976	855	1.250	0.046	0.394	0.473
Discriminatory attitudes towards people living with HIV	0.292	0.028	969	850	1.906	0.096	0.236	0.348
HIV prevalence among men 15-49	0.044	0.010	960	837	1.459	0.221	0.024	0.063
HIV prevalence among young men 15-24	0.018	0.008	415	358	1.207	0.434	0.002	0.034
HIV prevalence among men 15-59	0.045	0.009	1,072	929	1.416	0.200	0.027	0.063
WOMEN AND MEN								
HIV prevalence among respondents 15-49	0.056	0.009	2,184	1,824	1.853	0.162	0.038	0.075
HIV prevalence among respondents 15-24	0.028	0.005	951	788	0.970	0.185	0.018	0.038

na = Not applicable

Table B.12 Sampling errors: North Western sample, Zambia DHS 2018

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative standard error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
HOUSEHOLDS AND POPULATION								
Ownership of at least one ITN	0.784	0.033	1,010	685	2.546	0.042	0.718	0.850
De facto population with access to an ITN	0.602	0.036	4,826	3,313	2.664	0.059	0.531	0.673
Household population that slept under an ITN last night	0.453	0.032	4,826	3,313	2.206	0.070	0.390	0.516
WOMEN								
Urban residence	0.245	0.034	1,081	718	2.624	0.140	0.176	0.314
Literacy	0.644	0.025	1,081	718	1.741	0.039	0.594	0.695
No education	0.078	0.013	1,081	718	1.549	0.162	0.053	0.103
Secondary or higher education	0.528	0.029	1,081	718	1.884	0.054	0.471	0.586
Never married (never in union)	0.379	0.022	1,081	718	1.492	0.058	0.335	0.423
Currently married (in union)	0.500	0.023	1,081	718	1.535	0.047	0.453	0.547
Married before age 18	0.282	0.025	808	531	1.606	0.090	0.231	0.333
Had sexual intercourse before age 18	0.797	0.029	808	531	2.010	0.036	0.740	0.854
Currently pregnant	0.079	0.014	1,081	718	1.664	0.173	0.052	0.107
Know any contraceptive method	0.998	0.002	537	359	1.006	0.002	0.994	1.002
Know a modern method	0.998	0.002	537	359	1.006	0.002	0.994	1.002
Currently using any method	0.468	0.027	537	359	1.269	0.058	0.413	0.523
Currently using a modern method	0.459	0.027	537	359	1.277	0.060	0.404	0.514
Currently using IUD	0.001	0.001	537	359	0.805	1.007	0.000	0.004
Currently using pill	0.066	0.014	537	359	1.331	0.217	0.037	0.094
Currently using male condoms	0.014	0.006	537	359	1.226	0.446	0.002	0.026
Currently using injectables	0.250	0.025	537	359	1.343	0.100	0.200	0.301
Currently using implants	0.078	0.010	537	359	0.882	0.131	0.057	0.098
Currently using female sterilisation	0.049	0.013	537	359	1.447	0.277	0.022	0.076
Currently using withdrawal	0.005	0.003	537	359	0.892	0.544	0.000	0.010
Currently using rhythm	0.000	0.000	537	359	na	na	0.000	0.000
Using public sector source	0.862	0.036	387	253	2.041	0.042	0.790	0.934
Want no more children	0.326	0.023	537	359	1.155	0.072	0.279	0.373
Want to delay next birth at least 2 years	0.367	0.023	537	359	1.099	0.062	0.322	0.413
Ideal number of children	4.832	0.092	1,060	702	1.693	0.019	4.648	5.016
Mothers protected against tetanus for last birth	0.852	0.020	609	404	1.427	0.024	0.811	0.893
Mothers received antenatal care for last birth	0.972	0.008	609	404	1.164	0.008	0.957	0.988
Births with skilled attendant at delivery	0.790	0.037	800	531	2.258	0.047	0.716	0.864
Received 3+ doses of SP/Fansidar	0.643	0.031	324	219	1.182	0.048	0.581	0.705
Treated with ORS	0.623	0.077	107	78	1.676	0.124	0.468	0.778
Sought medical treatment for diarrhoea	0.752	0.062	107	78	1.461	0.082	0.628	0.876
Ever had vaccination card	0.945	0.029	156	109	1.627	0.031	0.887	1.003
Received BCG vaccination	0.981	0.015	156	109	1.373	0.015	0.951	1.010
Received DPT-HepB-Hib vaccination (3 doses)	0.906	0.027	156	109	1.188	0.030	0.852	0.960
Received birth dose polio 0 vaccination	0.660	0.053	156	109	1.419	0.080	0.554	0.766
Received polio vaccination (3 doses)	0.813	0.032	156	109	1.061	0.040	0.749	0.878
Received pneumococcal vaccination (3 doses)	0.883	0.040	156	109	1.610	0.046	0.803	0.964
Received rotavirus vaccination (2 doses)	0.908	0.058	156	109	2.568	0.064	0.791	1.024
Received measles and rubella vaccination	0.872	0.029	156	109	1.127	0.034	0.813	0.931
Received all basic vaccinations (12-23 months)	0.747	0.039	156	109	1.143	0.052	0.670	0.825
Received all age-appropriate vaccinations (12-23 months)	0.437	0.044	156	109	1.143	0.101	0.348	0.525
Received measles 2 vaccination	0.592	0.058	157	102	1.451	0.098	0.476	0.708
Received all age-appropriate vaccinations (24-35 months)	0.238	0.046	157	102	1.329	0.191	0.147	0.329
Height-for-age (-2 SD)	0.319	0.029	788	536	1.544	0.089	0.262	0.376
Weight-for-height (-2 SD)	0.024	0.007	786	536	1.175	0.277	0.011	0.037
Weight-for-age (-2 SD)	0.104	0.018	797	545	1.509	0.171	0.068	0.139
Prevalence of anaemia (children 6-59 months)	0.616	0.020	715	492	1.100	0.032	0.577	0.656
Prevalence of anaemia (women 15-49)	0.322	0.022	1,057	696	1.497	0.067	0.279	0.365
Ever experienced any physical violence since age 15	0.209	0.015	735	521	1.003	0.072	0.179	0.239
Ever experienced any sexual violence	0.058	0.010	735	521	1.147	0.170	0.039	0.078
Ever experienced any physical/sexual violence by husband/partner	0.239	0.019	518	318	0.999	0.078	0.201	0.276
Ever experienced any emotional/physical/sexual violence by any husband/partner	0.318	0.022	518	318	1.077	0.069	0.274	0.363
Experienced any emotional/physical/sexual violence in the last 12 months by any husband/partner	0.179	0.018	518	318	1.063	0.100	0.143	0.215
Had 2+ sexual partners in past 12 months	0.011	0.004	1,081	718	1.270	0.364	0.003	0.019
Condom use at last sex	0.163	0.114	12	8	1.018	0.698	0.000	0.390
Abstinence among never-married youth (never had sex)	0.350	0.032	341	230	1.253	0.093	0.285	0.415
Had an HIV test and received results in past 12 months	0.593	0.028	1,081	718	1.841	0.047	0.538	0.648
Discriminatory attitudes towards people living with HIV	0.310	0.029	1,060	704	2.038	0.094	0.252	0.368
Total fertility rate (last 3 years)	4.945	0.251	3,005	1,987	1.521	0.051	4.443	5.447
Neonatal mortality (last 0-9 years)	8.920	2.536	1,572	1,042	1.033	0.284	3.847	13.992
Postneonatal mortality (last 0-9 years)	10.491	2.481	1,582	1,049	0.947	0.237	5.528	15.453
Infant mortality (last 0-9 years)	19.410	3.080	1,574	1,044	0.862	0.159	13.251	25.570
Child mortality (last 0-9 years)	6.802	2.456	1,548	1,025	1.126	0.361	1.890	11.714
Under-5 mortality (last 0-9 years)	26.080	4.125	1,576	1,045	0.979	0.158	17.831	34.330
HIV prevalence among women 15-49	0.085	0.013	1,054	672	1.488	0.150	0.060	0.111
HIV prevalence among pregnant women 15-49	0.055	0.027	82	54	1.081	0.500	0.000	0.109
HIV prevalence among young women 15-24	0.066	0.020	479	324	1.764	0.305	0.026	0.106

Continued…

Table B.12—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative standard error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
MEN								
Urban residence	0.251	0.036	847	556	2.422	0.144	0.178	0.323
Literacy	0.806	0.022	847	556	1.614	0.027	0.763	0.850
No education	0.025	0.006	847	556	1.176	0.254	0.012	0.037
Secondary or higher education	0.659	0.025	847	556	1.504	0.037	0.610	0.708
Never married (in union)	0.488	0.019	847	556	1.123	0.040	0.449	0.526
Currently married (in union)	0.488	0.021	847	556	1.229	0.043	0.446	0.531
Had first sexual intercourse before age 18	0.577	0.031	616	404	1.549	0.054	0.515	0.638
Knows any contraceptive method	1.000	0.000	413	271	na	0.000	1.000	1.000
Knows any modern contraceptive method	1.000	0.000	413	271	na	0.000	1.000	1.000
Want no more children	0.312	0.021	413	271	0.927	0.068	0.270	0.354
Want to delay birth at least 2 years	0.404	0.020	413	271	0.844	0.051	0.363	0.445
Ideal number of children	5.491	0.158	841	552	1.680	0.029	5.176	5.806
Had 2+ sexual partners in past 12 months	0.175	0.015	847	556	1.178	0.088	0.144	0.206
Condom use at last sex	0.275	0.041	134	97	1.049	0.148	0.193	0.356
Abstinence among never-married youth (never had sex)	0.283	0.031	349	229	1.282	0.109	0.221	0.345
Had paid sex in past 12 months	0.131	0.013	847	556	1.088	0.097	0.105	0.156
Had HIV test and received results in past 12 months	0.504	0.020	847	556	1.163	0.040	0.464	0.544
Discriminatory attitudes towards people living with HIV	0.275	0.033	838	549	2.134	0.120	0.209	0.341
HIV prevalence among men 15-49	0.031	0.006	818	545	1.013	0.197	0.019	0.044
HIV prevalence among young men 15-24	0.003	0.002	381	251	0.829	0.751	0.000	0.008
HIV prevalence among men 15-59	0.033	0.006	885	585	1.021	0.185	0.021	0.046
WOMEN AND MEN								
HIV prevalence among respondents 15-49	0.061	0.008	1,872	1,218	1.514	0.137	0.044	0.078
HIV prevalence among respondents 15-24	0.038	0.012	860	575	1.773	0.304	0.015	0.062

na = Not applicable

Table B.13 Sampling errors: Southern sample, Zambia DHS 2018

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative standard error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
HOUSEHOLDS AND POPULATION								
Ownership of at least one ITN	0.828	0.014	1,289	1,579	1.343	0.017	0.800	0.856
De facto population with access to an ITN	0.641	0.024	6,298	7,594	2.020	0.037	0.593	0.689
Household population that slept under an ITN last night	0.426	0.034	6,298	7,594	2.564	0.080	0.358	0.495
WOMEN								
Urban residence	0.332	0.082	1,347	1,574	6.324	0.248	0.167	0.497
Literacy	0.722	0.021	1,347	1,574	1.729	0.029	0.680	0.764
No education	0.044	0.009	1,347	1,574	1.689	0.214	0.025	0.063
Secondary or higher education	0.480	0.034	1,347	1,574	2.524	0.072	0.411	0.548
Never married (never in union)	0.252	0.027	1,347	1,574	2.290	0.108	0.198	0.306
Currently married (in union)	0.631	0.028	1,347	1,574	2.156	0.045	0.574	0.688
Married before age 18	0.424	0.021	1,040	1,247	1.387	0.050	0.381	0.466
Had sexual intercourse before age 18	0.754	0.016	1,040	1,247	1.224	0.022	0.721	0.786
Currently pregnant	0.118	0.021	1,347	1,574	2.340	0.175	0.077	0.159
Know any contraceptive method	0.998	0.001	774	993	0.830	0.001	0.996	1.001
Know a modern method	0.998	0.001	774	993	0.830	0.001	0.996	1.001
Currently using any method	0.439	0.022	774	993	1.248	0.051	0.394	0.483
Currently using a modern method	0.424	0.023	774	993	1.313	0.055	0.377	0.471
Currently using IUD	0.004	0.003	774	993	1.180	0.646	0.000	0.010
Currently using pill	0.078	0.010	774	993	1.065	0.131	0.058	0.099
Currently using male condoms	0.027	0.007	774	993	1.256	0.270	0.013	0.042
Currently using injectables	0.237	0.018	774	993	1.200	0.078	0.200	0.273
Currently using implants	0.057	0.015	774	993	1.816	0.267	0.026	0.087
Currently using female sterilisation	0.007	0.003	774	993	1.155	0.496	0.000	0.014
Currently using withdrawal	0.003	0.002	774	993	0.971	0.614	0.000	0.007
Currently using rhythm	0.009	0.004	774	993	1.169	0.437	0.001	0.017
Using public sector source	0.949	0.013	438	518	1.284	0.014	0.922	0.976
Want no more children	0.312	0.014	774	993	0.857	0.046	0.283	0.340
Want to delay next birth at least 2 years	0.315	0.032	774	993	1.909	0.102	0.251	0.378
Ideal number of children	4.949	0.135	1,338	1,561	2.112	0.027	4.679	5.219
Mothers protected against tetanus for last birth	0.799	0.015	748	946	1.045	0.019	0.769	0.829
Mothers received antenatal care for last birth	0.981	0.006	748	946	1.242	0.006	0.969	0.994
Births with skilled attendant at delivery	0.813	0.036	1,019	1,308	2.608	0.044	0.742	0.884
Received 3+ doses of SP/Fansidar	0.418	0.040	420	525	1.685	0.097	0.337	0.499
Treated with ORS	0.550	0.048	129	192	1.188	0.088	0.453	0.647
Sought medical treatment for diarrhoea	0.566	0.080	129	192	1.989	0.141	0.406	0.725
Ever had vaccination card	0.997	0.003	208	257	0.758	0.003	0.992	1.003
Received BCG vaccination	0.980	0.009	208	257	0.927	0.009	0.962	0.998
Received DPT-HepB-Hib vaccination (3 doses)	0.930	0.020	208	257	1.139	0.022	0.889	0.970
Received birth dose polio 0 vaccination	0.518	0.044	208	257	1.266	0.086	0.430	0.607
Received polio vaccination (3 doses)	0.790	0.031	208	257	1.089	0.039	0.729	0.852
Received pneumococcal vaccination (3 doses)	0.909	0.023	208	257	1.130	0.025	0.864	0.954
Received rotavirus vaccination (2 doses)	0.914	0.020	208	257	1.037	0.022	0.873	0.954
Received measles and rubella vaccination	0.945	0.019	208	257	1.199	0.020	0.906	0.983
Received all basic vaccinations (12-23 months)	0.749	0.028	208	257	0.922	0.037	0.694	0.805
Received all age-appropriate vaccinations (12-23 months)	0.294	0.057	208	257	1.758	0.194	0.180	0.408
Received measles 2 vaccination	0.576	0.085	203	263	2.478	0.147	0.406	0.745
Received all age-appropriate vaccinations (24-35 months)	0.267	0.049	203	263	1.601	0.184	0.169	0.366
Height-for-age (-2 SD)	0.294	0.016	1,027	1,274	1.038	0.054	0.263	0.326
Weight-for-height (-2 SD)	0.023	0.006	1,030	1,278	1.240	0.251	0.011	0.034
Weight-for-age (-2 SD)	0.097	0.017	1,032	1,279	1.841	0.175	0.063	0.130
Prevalence of anaemia (children 6-59 months)	0.557	0.023	928	1,145	1.448	0.042	0.510	0.604
Prevalence of anaemia (women 15-49)	0.353	0.023	1,301	1,501	1.707	0.065	0.307	0.399
Ever experienced any physical violence since age 15	0.387	0.031	949	1,105	1.930	0.079	0.326	0.448
Ever experienced any sexual violence	0.138	0.037	949	1,105	3.267	0.266	0.065	0.212
Ever experienced any physical/sexual violence by husband/partner	0.444	0.035	734	839	1.885	0.078	0.375	0.514
Ever experienced any emotional/physical/sexual violence by any husband/partner	0.528	0.029	734	839	1.565	0.055	0.470	0.586
Experienced any emotional/physical/sexual violence in the last 12 months by any husband/partner	0.435	0.031	734	839	1.689	0.071	0.373	0.497
Had 2+ sexual partners in past 12 months	0.009	0.003	1,347	1,574	1.076	0.313	0.003	0.014
Condom use at last sex	0.214	0.107	14	14	0.943	0.498	0.001	0.428
Abstinence among never-married youth (never had sex)	0.366	0.028	353	338	1.095	0.077	0.310	0.423
Had an HIV test and received results in past 12 months	0.768	0.021	1,347	1,574	1.804	0.027	0.727	0.810
Discriminatory attitudes towards people living with HIV	0.202	0.021	1,331	1,557	1.900	0.104	0.160	0.244
Total fertility rate (last 3 years)	5.504	0.389	3,717	4,403	1.810	0.071	4.727	6.282
Neonatal mortality (last 0-9 years)	32.987	9.733	1,987	2,573	1.943	0.295	13.520	52.454
Postneonatal mortality (last 0-9 years)	13.096	3.987	1,990	2,573	1.472	0.304	5.122	21.070
Infant mortality (last 0-9 years)	46.083	12.244	1,987	2,573	1.911	0.266	21.594	70.572
Child mortality (last 0-9 years)	25.263	11.956	1,946	2,540	2.883	0.473	1.351	49.174
Under-5 mortality (last 0-9 years)	70.182	22.995	1,994	2,581	2.765	0.328	24.191	116.172
HIV prevalence among women 15-49	0.158	0.023	1,297	1,474	2.260	0.145	0.112	0.204
HIV prevalence among pregnant women 15-49	0.088	0.032	110	156	1.167	0.361	0.024	0.151
HIV prevalence among young women 15-24	0.058	0.018	548	602	1.812	0.314	0.021	0.094

Continued…

Table B.13—Continued

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative standard error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
MEN								
Urban residence	0.351	0.103	1,117	1,395	7.030	0.292	0.146	0.556
Literacy	0.830	0.014	1,117	1,395	1.275	0.017	0.802	0.859
No education	0.022	0.006	1,117	1,395	1.306	0.261	0.011	0.034
Secondary or higher education	0.582	0.041	1,117	1,395	2.798	0.071	0.499	0.664
Never married (in union)	0.455	0.015	1,117	1,395	0.988	0.032	0.426	0.485
Currently married (in union)	0.504	0.017	1,117	1,395	1.156	0.034	0.470	0.539
Had first sexual intercourse before age 18	0.529	0.043	824	1,035	2.492	0.082	0.442	0.616
Knows any contraceptive method	1.000	0.000	543	704	na	0.000	1.000	1.000
Knows any modern contraceptive method	1.000	0.000	543	704	na	0.000	1.000	1.000
Want no more children	0.241	0.041	543	704	2.220	0.170	0.159	0.322
Want to delay birth at least 2 years	0.466	0.024	543	704	1.137	0.052	0.417	0.515
Ideal number of children	5.387	0.251	1,087	1,347	2.174	0.047	4.884	5.889
Had 2+ sexual partners in past 12 months	0.254	0.031	1,117	1,395	2.393	0.123	0.191	0.316
Condom use at last sex	0.271	0.035	290	354	1.353	0.131	0.200	0.342
Abstinence among never-married youth (never had sex)	0.338	0.029	437	554	1.268	0.085	0.281	0.396
Had paid sex in past 12 months	0.086	0.011	1,117	1,395	1.371	0.134	0.063	0.109
Had HIV test and received results in past 12 months	0.606	0.028	1,117	1,395	1.942	0.047	0.549	0.663
Discriminatory attitudes towards people living with HIV	0.258	0.017	1,107	1,385	1.282	0.065	0.224	0.292
HIV prevalence among men 15-49	0.088	0.011	1,058	1,365	1.225	0.121	0.067	0.109
HIV prevalence among young men 15-24	0.009	0.004	469	623	0.964	0.472	0.001	0.017
HIV prevalence among men 15-59	0.105	0.013	1,160	1,496	1.440	0.123	0.079	0.131
WOMEN AND MEN								
HIV prevalence among respondents 15-49	0.124	0.015	2,355	2,839	2.247	0.123	0.094	0.155
HIV prevalence among respondents 15-24	0.033	0.008	1,017	1,225	1.466	0.250	0.016	0.049

na = Not applicable

Table B.14 Sampling errors: Western sample, Zambia DHS 2018

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative standard error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
HOUSEHOLDS AND POPULATION								
Ownership of at least one ITN	0.815	0.023	1,119	846	1.950	0.028	0.770	0.861
De facto population with access to an ITN	0.567	0.019	5,201	3,908	1.666	0.034	0.528	0.606
Household population that slept under an ITN last night	0.510	0.021	5,201	3,908	1.695	0.042	0.467	0.553
WOMEN								
Urban residence	0.229	0.020	1,096	808	1.603	0.089	0.188	0.270
Literacy	0.633	0.029	1,096	808	2.006	0.046	0.574	0.692
No education	0.133	0.022	1,096	808	2.155	0.166	0.089	0.178
Secondary or higher education	0.382	0.034	1,096	808	2.285	0.088	0.315	0.449
Never married (never in union)	0.366	0.022	1,096	808	1.510	0.060	0.322	0.410
Currently married (in union)	0.485	0.022	1,096	808	1.460	0.046	0.441	0.529
Married before age 18	0.241	0.018	839	618	1.221	0.075	0.205	0.277
Had sexual intercourse before age 18	0.824	0.017	839	618	1.271	0.020	0.791	0.858
Currently pregnant	0.086	0.010	1,096	808	1.209	0.119	0.065	0.106
Know any contraceptive method	0.986	0.006	523	392	1.111	0.006	0.974	0.997
Know a modern method	0.986	0.006	523	392	1.111	0.006	0.974	0.997
Currently using any method	0.312	0.030	523	392	1.456	0.095	0.253	0.371
Currently using a modern method	0.300	0.029	523	392	1.465	0.098	0.242	0.359
Currently using IUD	0.000	0.000	523	392	na	na	0.000	0.000
Currently using pill	0.063	0.012	523	392	1.127	0.191	0.039	0.087
Currently using male condoms	0.014	0.005	523	392	0.981	0.359	0.004	0.024
Currently using injectables	0.194	0.023	523	392	1.332	0.119	0.148	0.241
Currently using implants	0.028	0.008	523	392	1.073	0.276	0.013	0.044
Currently using female sterilisation	0.001	0.001	523	392	0.786	1.010	0.000	0.003
Currently using withdrawal	0.010	0.004	523	392	1.009	0.433	0.001	0.019
Currently using rhythm	0.000	0.000	523	392	na	na	0.000	0.000
Using public sector source	0.941	0.012	290	223	0.902	0.013	0.916	0.966
Want no more children	0.346	0.025	523	392	1.177	0.071	0.297	0.395
Want to delay next birth at least 2 years	0.287	0.021	523	392	1.064	0.073	0.245	0.329
Ideal number of children	4.766	0.097	1,037	764	1.444	0.020	4.573	4.960
Mothers protected against tetanus for last birth	0.662	0.023	630	477	1.250	0.035	0.615	0.708
Mothers received antenatal care for last birth	0.944	0.016	630	477	1.706	0.016	0.913	0.975
Births with skilled attendant at delivery	0.711	0.031	838	641	1.758	0.044	0.649	0.774
Received 3+ doses of SP/Fansidar	0.457	0.030	351	269	1.145	0.066	0.397	0.517
Treated with ORS	0.691	0.048	176	139	1.407	0.069	0.596	0.787
Sought medical treatment for diarrhoea	0.740	0.036	176	139	1.152	0.049	0.667	0.813
Ever had vaccination card	0.962	0.015	170	130	1.061	0.016	0.931	0.993
Received BCG vaccination	0.924	0.029	170	130	1.438	0.031	0.867	0.982
Received DPT-HepB-Hib vaccination (3 doses)	0.826	0.046	170	130	1.604	0.056	0.734	0.919
Received birth dose polio 0 vaccination	0.505	0.047	170	130	1.237	0.093	0.410	0.599
Received polio vaccination (3 doses)	0.734	0.048	170	130	1.433	0.065	0.638	0.830
Received pneumococcal vaccination (3 doses)	0.822	0.046	170	130	1.586	0.056	0.730	0.914
Received rotavirus vaccination (2 doses)	0.781	0.044	170	130	1.395	0.056	0.693	0.868
Received measles and rubella vaccination	0.868	0.039	170	130	1.507	0.044	0.791	0.946
Received all basic vaccinations (12-23 months)	0.681	0.051	170	130	1.449	0.075	0.578	0.784
Received all age-appropriate vaccinations (12-23 months)	0.358	0.049	170	130	1.335	0.136	0.261	0.456
Received measles 2 vaccination	0.513	0.057	156	116	1.404	0.111	0.399	0.626
Received all age-appropriate vaccinations (24-35 months)	0.140	0.027	156	116	0.982	0.194	0.086	0.195
Height-for-age (-2 SD)	0.290	0.021	797	615	1.293	0.073	0.247	0.332
Weight-for-height (-2 SD)	0.030	0.007	801	615	1.131	0.230	0.016	0.044
Weight-for-age (-2 SD)	0.141	0.014	798	616	1.118	0.101	0.113	0.170
Prevalence of anaemia (children 6-59 months)	0.609	0.023	695	537	1.245	0.037	0.564	0.655
Prevalence of anaemia (women 15-49)	0.379	0.017	1,041	767	1.161	0.046	0.344	0.414
Ever experienced any physical violence since age 15	0.322	0.031	790	541	1.881	0.097	0.259	0.384
Ever experienced any sexual violence	0.145	0.020	790	541	1.608	0.139	0.104	0.185
Ever experienced any physical/sexual violence by husband/partner	0.376	0.037	563	359	1.815	0.099	0.302	0.451
Ever experienced any emotional/physical/sexual violence by any husband/partner	0.456	0.040	563	359	1.899	0.088	0.376	0.536
Experienced any emotional/physical/sexual violence in the last 12 months by any husband/partner	0.300	0.027	563	359	1.418	0.091	0.245	0.355
Had 2+ sexual partners in past 12 months	0.021	0.005	1,096	808	1.225	0.255	0.010	0.031
Condom use at last sex	0.314	0.102	24	17	1.047	0.323	0.111	0.517
Abstinence among never-married youth (never had sex)	0.242	0.028	321	235	1.168	0.116	0.186	0.298
Had an HIV test and received results in past 12 months	0.738	0.021	1,096	808	1.597	0.029	0.696	0.781
Discriminatory attitudes towards people living with HIV	0.294	0.029	1,079	795	2.076	0.098	0.236	0.352
Total fertility rate (last 3 years)	5.372	0.214	3,031	2,227	1.055	0.040	4.944	5.801
Neonatal mortality (last 0-9 years)	25.180	4.110	1,632	1,236	1.043	0.163	16.961	33.399
Postneonatal mortality (last 0-9 years)	17.012	3.492	1,623	1,229	1.054	0.205	10.029	23.996
Infant mortality (last 0-9 years)	42.192	5.403	1,632	1,236	1.013	0.128	31.387	52.997
Child mortality (last 0-9 years)	15.860	3.669	1,596	1,212	1.062	0.231	8.521	23.198
Under-5 mortality (last 0-9 years)	57.382	6.230	1,633	1,237	1.025	0.109	44.923	69.842
HIV prevalence among women 15-49	0.132	0.014	1,037	757	1.288	0.103	0.105	0.159
HIV prevalence among pregnant women 15-49	0.076	0.033	88	67	1.158	0.434	0.010	0.142
HIV prevalence among young women 15-24	0.049	0.012	432	316	1.188	0.252	0.024	0.074

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Table B.14—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative standard error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
MEN								
Urban residence	0.245	0.030	771	574	1.936	0.123	0.185	0.305
Literacy	0.779	0.025	771	574	1.661	0.032	0.730	0.829
No education	0.056	0.012	771	574	1.496	0.221	0.031	0.081
Secondary or higher education	0.451	0.039	771	574	2.155	0.086	0.373	0.528
Never married (in union)	0.498	0.029	771	574	1.589	0.058	0.440	0.555
Currently married (in union)	0.465	0.030	771	574	1.655	0.064	0.406	0.525
Had first sexual intercourse before age 18	0.625	0.023	549	412	1.111	0.037	0.579	0.671
Knows any contraceptive method	1.000	0.000	353	267	na	0.000	1.000	1.000
Knows any modern contraceptive method	1.000	0.000	353	267	na	0.000	1.000	1.000
Want no more children	0.167	0.026	353	267	1.302	0.155	0.115	0.219
Want to delay birth at least 2 years	0.469	0.030	353	267	1.125	0.064	0.409	0.529
Ideal number of children	6.057	0.212	766	570	1.437	0.035	5.634	6.480
Had 2+ sexual partners in past 12 months	0.225	0.017	771	574	1.128	0.075	0.191	0.259
Condom use at last sex	0.272	0.041	172	129	1.190	0.149	0.191	0.353
Abstinence among never-married youth (never had sex)	0.195	0.026	337	247	1.198	0.133	0.143	0.246
Had paid sex in past 12 months	0.095	0.016	771	574	1.526	0.170	0.063	0.128
Had HIV test and received results in past 12 months	0.607	0.020	771	574	1.158	0.034	0.567	0.648
Discriminatory attitudes towards people living with HIV	0.332	0.024	764	570	1.406	0.072	0.284	0.380
HIV prevalence among men 15-49	0.071	0.010	723	562	1.074	0.144	0.051	0.092
HIV prevalence among young men 15-24	0.011	0.007	339	261	1.220	0.628	0.000	0.025
HIV prevalence among men 15-59	0.081	0.012	805	629	1.199	0.143	0.058	0.104
WOMEN AND MEN								
HIV prevalence among respondents 15-49	0.106	0.010	1,760	1,319	1.423	0.098	0.085	0.127
HIV prevalence among respondents 15-24	0.032	0.007	771	577	1.114	0.221	0.018	0.046

na = Not applicable

DATA QUALITY TABLES

Appendix C

Table C.1 Household age distribution

Single-year age distribution of the de facto household population by sex (weighted), Zambia DHS 2018

	Female		Male			Female		Male	
Age	Number	Percent	Number	Percent	Age	Number	Percent	Number	Percent
0	1,014	3.1	988	3.3	37	285	0.9	222	0.7
1	986	3.0	1,000	3.4	38	353	1.1	329	1.1
2	1,057	3.2	963	3.2	39	302	0.9	233	0.8
3	1,027	3.2	1,017	3.4	40	317	1.0	353	1.2
4	957	2.9	998	3.4	41	209	0.6	227	0.8
5	932	2.9	968	3.3	42	306	0.9	279	0.9
6	1,062	3.3	1,071	3.6	43	257	0.8	208	0.7
7	1,052	3.2	1,048	3.5	44	230	0.7	207	0.7
8	1,115	3.4	1,020	3.4	45	218	0.7	237	0.8
9	961	3.0	1,035	3.5	46	213	0.7	221	0.7
10	1,152	3.5	1,090	3.7	47	145	0.4	144	0.5
11	924	2.8	931	3.1	48	198	0.6	187	0.6
12	1,004	3.1	978	3.3	49	145	0.4	147	0.5
13	935	2.9	900	3.0	50	218	0.7	194	0.7
14	944	2.9	928	3.1	51	139	0.4	95	0.3
15	697	2.1	615	2.1	52	147	0.5	130	0.4
16	564	1.7	578	1.9	53	147	0.5	93	0.3
17	571	1.8	565	1.9	54	191	0.6	156	0.5
18	808	2.5	811	2.7	55	129	0.4	80	0.3
19	581	1.8	481	1.6	56	152	0.5	108	0.4
20	687	2.1	497	1.7	57	85	0.3	66	0.2
21	535	1.6	539	1.8	58	114	0.4	79	0.3
22	625	1.9	425	1.4	59	79	0.2	59	0.2
23	514	1.6	392	1.3	60	136	0.4	163	0.6
24	535	1.6	405	1.4	61	99	0.3	94	0.3
25	550	1.7	455	1.5	62	90	0.3	116	0.4
26	529	1.6	411	1.4	63	73	0.2	76	0.3
27	439	1.4	377	1.3	64	83	0.3	52	0.2
28	482	1.5	305	1.0	65	101	0.3	75	0.3
29	384	1.2	286	1.0	66	71	0.2	52	0.2
30	443	1.4	389	1.3	67	33	0.1	36	0.1
31	334	1.0	246	0.8	68	72	0.2	41	0.1
32	459	1.4	343	1.2	69	56	0.2	43	0.1
33	345	1.1	285	1.0	70+	694	2.1	524	1.8
34	359	1.1	310	1.0	Don't know/ missing	31	0.1	65	0.2
35	398	1.2	328	1.1					
36	436	1.3	306	1.0	Total	32,517	100.0	29,673	100.0

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview.

Table C.2.1 Age distribution of eligible and interviewed women

De facto household population of women age 10-54, number and percent distribution of interviewed women age 15-49, and percentage of eligible women who were interviewed (weighted), by 5-year age groups, Zambia DHS 2018

Age group	Household population of women age 10-54	Interviewed women age 15-49		Percentage of eligible women interviewed
		Number	Percentage	
10-14	4,959	na	na	na
15-19	3,222	3,066	22.0	95.2
20-24	2,895	2,798	20.0	96.7
25-29	2,384	2,322	16.6	97.4
30-34	1,940	1,879	13.5	96.8
35-39	1,773	1,717	12.3	96.8
40-44	1,319	1,292	9.3	97.9
45-49	920	888	6.4	96.5
50-54	843	na	na	na
15-49	14,454	13,962	100.0	96.6

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview. Weights for both the household population of women and interviewed women are household weights. Age is based on the Household Questionnaire.
na = Not applicable

Table C.2.2 Age distribution of eligible and interviewed men

De facto household population of men age 10-64, number and percent distribution of interviewed men age 15-59, and percentage of eligible men who were interviewed (weighted), by 5-year age groups, Zambia DHS 2018

Age group	Household population of men age 10-64	Interviewed men age 15-59		Percentage of eligible men interviewed
		Number	Percentage	
10-14	4,827	na	na	na
15-19	3,049	2,817	23.0	92.4
20-24	2,258	2,063	16.9	91.4
25-29	1,835	1,684	13.8	91.8
30-34	1,573	1,419	11.6	90.2
35-39	1,417	1,257	10.3	88.7
40-44	1,274	1,166	9.5	91.5
45-49	936	854	7.0	91.2
50-54	668	601	4.9	90.0
55-59	393	372	3.0	94.8
60-64	502	na	na	na
15-59	13,402	12,234	100.0	91.3

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview. Weights for both the household population of men and interviewed men are household weights. Age is based on the Household Questionnaire.
na = Not applicable

Table C.3 Completeness of reporting

Percentage of observations missing information for selected demographic and health questions (weighted), Zambia DHS 2018

Subject	Percentage with information missing	Number of cases
Birth date, day only (births in the 15 years preceding the survey)	1.50	27,006
Birth date, month only (births in the 15 years preceding the survey)	1.62	27,006
Birth date, month and year (births in the 15 years preceding the survey)	0.19	27,006
Age at death (deceased children born in the 15 years preceding the survey)	0.00	1,792
Age/date at first union[1] (ever-married women age 15-49)	0.00	9,411
Age/date at first union (ever-married men age 15-59)	0.47	6,967
Respondent's education (all women age 15-49)	0.00	13,683
Respondent's education (all men age 15-59)	0.00	12,132
Diarrhoea in last 2 weeks (living children age 0-59 months)	1.90	9,361
Height (living children age 0-59 months from the Biomarker Questionnaire)	4.05	10,109
Weight (living children age 0-59 months from the Biomarker Questionnaire)	3.87	10,109
Height or weight (living children age 0-59 months from the Biomarker Questionnaire)	4.07	10,109
Anaemia (living children age 6-59 months from the Biomarker Questionnaire)	5.45	9,120
Anaemia (all women from the Biomarker Questionnaire)	6.53	14,454

[1] Both year and age missing

Table C.4 Births by calendar years

Number of births, percentage with complete birth date, sex ratio at birth, and calendar year ratio by calendar year, according to living, dead, and total children (weighted), Zambia DHS 2018

Calendar year	Number of births			Percentage with year and month of birth given			Sex ratio at birth[1]			Calendar year ratio[2]		
	Living	Dead	Total	Living	Dead	Total	Living	Dead	Total	Living	Dead	Total
2019	3	0	3	100.0	na	100.0	119.0	na	119.0	na	na	na
2018	1,533	56	1,589	100.0	100.0	100.0	97.0	176.1	99.0	na	na	na
2017	1,854	84	1,938	100.0	100.0	100.0	96.5	167.7	98.7	106.9	111.2	107.1
2016	1,936	96	2,032	100.0	100.0	100.0	99.4	129.7	100.6	105.3	93.6	104.6
2015	1,825	120	1,946	100.0	100.0	100.0	102.7	96.9	102.3	97.2	119.2	98.3
2014	1,819	106	1,926	100.0	100.0	100.0	100.0	134.5	101.6	100.7	105.6	100.9
2013	1,790	81	1,871	100.0	100.0	100.0	99.5	115.8	100.1	97.1	68.3	95.4
2012	1,865	131	1,996	98.2	92.6	97.8	102.0	105.2	102.2	109.7	126.1	110.6
2011	1,612	126	1,738	98.0	92.0	97.5	100.0	59.5	96.4	86.6	88.7	86.8
2010	1,855	154	2,009	97.2	92.1	96.8	96.3	132.5	98.7	112.5	121.0	113.1
2015-2019	7,152	356	7,508	100.0	100.0	100.0	98.9	130.5	100.2	na	na	na
2010-2014	8,940	598	9,539	98.7	94.7	98.4	99.5	104.9	99.8	na	na	na
2005-2009	7,601	695	8,296	97.5	85.9	96.5	98.7	127.7	100.8	na	na	na
2000-2004	5,295	662	5,957	97.3	84.8	95.9	97.3	131.4	100.6	na	na	na
<2000	5,265	1,062	6,327	96.0	84.3	94.0	100.5	103.9	101.1	na	na	na
All	34,253	3,374	37,627	98.1	88.2	97.2	99.0	116.4	100.5	na	na	na

na = Not applicable
[1] (Bm/Bf)x100, where Bm and Bf are the numbers of male and female births, respectively
[2] [2Bx/(Bx-1+Bx+1)]x100, where Bx is the number of births in calendar year x

Table C.5 Reporting of age at death in days

Distribution of reported deaths under age 1 month by age at death in days and percentage of neonatal deaths reported to occur at ages 0-6 days, for 5-year periods preceding the survey (weighted), Zambia DHS 2018

Age at death (days)	Number of years preceding the survey				Total 0-19
	0-4	5-9	10-14	15-19	
<1	122	87	67	55	332
1	33	30	18	10	91
2	21	13	29	9	72
3	20	13	7	6	46
4	7	6	7	0	20
5	3	13	3	1	19
6	1	0	0	3	4
7	37	19	15	18	89
8	1	0	1	1	2
9	2	0	1	1	4
10	2	2	0	0	4
12	4	0	1	0	5
14	12	19	7	12	50
16	0	1	0	0	1
18	0	1	1	0	2
20	0	1	1	0	1
21	6	4	6	8	24
28	1	0	0	0	1
29	1	0	0	0	1
30	1	0	3	1	5
Total 0-30	273	209	166	124	772
Percentage early neonatal[1]	75.5	77.7	78.7	67.8	75.6

[1] 0-6 days/0-30 days

Table C.6 Reporting of age at death in months

Distribution of reported deaths under age 2 by age at death in months and percentage of infant deaths reported to occur under age 1 month, for 5-year periods preceding the survey (weighted), Zambia DHS 2018

Age at death (months)	Number of years preceding the survey				Total 0-19
	0-4	5-9	10-14	15-19	
<1[a]	273	209	166	124	772
1	39	25	27	18	109
2	13	20	21	18	72
3	21	15	16	30	82
4	6	20	16	13	55
5	3	11	20	21	55
6	7	21	22	20	70
7	7	25	12	19	63
8	9	10	12	18	50
9	8	17	38	25	87
10	5	5	6	6	22
11	8	16	12	12	48
12	11	27	30	33	102
13	4	4	11	5	24
14	5	10	12	12	39
15	9	6	8	9	32
16	1	3	2	6	12
17	3	4	3	7	17
18	1	17	13	15	46
19	1	3	4	2	9
20	10	4	6	2	23
21	2	4	3	2	12
22	0	0	3	2	5
23	11	0	5	2	18
Total 0-11	399	394	367	324	1,483
Percentage neonatal[1]	68.5	53.1	45.2	38.2	52.0

[a] Includes deaths under month reported in days
[1] Under one month / under one year

Table C.7 Completeness of information on siblings

Completeness of data on survival status of sisters and brothers reported by interviewed women, age of living siblings, and age at death (AD) and years since death (YSD) of dead siblings (unweighted), Zambia DHS 2018

	Sisters		Brothers		All siblings	
	Number	Percent	Number	Percent	Number	Percent
All siblings	36,114	100.0	36,074	100.0	72,188	100.0
Living	32,104	88.9	31,650	87.7	63,754	88.3
Dead	3,986	11.0	4,398	12.2	8,384	11.6
Survival status unknown	24	0.1	26	0.1	50	0.1
Living siblings	32,104	100.0	31,650	100.0	63,754	100.0
Age reported	32,104	100.0	31,650	100.0	63,754	100.0
Dead siblings	3,986	100.0	4,398	100.0	8,384	100.0
AD and YSD reported	3,986	100.0	4,398	100.0	8,384	100.0

Table C.8 Sibship size and sex ratio of siblings

Mean sibship size and sex ratio of siblings at birth, Zambia DHS 2018

Age of respondents	Mean sibship size[1]	Sex ratio of siblings at birth[2]
15-19	5.8	96.7
20-24	6.0	100.0
25-29	6.2	99.8
30-34	6.4	100.9
35-39	6.5	105.5
40-44	6.5	99.6
45-49	6.8	103.4
Total	6.2	100.3

[1] Includes the respondent
[2] Excludes the respondent

Table C.9 Height and weight data completeness and quality for children

Among children under age 5 (age 0-59 months) who were eligible for anthropometry, percentage with incomplete or missing height and/or weight measurements and/or date of birth; percentage with out-of-range height-for-age, and/or weight-for-height, and/or weight-for-age data; and percentage with valid data, according to background characteristics (unweighted), Zambia DHS 2018

Background characteristic	Percentage with data missing or incomplete:			Percentage with out-of-range data for[4]:			Percentage with valid data for[8]:			Number of children
	Height[1]	Weight[2]	Age in months[3]	Height-for-age[5]	Weight-for-height[6]	Weight-for-age[7]	Height-for-age	Weight-for-height	Weight-for-age	
Age in months										
<6	4.9	4.4	0.6	1.5	4.5	0.1	93.6	90.5	95.5	1,057
6-8	3.0	2.1	0.4	1.1	2.1	0.0	96.0	94.9	97.9	474
9-11	2.4	2.4	0.4	1.4	1.6	0.2	96.2	96.0	97.4	501
12-17	3.3	3.3	0.4	0.9	0.5	0.1	95.8	96.1	96.6	992
18-23	2.5	2.4	0.6	0.8	0.3	0.0	96.7	97.2	97.6	1,004
24-35	3.6	3.1	0.8	0.6	0.7	0.0	95.5	95.7	96.6	2,038
36-47	4.2	4.2	1.3	0.3	0.3	0.0	95.0	95.5	95.3	2,026
48-59	5.5	5.4	1.2	0.2	0.3	0.0	93.7	94.1	94.0	2,002
Sex										
Male	4.1	4.0	0.9	1.0	1.2	0.0	94.7	94.6	95.8	4,991
Female	3.9	3.6	0.9	0.4	0.8	0.0	95.4	95.3	96.0	5,103
Mother's interview status										
Interviewed	2.9	2.7	0.0	0.7	1.1	0.0	96.5	96.1	97.3	9,039
Not interviewed but in household	32.5	32.5	16.7	0.6	0.6	0.3	65.4	66.6	65.7	335
Not interviewed and not in the household[9]	5.3	4.9	4.3	0.7	0.4	0.0	91.0	94.3	92.1	720
Residence										
Urban	4.2	4.0	1.0	0.6	1.0	0.0	95.0	94.8	95.7	2,999
Rural	3.9	3.7	0.8	0.7	1.0	0.0	95.1	95.0	96.0	7,095
Province										
Central	1.3	1.3	0.4	1.0	1.9	0.0	97.3	96.8	98.3	1,003
Copperbelt	3.7	3.6	0.9	0.4	0.8	0.0	95.9	95.5	96.4	976
Eastern	6.2	6.0	1.4	0.1	0.7	0.0	93.2	93.1	93.4	1,212
Luapula	8.3	7.7	0.3	0.7	0.6	0.1	90.8	91.1	92.1	1,225
Lusaka	2.1	2.0	1.0	0.6	1.3	0.0	97.1	96.6	97.8	1,040
Muchinga	2.5	2.5	0.6	1.5	1.5	0.1	96.0	96.1	97.3	892
Northern	4.1	3.5	0.6	1.3	1.6	0.0	94.5	94.3	96.4	1,018
North Western	1.4	1.1	0.1	0.9	1.1	0.0	97.8	97.5	98.9	806
Southern	2.9	2.8	0.7	0.5	0.6	0.1	96.3	96.5	96.7	1,067
Western	6.0	6.0	2.7	0.1	0.4	0.0	93.2	93.7	93.3	855
Mother's education										
No education	5.7	5.2	0.7	1.4	0.8	0.2	92.8	93.4	94.5	1,015
Primary	3.8	3.7	0.4	0.5	1.0	0.0	95.6	95.2	96.2	4,907
Secondary	3.3	3.0	0.9	0.7	1.3	0.0	96.0	95.4	96.9	3,053
Higher	4.6	4.6	0.5	1.0	1.0	0.0	94.4	94.4	95.4	391
Missing	37.5	37.5	25.0	0.0	0.0	0.0	62.5	62.5	62.5	8
Total	4.0	3.8	0.9	0.7	1.0	0.0	95.0	95.0	95.9	10,094

[1] Child's height in centimetres is missing, child was not present, child refused, and "other" result codes
[2] Child's weight in kilograms is missing, child was not present, child refused, and "other" result codes
[3] Incomplete date of birth; a complete date of birth is month/day/year or month/year.
[4] Cases with missing or incomplete data are not considered to be out-of-range cases.
[5] Out-of-range cases for height-for-age are defined as more than 6 standard deviations (SD) above or below the standard population median (Z-scores) based on the WHO Child Growth Standards.
[6] Out-of-range cases for weight-for-height are defined as more than 5 SD above or below the standard population median (Z-scores) based on the WHO Child Growth Standards.
[7] Out-of-range cases for weight-for-age are defined as more than 6 SD below or 5 SD above the standard population median (Z-scores) based on the WHO Child Growth Standards.
[8] No missing data, incomplete data, or out-of-range data
[9] Includes children whose mothers are deceased

Table C.10 Number of enumeration areas completed by month, according to province, Zambia DHS 2018

Province	Month							Total
	July 2018	August 2018	September 2018	October 2018	November 2018	December 2018	January 2019	
Central	2	9	10	6	7	14	7	55
Copperbelt	2	12	16	12	15	4	0	61
Eastern	3	10	12	12	10	10	5	62
Luapula	4	8	11	12	10	9	0	54
Lusaka	2	10	15	12	18	8	1	66
Muchinga	2	11	11	5	9	7	0	45
Northern	4	12	9	10	10	8	0	53
North Western	3	8	10	8	8	6	0	43
Southern	2	11	8	9	8	12	7	57
Western	0	10	12	9	11	7	0	49
Percent	4.4	18.5	20.9	17.4	19.4	15.6	3.7	100.0
Total	24	101	114	95	106	85	20	545

Note: Enumeration areas are classified by month according to the date by which the last Biomarker Questionnaire in the enumeration area was completed.

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QUESTIONNAIRES

Appendix **E**

FORMATTING DATE: 16 Mar 2017
ENGLISH LANGUAGE: July 5 2018

2018 ZAMBIA DEMOGRAPHIC AND HEALTH SURVEY
HOUSEHOLD QUESTIONNAIRE
ZAMBIA
MINISTRY OF HEALTH/CENTRAL STATISTICAL OFFICE

IDENTIFICATION

LOCALITY NAME _____

NAME OF HOUSEHOLD HEAD _____

CLUSTER NUMBER . . . . . | | | | |

HOUSEHOLD NUMBER . . . . . | | | | |

INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE				DAY
				MONTH
				YEAR
INTERVIEWER'S NAME				INT. NO.
RESULT*				RESULT*
NEXT VISIT: DATE				TOTAL NUMBER OF VISITS
TIME				

*RESULT CODES:

1 COMPLETED
2 NO HOUSEHOLD MEMBER AT HOME OR NO COMPETENT RESPONDENT AT HOME AT TIME OF VISIT
3 ENTIRE HOUSEHOLD ABSENT FOR EXTENDED PERIOD OF TIME
4 POSTPONED
5 REFUSED
6 DWELLING VACANT OR ADDRESS NOT A DWELLING
7 DWELLING DESTROYED
8 DWELLING NOT FOUND
9 OTHER _____ (SPECIFY)

TOTAL PERSONS IN HOUSEHOLD

TOTAL ELIGIBLE WOMEN

TOTAL ELIGIBLE MEN

LINE NO. OF RESPONDENT TO HOUSEHOLD QUESTIONNAIRE

LANGUAGE OF QUESTIONNAIRE** 0 1 | LANGUAGE OF INTERVIEW** | | NATIVE LANGUAGE OF RESPONDENT** | | TRANSLATOR USED (YES = 1, NO = 2) |

LANGUAGE OF QUESTIONNAIRE** ENGLISH

**LANGUAGE CODES:

01 ENGLISH	04 LOZI	07 NYANJA
02 BEMBA	05 LUNDA	08 TONGA
03 KAONDE	06 LUVALE	

SUPERVISOR

NAME

NUMBER

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INTRODUCTION AND CONSENT

Hello. My name is _____. I am working with the Ministry of Health in collaboration with Central Statstical Office (CSO). We are conducting a survey about health and other topics all over Zambia. The information we collect will help the government to plan health services. Your household was selected for the survey. I would like to ask you some questions about your household. The questions usually take about 20 to 30 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of our survey team. You don't have to be in the survey, but we hope you will agree to answer the questions since your views are important. If I ask you any question you don't want to answer, just let me know and I will go on to the next question or you can stop the interview at any time. In case you need more information about the survey, you may contact the person listed on this card.

GIVE CARD WITH CONTACT INFORMATION

Do you have any questions?
May I begin the interview now?

SIGNATURE OF INTERVIEWER _____ DATE _____

RESPONDENT AGREES TO BE INTERVIEWED . . 1 ↓

RESPONDENT DOES NOT AGREE TO BE INTERVIEWED . . 2 → END

100	RECORD THE TIME.	HOURS . . . . . ☐☐ MINUTES . . . . . ☐☐

HOUSEHOLD SCHEDULE

							IF AGE 15 OR OLDER			
LINE NO.	USUAL RESIDENTS AND VISITORS	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	RESIDENCE		AGE	MARITAL STATUS	ELIGIBILITY		
1	2	3	4	5	6	7	8	9	10	11
	Please give me the names of the persons who usually live in your household and guests of the household who stayed here last night, starting with the head of the household. AFTER LISTING THE NAMES AND RECORDING THE RELATIONSHIP AND SEX FOR EACH PERSON, ASK QUESTIONS 2A-2C TO BE SURE THAT THE LISTING IS COMPLETE. THEN ASK APPROPRIATE QUESTIONS IN COLUMNS 5-20 FOR EACH PERSON.	What is the relationship of (NAME) to the head of the household? SEE CODES BELOW.	Is (NAME) male or female?	Does (NAME) usually live here?	Did (NAME) stay here last night?	How old is (NAME)? IF 95 OR MORE, RECORD '95'.	What is (NAME)'s current marital status? 1 = MARRIED OR LIVING TOGETHER 2 = DIVORCED/ SEPARATED 3 = WIDOWED 4 = NEVER-MARRIED AND NEVER LIVED TOGETHER	CIRCLE LINE NUMBER OF ALL WOMEN AGE 15-49	CIRCLE LINE NUMBER OF ALL MEN AGE 15-59	CIRCLE LINE NUMBER OF ALL CHILDREN AGE 0-5
01			M F 1 2	Y N 1 2	Y N 1 2	IN YEARS		01	01	01
02			M F 1 2	Y N 1 2	Y N 1 2	IN YEARS		02	02	02
03			M F 1 2	Y N 1 2	Y N 1 2	IN YEARS		03	03	03
04			M F 1 2	Y N 1 2	Y N 1 2	IN YEARS		04	04	04
05			M F 1 2	Y N 1 2	Y N 1 2	IN YEARS		05	05	05
06			M F 1 2	Y N 1 2	Y N 1 2	IN YEARS		06	06	06
07			M F 1 2	Y N 1 2	Y N 1 2	IN YEARS		07	07	07
08			M F 1 2	Y N 1 2	Y N 1 2	IN YEARS		08	08	08
09			M F 1 2	Y N 1 2	Y N 1 2	IN YEARS		09	09	09
10			M F 1 2	Y N 1 2	Y N 1 2	IN YEARS		10	10	10

2A) Just to make sure that I have a complete listing: are there any other people such as small children or infants that we have not listed? YES → ADD TO TABLE NO

2B) Are there any other people who may not be members of your family, such as domestic servants, lodgers, or friends who usually live here? YES → ADD TO TABLE NO

2C) Are there any guests or temporary visitors staying here, or anyone else who stayed here last night, who have not been listed? YES → ADD TO TABLE NO

CODES FOR Q. 3: RELATIONSHIP TO HEAD OF HOUSEHOLD

01 = HEAD
02 = WIFE OR HUSBAND
03 = SON OR DAUGHTER
04 = SON-IN-LAW OR DAUGHTER-IN-LAW
05 = GRANDCHILD
06 = PARENT
07 = PARENT-IN-LAW
08 = BROTHER OR SISTER
09 = OTHER RELATIVE
10 = ADOPTED/FOSTER/ STEPCHILD
11 = NOT RELATED
98 = DON'T KNOW

HOUSEHOLD SCHEDULE

	IF AGE 0-17 YEARS				IF AGE 2 YEARS OR OLDER		IF AGE 2-24 YEARS		IF AGE 0-4 YEARS; IF 5 OR OLDER GO TO 31
LINE NO.	SURVIVORSHIP AND RESIDENCE OF BIOLOGICAL PARENTS				EVER ATTENDED SCHOOL		CURRENT/RECENT SCHOOL ATTENDANCE		BIRTH REGISTRATION
	12	13	14	15	16	17	18	19	20
	Is (NAME)'s natural mother alive?	Does (NAME)'s natural mother usually live in this household or was she a guest last night? IF YES: What is her name? RECORD MOTHER'S LINE NUMBER. IF NO, RECORD '00'.	Is (NAME)'s natural father alive?	Does (NAME)'s natural father usually live in this household or was he a guest last night? IF YES: What is his name? RECORD FATHER'S LINE NUMBER. IF NO, RECORD '00'.	Has (NAME) ever attended school or a nursery/kindergarden?	What is the highest level of school (NAME) has attended? What is the highest year (NAME) completed at that level? SEE CODES BELOW.	Did (NAME) attend school or a (nursery/kindergarden) at any time during the 2018 school year?	During the 2018 school year, what level and year at that level [is/was] (NAME) attending? SEE CODES BELOW.	Does (NAME) have a birth certificate? IF NO, PROBE: Has (NAME)'s birth ever been registered with the civil authority? 1 = HAS CERTIFICATE 2 = REGISTERED 3 = NEITHER 8 = DON'T KNOW
01	Y N DK 1 2 8 GO TO 14		Y N DK 1 2 8 GO TO 16		Y N 1 2 GO TO 20	LEVEL YEAR	Y N 1 2 GO TO 20	LEVEL YEAR	
02	Y N DK 1 2 8 GO TO 14		Y N DK 1 2 8 GO TO 16		Y N 1 2 GO TO 20	LEVEL YEAR	Y N 1 2 GO TO 20	LEVEL YEAR	
03	Y N DK 1 2 8 GO TO 14		Y N DK 1 2 8 GO TO 16		Y N 1 2 GO TO 20	LEVEL YEAR	Y N 1 2 GO TO 20	LEVEL YEAR	
04	Y N DK 1 2 8 GO TO 14		Y N DK 1 2 8 GO TO 16		Y N 1 2 GO TO 20	LEVEL YEAR	Y N 1 2 GO TO 20	LEVEL YEAR	
05	Y N DK 1 2 8 GO TO 14		Y N DK 1 2 8 GO TO 16		Y N 1 2 GO TO 20	LEVEL YEAR	Y N 1 2 GO TO 20	LEVEL YEAR	
06	Y N DK 1 2 8 GO TO 14		Y N DK 1 2 8 GO TO 16		Y N 1 2 GO TO 20	LEVEL YEAR	Y N 1 2 GO TO 20	LEVEL YEAR	
07	Y N DK 1 2 8 GO TO 14		Y N DK 1 2 8 GO TO 16		Y N 1 2 GO TO 20	LEVEL YEAR	Y N 1 2 GO TO 20	LEVEL YEAR	
08	Y N DK 1 2 8 GO TO 14		Y N DK 1 2 8 GO TO 16		Y N 1 2 GO TO 20	LEVEL YEAR	Y N 1 2 GO TO 20	LEVEL YEAR	
09	Y N DK 1 2 8 GO TO 14		Y N DK 1 2 8 GO TO 16		Y N 1 2 GO TO 20	LEVEL YEAR	Y N 1 2 GO TO 20	LEVEL YEAR	
10	Y N DK 1 2 8 GO TO 14		Y N DK 1 2 8 GO TO 16		Y N 1 2 GO TO 20	LEVEL YEAR	Y N 1 2 GO TO 20	LEVEL YEAR	

CODES FOR Qs. 17 AND 19: EDUCATION

LEVEL	YEAR
0 = NURSERY/KINDERGARDEN	00 = LESS THAN 1 YEAR COMPLETED (USE '00' FOR Q. 17 ONLY. THIS CODE IS NOT ALLOWED FOR Q. 19.)
1 = PRIMARY	
2 = SECONDARY	
3 = HIGHER	
8 = DON'T KNOW	98 = DON'T KNOW

HOUSEHOLD SCHEDULE

							IF AGE 15 OR OLDER			
LINE NO.	USUAL RESIDENTS AND VISITORS	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	RESIDENCE		AGE	MARITAL STATUS	ELIGIBILITY		
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**
	Please give me the names of the persons who usually live in your household and guests of the household who stayed here last night, starting with the head of the household. AFTER LISTING THE NAMES AND RECORDING THE RELATIONSHIP AND SEX FOR EACH PERSON, ASK QUESTIONS 2A-2C TO BE SURE THAT THE LISTING IS COMPLETE. THEN ASK APPROPRIATE QUESTIONS IN COLUMNS 5-20 FOR EACH PERSON.	What is the relationship of (NAME) to the head of the household? SEE CODES BELOW.	Is (NAME) male or female? M F 1 2	Does (NAME) usually live here? Y N 1 2	Did (NAME) stay here last night? Y N 1 2	How old is (NAME)? IN YEARS IF 95 OR MORE, RECORD '95'.	What is (NAME)'s current marital status? 1 = MARRIED OR LIVING TOGETHER 2 = DIVORCED/ SEPARATED 3 = WIDOWED 4 = NEVER-MARRIED AND NEVER LIVED TOGETHER	CIRCLE LINE NUMBER OF ALL WOMEN AGE 15-49	CIRCLE LINE NUMBER OF ALL MEN AGE 15-59	CIRCLE LINE NUMBER OF ALL CHILDREN AGE 0-5
11			M F 1 2	Y N 1 2	Y N 1 2	IN YEARS		11	11	11
12			M F 1 2	Y N 1 2	Y N 1 2	IN YEARS		12	12	12
13			M F 1 2	Y N 1 2	Y N 1 2	IN YEARS		13	13	13
14			M F 1 2	Y N 1 2	Y N 1 2	IN YEARS		14	14	14
15			M F 1 2	Y N 1 2	Y N 1 2	IN YEARS		15	15	15
16			M F 1 2	Y N 1 2	Y N 1 2	IN YEARS		16	16	16
17			M F 1 2	Y N 1 2	Y N 1 2	IN YEARS		17	17	17
18			M F 1 2	Y N 1 2	Y N 1 2	IN YEARS		18	18	18
19			M F 1 2	Y N 1 2	Y N 1 2	IN YEARS		19	19	19
20			M F 1 2	Y N 1 2	Y N 1 2	IN YEARS		20	20	20

TICK HERE IF CONTINUATION SHEET USED ☐

CODES FOR Q. 3: RELATIONSHIP TO HEAD OF HOUSEHOLD

01 = HEAD
02 = WIFE OR HUSBAND
03 = SON OR DAUGHTER
04 = SON-IN-LAW OR DAUGHTER-IN-LAW
05 = GRANDCHILD
06 = PARENT
07 = PARENT-IN-LAW
08 = BROTHER OR SISTER
09 = OTHER RELATIVE
10 = ADOPTED/FOSTER/ STEPCHILD
11 = NOT RELATED
98 = DON'T KNOW

HOUSEHOLD SCHEDULE

	IF AGE 0-17 YEARS				IF AGE 2 YEARS OR OLDER		IF AGE 2-24 YEARS		IF AGE 0-4 YEARS; IF 5 OR OLDER GO TO 31
LINE NO.	SURVIVORSHIP AND RESIDENCE OF BIOLOGICAL PARENTS				EVER ATTENDED SCHOOL		CURRENT/RECENT SCHOOL ATTENDANCE		BIRTH REGISTRATION
	12	13	14	15	16	17	18	19	20
	Is (NAME)'s natural mother alive?	Does (NAME)'s natural mother usually live in this household or was she a guest last night? IF YES: What is her name? RECORD MOTHER'S LINE NUMBER. IF NO, RECORD '00'.	Is (NAME)'s natural father alive?	Does (NAME)'s natural father usually live in this household or was he a guest last night? IF YES: What is his name? RECORD FATHER'S LINE NUMBER. IF NO, RECORD '00'.	Has (NAME) ever attended school or a nursery/kindergarden?	What is the highest level of school (NAME) has attended? What is the highest year (NAME) completed at that level? SEE CODES BELOW.	Did (NAME) attend school or a (nursery/kindergarden) at any time during the 2018 school year?	During the 2018 school year, what level and year at that level [is/was] (NAME) attending? SEE CODES BELOW.	Does (NAME) have a birth certificate? IF NO, PROBE: Has (NAME)'s birth ever been registered with the civil authority? 1 = HAS CERTIFICATE 2 = REGISTERED 3 = NEITHER 8 = DON'T KNOW
11	Y N DK 1 2 8 GO TO 14		Y N DK 1 2 8 GO TO 16		Y N 1 2 GO TO 20	LEVEL YEAR	Y N 1 2 GO TO 20	LEVEL YEAR	
12	Y N DK 1 2 8 GO TO 14		Y N DK 1 2 8 GO TO 16		Y N 1 2 GO TO 20	LEVEL YEAR	Y N 1 2 GO TO 20	LEVEL YEAR	
13	Y N DK 1 2 8 GO TO 14		Y N DK 1 2 8 GO TO 16		Y N 1 2 GO TO 20	LEVEL YEAR	Y N 1 2 GO TO 20	LEVEL YEAR	
14	Y N DK 1 2 8 GO TO 14		Y N DK 1 2 8 GO TO 16		Y N 1 2 GO TO 20	LEVEL YEAR	Y N 1 2 GO TO 20	LEVEL YEAR	
15	Y N DK 1 2 8 GO TO 14		Y N DK 1 2 8 GO TO 16		Y N 1 2 GO TO 20	LEVEL YEAR	Y N 1 2 GO TO 20	LEVEL YEAR	
16	Y N DK 1 2 8 GO TO 14		Y N DK 1 2 8 GO TO 16		Y N 1 2 GO TO 20	LEVEL YEAR	Y N 1 2 GO TO 20	LEVEL YEAR	
17	Y N DK 1 2 8 GO TO 14		Y N DK 1 2 8 GO TO 16		Y N 1 2 GO TO 20	LEVEL YEAR	Y N 1 2 GO TO 20	LEVEL YEAR	
18	Y N DK 1 2 8 GO TO 14		Y N DK 1 2 8 GO TO 16		Y N 1 2 GO TO 20	LEVEL YEAR	Y N 1 2 GO TO 20	LEVEL YEAR	
19	Y N DK 1 2 8 GO TO 14		Y N DK 1 2 8 GO TO 16		Y N 1 2 GO TO 20	LEVEL YEAR	Y N 1 2 GO TO 20	LEVEL YEAR	
20	Y N DK 1 2 8 GO TO 14		Y N DK 1 2 8 GO TO 16		Y N 1 2 GO TO 20	LEVEL YEAR	Y N 1 2 GO TO 20	LEVEL YEAR	

CODES FOR Qs. 17 AND 19: EDUCATION

LEVEL	YEAR
0 = PRESCHOOL	00 = LESS THAN 1 YEAR COMPLETED (USE '00' FOR Q. 17 ONLY. THIS CODE IS NOT ALLOWED FOR Q. 19.)
1 = PRIMARY	
2 = SECONDARY	
3 = HIGHER	
8 = DON'T KNOW	98 = DON'T KNOW

SELECTION OF WOMAN FOR THE DOMESTIC VIOLENCE QUESTIONS (PAPER OPTION)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
31	CHECK COL.9 IN THE HOUSEHOLD SCHEDULE AND WRITE THE TOTAL NUMBER OF WOMEN AGE 15-49 YEARS.	TOTAL NUMBER . . . . . ☐☐	
32	CHECK THE NUMBER OF WOMEN AGE 15-49 YEARS IN 31: ZERO ☐ → 101 TWO OR MORE ☐ ↓ ONE ☐ → 33		

LOOK AT THE LAST DIGIT OF THE HOUSEHOLD NUMBER ON THE COVER PAGE. THIS IS THE ROW NUMBER YOU SHOULD GO TO. CHECK THE TOTAL NUMBER OF ELIGIBLE WOMEN (COLUMN 9) IN THE HOUSEHOLD SCHEDULE. THIS IS THE COLUMN NUMBER YOU SHOULD GO TO. FOLLOW THE SELECTED ROW AND COLUMN TO THE CELL WHERE THEY MEET AND CIRCLE THE NUMBER IN THE CELL. THIS IS THE NUMBER OF THE WOMAN SELECTED FOR THE DOMESTIC VIOLENCE QUESTIONS FROM THE LIST OF ELIGIBLE WOMEN IN COLUMN 9 OF THE HOUSEHOLD SCHEDULE. WRITE THE NAME AND LINE NUMBER OF THE SELECTED WOMAN IN THE SPACE BELOW THE TABLE.

EXAMPLE: THE HOUSEHOLD NUMBER IS '16' AND THE HOUSEHOLD SCHEDULE COLUMN 9 SHOWS THAT THERE ARE THREE ELIGIBLE WOMEN AGE 15-49 IN THE HOUSEHOLD (LINE NUMBERS 02, 04, AND 05). SINCE THE LAST DIGIT OF THE HOUSEHOLD SERIAL NUMBER IS '6' GO TO ROW '6' AND SINCE THERE ARE THREE ELIGIBLE WOMEN IN THE HOUSEHOLD, GO TO COLUMN '3'. FOLLOW THE ROW AND COLUMN AND FIND THE NUMBER IN THE CELL WHERE THEY MEET ('2') AND CIRCLE THE NUMBER. NOW GO TO THE HOUSEHOLD SCHEDULE AND FIND THE SECOND WOMAN WHO IS ELIGIBLE FOR THE WOMAN'S INTERVIEW (LINE NUMBER '04' IN THIS EXAMPLE). WRITE HER NAME AND LINE NUMBER IN THE SPACE BELOW THE TABLE.

LAST DIGIT OF THE HOUSEHOLD NUMBER	TOTAL NUMBER OF ELIGIBLE WOMEN AGE 15-49 IN HOUSEHOLD SCHEDULE COLUMN 9							
	1	2	3	4	5	6	7	8+
0	1	2	2	4	3	6	5	4
1	1	1	3	1	4	1	6	5
2	1	2	1	2	5	2	7	6
3	1	1	2	3	1	3	1	7
4	1	2	3	4	2	4	2	8
5	1	1	1	1	3	5	3	1
6	1	2	2	2	4	6	4	2
7	1	1	3	3	5	1	5	3
8	1	2	1	4	1	2	6	4
9	1	1	2	1	2	3	7	5

33 NAME OF SELECTED WOMAN _____ HH LINE NUMBER OF SELECTED WOMAN ☐☐

HOUSEHOLD CHARACTERISTICS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	What is the main source of drinking water for members of your household?	**PIPED WATER** PIPED INTO DWELLING . . . . . 11 PIPED TO YARD/PLOT . . . . . 12 PIPED TO NEIGHBOR . . . . . 13 PUBLIC TAP/STANDPIPE . . . . . 14 TUBE WELL OR BOREHOLE . . . . . 21 **DUG WELL** PROTECTED WELL . . . . . 31 UNPROTECTED WELL . . . . . 32 **WATER FROM SPRING** PROTECTED SPRING . . . . . 41 UNPROTECTED SPRING . . . . . 42 RAINWATER . . . . . 51 TANKER TRUCK . . . . . 61 CART WITH SMALL TANK . . . . . 71 SURFACE WATER (RIVER/DAM/ LAKE/POND/STREAM/CANAL/ IRRIGATION CHANNEL) . . . . . 81 BOTTLED WATER . . . . . 91 OTHER _____ 96 (SPECIFY)	12 → 106 14 → 103 96 → 103
102	What is the main source of water used by your household for other purposes such as cooking and handwashing?	**PIPED WATER** PIPED INTO DWELLING . . . . . 11 PIPED TO YARD/PLOT . . . . . 12 PIPED TO NEIGHBOR . . . . . 13 PUBLIC TAP/STANDPIPE . . . . . 14 TUBE WELL OR BOREHOLE . . . . . 21 **DUG WELL** PROTECTED WELL . . . . . 31 UNPROTECTED WELL . . . . . 32 **WATER FROM SPRING** PROTECTED SPRING . . . . . 41 UNPROTECTED SPRING . . . . . 42 RAINWATER . . . . . 51 TANKER TRUCK . . . . . 61 CART WITH SMALL TANK . . . . . 71 SURFACE WATER (RIVER/DAM/ LAKE/POND/STREAM/CANAL/ IRRIGATION CHANNEL) . . . . . 81 OTHER _____ 96 (SPECIFY)	12 → 106
103	Where is that water source located?	IN OWN DWELLING . . . . . 1 IN OWN YARD/PLOT . . . . . 2 ELSEWHERE 3	1 → 105
104	How long does it take to go there, wait, get water, and come back?	MINUTES . . . . . ☐☐☐ DON'T KNOW 998	
105	CHECK 101 AND 102: CODE '14' OR '21' CIRCLED? YES ☐ ↓	NO ☐ →	→ 107

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
106	In the past two weeks, was the water from this source not available for at least one full day?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
107	Do you do anything to the water to make it safer to drink?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 108A
108	What do you usually do to make the water safer to drink? Anything else? RECORD ALL MENTIONED.	BOIL . . . . . A ADD BLEACH/CHLORINE . . . . . B STRAIN THROUGH A CLOTH . . . . . C USE WATER FILTER (CERAMIC/ SAND/COMPOSITE/ETC) . . . . . D SOLAR DISINFECTION . . . . . E LET IT STAND AND SETTLE . . . . . F OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	
108A	How do you store your drinking water?	CLOSED CONTAINER/JERRY CAN . . . . . 1 OPEN CONTAINER/BUCKET . . . . . 2 DOES NOT STORE WATER . . . . . 3 OTHER _____ 6 (SPECIFY)	
109	What kind of toilet facility do members of your household usually use? IF NOT POSSIBLE TO DETERMINE, ASK PERMISSION TO OBSERVE THE FACILITY.	**FLUSH OR POUR FLUSH TOILET** FLUSH TO PIPED SEWER SYSTEM . . . . . 11 FLUSH TO SEPTIC TANK . . . . . 12 FLUSH TO PIT LATRINE . . . . . 13 FLUSH TO SOMEWHERE ELSE . . . . . 14 FLUSH, DON'T KNOW WHERE . . . . . 15 **PIT LATRINE** VENTILATED IMPROVED PIT LATRINE . . . . . 21 PIT LATRINE WITH SLAB . . . . . 22 PIT LATRINE WITHOUT SLAB/OPEN PIT . . . . . 23 COMPOSTING TOILET . . . . . 31 BUCKET TOILET . . . . . 41 HANGING TOILET/HANGING LATRINE . . . . . 51 NO FACILITY/BUSH/FIELD . . . . . 61 OTHER _____ 96 (SPECIFY)	→ 113
110	Do you share this toilet facility with other households?	YES . . . . . 1 NO 2	→ 112
111	Including your own household, how many households use this toilet facility?	NO. OF HOUSEHOLDS IF LESS THAN 10 . . . . . 0 ☐ 10 OR MORE HOUSEHOLDS . . . . . 95 DON'T KNOW 98	
112	Where is this toilet facility located?	IN OWN DWELLING . . . . . 1 IN OWN YARD/PLOT . . . . . 2 ELSEWHERE 3	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
113	What type of fuel does your household mainly use for cooking?	ELECTRICITY . . . . . 01 SOLAR POWER 02 LIQUID PROPANE GAS (LPG) . . . . . 03 NATURAL GAS . . . . . 04 BIOGAS . . . . . 05 KEROSENE . . . . . 06 COAL, LIGNITE . . . . . 07 CHARCOAL . . . . . 08 WOOD . . . . . 09 STRAW/SHRUBS/GRASS . . . . . 10 AGRICULTURAL CROP . . . . . 11 ANIMAL DUNG . . . . . 12 NO FOOD COOKED IN HOUSEHOLD . . . . . 95 OTHER _____ 96 (SPECIFY)	→ 116
114	Is the cooking usually done in the house, in a separate building, or outdoors?	IN THE HOUSE . . . . . 1 IN A SEPARATE BUILDING . . . . . 2 OUTDOORS . . . . . 3 OTHER _____ 6 (SPECIFY)	→ 116
115	Do you have a separate room which is used as a kitchen?	YES . . . . . 1 NO 2	
116	How many rooms in this household are used for sleeping?	ROOMS	
117	Does this household own any livestock, herds, other farm animals, or poultry?	YES . . . . . 1 NO 2	→ 119
118	How many of the following animals does this household own? IF NONE, RECORD '00'. IF 95 OR MORE, RECORD '95'. IF UNKNOWN, RECORD '98'. a) Traditional cattle? b) Dairy cattle? c) Beef cattle? d) Horses, donkeys, or mules? e) Goats? f) Sheep? g) Chickens? h) Pigs? i) Rabbits/Other Poultry?	a) TRADITIONAL CATTLE . . . . . b) DAIRYCATTLE . . . . . c) BEEF CATTLE . . . . . d) HORSES/DONKEYS/MULES . . . . . e) GOATS . . . . . f) SHEEP . . . . . g) CHICKENS . . . . . h) PIGS . . . . . i) RABBITS/OTHER POULTR	
119	Does any member of this household own any agricultural land?	YES . . . . . 1 NO 2	→ 121

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
120	How much hectares, acres, or lima of agricultural land do members of this household own? IF 95 OR MORE HECTARES, CIRCLE '950'. IF 95 OR MORE ACRES, CIRCLE '951'. IF 95 OR MORE LIMA, CIRCLE '952'.	HECTARES . . . . . 1 ☐☐.☐ ACRES . . . . . 2 ☐☐.☐ LIMA . . . . . 3 ☐☐.☐ 95 OR MORE HECTARES . . . . . 950 95 OR MORE ACRES . . . . . 951 95 OR MORE LIMA . . . . . 952 DON'T KNOW 998	
121	Does your household have: a) Electricity? b) A radio? c) A television? d) A computer? e) A refrigerator? f) Access to Internet? g) A bed? h) A table? i) A sofa? j) A washing machine? k) An air conditioner? l) A generator? m) A microwave? n) A geyser (water heater)? o) A grain grinder? p) A plough? q) A tractor? r) A hammer mill?	YES NO a) ELECTRICITY . . . . . 1 2 b) RADIO . . . . . 1 2 c) TELEVISION . . . . . 1 2 d) COMPUTER . . . . . 1 2 e) REFRIGERATOR . . . . . 1 2 f) INTERNET . . . . . 1 2 g) BED . . . . . 1 2 h) TABLE . . . . . 1 2 i) SOFA . . . . . 1 2 j) WASHING MACHINE . . . . . 1 2 k) AIR CONDITIONER . . . . . 1 2 l) GENERATOR . . . . . 1 2 m) MICROWAVE . . . . . 1 2 n) GEYSER . . . . . 1 2 o) GRAIN GRINDER . . . . . 1 2 p) PLOUGH . . . . . 1 2 q) TRACTOR . . . . . 1 2 r) HAMMER MILL 1 2	
122	Does any member of this household own: a) A watch? b) A mobile phone? c) A bicycle? d) A motorcycle or motor scooter? e) An animal-drawn cart? f) A car or truck? g) A boat with a motor? h) A banana boat?	YES NO a) WATCH . . . . . 1 2 b) MOBILE PHONE . . . . . 1 2 c) BICYCLE . . . . . 1 2 d) MOTORCYCLE/SCOOTER . . . . . 1 2 e) ANIMAL-DRAWN CART . . . . . 1 2 f) CAR/TRUCK . . . . . 1 2 g) BOAT WITH MOTOR . . . . . 1 2 h) BANANA BOAT 1 2	
123	Does any member of this household have a bank account?	YES . . . . . 1 NO 2	
124	How often does anyone smoke inside your house? Would you say daily, weekly, monthly, less than monthly, or never?	DAILY . . . . . 1 WEEKLY . . . . . 2 MONTHLY . . . . . 3 LESS OFTEN THAN ONCE A MONTH . . . . . 4 NEVER 5	
124A	At any time in the past 12 months, has anyone come into your dwelling to spray the interior walls against mosquitoes?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 127

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
124B	Who sprayed the dwelling?	GOVERNMENT WORKER/PROGRAM . . . . . A PRIVATE COMPANY . . . . . B NGO . . . . . C OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Y	
127	Does your household have any mosquito nets that can be used while sleeping?	YES . . . . . 1 NO 2	→ 139
128	How many mosquito nets does your household have? IF 7 OR MORE NETS, RECORD '7'.	NUMBER OF NETS . . . . . ☐	

MOSQUITO NETS

		NET #1	NET #2	NET #3
129	ASK THE RESPONDENT TO SHOW YOU ALL THE NETS IN THE HOUSEHOLD. IF MORE THAN 3 NETS, USE ADDITIONAL QUESTIONNAIRE(S).	OBSERVED . . . . . 1 NOT OBSERVED 2	OBSERVED . . . . . 1 NOT OBSERVED 2	OBSERVED . . . . . 1 NOT OBSERVED 2
130	How many months ago did your household get the mosquito net? IF LESS THAN ONE MONTH AGO, RECORD '00'.	MONTHS AGO . . . . . [ ][ ] MORE THAN 36 MONTHS AGO . . . . . 95 NOT SURE 98	MONTHS AGO . . . . . [ ][ ] MORE THAN 36 MONTHS AGO . . . . . 95 NOT SURE 98	MONTHS AGO . . . . . [ ][ ] MORE THAN 36 MONTHS AGO . . . . . 95 NOT SURE 98
131	OBSERVE OR ASK BRAND/TYPE OF MOSQUITO NET. IF BRAND IS UNKNOWN AND YOU CANNOT OBSERVE THE NET, SHOW PICTURES OF TYPICAL NET TYPES/BRANDS TO RESPONDENT.	**LONG-LASTING INSECTICIDE-TREATED NET (LLIN)** PermaNET . . . . . 11 OLICET . . . . . 12 TANA NET . . . . . 13 OTHER/DON'T KNOW BRAND . . . . . 16 OTHER TYPE . . . . . 96 DON'T KNOW TYPE . . 98	**LONG-LASTING INSECTICIDE-TREATED NET (LLIN)** PermaNET . . . . . 11 OLICET . . . . . 12 TANA NET . . . . . 13 OTHER/DON'T KNOW BRAND . . . . . 16 OTHER TYPE . . . . . 96 DON'T KNOW TYPE . . 98	**LONG-LASTING INSECTICIDE-TREATED NET (LLIN)** PermaNET . . . . . 11 OLICET . . . . . 12 TANA NET . . . . . 13 OTHER/DON'T KNOW BRAND . . . . . 16 OTHER TYPE . . . . . 96 DON'T KNOW TYPE . . 98
134	Did you get the net through a mass distribution campaign, school distribution, during an antenatal care visit, or during an under five visit?	YES, MASS DIST. CAMPAIGN . . . . . 1 YES, SCHOOL . . . . . 2 YES, ANC . . . . . 3 YES, UNDER FIVE VISIT . . . . . 4 (SKIP TO 136) NO 5	YES, MASS DIST. CAMPAIGN . . . . . 1 YES, SCHOOL . . . . . 2 YES, ANC . . . . . 3 YES, UNDER FIVE VISIT . . . . . 4 (SKIP TO 136) NO 5	YES, MASS DIST. CAMPAIGN . . . . . 1 YES, SCHOOL . . . . . 2 YES, ANC . . . . . 3 YES, UNDER FIVE VISIT . . . . . 4 (SKIP TO 136) NO 5
135	Where did you get the net?	GOVT. HEALTH FACILITY . . . . . 01 PRIVATE HEALTH FACILITY . . . . . 02 PHARMACY . . . . . 03 SHOP/MARKET . . . . . 04 CHW . . . . . 05 OTHER . . . . . 96 DON'T KNOW 98	GOVT. HEALTH FACILITY . . . . . 01 PRIVATE HEALTH FACILITY . . . . . 02 PHARMACY . . . . . 03 SHOP/MARKET . . . . . 04 CHW . . . . . 05 OTHER . . . . . 96 DON'T KNOW 98	GOVT. HEALTH FACILITY . . . . . 01 PRIVATE HEALTH FACILITY . . . . . 02 PHARMACY . . . . . 03 SHOP/MARKET . . . . . 04 CHW . . . . . 05 OTHER . . . . . 96 DON'T KNOW 98

MOSQUITO NETS

		NET #1	NET #2	NET #3
136	Did anyone sleep under this mosquito net last night?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 138) NOT SURE 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 138) NOT SURE 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 138) NOT SURE 8
137	Who slept under this mosquito net last night? RECORD THE PERSON'S NAME AND LINE NUMBER FROM HOUSEHOLD SCHEDULE.	NAME _____ LINE NO.	NAME _____ LINE NO.	NAME _____ LINE NO. . . . .
		NAME _____ LINE NO.	NAME _____ LINE NO.	NAME _____ LINE NO. . . . .
		NAME _____ LINE NO.	NAME _____ LINE NO.	NAME _____ LINE NO. . . . .
		NAME _____ LINE NO.	NAME _____ LINE NO.	NAME _____ LINE NO. . . . .
138		GO BACK TO 129 FOR NEXT NET; OR, IF NO MORE NETS, GO TO 139.	GO BACK TO 129 FOR NEXT NET; OR, IF NO MORE NETS, GO TO 139.	GO TO 129 IN FIRST COLUMN OF A NEW QUESTIONNAIRE; OR, IF NO MORE NETS, GO TO 139.

ADDITIONAL HOUSEHOLD CHARACTERISTICS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
139	We would like to learn about the places that households use to wash their hands. Can you please show me where members of your household most often wash their hands?	OBSERVED, FIXED PLACE . . . . . 1 OBSERVED, MOBILE . . . . . 2 NOT OBSERVED, NOT IN DWELLING/YARD/PLOT . . . . . 3 NOT OBSERVED, NO PERMISSION TO SEE . . . . . 4 NOT OBSERVED, OTHER REASON 5	→ 142
140	OBSERVE PRESENCE OF WATER AT THE PLACE FOR HANDWASHING. RECORD OBSERVATION.	WATER IS AVAILABLE . . . . . 1 WATER IS NOT AVAILABLE 2	
141	OBSERVE PRESENCE OF SOAP, DETERGENT, OR OTHER CLEANSING AGENT AT THE PLACE FOR HANDWASHING. RECORD OBSERVATION.	SOAP OR DETERGENT (BAR, LIQUID, POWDER, PASTE) . . . . . A ASH, MUD, SAND . . . . . B NONE . . . . . Y	
142	OBSERVE MAIN MATERIAL OF THE FLOOR OF THE DWELLING. RECORD OBSERVATION.	**NATURAL FLOOR** EARTH/SAND . . . . . 11 DUNG . . . . . 12 **RUDIMENTARY FLOOR** WOOD PLANKS . . . . . 21 PALM/BAMBOO/REEDS . . . . . 22 **FINISHED FLOOR** PARQUET OR POLISHED WOOD . . . . . 31 VINYL (PVC) OR ASPHALT STRIPS . . . . . 32 CERAMIC/TERRAZZO TILES . . . . . 33 CEMENT . . . . . 34 CARPET . . . . . 35 OTHER _____ 96 (SPECIFY)	
143	OBSERVE MAIN MATERIAL OF THE ROOF OF THE DWELLING. RECORD OBSERVATION.	**NATURAL ROOFING** NO ROOF . . . . . 11 THATCH/PALM LEAF . . . . . 12 **RUDIMENTARY ROOFING** RUSTIC MAT . . . . . 21 PALM/BAMBOO . . . . . 22 WOOD PLANKS . . . . . 23 CARDBOARD . . . . . 24 **FINISHED ROOFING** METAL/IRON SHEETS . . . . . 31 WOOD . . . . . 32 CALAMINE/CEMENT FIBER . . . . . 33 CERAMIC TILES/HARVEY TILES . . . . . 34 CEMENT . . . . . 35 ROOFING SHINGLES . . . . . 36 MUD TILES . . . . . 37 ASBESTOS . . . . . 38 OTHER _____ 96 (SPECIFY)	

ADDITIONAL HOUSEHOLD CHARACTERISTICS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
144	OBSERVE MAIN MATERIAL OF THE EXTERIOR WALLS OF THE DWELLING. RECORD OBSERVATION.	**NATURAL WALLS** NO WALLS . . . . . 11 CANE/PALM/TRUNKS . . . . . 12 MUD . . . . . 13 **RUDIMENTARY WALLS** MUDBRICK . . . . . 21 BAMBOO WITH MUD . . . . . 22 STONE WITH MUD . . . . . 23 UNCOVERED ADOBE . . . . . 24 PLYWOOD . . . . . 25 CARDBOARD . . . . . 26 REUSED WOOD . . . . . 27 **FINISHED WALLS** CEMENT . . . . . 31 STONE WITH LIME/CEMENT . . . . . 32 BURNED BRICKS . . . . . 33 CEMENT BLOCKS . . . . . 34 COVERED ADOBE . . . . . 35 WOOD PLANKS/SHINGLES . . . . . 36 OTHER _____ 96 (SPECIFY)	
145	I would like to check whether the salt used in your household is iodized. May I have a sample of the salt used to cook meals in your household? TEST SALT FOR IODINE.	IODINE PRESENT . . . . . 1 NO IODINE . . . . . 2 NO SALT IN HOUSEHOLD . . . . . 3 SALT NOT TESTED _____ 6 (SPECIFY REASON)	
146	RECORD THE TIME.	HOURS . . . . . [ ][ ] MINUTES . . . . . [ ][ ]	

INTERVIEWER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING INTERVIEW

COMMENTS ABOUT INTERVIEW:

COMMENTS ON SPECIFIC QUESTIONS:

ANY OTHER COMMENTS:

SUPERVISOR'S OBSERVATIONS

EDITOR'S OBSERVATIONS

FORMATTING DATE: 7-Jun-17
ENGLISH LANGUAGE: 5-Jul-18

2018 ZAMBIA DEMOGRAPHIC AND HEALTH SURVEY
WOMAN'S QUESTIONNAIRE
ZAMBIA
MINISTRY OF HEALTH/CENTRAL STATISTICAL OFFICE

IDENTIFICATION

PLACE NAME _____

NAME OF HOUSEHOLD HEAD _____

CLUSTER NUMBER . . . . . [ ][ ][ ][ ]

HOUSEHOLD NUMBER . . . . . [ ][ ][ ][ ]

NAME AND LINE NUMBER OF WOMAN _____ [ ][ ]

CHECK HOUSEHOLD QUESTIONNAIRE Q.33: WOMAN SELECTED FOR DV MODULE? (1=YES, 2=NO) . . . . . [ ]

INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE	_____	_____	_____	DAY [ ][ ]
				MONTH [ ][ ]
				YEAR [ ][ ][ ][ ]
INTERVIEWER'S NAME	_____	_____	_____	INT. NO. [ ][ ][ ][ ]
RESULT*	_____	_____	_____	RESULT* [ ]
NEXT VISIT: DATE	_____	_____		TOTAL NUMBER OF VISITS [ ]
TIME	_____	_____		

*RESULT CODES: 1 COMPLETED; 2 NOT AT HOME; 3 POSTPONED; 4 REFUSED; 5 PARTLY COMPLETED; 6 INCAPACITATED; 7 OTHER _____ SPECIFY

LANGUAGE OF QUESTIONNAIRE** [0][1] LANGUAGE OF INTERVIEW** [ ][ ] NATIVE LANGUAGE OF RESPONDENT** [ ][ ] TRANSLATOR USED (YES = 1, NO = 2) [ ]

LANGUAGE OF QUESTIONNAIRE** **ENGLISH**

**LANGUAGE CODES:
01 ENGLISH
02 BEMBA
03 KAONDE
04 LOZI
05 LUNDA
06 LUVALE
07 NYANJA
08 TONGA

SUPERVISOR

_____ NAME

[ ][ ][ ][ ] NUMBER

INTRODUCTION AND CONSENT

Hello. My name is _____. I am working with the Ministry of Health in collaboration with Central Statistical Office (CSO). We are conducting a survey about health and other topics all over Zambia. The information we collect will help the government to plan health services. Your household was selected for the survey. The questions usually take about 30 to 60 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of our survey team. You don't have to be in the survey, but we hope you will agree to answer the questions since your views are important. If I ask you any question you don't want to answer, just let me know and I will go on to the next question or you can stop the interview at any time.

In case you need more information about the survey, you may contact the person listed on the card that has already been given to your household.

Do you have any questions?
May I begin the interview now?

SIGNATURE OF INTERVIEWER _____ DATE _____

RESPONDENT AGREES TO BE INTERVIEWED . . 1 ↓

RESPONDENT DOES NOT AGREE TO BE INTERVIEWED . . 2 → END

SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	RECORD THE TIME.	HOURS . . . . . ☐☐ MINUTES . . . . . ☐☐	
102	How long have you been living continuously in (NAME OF CURRENT CITY, TOWN OR VILLAGE OF RESIDENCE)? IF LESS THAN ONE YEAR, RECORD '00' YEARS.	YEARS . . . . . ☐☐ ALWAYS . . . . . 95 VISITOR 96	→ 105
103	Just before you moved here, did you live in Lusaka, another city, in a town, or in a village?	CITY . . . . . 1 TOWN . . . . . 2 RURAL AREA 3	
104	Before you moved here, which province did you live in?	CENTRAL . . . . . 01 COPPERBELT . . . . . 02 EASTERN . . . . . 03 LUAPULA . . . . . 04 LUSAKA . . . . . 05 MUCHINGA . . . . . 06 NORTHERN . . . . . 07 NORTHWESTERN . . . . . 08 SOUTHERN . . . . . 09 WESTERN . . . . . 10 OUTSIDE OF ZAMBIA 96	
105	In what month and year were you born?	MONTH . . . . . ☐☐ DON'T KNOW MONTH . . . . . 98 YEAR . . . . . ☐☐☐☐ DON'T KNOW YEAR 9998	
106	How old were you at your last birthday? COMPARE AND CORRECT 105 AND/OR 106 IF INCONSISTENT.	AGE IN COMPLETED YEARS . . . . . ☐☐	
107	Have you ever attended school?	YES . . . . . 1 NO 2	→ 111

SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
108	What is the highest level of school you attended: primary, secondary, or higher?	PRIMARY . . . . . 1 SECONDARY . . . . . 2 HIGHER 3	
109	What is the highest year you completed at that level? IF COMPLETED LESS THAN ONE YEAR AT THAT LEVEL, RECORD '00'.	YEAR . . . . . ☐☐	
110	CHECK 108: PRIMARY OR SECONDARY ☐ ↓ HIGHER ☐ →		113
111	Now I would like you to read this sentence to me. SHOW CARD TO RESPONDENT. IF RESPONDENT CANNOT READ WHOLE SENTENCE, PROBE: Can you read any part of the sentence to me?	CANNOT READ AT ALL . . . . . 1 ABLE TO READ ONLY PART OF THE SENTENCE . . . . . 2 ABLE TO READ WHOLE SENTENCE . . . . . 3 NO CARD WITH REQUIRED LANGUAGE _____ 4 _____ (SPECIFY LANGUAGE) BLIND/VISUALLY IMPAIRED 5	
112	CHECK 111: CODE '2', '3' OR '4' CIRCLED ☐ ↓ CODE '1' OR '5' CIRCLED ☐ →		114
113	Do you read a newspaper or magazine almost every day, at least once a week, less than once a week or not at all?	ALMOST EVERY DAY . . . . . 1 AT LEAST ONCE A WEEK . . . . . 2 LESS THAN ONCE A WEEK . . . . . 3 NOT AT ALL 4	
114	Do you listen to the radio almost every day, at least once a week, less than once a week or not at all?	ALMOST EVERY DAY . . . . . 1 AT LEAST ONCE A WEEK . . . . . 2 LESS THAN ONCE A WEEK . . . . . 3 NOT AT ALL 4	
115	Do you watch television almost every day, at least once a week, less than once a week or not at all?	ALMOST EVERY DAY . . . . . 1 AT LEAST ONCE A WEEK . . . . . 2 LESS THAN ONCE A WEEK . . . . . 3 NOT AT ALL 4	
116	Do you own a mobile telephone?	YES . . . . . 1 NO . . . . . 2 →	118
117	Do you use your mobile phone for any financial transactions?	YES . . . . . 1 NO 2	
118	Do you have an account in a bank or other financial institution that you yourself use?	YES . . . . . 1 NO 2	
119	Have you ever used the internet?	YES . . . . . 1 NO . . . . . 2 →	122
120	In the last 12 months, have you used the internet? IF NECESSARY, PROBE FOR USE FROM ANY LOCATION, WITH ANY DEVICE.	YES . . . . . 1 NO . . . . . 2 →	122
121	During the last one month, how often did you use the internet: almost every day, at least once a week, less than once a week, or not at all?	ALMOST EVERY DAY . . . . . 1 AT LEAST ONCE A WEEK . . . . . 2 LESS THAN ONCE A WEEK . . . . . 3 NOT AT ALL 4	

SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
122	What is your religion?	CATHOLIC . . . . . 1 PROTESTANT . . . . . 2 MUSLIM . . . . . 3 OTHER _____ 96 (SPECIFY)	
124	In the last 12 months, on how many separate occasions have you traveled away from your home community and slept away?	NUMBER OF TIMES . . . . . [ ][ ] NONE 00	→ 201
125	In the last 12 months, have you been away from your home community for more than one month at a time?	YES . . . . . 1 NO 2	

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
201	Now I would like to ask about all the births you have had during your life. Have you ever given birth?	YES . . . . . 1 NO 2	→ 206
202	Do you have any sons or daughters to whom you have given birth who are now living with you?	YES . . . . . 1 NO 2	→ 204
203	a) How many sons live with you? b) How many daughters live with you? IF NONE, RECORD '00'.	a) SONS AT HOME . . . . . [ ][ ] b) DAUGHTERS AT HOME . . . . . [ ][ ]	
204	Do you have any sons or daughters to whom you have given birth who are alive but do not live with you?	YES . . . . . 1 NO 2	→ 206
205	a) How many sons are alive but do not live with you? b) How many daughters are alive but do not live with you? IF NONE, RECORD '00'.	a) SONS ELSEWHERE . . . . . [ ][ ] b) DAUGHTERS ELSEWHERE . . . . . [ ][ ]	
206	Have you ever given birth to a boy or girl who was born alive but later died? IF NO, PROBE: Any baby who cried, who made any movement, sound, or effort to breathe, or who showed any other signs of life even if for a very short time?	YES . . . . . 1 NO 2	→ 208
207	a) How many boys have died? b) How many girls have died IF NONE, RECORD '00'.	a) BOYS DEAD . . . . . [ ][ ] b) GIRLS DEAD . . . . . [ ][ ]	
208	SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL. IF NONE, RECORD '00'.	TOTAL BIRTHS . . . . . [ ][ ]	
209	CHECK 208: Just to make sure that I have this right: you have had in TOTAL _____ births during your life. Is that correct? YES NO → PROBE AND CORRECT 201-208 AS NECESSARY.		
210	CHECK 208: ONE OR MORE BIRTHS NO BIRTHS → 226		

SECTION 2. REPRODUCTION

211 Now I would like to record the names of all your births, whether still alive or not, starting with the first one you had.
RECORD NAMES OF ALL THE BIRTHS IN 212. RECORD TWINS AND TRIPLETS ON SEPARATE ROWS. IF THERE ARE MORE THAN 10 BIRTHS, USE AN ADDITIONAL QUESTIONNAIRE, STARTING WITH THE SECOND ROW.

212 What name was given to your (first/next) baby? RECORD NAME. BIRTH HISTORY NUMBER.	213 Is (NAME) a boy or a girl?	214 Were any of these births twins?	215 On what day, month, and year was (NAME) born?	216 Is (NAME) still alive?	217 IF ALIVE: How old was (NAME) at his/her last birthday? RECORD AGE IN COMP-LETED YEARS.	218 IF ALIVE: Is (NAME) living with you?	219 IF ALIVE: RECORD HOUSEHOLD LINE NUMBER OF CHILD. RECORD '00' IF CHILD NOT LISTED IN HOUSEHOLD.	220 IF DEAD: How old was (NAME) when (he/she) died? IF '12 MONTHS' OR '1 YR', ASK: Did (NAME) have (his/her) first birthday? THEN ASK: Exactly how many months old was (NAME) when (he/she) died? RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OR YEARS.	221 Were there any other live births between (NAME OF PREVIOUS BIRTH) and (NAME), including any children who died after birth?
01	BOY 1 GIRL 2	SING 1 MULT 2	DAY ☐☐ MONTH ☐☐ ☐☐☐☐ YEAR	YES 1 NO 2 → (SKIP TO 220)	AGE IN YEARS ☐☐	YES 1 NO 2	HOUSEHOLD LINE NUMBER ☐☐ → (NEXT BIRTH)	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 ☐☐	
02	BOY 1 GIRL 2	SING 1 MULT 2	DAY ☐☐ MONTH ☐☐ ☐☐☐☐ YEAR	YES 1 NO 2 → (SKIP TO 220)	AGE IN YEARS ☐☐	YES 1 NO 2	HOUSEHOLD LINE NUMBER ☐☐ → (SKIP TO 221)	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 ☐☐	YES 1 (ADD BIRTH) ← NO 2 (NEXT BIRTH) ←
03	BOY 1 GIRL 2	SING 1 MULT 2	DAY ☐☐ MONTH ☐☐ ☐☐☐☐ YEAR	YES 1 NO 2 → (SKIP TO 220)	AGE IN YEARS ☐☐	YES 1 NO 2	HOUSEHOLD LINE NUMBER ☐☐ → (SKIP TO 221)	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 ☐☐	YES 1 (ADD BIRTH) ← NO 2 (NEXT BIRTH) ←
04	BOY 1 GIRL 2	SING 1 MULT 2	DAY ☐☐ MONTH ☐☐ ☐☐☐☐ YEAR	YES 1 NO 2 → (SKIP TO 220)	AGE IN YEARS ☐☐	YES 1 NO 2	HOUSEHOLD LINE NUMBER ☐☐ → (SKIP TO 221)	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 ☐☐	YES 1 (ADD BIRTH) ← NO 2 (NEXT BIRTH) ←
05	BOY 1 GIRL 2	SING 1 MULT 2	DAY ☐☐ MONTH ☐☐ ☐☐☐☐ YEAR	YES 1 NO 2 → (SKIP TO 220)	AGE IN YEARS ☐☐	YES 1 NO 2	HOUSEHOLD LINE NUMBER ☐☐ → (SKIP TO 221)	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 ☐☐	YES 1 (ADD BIRTH) ← NO 2 (NEXT BIRTH) ←

212 What name was given to your (first/next) baby? RECORD NAME. BIRTH HISTORY NUMBER.	213 Is (NAME) a boy or a girl?	214 Were any of these births twins?	215 On what day, month, and year was (NAME) born?	216 Is (NAME) still alive?	217 IF ALIVE: How old was (NAME) at his/her last birthday? RECORD AGE IN COMP-LETED YEARS.	218 IF ALIVE: Is (NAME) living with you?	219 IF ALIVE: RECORD HOUSEHOLD LINE NUMBER OF CHILD. RECORD '00' IF CHILD NOT LISTED IN HOUSEHOLD.	220 IF DEAD: How old was (NAME) when (he/she) died? IF '12 MONTHS' OR '1 YR', ASK: Did (NAME) have (his/her) first birthday? THEN ASK: Exactly how many months old was (NAME) when (he/she) died? RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OR YEARS.	221 Were there any other live births between (NAME OF PREVIOUS BIRTH) and (NAME), including any children who died after birth?
06	BOY 1 GIRL 2	SING 1 MULT 2	DAY ☐☐ MONTH ☐☐ ☐☐☐☐ YEAR	YES 1 NO 2 → (SKIP TO 220)	AGE IN YEARS ☐☐	YES 1 NO 2	HOUSEHOLD LINE NUMBER ☐☐ → (SKIP TO 221)	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 ☐☐	YES 1 (ADD BIRTH) ↵ NO 2 (NEXT BIRTH) ↵
07	BOY 1 GIRL 2	SING 1 MULT 2	DAY ☐☐ MONTH ☐☐ ☐☐☐☐ YEAR	YES 1 NO 2 → (SKIP TO 220)	AGE IN YEARS ☐☐	YES 1 NO 2	HOUSEHOLD LINE NUMBER ☐☐ → (SKIP TO 221)	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 ☐☐	YES 1 (ADD BIRTH) ↵ NO 2 (NEXT BIRTH) ↵
08	BOY 1 GIRL 2	SING 1 MULT 2	DAY ☐☐ MONTH ☐☐ ☐☐☐☐ YEAR	YES 1 NO 2 → (SKIP TO 220)	AGE IN YEARS ☐☐	YES 1 NO 2	HOUSEHOLD LINE NUMBER ☐☐ → (SKIP TO 221)	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 ☐☐	YES 1 (ADD BIRTH) ↵ NO 2 (NEXT BIRTH) ↵
09	BOY 1 GIRL 2	SING 1 MULT 2	DAY ☐☐ MONTH ☐☐ ☐☐☐☐ YEAR	YES 1 NO 2 → (SKIP TO 220)	AGE IN YEARS ☐☐	YES 1 NO 2	HOUSEHOLD LINE NUMBER ☐☐ → (SKIP TO 221)	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 ☐☐	YES 1 (ADD BIRTH) ↵ NO 2 (NEXT BIRTH) ↵
10	BOY 1 GIRL 2	SING 1 MULT 2	DAY ☐☐ MONTH ☐☐ ☐☐☐☐ YEAR	YES 1 NO 2 → (SKIP TO 220)	AGE IN YEARS ☐☐	YES 1 NO 2	HOUSEHOLD LINE NUMBER ☐☐ → (SKIP TO 221)	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 ☐☐	YES 1 (ADD BIRTH) ↵ NO 2 (NEXT BIRTH) ↵

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
222	Have you had any live births since the birth of (NAME OF LAST BIRTH)?	YES . . . . . 1 → (RECORD BIRTH(S) IN TABLE) NO 2	
223	COMPARE 208 WITH NUMBER OF BIRTHS IN BIRTH HISTORY NUMBERS ARE SAME ☐ NUMBERS ARE DIFFERENT ☐ → (PROBE AND RECONCILE)		
224	CHECK 215: ENTER THE NUMBER OF BIRTHS IN 2013-2018	NUMBER OF BIRTHS . . . . . ☐☐ NONE 0	→ 226
225	**C** FOR EACH BIRTH IN 2013-2018, ENTER 'B' IN THE MONTH OF BIRTH IN THE CALENDAR. WRITE THE NAME OF THE CHILD TO THE LEFT OF THE 'B' CODE. FOR EACH BIRTH, ASK THE NUMBER OF COMPLETED MONTHS THE PREGNANCY LASTED AND RECORD 'P' IN EACH OF THE PRECEDING MONTHS ACCORDING TO THE DURATION OF PREGNANCY. (NOTE: THE NUMBER OF 'P's MUST BE ONE LESS THAN THE NUMBER OF MONTHS THAT THE PREGNANCY LASTED.)		
226	Are you pregnant now?	YES . . . . . 1 NO . . . . . 2 UNSURE 8	→ 230
227	How many months pregnant are you? RECORD NUMBER OF COMPLETED MONTHS. **C** ENTER 'P's IN THE CALENDAR, BEGINNING WITH THE MONTH OF INTERVIEW AND FOR THE TOTAL NUMBER OF COMPLETED MONTHS.	MONTHS . . . . . ☐☐	
228	When you got pregnant, did you want to get pregnant at that time?	YES . . . . . 1 NO 2	→ 230
229	CHECK 208: TOTAL NUMBER OF BIRTHS ONE OR MORE ☐ → a) Did you want to have a baby later on or did you not want any more children? NONE ☐ → b) Did you want to have a baby later on or did you not want any children?	LATER . . . . . 1 NO MORE/NONE 2	
230	Have you ever had a pregnancy that miscarried, was aborted, or ended in a stillbirth?	YES . . . . . 1 NO 2	→ 239
231	When did the last such pregnancy end?	MONTH . . . . . ☐☐ YEAR . . . . . ☐☐☐☐	

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
232	CHECK 231: LAST PREGNANCY ENDED IN 2013-2018 ☐ → 234 LAST PREGNANCY ENDED IN 2012 OR EARLIER ☐ → 239		

LINE NO.	233 In what month and year did the preceding such pregnancy end?	234 How many months pregnant were you when that pregnancy ended?	235 Since January 2013, have you had any other pregnancies that did not result in a live birth?	SKIP
01		NUMBER OF MONTHS	YES . . . . . 1 NO . . . . . 2 → 236	→ NEXT LINE
02	MONTH YEAR	NUMBER OF MONTHS	YES . . . . . 1 NO . . . . . 2 → 236	→ NEXT LINE
03	MONTH YEAR	NUMBER OF MONTHS	YES . . . . . 1 NO . . . . . 2 → 236	→ NEXT LINE
04	MONTH YEAR	NUMBER OF MONTHS	YES . . . . . 1 NO 2	→ 236

236	**C** FOR EACH PREGNANCY THAT DID NOT END IN A LIVE BIRTH IN 2013-2018 OR LATER, ENTER 'T' IN THE CALENDAR IN THE MONTH THAT THE PREGNANCY TERMINATED AND 'P' FOR THE REMAINING NUMBER OF COMPLETED MONTHS OF PREGNANCY. IF THERE ARE MORE THAN FOUR PREGNANCIES THAT DID NOT END IN A LIVE BIRTH, USE AN ADDITIONAL QUESTIONNAIRE STARTING ON THE SECOND LINE.	
237	Did you have any miscarriages, abortions or stillbirths that ended before 2013?	YES . . . . . 1 NO . . . . . 2 → 239
238	When did the last such pregnancy that terminated before 2013 end?	MONTH . . . . . ☐☐ YEAR . . . . . ☐☐☐☐

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
239	When did your last menstrual period start? _____ (DATE, IF GIVEN)	DAYS AGO . . . . . 1 [ ][ ] WEEKS AGO . . . . . 2 [ ][ ] MONTHS AGO . . . . . 3 [ ][ ] YEARS AGO . . . . . 4 [ ][ ] IN MENOPAUSE/ HAS HAD HYSTERECTOMY . . . . . 994 BEFORE LAST BIRTH . . . . . 995 NEVER MENSTRUATED 996	
240	From one menstrual period to the next, are there certain days when a woman is more likely to become pregnant?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 242
241	Is this time just before her period begins, during her period, right after her period has ended, or halfway between two periods?	JUST BEFORE HER PERIOD BEGINS . . . . . 1 DURING HER PERIOD . . . . . 2 RIGHT AFTER HER PERIOD HAS ENDE . . . . . 3 HALFWAY BETWEEN TWO PERIODS . . . . . 4 OTHER _____ 6 (SPECIFY) DON'T KNOW 8	
242	After the birth of a child, can a woman become pregnant before her menstrual period has returned?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	

SECTION 3. CONTRACEPTION

301	Now I would like to talk about family planning - the various ways or methods that a couple can use to delay or avoid a pregnancy. Have you ever heard of (METHOD)? PROCEED DOWN COLUMN 301, READING THE NAME AND DESCRIPTION OF EACH METHOD. CIRCLE CODE 1 IF METHOD IS RECOGNIZED, AND CODE 2 IF NOT RECOGNIZED.	
01	Female Sterilization. PROBE: Women can have an operation to avoid having any more children.	YES . . . . . 1 NO 2
02	Male Sterilization. PROBE: Men can have an operation to avoid having any more children.	YES . . . . . 1 NO 2
03	IUD. PROBE: Women can have a loop or coil placed inside them by a doctor, nurse, or clinic officer which can prevent pregnancy for one or more years.	YES . . . . . 1 NO 2
04	Injectables. PROBE: Women can have an injection by a doctor, nurse, or clinic officer that stops them from becoming pregnant for one or more months.	YES . . . . . 1 NO 2
05	Implants. PROBE: Women can have one or more small rods placed in their upper arm by a doctor or nurse which can prevent pregnancy for one or more years.	YES . . . . . 1 NO 2
06	Pill. PROBE: Women can take a pill every day to avoid becoming pregnant.	YES . . . . . 1 NO 2
07	Male Condom. PROBE: Men can put a rubber sheath on their penis before sexual intercourse.	YES . . . . . 1 NO 2
08	Female Condom. PROBE: Women can place a sheath in their vagina before sexual intercourse.	YES . . . . . 1 NO 2
09	Emergency Contraception. PROBE: As an emergency measure, within five days after they have unprotected sexual intercourse, women can take special pills to prevent pregnancy.	YES . . . . . 1 NO 2
10	Standard Days Method (Cycle Beads). PROBE: A woman uses a string of colored beads to know the days she can get pregnant. On the days she can get pregnant, she uses a condom or does not have sexual intercourse.	YES . . . . . 1 NO 2
11	Lactational Amenorrhea Method (LAM). PROBE: Up to six months after childbirth, before the menstrual period has returned, women use a method requiring frequent breastfeeding day and night.	YES . . . . . 1 NO 2
12	Rhythm Method. PROBE: To avoid pregnancy, women do not have sexual intercourse on the days of the month they think they can get pregnant.	YES . . . . . 1 NO 2
13	Withdrawal. PROBE: Men can be careful and pull out before climax.	YES . . . . . 1 NO 2
14	Have you heard of any other ways or methods that women or men can use to avoid pregnancy?	YES, MODERN METHOD _____ A (SPECIFY) YES, TRADITIONAL METHOD _____ B (SPECIFY) NO . . . . . Y

SECTION 3. CONTRACEPTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
302	CHECK 226: NOT PREGNANT OR UNSURE ☐↓	PREGNANT ☐	→ 312
303	Are you or your partner currently doing something or using any method to delay or avoid getting pregnant?	YES . . . . . 1 NO 2	→ 312
304	Which method are you using? RECORD ALL MENTIONED. IF MORE THAN ONE METHOD MENTIONED, FOLLOW SKIP INSTRUCTION FOR HIGHEST METHOD IN LIST.	FEMALE STERILIZATION . . . . . A MALE STERILIZATION . . . . . B IUD . . . . . C INJECTABLES . . . . . D IMPLANTS . . . . . E PILL . . . . . F CONDOM . . . . . G FEMALE CONDOM . . . . . H EMERGENCY CONTRACEPTION . . . . . I STANDARD DAYS METHOD . . . . . J LACTATIONAL AMENORRHEA METHOD . . . . . K RHYTHM METHOD . . . . . L WITHDRAWAL . . . . . M OTHER MODERN METHOD . . . . . X OTHER TRADITIONAL METHOD . . . . . Y	A → 307 B C D → 309 E F G → 306 H → 306A I J K L → 309 M X Y
305	What is the brand name of the pills you are using? IF DON'T KNOW THE BRAND, ASK TO SEE THE PACKAGE.	SAFE PLAN . . . . . 01 MICROGYNON . . . . . 02 MICROLUT . . . . . 03 EUGYNON . . . . . 04 LOGYNON . . . . . 05 NORDETTE . . . . . 06 ORALCON F . . . . . 07 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	→ 309
306	What is the brand name of the condoms you are using? IF DON'T KNOW THE BRAND, ASK TO SEE THE PACKAGE.	MAXIMUM CLASSIC . . . . . 01 MAXIMUM SCENTED . . . . . 02 ROUGH RIDER . . . . . 03 DUREX . . . . . 04 REALITY . . . . . 05 PUBLIC SECTOR: UNBRANDED (WHITE COLOUR FOIL) . . . . . 06 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	→ 309
306A	What is the brand name of the female condoms you are using? IF DON'T KNOW THE BRAND, ASK TO SEE THE PACKAGE.	CARE FEMALE CONDOM . . . . . 01 FEMIDOM . . . . . 02 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	→ 309

SECTION 3. CONTRACEPTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
307	In what facility did the sterilization take place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . . . . 11 GOVERNMENT HEALTH CENTER . . . . . 12 GOVERNMENT HEALTH POST . . . . . 13 MOBILE HOSPITAL/CLINIC . . . . . 14 OTHER PUBLIC SECTOR _____ 16 (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/CLINIC . . . . . 21 MISSION HOSPITAL/CLINIC . . . . . 22 PRIVATE DOCTOR'S OFFICE . . . . . 23 MOBILE HOSPITAL/CLINIC . . . . . 24 OTHER PRIVATE MEDICAL SECTOR _____ 26 (SPECIFY) OTHER _____ 96 (SPECIFY) DON'T KNOW 98	
308	In what month and year was the sterilization performed?	MONTH . . . . . ☐☐ YEAR . . . . . ☐☐☐☐	→ 310
309	Since what month and year have you been using (CURRENT METHOD) without stopping? PROBE: For how long have you been using (CURRENT METHOD) now without stopping?	MONTH . . . . . ☐☐ YEAR . . . . . ☐☐☐☐	
310	CHECK 308 AND 309, 215 AND 231: ANY BIRTH OR PREGNANCY TERMINATION AFTER MONTH AND YEAR OF START OF USE OF CONTRACEPTION IN 308 OR 309 NO ☐ ↓ YES ☐ → GO BACK TO 308 OR 309, PROBE AND RECORD MONTH AND YEAR AT START OF CONTINUOUS USE OF CURRENT METHOD (MUST BE AFTER LAST BIRTH OR PREGNANCY TERMINATION).		

SECTION 3. CONTRACEPTION

311 CHECK 308 AND 309:

YEAR IS 2013-2018

C ENTER CODE FOR METHOD USED IN MONTH OF INTERVIEW IN THE CALENDAR AND IN EACH MONTH BACK TO THE DATE STARTED USING.

THEN CONTINUE

YEAR IS 2012 OR EARLIER

C ENTER CODE FOR METHOD USED IN MONTH OF INTERVIEW IN THE CALENDAR AND EACH MONTH BACK TO JANUARY 2013 .

THEN

(SKIP TO 324)

312 I would like to ask you some questions about the times you or your partner may have used a method to avoid getting pregnant during the last few years.

USE CALENDAR TO PROBE FOR EARLIER PERIODS OF USE AND NONUSE, STARTING WITH MOST RECENT USE, BACK TO JANUARY 2013 USE NAMES OF CHILDREN, DATES OF BIRTH, AND PERIODS OF PREGNANCY AS REFERENCE POINTS.

C IN **COLUMN 1**, ENTER METHOD USE CODE OR '0' FOR NONUSE IN EACH BLANK MONTH.

ILLUSTRATIVE QUESTIONS:

a) When was the last time you used a method? Which method was that?
b) When did you start using that method? How long after the birth of (NAME)?
c) How long did you use the method then?

C IN **COLUMN 2**, ENTER CODES FOR DISCONTINUATION NEXT TO THE LAST MONTH OF USE. NUMBER OF CODES IN COLUMN 2 MUST BE SAME AS NUMBER OF INTERRUPTIONS OF METHOD USE IN COLUMN 1.

ASK WHY SHE STOPPED USING THE METHOD. IF A PREGNANCY FOLLOWED, ASK WHETHER SHE BECAME PREGNANT UNINTENTIONALLY WHILE USING THE METHOD OR DELIBERATELY STOPPED TO GET PREGNANT.

ILLUSTRATIVE QUESTIONS:

d) Why did you stop using the (METHOD)? Did you become pregnant while using (METHOD), or did you stop to get pregnant, or did you stop for some other reason?
e) IF DELIBERATELY STOPPED TO BECOME PREGNANT, ASK: How many months did it take you to get pregnant after you stopped using (METHOD)? AND ENTER ‘0’ IN EACH SUCH MONTH IN COLUMN 1.

SECTION 3. CONTRACEPTION

311	CHECK 308 AND 309: YEAR IS 2013-2018 **C** ENTER CODE FOR METHOD USED IN MONTH OF INTERVIEW IN THE CALENDAR AND IN EACH MONTH BACK TO THE DATE STARTED USING. THEN CONTINUE		YEAR IS 2012 OR EARLIER **C** ENTER CODE FOR METHOD USED IN MONTH OF INTERVIEW IN THE CALENDAR AND EACH MONTH BACK TO JANUARY 2013 . THEN (SKIP TO 324)	
312	I would like to ask you some questions about the times you or your partner may have used a method to avoid getting pregnant during the last few years. **C** USE CALENDAR TO PROBE FOR EARLIER PERIODS OF USE AND NONUSE, STARTING WITH MOST RECENT USE, BACK TO JANUARY 2013. USE NAMES OF CHILDREN, DATES OF BIRTH, AND PERIODS OF PREGNANCY AS REFERENCE POINTS.			
		COLUMN 1	COLUMN 2	COLUMN 3
312A	MONTH AND YEAR OF START OF INTERVAL OF USE OR NON-USE.	MONTH ☐☐ YEAR ☐☐☐☐	MONTH ☐☐ YEAR ☐☐☐☐	MONTH ☐☐ YEAR ☐☐☐☐
312B	Between (EVENT) in (MONTH/YEAR) and (EVENT) in (MONTH/YEAR), did you or your partner use any method of contraception?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 312I)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 312I)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 312I)
312C	Which method was that?	METHOD CODE . . ☐☐	METHOD CODE . . ☐☐	METHOD CODE . . ☐☐
312D	How many months after (EVENT) in (MONTH/YEAR) did you start to use (METHOD)? CIRCLE '95' IF RESPONDENT GIVES THE DATE OF STARTING TO USE THE METHOD.	IMMEDIATELY . . . . . 00 MONTHS . . ☐☐ (SKIP TO 312F) DATE GIVEN 95	IMMEDIATELY . . . . . 00 MONTHS . . ☐☐ (SKIP TO 312F) DATE GIVEN 95	IMMEDIATELY . . . . . 00 MONTHS . . ☐☐ (SKIP TO 312F) DATE GIVEN 95
312E	RECORD MONTH AND YEAR RESPONDENT STARTED USING METHOD.	MONTH ☐☐ YEAR ☐☐☐☐	MONTH ☐☐ YEAR ☐☐☐☐	MONTH ☐☐ YEAR ☐☐☐☐
312F	For how many months did you use (METHOD)? CIRCLE '95' IF RESPONDENT GIVES THE DATE OF TERMINATION OF USE.	MONTHS . . ☐☐ (SKIP TO 312H) DATE GIVEN 95	MONTHS . . ☐☐ (SKIP TO 312H) DATE GIVEN 95	MONTHS . . ☐☐ (SKIP TO 312H) DATE GIVEN 95
312G	RECORD MONTH AND YEAR RESPONDENT STOPPED USING METHOD.	MONTH ☐☐ YEAR ☐☐☐☐	MONTH ☐☐ YEAR ☐☐☐☐	MONTH ☐☐ YEAR ☐☐☐☐
312H	Why did you stop using (METHOD)?	REASON STOPPED . . . . . ☐	REASON STOPPED . . . . . ☐	REASON STOPPED . . . . . ☐
312I		GO BACK TO 312A IN NEXT COLUMN; OR, IF NO MORE GAPS, GO TO 313.	GO BACK TO 312A IN NEXT COLUMN; OR, IF NO MORE GAPS, GO TO 313.	GO BACK TO 312A IN NEW QUESTIONNAIRE; OR, IF NO MORE GAPS, GO TO 313.

SECTION 3. CONTRACEPTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
313	CHECK THE CALENDAR FOR USE OF ANY CONTRACEPTIVE METHOD IN ANY MONTH NO METHOD USED ☐ ↓ ANY METHOD USED ☐		→ 315
314	Have you ever used anything or tried in any way to delay or avoid getting pregnant?	YES . . . . . 1 NO 2	→ 326
315	CHECK 304: CIRCLE METHOD CODE: IF MORE THAN ONE METHOD CODE CIRCLED IN 304, CIRCLE CODE FOR HIGHEST METHOD IN LIST.	NO CODE CIRCLED . . . . . 00 FEMALE STERILIZATION . . . . . 01 MALE STERILIZATION . . . . . 02 IUD . . . . . 03 INJECTABLES . . . . . 04 IMPLANTS . . . . . 05 PILL . . . . . 06 CONDOM . . . . . 07 FEMALE CONDOM . . . . . 08 EMERGENCY CONTRACEPTION . . . . . 09 STANDARD DAYS METHOD . . . . . 10 LACTATIONAL AMENORRHEA METHOD . . . . . 11 RHYTHM METHOD . . . . . 12 WITHDRAWAL . . . . . 13 OTHER MODERN METHOD . . . . . 95 OTHER TRADITIONAL METHOD 96	→ 326 → 319 → 327 → 323
316	You first started using (CURRENT METHOD) in (DATE FROM 309). Where did you get it at that time? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . . . . 11 GOVERNMENT HEALTH CENTER . . . . . 12 GOVERNMENT HEALTH POST . . . . . 13 MOBILE CLINIC/HOSPITAL . . . . . 14 COMMUNITY BASED AGENT/FIELDWORKER . . . . . 15 OTHER PUBLIC SECTOR _____ 16 (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/CLINIC . . . . . 21 MISSION HOSPITAL/CLINIC . . . . . 22 PHARMACY . . . . . 23 PRIVATE DOCTOR . . . . . 24 MOBILE HOSPITAL/CLINIC . . . . . 25 COMMUNITY BASED AGENT/FIELDWORKER . . . . . 26 OTHER PRIVATE MEDICAL SECTOR _____ 27 (SPECIFY) **OTHER SOURCE** SHOP . . . . . 31 CHURCH . . . . . 32 FRIEND/RELATIVE . . . . . 33 OTHER _____ 96 (SPECIFY)	
317	CHECK 304: CIRCLE METHOD CODE: IF MORE THAN ONE METHOD CODE CIRCLED IN 304, CIRCLE CODE FOR HIGHEST METHOD IN LIST.	IUD . . . . . 03 INJECTABLES . . . . . 04 IMPLANTS . . . . . 05 PILL . . . . . 06 CONDOM . . . . . 07 FEMALE CONDOM . . . . . 08 EMERGENCY CONTRACEPTION . . . . . 09 STANDARD DAYS METHOD . . . . . 10 OTHER MODERN METHOD . . . . . 95 OTHER TRADITIONAL METHOD 96	→ 323 → 322 → 323

SECTION 3. CONTRACEPTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
318	At that time, were you told about side effects or problems you might have with the method?	YES . . . . . 1 NO 2	→ 321 → 320
319	When you got sterilized, were you told about side effects or problems you might have with the method?	YES . . . . . 1 NO 2	→ 321
320	Were you ever told by a health or family planning worker about side effects or problems you might have with the method?	YES . . . . . 1 NO 2	→ 322
321	Were you told what to do if you experienced side effects or problems?	YES . . . . . 1 NO 2	
322	CHECK 318 AND 319: ANY 'YES' → a) At that time, were you told about other methods of family planning that you could use? OTHER → b) When you obtained (CURRENT METHOD FROM 315) from (SOURCE OF METHOD FROM 307 OR 316), were you told about other methods of family planning that you could use?	YES . . . . . 1 NO 2	→ 324
323	Were you ever told by a health or family planning worker about other methods of family planning that you could use?	YES . . . . . 1 NO 2	
324	CHECK 304: CIRCLE METHOD CODE: IF MORE THAN ONE METHOD CODE CIRCLED IN 304, CIRCLE CODE FOR HIGHEST METHOD IN LIST.	FEMALE STERILIZATION . . . . . 01 MALE STERILIZATION . . . . . 02 IUD . . . . . 03 INJECTABLES . . . . . 04 IMPLANTS . . . . . 05 PILL . . . . . 06 CONDOM . . . . . 07 FEMALE CONDOM . . . . . 08 EMERGENCY CONTRACEPTION . . . . . 09 STANDARD DAYS METHOD . . . . . 10 LACTATIONAL AMENORRHEA METHOD . . . . . 11 RHYTHM METHOD . . . . . 12 WITHDRAWAL . . . . . 13 OTHER MODERN METHOD . . . . . 95 OTHER TRADITIONAL METHOD 96	→ 327 → 327 → 327

SECTION 3. CONTRACEPTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
325	Where did you obtain (CURRENT METHOD) the last time? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . . . . 11 GOVERNMENT HEALTH CENTER . . . . . 12 GOVERNMENT HEALTH POST . . . . . 13 MOBILE CLINIC/HOSPITAL . . . . . 14 COMMUNITY BASED AGENT/FIELDWORKER . . . . . 15 OTHER PUBLIC SECTOR _____ 16 (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/CLINIC . . . . . 21 MISSION HOSPITAL/CLINIC . . . . . 22 PHARMACY . . . . . 23 PRIVATE DOCTOR . . . . . 24 MOBILE HOSPITAL/CLINIC . . . . . 25 COMMUNITY BASED AGENT/FIELDWORKER . . . . . 26 OTHER PRIVATE MEDICAL SECTOR _____ 27 (SPECIFY) **OTHER SOURCE** SHOP . . . . . 31 CHURCH . . . . . 32 FRIEND/RELATIVE . . . . . 33 OTHER _____ 96 (SPECIFY)	→ 327
326	Do you know of a place where you can obtain a method of family planning?	YES . . . . . 1 NO 2	
327	In the last 12 months, were you visited by a community health worker?	YES . . . . . 1 NO 2	→ 329
328	Did the community health worker talk to you about family planning?	YES . . . . . 1 NO 2	
329	CHECK 202: CHILDREN LIVING WITH THE RESPONDENT YES ↓ / NO ↓ a) In the last 12 months, have you visited a health facility for care for yourself or your children? b) In the last 12 months, have you visited a health facility for care for yourself?	YES . . . . . 1 NO 2	→ 401
330	Did any health worker at the health facility speak to you about family planning methods?	YES . . . . . 1 NO 2	

SECTION 4. PREGNANCY AND POSTNATAL CARE

401	CHECK 224: ONE OR MORE BIRTHS IN 2013-2018 ☐ ↓ NO BIRTHS IN 2013-2018 ☐ → 648		
402	CHECK 215. RECORD THE BIRTH HISTORY NUMBER IN 403 AND THE NAME AND SURVIVAL STATUS IN 404 FOR EACH BIRTH IN 2013-2018. ASK THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH. IF THERE ARE MORE THAN 2 BIRTHS, USE LAST COLUMN OF ADDITIONAL QUESTIONNAIRE(S). Now I would like to ask you some questions about the health of all your children born in the last five years. (We will talk about each separately.)		
403	BIRTH HISTORY NUMBER FROM 212 IN BIRTH HISTORY.	LAST BIRTH BIRTH HISTORY NUMBER . . . . . ☐☐	NEXT-TO-LAST BIRTH BIRTH HISTORY NUMBER . . . . . ☐☐
404	FROM 212 AND 216:	NAME _____ LIVING ☐ ↓ DEAD ☐ ↓	NAME _____ LIVING ☐ ↓ DEAD ☐ ↓
405	When you got pregnant with (NAME), did you want to get pregnant at that time?	YES . . . . . 1 (SKIP TO 408) ← NO 2	YES . . . . . 1 (SKIP TO 426) ← NO 2
406	CHECK 208: ONLY ONE BIRTH ☐ ↓ / MORE THAN ONE BIRTH ☐ ↓ a) Did you want to have a baby later on, or did you not want any children? b) Did you want to have a baby later on, or did you not want any more children?	LATER . . . . . 1 NO MORE/NONE . . . . . 2 (SKIP TO 408) ←	LATER . . . . . 1 NO MORE/NONE . . . . . 2 (SKIP TO 426) ←
407	How much longer would you have liked to wait?	MONTHS . . . . . 1 ☐☐ YEARS . . . . . 2 ☐☐ DON'T KNOW 998	MONTHS . . . . . 1 ☐☐ YEARS . . . . . 2 ☐☐ DON'T KNOW 998
408	Did you see anyone for antenatal care for this pregnancy?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 414) ←	
409	Whom did you see? Anyone else? PROBE TO IDENTIFY EACH TYPE OF PERSON AND RECORD ALL MENTIONED.	**HEALTH PERSONNEL** DOCTOR . . . . . A NURSE/MIDWIFE . . . . . B CLINICAL OFFICER . . . . . C **OTHER PERSON** COMMUNITY/ VILLAGE HEALTH ASSISTANT . . . . . D TRADITIONAL BIRTH ATTENDANT . . . . . E COMMUNITY/ VILLAGE HEALTH WORKER . . . . . F OTHER _____ X (SPECIFY)	

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
410	Where did you receive antenatal care for this pregnancy? Anywhere else? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**HOME** HER HOME . . . . . A OTHER HOME . . . . . B **PUBLIC SECTOR** GOVERNMENT HOSPITAL . . C GOVERNMENT HEALTH CENTER . . . . . D GOVERNMENT HEALTH POST . . . . . E MOBILE HOSPITAL/CLINIC . . F OTHER PUBLIC SECTOR _____ G (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/ CLINIC . . . . . H MISSION HOSPITAL/ CLINIC . . . . . I OTHER PRIVATE MEDICAL SECTOR _____ J (SPECIFY) OTHER _____ X (SPECIFY)	
411	How many months pregnant were you when you first received antenatal care for this pregnancy?	MONTHS . . . . . [ ][ ] DON'T KNOW 98	
412	How many times did you receive antenatal care during this pregnancy?	NUMBER OF TIMES . . . . . [ ][ ] DON'T KNOW 98	
413	As part of your antenatal care during this pregnancy, were any of the following done at least once:	YES NO	
	a) Was your blood pressure measured?	a) BP 1 2	
	b) Did you give a urine sample?	b) URINE 1 2	
	c) Did you give a blood sample?	c) BLOOD 1 2	
	d) Were you weighed?	c) WEIGHED 1 2	
414	During this pregnancy, were you given an injection in the arm to prevent the baby from getting tetanus, that is, convulsions after birth?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 417) DON'T KNOW 8	
415	During this pregnancy, how many times did you get this tetanus injection?	TIMES . . . . . [ ] DON'T KNOW 8	

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
416	CHECK 415:	2 OR MORE TIMES ☐ → (SKIP TO 420) OTHER ☐ ↓	
417	At any time before this pregnancy, did you receive any tetanus injections?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 420) ← DON'T KNOW 8	
418	Before this pregnancy, how many other times did you receive a tetanus injection? IF 7 OR MORE TIMES, RECORD '7'.	TIMES . . . . . ☐☐ DON'T KNOW 8	
419	CHECK 418: ONLY ONE ☐ ↓ a) How many years ago did you receive that tetanus injection? MORE THAN ONE ☐ ↓ b) How many years ago did you receive the last tetanus injection before this pregnancy?	YEARS AGO . . . . . ☐☐	
420	During this pregnancy, were you given or did you buy any iron tablets or iron syrup? SHOW TABLETS/SYRUP.	YES . . . . . 1 NO . . . . . 2 (SKIP TO 422) ← DON'T KNOW 8	
421	During the whole pregnancy, for how many days did you take the tablets or syrup? IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER OF DAYS.	DAYS . . . . . ☐☐☐ DON'T KNOW 998	
422	During this pregnancy, did you take any drug for intestinal worms?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
423	During this pregnancy, did you take SP/Fansidar to keep you from getting malaria?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 426) ← DON'T KNOW 8	
424	How many times did you take SP/Fansidar during this pregnancy?	TIMES . . . . . ☐☐	
425	Did you get the SP/Fansidar during any antenatal care visit, during another visit to a health facility or from another source? IF MORE THAN ONE SOURCE, RECORD THE HIGHEST SOURCE ON THE LIST.	ANTENATAL VISIT . . . . . 1 ANOTHER FACILITY VISIT . . . . . 2 OTHER SOURCE 6	

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
426	When (NAME) was born, was he/she very large, larger than average, average, smaller than average, or very small?	VERY LARGE . . . . . 1 LARGER THAN AVERAGE . . . . . 2 AVERAGE . . . . . 3 SMALLER THAN AVERAGE . . . . . 4 VERY SMALL . . . . . 5 DON'T KNOW 8	VERY LARGE . . . . . 1 LARGER THAN AVERAGE . . . . . 2 AVERAGE . . . . . 3 SMALLER THAN AVERAGE . . . . . 4 VERY SMALL . . . . . 5 DON'T KNOW 8
427	Was (NAME) weighed at birth?	YES . . . . . 1 NO . . . . . 2 → (SKIP TO 429) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 → (SKIP TO 429) DON'T KNOW 8
428	How much did (NAME) weigh? RECORD WEIGHT IN KILOGRAMS FROM HEALTH CARD, IF AVAILABLE.	KG FROM CARD 1 ☐☐.☐☐☐ KG FROM RECALL 2 ☐☐.☐☐☐ DON'T KNOW 99998	KG FROM CARD 1 ☐☐.☐☐☐ KG FROM RECALL 2 ☐☐.☐☐☐ DON'T KNOW 99998
429	Who assisted with the delivery of (NAME)? Anyone else? PROBE FOR THE TYPE(S) OF PERSON(S) AND RECORD ALL MENTIONED. IF RESPONDENT SAYS NO ONE ASSISTED, PROBE TO DETERMINE WHETHER ANY ADULTS WERE PRESENT AT THE DELIVERY.	**HEALTH PERSONNEL** DOCTOR . . . . . A NURSE/MIDWIFE . . . . . B CLINICAL OFFICER . . . . . C **OTHER PERSON** COMMUNITY/ VILLAGE HEALTH ASSISTANT . . . . . D TRADITIONAL BIRTH ATTENDANT . . . . . E COMMUNITY/ VILLAGE HEALTH WORKER . . . . . F RELATIVE/FRIEND . . . . . G OTHER _____ X (SPECIFY) NO ONE ASSISTED . . . . . Y	**HEALTH PERSONNEL** DOCTOR . . . . . A NURSE/MIDWIFE . . . . . B CLINICAL OFFICER . . . . . C **OTHER PERSON** COMMUNITY/ VILLAGE HEALTH ASSISTANT . . . . . D TRADITIONAL BIRTH ATTENDANT . . . . . E COMMUNITY/ VILLAGE HEALTH WORKER . . . . . F RELATIVE/FRIEND . . . . . G OTHER _____ X (SPECIFY) NO ONE ASSISTED . . . . . Y

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
430	Where did you give birth to (NAME)? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**HOME** HER HOME . . . . . 11 (SKIP TO 434) OTHER HOME . . . . . 12 **PUBLIC SECTOR** GOVERNMENT HOSPITAL . . 21 GOVERNMENT HEALTH CENTER . . . . . 22 GOVERNMENT HEALTH POST . . . . . 23 OTHER PUBLIC SECTOR _____ 26 (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/ CLINIC . . . . . 31 MISSION HOSPITAL/ CLINIC 32 OTHER PRIVATE MEDICAL SECTOR _____ 36 (SPECIFY) OTHER _____ 96 (SPECIFY) (SKIP TO 434)	**HOME** HER HOME . . . . . 11 (SKIP TO 434) OTHER HOME . . . . . 12 **PUBLIC SECTOR** GOVERNMENT HOSPITAL . . 21 GOVERNMENT HEALTH CENTER . . . . . 22 GOVERNMENT HEALTH POST . . . . . 23 OTHER PUBLIC SECTOR _____ 26 (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/ CLINIC . . . . . 31 MISSION HOSPITAL/ CLINIC 32 OTHER PRIVATE MEDICAL SECTOR _____ 36 (SPECIFY) OTHER _____ 96 (SPECIFY) (SKIP TO 434)
431	How long after (NAME) was delivered did you stay there? IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS . . . . . 1 DAYS . . . . . 2 WEEKS . . . . . 3 DON'T KNOW 998	
432	Was (NAME) delivered by caesarean, that is, did they cut your belly open to take the baby out?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 434)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 434)
433	When was the decision made to have the caesarean section? Was it before or after your labor pains started?	BEFORE . . . . . 1 AFTER 2	BEFORE . . . . . 1 AFTER 2
434	Immediately after the birth, was (NAME) put on your chest?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 434B) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 459) DON'T KNOW 8
434A	Was (NAME)'s bare skin touching your bare skin?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
434B	CHECK 430: PLACE OF DELIVERY	CODE 11, 12, OR 96 CIRCLED OTHER (SKIP TO 449)	

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
435	I would like to talk to you about checks on your health after delivery, for example, someone asking you questions about your health or examining you. Did anyone check on your health while you were still in the facility?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 438)	
436	How long after delivery did the first check take place? IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS . . . . . 1 ☐☐ DAYS . . . . . 2 ☐☐ WEEKS . . . . . 3 ☐☐ DON'T KNOW 998	
437	Who checked on your health at that time? PROBE FOR MOST QUALIFIED PERSON.	**HEALTH PERSONNEL** DOCTOR . . . . . 11 NURSE/MIDWIFE . . . . . 12 CLINICAL OFFICER . . . . . 13 **OTHER PERSON** COMMUNITY/ VILLAGE HEALTH ASSISTANT . . . . . 21 TRADITIONAL BIRTH ATTENDANT . . . . . 22 COMMUNITY/ VILLAGE HEALTH WORKER . . . . . 23 RELATIVE/FRIEND . . . . . 24 OTHER _____ 96 (SPECIFY)	
438	Now I would like to talk to you about checks on (NAME)'s health after delivery – for example, someone examining (NAME), checking the cord, or seeing if (NAME) is OK. Did anyone check on (NAME)'s health while you were still in the facility?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 441) DON'T KNOW 8	
439	How long after delivery was (NAME)'s health first checked? IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS . . . . . 1 ☐☐ DAYS . . . . . 2 ☐☐ WEEKS . . . . . 3 ☐☐ DON'T KNOW 998	

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
440	Who checked on (NAME)'s health at that time? PROBE FOR MOST QUALIFIED PERSON.	**HEALTH PERSONNEL** DOCTOR . . . . . 11 NURSE/MIDWIFE . . . . . 12 CLINICAL OFFICER . . . . . 13 **OTHER PERSON** COMMUNITY/ VILLAGE HEALTH ASSISTANT . . . . . 21 TRADITIONAL BIRTH ATTENDANT . . . . . 22 COMMUNITY/ VILLAGE HEALTH WORKER . . . . . 23 OTHER _____ 96 (SPECIFY)	
441	Now I want to talk to you about what happened after you left the facility. Did anyone check on your health after you left the facility?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 445)	
442	How long after delivery did that check take place? IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS . . . . . 1 ☐☐ DAYS . . . . . 2 ☐☐ WEEKS . . . . . 3 ☐☐ DON'T KNOW 998	
443	Who checked on your health at that time? PROBE FOR MOST QUALIFIED PERSON.	**HEALTH PERSONNEL** DOCTOR . . . . . 11 NURSE/MIDWIFE . . . . . 12 CLINICAL OFFICER . . . . . 13 **OTHER PERSON** COMMUNITY/ VILLAGE HEALTH ASSISTANT . . . . . 21 TRADITIONAL BIRTH ATTENDANT . . . . . 22 COMMUNITY/ VILLAGE HEALTH WORKER . . . . . 23 OTHER _____ 96 (SPECIFY)	

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
444	Where did the check take place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**HOME** HER HOME . . . . . 11 OTHER HOME . . . . . 12 **PUBLIC SECTOR** GOVERNMENT HOSPITAL . . 21 GOVERNMENT HEALTH CENTER . . . . . 22 GOVERNMENT HEALTH POST . . . . . 23 OTHER PUBLIC SECTOR _____ 26 (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/ CLINIC . . . . . 31 MISSION HOSPITAL/ CLINIC . . . . . 32 OTHER PRIVATE MEDICAL SECTOR _____ 36 (SPECIFY) OTHER _____ 96 (SPECIFY)	
445	I would like to talk to you about checks on (NAME)'s health after you left (FACILITY IN 430). Did any health care provider or a traditional birth attendant check on (NAME)'s health in the two months after you left (FACILITY IN 430)?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 457) DON'T KNOW 8	
446	How many hours, days or weeks after the birth of (NAME) did that check take place? IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS . . . . . 1 DAYS . . . . . 2 WEEKS . . . . . 3 DON'T KNOW 998	
447	Who checked on (NAME)'s health at that time? PROBE FOR MOST QUALIFIED PERSON.	**HEALTH PERSONNEL** DOCTOR . . . . . 11 NURSE/MIDWIFE . . . . . 12 CLINICAL OFFICER . . . . . 13 **OTHER PERSON** COMMUNITY/ VILLAGE HEALTH ASSISTANT . . . . . 21 TRADITIONAL BIRTH ATTENDANT . . . . . 22 COMMUNITY/ VILLAGE HEALTH WORKER . . . . . 23 OTHER _____ 96 (SPECIFY)	

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
448	Where did this check of (NAME) take place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**HOME** HER HOME . . . . . 11 OTHER HOME . . . . . 12 **PUBLIC SECTOR** GOVERNMENT HOSPITAL . . 21 GOVERNMENT HEALTH CENTER . . . . . 22 GOVERNMENT HEALTH POST . . . . . 23 OTHER PUBLIC SECTOR _____ 26 (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/ CLINIC . . . . . 31 MISSION HOSPITAL/ CLINIC 32 OTHER PRIVATE MEDICAL SECTOR _____ 36 (SPECIFY) OTHER _____ 96 (SPECIFY) (SKIP TO 457)	

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
449	I would like to talk to you about checks on your health after delivery, for example, someone asking you questions about your health or examining you. Did anyone check on your health after you gave birth to (NAME)?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 453)	
450	How long after delivery did the first check take place? IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS . . . . . 1 ☐☐ DAYS . . . . . 2 ☐☐ WEEKS . . . . . 3 ☐☐ DON'T KNOW 998	
451	Who checked on your health at that time? PROBE FOR MOST QUALIFIED PERSON.	**HEALTH PERSONNEL** DOCTOR . . . . . 11 NURSE/MIDWIFE . . . . . 12 CLINICAL OFFICER . . . . . 13 **OTHER PERSON** COMMUNITY/ VILLAGE HEALTH ASSISTANT . . . . . 21 TRADITIONAL BIRTH ATTENDANT . . . . . 22 COMMUNITY/ VILLAGE HEALTH WORKER . . . . . 23 OTHER _____ 96 (SPECIFY)	
452	Where did this first check take place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**HOME** HER HOME . . . . . 11 OTHER HOME . . . . . 12 **PUBLIC SECTOR** GOVERNMENT HOSPITAL . . 21 GOVERNMENT HEALTH CENTER . . . . . 22 GOVERNMENT HEALTH POST . . . . . 23 OTHER PUBLIC SECTOR _____ 26 (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/ CLINIC . . . . . 31 MISSION HOSPITAL/ CLINIC 32 OTHER PRIVATE MEDICAL SECTOR _____ 36 (SPECIFY) OTHER _____ 96 (SPECIFY)	

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
453	I would like to talk to you about checks on (NAME)'s health after delivery – for example, someone examining (NAME), checking the cord, or seeing if (NAME) is OK. In the two months after (NAME) was born, did any health care provider or a traditional birth attendant check on (NAME)'s health?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 457) DON'T KNOW 8	
454	How many hours, days or weeks after the birth of (NAME) did the first check take place? IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS AFTER BIRTH . . . . . 1 [ ][ ] DAYS AFTER BIRTH . . . . . 2 [ ][ ] WEEKS AFTER BIRTH . . . . . 3 [ ][ ] DON'T KNOW 998	
455	Who checked on (NAME)'s health at that time? PROBE FOR MOST QUALIFIED PERSON.	**HEALTH PERSONNEL** DOCTOR . . . . . 11 NURSE/MIDWIFE . . . . . 12 CLINICAL OFFICER . . . . . 13 **OTHER PERSON** COMMUNITY/ VILLAGE HEALTH ASSISTANT . . . . . 21 TRADITIONAL BIRTH ATTENDANT . . . . . 22 COMMUNITY/ VILLAGE HEALTH WORKER . . . . . 23 OTHER _____ 96 (SPECIFY)	
456	Where did this first check of (NAME) take place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**HOME** HER HOME . . . . . 11 OTHER HOME . . . . . 12 **PUBLIC SECTOR** GOVERNMENT HOSPITAL . . 21 GOVERNMENT HEALTH CENTER . . . . . 22 GOVERNMENT HEALTH POST . . . . . 23 OTHER PUBLIC SECTOR _____ 26 (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/ CLINIC . . . . . 31 MISSION HOSPITAL/ CLINIC 32 OTHER PRIVATE MEDICAL SECTOR _____ 36 (SPECIFY) OTHER _____ 96 SPECIFY	

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
457	During the first two days after (NAME)'s birth, did any health care provider do the following: a) Examine the cord? b) Measure (NAME)'s temperature? c) Counsel you on danger signs for newborns? d) Counsel you on breastfeeding? e) Observe (NAME) breastfeeding?	YES NO DK a) CORD . . . . . 1 2 8 b) TEMP. . . . . 1 2 8 c) SIGNS . . . . . 1 2 8 d) COUNSEL BREAST-FEED 1 2 8 e) OBSERVE BREAST-FEED 1 2 8	
458	Has your menstrual period returned since the birth of (NAME)?	YES . . . . . 1 → (SKIP TO 460) NO . . . . . 2 → (SKIP TO 461)	
459	Did your period return between the birth of (NAME) and your next pregnancy?		YES . . . . . 1 NO . . . . . 2 → (SKIP TO 463)
460	For how many months after the birth of (NAME) did you not have a period?	MONTHS . . . . . ☐☐ DON'T KNOW 98	MONTHS . . . . . ☐☐ DON'T KNOW 98
461	CHECK 226: IS RESPONDENT PREGNANT?	NOT PREGNANT ↓ PREGNANT OR UNSURE → (SKIP TO 463)	
462	Have you had sexual intercourse since the birth of (NAME)?	YES . . . . . 1 NO . . . . . 2 → (SKIP TO 464)	
463	For how many months after the birth of (NAME) did you not have sexual intercourse?	MONTHS . . . . . ☐☐ DON'T KNOW 98	MONTHS . . . . . ☐☐ DON'T KNOW 98
464	Did you ever breastfeed (NAME)?	YES . . . . . 1 → (SKIP TO 466) NO 2	YES . . . . . 1 NO 2
465	CHECK 404: IS CHILD LIVING?	LIVING → (SKIP TO 470) DEAD → (SKIP TO 471)	
466	How long after birth did you first put (NAME) to the breast? IF LESS THAN 1 HOUR, RECORD '00' HOURS; IF LESS THAN 24 HOURS, RECORD HOURS; OTHERWISE, RECORD DAYS.	IMMEDIATELY . . . . . 000 HOURS . . . . . 1 ☐☐ DAYS . . . . . 2 ☐☐	

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
467	In the first three days after delivery, was (NAME) given anything to drink other than breast milk?	YES . . . . . 1 NO 2	
468	CHECK 404: IS CHILD LIVING?	LIVING → DEAD → (SKIP TO 471)	LIVING → DEAD → (SKIP TO 471)
469	Are you still breastfeeding (NAME)?	YES . . . . . 1 NO 2	
470	Did (NAME) drink anything from a bottle with a nipple yesterday or last night?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
471		GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 501A.	GO BACK TO 405 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 501A.

SECTION 5A. CHILD IMMUNIZATION (LAST BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
501A	CHECK 215 IN THE BIRTH HISTORY: ANY BIRTHS IN 2015-2018? ONE OR MORE BIRTHS IN 2015-2018 ☐ NO BIRTHS IN 2015-2018 ☐		→ 601
502A	RECORD THE NAME AND BIRTH HISTORY NUMBER FROM 212 OF THE LAST CHILD BORN IN 2015-2018. NAME OF LAST BIRTH _____ BIRTH HISTORY NUMBER . . . . . ☐☐		
503A	CHECK 216 FOR CHILD: LIVING ☐ DEAD ☐		→ 501B
504A	Do you have a card or other document where (NAME)'s vaccinations are written down?	YES, HAS ONLY A CARD . . . . . 1 YES, HAS ONLY AN OTHER DOCUMENT . . 2 YES, HAS CARD AND OTHER DOCUMENT . . 3 NO, NO CARD AND NO OTHER DOCUMENT . . 4	→ 507A → 507A
505A	Did you ever have a vaccination card for (NAME)?	YES . . . . . 1 NO 2	
506A	CHECK 504A: CODE '2' CIRCLED ☐ CODE '4' CIRCLED ☐		→ 511A
507A	May I see the card or other document where (NAME)'s vaccinations are written down?	YES, ONLY CARD SEEN . . . . . 1 YES, ONLY OTHER DOCUMENT SEEN . . . . . 2 YES, CARD AND OTHER DOCUMENT SEEN . . 3 NO CARD AND NO OTHER DOCUMENT SEEN . . 4	 → 511A

SECTION 5A. CHILD IMMUNIZATION (LAST BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
	NAME OF LAST BIRTH _____	BIRTH HISTORY NUMBER	
508A	COPY DATES FROM THE CARD. WRITE '44' IN 'DAY' COLUMN IF CARD SHOWS THAT A DOSE WAS GIVEN, BUT NO DATE IS RECORDED.		
509A	CHECK 508A: 'BCG' TO ROTA VACCINE 2' ALL RECORDED?	NO ☐ YES ☐ → 525A	
510A	In addition to what is recorded on (this document/these documents), did (NAME) received any other vaccinations, including vaccinations received in campaigns or immunization days or child health days? RECORD 'YES' ONLY IF THE RESPONDENT MENTIONS AT LEAST ONE OF THE VACCINATIONS IN 508A THAT ARE NOT RECORDED AS HAVING BEEN GIVEN.	YES . . . . . 1 (PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 508A THEN WRITE '00' IN THE CORRESPONDING DAY COLUMN FOR ALL VACCINATIONS NOT GIVEN) (THEN SKIP TO 525A) NO . . . . . 2 DON'T KNOW . . . . . 8 (WRITE '00' IN THE CORRESPONDING DAY COLUMN FOR ALL VACCINATIONS NOT GIVEN) (THEN SKIP TO 525A)	

	DAY		MONTH		YEAR			
BCG (at birth)								
ORAL POLIO VACCINE (OPV) 0 (BIRTH DOSE)								
ORAL POLIO VACCINE (OPV) 1								
ORAL POLIO VACCINE (OPV) 2								
ORAL POLIO VACCINE (OPV) 3								
ORAL POLIO VACCINE (OPV) 4								
PCV 1								
PCV 2								
PCV 3								
DPT-HEP.B-HIB (PENTAVALENT) 1								
DPT-HEP.B-HIB (PENTAVALENT) 2								
DPT-HEP.B-HIB (PENTAVALENT) 3								
MEASLES / MEASLES AND RUBELLA 1								
MEASLES / MEASLES AND RUBELLA 2								
ROTA VACCINE 1								
ROTA VACCINE 2								
VITAMIN A (MOST RECENT)								

SECTION 5A. CHILD IMMUNIZATION (LAST BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
	NAME OF LAST BIRTH _____	BIRTH HISTORY NUMBER . . . . . ☐☐	
511A	Did (NAME) ever receive any vaccinations to prevent (NAME) from getting diseases, including vaccinations received in campaigns or immunization days or child health days?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 525A
512A	Has (NAME) ever received a BCG vaccination against tuberculosis, that is, an injection in the arm or shoulder that usually causes a scar?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
514A	Has (NAME) ever received oral polio vaccine, that is, about two drops in the mouth to prevent polio?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 517A
515A	Did (NAME) receive the first oral polio vaccine in the first two weeks after birth or later?	FIRST TWO WEEKS . . . . . 1 LATER 2	
516A	How many times did (NAME) receive the oral polio vaccine?	NUMBER OF TIMES . . . . . ☐	
517A	Has (NAME) ever received a pentavalent (DPT-HEP.B-HIB) vaccination, that is, an injection given in the left thigh sometimes at the same time as polio drops?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 519A
518A	How many times did (NAME) receive the pentavalent vaccine?	NUMBER OF TIMES . . . . . ☐	

SECTION 5A. CHILD IMMUNIZATION (LAST BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
	NAME OF LAST BIRTH _____	BIRTH HISTORY NUMBER	
519A	Has (NAME) ever received a PCV (pneumococcal) vaccination, that is, an injection in the right thigh to prevent pneumonia?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 521A
520A	How many times did (NAME) receive the PCV (pneumococcal) vaccine?	NUMBER OF TIMES	
521A	Has (NAME) ever received a rotavirus vaccination, that is, liquid in the mouth to prevent diarrhoea?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 523A
522A	How many times did (NAME) receive the rotavirus vaccine?	NUMBER OF TIMES	
523A	Has (NAME) ever received a measles and rubella vaccination, that is, an injection in the arm to prevent measles and rubella?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 525A
524A	How many times did (NAME) receive the measles and rubella vaccine?	NUMBER OF TIMES	
525A	In the last 7 days was (NAME) given: a) Micronutrient powder b) Ready to use therapeutic food such as Plumpy'nut?	YES NO DK a) POWDER . . . . . 1 2 8 b) PLUMPY'NUT 1 2 8	
526A	CONTINUE WITH 501B.		

SECTION 5B. CHILD IMMUNIZATION (NEXT-TO-LAST BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
501B	CHECK 215 IN THE BIRTH HISTORY: ANY MORE BIRTHS IN 2015-2018? MORE BIRTHS IN 2015-2018 ☐ ↓ NO MORE BIRTHS IN 2015-2018 ☐ → 601		
502B	RECORD THE NAME AND BIRTH HISTORY NUMBER FROM 212 OF THE NEXT-TO-LAST CHILD BORN IN 2015-2018. NAME OF NEXT-TO-LAST BIRTH _____ BIRTH HISTORY NUMBER . . . . . ☐☐		
503B	CHECK 216 FOR CHILD: LIVING ☐ ↓ DEAD ☐ → 526B		
504B	Do you have a card or other document where (NAME)'s vaccinations are written down?	YES, HAS ONLY A CARD . . . . . 1 YES, HAS ONLY AN OTHER DOCUMENT . . 2 YES, HAS CARD AND OTHER DOCUMENT . . 3 NO, NO CARD AND NO OTHER DOCUMENT . . 4	→ 507B → 507B
505B	Did you ever have a vaccination card for (NAME)?	YES . . . . . 1 NO 2	
506B	CHECK 504B: CODE '2' CIRCLED ☐ ↓ CODE '4' CIRCLED ☐ → 511B		
507B	May I see the card or other document where (NAME)'s vaccinations are written down?	YES, ONLY CARD SEEN . . . . . 1 YES, ONLY OTHER DOCUMENT SEEN . . . . . 2 YES, CARD AND OTHER DOCUMENT SEEN . . 3 NO CARD AND NO OTHER DOCUMENT SEEN . . 4	 → 511B

SECTION 5B. CHILD IMMUNIZATION (NEXT-TO-LAST BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
	NAME OF NEXT-TO-LAST BIRTH _____	BIRTH HISTORY NUMBER	

508B COPY DATES FROM THE CARD.
WRITE '44' IN 'DAY' COLUMN IF CARD SHOWS THAT A DOSE WAS GIVEN, BUT NO DATE IS RECORDED.

	DAY		MONTH		YEAR			
BCG (at birth)								
ORAL POLIO VACCINE (OPV) 0 (BIRTH DOSE)								
ORAL POLIO VACCINE (OPV) 1								
ORAL POLIO VACCINE (OPV) 2								
ORAL POLIO VACCINE (OPV) 3								
ORAL POLIO VACCINE (OPV) 4								
PCV 1								
PCV 2								
PCV 3								
DPT-HEP.B-HIB (PENTAVALENT) 1								
DPT-HEP.B-HIB (PENTAVALENT) 2								
DPT-HEP.B-HIB (PENTAVALENT) 3								
MEASLES / MEASLES AND RUBELLA 1								
MEASLES / MEASLES AND RUBELLA 2								
ROTA VACCINE 1								
ROTA VACCINE 2								
VITAMIN A (MOST RECENT)								

509B CHECK 508B: 'BCG' TO ROTA VACCINE 2' ALL RECORDED?

NO ☐ → YES ☐ → 525B

510B In addition to what is recorded on (this document/these documents), did (NAME) receive any other vaccinations, including vaccinations received in campaigns or immunization days or child health days?

YES 1
(PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 508B THEN WRITE '00' IN THE CORRESPONDING DAY COLUMN FOR ALL VACCINATIONS NOT
(THEN SKIP TO 525B)

RECORD 'YES' ONLY IF THE RESPONDENT MENTIONS AT LEAST ONE OF THE VACCINATIONS IN 508B THAT ARE NOT RECORDED AS HAVING BEEN GIVEN.

NO 2
DON'T KNOW 8
(WRITE '00' IN THE CORRESPONDING DAY COLUMN FOR ALL VACCINATIONS NOT GIVEN)
(THEN SKIP TO 525B)

SECTION 5B. CHILD IMMUNIZATION (NEXT-TO-LAST BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
	NAME OF NEXT-TO-LAST BIRTH _____	BIRTH HISTORY NUMBER	
511B	Did (NAME) ever receive any vaccinations to prevent (NAME) from getting diseases, including vaccinations received in campaigns or immunization days or child health days?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 525B
512B	Has (NAME) ever received a BCG vaccination against tuberculosis, that is, an injection in the arm or shoulder that usually causes a scar?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
514B	Has (NAME) ever received oral polio vaccine, that is, about two drops in the mouth to prevent polio?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 517B
515B	Did (NAME) receive the first oral polio vaccine in the first two weeks after birth or later?	FIRST TWO WEEKS . . . . . 1 LATER 2	
516B	How many times did (NAME) receive the oral polio vaccine?	NUMBER OF TIMES	
517B	Has (NAME) ever received a pentavalent (DPT-HEP.B-HIB) vaccination, that is, an injection given in the left thigh sometimes at the same time as polio drops?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 519B
518B	How many times did (NAME) receive the pentavalent vaccine?	NUMBER OF TIMES	

SECTION 5B. CHILD IMMUNIZATION (NEXT-TO-LAST BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
	NAME OF NEXT-TO-LAST BIRTH _____	BIRTH HISTORY NUMBER . . . . . ☐☐	
519B	Has (NAME) ever received a PCV (pneumococcal) vaccination, that is, an injection in the right thigh to prevent pneumonia?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 521B
520B	How many times did (NAME) receive the PCV (pneumococcal) vaccine?	NUMBER OF TIMES . . . . . ☐	
521B	Has (NAME) ever received a rotavirus vaccination, that is, liquid in the mouth to prevent diarrhoea?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 523B
522B	How many times did (NAME) receive the rotavirus vaccine?	NUMBER OF TIMES . . . . . ☐	
523B	Has (NAME) ever received a measles and rubella vaccination, that is, an injection in the arm to prevent measles and rubella?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 525B
524B	How many times did (NAME) receive the measles and rubella vaccine?	NUMBER OF TIMES . . . . . ☐	
525B	In the last 7 days was (NAME) given:	YES NO DK	
	a) Micronutrient powder	a) POWDER 1 2 8	
	b) Ready to use therapeutic food such as Plumpy'nut?	b) PLUMPY'NUT 1 2 8	
526B	CHECK 215 IN BIRTH HISTORY: ANY MORE BIRTHS IN 2015-2018?		
	MORE BIRTHS IN 2015-2018 ☐ → (GO TO 502B IN AN ADDITIONAL QUESTIONNAIRE)	NO MORE BIRTHS IN 2015-2018 ☐	→ 601

601	CHECK 224: ONE OR MORE BIRTHS IN 2013-2018 ☐ ↓ NO BIRTHS IN 2013-2018 ☐ → 648		
602	CHECK 215: RECORD THE BIRTH HISTORY NUMBER IN 603 AND THE NAME AND SURVIVAL STATUS IN 604 FOR EACH BIRTH IN 2013-2018. ASK THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH. IF THERE ARE MORE THAN 2 BIRTHS, USE LAST COLUMN OF ADDITIONAL QUESTIONNAIRE(S). Now I would like to ask you some questions about the health of all your children born in the last five years. (We will talk about each separately.)		
603	BIRTH HISTORY NUMBER FROM 212 IN BIRTH HISTORY.	LAST BIRTH BIRTH HISTORY NUMBER . . . . . ☐☐	NEXT-TO-LAST BIRTH BIRTH HISTORY NUMBER . . . . . ☐☐
604	FROM 212 AND 216:	NAME _____ LIVING ☐ ↓ DEAD ☐ → (SKIP TO 646)	NAME _____ LIVING ☐ ↓ DEAD ☐ → (SKIP TO 646)
605	Within the last six months, was (NAME) given a vitamin A dose like (this/any of these)? SHOW COMMON TYPES OF AMPULES/CAPSULES/SYRUPS.	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
606	In the last seven days, was (NAME) given iron pills, sprinkles with iron, or iron syrup like [this/any of these]? SHOW COMMON TYPES OF PILLS/SPRINKLES/SYRUPS.	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
607	Was (NAME) given any drug for intestinal worms in the last six months?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
608	Has (NAME) had diarrhoea in the last 2 weeks?	YES . . . . . 1 NO . . . . . 2 → (SKIP TO 618) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 → (SKIP TO 618) DON'T KNOW 8

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
609	CHECK 469: CURRENTLY BREASTFEEDING? YES ☐ → a) Now I would like to know how much (NAME) was given to drink during the diarrhoea including breastmilk. Was (NAME) given less than usual to drink, about the same amount, or more than usual to drink? IF LESS, PROBE: Was (NAME) given much less than usual to drink or somewhat less? NO/ NOT ASKED ☐ → b) Now I would like to know how much (NAME) was given to drink during the diarrhoea. Was (NAME) given less than usual to drink, about the same amount, or more than usual to drink? IF LESS, PROBE: Was (NAME) given much less than usual to drink or somewhat less?	MUCH LESS . . . . . 1 SOMEWHAT LESS . . . . . 2 ABOUT THE SAME . . . . . 3 MORE . . . . . 4 NOTHING TO DRINK . . . . . 5 DON'T KNOW 8	MUCH LESS . . . . . 1 SOMEWHAT LESS . . . . . 2 ABOUT THE SAME . . . . . 3 MORE . . . . . 4 NOTHING TO DRINK . . . . . 5 DON'T KNOW 8
610	When (NAME) had diarrhoea, was (NAME) given less than usual to eat, about the same amount, more than usual, or nothing to eat? IF LESS, PROBE: Was (NAME) given much less than usual to eat or somewhat less?	MUCH LESS . . . . . 1 SOMEWHAT LESS . . . . . 2 ABOUT THE SAME . . . . . 3 MORE . . . . . 4 STOPPED FOOD . . . . . 5 NEVER GAVE FOOD . . . . . 6 DON'T KNOW 8	MUCH LESS . . . . . 1 SOMEWHAT LESS . . . . . 2 ABOUT THE SAME . . . . . 3 MORE . . . . . 4 STOPPED FOOD . . . . . 5 NEVER GAVE FOOD . . . . . 6 DON'T KNOW 8
611	Did you seek advice or treatment for the diarrhoea from any source?	YES . . . . . 1 NO . . . . . 2 → (SKIP TO 615)	YES . . . . . 1 NO . . . . . 2 → (SKIP TO 615)

SECTION 6. CHILD HEALTH AND NUTRITION

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
612	Where did you seek advice or treatment? Anywhere else? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE(S). _____ (NAME OF PLACE(S))	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . A GOVERNMENT HEALTH CENTER . . . . . B GOVERNMENT HEALTH POST . . . . . C MOBILE HOSPITAL/CLINIC . . D COMMUNITY BASED AGENT/FIELDWORKER . . E OTHER PUBLIC SECTOR _____ F (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/ CLINIC . . . . . G MISSION HOSPITAL/ CLINIC H PHARMACY . . . . . I PRIVATE DOCTOR . . . . . J MOBILE CLINIC . . . . . K COMMUNITY BASED AGENT/FIELDWORKER . . L OTHER PRIVATE MEDICAL SECTOR _____ M (SPECIFY) **OTHER SOURCE** SHOP . . . . . N TRADITIONAL PRACTITIONER . . . . . O MARKET . . . . . P ITINERANT DRUG SELLER . . . . . Q OTHER _____ X (SPECIFY)	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . A GOVERNMENT HEALTH CENTER . . . . . B GOVERNMENT HEALTH POST . . . . . C MOBILE HOSPITAL/CLINIC . . D COMMUNITY BASED AGENT/FIELDWORKER . . E OTHER PUBLIC SECTOR _____ F (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/ CLINIC . . . . . G MISSION HOSPITAL/ CLINIC H PHARMACY . . . . . I PRIVATE DOCTOR . . . . . J MOBILE CLINIC . . . . . K COMMUNITY BASED AGENT/FIELI . . . . . L OTHER PRIVATE MEDICAL SECTOR _____ M (SPECIFY) **OTHER SOURCE** SHOP . . . . . N TRADITIONAL PRACTITIONER . . . . . O MARKET . . . . . P ITINERANT DRUG SELLER . . . . . Q OTHER _____ X (SPECIFY)
613	CHECK 612:	TWO OR MORE CODES CIRCLED ONLY ONE CODE CIRCLED (SKIP TO 614A)	TWO OR MORE CODES CIRCLED ONLY ONE CODE CIRCLED (SKIP TO 614A)
614	Where did you first seek advice or treatment? USE LETTER CODE FROM 612.	FIRST PLACE	FIRST PLACE . . . . .
614A	How many days after the diarrhoea began did you first seek advice or treatment for (NAME)? IF THE SAME DAY, RECORD '00'.	DAYS	DAYS . . . . .

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
615	Was (NAME) given any of the following at any time since (NAME) started having the diarrhoea: a) A fluid made from a special packet called ORS (commonly called Manzi Ya Moyo)? b) A government-recommended homemade fluid? c) Zinc tablets or syrup?	YES NO DK a) FLUID FROM ORS PACKET . . 1 2 8 b) HOMEMADE FLUID . . . . . 1 2 8 c) ZINC 1 2 8	YES NO DK a) FLUID FROM ORS PACKET . . 1 2 8 b) HOMEMADE FLUID . . . . . 1 2 8 c) ZINC 1 2 8
616	CHECK 615: ANY 'YES' → a) Was anything else given to treat the diarrhoea? ALL 'NO' OR 'DK' → b) Was anything given to treat the diarrhoea?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 618) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 618) DON'T KNOW 8
617	CHECK 615: ANY 'YES' → a) What else was given to treat the diarrhoea? Anything else? ALL 'NO' OR 'DK' → b) What was given to treat the diarrhoea? Anything else? RECORD ALL TREATMENTS GIVEN.	**PILL OR SYRUP** ANTIBIOTIC . . . . . A ANTIMOTILITY . . . . . B OTHER (NOT ANTIBIOTIC OR ANTIMOTILITY) . . . . . C UNKNOWN PILL OR SYRUP . . . . . D **INJECTION** ANTIBIOTIC . . . . . E NON-ANTIBIOTIC . . . . . F UNKNOWN INJECTION . . . . . G (IV) INTRAVENOUS . . . . . H HOME REMEDY/ HERBAL MEDICINE . . . . . I OTHER _____ X (SPECIFY)	**PILL OR SYRUP** ANTIBIOTIC . . . . . A ANTIMOTILITY . . . . . B OTHER (NOT ANTIBIOTIC OR ANTIMOTILITY) . . . . . C UNKNOWN PILL OR SYRUP . . . . . D **INJECTION** ANTIBIOTIC . . . . . E NON-ANTIBIOTIC . . . . . F UNKNOWN INJECTION . . . . . G (IV) INTRAVENOUS . . . . . H HOME REMEDY/ HERBAL MEDICINE . . . . . I OTHER _____ X (SPECIFY)
618	Has (NAME) been ill with a fever at any time in the last 2 weeks?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 620) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 620) DON'T KNOW 8
619	At any time during the illness, did (NAME) have blood taken from (NAME)'s finger or heel for testing?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
620	Has (NAME) had an illness with a cough at any time in the last 2 weeks?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8

SECTION 6. CHILD HEALTH AND NUTRITION

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
621	Has (NAME) had fast, short, rapid breaths or difficulty breathing at any time in the last 2 weeks?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 623) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 623) DON'T KNOW 8
622	Was the fast or difficult breathing due to a problem in the chest or to a blocked or runny nose?	CHEST ONLY . . . . . 1 NOSE ONLY . . . . . 2 BOTH . . . . . 3 OTHER _____ 6 (SPECIFY) DON'T KNOW . . . . . 8 (SKIP TO 624)	CHEST ONLY . . . . . 1 NOSE ONLY . . . . . 2 BOTH . . . . . 3 OTHER _____ 6 (SPECIFY) DON'T KNOW . . . . . 8 (SKIP TO 624)
623	CHECK 618: HAD FEVER?	YES NO OR DK (SKIP TO 646)	YES NO OR DK (SKIP TO 646)
624	Did you seek advice or treatment for the illness from any source?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 629)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 629)
625	Where did you seek advice or treatment? Anywhere else? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE(S). _____ (NAME OF PLACE(S))	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . A GOVERNMENT HEALTH CENTER . . . . . B GOVERNMENT HEALTH POST . . . . . C MOBILE HOSPITAL/CLINIC . . D COMMUNITY BASED AGENT/FIELDWORKER . . E OTHER PUBLIC SECTOR _____ F (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/ CLINIC . . . . . G MISSION HOSPITAL/ CLINIC . . . . . H PHARMACY . . . . . I PRIVATE DOCTOR . . . . . J MOBILE CLINIC . . . . . K COMMUNITY BASED AGENT/FIELDWORKER . . L OTHER PRIVATE MEDICAL SECTOR _____ M (SPECIFY) **OTHER SOURCE** SHOP . . . . . N TRADITIONAL PRACTITIONER . . . . . O MARKET . . . . . P ITINERANT DRUG SELLER . . . . . Q OTHER _____ X (SPECIFY)	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . A GOVERNMENT HEALTH CENTER . . . . . B GOVERNMENT HEALTH POST . . . . . C MOBILE HOSPITAL/CLINIC . . D COMMUNITY BASED AGENT/FIELDWORKER . . E OTHER PUBLIC SECTOR _____ F (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/ CLINIC . . . . . G MISSION HOSPITAL/ CLINIC . . . . . H PHARMACY . . . . . I PRIVATE DOCTOR . . . . . J MOBILE CLINIC . . . . . K COMMUNITY BASED AGENT/FIELDWORKER . . L OTHER PRIVATE MEDICAL SECTOR _____ M (SPECIFY) **OTHER SOURCE** SHOP . . . . . N TRADITIONAL PRACTITIONER . . . . . O MARKET . . . . . P ITINERANT DRUG SELLER . . . . . Q OTHER _____ X (SPECIFY)

SECTION 6. CHILD HEALTH AND NUTRITION

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
626	CHECK 625:	TWO OR MORE CODES CIRCLED ☐ / ONLY ONE CODE CIRCLED ☐ (SKIP TO 628)	TWO OR MORE CODES CIRCLED ☐ / ONLY ONE CODE CIRCLED ☐ (SKIP TO 628)
627	Where did you first seek advice or treatment? USE LETTER CODE FROM 625.	FIRST PLACE . . . . . ☐	FIRST PLACE . . . . . ☐
628	How many days after the illness began did you first seek advice or treatment for (NAME)? IF THE SAME DAY RECORD '00'.	DAYS . . . . . ☐☐	DAYS . . . . . ☐☐
629	At any time during the illness, did (NAME) take any drugs for the illness?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 646) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 646) DON'T KNOW 8
630	What drugs did (NAME) take? Any other drugs? RECORD ALL MENTIONED.	**ANTIMALARIAL DRUGS** ARTEMISININ COMBINATION THERAPY (ACT) . . . . . A SP/FANSIDAR . . . . . B CHLOROQUINE . . . . . C AMODIAQUINE . . . . . D QUININE PILLS . . . . . E INJECTION/IV . . . . . F ARTESUNATE RECTAL . . . . . G INJECTION/IV . . . . . H OTHER ANTIMALARIAL _____ I (SPECIFY) **ANTIBIOTIC DRUGS** PILL/SYRUP . . . . . J INJECTION/IV . . . . . K **OTHER DRUGS** ASPIRIN . . . . . L ACETAMINOPHEN/ PARACETAMOL M IBUPROFEN . . . . . N OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	**ANTIMALARIAL DRUGS** ARTEMISININ COMBINATION THERAPY (ACT) . . . . . A SP/FANSIDAR . . . . . B CHLOROQUINE . . . . . C AMODIAQUINE . . . . . D QUININE PILLS . . . . . E INJECTION/IV . . . . . F ARTESUNATE RECTAL . . . . . G INJECTION/IV . . . . . H OTHER ANTIMALARIAL _____ I (SPECIFY) **ANTIBIOTIC DRUGS** PILL/SYRUP . . . . . J INJECTION/IV . . . . . K **OTHER DRUGS** ASPIRIN . . . . . L ACETAMINOPHEN/ PARACETAMOL M IBUPROFEN . . . . . N OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z
631	CHECK 630: ANY CODE A-I CIRCLED?	YES ☐ / NO ☐ (SKIP TO 646)	YES ☐ / NO ☐ (SKIP TO 646)

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
632	CHECK 630: ARTEMISININ COMBINATION THERAPY ('A') GIVEN	CODE 'A' CIRCLED CODE 'A' NOT CIRCLED (SKIP TO 634)	CODE 'A' CIRCLED CODE 'A' NOT CIRCLED (SKIP TO 634)
633	How long after the fever started did (NAME) first take an artemisinin combination therapy (Coartem)?	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . . 3 DON'T KNOW 8	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . . 3 DON'T KNOW 8
634	CHECK 630: SP/FANSIDAR ('B') GIVEN	CODE 'B' CIRCLED CODE 'B' NOT CIRCLED (SKIP TO 636)	CODE 'B' CIRCLED CODE 'B' NOT CIRCLED (SKIP TO 636)
635	How long after the fever started did (NAME) first take SP/Fansidar?	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . . 3 DON'T KNOW 8	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . . 3 DON'T KNOW 8
636	CHECK 630: CHLOROQUINE ('C') GIVEN	CODE 'C' CIRCLED CODE 'C' NOT CIRCLED (SKIP TO 638)	CODE 'C' CIRCLED CODE 'C' NOT CIRCLED (SKIP TO 638)
637	How long after the fever started did (NAME) first take chloroquine?	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . . 3 DON'T KNOW 8	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . . 3 DON'T KNOW 8
638	CHECK 630: AMODIAQUINE ('D') GIVEN	CODE 'D' CIRCLED CODE 'D' NOT CIRCLED (SKIP TO 640)	CODE 'D' CIRCLED CODE 'D' NOT CIRCLED (SKIP TO 640)
639	How long after the fever started did (NAME) first take amodiaquine?	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . . 3 DON'T KNOW 8	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . . 3 DON'T KNOW 8

SECTION 6. CHILD HEALTH AND NUTRITION

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
640	CHECK 630: QUININE ('E' OR 'F') GIVEN	CODE 'E' OR 'F' CIRCLED CODE 'E' OR 'F' NOT CIRCLED (SKIP TO 642)	CODE 'E' OR 'F' CIRCLED CODE 'E' OR 'F' NOT CIRCLED (SKIP TO 642)
641	How long after the fever started did (NAME) first take quinine?	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . . 3 DON'T KNOW 8	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . . 3 DON'T KNOW 8
642	CHECK 630: ARTESUNATE ('G' OR 'H') GIVEN	CODE 'G' OR 'H' CIRCLED CODE 'G' OR 'H' NOT CIRCLED (SKIP TO 644)	CODE 'G' OR 'H' CIRCLED CODE 'G' OR 'H' NOT CIRCLED (SKIP TO 644)
643	How long after the fever started did (NAME) first take artesunate?	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . . 3 DON'T KNOW 8	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . . 3 DON'T KNOW 8
644	CHECK 630: OTHER ANTIMALARIAL ('I') GIVEN	CODE 'I' CIRCLED CODE 'I' NOT CIRCLED (SKIP TO 646)	CODE 'I' CIRCLED CODE 'I' NOT CIRCLED (SKIP TO 646)
645	How long after the fever started did (NAME) first take (OTHER ANTIMALARIAL)?	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . . 3 DON'T KNOW 8	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . . 3 DON'T KNOW 8
646		GO BACK TO 604 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 647.	GO TO 604 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 647.

SECTION 6. CHILD HEALTH AND NUTRITION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
647	CHECK 615(a) AND 615(b), ALL COLUMNS: NO CHILD RECEIVED FLUID FROM ORS PACKET ☐ ↓ ANY CHILD RECEIVED FLUID FROM ORS PACKET ☐ →		649
648	Have you ever heard of a special product called ORS you can get for the treatment of diarrhoea?	YES . . . . . 1 NO 2	
649	CHECK 215 AND 218, ALL ROWS: NUMBER OF CHILDREN BORN IN 2016-2018 LIVING WITH THE RESPONDENT ONE OR MORE ☐ ↓ NONE ☐ →		701
	_____ (NAME OF YOUNGEST CHILD LIVING WITH HER) ↓		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
650	Now I would like to ask you about liquids or foods that (NAME FROM 649) had yesterday during the day or at night. I am interested in whether your child had the item I mention even if it was combined with other foods. Did (NAME FROM 649) drink or eat:	YES NO DK	
	a) Plain water?	a) 1 2 8	
	b) Juice or juice drinks?	b) 1 2 8	
	c) Clear broth?	c) 1 2 8	
	d) Milk such as tinned, powdered, or fresh animal milk? IF YES: How many times did (NAME) drink milk? IF 7 OR MORE TIMES, RECORD '7'.	d) . . . . . 1 2 8 NUMBER OF TIMES DRANK ☐	
	e) Infant formula? IF YES: How many times did (NAME) drink infant formula? IF 7 OR MORE TIMES, RECORD '7'.	e) . . . . . 1 2 8 NUMBER OF TIMES DRANK ☐	
	f) Any other liquids?	f) 1 2 8	
	g) Yogurt? IF YES: How many times did (NAME) eat yogurt? IF 7 OR MORE TIMES, RECORD '7'.	g) . . . . . 1 2 8 NUMBER OF TIMES ATE ☐	
	h) Any Provita, Delight, Cerelac, Soya Porridge?	h) 1 2 8	
	i) Bread, rice, noodles, porridge, nshima or other foods made from grains?	i) 1 2 8	
	j) Pumpkin, carrots, squash or sweet potatoes that are yellow or orange inside?	j) 1 2 8	
	k) White potatoes, yams, cassava, or any other foods made from roots?	k) 1 2 8	
	l) Any dark green, leafy vegetables, cassava leaves, rape, sweet potato leaves?	l) 1 2 8	
	m) Ripe mangoes, paw paw, apricot, watermelon?	m) 1 2 8	
	n) Any other fruits or vegetables?	n) 1 2 8	
	o) Liver, kidney, heart, or other organ meats?	o) 1 2 8	
	p) Any meat, such as beef, pork, lamb, goat, chicken, or duck?	p) 1 2 8	
	q) Eggs?	q) 1 2 8	
	r) Fresh or dried fish or shellfish?	r) 1 2 8	
	s) Any foods made from beans, peas, lentils, or nuts?	s) 1 2 8	
	t) Cheese or other food made from milk?	t) 1 2 8	
	u) Any caterpillars, other insects or other small protein foods?	u) 1 2 8	
	v) Any other solid, semi-solid, or soft food?	v) 1 2 8	

SECTION 6. CHILD HEALTH AND NUTRITION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
651	CHECK 650 (CATEGORIES 'g' THROUGH 'v'): NOT A SINGLE 'YES' ↓ AT LEAST ONE 'YES' →		653
652	Did (NAME FROM 649) eat any solid, semi-solid, or soft foods yesterday during the day or at night? IF 'YES' PROBE: What kind of solid, semi-solid or soft foods did (NAME FROM 649) eat?	YES . . . . . 1 (GO BACK TO 650 TO RECORD FOOD EATEN YESTERDAY) (THEN CONTINUE TO 653) NO 2	→ 654
653	How many times did (NAME FROM 649) eat solid, semisolid, or soft foods other than liquids yesterday during the day or at night? IF 7 OR MORE TIMES, RECORD '7'.	NUMBER OF TIMES . . . . . [ ] DON'T KNOW 8	
654	The last time (NAME FROM 649) passed stools, what was done to dispose of the stools?	CHILD USED TOILET OR LATRINE . . . . . 01 PUT/RINSED INTO TOILET OR LATRINE . . . . . 02 PUT/RINSED INTO DRAIN OR DITCH . . . . . 03 THROWN INTO GARBAGE . . . . . 04 BURIED . . . . . 05 LEFT IN THE OPEN . . . . . 06 OTHER _____ 96 (SPECIFY)	

SECTION 7. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
701	Are you currently married or living together with a man as if married?	YES, CURRENTLY MARRIED . . . . . 1 YES, LIVING WITH A MAN . . . . . 2 NO, NOT IN UNION 3	→ 704
702	Have you ever been married or lived together with a man as if married?	YES, FORMERLY MARRIED . . . . . 1 YES, LIVED WITH A MAN . . . . . 2 NO 3	→ 712
703	What is your marital status now: are you widowed, divorced, or separated?	WIDOWED . . . . . 1 DIVORCED . . . . . 2 SEPARATED 3	→ 709
704	Is your (husband/partner) living with you now or is he staying elsewhere?	LIVING WITH HER . . . . . 1 STAYING ELSEWHERE 2	
705	RECORD THE HUSBAND'S/PARTNER'S NAME AND LINE NUMBER FROM THE HOUSEHOLD QUESTIONNAIRE. IF HE IS NOT LISTED IN THE HOUSEHOLD, RECORD '00'.	NAME _____ LINE NO.	
706	Does your (husband/partner) have other wives or does he live with other women as if married?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 709
707	Including yourself, in total, how many wives or live-in partners does he have?	TOTAL NUMBER OF WIVES AND LIVE-IN PARTNERS . . . . . DON'T KNOW 98	
708	Are you the first, second, ... wife/partner?	RANK	
709	Have you been married or lived with a man only once or more than once?	ONLY ONCE . . . . . 1 MORE THAN ONCE 2	→ 709B
709A	CHECK 703: IS RESPONDENT CURRENTLY CURRENTLY WIDOWED ☐ → 709D NOT ASKED OR CURRENTLY DIVORCED/SEPARATED ☐ → 710		
709B	CHECK 703: IS RESPONDENT CURRENTLY NOT ASKED ☐ ↓ CURRENTLY WIDOWED ☐ → 709D CURRENTLY DIVORCED/SEPARATED ☐ → 710		
709C	How did your previous marriage or union end?	DEATH . . . . . 1 DIVORCE . . . . . 2 SEPARATION 3	→ 710
709D	To whom did most of your late husband's property go?	RESPONDENT . . . . . 1 OTHER WIFE . . . . . 2 SPOUSE'S CHILDREN . . . . . 3 SPOUSE'S FAMILY . . . . . 4 NO PROPERTY . . . . . 5 OTHER _____ 6 (SPECIFY)	→ 710
709E	Did you receive any of your late husband's assets or valuables?	YES . . . . . 1 NO 2	

SECTION 7. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
710	CHECK 709: MARRIED/ LIVED WITH A MAN ONLY ONCE ☐↓ a) In what month and year did you start living with your (husband/partner)? MARRIED/ LIVED WITH A MAN MORE THAN ONCE ☐↓ b) Now I would like to ask about your first (husband/partner). In what month and year did you start living with him?	MONTH . . . . . ☐☐ DON'T KNOW MONTH . . . . . 98 YEAR . . . . . ☐☐☐☐ DON'T KNOW YEAR 9998	→ 712
711	How old were you when you first started living with him?	AGE . . . . . ☐☐	

SECTION 7. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
712	**CHECK FOR PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.**		
713	Now I would like to ask some questions about sexual activity in order to gain a better understanding of some important life issues. Let me assure you again that your answers are completely confidential and will not be told to anyone. If we should come to any question that you don't want to answer, just let me know and we will go to the next question. How old were you when you had sexual intercourse for the very first time?	NEVER HAD SEXUAL INTERCOURSE . . . . . 00 AGE IN YEARS . . . . . [ ][ ]	→ 713C
713A	CHECK 106: AGE AGE 15-24 [ ] AGE 25-49 [ ]		→ 731
713B	Do you intend to wait until you get married to have sexual intercourse for the first time?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/UNSURE 8	→ 731
713C	CHECK 106: AGE AGE 15-24 [ ] AGE 25-49 [ ]		→ 714
713D	The first time you had sexual intercourse, was a condom used?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/UNSURE 8	
713E	How old was the person you first had sexual intercourse with?	AGE IN YEARS . . . . . [ ][ ] DON'T KNOW 98	→ 714
713F	Was this person older than you, younger than you, or about the same age as you?	OLDER . . . . . 1 YOUNGER . . . . . 2 ABOUT THE SAME AGE . . . . . 3 DON'T KNOW/DON'T REMEMBER 8	→ 714
713G	Would you say this person was ten or more years older than you or less than ten years older than you?	TEN OR MORE YEARS OLDER . . . . . 1 LESS THAN TEN YEARS OLDER . . . . . 2 OLDER, UNSURE HOW MUCH 8	
714	I would like to ask you about your recent sexual activity. When was the last time you had sexual intercourse? IF LESS THAN 12 MONTHS, ANSWER MUST BE RECORDED IN DAYS, WEEKS OR MONTHS. IF 12 MONTHS (ONE YEAR) OR MORE, ANSWER MUST BE RECORDED IN YEARS.	DAYS AGO . . . . . 1 [ ][ ] WEEKS AGO . . . . . 2 [ ][ ] MONTHS AGO . . . . . 3 [ ][ ] YEARS AGO . . . . . 4 [ ][ ]	→ 716 → 727

SECTION 7. MARRIAGE AND SEXUAL ACTIVITY

		LAST SEXUAL PARTNER	SECOND-TO-LAST SEXUAL PARTNER	THIRD-TO-LAST SEXUAL PARTNER
715	When was the last time you had sexual intercourse with this person?		DAYS AGO . . 1 [ ][ ] WEEKS AGO . . 2 [ ][ ] MONTHS AGO . . 3 [ ][ ]	DAYS AGO . . 1 [ ][ ] WEEKS AGO . . 2 [ ][ ] MONTHS AGO . . 3 [ ][ ]
716	The last time you had sexual intercourse with this person, was a condom used?	YES . . . . . 1 NO . . . . . 2 → (SKIP TO 718)	YES . . . . . 1 NO . . . . . 2 → (SKIP TO 718)	YES . . . . . 1 NO . . . . . 2 → (SKIP TO 718)
717	Was a condom used every time you had sexual intercourse with this person in the last 12 months?	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2
718	What was your relationship to this person with whom you had sexual intercourse? IF BOYFRIEND: Were you living together as if married?	HUSBAND . . . . . 1 LIVE-IN PARTNER . . . . . 2 BOYFRIEND NOT LIVING WITH RESPONDENT . . . . . 3 CASUAL ACQUAINTANCE . . 4 CLIENT/SEX WORKER . . 5 OTHER _____ 6 (SPECIFY)	HUSBAND . . . . . 1 LIVE-IN PARTNER . . . . . 2 BOYFRIEND NOT LIVING WITH RESPONDENT . . . . . 3 CASUAL ACQUAINTANCE . . 4 CLIENT/SEX WORKER . . 5 OTHER _____ 6 (SPECIFY)	HUSBAND . . . . . 1 LIVE-IN PARTNER . . . . . 2 BOYFRIEND NOT LIVING WITH RESPONDENT . . . . . 3 CASUAL ACQUAINTANCE . . 4 CLIENT/SEX WORKER . . 5 OTHER _____ 6 (SPECIFY)
719	How long ago did you first have sexual intercourse with this person?	DAYS AGO . . 1 [ ][ ] WEEKS AGO . . 2 [ ][ ] MONTHS AGO . . 3 [ ][ ] YEARS AGO . . 4 [ ][ ]	DAYS AGO . . 1 [ ][ ] WEEKS AGO . . 2 [ ][ ] MONTHS AGO . . 3 [ ][ ] YEARS AGO . . 4 [ ][ ]	DAYS AGO . . 1 [ ][ ] WEEKS AGO . . 2 [ ][ ] MONTHS AGO . . 3 [ ][ ] YEARS AGO . . 4 [ ][ ]
720	How many times during the last 12 months did you have sexual intercourse with this person? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF TIMES IS 95 OR MORE, RECORD '95'.	NUMBER OF TIMES . . . . . [ ][ ]	NUMBER OF TIMES . . . . . [ ][ ]	NUMBER OF TIMES . . . . . [ ][ ]
721	How old is this person?	AGE OF PARTNER [ ][ ] DON'T KNOW 98	AGE OF PARTNER [ ][ ] DON'T KNOW 98	AGE OF PARTNER [ ][ ] DON'T KNOW 98
721A	The last time you had sexual intercourse with this person, did you or this person drink alcohol?	YES . . . . . 1 NO . . . . . 2 → (SKIP TO 722)	YES . . . . . 1 NO . . . . . 2 → (SKIP TO 722)	YES . . . . . 1 NO . . . . . 2 → (SKIP TO 722)

		LAST SEXUAL PARTNER	SECOND-TO-LAST SEXUAL PARTNER	THIRD-TO-LAST SEXUAL PARTNER
721B	Were you or your partner drunk at that time? IF YES: Who was drunk?	RESPONDENT ONLY . . 1 PARTNER ONLY . . . . . 2 BOTH, RESPONDENT AND PARTNER . . . . . 3 NEITHER 4	RESPONDENT ONLY . . 1 PARTNER ONLY . . . . . 2 BOTH, RESPONDENT AND PARTNER . . . . . 3 NEITHER 4	RESPONDENT ONLY . . 1 PARTNER ONLY . . . . . 2 BOTH, RESPONDENT AND PARTNER . . . . . 3 NEITHER 4
722	Apart from this person, have you had sexual intercourse with any other person in the last 12 months?	YES . . . . . 1 → (GO BACK TO 715 IN NEXT COLUMN) NO . . . . . 2 → (SKIP TO 724)	YES . . . . . 1 → (GO BACK TO 715 IN NEXT COLUMN) NO . . . . . 2 → (SKIP TO 724)	
723	In total, with how many different people have you had sexual intercourse in the last 12 months? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF PARTNERS IS 95 OR MORE, RECORD '95'.			NUMBER OF PARTNERS LAST 12 MONTHS . . [ ][ ] DON'T KNOW 98

SECTION 7. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
724	CHECK 106: AGE 15-24 ☐ (↓) AGE 25-49 ☐ → 727		
725	CHECK 701: NOT IN A UNION ☐ (↓) CURRENTLY MARRIED/ LIVING WITH A MAN ☐ → 727		
726	In the past 12 months have you had sex or been sexually involved with anyone because he gave you or told you he would give you gifts, cash, or anything else?	YES . . . . . 1 NO 2	
727	In total, with how many different people have you had sexual intercourse in your lifetime? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF PARTNERS IS 95 OR MORE, RECORD '95'.	NUMBER OF PARTNERS IN LIFETIME . . . . . ☐☐ DON'T KNOW 98	
728	CHECK 716, MOST RECENT PARTNER (FIRST COLUMN): YES, CONDOM USED ☐ (↓) NO, CONDOM NOT USED ☐ → 731 NOT ASKED ☐ → 731		
729	You told me that a condom was used the last time you had sex. What is the brand name of the condom used at that time? IF BRAND NOT KNOWN, ASK TO SEE THE PACKAGE.	MAXIMUM CLASSIC . . . . . 01 MAXIMUM SCENTED . . . . . 02 ROUGH RIDER . . . . . 03 DUREX . . . . . 04 REALITY . . . . . 05 PUBLIC SECTOR: UNBRANDED (WHITE COLOUR FOIL) . . . . . 06 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	

SECTION 7. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
730	From where did you obtain the condom the last time? PROBE TO IDENTIFY TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . . . . 11 GOVERNMENT HEALTH CENTER . . . . . 12 GOVERNMENT HEALTH POST . . . . . 13 MOBILE CLINIC/HOSPITAL . . . . . 14 COMMUNITY BASED AGENT/FIELDWORKER . . . . . 15 OTHER PUBLIC SECTOR _____ 16 (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/CLINIC . . . . . 21 MISSION HOSPITAL/CLINIC . . . . . 22 PHARMACY . . . . . 23 PRIVATE DOCTOR . . . . . 24 MOBILE HOSPITAL/CLINIC . . . . . 25 COMMUNITY BASED AGENT/FIELDWORKER . . . . . 26 OTHER PRIVATE MEDICAL SECTOR _____ 27 (SPECIFY) **OTHER SOURCE** SHOP . . . . . 31 CHURCH . . . . . 32 FRIEND/RELATIVE . . . . . 33 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	
731	PRESENCE OF OTHERS DURING THIS SECTION.	YES NO CHILDREN <10 . . . . . 1 2 MALE ADULTS . . . . . 1 2 FEMALE ADULTS 1 2	

SECTION 8. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
801	CHECK 304: NEITHER STERILIZED ☐ HE OR SHE STERILIZED ☐ →		813
802	CHECK 226: PREGNANT ☐ NOT PREGNANT OR UNSURE ☐ →		804
803	Now I have some questions about the future. After the child you are expecting now, would you like to have another child, or would you prefer not to have any more children?	HAVE ANOTHER CHILD . . . . . 1 NO MORE . . . . . 2 UNDECIDED/DON'T KNOW 8	→ 805 → 812
804	Now I have some questions about the future. Would you like to have (a/another) child, or would you prefer not to have any (more) children?	HAVE (A/ANOTHER) CHILD . . . . . 1 NO MORE/NONE . . . . . 2 SAYS SHE CAN'T GET PREGNANT . . . . . 3 UNDECIDED/DON'T KNOW 8	→ 807 → 813 → 811
805	CHECK 226: NOT PREGNANT OR UNSURE ☐ a) How long would you like to wait from now before the birth of (a/another) child? PREGNANT ☐ b) After the birth of the child you are expecting now, how long would you like to wait before the birth of another child?	MONTHS . . . . . 1 ☐☐ YEARS . . . . . 2 ☐☐ SOON/NOW . . . . . 993 SAYS SHE CAN'T GET PREGNANT . . . . . 994 AFTER MARRIAGE . . . . . 995 OTHER _____ (SPECIFY) 996 DON'T KNOW 998	→ 811 → 813 → 811
806	CHECK 226: NOT PREGNANT OR UNSURE ☐ PREGNANT ☐ →		812
807	CHECK 303: USING A CONTRACEPTIVE METHOD? NOT CURRENTLY USING ☐ CURRENTLY USING ☐ →		813
808	CHECK 805: '24' OR MORE MONTHS OR '02' OR MORE YEARS ☐ NOT ASKED ☐ '00-23' MONTHS OR '00-01' YEAR ☐ →		812
809	CHECK 714: DAYS, WEEKS OR MONTHS AGO ☐ YEARS AGO ☐ → NOT ASKED ☐ →		811 811

SECTION 8. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
810	CHECK 804: WANTS TO HAVE A/ANOTHER CHILD ☐ → a) You have said that you do not want (a/another) child soon. Can you tell me why you are not using a method to prevent pregnancy? Any other reason? WANTS NO MORE/ NONE ☐ → b) You have said that you do not want any (more) children. Can you tell me why you are not using a method to prevent pregnancy? Any other reason? RECORD ALL REASONS MENTIONED.	NOT MARRIED . . . . . A **FERTILITY-RELATED REASONS** NOT HAVING SEX . . . . . B INFREQUENT SEX . . . . . C MENOPAUSAL/HYSTERECTOMY . . . . . D CAN'T GET PREGNANT . . . . . E NOT MENSTRUATED SINCE LAST BIRTH . . . . . F BREASTFEEDING . . . . . G UP TO GOD/FATALISTIC . . . . . H **OPPOSITION TO USE** RESPONDENT OPPOSED . . . . . I HUSBAND/PARTNER OPPOSED . . . . . J OTHERS OPPOSED . . . . . K RELIGIOUS PROHIBITION . . . . . L **LACK OF KNOWLEDGE** KNOWS NO METHOD . . . . . M KNOWS NO SOURCE . . . . . N **METHOD-RELATED REASONS** SIDE EFFECTS/HEALTH CONCERNS . . . . . O LACK OF ACCESS/TOO FAR . . . . . P COSTS TOO MUCH . . . . . Q PREFERRED METHOD NOT AVAILABLE . . . . . R NO METHOD AVAILABLE . . . . . S INCONVENIENT TO USE . . . . . T INTERFERES WITH BODY'S NORMAL PROCESSES . . . . . U OTHER _____ (SPECIFY) X DON'T KNOW . . . . . Z	
811	CHECK 303: USING A CONTRACEPTIVE METHOD? NOT ASKED ☐ ↓ NO, NOT CURRENTLY USING ☐ ↓ YES, CURRENTLY USING ☐ →		813
812	Do you think you will use a contraceptive method to delay or avoid pregnancy at any time in the future?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
813	CHECK 216: HAS LIVING CHILDREN ☐ → a) If you could go back to the time you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be? NO LIVING CHILDREN ☐ → b) If you could choose exactly the number of children to have in your whole life, how many would that be? PROBE FOR A NUMERIC RESPONSE.	NONE . . . . . 00 → 815 NUMBER . . . . . ☐☐ OTHER _____ (SPECIFY) 96 → 815	
814	How many of these children would you like to be boys, how many would you like to be girls and for how many would it not matter if it's a boy or a girl?	BOYS GIRLS EITHER NUMBER . . ☐☐ ☐☐ ☐☐ OTHER _____ (SPECIFY) 96	

SECTION 8. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
815	In the last few months have you:	YES NO	
	a) Heard about family planning on the radio?	a) RADIO 1 2	
	b) Seen anything about family planning on the television?	b) TELEVISION 1 2	
	c) Read about family planning in a newspaper or magazine?	c) NEWSPAPER OR MAGAZINE 1 2	
	d) Received a voice or text message about family planning on a mobile phone?	d) MOBILE PHONE 1 2	
816	In the last six months, have you listened to the following programmes on the radio:	YES NO	
	a) Your Health Matters?	a) HEALTH MATTERS 1 2	
	b) Other health related programmes?	b) OTHER _____ (SPECIFY) 1 2	
816A	In the last six months, have you seen any of the following programmes on television:	YES NO	
	a) Your Health Matters?	a) HEALTH MATTERS 1 2	
	b) Other health related programmes?	b) OTHER _____ (SPECIFY) 1 2	
817	CHECK 701: YES, CURRENTLY MARRIED; YES, LIVING WITH A MAN; NO, NOT IN A UNION		→ 901
818	CHECK 303: USING A CONTRACEPTIVE METHOD? CURRENTLY USING; NOT CURRENTLY USING		→ 820
	NOT ASKED		→ 822
819	Would you say that using contraception is mainly your decision, mainly your (husband's/partner's) decision, or did you both decide together?	MAINLY RESPONDENT . . . . . 1 MAINLY HUSBAND/PARTNER . . . . . 2 JOINT DECISION . . . . . 3 OTHER _____ (SPECIFY) 6	→ 821
820	Would you say that not using contraception is mainly your decision, mainly your (husband's/partner's) decision, or did you both decide together?	MAINLY RESPONDENT . . . . . 1 MAINLY HUSBAND/PARTNER . . . . . 2 JOINT DECISION . . . . . 3 OTHER _____ (SPECIFY) 6	
821	CHECK 304: NEITHER ARE STERILIZED; HE OR SHE ARE STERILIZED		→ 901
822	Does your (husband/partner) want the same number of children that you want, or does he want more or fewer than you want?	SAME NUMBER . . . . . 1 MORE CHILDREN . . . . . 2 FEWER CHILDREN . . . . . 3 DON'T KNOW 8	

SECTION 9. HUSBAND'S BACKGROUND AND WOMAN'S WORK

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
901	CHECK 701: CURRENTLY MARRIED/ LIVING WITH A MAN ☐ ↓ NOT IN UNION ☐	→ 909	
902	How old was your (husband/partner) on his last birthday?	AGE IN COMPLETED YEARS ..... ☐☐	
903	Did your (husband/partner) ever attend school?	YES ..... 1 NO 2	→ 906
904	What was the highest level of school he attended: primary, secondary, or higher?	PRIMARY ..... 1 SECONDARY ..... 2 HIGHER ..... 3 DON'T KNOW 8	→ 906
905	What is the highest year he completed at that level? IF COMPLETED LESS THAN ONE YEAR AT THAT LEVEL, RECORD '00'.	YEAR ..... ☐☐ DON'T KNOW 98	
906	Has your (husband/partner) done any work in the last 7 days?	YES ..... 1 NO ..... 2 DON'T KNOW 8	→ 908
907	Has your (husband/partner) done any work in the last 12 months?	YES ..... 1 NO ..... 2 DON'T KNOW 8	→ 909
908	What is your (husband's/partner's) occupation? That is, what kind of work does he mainly do?	_____ _____ ☐☐ _____	
908A	(Is/was) he paid in cash or kind for this work or (is/was) he not paid at all?	CASH ONLY ..... 1 CASH AND KIND ..... 2 IN KIND ONLY ..... 3 NOT PAID 4	
909	Aside from your own housework, have you done any work in the last seven days?	YES ..... 1 NO 2	→ 913
910	As you know, some women take up jobs for which they are paid in cash or kind. Others sell things, have a small business or work on the family farm or in the family business. In the last seven days, have you done any of these things or any other work?	YES ..... 1 NO 2	→ 913
911	Although you did not work in the last seven days, do you have any job or business from which you were absent for leave, illness, vacation, maternity leave, or any other such reason?	YES ..... 1 NO 2	→ 913
912	Have you done any work in the last 12 months?	YES ..... 1 NO 2	→ 917
913	What is your occupation, that is, what kind of work do you mainly do?	_____ _____ ☐☐ _____	

SECTION 9. HUSBAND'S BACKGROUND AND WOMAN'S WORK

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
914	Do you do this work for a member of your family, for someone else, or are you self-employed?	FOR FAMILY MEMBER . . . . . 1 FOR SOMEONE ELSE . . . . . 2 SELF-EMPLOYED 3	
915	Do you usually work throughout the year, or do you work seasonally, or only once in a while?	THROUGHOUT THE YEAR . . . . . 1 SEASONALLY/PART OF THE YEAR . . . . . 2 ONCE IN A WHILE 3	
916	Are you paid in cash or kind for this work or are you not paid at all?	CASH ONLY . . . . . 1 CASH AND KIND . . . . . 2 IN KIND ONLY . . . . . 3 NOT PAID 4	
917	CHECK 701: CURRENTLY MARRIED/LIVING WITH A MAN ☐ ↓ NOT IN UNION ☐ →		925
918	CHECK 916: CODE '1' OR '2' CIRCLED ☐ ↓ OTHER ☐ →		921
919	Who usually decides how the money you earn will be used: you, your (husband/partner), or you and your (husband/partner) jointly?	RESPONDENT . . . . . 1 HUSBAND/PARTNER . . . . . 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY . . . . . 3 OTHER _____ 6 (SPECIFY)	
920	Would you say that the money that you earn is more than what your (husband/partner) earns, less than what he earns, or about the same?	MORE THAN HIM . . . . . 1 LESS THAN HIM . . . . . 2 ABOUT THE SAME . . . . . 3 HUSBAND/PARTNER HAS NO EARNINGS . . . . . 4 DON'T KNOW 8	→ 922
921	Who usually decides how your (husband's/partner's) earnings will be used: you, your (husband/partner), or you and your (husband/partner) jointly?	RESPONDENT . . . . . 1 HUSBAND/PARTNER . . . . . 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY . . . . . 3 HUSBAND/PARTNER HAS NO EARNINGS . . . . . 4 OTHER _____ 6 (SPECIFY)	
922	Who usually makes decisions about health care for yourself: you, your (husband/partner), you and your (husband/partner) jointly, or someone else?	RESPONDENT . . . . . 1 HUSBAND/PARTNER . . . . . 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY . . . . . 3 SOMEONE ELSE . . . . . 4 OTHER 6	
923	Who usually makes decisions about making major household purchases?	RESPONDENT . . . . . 1 HUSBAND/PARTNER . . . . . 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY . . . . . 3 SOMEONE ELSE . . . . . 4 OTHER 6	
923A	Who usually makes decisions about making purchases for daily household needs?	RESPONDENT . . . . . 1 HUSBAND/PARTNER . . . . . 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY . . . . . 3 SOMEONE ELSE . . . . . 4 OTHER 6	

SECTION 9. HUSBAND'S BACKGROUND AND WOMAN'S WORK

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
924	Who usually makes decisions about visits to your family or relatives?	RESPONDENT . . . . . 1 HUSBAND/PARTNER . . . . . 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY . . . . . 3 SOMEONE ELSE . . . . . 4 OTHER 6	
925	Do you own this or any other house either alone or jointly with someone else?	ALONE ONLY . . . . . 1 JOINTLY ONLY . . . . . 2 BOTH ALONE AND JOINTLY . . . . . 3 DOES NOT OWN 4	→ 928
926	Do you have a title deed for any house you own?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 928
927	Is your name on the title deed?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
928	Do you own any agricultural or non-agricultural land either alone or jointly with someone else?	ALONE ONLY . . . . . 1 JOINTLY ONLY . . . . . 2 BOTH ALONE AND JOINTLY . . . . . 3 DOES NOT OWN 4	→ 931
929	Do you have a title deed for any land you own?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 931
930	Is your name on the title deed?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
931	PRESENCE OF OTHERS AT THIS POINT (PRESENT AND LISTENING, PRESENT BUT NOT LISTENING, OR NOT PRESENT)	PRES./ LISTEN. / PRES./ NOT LISTEN. / NOT PRES. CHILDREN < 10 . . . . . 1 / 2 / 3 HUSBAND . . . . . 1 / 2 / 3 OTHER MALES . . . . . 1 / 2 / 3 OTHER FEMALES . . . . . 1 / 2 / 3	
932	In your opinion, is a husband justified in hitting or beating his wife in the following situations:	YES / NO / DK a) GOES OUT . . . . . 1 / 2 / 8 b) NEGLECTS CHILDREN . . 1 / 2 / 8 c) ARGUES . . . . . 1 / 2 / 8 d) REFUSES SEX . . . . . 1 / 2 / 8 e) BURNS FOOD . . . . . 1 / 2 / 8 f) MAJOR DECISION . . . . . 1 / 2 / 8	
	a) If she goes out without telling him?		
	b) If she neglects the children?		
	c) If she argues with him?		
	d) If she refuses to have sex with him?		
	e) If she burns the food?		
	f) If she makes a major household decision without consulting him?		

SECTION 10. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1001	Now I would like to talk about something else. Have you ever heard of HIV or AIDS?	YES . . . . . 1 NO 2	→ 1042
1002	HIV is the virus that can lead to AIDS. Can people reduce their chance of getting HIV by having just one uninfected sex partner who has no other sex partners?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1003	Can people get HIV from mosquito bites?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1004	Can people reduce their chance of getting HIV by using a condom every time they have sex?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1005	Can people get HIV by sharing food with a person who has HIV?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1005A	Can people reduce their chance of getting HIV by not having sexual intercourse at all?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1006	Can people get HIV because of witchcraft or other supernatural means?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1007	Is it possible for a healthy-looking person to have HIV?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1008	Can HIV be transmitted from a mother to her baby: a) During pregnancy? b) During delivery? c) By breastfeeding?	YES NO DK a) DURING PREGNANCY . . 1 2 8 b) DURING DELIVERY . . . . . 1 2 8 c) BREASTFEEDING 1 2 8	
1009	CHECK 1008: AT LEAST ONE 'YES' ↓ OTHER →		1011
1010	Are there any special drugs that a health worker can give to a woman infected with HIV to reduce the risk of transmission to the baby?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1011	CHECK 208 AND 215: LAST BIRTH IN 2016-2018 ↓ NO BIRTHS →		1027
	LAST BIRTH IN 2015 OR EARLIER →		1027
1012	CHECK 408 FOR LAST BIRTH: HAD ANTENATAL CARE ↓ NO ANTENATAL CARE →		1020
1013	**CHECK FOR PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.**		

SECTION 10. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1014	During any of the antenatal visits for your last birth were you given any information about: a) Babies getting HIV from their mother? b) Things that you can do to prevent getting HIV? c) Getting tested for HIV?	YES NO DK a) HIV FROM MOTHER . . 1 2 8 b) THINGS TO DO . . . . . 1 2 8 c) TESTED FOR HIV 1 2 8	
1015	Were you offered a test for HIV as part of your antenatal care?	YES . . . . . 1 NO 2	
1016	I don't want to know the results, but were you tested for HIV as part of your antenatal care?	YES . . . . . 1 NO 2	→ 1020
1017	Where was the test done? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . . . . 11 GOVERNMENT HEALTH CENTER . . . . . 12 GOVERNMENT HEALTH POST 13 STAND-ALONE HTC CENTER . . . . . 14 MOBILE HTC SERVICES . . . . . 15 OTHER PUBLIC SECTOR _____ 16 (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/CLINIC/ PRIVATE DOCTOR . . . . . 21 MISSION HOSPITAL/CLINIC . . . . . 22 STAND-ALONE HTC CENTER . . . . . 23 PHARMACY . . . . . 24 MOBILE HTC SERVICES . . . . . 25 OTHER PRIVATE MEDICAL SECTOR _____ 26 (SPECIFY) **OTHER SOURCE** HOME . . . . . 31 WORKPLACE . . . . . 32 CORRECTIONAL FACILITY . . . . . 33 OTHER _____ 96 (SPECIFY)	
1018	I don't want to know the results, but did you get the results of the test?	YES . . . . . 1 NO 2	→ 1020
1019	All women are supposed to receive counselling after being tested. After you were tested, did you receive counselling?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1019A	Did you disclose your results to any of the following: a) (Husband/Partner)? b) Family member? c) Religious leader? d) Friend? e) Any other?	YES NO a) HUSBAND/PARTNER . . . . . 1 2 b) FAMILY MEMBER . . . . . 1 2 c) RELIGIOUS LEADER . . . . . 1 2 d) FRIEND . . . . . 1 2 e) OTHER 1 2	

SECTION 10. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1020	CHECK 430 FOR LAST BIRTH: ANY CODE '21-36' CIRCLED ☐ ↓ OTHER ☐ → 1024		
1021	Between the time you went for delivery but before the baby was born, were you offered an HIV test?	YES . . . . . 1 NO 2	
1022	I don't want to know the results, but were you tested for HIV at that time?	YES . . . . . 1 NO 2	→ 1024
1023	I don't want to know the results, but did you get the results of the test?	YES . . . . . 1 NO 2	→ 1025
1023A	Did you disclose your results to any of the following: a) (Husband/Partner)? b) Family member? c) Religious leader? d) Friend? e) Any other?	YES NO a) HUSBAND/PARTNER . . . . . 1 2 b) FAMILY MEMBER . . . . . 1 2 c) RELIGIOUS LEADER . . . . . 1 2 d) FRIEND . . . . . 1 2 e) OTHER 1 2	→ 1025
1024	CHECK 1016: YES ☐ ↓ NO OR NOT ASKED ☐ → 1027		
1025	Have you been tested for HIV since that time you were tested during your pregnancy?	YES . . . . . 1 NO 2	→ 1028
1026	How many months ago was your most recent HIV test?	MONTHS AGO . . . . . ☐☐ TWO OR MORE YEARS 95	→ 1033
1027	I don't want to know the results, but have you ever been tested for HIV?	YES . . . . . 1 NO 2	→ 1031
1028	How many months ago was your most recent HIV test?	MONTHS AGO . . . . . ☐☐ TWO OR MORE YEARS 95	
1029	I don't want to know the results, but did you get the results of the test?	YES . . . . . 1 NO 2	→ 1030
1029A	Did you disclose your results to any of the following: a) (Husband/Partner)? b) Family member? c) Religious leader? d) Friend? e) Any other?	YES NO a) HUSBAND/PARTNER . . . . . 1 2 b) FAMILY MEMBER . . . . . 1 2 c) RELIGIOUS LEADER . . . . . 1 2 d) FRIEND . . . . . 1 2 e) OTHER 1 2	

SECTION 10. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1030	Where was the test done? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . . . . 11 GOVERNMENT HEALTH CENTER . . . . . 12 GOVERNMENT HEALTH POST 13 STAND-ALONE HTC CENTER . . . . . 14 MOBILE HTC SERVICES . . . . . 15 OTHER PUBLIC SECTOR _____ 16 (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/CLINIC/ PRIVATE DOCTOR . . . . . 21 MISSION HOSPITAL/CLINIC . . . . . 22 STAND-ALONE HTC CENTER . . . . . 23 PHARMACY . . . . . 24 MOBILE HTC SERVICES . . . . . 25 OTHER PRIVATE MEDICAL SECTOR _____ 26 (SPECIFY) **OTHER SOURCE** HOME . . . . . 31 WORKPLACE . . . . . 32 CORRECTIONAL FACILITY . . . . . 33 OTHER _____ 96 (SPECIFY)	→ 1033
1031	Do you know of a place where people can go to get an HIV test?	YES . . . . . 1 NO 2	→ 1033
1032	Where is that? Any other place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . . . . A GOVERNMENT HEALTH CENTER . . . . . B GOVERNMENT HEALTH POST . . . . . C STAND-ALONE HTC CENTER . . . . . D MOBILE HTC SERVICES . . . . . E OTHER PUBLIC SECTOR _____ F (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/CLINIC/ PRIVATE DOCTOR . . . . . G MISSION HOSPITAL/CLINIC H STAND-ALONE HTC CENTER . . . . . I PHARMACY . . . . . J MOBILE HTC SERVICES . . . . . K OTHER PRIVATE MEDICAL SECTOR _____ L (SPECIFY) OTHER _____ X (SPECIFY)	
1033	Have you heard of test kits people can use to test themselves for HIV?	YES . . . . . 1 NO 2	→ 1035
1034	Have you ever tested yourself for HIV using a self-test kit?	YES . . . . . 1 NO 2	
1035	Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had HIV?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/NOT SURE/DEPENDS 8	

SECTION 10. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1036	Do you think children living with HIV should be allowed to attend school with children who do not have HIV?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/NOT SURE/DEPENDS 8	
1037	Do you think people hesitate to take an HIV test because they are afraid of how other people will react if the test result is positive for HIV?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/NOT SURE/DEPENDS 8	
1038	Do people talk badly about people living with HIV, or who are thought to be living with HIV?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/NOT SURE/DEPENDS 8	
1039	Do people living with HIV, or thought to be living with HIV, lose the respect of other people?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/NOT SURE/DEPENDS 8	
1040	Do you agree or disagree with the following statement: I would be ashamed if someone in my family had HIV.	AGREE . . . . . 1 DISAGREE . . . . . 2 DON'T KNOW/NOT SURE/DEPENDS 8	
1041	Do you fear that you could get HIV if you come into contact with the saliva of a person living with HIV?	YES . . . . . 1 NO . . . . . 2 SAYS SHE HAS HIV . . . . . 3 DON'T KNOW/NOT SURE/DEPENDS 8	

SECTION 10. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1042	CHECK 1001: HEARD ABOUT HIV OR AIDS → a) Apart from HIV, have you heard about other infections that can be transmitted through sexual contact? NOT HEARD ABOUT HIV OR AIDS → b) Have you heard about infections that can be transmitted through sexual contact?	YES . . . . . 1 NO 2	
1043	CHECK 713: HAS HAD SEXUAL INTERCOURSE NEVER HAD SEXUAL INTERCOURSE		→ 1050A
1044	CHECK 1042: HEARD ABOUT OTHER SEXUALLY TRANSMITTED INFECTIONS? YES NO		→ 1046
1045	Now I would like to ask you some questions about your health in the last 12 months. During the last 12 months, have you had a disease which you got through sexual contact?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1046	Sometimes women experience a bad-smelling abnormal genital discharge. During the last 12 months, have you had a bad-smelling abnormal genital discharge?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1047	Sometimes women have a genital sore or ulcer. During the last 12 months, have you had a genital sore or ulcer?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1048	CHECK 1045, 1046, AND 1047: HAS HAD AN INFECTION (ANY 'YES') HAS NOT HAD AN INFECTION OR DOES NOT KNOW		→ 1050A
1049	The last time you had (PROBLEM FROM 1045/1046/1047), did you seek any kind of advice or treatment?	YES . . . . . 1 NO 2	→ 1050A

SECTION 10. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1050	Where did you go? Any other place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . . . . A GOVERNMENT HEALTH CENTER . . . . . B GOVERNMENT HEALTH POST . . . . . C STAND-ALONE HTC CENTER . . . . . D MOBILE HTC SERVICES . . . . . E OTHER PUBLIC SECTOR _____ F (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/CLINIC/ PRIVATE DOCTOR . . . . . G MISSION HOSPITAL/CLINIC . . . . . H STAND-ALONE HTC CENTER . . . . . I PHARMACY . . . . . J MOBILE HTC SERVICES . . . . . K OTHER PRIVATE MEDICAL SECTOR _____ L (SPECIFY) **OTHER SOURCE** SHOP . . . . . M OTHER _____ X (SPECIFY)	
1050A	Husbands and wives do not always agree on everything. If a wife knows her husband has a disease that she can get during sexual intercourse, is she justified in refusing to have sex with him?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1051	If a wife knows her husband has a disease that she can get during sexual intercourse, is she justified in asking that they use a condom when they have sex?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1052	Is a wife justified in refusing to have sex with her husband when she knows he has sex with other women?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1053	CHECK 701: CURRENTLY MARRIED/ LIVING WITH A MAN ☐ ↓ NOT IN UNION ☐ →		1101
1054	Can you say no to your (husband/partner) if you do not want to have sexual intercourse?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/NOT SURE/DEPENDS 8	
1055	Could you ask your (husband/partner) to use a condom if you wanted him to?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/NOT SURE/DEPENDS 8	

SECTION 11. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1101	Now I would like to ask you some other questions relating to health matters. Have you had an injection for any reason in the last 12 months? IF YES: How many injections have you had? IF NUMBER OF INJECTIONS IS 90 OR MORE, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'. IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.	NUMBER OF INJECTIONS . . . . . [ ][ ] NONE 00	→ 1104
1102	Among these injections, how many were administered by a doctor, a nurse, a pharmacist, a dentist, or any other health worker? IF NUMBER OF INJECTIONS IS 90 OR MORE, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'. IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.	NUMBER OF INJECTIONS . . . . . [ ][ ] NONE 00	→ 1104
1103	The last time you got an injection from a health worker, did he/she take the syringe and needle from a new, unopened package?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1104	Do you currently smoke cigarettes every day, some days, or not at all?	EVERY DAY . . . . . 1 SOME DAYS . . . . . 2 NOT AT ALL 3	→ 1106
1105	On average, how many cigarettes do you currently smoke each day?	NUMBER OF CIGARETTES . . . . . [ ][ ]	
1106	Do you currently smoke or use any other type of tobacco every day, some days, or not at all?	EVERY DAY . . . . . 1 SOME DAYS . . . . . 2 NOT AT ALL 3	→ 1108
1107	What other type of tobacco do you currently smoke or use? RECORD ALL MENTIONED.	PIPES FULL OF TOBACCO . . . . . A CIGARS OR CIGARILLOS . . . . . B WATER PIPE (SHISHA) . . . . . C SNUFF BY MOUTH . . . . . D SNUFF BY NOSE . . . . . E CHEWING TOBACCO . . . . . F OTHER _____ X (SPECIFY)	
1108	Many different factors can prevent women from getting medical advice or treatment for themselves. When you are sick and want to get medical advice or treatment, is each of the following a big problem or not a big problem:	BIG PROBLEM / NOT A BIG PROBLEM	
	a) Getting permission to go for advice or treatment?	a) PERMISSION TO GO . . . . . 1 / 2	
	b) Getting money needed for advice or treatment?	b) GETTING MONEY . . . . . 1 / 2	
	c) The distance to the health facility?	c) DISTANCE . . . . . 1 / 2	
	d) Not wanting to go alone?	d) GO ALONE . . . . . 1 / 2	
	e) Having to take transport?	e) TAKE TRANSPORT . . . . . 1 / 2	
	f) Concern that there may not be any health provider?	f) NO PROVIDER . . . . . 1 / 2	
	g) Concern that there may not be a female health provider?	g) NO FEMALE PROVIDER . . 1 / 2	
	h) Rude attitude of health provider?	h) RUDE ATTITUDE . . . . . 1 / 2	

SECTION 11. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1109	Are you covered by any health insurance or health scheme?	YES . . . . . 1 NO 2	→ 1110A
1110	What type of health insurance or health scheme are you covered by? RECORD ALL MENTIONED.	MUTUAL HEALTH ORGANIZATION/ COMMUNITY-BASED HEALTH INSURANCE . . . . . A HEALTH INSURANCE THROUGH EMPLOYER . . . . . B SOCIAL SECURITY . . . . . C OTHER PRIVATELY PURCHASED COMMERCIAL HEALTH INSURANCE . . . . . D LOW COST PRE-PAYMENT SCHEME/STANDARD . . . . . E HIGH COST PRE-PAYMENT SCHEME/PREMIUM . . . . . F OTHER _____ X (SPECIFY)	
1110A	Have you ever been told by a doctor or other health worker that you have raised blood pressure or hypertension?	YES . . . . . 1 NO 2	→ 1110C
1110B	In the past two weeks, have you taken any drugs (medication) for raised blood pressure prescribed by a doctor or other health worker?	YES . . . . . 1 NO 2	
1110C	Have you ever been told by a doctor or other health worker that you have raised blood sugar or diabetes?	YES . . . . . 1 NO 2	→ 1111A
1110D	In the past two weeks, have you taken any drugs (medication) for diabetes prescribed by a doctor or other health worker?	YES . . . . . 1 NO 2	

SECTION 11. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1111A	Have you ever undergone a surgical operation in the past 5 years?	YES . . . . . 1 NO 2	→ 1111C
1111B	What type of operation(s) were they? RECORD ALL MENTIONED.	HERNIA OPERATION . . . . . A CAESAREAN SECTION . . . . . B LAPAROTOMY (Cutting open the abdomen) . . . . . C LUMP REMOVAL . . . . . D ABSCESS DRAINAGE . . . . . E WOUND CLOSURE . . . . . F OPEN FRACTURE . . . . . G OTHER _____ (specify) X	
1111C	In the last 5 years has a doctor or another healthcare worker told you that you might need (a/another) operation?	YES . . . . . 1 NO 2	→ 1201
1111D	Did you undergo the surgery?	YES . . . . . 1 NO 2	→ 1201
1111E	Why did you not undergo it? RECORD ALL MENTIONED.	I COULD NOT REACH THE DOCTOR . . . . . A I COULD NOT AFFORD THE OPERATION . . . . . B I COULD NOT AFFORD TO GET TO THE HOSPITAL . . . . . C I COULD NOT AFFORD THE TIME OFF WORK D IT WAS TOO FAR TO GET TO THE HOSPITAL E I DID NOT TRUST THE OPERATION WOULD MAKE BE BETTER . . . . . F FEAR OF CARE . . . . . G OUT OF SHAME . . . . . H MY SPOUSE/FAMILY WOULD NOT LET ME GO I OTHER _____ (specify) X	

SECTION 12: FISTULA

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1201	Sometimes a woman can have a problem of constant leakage of urine or stool from her vagina during the day and night. This problem usually occurs after a difficult childbirth, but may also occur after a sexual assault or after pelvic surgery. Have you ever experienced a constant leakage of urine or stool from your vagina during the day and night?	YES . . . . . 1 NO 2	→ 1203
1202	Have you ever heard of this problem?	YES . . . . . 1 NO 2	→ 1301
1203	Did this problem start after you delivered a baby or had a stillbirth?	AFTER DELIVERED BABY . . . . . 1 AFTER HAD STILLBIRTH . . . . . 2 NEITHER 3	→ 1205
1204	Did this problem start after a normal labor and delivery, or after a very difficult labor and delivery?	NORMAL LABOR/DELIVERY . . . . . 1 VERY DIFFICULT LABOR/DELIVERY 2	→ 1206
1205	What do you think caused this problem?	SEXUAL ASSAULT . . . . . 1 PELVIC SURGERY . . . . . 2 OTHER _____ 6 (SPECIFY) DON'T KNOW 8	→ 1207
1206	How many days after (CAUSE OF PROBLEM FROM 1203 OR 1205) did the leakage start? ENTER '90' IF 90 DAYS OR MORE.	NUMBER OF DAYS AFTER DELIVERY/OTHER EVENT . . . . . [ ][ ]	
1207	Have you sought treatment for this condition?	YES . . . . . 1 NO 2	→ 1209
1208	Why have you not sought treatment? PROBE AND RECORD ALL MENTIONED.	DO NOT KNOW CAN BE FIXED . . . . . A DO NOT KNOW WHERE TO GO . . . . . B TOO EXPENSIVE . . . . . C TOO FAR . . . . . D POOR QUALITY OF CARE . . . . . E COULD NOT GET PERMISSION . . . . . F EMBARRASSMENT . . . . . G PROBLEM DISAPPEARED . . . . . H OTHER _____ X (SPECIFY)	→ 1301
1209	From whom did you last seek treatment?	**HEALTH PROFESSIONAL** DOCTOR . . . . . 1 NURSE/MIDWIFE . . . . . 2 **OTHER PERSON** COMMUNITY/VILLAGE HEALTH WORKER . . . . . 3 OTHER _____ 6 (SPECIFY)	
1210	Did you have an operation to fix the problem?	YES . . . . . 1 NO 2	
1211	Did the treatment stop the leakage completely? IF NO: Did the treatment reduce the leakage?	YES, STOPPED COMPLETELY . . . . . 1 NOT STOPPED BUT REDUCED . . . . . 2 NOT STOPPED AT ALL . . . . . 3 DID NOT RECEIVE TREATMENT 4	

SECTION 13. ADULT AND MATERNAL MORTALITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1301	Now I would like to ask you some questions about your brothers and sisters born to your natural mother, including those who are living with you, those living elsewhere and those who have died. From our experience in prior surveys, we know it may sometimes be difficult to establish a complete list of all the children born to your natural mother. We will work together to draw the most complete list and work to recall all your siblings. Could you please now give me the names of all of your brothers and sisters born to your natural mother. DO NOT FILL IN THE ORDER NUMBER YET. NAME / ORDER NUMBER a _____ ☐☐ b _____ ☐☐ c _____ ☐☐ d _____ ☐☐ e _____ ☐☐ f _____ ☐☐ g _____ ☐☐ h _____ ☐☐ i _____ ☐☐ j _____ ☐☐ NAME / ORDER NUMBER k _____ ☐☐ l _____ ☐☐ m _____ ☐☐ n _____ ☐☐ o _____ ☐☐ p _____ ☐☐ q _____ ☐☐ r _____ ☐☐ s _____ ☐☐ t _____ ☐☐		
1302	CHECK 1301: ONE OR MORE BROTHERS OR SISTERS LISTED ☐ ↓ NO BROTHERS OR SISTERS LISTED ☐ → 1304		
1303	READ THE NAMES OF THE BROTHERS AND SISTERS TO THE RESPONDENT AND AFTER THE LAST ONE ASK: Are there any other brothers and sisters from the same mother that you have not mentioned? NO ☐ ↓ YES ☐ → LIST ADDITIONAL BROTHERS AND SISTERS IN 1301.		
1304	Sometimes people forget to mention children born to their natural mother because they do not live with them or they do not see them very often. Are there any brothers or sisters who do not live with you that you have not mentioned? NO ☐ ↓ YES ☐ → LIST ADDITIONAL BROTHERS AND SISTERS IN 1301.		
1305	Sometimes people forget to mention children born to their natural mother because they have died. Are there any brothers or sisters who died that you have not mentioned? NO ☐ ↓ YES ☐ → LIST ADDITIONAL BROTHERS AND SISTERS IN 1301.		
1306	Some people have brothers or sisters from the same mother but a different father. Are there any brothers or sisters born to your natural mother, but who have a different natural father, that you have not mentioned? NO ☐ ↓ YES ☐ → LIST ADDITIONAL BROTHERS AND SISTERS IN 1301.		
1307	COUNT THE NUMBER OF BROTHERS AND SISTERS RECORDED IN 1301.	TOTAL BROTHERS AND SISTERS . . ☐☐	

SECTION 13. ADULT AND MATERNAL MORTALITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1308	CHECK 1307: Just to make sure that I have this right: Your mother had in TOTAL _____ births, excluding you, during her lifetime. Is that correct? YES ☐ NO ☐ → PROBE AND CORRECT 1301 AND/OR 1307.		
1309	CHECK 1307: ONE OR MORE BROTHERS/SISTERS ☐ NO BROTHER OR SISTER ☐ → 1400		
1310	Please tell me, which brother or sister was born first? And which was born next? RECORD '01' FOR THE ORDER NUMBER IN 1301 FOR THE FIRST BROTHER OR SISTER, '02' FOR THE SECOND, AND SO ON UNTIL YOU HAVE RECORDED THE ORDER NUMBER FOR ALL BROTHERS AND SISTERS.		
1311	How many births did your mother have before you were born?	NUMBER OF PRECEDING BIRTHS . . ☐☐	

1312	LIST THE BROTHERS AND SISTERS ACCORDING TO THE ORDER NUMBER IN 1301. ASK 1313 TO 1324 FOR ONE BROTHER OR SISTER BEFORE ASKING ABOUT THE NEXT BROTHER OR SISTER. IF THERE ARE MORE THAN 12 BROTHERS AND SISTERS, USE AN ADDITIONAL QUESTIONNAIRE.						
1313	NAME OF BROTHER OR SISTER.	(01) _____	(02) _____	(03) _____	(04) _____	(05) _____	(06) _____
1314	Is (NAME) male or female?	MALE . . . . 1 FEMALE . 2	MALE . . . . 1 FEMALE . 2	MALE . . . . 1 FEMALE . 2	MALE . . . . 1 FEMALE . 2	MALE . . . . 1 FEMALE . 2	MALE . . . . 1 FEMALE . 2
1315	Is (NAME) still alive?	YES . . . . . 1 NO . . . . . 2 → GO TO 1317 DK . . . . . 8 → GO TO (02)	YES . . . . . 1 NO . . . . . 2 → GO TO 1317 DK . . . . . 8 → GO TO (03)	YES . . . . . 1 NO . . . . . 2 → GO TO 1317 DK . . . . . 8 → GO TO (04)	YES . . . . . 1 NO . . . . . 2 → GO TO 1317 DK . . . . . 8 → GO TO (05)	YES . . . . . 1 NO . . . . . 2 → GO TO 1317 DK . . . . . 8 → GO TO (06)	YES . . . . . 1 NO . . . . . 2 → GO TO 1317 DK . . . . . 8 → GO TO (07)
1316	How old is (NAME)?	☐☐ GO TO (02)	☐☐ GO TO (03)	☐☐ GO TO (04)	☐☐ GO TO (05)	☐☐ GO TO (06)	☐☐ GO TO (07)
1317	How many years ago did (NAME) die?	☐☐	☐☐	☐☐	☐☐	☐☐	☐☐
1318	How old was (NAME) when (he/she) died? IF DON'T KNOW, PROBE AND ASK ADDITIONAL QUESTIONS TO GET AN ESTIMATE.	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE, GO TO 1323	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE, GO TO 1323	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE, GO TO 1323	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE, GO TO 1323	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE, GO TO 1323	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE, GO TO 1323
1319	Was (NAME) pregnant when she died?	YES . . . . . 1 → GO TO 1322B NO 2	YES . . . . . 1 → GO TO 1322B NO 2	YES . . . . . 1 → GO TO 1322B NO 2	YES . . . . . 1 → GO TO 1322B NO 2	YES . . . . . 1 → GO TO 1322B NO 2	YES . . . . . 1 → GO TO 1322B NO 2
1320	Did (NAME) die during childbirth?	YES . . . . . 1 → GO TO 1322A NO 2	YES . . . . . 1 → GO TO 1322A NO 2	YES . . . . . 1 → GO TO 1322A NO 2	YES . . . . . 1 → GO TO 1322A NO 2	YES . . . . . 1 → GO TO 1322A NO 2	YES . . . . . 1 → GO TO 1322A NO 2
1321	Did (NAME) die within two months after the end of a pregnancy or childbirth?	YES . . . . . 1 NO . . . . . 2 → GO TO 1323	YES . . . . . 1 NO . . . . . 2 → GO TO 1323	YES . . . . . 1 NO . . . . . 2 → GO TO 1323	YES . . . . . 1 NO . . . . . 2 → GO TO 1323	YES . . . . . 1 NO . . . . . 2 → GO TO 1323	YES . . . . . 1 NO . . . . . 2 → GO TO 1323
1322	How many days after the end of the pregnancy did (NAME) die?	☐☐	☐☐	☐☐	☐☐	☐☐	☐☐
1322A	Did (NAME) receive a caesarean section?	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2
1322B	Did (NAME) die in the hospital?	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2
1323	Was (NAME)'s death due to an act of violence?	YES . . . . . 1 → GO TO (02) NO 2	YES . . . . . 1 → GO TO (03) NO 2	YES . . . . . 1 → GO TO (04) NO 2	YES . . . . . 1 → GO TO (05) NO 2	YES . . . . . 1 → GO TO (06) NO 2	YES . . . . . 1 → GO TO (07) NO 2
1324	Was (NAME)'s death due to an accident?	YES . . . . . 1 NO . . . . . 2 GO TO (02)	YES . . . . . 1 NO . . . . . 2 GO TO (03)	YES . . . . . 1 NO . . . . . 2 GO TO (04)	YES . . . . . 1 NO . . . . . 2 GO TO (05)	YES . . . . . 1 NO . . . . . 2 GO TO (06)	YES . . . . . 1 NO . . . . . 2 GO TO (07)
IF NO MORE BROTHERS OR SISTERS, GO TO 1400.							

1312	LIST THE BROTHERS AND SISTERS ACCORDING TO THE ORDER NUMBER IN 1301. ASK 1313 TO 1324 FOR ONE BROTHER OR SISTER BEFORE ASKING ABOUT THE NEXT BROTHER OR SISTER. IF THERE ARE MORE THAN 12 BROTHERS AND SISTERS, USE AN ADDITIONAL QUESTIONNAIRE.						
1313	NAME OF BROTHER OR SISTER.	(07) _____	(08) _____	(09) _____	(10) _____	(11) _____	(12) _____
1314	Is (NAME) male or female?	MALE .... 1 FEMALE . 2	MALE .... 1 FEMALE . 2	MALE .... 1 FEMALE . 2	MALE .... 1 FEMALE . 2	MALE .... 1 FEMALE . 2	MALE .... 1 FEMALE . 2
1315	Is (NAME) still alive?	YES ..... 1 NO ..... 2 → GO TO 1317 DK ..... 8 → GO TO (08)	YES ..... 1 NO ..... 2 → GO TO 1317 DK ..... 8 → GO TO (09)	YES ..... 1 NO ..... 2 → GO TO 1317 DK ..... 8 → GO TO (10)	YES ..... 1 NO ..... 2 → GO TO 1317 DK ..... 8 → GO TO (11)	YES ..... 1 NO ..... 2 → GO TO 1317 DK ..... 8 → GO TO (12)	YES ..... 1 NO ..... 2 → GO TO 1317 DK ..... 8 → GO TO (13)
1316	How old is (NAME)?	☐☐ GO TO (08)	☐☐ GO TO (09)	☐☐ GO TO (10)	☐☐ GO TO (11)	☐☐ GO TO (12)	☐☐ GO TO (13)
1317	How many years ago did (NAME) die?	☐☐	☐☐	☐☐	☐☐	☐☐	☐☐
1318	How old was (NAME) when (he/she) died? IF DON'T KNOW, PROBE AND ASK ADDITIONAL QUESTIONS TO GET AN ESTIMATE.	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE, GO TO 1323	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE, GO TO 1323	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE, GO TO 1323	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE, GO TO 1323	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE, GO TO 1323	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE, GO TO 1323
1319	Was (NAME) pregnant when she died?	YES ..... 1 → GO TO 1322B NO 2	YES ..... 1 → GO TO 1322B NO 2	YES ..... 1 → GO TO 1322B NO 2	YES ..... 1 → GO TO 1322B NO 2	YES ..... 1 → GO TO 1322B NO 2	YES ..... 1 → GO TO 1322B NO 2
1320	Did (NAME) die during childbirth?	YES ..... 1 → GO TO 1322A NO 2	YES ..... 1 → GO TO 1322A NO 2	YES ..... 1 → GO TO 1322A NO 2	YES ..... 1 → GO TO 1322A NO 2	YES ..... 1 → GO TO 1322A NO 2	YES ..... 1 → GO TO 1322A NO 2
1321	Did (NAME) die within two months after the end of a pregnancy or childbirth?	YES ..... 1 NO ..... 2 → GO TO 1323	YES ..... 1 NO ..... 2 → GO TO 1323	YES ..... 1 NO ..... 2 → GO TO 1323	YES ..... 1 NO ..... 2 → GO TO 1323	YES ..... 1 NO ..... 2 → GO TO 1323	YES ..... 1 NO ..... 2 → GO TO 1323
1322	How many days after the end of the pregnancy did (NAME) die?	☐☐	☐☐	☐☐	☐☐	☐☐	☐☐
1322A	Did (NAME) receive a caesarean section?	YES ..... 1 NO 2	YES ..... 1 NO 2	YES 1 NO 2	YES 1 NO 2	YES ..... 1 NO 2	YES ..... 1 NO 2
1322B	Did (NAME) die in the hospital?	YES ..... 1 NO 2	YES ..... 1 NO 2	YES 1 NO 2	YES 1 NO 2	YES ..... 1 NO 2	YES ..... 1 NO 2
1323	Was (NAME)'s death due to an act of violence?	YES ..... 1 → GO TO (08) NO 2	YES ..... 1 → GO TO (09) NO 2	YES ..... 1 → GO TO (10) NO 2	YES ..... 1 → GO TO (11) NO 2	YES ..... 1 → GO TO (12) NO 2	YES ..... 1 → GO TO (13) NO 2
1324	Was (NAME)'s death due to an accident?	YES ..... 1 NO ..... 2 GO TO (08)	YES ..... 1 NO ..... 2 GO TO (09)	YES ..... 1 NO ..... 2 GO TO (10)	YES ..... 1 NO ..... 2 GO TO (11)	YES ..... 1 NO ..... 2 GO TO (12)	YES ..... 1 NO ..... 2 GO TO (13)
IF NO MORE BROTHERS OR SISTERS, GO TO 1400.							

SECTION 14: DOMESTIC VIOLENCE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1400	CHECK COVER PAGE: WOMAN SELECTED FOR 14 MODULE? WOMAN SELECTED FOR THIS SECTION ☐ ↓ WOMAN NOT SELECTED ☐ →		1433
1401	CHECK FOR PRESENCE OF OTHERS: DO NOT CONTINUE UNTIL PRIVACY IS ENSURED. PRIVACY OBTAINED . . . . . 1 ↓ PRIVACY NOT POSSIBLE . . . . . 2 →		1432
1401A	READ TO THE RESPONDENT: Now I would like to ask you questions about some other important aspects of a woman's life. You may find some of these questions very personal. However, your answers are crucial for helping to understand the condition of women in Zambia. Let me assure you that your answers are completely confidential and will not be told to anyone and no one else in your household will know that you were asked these questions. If I ask you any question you don't want to answer, just let me know and I will go on to the next question.		
1402	CHECK 701 AND 702: CURRENTLY MARRIED/ LIVING WITH A MAN ☐ ↓ FORMERLY MARRIED/ LIVED WITH A MAN (READ IN PAST TENSE AND USE 'LAST' WITH 'HUSBAND/PARTNER') ☐ ↓ NEVER MARRIED/ NEVER LIVED WITH A MAN ☐ →		1416
1403	First, I am going to ask you about some situations which happen to some women. Please tell me if these apply to your relationship with your (last) (husband/partner)?		
	a) He (is/was) jealous or angry if you (talk/talked) to other men?	JEALOUS . . . . . YES 1 NO 2 DK 8	
	b) He frequently (accuses/accused) you of being unfaithful?	ACCUSES 1 2 8	
	c) He (does/did) not permit you to meet your female friends?	NOT MEET FRIENDS . . 1 2 8	
	d) He (tries/tried) to limit your contact with your family?	NO FAMILY 1 2 8	
	e) He (insists/insisted) on knowing where you (are/were) at all times?	WHERE YOU ARE 1 2 8	
1404	Now I need to ask some more questions about your relationship with your (last) (husband/partner).		
	A. Did your (last) (husband/partner) ever:	B. How often did this happen during the last 12 months: often, only sometimes, or not at all?	
		EVER / OFTEN / SOME-TIMES / NOT IN LAST 12 MONTHS	
	a) say or do something to humiliate you in front of others?	YES 1 → OFTEN 1 / SOMETIMES 2 / NOT IN LAST 12 MONTHS 3 NO 2 ↓	
	b) threaten to hurt or harm you or someone you care about?	YES 1 → 1 / 2 / 3 NO 2 ↓	
	c) insult you or make you feel bad about yourself?	YES 1 → 1 / 2 / 3 NO 2 ↓	

SECTION 14: DOMESTIC VIOLENCE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1405	A. Did your (last) (husband/partner) ever do any of the following things to you: B. How often did this happen during the last 12 months: often, only sometimes, or not at all?		

	EVER		OFTEN	SOME-TIMES	NOT IN LAST 12 MONTHS
a) push you, shake you, or throw something at you?	YES NO	1 2	1	2	3
b) slap you?	YES NO	1 2	1	2	3
c) twist your arm or pull your hair?	YES NO	1 2	1	2	3
d) punch you with his fist or with something that could hurt you?	YES NO	1 2	1	2	3
e) kick you, drag you, or beat you up?	YES NO	1 2	1	2	3
f) try to choke you or burn you on purpose?	YES NO	1 2	1	2	3
g) threaten or attack you with a knife, gun, or other weapon?	YES NO	1 2	1	2	3
h) physically force you to have sexual intercourse with him when you did not want to?	YES NO	1 2	1	2	3
i) physically force you to perform any other sexual acts you did not want to?	YES NO	1 2	1	2	3
j) force you with threats or in any other way to perform sexual acts you did not want to?	YES NO	1 2	1	2	3

1406	CHECK 1405A (a-j): AT LEAST ONE 'YES' ☐ ↓ NOT A SINGLE 'YES' ☐ →		1409
1407	How long after you first (got married/started living together) with your (last) (husband/partner) did (this/any of these things) first happen? IF LESS THAN ONE YEAR, RECORD '00'.	NUMBER OF YEARS . . . . . ☐☐ BEFORE MARRIAGE/BEFORE LIVING TOGETHER 95	
1408	Did the following ever happen as a result of what your (last) (husband/partner) did to you: a) You had cuts, bruises, or aches? b) You had eye injuries, sprains, dislocations, or burns? c) You had deep wounds, broken bones, broken teeth, or any other serious injury?	YES . . . . . 1 NO . . . . . 2 YES . . . . . 1 NO . . . . . 2 YES . . . . . 1 NO 2	

SECTION 14: DOMESTIC VIOLENCE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1409	Have you ever hit, slapped, kicked, or done anything else to physically hurt your (last) (husband/partner) at times when he was not already beating or physically hurting you?	YES . . . . . 1 NO 2	→ 1411
1410	In the last 12 months, how often have you done this to your (last) (husband/partner): often, only sometimes, or not at all?	OFTEN . . . . . 1 SOMETIMES . . . . . 2 NOT AT ALL 3	
1411	Does (did) your (last) (husband/partner) drink alcohol?	YES . . . . . 1 NO 2	→ 1413
1412	How often does (did) he get drunk: often, only sometimes, or never?	OFTEN . . . . . 1 SOMETIMES . . . . . 2 NEVER 3	
1413	Are (Were) you afraid of your (last) (husband/partner): most of the time, sometimes, or never?	MOST OF THE TIME AFRAID . . . . . 1 SOMETIMES AFRAID . . . . . 2 NEVER AFRAID 3	
1414	CHECK 709: MARRIED MORE THAN ONCE ☐ ↓ MARRIED ONLY ONCE ☐ →		→ 1416
1415	A. So far we have been talking about the behaviour of your (current/last) (husband/partner). Now I want to ask you about the behaviour of any previous (husband/partner).	B. How long ago did this last happen?	

	EVER		0 - 11 MONTHS AGO	12+ MONTHS AGO	DON'T REMEMBER
a) Did any previous (husband/partner) ever hit, slap, kick, or do anything else to hurt you physically?	YES NO	1 2 ↓	→ 1	2	3
b) Did any previous (husband/partner) physically force you to have intercourse or perform any other sexual acts against your will?	YES NO	1 2 ↓	→ 1	2	3
c) Did any previous (husband/partner) humiliate you in front of others, threaten to hurt you or someone you care about, or insult you or make you feel bad about yourself?	YES NO	1 2 ↓	→ 1	2	3

NO.				SKIP
1416	CHECK 701 AND 702: EVER MARRIED/EVER LIVED WITH A MAN ☐ ↓ NEVER MARRIED/NEVER LIVED WITH A MAN ☐ ↓		YES . . . . . 1 NO . . . . . 2 REFUSED TO ANSWER/ NO ANSWER 3	→ 1419
	a) From the time you were 15 years old has anyone other than (your/any) (husband/partner) hit you, slapped you, kicked you, or done anything else to hurt you physically?	b) From the time you were 15 years old has anyone hit you, slapped you, kicked you, or done anything else to hurt you physically?		

SECTION 14: DOMESTIC VIOLENCE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1417	Who has hurt you in this way? Anyone else? RECORD ALL MENTIONED.	MOTHER/STEP-MOTHER . . . . . A FATHER/STEP-FATHER . . . . . B SISTER/BROTHER . . . . . C DAUGHTER/SON . . . . . D OTHER RELATIVE . . . . . E CURRENT BOYFRIEND . . . . . F FORMER BOYFRIEND . . . . . G MOTHER-IN-LAW . . . . . H FATHER-IN-LAW . . . . . I OTHER IN-LAW . . . . . J TEACHER . . . . . K EMPLOYER/SOMEONE AT WORK . . L POLICE/SOLDIER . . . . . M OTHER _____ X (SPECIFY)	
1418	In the last 12 months, how often has (this person/have these persons) physically hurt you: often, only sometimes, or not at all?	OFTEN . . . . . 1 SOMETIMES . . . . . 2 NOT AT ALL 3	
1419	CHECK 201, 226, AND 230: EVER BEEN PREGNANT ('YES' ON 201 OR 226 OR 230) ☐ ↓ NEVER BEEN PREGNANT ☐ →		1422
1420	Has any one ever hit, slapped, kicked, or done anything else to hurt you physically while you were pregnant?	YES . . . . . 1 NO . . . . . 2 →	1422
1421	Who has done any of these things to physically hurt you while you were pregnant? Anyone else? RECORD ALL MENTIONED.	CURRENT HUSBAND/PARTNER . . . . . A MOTHER/STEP-MOTHER . . . . . B FATHER/STEP-FATHER . . . . . C SISTER/BROTHER . . . . . D DAUGHTER/SON . . . . . E OTHER RELATIVE . . . . . F FORMER HUSBAND/PARTNER . . . . . G CURRENT BOYFRIEND . . . . . H FORMER BOYFRIEND . . . . . I MOTHER-IN-LAW . . . . . J FATHER-IN-LAW . . . . . K OTHER IN-LAW . . . . . L TEACHER . . . . . M EMPLOYER/SOMEONE AT WORK . . N POLICE/SOLDIER . . . . . O OTHER _____ X (SPECIFY)	
1422	CHECK 701 AND 702: EVER MARRIED/EVER LIVED WITH A MAN ☐ ↓ NEVER MARRIED/NEVER LIVED WITH A MAN ☐ →		1422B
1422A	Now I want to ask you about things that may have been done to you by someone other than (your/any) (husband/partner). At any time in your life, as a child or as an adult, has anyone ever forced you in any way to have sexual intercourse or perform any other sexual acts when you did not want to?	YES . . . . . 1 → NO . . . . . 2 REFUSED TO ANSWER/ NO ANSWER 3	1423 1424A
1422B	At any time in your life, as a child or as an adult, has anyone ever forced you in any way to have sexual intercourse or perform any other sexual acts when you did not want to?	YES . . . . . 1 NO . . . . . 2 REFUSED TO ANSWER/ NO ANSWER 3	1426

SECTION 14: DOMESTIC VIOLENCE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1423	Who was the person who was forcing you the very first time this happened?	CURRENT HUSBAND/PARTNER . . . . . 01 FORMER HUSBAND/PARTNER . . . . . 02 CURRENT/FORMER BOYFRIEND . . 03 FATHER/STEP-FATHER . . . . . 04 BROTHER/STEP-BROTHER . . . . . 05 OTHER RELATIVE . . . . . 06 IN-LAW . . . . . 07 OWN FRIEND/ACQUAINTANCE . . . . . 08 FAMILY FRIEND . . . . . 09 TEACHER . . . . . 10 EMPLOYER/SOMEONE AT WORK . . 11 POLICE/SOLDIER . . . . . 12 PRIEST/RELIGIOUS LEADER . . . . . 13 STRANGER . . . . . 14 OTHER _____ 96 (SPECIFY)	
1424	CHECK 701 AND 702: EVER MARRIED/EVER LIVED WITH A MAN ☐ ↓ a) In the last 12 months, has anyone other than (your/any) (husband/partner) physically forced you to have sexual intercourse when you did not want to? NEVER MARRIED/NEVER LIVED WITH A MAN ☐ ↓ b) In the last 12 months has anyone physically forced you to have sexual intercourse when you did not want to?	YES . . . . . 1 NO 2	→ 1425
1424A	CHECK 1405A (h-j) and 1415A(b) AT LEAST ONE 'YES' ☐ ↓ NOT A SINGLE 'YES' ☐ →		→ 1426
1425	CHECK 701 AND 702: EVER MARRIED/EVER LIVED WITH A MAN ☐ ↓ a) How old were you the first time you were forced to have sexual intercourse or perform any other sexual acts by anyone, including (your/any) husband/partner? NEVER MARRIED/NEVER LIVED WITH A MAN ☐ ↓ b) How old were you the first time you were forced to have sexual intercourse or perform any other sexual acts?	AGE IN COMPLETED YEARS . . . . . ☐☐ DON'T KNOW 98	
1426	CHECK 1405A (a-j), 1415A (a,b), 1416, 1420, 1422A, AND 1422B: AT LEAST ONE 'YES' ☐ ↓ NOT A SINGLE 'YES' ☐ →		→ 1430
1427	Thinking about what you yourself have experienced among the different things we have been talking about, have you ever tried to seek help?	YES . . . . . 1 NO 2	→ 1429

SECTION 14: DOMESTIC VIOLENCE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1428	From whom have you sought help? Anyone else? RECORD ALL MENTIONED.	OWN FAMILY . . . . . A HUSBAND'S/PARTNER'S FAMILY . . B CURRENT/FORMER HUSBAND/PARTNER . . . . . C CURRENT/FORMER BOYFRIEND . . D FRIEND . . . . . E NEIGHBOR . . . . . F RELIGIOUS LEADER . . . . . G DOCTOR/MEDICAL PERSONNEL H POLICE . . . . . I LAWYER . . . . . J SOCIAL SERVICE ORGANIZATION K OTHER _____ X (SPECIFY)	→ 1430
1429	Have you ever told any one about this?	YES . . . . . 1 NO 2	
1430	As far as you know, did your father ever beat your mother?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
	THANK THE RESPONDENT FOR HER COOPERATION AND REASSURE HER ABOUT THE CONFIDENTIALITY OF HER ANSWERS. FILL OUT THE QUESTIONS BELOW WITH REFERENCE TO THE DOMESTIC VIOLENCE MODULE ONLY.		
1431	DID YOU HAVE TO INTERRUPT THE INTERVIEW BECAUSE SOME ADULT WAS TRYING TO LISTEN, OR CAME INTO THE ROOM, OR INTERFERED IN ANY OTHER WAY?	YES, ONCE / YES, MORE THAN ONCE / NO HUSBAND . . . . . 1 2 3 OTHER MALE ADULT . . . . . 1 2 3 FEMALE ADULT 1 2 3	
1432	INTERVIEWER'S COMMENTS/EXPLANATION FOR NOT COMPLETING THE DOMESTIC VIOLENCE MODULE. _____ _____ _____		
1433	RECORD THE TIME.	HOURS . . . . . [ ][ ] MINUTES . . . . . [ ][ ]	

INTERVIEWER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING INTERVIEW

COMMENTS ABOUT INTERVIEW:

COMMENTS ON SPECIFIC QUESTIONS:

ANY OTHER COMMENTS:

SUPERVISOR'S OBSERVATIONS

EDITOR'S OBSERVATIONS

INSTRUCTIONS:

ONLY ONE CODE SHOULD APPEAR IN ANY BOX.
COLUMN 1 REQUIRES A CODE IN EVERY MONTH.

CODES FOR EACH COLUMN:

COLUMN 1: BIRTHS, PREGNANCIES, CONTRACEPTIVE USE (2)

- B BIRTHS
- P PREGNANCIES
- T TERMINATIONS

- 0 NO METHOD
- 1 FEMALE STERILIZATION
- 2 MALE STERILIZATION
- 3 IUD
- 4 INJECTABLES
- 5 IMPLANTS
- 6 PILL
- 7 CONDOM
- 8 FEMALE CONDOM
- 9 EMERGENCY CONTRACEPTION
- J STANDARD DAYS METHOD
- K LACTATIONAL AMENORRHEA METHOD
- L RHYTHM METHOD
- M WITHDRAWAL
- X OTHER MODERN METHOD
- Y OTHER TRADITIONAL METHOD

COLUMN 2: DISCONTINUATION OF CONTRACEPTIVE USE

- 0 INFREQUENT SEX/HUSBAND AWAY
- 1 BECAME PREGNANT WHILE USING
- 2 WANTED TO BECOME PREGNANT
- 3 HUSBAND/PARTNER DISAPPROVED
- 4 WANTED MORE EFFECTIVE METHOD
- 5 SIDE EFFECTS/HEALTH CONCERNS
- 6 LACK OF ACCESS/TOO FAR
- 7 COSTS TOO MUCH
- 8 INCONVENIENT TO USE
- F UP TO GOD/FATALISTIC
- A DIFFICULT TO GET PREGNANT/MENOPAUSAL
- D MARITAL DISSOLUTION/SEPARATION
- X OTHER

_____
(SPECIFY)

- Z DON'T KNOW

				COL. 1	COL. 2	
	12	DEC	01			
	11	NOV	02			
	10	OCT	03			
2	09	SEP	04			2
	08	AUG	05			
0	07	JUL	06			0
	06	JUN	07			
1	05	MAY	08			1
	04	APR	09			
8	03	MAR	10			8
	02	FEB	11			
	01	JAN	12			
	12	DEC	13			
	11	NOV	14			
	10	OCT	15			
2	09	SEP	16			2
	08	AUG	17			
0	07	JUL	18			0
	06	JUN	19			
1	05	MAY	20			1
	04	APR	21			
7	03	MAR	22			7
	02	FEB	23			
	01	JAN	24			
	12	DEC	25			
	11	NOV	26			
	10	OCT	27			
	09	SEP	28			
2	08	AUG	29			2
0	07	JUL	30			0
1	06	JUN	31			1
	05	MAY	32			
6	04	APR	33			6
	03	MAR	34			
	02	FEB	35			
	01	JAN	36			
	12	DEC	37			
	11	NOV	38			
	10	OCT	39			
2	09	SEP	40			2
	08	AUG	41			
0	07	JUL	42			0
	06	JUN	43			
1	05	MAY	44			1
5	04	APR	45			5
	03	MAR	46			
	02	FEB	47			
	01	JAN	48			
	12	DEC	49			
	11	NOV	50			
	10	OCT	51			
2	09	SEP	52			2
	08	AUG	53			
0	07	JUL	54			0
	06	JUN	55			
1	05	MAY	56			1
4	04	APR	57			4
	03	MAR	58			
	02	FEB	59			
	01	JAN	60			
	12	DEC	61			
	11	NOV	62			
	10	OCT	63			
2	09	SEP	64			2
	08	AUG	65			
0	07	JUL	66			0
	06	JUN	67			
1	05	MAY	68			1
3	04	APR	69			3
	03	MAR	70			
	02	FEB	71			
	01	JAN	72			

FORMATTING DATE: 16 May 2016
ENGLISH LANGUAGE: July 8 2018

2018 ZAMBIA DEMOGRAPHIC AND HEALTH SURVEY
MAN'S QUESTIONNAIRE
ZAMBIA
MINISTRY OF HEALTH/CENTRAL STATISTICAL OFFICE

IDENTIFICATION

PLACE NAME _____

NAME OF HOUSEHOLD HEAD _____

CLUSTER NUMBER . . . . . | | | | |

HOUSEHOLD NUMBER . . . . . | | | | |

NAME AND LINE NUMBER OF MAN _____ | | |

INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE				DAY
				MONTH
				YEAR
INTERVIEWER'S NAME				INT. NO.
RESULT*				RESULT*
NEXT VISIT: DATE				TOTAL NUMBER OF VISITS
TIME				

*RESULT CODES: 1 COMPLETED; 2 NOT AT HOME; 3 POSTPONED; 4 REFUSED; 5 PARTLY COMPLETED; 6 INCAPACITATED; 7 OTHER _____ SPECIFY

LANGUAGE OF QUESTIONNAIRE** 0 1 | LANGUAGE OF INTERVIEW** | | NATIVE LANGUAGE OF RESPONDENT** | | TRANSLATOR USED (YES = 1, NO = 2) |

LANGUAGE OF QUESTIONNAIRE** **ENGLISH**

**LANGUAGE CODES:
01 ENGLISH; 02 BEMBA; 03 KAONDE; 04 LOZI; 05 LUNDA; 06 LUVALE; 07 NYANJA; 08 TONGA

SUPERVISOR

NAME _____ NUMBER | | | | |

INTRODUCTION AND CONSENT

July 8 2018

Hello. My name is _____. I am working with the Ministry of Health in collaboration with Central Statistical Office (CSO). We are conducting a survey about health and other topics all over Zambia. The information we collect will help the government to plan health services. Your household was selected for the survey. The questions usually take about 20 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of our survey team. You don't have to be in the survey, but we hope you will agree to answer the questions since your views are important. If I ask you any question you don't want to answer, just let me know and I will go on to the next question or you can stop the interview at any time.

In case you need more information about the survey, you may contact the person listed on the card that has already been given to your household.

Do you have any questions?
May I begin the interview now?

SIGNATURE OF INTERVIEWER _____ DATE _____

RESPONDENT AGREES TO BE INTERVIEWED . . 1 ↓

RESPONDENT DOES NOT AGREE TO BE INTERVIEWED . . 2 → END

SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	RECORD THE TIME.	HOURS . . . . . ☐☐ MINUTES . . . . . ☐☐	
102	How long have you been living continuously in (NAME OF CURRENT CITY, TOWN OR VILLAGE OF RESIDENCE)? IF LESS THAN ONE YEAR, RECORD '00' YEARS.	YEARS . . . . . ☐☐ ALWAYS . . . . . 95 VISITOR 96	→ 105
103	Just before you moved here, did you live in Lusaka, another city, in a town, or in a village?	CITY . . . . . 1 TOWN . . . . . 2 RURAL AREA 3	
104	Before you moved here, which province did you live in?	CENTRAL . . . . . 01 COPPERBELT . . . . . 02 EASTERN . . . . . 03 LUAPULA . . . . . 04 LUSAKA . . . . . 05 MUCHINGA . . . . . 06 NORTHERN . . . . . 07 NORTHWESTERN . . . . . 08 SOUTHERN . . . . . 09 WESTERN . . . . . 10 OUTSIDE OF ZAMBIA 96	
105	In what month and year were you born?	MONTH . . . . . ☐☐ DON'T KNOW MONTH . . . . . 98 YEAR . . . . . ☐☐☐☐ DON'T KNOW YEAR 9998	
106	How old were you at your last birthday? COMPARE AND CORRECT 105 AND/OR 106 IF INCONSISTENT.	AGE IN COMPLETED YEARS . . . . . ☐☐	
107	Have you ever attended school?	YES . . . . . 1 NO 2	→ 111

SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
108	What is the highest level of school you attended: primary, secondary, or higher?	PRIMARY . . . . . 1 SECONDARY . . . . . 2 HIGHER 3	
109	What is the highest year you completed at that level? IF COMPLETED LESS THAN ONE YEAR AT THAT LEVEL, RECORD '00'.	YEAR . . . . . ☐☐	
110	CHECK 108: PRIMARY OR SECONDARY ☐ ↓ HIGHER ☐ →		113
111	Now I would like you to read this sentence to me. SHOW CARD TO RESPONDENT. IF RESPONDENT CANNOT READ WHOLE SENTENCE, PROBE: Can you read any part of the sentence to me?	CANNOT READ AT ALL . . . . . 1 ABLE TO READ ONLY PART OF THE SENTENCE . . . . . 2 ABLE TO READ WHOLE SENTENCE . . . . . 3 NO CARD WITH REQUIRED LANGUAGE _____ 4 (SPECIFY LANGUAGE) BLIND/VISUALLY IMPAIRED 5	
112	CHECK 111: CODE '2', '3' OR '4' CIRCLED ☐ ↓ CODE '1' OR '5' CIRCLED ☐ →		114
113	Do you read a newspaper or magazine almost every day, at least once a week, less than once a week or not at all?	ALMOST EVERY DAY . . . . . 1 AT LEAST ONCE A WEEK . . . . . 2 LESS THAN ON(. . . . . 3 NOT AT ALL 4	
114	Do you listen to the radio almost every day, at least once a week, less than once a week or not at all?	ALMOST EVERY DAY . . . . . 1 AT LEAST ONCE A WEEK . . . . . 2 LESS THAN ON(. . . . . 3 NOT AT ALL 4	
115	Do you watch television almost every day, at least once a week, less than once a week or not at all?	ALMOST EVERY DAY . . . . . 1 AT LEAST ONCE A WEEK . . . . . 2 LESS THAN ON(. . . . . 3 NOT AT ALL 4	
116	Do you own a mobile telephone?	YES . . . . . 1 NO . . . . . 2 →	118
117	Do you use your mobile phone for any financial transactions?	YES . . . . . 1 NO 2	
118	Do you have an account in a bank or other financial institution that you yourself use?	YES . . . . . 1 NO 2	
119	Have you ever used the internet?	YES . . . . . 1 NO . . . . . 2 →	122
120	In the last 12 months, have you used the internet? IF NECESSARY, PROBE FOR USE FROM ANY LOCATION, WITH ANY DEVICE.	YES . . . . . 1 NO . . . . . 2 →	122

SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
121	During the last one month, how often did you use the internet: almost every day, at least once a week, less than once a week, or not at all?	ALMOST EVERY DAY . . . . . 1 AT LEAST ONCE A WEEK . . . . . 2 LESS THAN ONCE A WEEK . . . . . 3 NOT AT ALL 4	
122	What is your religion?	CATHOLIC . . . . . 1 PROTESTANT . . . . . 2 MUSLIM . . . . . 3 OTHER _____ 6 (SPECIFY)	
124	In the last 12 months, on how many separate occasions have you traveled away from your home community and slept away?	NUMBER OF TIMES . . . . . [ ][ ] NONE 00	→ 201
125	In the last 12 months, have you been away from your home community for more than one month at a time?	YES . . . . . 1 NO 2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
201	Now I would like to ask about any children you have had during your life. I am interested in all of the children that are biologically yours, even if they are not legally yours or do not have your last name. Have you ever fathered any children with any woman?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 206
202	Do you have any sons or daughters that you have fathered who are now living with you?	YES . . . . . 1 NO 2	→ 204
203	a) How many sons live with you? b) And how many daughters live with you? IF NONE, RECORD '00'.	a) SONS AT HOME . . . . . [ ][ ] b) DAUGHTERS AT HOME . . . . . [ ][ ]	
204	Do you have any sons or daughters that you have fathered who are alive but do not live with you?	YES . . . . . 1 NO 2	→ 206
205	a) How many sons are alive but do not live with you? b) And how many daughters are alive but do not live with you? IF NONE, RECORD '00'.	a) SONS ELSEWHERE . . . . . [ ][ ] b) DAUGHTERS ELSEWHERE . . . . . [ ][ ]	
206	Have you ever fathered a son or a daughter who was born alive but later died? IF NO, PROBE: Any baby who cried, who made any movement, sound, or effort to breathe, or who showed any other signs of life even if for a very short time?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 208
207	a) How many boys have died? b) And how many girls have died? IF NONE, RECORD '00'.	a) BOYS DEAD . . . . . [ ][ ] b) GIRLS DEAD . . . . . [ ][ ]	
208	SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL. IF NONE, RECORD '00'.	TOTAL CHILDREN . . . . . [ ][ ]	
209	CHECK 208: HAS HAD MORE THAN ONE CHILD HAS HAD ONLY ONE CHILD → 211 HAS NOT HAD ANY CHILDREN → 301		
210	Did all of the children you have fathered have the same biological mother?	YES . . . . . 1 NO 2	→ 211
210A	In all, how many women have you fathered children with?	NUMBER OF WOMEN . . . . . [ ][ ]	
211	CHECK 208: HAS HAD MORE THAN ONE CHILD a) How old were you when your first child was born? HAS HAD ONLY ONE CHILD b) How old were you when your child was born?	AGE IN YEARS . . . . . [ ][ ]	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
212	CHECK 203 AND 205: AT LEAST ONE LIVING CHILD ☐↓	NO LIVING CHILDREN ☐ →	301
213	CHECK 203 AND 205: MORE THAN ONE LIVING CHILD ☐↓ a) How old is your youngest child? ONLY ONE LIVING CHILD ☐↓ b) How old is your child?	AGE IN YEARS . . . . . ☐☐	
214	CHECK 213: (YOUNGEST) CHILD IS AGE 0-2 YEARS ☐↓	(YOUNGEST) CHILD IS AGE 3 YEARS OR OLDER ☐ →	301
215	CHECK 203 AND 205: MORE THAN ONE LIVING CHILD ☐↓ a) What is the name of your youngest child? ONLY ONE LIVING CHILD ☐↓ b) What is the name of your child?	_____ (NAME OF (YOUNGEST) CHILD)	
216	When (NAME)'s mother was pregnant with (NAME), did she have any antenatal check-ups?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 218
217	Were you ever present during any of those antenatal check-ups?	PRESENT . . . . . 1 NOT PRESENT 2	
218	Was (NAME) born in a hospital or health facility?	HOSPITAL/HEALTH FACILITY . . . . . 1 OTHER _____ 96 (SPECIFY)	
219	When a child has diarrhea, how much should he or she be given to drink: more than usual, about the same as usual, less than usual, or nothing to drink at all?	MORE THAN USUAL . . . . . 1 ABOUT THE SAME . . . . . 2 LESS THAN USUAL . . . . . 3 NOTHING TO DRINK . . . . . 4 DON'T KNOW 8	

301	Now I would like to talk about family planning - the various ways or methods that a couple can use to delay or avoid a pregnancy. Have you ever heard of (METHOD)? PROCEED DOWN COLUMN 301, READING THE NAME AND DESCRIPTION OF EACH METHOD. CIRCLE CODE 1 IF METHOD IS RECOGNIZED, AND CODE 2 IF NOT RECOGNIZED.	
01	Female Sterilization. PROBE: Women can have an operation to avoid having any more children.	YES . . . . . 1 NO 2
02	Male Sterilization. PROBE: Men can have an operation to avoid having any more children.	YES . . . . . 1 NO 2
03	IUD. PROBE: Women can have a loop or coil placed inside them by a doctor, nurse, or clinic officer which can prevent pregnancy for one or more years.	YES . . . . . 1 NO 2
04	Injectables. PROBE: Women can have an injection by a doctor, nurse, or clinic officer that stops them from becoming pregnant for one or more months.	YES . . . . . 1 NO 2
05	Implants. PROBE: Women can have one or more small rods placed in their upper arm by a doctor or nurse which can prevent pregnancy for one or more years.	YES . . . . . 1 NO 2
06	Pill. PROBE: Women can take a pill every day to avoid becoming pregnant.	YES . . . . . 1 NO 2
07	Male Condom. PROBE: Men can put a rubber sheath on their penis before sexual intercourse.	YES . . . . . 1 NO 2
08	Female Condom. PROBE: Women can place a sheath in their vagina before sexual intercourse.	YES . . . . . 1 NO 2
09	Emergency Contraception. PROBE: As an emergency measure, within five days after they have unprotected sexual intercourse, women can take special pills to prevent pregnancy.	YES . . . . . 1 NO 2
10	Standard Days Method (Cycle Beads). PROBE: A woman uses a string of colored beads to know the days she can get pregnant. On the days she can get pregnant, she uses a condom or does not have sexual intercourse.	YES . . . . . 1 NO 2

11	Lactational Amenorrhea Method (LAM). PROBE: Up to six months after childbirth, before the menstrual period has returned, women use a method requiring frequent breastfeeding day and night.	YES . . . . . 1 NO 2
12	Rhythm Method. PROBE: To avoid pregnancy, women do not have sexual intercourse on the days of the month they think they can get pregnant.	YES . . . . . 1 NO 2
13	Withdrawal. PROBE: Men can be careful and pull out before climax.	YES . . . . . 1 NO 2
14	Have you heard of any other ways or methods that women or men can use to avoid pregnancy?	YES, MODERN METHOD _____ A (SPECIFY) YES, TRADITIONAL METHOD _____ B (SPECIFY) NO . . . . . Y

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
302	In the last few months have you:	YES NO	
	a) Heard about family planning on the radio?	a) RADIO 1 2	
	b) Seen anything about family planning on the television?	b) TELEVISION 1 2	
	c) Read about family planning in a newspaper or magazine?	c) NEWSPAPER OR MAGAZINE 1 2	
	d) Received a voice or text message about family planning on a mobile phone?	d) MOBILE PHONE 1 2	
303	In the last few months, have you discussed family planning with a health worker or health professional?	YES . . . . . 1 NO 2	
304	Now I would like to ask you about a woman's risk of pregnancy. From one menstrual period to the next, are there certain days when a woman is more likely to become pregnant if she has sexual relations?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 306
305	Is this time just before her period begins, during her period, right after her period has ended, or halfway between two periods?	JUST BEFORE HER PERIOD BEGINS . . . . . 1 DURING HER PERIOD . . . . . 2 RIGHT AFTER HER PERIOD HAS ENDE . . . . . 3 HALFWAY BETWEEN TWO PERIOD . . . . . 4 OTHER _____ 6 (SPECIFY) DON'T KNOW 8	
306	After the birth of a child, can a woman become pregnant before her menstrual period has returned?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
306A	Do you think that a woman who is breastfeeding her baby can become pregnant?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
307	I will now read you some statements about contraception. Please tell me if you agree or disagree with each one.	AGREE DISAGREE DK	
	a) Contraception is a woman's concern and a man should not have to worry about it.	a) CONTRACEPTION WOMAN'S CONCERN 1 2 8	
	b) Women who use contraception may become promiscuous.	b) WOMEN MAY BECOME PROMISCUOUS 1 2 8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
401	Are you currently married or living together with a woman as if married?	YES, CURRENTLY MARRIED . . . . . 1 YES, LIVING WITH A WOMAN . . . . . 2 NO, NOT IN UNION 3	→ 404
402	Have you ever been married or lived together with a woman as if married?	YES, FORMERLY MARRIED . . . . . 1 YES, LIVED WITH A WOMAN . . . . . 2 NO 3	→ 413
403	What is your marital status now: are you widowed, divorced, or separated?	WIDOWED . . . . . 1 DIVORCED . . . . . 2 SEPARATED 3	→ 410
404	Is your (wife/partner) living with you now or is she staying elsewhere?	LIVING WITH HIM . . . . . 1 STAYING ELSEWHERE 2	
405	Do you have other wives or do you live with other women as if married?	YES (MORE THAN ONE WIFE) . . . . . 1 NO (ONLY ONE WIFE) 2	→ 407
406	Altogether, how many wives or live-in partners do you have?	TOTAL NUMBER OF WIVES AND LIVE-IN PARTNERS	
407	CHECK 405: ONE WIFE/ PARTNER → a) Please tell me the name of (your wife/the woman you are living with as if married). MORE THAN ONE WIFE/ PARTNER → b) Please tell me the name of each of your wives or each woman you are living with as if married. RECORD THE NAME AND THE LINE NUMBER FROM THE HOUSEHOLD QUESTIONNAIRE FOR EACH WIFE AND LIVE-IN PARTNER. IF A WOMAN IS NOT LISTED IN THE HOUSEHOLD, RECORD '00'.	NAME / LINE NUMBER / 408 How old was (NAME) on her last birthday? / AGE	
408	ASK 408 FOR EACH PERSON.		
409	CHECK 407: ONE WIFE/ PARTNER MORE THAN ONE WIFE/ PARTNER →		→ 411
410	Have you been married or lived with a woman only once or more than once?	MORE THAN ONCE . . . . . 1 ONLY ONCE 2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
411	CHECK 405 AND 410: BOTH ARE CODE '2' ☐ → a) In what month and year did you start living with your (wife/partner)? OTHER ☐ → b) Now I would like to ask about your first (wife/partner). In what month and year did you start living with her?	MONTH . . . . . ☐☐ DON'T KNOW MONTH . . . . . 98 YEAR . . . . . ☐☐☐☐ DON'T KNOW YEAR 9998	→ 413
412	How old were you when you first started living with her?	AGE . . . . . ☐☐	
413	**CHECK FOR PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.**		
414	I would like to ask some questions about sexual activity in order to gain a better understanding of some important life issues. Let me assure you again that your answers are completely confidential and will not be told to anyone. If we should come to any question that you don't want to answer, just let me know and we will go to the next question. How old were you when you had sexual intercourse for the very first time?	NEVER HAD SEXUAL INTERCOURSE . . . . . 00 AGE IN YEARS . . . . . ☐☐	→ 414C
414A	CHECK 106: AGE AGE 15-24 ☐ → AGE 25-59 ☐ →		501
414B	Do you intend to wait until you get married to have sexual intercourse for the first time?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/UNSURE 8	→ 501
414C	CHECK 106: AGE AGE 15-24 ☐ → AGE 25-59 ☐ →		415
414D	The first time you had sexual intercourse, was a condom used?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/UNSURE 8	
415	I would like to ask you about your recent sexual activity. When was the last time you had sexual intercourse? IF LESS THAN 12 MONTHS, ANSWER MUST BE RECORDED IN DAYS, WEEKS OR MONTHS. IF 12 MONTHS (ONE YEAR) OR MORE, ANSWER MUST BE RECORDED IN YEARS.	DAYS AGO . . . . . 1 ☐☐ WEEKS AGO . . . . . 2 ☐☐ MONTHS AGO . . . . . 3 ☐☐ YEARS AGO . . . . . 4 ☐☐	→ 417 → 427

		LAST SEXUAL PARTNER	SECOND-TO-LAST SEXUAL PARTNER	THIRD-TO-LAST SEXUAL PARTNER
416	When was the last time you had sexual intercourse with this person?		DAYS AGO . . 1 [ ][ ] WEEKS AGO . . 2 [ ][ ] MONTHS AGO . . 3 [ ][ ]	DAYS AGO . . 1 [ ][ ] WEEKS AGO . . 2 [ ][ ] MONTHS AGO . . 3 [ ][ ]
417	The last time you had sexual intercourse with this person, was a condom used?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 419)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 419)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 419)
418	Was a condom used every time you had sexual intercourse with this person in the last 12 months?	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2
419	What was your relationship to this person with whom you had sexual intercourse? IF GIRLFRIEND: Were you living together as if married? IF YES, RECORD '2'. IF NO, RECORD '3'.	WIFE . . . . . 1 LIVE-IN PARTNER . . . . . 2 GIRLFRIEND NOT LIVING WITH RESPONDENT . . . . . 3 CASUAL ACQUAINTANCE . . 4 CLIENT/SEX WORKER . . 5 OTHER _____ 6 (SPECIFY)	WIFE . . . . . 1 LIVE-IN PARTNER . . . . . 2 GIRLFRIEND NOT LIVING WITH RESPONDENT . . . . . 3 CASUAL ACQUAINTANCE . . 4 CLIENT/SEX WORKER . . 5 OTHER _____ 6 (SPECIFY)	WIFE . . . . . 1 LIVE-IN PARTNER . . . . . 2 GIRLFRIEND NOT LIVING WITH RESPONDENT . . . . . 3 CASUAL ACQUAINTANCE . . 4 CLIENT/SEX WORKER . . 5 OTHER _____ 6 (SPECIFY)
420	How long ago did you first have sexual intercourse with this person?	DAYS AGO . . 1 [ ][ ] WEEKS AGO . . 2 [ ][ ] MONTHS AGO . . 3 [ ][ ] YEARS AGO . . 4 [ ][ ]	DAYS AGO . . 1 [ ][ ] WEEKS AGO . . 2 [ ][ ] MONTHS AGO . . 3 [ ][ ] YEARS AGO . . 4 [ ][ ]	DAYS AGO . . 1 [ ][ ] WEEKS AGO . . 2 [ ][ ] MONTHS AGO . . 3 [ ][ ] YEARS AGO . . 4 [ ][ ]
421	How many times during the last 12 months did you have sexual intercourse with this person? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF TIMES IS 95 OR MORE, RECORD '95'.	NUMBER OF TIMES . . . . . [ ][ ]	NUMBER OF TIMES . . . . . [ ][ ]	NUMBER OF TIMES . . . . . [ ][ ]
422	How old is this person?	AGE OF PARTNER [ ][ ] DON'T KNOW 98	AGE OF PARTNER [ ][ ] DON'T KNOW 98	AGE OF PARTNER [ ][ ] DON'T KNOW 98

		LAST SEXUAL PARTNER	SECOND-TO-LAST SEXUAL PARTNER	THIRD-TO-LAST SEXUAL PARTNER
422A	The last time you had sexual intercourse with this person did you or this person drink alcohol?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 423)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 423)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 424)
422B	Were you or your partner drunk at that time? IF YES: Who was drunk?	RESPONDENT ONLY . . 1 PARTNER ONLY . . . . . 2 BOTH, RESPONDENT AND PARTNER . . . . . 3 NEITHER 4	RESPONDENT ONLY . . 1 PARTNER ONLY . . . . . 2 BOTH, RESPONDENT AND PARTNER . . . . . 3 NEITHER 4	RESPONDENT ONLY . . 1 PARTNER ONLY . . . . . 2 BOTH, RESPONDENT AND PARTNER . . . . . 3 NEITHER 4
423	Apart from this person, have you had sexual intercourse with any other person in the last 12 months?	YES . . . . . 1 (GO BACK TO 416 IN NEXT COLUMN) NO . . . . . 2 (SKIP TO 425)	YES . . . . . 1 (GO BACK TO 416 IN NEXT COLUMN) NO . . . . . 2 (SKIP TO 425)	
424	In total, with how many different people have you had sexual intercourse in the last 12 months? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF PARTNERS IS 95 OR MORE, RECORD '95'.			NUMBER OF PARTNERS LAST 12 MONTHS . . [ ][ ] DON'T KNOW 98

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
425	CHECK 419 (ALL COLUMNS): AT LEAST ONE PARTNER IS A SEX WORKER ☐ ↓ NO PARTNERS ARE SEX WORKERS ☐ → 427		
426	CHECK 419 AND 417 (ALL COLUMNS): CONDOM USED WITH EVERY SEX WORKER ☐ → 430 OTHER ☐ → 431		
427	In the last 12 months, did you pay anyone in exchange for having sexual intercourse?	YES . . . . . 1 NO 2	→ 429
428	Have you ever paid anyone in exchange for having sexual intercourse?	YES . . . . . 1 NO 2	→ 431
429	The last time you paid someone in exchange for having sexual intercourse, was a condom used?	YES . . . . . 1 NO 2	→ 431
430	Was a condom used during sexual intercourse every time you paid someone in exchange for having sexual intercourse in the last 12 months?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
431	In the past 12 months have you given any gifts or other goods in order to have sex or to become sexually involved with anyone?	YES . . . . . 1 NO 2	→ 433
432	Have you ever given any gifts or other goods in order to have sex or to become sexually involved with anyone?	YES . . . . . 1 NO 2	
433	In total, with how many different people have you had sexual intercourse in your lifetime? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF PARTNERS IS 95 OR MORE, RECORD '95'.	NUMBER OF PARTNERS IN LIFETIME . . . . . ☐☐ DON'T KNOW 98	
434	CHECK 417: MOST RECENT PARTNER (FIRST COLUMN) NOT ASKED ☐ → 438 CONDOM USED ☐ ↓ NO CONDOM USED ☐ → 438		
435	You told me that a condom was used the last time you had sex. What is the brand name of the condom used at that time? IF BRAND NOT KNOWN, ASK TO SEE THE PACKAGE.	MAXIMUM CLASSIC . . . . . 01 MAXIMUM SCENTED . . . . . 02 ROUGH RIDER . . . . . 03 DUREX . . . . . 04 REALITY . . . . . 05 PUBLIC SECTOR: UNBRANDED (WHITE COLOUR FOIL) . . . . . 06 BRANDED . . . . . 07 OTHER _____ 96 (SPECIFY) DON'T KNOW . . . . . 98 DON'T KNOW 98	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
436	From where did you obtain the condom the last time? PROBE TO IDENTIFY TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . . . . 11 GOVERNMENT HEALTH CENTER . . . . . 12 GOVERNMENT HEALTH POST . . . . . 12 MOBILE CLINIC/HOSPITAL . . . . . 14 COMMUNITY BASED AGENT/FIELDWORKER . . . . . 15 OTHER PUBLIC SECTOR _____ 16 (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/CLINIC . . . . . 21 MISSION HOSPITAL/CLINIC . . . . . 22 PHARMACY . . . . . 23 PRIVATE DOCTOR . . . . . 24 MOBILE HOSPIT . . . . . 25 COMMUNITY BASED AGENT/FIELDWORKER . . . . . 26 OTHER PRIVATE MEDICAL SECTOR _____ 27 (SPECIFY) **OTHER SOURCE** SHOP . . . . . 31 CHURCH . . . . . 32 FRIEND/RELATIVE . . . . . 33 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	
437	The last time you had sex did you or your partner use any method other than a condom to avoid or prevent a pregnancy?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 439 → 440
438	The last time you had sex did you or your partner use any method to avoid or prevent a pregnancy?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 440
439	What method did you or your partner use? PROBE: Did you or your partner use any other method to prevent pregnancy? RECORD ALL MENTIONED.	FEMALE STERILIZATION . . . . . A MALE STERILIZATION . . . . . B IUD . . . . . C INJECTABLES . . . . . D IMPLANTS . . . . . E PILL . . . . . F CONDOM . . . . . G FEMALE CONDOM . . . . . H EMERGENCY CONTRACEPTION . . . . . I STANDARD DAYS METHOD . . . . . J LACTATIONAL AMENORRHEA METHOD . . . . . K RHYTHM METHOD . . . . . L WITHDRAWAL . . . . . M OTHER MODERN METHOD . . . . . X OTHER TRADITIONAL METHOD . . . . . Y	→ 501
440	Do you know of a place where you can obtain a method of family planning?	YES . . . . . 1 NO 2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
501	CHECK 401: CURRENTLY MARRIED OR LIVING WITH A PARTNER ☐ NOT CURRENTLY MARRIED AND NOT LIVING WITH A PARTNER ☐		→ 514
502	CHECK 439: MAN NOT STERILIZED OR NOT ASKED ☐ MAN STERILIZED ☐		→ 514
503	CHECK 407: ONE WIFE/ PARTNER ☐ MORE THAN ONE WIFE/ PARTNER ☐		→ 509
504	Is your (wife/partner) currently pregnant?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 507
505	Now I have some questions about the future. After the child you and your (wife/partner) are expecting now, would you like to have another child, or would you prefer not to have any more children?	HAVE ANOTHER CHILD . . . . . 1 NO MORE . . . . . 2 UNDECIDED/DON'T KNOW 8	→ 514
506	After the birth of the child you are expecting now, how long would you like to wait before the birth of another child?	MONTHS . . . . . 1 ☐☐ YEARS . . . . . 2 ☐☐ SOONNOW . . . . . 993 OTHER _____ 996 (SPECIFY) DON'T KNOW 998	→ 514
507	CHECK 208: HAS FATHERED CHILDREN ☐ a) Now I have some questions about the future. Would you like to have another child, or would you prefer not to have any more children? HAS NOT FATHERED CHILDREN ☐ b) Now I have some questions about the future. Would you like to have a child, or would you prefer not to have any children?	HAVE (A/ANOTHER) CHILD . . . . . 1 NO MORE/NONE . . . . . 2 SAYS COUPLE CAN'T GET PREGNANT . . . . . 3 WIFE/PARTNER STERILIZED . . . . . 4 UNDECIDED/DON'T KNOW 8	→ 514
508	CHECK 208: HAS FATHERED CHILDREN ☐ a) How long would you like to wait from now before the birth of another child? HAS NOT FATHERED CHILDREN ☐ b) How long would you like to wait from now before the birth of a child?	MONTHS . . . . . 1 ☐☐ YEARS . . . . . 2 ☐☐ SOONNOW . . . . . 993 SAYS COUPLE CAN'T GET PREGNANT . . . . . 994 OTHER _____ 996 (SPECIFY) DON'T KNOW 998	→ 514
509	Are any of your (wives/partners) currently pregnant?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 512

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
510	Now I have some questions about the future. After the (child/children) you and your (wives/partners) are expecting now, would you like to have another child, or would you prefer not to have any more children?	HAVE ANOTHER CHILD . . . . . 1 NO MORE . . . . . 2 UNDECIDED/DON'T KNOW 8	→ 514
511	After the birth of the child you are expecting now, how long would you like to wait before the birth of another child?	MONTHS . . . . . 1 ☐☐ YEARS . . . . . 2 ☐☐ SOON/NOW . . . . . 993 OTHER _____ 996 (SPECIFY) DON'T KNOW 998	→ 514
512	CHECK 208: HAS FATHERED CHILDREN ☐ → a) Now I have some questions about the future. Would you like to have another child, or would you prefer not to have any more children? HAS NOT FATHERED CHILDREN ☐ → b) Now I have some questions about the future. Would you like to have a child, or would you prefer not to have any children?	HAVE (A/ANOTHER) CHILD . . . . . 1 NO MORE/NONE . . . . . 2 SAYS COUPLE CAN'T GET PREGNANT . . . . . 3 (WIFE/WIVES/PARTNER(S)) STERILIZED . . . . . 4 UNDECIDED/DON'T KNOW 8	→ 514
513	CHECK 208: HAS FATHERED CHILDREN ☐ → a) How long would you like to wait from now before the birth of another child? HAS NOT FATHERED CHILDREN ☐ → b) How long would you like to wait from now before the birth of a child?	MONTHS . . . . . 1 ☐☐ YEARS . . . . . 2 ☐☐ SOON/NOW . . . . . 993 SAYS COUPLE CAN'T GET PREGNANT . . . . . 994 OTHER _____ 996 (SPECIFY) DON'T KNOW 998	
514	CHECK 203 AND 205: HAS LIVING CHILDREN ☐ → a) If you could go back to the time you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be? NO LIVING CHILDREN ☐ → b) If you could choose exactly the number of children to have in your whole life, how many would that be? PROBE FOR A NUMERIC RESPONSE.	NONE . . . . . 00 → 601 NUMBER . . . . . ☐☐ OTHER _____ 96 → 601 (SPECIFY)	
515	How many of these children would you like to be boys, how many would you like to be girls and for how many would it not matter if it's a boy or a girl?	BOYS GIRLS EITHER NUMBER . . ☐☐ ☐☐ ☐☐ OTHER _____ 96 (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
601	Have you done any work in the last seven days?	YES . . . . . 1 NO 2	→ 604
602	Although you did not work in the last seven days, do you have any job or business from which you were absent for leave, illness, vacation, or any other such reason?	YES . . . . . 1 NO 2	→ 604
603	Have you done any work in the last 12 months?	YES . . . . . 1 NO 2	→ 607
604	What is your occupation, that is, what kind of work do you mainly do?	_____ _____ _____ ☐☐	
605	Do you usually work throughout the year, or do you work seasonally, or only once in a while?	THROUGHOUT THE YEAR . . . . . 1 SEASONALLY/PART OF THE YEAR . . . . . 2 ONCE IN A WHILE 3	
606	Are you paid in cash or kind for this work or are you not paid at all?	CASH ONLY . . . . . 1 CASH AND KIND . . . . . 2 IN KIND ONLY . . . . . 3 NOT PAID 4	
607	CHECK 401: CURRENTLY MARRIED OR LIVING WITH A PARTNER ☐ ↓ NOT CURRENTLY MARRIED AND NOT LIVING WITH A PARTNER ☐ →		612
608	CHECK 606: CODE '1' OR '2' CIRCLED ☐ ↓ OTHER ☐ →		610
609	Who usually decides how the money you earn will be used: you, your (wife/partner), or you and your (wife/partner) jointly?	RESPONDENT . . . . . 1 WIFE/PARTNER . . . . . 2 RESPONDENT AND WIFE/PARTNER JOINTLY . . 3 OTHER _____ 6 (SPECIFY)	
610	Who usually makes decisions about health care for yourself: you, your (wife/partner), you and your (wife/partner) jointly, or someone else?	RESPONDENT . . . . . 1 WIFE/PARTNER . . . . . 2 RESPONDENT AND WIFE/PARTNER JOINTLY . . 3 SOMEONE ELSE . . . . . 4 OTHER 6	
611	Who usually makes decisions about making major household purchases?	RESPONDENT . . . . . 1 WIFE/PARTNER . . . . . 2 RESPONDENT AND WIFE/PARTNER JOINTLY . . 3 SOMEONE ELSE . . . . . 4 OTHER 6	
611A	Who usually makes decisions about making purchases for daily household needs?	RESPONDENT . . . . . 1 WIFE/PARTNER . . . . . 2 RESPONDENT AND WIFE/PARTNER JOINTLY . . 3 SOMEONE ELSE . . . . . 4 OTHER 6	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
612	Do you own this or any other house either alone or jointly with someone else?	ALONE ONLY . . . . . 1 JOINTLY ONLY . . . . . 2 BOTH ALONE AND JOINTLY . . . . . 3 DOES NOT OWN 4	→ 615
613	Do you have a title deed for any house you own?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 615
614	Is your name on the title deed?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
615	Do you own any agricultural or non-agricultural land either alone or jointly with someone else?	ALONE ONLY . . . . . 1 JOINTLY ONLY . . . . . 2 BOTH ALONE AND JOINTLY . . . . . 3 DOES NOT OWN 4	→ 618
616	Do you have a title deed for any land you own?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 618
617	Is your name on the title deed?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
618	In your opinion, is a husband justified in hitting or beating his wife in the following situations:	YES NO DK	
	a) If she goes out without telling him?	a) GOES OUT 1 2 8	
	b) If she neglects the children?	b) NEGLECTS CHILDREN . . 1 2 8	
	c) If she argues with him?	c) ARGUES 1 2 8	
	d) If she refuses to have sex with him?	d) REFUSES SEX 1 2 8	
	e) If she burns the food?	e) BURNS FOOD 1 2 8	
	f) If she makes a major household decision without consulting him?	f) MAJOR DECISION 1 2 8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
701	Now I would like to talk about something else. Have you ever heard of HIV or AIDS?	YES . . . . . 1 NO 2	→ 727
702	HIV is the virus that can lead to AIDS. Can people reduce their chance of getting HIV by having just one uninfected sex partner who has no other sex partners?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
703	Can people get HIV from mosquito bites?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
704	Can people reduce their chance of getting HIV by using a condom every time they have sex?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
705	Can people get HIV by sharing food with a person who has HIV?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
705A	Can people reduce their chance of getting HIV by not having sexual intercourse at all?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
706	Can people get HIV because of witchcraft or other supernatural means?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
707	Is it possible for a healthy-looking person to have HIV?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
708	Can HIV be transmitted from a mother to her baby: a) During pregnancy? b) During delivery? c) By breastfeeding?	YES NO DK a) DURING PREGNANCY . . 1 2 8 b) DURING DELIVERY . . . . . 1 2 8 c) BREASTFEEDING 1 2 8	
709	CHECK 708: AT LEAST ONE 'YES' ☐ ↓ OTHER ☐ →		711
710	Are there any special drugs that a doctor or a nurse can give to a woman infected with HIV to reduce the risk of transmission to the baby?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
711	**CHECK FOR PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.**		
712	I don't want to know the results, but have you ever been tested for HIV?	YES . . . . . 1 NO 2	→ 716
713	How many months ago was your most recent HIV test?	MONTHS AGO . . . . . ☐☐ TWO OR MORE YEARS 95	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
714	I don't want to know the results, but did you get the results of the test?	YES . . . . . 1 NO 2	→ 715
714A	Did you disclose your results to any of the following: a) (Wife/Partner)? b) Family member? c) Religious leader? d) Friend? e) Any other?	YES NO DK a) HUSBAND/PARTNER . . 1 2 8 b) FAMILY MEMBER . . . . . 1 2 8 c) RELIGIOUS LEADER . . 1 2 8 d) FRIEND . . . . . 1 2 8 e) OTHER 1 2 8	
715	Where was the test done? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . . . . 11 GOVERNMENT HEALTH CENTER . . . . . 12 GOVERNMENT HEALTH POST 13 STAND-ALONE HTC CENTER . . . . . 14 FAMILY PLANNING CLINIC . . . . . 15 MOBILE HTC SERVICES . . . . . 16 OTHER PUBLIC SECTOR _____ 17 (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/CLINIC/ PRIVATE DOCTOR . . . . . 21 MISSION HOSPITAL/CLINIC . . . . . 22 STAND-ALONE HTC CENTER . . . . . 23 PHARMACY . . . . . 24 MOBILE HTC SERVICES . . . . . 25 OTHER PRIVATE MEDICAL SECTOR _____ 26 (SPECIFY) **OTHER SOURCE** HOME . . . . . 31 WORKPLACE . . . . . 32 CORRECTIONAL FACILITY . . . . . 33 OTHER _____ 96 (SPECIFY)	→ 718
716	Do you know of a place where people can go to get an HIV test?	YES . . . . . 1 NO 2	→ 718
717	Where is that? Any other place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . . . . A GOVERNMENT HEALTH CENTER . . . . . B GOVERNMENT HEALTH POST . . . . . C STAND-ALONE HTC CENTER . . . . . D FAMILY PLANNING CLINIC . . . . . E MOBILE HTC SERVICES . . . . . F OTHER PUBLIC SECTOR _____ G (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/CLINIC/ PRIVATE DOCTOR . . . . . H MISSION HOSPITAL/CLINIC . . . . . I STAND-ALONE HTC CENTER . . . . . J PHARMACY . . . . . K MOBILE HTC SERVICES . . . . . L OTHER PRIVATE MEDICAL SECTOR _____ M (SPECIFY) OTHER _____ X (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
718	Have you heard of test kits people can use to test themselves for HIV?	YES . . . . . 1 NO 2	→ 720
719	Have you ever tested yourself for HIV using a self-test kit?	YES . . . . . 1 NO 2	
720	Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had HIV?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/NOT SURE/DEPENDS 8	
721	Do you think children living with HIV should be allowed to attend school with children who do not have HIV?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/NOT SURE/DEPENDS 8	
722	Do you think people hesitate to take an HIV test because they are afraid of how other people will react if the test result is positive for HIV?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/NOT SURE/DEPENDS 8	
723	Do people talk badly about people living with HIV, or who are thought to be living with HIV?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/NOT SURE/DEPENDS 8	
724	Do people living with HIV, or thought to be living with HIV, lose the respect of other people?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/NOT SURE/DEPENDS 8	
725	Do you agree or disagree with the following statement: I would be ashamed if someone in my family had HIV.	AGREE . . . . . 1 DISAGREE . . . . . 2 DON'T KNOW/NOT SURE/DEPENDS 8	
726	Do you fear that you could get HIV if you come into contact with the saliva of a person living with HIV?	YES . . . . . 1 NO . . . . . 2 SAYS HE HAS HIV . . . . . 3 DON'T KNOW/NOT SURE/DEPENDS 8	
727	CHECK 701: HEARD ABOUT HIV OR AIDS ↓ a) Apart from HIV, have you heard about other infections that can be transmitted through sexual contact? NOT HEARD ABOUT HIV OR AIDS ↓ b) Have you heard about infections that can be transmitted through sexual contact?	YES . . . . . 1 NO 2	
728	CHECK 414: HAS HAD SEXUAL INTERCOURSE ↓ NEVER HAD SEXUAL INTERCOURSE →		→ 736
729	CHECK 727: HEARD ABOUT OTHER SEXUALLY TRANSMITTED INFECTIONS? YES ↓ NO →		→ 731
730	Now I would like to ask you some questions about your health in the last 12 months. During the last 12 months, have you had a disease which you got through sexual contact?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
731	Sometimes men experience an abnormal discharge from their penis. During the last 12 months, have you had an abnormal discharge from your penis?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
732	Sometimes men have a sore or ulcer near their penis. During the last 12 months, have you had a sore or ulcer on or near your penis?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
733	CHECK 730, 731 AND 732: HAS HAD AN INFECTION (ANY 'YES') ↓ HAS NOT HAD AN INFECTION OR DOES NOT KNOW →		736
734	The last time you had (PROBLEM FROM 730/731/732), did you seek any kind of advice or treatment?	YES . . . . . 1 NO . . . . . 2 →	736
735	Where did you go? Any other place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . . . . A GOVERNMENT HEALTH CENTER . . . . . B GOVERNMENT HEALTH POST . . . . . C STAND-ALONE HTC CENTER . . . . . D FAMILY PLANNING CLINIC . . . . . E MOBILE HTC SERVICES . . . . . F OTHER PUBLIC SECTOR _____ G (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/CLINIC/ PRIVATE DOCTOR . . . . . H MISSION HOSPITAL/CLINIC . . . . . I STAND-ALONE HTC CENTER . . . . . J PHARMACY . . . . . K MOBILE HTC SERVICES . . . . . L OTHER PRIVATE MEDICAL SECTOR _____ M (SPECIFY) **OTHER SOURCE** SHOP . . . . . N OTHER _____ X (SPECIFY)	
736	If a wife knows her husband has a disease that she can get during sexual intercourse, is she justified in asking that they use a condom when they have sex?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
737	Is a wife justified in refusing to have sex with her husband when she knows he has sex with other women?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
801	Some men are circumcised, that is, the foreskin is completely removed from the penis. Are you circumcised?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 805
802	How old were you when you got circumcised?	AGE IN COMPLETED YEARS . . . . . [ ][ ] DURING CHILDHOOD (<5 YEARS) . . . . . 95 DON'T KNOW 98	
803	Who performed your circumcision?	TRADITIONAL PRACTITIONER/FAMILY/FRIEN . . 1 HEALTH WORKER/PROFESSIONAL . . . . . 2 OTHER . . . . . 3 DON'T KNOW 8	
804	Where was it performed?	HEALTH FACILITY . . . . . 1 HOME OF A HEALTH WORKER/PROFESSION . . 2 CIRCUMCISION DONE AT HOME . . . . . 3 RITUAL SITE . . . . . 4 OTHER HOME/PLACE . . . . . 5 DON'T KNOW 8	
804A	Why were you circumcised? RECORD ALL MENTIONED.	TRADITIONAL CUSTOM . . . . . A TREATMENT FOR DISEASE . . . . . B HYGIENE . . . . . C PREVENTION FROM A DISEASE . . . . . D INCREASE SEXUAL PLEASURE . . . . . E OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	
805	Now I would like to ask you some other questions relating to health matters. Have you had an injection for any reason in the last 12 months? IF YES: How many injections have you had? IF NUMBER OF INJECTIONS IS 90 OR MORE, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'. IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.	NUMBER OF INJECTIONS . . . . . [ ][ ] NONE 00	→ 808
806	Among these injections, how many were administered by a doctor, a nurse, a pharmacist, a dentist, or any other health worker? IF NUMBER OF INJECTIONS IS 90 OR MORE, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'. IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.	NUMBER OF INJECTIONS . . . . . [ ][ ] NONE 00	→ 808
807	The last time you got an injection from a health worker, did he/she take the syringe and needle from a new, unopened package?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
808	Do you currently smoke tobacco every day, some days, or not at all?	EVERY DAY . . . . . 1 SOME DAYS . . . . . 2 NOT AT ALL 3	→ 811 → 810
809	In the past, have you smoked tobacco every day?	YES . . . . . 1 NO 2	→ 812
810	In the past, have you ever smoked tobacco every day, some days, or not at all?	EVERY DAY . . . . . 1 SOME DAYS . . . . . 2 NOT AT ALL 3	→ 813

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
811	On average, how many of the following products do you currently smoke each day? Also, let me know if you use the product, but not every day. IF RESPONDENT REPORTS USING THE PRODUCT BUT NOT EVERY DAY, RECORD '888'. IF THE PRODUCT IS NOT USED AT ALL, RECORD '000'. a) Manufactured cigarettes? b) Hand-rolled cigarettes? c) Pipes full of tobacco? d) Cigars, or cigarillos? e) Number of water pipe (shisha) sessions? f) Any others? _____ (SPECIFY)	NUMBER DAILY a) MANUFACTURED CIGARETTES . . . . . [ ][ ][ ] b) HAND-ROLLED CIGARETTES . . . . . [ ][ ][ ] d) PIPES FULL OF TOBACCO . . . . . [ ][ ][ ] e) CIGARS OR CIGARILLOS . . . . . [ ][ ][ ] f) NUMBER OF WATER PIPE SESSIONS . . . . . [ ][ ][ ] g) OTHERS . . . . . [ ][ ][ ]	→ 813
812	On average, how many of the following products do you currently smoke each week? Also, let me know if you use the product, but not every week. IF RESPONDENT REPORTS USING THE PRODUCT BUT NOT EVERY WEEK, RECORD '888'. IF THE PRODUCT IS NOT USED AT ALL, RECORD '000'. a) Manufactured cigarettes? b) Hand-rolled cigarettes? c) Pipes full of tobacco? d) Cigars, or cigarillos? e) Number of water pipe (shisha) sessions? f) Any others?	NUMBER WEEKLY a) MANUFACTURED CIGARETTES . . . . . [ ][ ][ ] b) HAND-ROLLED CIGARETTES . . . . . [ ][ ][ ] c) PIPES FULL OF TOBACCO . . . . . [ ][ ][ ] d) CIGARS OR CIGARILLOS . . . . . [ ][ ][ ] e) NUMBER OF WATER PIPE SESSIONS . . . . . [ ][ ][ ] f) OTHERS . . . . . [ ][ ][ ]	
813	Do you currently use smokeless tobacco every day, some days, or not at all?	EVERY DAY . . . . . 1 SOME DAYS . . . . . 2 → 815 NOT AT ALL . . . . . 3 → 816	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
814	On average, how many times a day do you use the following products? Also, let me know if you use the product, but not every day. IF RESPONDENT REPORTS USING THE PRODUCT BUT NOT EVERY DAY, RECORD '888'. IF THE PRODUCT IS NOT USED AT ALL, RECORD '000'. a) Snuff, by mouth? b) Snuff, by nose? c) Chewing tobacco? d) Any others? _____ (SPECIFY)	TIMES DAILY a) SNUFF, BY MOUTH . . . . . [ ][ ][ ] b) SNUFF, BY NOSE . . . . . [ ][ ][ ] c) CHEWING TOBACCO . . . . . [ ][ ][ ] d) ANY OTHERS . . . . . [ ][ ][ ]	→ 816
815	On average, how many times a week do you use the following products? Also, let me know if you use the product, but not every week. IF RESPONDENT REPORTS USING THE PRODUCT BUT NOT EVERY WEEK, RECORD '888'. IF THE PRODUCT IS NOT USED AT ALL, RECORD '000'. a) Snuff, by mouth? b) Snuff, by nose? c) Chewing tobacco? d) Any others?	TIMES WEEKLY a) SNUFF, BY MOUTH . . . . . [ ][ ][ ] b) SNUFF, BY NOSE . . . . . [ ][ ][ ] c) CHEWING TOBACCO . . . . . [ ][ ][ ] e) ANY OTHERS . . . . . [ ][ ][ ]	
816	Are you covered by any health insurance or health scheme?	YES . . . . . 1 NO 2	→ 817A
817	What type of health insurance or health scheme are you covered by? RECORD ALL MENTIONED.	MUTUAL HEALTH ORGANIZATION/ COMMUNITY-BASED HEALTH INSURANCE . . . . . A HEALTH INSURANCE THROUGH EMPLOYER . . . . . B SOCIAL SECURITY . . . . . C OTHER PRIVATELY PURCHASED COMMERCIAL HEALTH INSURANCE . . . . . D OTHER _____ (SPECIFY) X	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
817A	Have you ever undergone a surgical operation in the past 5 years?	YES . . . . . 1 NO 2	→ 817C
817B	What type of operation(s) were they? RECORD ALL MENTIONED.	HERNIA OPERATION . . . . . A HYDROCELE OPERATION . . . . . B LAPAROTOMY (Cutting open the abdomen) . . . . . C LUMP REMOVAL . . . . . D ABSCESS DRAINAGE . . . . . E WOUND CLOSURE . . . . . F OPEN FRACTURE REPAIR . . . . . G OTHER _____ (specify) X	
817C	In the last 5 years has a doctor or another healthcare worker told you that you might need (a/another) operation?	YES . . . . . 1 NO 2	→ 818
817D	Did you undergo the surgery?	YES . . . . . 1 NO 2	→ 818
817E	Why did you not undergo it? RECORD ALL MENTIONED.	I COULD NOT REACH THE DOCTOR . . . . . A I COULD NOT AFFORD THE OPERATION . . . . . B I COULD NOT AFFORD TO GET TO THE HOSPITAL . . . . . C I COULD NOT AFFORD THE TIME OFF WORK . . . . . D IT WAS TOO FAR TO GET TO THE HOSPITAL . . . . . E I DID NOT TRUST THE OPERATION WOULD MAKE BE BETTER . . . . . F FEAR OF CARE . . . . . G OUT OF SHAME . . . . . H MY SPOUSE/FAMILY WOULD NOT LET ME GO I OTHER _____ (specify) X	
818	RECORD THE TIME.	HOURS . . . . . ☐☐ MINUTES . . . . . ☐☐	

INTERVIEWER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING INTERVIEW

COMMENTS ABOUT INTERVIEW:

COMMENTS ON SPECIFIC QUESTIONS:

ANY OTHER COMMENTS:

SUPERVISOR'S OBSERVATIONS

EDITOR'S OBSERVATIONS

FORMATTING DATE: 09 Jun 2015
ENGLISH LANGUAGE: June 13 2018

2018 ZAMBIA DEMOGRAPHIC AND HEALTH SURVEY
BIOMARKER QUESTIONNAIRE
ZAMBIA
MINISTRY OF HEALTH/CENTRAL STATISTICAL OFFICE

IDENTIFICATION

PLACE NAME _____

NAME OF HOUSEHOLD HEAD _____

CLUSTER NUMBER . . . . . | | | | |

HOUSEHOLD NUMBER . . . . . | | | | |

FIELDWORKER VISITS

	1	2	3	FINAL VISIT
DATE				DAY
FIELDWORKER'S NAME				MONTH YEAR
NEXT VISIT: DATE				TOTAL NUMBER OF VISITS
TIME				

NOTES:

_____

_____

_____

_____

_____

TOTAL ELIGIBLE WOMEN

TOTAL ELIGIBLE MEN

TOTAL ELIGIBLE CHILDREN

LANGUAGE OF QUESTIONNAIRE** 0 1

LANGUAGE OF INTERVIEW**

NATIVE LANGUAGE OF RESPONDENT**

TRANSLATOR (YES = 1, NO = 2)

LANGUAGE OF QUESTIONNAIRE** **ENGLISH**

**LANGUAGE CODES:

01 ENGLISH	04 LOZI	07 NYANJA
02 BEMBA	05 LUNDA	08 TONGA
03 KAONDE	06 LUVALE	

SUPERVISOR

_____
NAME

NUMBER

WEIGHT, HEIGHT AND HEMOGLOBIN MEASUREMENT FOR CHILDREN AGE 0-5

101	**INTERVIEWER**: USE THE INTERVIEWER'S MENU AND SELECT THE APPROPRIATE OPTION TO LIST ALL CHILDREN AGE 0-5 ELIGIBLE FOR BIOMARKER TESTING. RECORD THE COMPLETE NAME, AGE AND THE LINE NUMBER AS THEY APPEAR IN THE REPORT ON YOUR TABLET. LIST EACH CHILD IN THE SAME ORDER SHOWN IN THE REPORT. IF MORE THAN SIX CHILDREN, USE ADDITIONAL QUESTIONNAIRE(S). WRITE THE NAME OF EACH ELIGIBLE CHILD ON EACH SUBSEQUENT PAGES.			
		CHILD 1	CHILD 2	CHILD 3
102	FROM TABLET'S REPORT WRITE CHILD'S COMPLETE FIRST/LAST NAME, AGE, AND LINE NUMBER	NAME _____ AGE . . . . . ☐☐ LINE NUMBER . . . . . ☐☐	NAME _____ AGE . . . . . ☐☐ LINE NUMBER . . . . . ☐☐	NAME _____ AGE . . . . . ☐☐ LINE NUMBER . . . . . ☐☐
103	**BIOMARKER:** ASK: What is (NAME)'s date of birth?	DAY . . . . . ☐☐ MONTH . . . . . ☐☐ YEAR . . . ☐☐☐☐	DAY . . . . . ☐☐ MONTH . . . . . ☐☐ YEAR . . . ☐☐☐☐	DAY . . . . . ☐☐ MONTH . . . . . ☐☐ YEAR . . . ☐☐☐☐
104	CHECK 103: CHILD BORN IN 2013-2018?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 114)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 114)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 114)
105	WEIGHT IN KILOGRAMS.	KG. . . . ☐☐.☐☐ NOT PRESENT . . . . 9994 REFUSED . . . . . 9995 OTHER 9996	KG. . . . ☐☐.☐☐ NOT PRESENT . . . . 9994 REFUSED . . . . . 9995 OTHER 9996	KG. . . . ☐☐.☐☐ NOT PRESENT . . . . 9994 REFUSED . . . . . 9995 OTHER 9996
106	HEIGHT IN CENTIMETERS.	CM. . . . ☐☐☐.☐ NOT PRESENT . . . . 9994 REFUSED . . . . . 9995 OTHER . . . . . 9996 (SKIP TO 108)	CM. . . . ☐☐☐.☐ NOT PRESENT . . . . 9994 REFUSED . . . . . 9995 OTHER . . . . . 9996 (SKIP TO 108)	CM. . . . ☐☐☐.☐ NOT PRESENT . . . . 9994 REFUSED . . . . . 9995 OTHER . . . . . 9996 (SKIP TO 108)
107	MEASURED LYING DOWN OR STANDING UP?	LYING DOWN . . . . . 1 STANDING UP 2	LYING DOWN . . . . . 1 STANDING UP 2	LYING DOWN . . . . . 1 STANDING UP 2
108	MEASURER: ENTER YOUR FIELDWORKER NUMBER.	☐☐☐☐ FIELDWORKER NUMBER	☐☐☐☐ FIELDWORKER NUMBER	☐☐☐☐ FIELDWORKER NUMBER

WEIGHT, HEIGHT AND HEMOGLOBIN MEASUREMENT FOR CHILDREN AGE 0-5

101	**INTERVIEWER**: USE THE INTERVIEWER'S MENU AND SELECT THE APPROPRIATE OPTION TO LIST ALL CHILDREN AGE 0-5 ELIGIBLE FOR BIOMARKER TESTING. RECORD THE COMPLETE NAME, AGE AND THE LINE NUMBER AS THEY APPEAR IN THE REPORT ON YOUR TABLET. LIST EACH CHILD IN THE SAME ORDER SHOWN IN THE REPORT. IF MORE THAN SIX CHILDREN, USE ADDITIONAL QUESTIONNAIRE(S). WRITE THE NAME OF EACH ELIGIBLE CHILD ON EACH SUBSEQUENT PAGES.			
		CHILD 1	CHILD 2	CHILD 3
102	FROM TABLET'S REPORT WRITE CHILD'S COMPLETE FIRST/LAST NAME, AGE, AND LINE NUMBER	NAME _____ AGE . . . . . ☐☐ LINE NUMBER . . . . . ☐☐	NAME _____ AGE . . . . . ☐☐ LINE NUMBER . . . . . ☐☐	NAME _____ AGE . . . . . ☐☐ LINE NUMBER . . . . . ☐☐
109	CHECK 103: CHILD AGE 0-5 MONTHS, I.E., WAS CHILD BORN IN MONTH OF INTERVIEW OR 5 PREVIOUS MONTHS?	0-5 MONTHS . . . . . 1 (SKIP TO 114) OLDER 2	0-5 MONTHS . . . . . 1 (SKIP TO 114) OLDER 2	0-5 MONTHS . . . . . 1 (SKIP TO 114) OLDER 2
110	WRITE THE NAME OF THE PARENT/OTHER ADULT RESPONSIBLE FOR THE CHILD	NAME OF PARENT/ADULT RESPONSIBLE NAME_____	NAME OF PARENT/ADULT RESPONSIBLE NAME_____	NAME OF PARENT/ADULT RESPONSIBLE NAME_____
111	ASK CONSENT FOR ANEMIA TEST FROM PARENT/OTHER ADULT.	As part of this survey, we are asking people all over the country to take an anemia test. Anemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat anemia. We ask that all children born in 2013 or later take part in the anemia testing and give a few drops of blood from a finger or heel. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The blood will be tested for anemia immediately, and the result will be told to you right away. The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team. Do you have any questions? You can say yes or no. It is up to you to decide. Will you allow (NAME OF CHILD) to participate in the anemia test?		
112	CIRCLE THE CODE, SIGN YOUR NAME, AND ENTER YOUR FIELDWORKER NUMBER.	GRANTED . . . . . 1 _____ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) ☐☐☐☐ REFUSED . . . . . 2 NOT PRESENT/OTHER . 3 (SKIP TO 114)	GRANTED . . . . . 1 _____ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) ☐☐☐☐ REFUSED . . . . . 2 NOT PRESENT/OTHER . 3 (SKIP TO 114)	GRANTED . . . . . 1 _____ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) ☐☐☐☐ REFUSED . . . . . 2 NOT PRESENT/OTHER . 3 (SKIP TO 114)
113	RECORD HEMOGLOBIN LEVEL HERE AND IN THE ANEMIA PAMPHLET.	G/DL . . . . ☐☐.☐ REFUSED . . . . . 995 OTHER 996	G/DL . . . . ☐☐.☐ REFUSED . . . . . 995 OTHER 996	G/DL . . . . ☐☐.☐ REFUSED . . . . . 995 OTHER 996
114	GO BACK TO 103 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF THE NEXT PAGE; IF NO MORE CHILDREN, GO TO 201.			

101	**INTERVIEWER**: USE THE INTERVIEWER'S MENU AND SELECT THE APPROPRIATE OPTION TO LIST ALL CHILDREN AGE 0-5 ELIGIBLE FOR BIOMARKER TESTING. RECORD THE COMPLETE NAME, AGE AND THE LINE NUMBER AS THEY APPEAR IN THE REPORT ON YOUR TABLET. LIST EACH CHILD IN THE SAME ORDER SHOWN IN THE REPORT. IF MORE THAN SIX CHILDREN, USE ADDITIONAL QUESTIONNAIRE(S). WRITE THE NAME OF EACH ELIGIBLE CHILD ON EACH SUBSEQUENT PAGES.			
		CHILD 4	CHILD 5	CHILD 6
102	FROM TABLET'S REPORT WRITE CHILD'S COMPLETE FIRST/LAST NAME, AGE, AND LINE NUMBER	NAME _____ AGE . . . . . ☐☐ LINE NUMBER . . . . . ☐☐	NAME _____ AGE . . . . . ☐☐ LINE NUMBER . . . . . ☐☐	NAME _____ AGE . . . . . ☐☐ LINE NUMBER . . . . . ☐☐
103	**BIOMARKER:** ASK: What is (NAME)'s date of birth?	DAY . . . . . ☐☐ MONTH . . . . . ☐☐ YEAR . . . ☐☐☐☐	DAY . . . . . ☐☐ MONTH . . . . . ☐☐ YEAR . . . ☐☐☐☐	DAY . . . . . ☐☐ MONTH . . . . . ☐☐ YEAR . . . ☐☐☐☐
104	CHECK 103: CHILD BORN IN 2013-2018?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 114)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 114)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 114)
105	WEIGHT IN KILOGRAMS.	KG. . . . ☐☐.☐☐ NOT PRESENT . . . . 9994 REFUSED . . . . . 9995 OTHER 9996	KG. . . . ☐☐.☐☐ NOT PRESENT . . . . 9994 REFUSED . . . . . 9995 OTHER 9996	KG. . . . ☐☐.☐☐ NOT PRESENT . . . . 9994 REFUSED . . . . . 9995 OTHER 9996
106	HEIGHT IN CENTIMETERS.	CM. . . . ☐☐☐.☐ NOT PRESENT . . . . 9994 REFUSED . . . . . 9995 OTHER . . . . . 9996 (SKIP TO 108)	CM. . . . ☐☐☐.☐ NOT PRESENT . . . . 9994 REFUSED . . . . . 9995 OTHER . . . . . 9996 (SKIP TO 108)	CM. . . . ☐☐☐.☐ NOT PRESENT . . . . 9994 REFUSED . . . . . 9995 OTHER . . . . . 9996 (SKIP TO 108)
107	MEASURED LYING DOWN OR STANDING UP?	LYING DOWN . . . . . 1 STANDING UP 2	LYING DOWN . . . . . 1 STANDING UP 2	LYING DOWN . . . . . 1 STANDING UP 2
108	MEASURER: ENTER YOUR FIELDWORKER NUMBER.	☐☐☐☐ FIELDWORKER NUMBER	☐☐☐☐ FIELDWORKER NUMBER	☐☐☐☐ FIELDWORKER NUMBER

WEIGHT, HEIGHT AND HEMOGLOBIN MEASUREMENT FOR CHILDREN AGE 0-5

101	**INTERVIEWER**: USE THE INTERVIEWER'S MENU AND SELECT THE APPROPRIATE OPTION TO LIST ALL CHILDREN AGE 0-5 ELIGIBLE FOR BIOMARKER TESTING. RECORD THE COMPLETE NAME, AGE AND THE LINE NUMBER AS THEY APPEAR IN THE REPORT ON YOUR TABLET. LIST EACH CHILD IN THE SAME ORDER SHOWN IN THE REPORT. IF MORE THAN SIX CHILDREN, USE ADDITIONAL QUESTIONNAIRE(S). WRITE THE NAME OF EACH ELIGIBLE CHILD ON EACH SUBSEQUENT PAGES.			
		CHILD 4	CHILD 5	CHILD 6
102	FROM TABLET'S REPORT WRITE CHILD'S COMPLETE FIRST/LAST NAME, AGE, AND LINE NUMBER	NAME _____ AGE . . . . . ☐☐ LINE NUMBER . . . . . ☐☐	NAME _____ AGE . . . . . ☐☐ LINE NUMBER . . . . . ☐☐	NAME _____ AGE . . . . . ☐☐ LINE NUMBER . . . . . ☐☐
109	CHECK 103: CHILD AGE 0-5 MONTHS, I.E., WAS CHILD BORN IN MONTH OF INTERVIEW OR 5 PREVIOUS MONTHS?	0-5 MONTHS . . . . . 1 (SKIP TO 114) OLDER 2	0-5 MONTHS . . . . . 1 (SKIP TO 114) OLDER 2	0-5 MONTHS . . . . . 1 (SKIP TO 114) OLDER 2
110	WRITE THE NAME OF THE PARENT/OTHER ADULT RESPONSIBLE FOR THE CHILD	NAME OF PARENT/ADULT RESPONSIBLE NAME_____	NAME OF PARENT/ADULT RESPONSIBLE NAME_____	NAME OF PARENT/ADULT RESPONSIBLE NAME_____
111	ASK CONSENT FOR ANEMIA TEST FROM PARENT/OTHER ADULT.	As part of this survey, we are asking people all over the country to take an anemia test. Anemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat anemia. We ask that all children born in 2013 or later take part in the anemia testing and give a few drops of blood from a finger or heel. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The blood will be tested for anemia immediately, and the result will be told to you right away. The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team. Do you have any questions? You can say yes or no. It is up to you to decide. Will you allow (NAME OF CHILD) to participate in the anemia test?		
112	CIRCLE THE CODE, SIGN YOUR NAME, AND ENTER YOUR FIELDWORKER NUMBER.	GRANTED . . . . . 1 _____ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) ☐☐☐☐ REFUSED . . . . . 2 NOT PRESENT/OTHER . 3 (SKIP TO 114)	GRANTED . . . . . 1 _____ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) ☐☐☐☐ REFUSED . . . . . 2 NOT PRESENT/OTHER . 3 (SKIP TO 114)	GRANTED . . . . . 1 _____ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) ☐☐☐☐ REFUSED . . . . . 2 NOT PRESENT/OTHER . 3 (SKIP TO 114)
113	RECORD HEMOGLOBIN LEVEL HERE AND IN THE ANEMIA PAMPHLET.	G/DL . . . . ☐☐.☐ REFUSED . . . . . 995 OTHER 996	G/DL . . . . ☐☐.☐ REFUSED . . . . . 995 OTHER 996	G/DL . . . . ☐☐.☐ REFUSED . . . . . 995 OTHER 996
114	GO BACK TO 103 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF AN ADDITIONAL QUESTIONNAIRE; IF NO MORE CHILDREN, GO TO 201.			

HEMOGLOBIN MEASUREMENT AND HIV TESTING FOR WOMEN AGE 15-49

201	**INTERVIEWER:** USE THE APPROPRIATE OPTION FROM THE INTERVIEWER'S MENU TO LIST ALL WOMEN AGE 15-49 ELIGIBLE FOR BIOMARKER TESTING. IN EACH COLUMN, WRITE THE COMPLETE NAME, AGE AND LINE NUMBER AS THEY APPEAR IN THE REPORT ON YOUR TABLET. ALSO CIRCLE THE APPROPRIATE CODE FOR QUESTION 208. IF THE WOMAN'S AGE IS 15-17, COMPLETE QUESTION 209 USING THE MARITAL STATUS INFORMATION PRINTED IN THE TABLET'S REPORT. IF THERE ARE MORE THAN THREE WOMEN, USE ADDITIONAL QUESTIONNAIRE(S).			
		WOMAN 1	WOMAN 2	WOMAN 3
202	CHECK TABLET'S REPORT: WRITE WOMAN'S AGE WRITE WOMAN'S	NAME _____ AGE . . . . . ☐☐ LINE NUMBER . . . . . ☐☐	NAME _____ AGE . . . . . ☐☐ LINE NUMBER . . . . . ☐☐	NAME _____ AGE . . . . . ☐☐ LINE NUMBER . . . . . ☐☐
208	CIRCLE CODE FOR AGE GROUP:	15-17 YEARS . . . . . 1 18-49 YEARS . . . . . 2 (SKIP TO 210)	15-17 YEARS . . . . . 1 18-49 YEARS . . . . . 2 (SKIP TO 210)	15-17 YEARS . . . . . 1 18-49 YEARS . . . . . 2 (SKIP TO 210)
209	CIRCLE CODE FOR MARITAL STATUS:	CODE 4 (NEVER IN UNION) . 1 (SKIP TO 218) OTHER 2	CODE 4 (NEVER IN UNION) . 1 (SKIP TO 218) OTHER 2	CODE 4 (NEVER IN UNION) . 1 (SKIP TO 218) OTHER 2

HEMOGLOBIN MEASUREMENT AND HIV TESTING FOR WOMEN AGE 15-49

		WOMAN 1	WOMAN 2	WOMAN 3
	NAME FROM COLUMN 2.	NAME _____	NAME _____	NAME _____

	BIOMARKER: BEFORE PROCEEDING WITH THE CONSENT STATEMENTS, ASK THE RESPONDENT HER AGE AND MARITAL STATUS TO CONFIRM THE SKIP PATTERN IN Q208/Q209. IF THERE ARE ANY DISCREPANCIES THAT AFFECT THE INFORMED CONSENT PATTERN (MINOR VS. ADULT); GO BACK TO Q208/Q209 AND MAKE CORRECTIONS AND FOLLOW THE NEW SKIP PATTERN. PLEASE INFORM THE INTERVIEWER OF NEEDED ADJUSTMENTS IN THE HOUSEHOLD SCHEDULE (QH07/QH08), IF NECESSARY.

ADULT RESPONDENT CONSENT

ADULT RESPONDENT CONSENT FOR ANEMIA TEST

210	ASK CONSENT FOR ANEMIA TEST.	As part of this survey, we are asking people all over the country to take an anemia test. Anemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat anemia. For the anemia testing, we will need a few drops of blood from a finger. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after we take your blood. The blood will be tested for anemia immediately, and the result will be told to you right away. The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team. Do you have any questions? You can say yes or no. It is up to you to decide. Will you take the anemia test?		
211	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . . 1 RESPONDENT REFUSED . . . 2 _____ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) ☐☐☐☐ (IF REFUSED, SKIP TO 212) NOT PRESENT/OTHER . . . . 3 (SKIP TO 212)	GRANTED . . . . . 1 RESPONDENT REFUSED . . . 2 _____ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) ☐☐☐☐ (IF REFUSED, SKIP TO 212) NOT PRESENT/OTHER . . . . 3 (SKIP TO 212)	GRANTED . . . . . 1 RESPONDENT REFUSED . . . 2 _____ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) ☐☐☐☐ (IF REFUSED, SKIP TO 212) NOT PRESENT/OTHER . . . . 3 (SKIP TO 212)
211A	ASK: Are you pregnant?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8

		WOMAN 1	WOMAN 2	WOMAN 3
	NAME FROM COLUMN 2.	NAME _____	NAME _____	NAME _____

ADULT RESPONDENT CONSENT FOR DBS COLLECTION

ADULT RESPONDENT CONSENT

212	ASK CONSENT FOR DBS COLLECTION.	As part of the survey we also are asking people all over the country to give blood for HIV testing to be done in a laboratory. HIV is the virus that can lead to AIDS. The HIV testing is being done to see how many people have HIV. For the HIV testing, we need a few (more) drops of blood from a finger. The blood will be collected on a paper card. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after we take your blood. No names will be written on the paper card so we will not be able to tell you the test results. No one else will be able to know your test results either. Do you have any questions? You can say yes or no. It is up to you to decide. Will you give blood on a paper card for HIV testing in a laboratory?		
213	CIRCLE THE CODE, SIGN YOUR NAME, AND ENTER YOUR FIELDWORKER NUMBER	GRANTED . . . . . 1 RESPONDENT REFUSED . . . 2 _____ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) ☐☐☐☐ (IF REFUSED, SKIP TO 216) NOT PRESENT/OTHER . . . . 3 (SKIP TO 216)	GRANTED . . . . . 1 RESPONDENT REFUSED . . . 2 _____ (SIGN AND ENTER YOUR FIELDWORKER ID NUMBER) ☐☐☐☐ (IF REFUSED, SKIP TO 216) NOT PRESENT/OTHER . . . . 3 (SKIP TO 216)	GRANTED . . . . . 1 RESPONDENT REFUSED . . . 2 _____ (SIGN AND ENTER YOUR FIELDWORKER ID NUMBER) ☐☐☐☐ (IF REFUSED, SKIP TO 216) NOT PRESENT/OTHER . . . . 3 (SKIP TO 216)

ADULT RESPONDENT CONSENT FOR ADDITIONAL TESTING

ADULT RESPONDENT CONSENT

214	ASK CONSENT FOR ADDITIONAL TESTING.	We ask you to allow the Ministry of Health to store part of the blood sample at the laboratory for additional tests or research. These additional tests could include tests to see if individuals are protected against diseases such as measles and rubella, or other tests. The blood sample will not have any name or other information attached that could identify you. You do not have to agree. If you do not want the blood sample stored for additional testing, you can still participate in the HIV testing in this survey. Will you allow us to keep the blood sample stored for additional testing?		
215	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . . 1 RESPONDENT REFUSED . . . 2 _____ (SIGN)	GRANTED . . . . . 1 RESPONDENT REFUSED . . . 2 _____ (SIGN)	GRANTED . . . . . 1 RESPONDENT REFUSED . . . 2 _____ (SIGN)

HEMOGLOBIN MEASUREMENT AND HIV TESTING FOR WOMEN AGE 15-49

		WOMAN 1	WOMAN 2	WOMAN 3
	NAME FROM COLUMN 2.	NAME _____	NAME _____	NAME _____

ADULT RESPONDENT CONSENT FOR RDT TESTING

ADULT RESPONDENT CONSENT

216	ASK CONSENT FOR HIV RDT TEST.	If you want to know your HIV status right now, we can do a rapid test and tell you the result. The testing is free and we will offer counselling before and after the test. For the rapid HIV test, we need a few (more) drops of blood from a finger. We will use the same rapid tests used in the hospitals in Zambia. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The result of the test will be available in 20-30 minutes. If the test is positive, I will give you a referral form to go to the nearest health facility for follow up with medical personnel, as is recommended by the Ministry of Health. Do you have any questions? You can say yes or no. It is up to you to decide. Will you give blood for the rapid HIV testing?		
217	CIRCLE THE CODE, SIGN YOUR NAME, AND ENTER YOUR FIELDWORKER NUMBER	GRANTED . . . . . 1 RESPONDENT REFUSED . . . 2 ← _____ (SIGN, ENTER YOUR FIELDWORKER NUMBER, AND SKIP TO 239) ☐☐☐☐ NOT PRESENT/OTHER . . . . 3 ← (SKIP TO 239)	GRANTED . . . . . 1 RESPONDENT REFUSED . . . 2 ← _____ (SIGN, ENTER YOUR FIELDWORKER NUMBER, AND SKIP TO 239) ☐☐☐☐ NOT PRESENT/OTHER . . . . 3 ← (SKIP TO 239)	GRANTED . . . . . 1 RESPONDENT REFUSED . . . 2 ← _____ (SIGN, ENTER YOUR FIELDWORKER NUMBER, AND SKIP TO 239) ☐☐☐☐ NOT PRESENT/OTHER . . . . 3 ← (SKIP TO 239)
218	WRITE THE NAME OF THE PARENT/OTHER ADULT RESPONSIBLE FOR ADOLESCENT	NAME _____	NAME _____	NAME _____

PARENTAL/RESPONSIBLE ADULT CONSENT FOR ANEMIA TEST

PARENT — RESP ADULT CONSENT

219	ASK CONSENT FOR ANEMIA TEST FROM PARENT/ADULT.	As part of this survey, we are asking people all over the country to take an anemia test. Anemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat anemia. For the anemia testing, we will need a few drops of blood from (NAME OF MINOR)'s finger. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The blood will be tested for anemia immediately, and the result will be told to you and (NAME OF MINOR) right away. The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team. Do you have any questions? You can say yes or no. It is up to you to decide. Will you allow (NAME OF MINOR) to take the anemia test?		
220	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . 2 ← _____ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) ☐☐☐☐ NOT PRESENT/OTHER 3	GRANTED . . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . 2 ← _____ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) ☐☐☐☐ NOT PRESENT/OTHER 3	GRANTED . . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . 2 ← _____ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) ☐☐☐☐ NOT PRESENT/OTHER 3

		WOMAN 1	WOMAN 2	WOMAN 3
	NAME FROM COLUMN 2.	NAME _____	NAME _____	NAME _____

PARENTAL/RESPONSIBLE ADULT CONSENT FOR DBS COLLECTION

PARENT/RESP ADULT CONSENT

221	ASK CONSENT FOR DBS COLLECTION FROM PARENT/ADULT.	As part of the survey we also are asking people all over the country to give blood for HIV testing to be done in a laboratory. HIV is the virus that can lead to AIDS. The HIV testing is being done to see how many people have HIV. For the HIV testing, we need a few (more) drops of blood from a finger. The blood will be collected on a paper card. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after we take the blood. No names will be written on the paper card so we will not be able to tell you the results of (NAME OF MINOR)'s test. No one else will be able to know (NAME OF MINOR)'s test results either. Do you have any questions? You can say yes or no. It is up to you to decide. Will you allow (NAME OF MINOR) to give blood on a paper card for HIV testing in a laboratory?
222	CIRCLE THE CODE, SIGN YOUR NAME, AND ENTER YOUR FIELDWORKER NUMBER.	GRANTED . . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . 2 _____ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) ☐☐☐☐ (IF REFUSED, SKIP TO 225) NOT PRESENT/OTHER . . . . 3 (SKIP TO 225)

PARENTAL/RESPONSIBLE ADULT CONSENT FOR ADDITIONAL TESTING

PARENT/RESP ADULT CONSENT

223	ASK CONSENT FOR ADDITIONAL TESTING FROM PARENT/ADULT.	We ask you to allow the Ministry of Health to store part of the blood sample at the laboratory for additional tests or research. These additional tests could include tests to see if individuals are protected against diseases such as measles and rubella, or other tests. The blood sample will not have any name or other data attached that could identify (NAME OF MINOR). You do not have to agree. If you do not want the blood sample stored for additional testing, (NAME OF MINOR) can still participate in the HIV testing in this survey. Will you allow us to keep the blood sample stored for additional testing?
224	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . 2 _____ (SIGN)

HEMOGLOBIN MEASUREMENT AND HIV TESTING FOR WOMEN AGE 15-49

		WOMAN 1	WOMAN 2	WOMAN 3
	NAME FROM COLUMN 2.	NAME _____	NAME _____	NAME _____

PARENTAL/RESPONSIBLE ADULT CONSENT FOR RDT TESTING

PARENT — RESP ADULT CONSENT

225	ASK CONSENT FOR RDT TEST FROM PARENT/ADULT.	If you want (NAME OF MINOR) to know her HIV status right now, we can do a rapid test and tell you the result. The testing is free and we will offer counselling before and after the test. For the rapid HIV test, we need a few (more) drops of blood from a finger. We will use the same rapid tests used in the hospitals in Zambia. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The result of the test will be available in 20-30 minutes. If the test is positive, I will give (NAME OF MINOR) a referral form to go to the nearest health facility for follow up with health technicians, as is recommended by the Ministry of Health. Do you have any questions? You can say yes to the test, or you can say no. It is up to you to decide. Will you allow (NAME OF MINOR) to give blood for the rapid HIV test?		
226	CIRCLE THE CODE, SIGN YOUR NAME, AND ENTER YOUR FIELDWORKER NUMBER.	GRANTED . . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . 2 (SIGN AND ENTER YOUR FIELDWORKER NUMBER) NOT PRESENT/OTHER 3	GRANTED . . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . 2 (SIGN AND ENTER YOUR FIELDWORKER NUMBER) NOT PRESENT/OTHER 3	GRANTED . . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . 2 (SIGN AND ENTER YOUR FIELDWORKER NUMBER) NOT PRESENT/OTHER 3

MINOR RESPONDENT CONSENT FOR ANEMIA TEST

MINOR RESPONDENT CONSENT

227	CHECK 220: WAS CONSENT GRANTED?	YES NO OR NOT ASKED → ##	YES NO OR NOT ASKED → ##	YES NO OR NOT ASKED → ##
228	ASK CONSENT FOR ANEMIA TEST FROM RESPONDENT.	As part of this survey, we are asking people all over the country to take an anemia test. Anemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat anemia. For the anemia testing, we will need a few drops of blood from a finger. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after we take your blood. The blood will be tested for anemia immediately, and the result will be told to you and (NAME OF PARENT/RESPONSIBLE ADULT) right away. The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team. Do you have any questions? You can say yes or no. It is up to you to decide. Will you take the anemia test?		
229	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . . 1 MINOR RESPONDENT REFUSED . . . . . 2 (SIGN) (IF REFUSED, SKIP TO 230) NOT PRESENT/OTHER . . . . 3 (SKIP TO 230)	GRANTED . . . . . 1 MINOR RESPONDENT REFUSED . . . . . 2 (SIGN) (IF REFUSED, SKIP TO 230) NOT PRESENT/OTHER . . . . 3 (SKIP TO 230)	GRANTED . . . . . 1 MINOR RESPONDENT REFUSED . . . . . 2 (SIGN) (IF REFUSED, SKIP TO 230) NOT PRESENT/OTHER . . . . 3 (SKIP TO 230)
229A	ASK: Are you pregnant?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8

		WOMAN 1	WOMAN 2	WOMAN 3
	NAME FROM COLUMN 2.	NAME _____	NAME _____	NAME _____

MINOR RESPONDENT CONSENT FOR DBS COLLECTION

MINOR RESPONDENT CONSENT

230	CHECK 222: WAS CONSENT GRANTED?	YES ☐ → NO OR NOT ASKED ☐ → ##	YES ☐ → NO OR NOT ASKED ☐ → ##	YES ☐ → NO OR NOT ASKED ☐ → ##
231	ASK CONSENT FOR DBS COLLECTION FROM MINOR RESPONDENT.	As part of the survey we also are asking people all over the country to give blood for HIV testing. HIV is the virus that can lead to AIDS. The HIV testing is being done to see how many people have HIV. For the HIV testing, we need a few (more) drops of blood from a finger. The blood will be collected on a paper card. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after we take your blood. No names will be written on the paper card so we will not be able to tell you the test results. No one else will be able to know your test results either. Do you have any questions? You can say yes or no. It is up to you to decide. Will you give blood on a paper card for HIV testing in a laboratory?		
232	CIRCLE THE CODE, SIGN YOUR NAME, AND ENTER YOUR FIELDWORKER NUMBER	GRANTED . . . . . 1 MINOR RESPONDENT REFUSED . . . . . 2 ← _____ (SIGN) (IF REFUSED, SKIP TO 236) NOT PRESENT/OTHER . . . . 3 → (SKIP TO 236)	GRANTED . . . . . 1 MINOR RESPONDENT REFUSED . . . . . 2 ← _____ (SIGN) (IF REFUSED, SKIP TO 236) NOT PRESENT/OTHER . . . . 3 → (SKIP TO 236)	GRANTED . . . . . 1 MINOR RESPONDENT REFUSED . . . . . 2 ← _____ (SIGN) (IF REFUSED, SKIP TO 236) NOT PRESENT/OTHER . . . . 3 → (SKIP TO 236)

MINOR RESPONDENT CONSENT FOR ADDITIONAL TESTING

MINOR RESPONDENT CONSENT

233	CHECK 224:WAS CONSENT GRANTED?	YES ☐ → NO OR NOT ASKED ☐ → ##	YES ☐ → NO OR NOT ASKED ☐ → ##	YES ☐ → NO OR NOT ASKED ☐ → ##
234	ASK CONSENT FOR ADDITIONAL TESTING FROM MINOR RESPONDENT.	We ask you to allow the Ministry of Health to store part of the blood sample at the laboratory for additional tests or research. These additional tests could include tests to see if individuals are protected against diseases such as measles and rubella, or other tests. The blood sample will not have any name or other data attached that could identify you. You do not have to agree. If you do not want the blood sample stored for additional testing, you can still participate in the HIV testing in this survey. Will you allow us to keep the blood sample stored for additional testing?		
235	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . . 1 MINOR RESPONDENT REFUSED . . . . . 2 ← _____ (SIGN)	GRANTED . . . . . 1 MINOR RESPONDENT REFUSED . . . . . 2 ← _____ (SIGN)	GRANTED . . . . . 1 MINOR RESPONDENT REFUSED . . . . . 2 ← _____ (SIGN)

		WOMAN 1	WOMAN 2	WOMAN 3
	NAME FROM COLUMN 2.	NAME _____	NAME _____	NAME _____

MINOR RESPONDENT CONSENT FOR RDT TEST

MINOR RESPONDENT CONSENT

236	CHECK 226: WAS CONSENT GRANTED?	YES ☐ → NO OR NOT ASKED ☐ → ##	YES ☐ → NO OR NOT ASKED ☐ → ##	YES ☐ → NO OR NOT ASKED ☐ → ##
237	ASK CONSENT FOR RDT TEST FROM MINOR RESPONDENT.	If you want to know your HIV status right now, we can do a rapid test and tell you the result. The testing is free and we will offer counselling before and after the test. For the rapid HIV test, we need a few (more) drops of blood from a finger. We will use the same rapid tests used in the hospitals in Zambia. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The result of the test will be available in 20-30 minutes. If the test is positive, I will give you a referral form to go to the nearest health facility for follow up with health technicians, as is recommended by the Ministry of Health. Do you have any questions? You can say yes or no. It is up to you to decide. Will you give blood for the rapid HIV testing?		
238	CIRCLE THE CODE, SIGN YOUR NAME, AND ENTER YOUR FIELDWORKER NUMBER.	GRANTED . . . . . 1 MINOR RESPONDENT REFUSED . . . . . 2 _____ (SIGN) NOT PRESENT/OTHER 3	GRANTED . . . . . 1 MINOR RESPONDENT REFUSED . . . . . 2 _____ (SIGN) NOT PRESENT/OTHER 3	GRANTED . . . . . 1 MINOR RESPONDENT REFUSED . . . . . 2 _____ (SIGN) NOT PRESENT/OTHER 3

239	PREPARE EQUIPMENT AND SUPPLIES ONLY FOR THE TEST(S) FOR WHICH CONSENT HAS BEEN OBTAINED AND PROCEED WITH THE TEST(S).			
240	ADDITIONAL TESTS.	IF ADULT RESPONDENT, CHECK 215; IF MINOR RESPONDENT, CHECK 224 AND 235 IF CONSENT HAS NOT BEEN GRANTED, WRITE "NO ADDITIONAL TESTS" ON THE FILTER PAPER	IF ADULT RESPONDENT, CHECK 215; IF MINOR RESPONDENT, CHECK 224 AND 235 IF CONSENT HAS NOT BEEN GRANTED, WRITE "NO ADDITIONAL TESTS" ON THE FILTER PAPER	IF ADULT RESPONDENT, CHECK 215; IF MINOR RESPONDENT, CHECK 224 AND 235 IF CONSENT HAS NOT BEEN GRANTED, WRITE "NO ADDITIONAL TESTS" ON THE FILTER PAPER
241	RECORD HEMOGLOBIN LEVEL HERE AND IN ANEMIA PAMPHLET.	G/DL . . . . . ☐☐.☐ NOT PRESENT . . . . . 994 REFUSED . . . . . 995 OTHER 996	G/DL . . . . . ☐☐.☐ NOT PRESENT . . . . . 994 REFUSED . . . . . 995 OTHER 996	G/DL . . . . . ☐☐.☐ NOT PRESENT . . . . . 994 REFUSED . . . . . 995 OTHER 996
242	PLACE BAR CODE LABEL.	PUT THE 1ST BAR CODE LABEL HERE. NOT PRESENT . . . . . 99994 REFUSED . . . . . 99995 OTHER . . . . . 99996 PUT THE 2ND BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER AND THE 3RD ON THE TRANSMITTAL FORM	PUT THE 1ST BAR CODE LABEL HERE. NOT PRESENT . . . . . 99994 REFUSED . . . . . 99995 OTHER . . . . . 99996 PUT THE 2ND BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER AND THE 3RD ON THE TRANSMITTAL FORM	PUT THE 1ST BAR CODE LABEL HERE. NOT PRESENT . . . . . 99994 REFUSED . . . . . 99995 OTHER . . . . . 99996 PUT THE 2ND BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER AND THE 3RD ON THE TRANSMITTAL FORM

HEMOGLOBIN MEASUREMENT AND HIV TESTING FOR WOMEN AGE 15-49

		WOMAN 1	WOMAN 2	WOMAN 3
	NAME FROM COLUMN 2.	NAME _____	NAME _____	NAME _____
243	RECORD THE RESULT OF THE "DETERMINE HIV RDT" HERE.	POSITIVE . . . . . 1 NEGATIVE . . . . . 2 (SKIP TO 246) NOT PRESENT . . . . . 3 REFUSED . . . . . 4 OTHER . . . . . 5 (SKIP TO 248)	POSITIVE . . . . . 1 NEGATIVE . . . . . 2 (SKIP TO 246) NOT PRESENT . . . . . 3 REFUSED . . . . . 4 OTHER . . . . . 5 (SKIP TO 248)	POSITIVE . . . . . 1 NEGATIVE . . . . . 2 (SKIP TO 246) NOT PRESENT . . . . . 3 REFUSED . . . . . 4 OTHER . . . . . 5 (SKIP TO 248)
244	RECORD THE RESULT OF THE "UNIGOLD HIV RDT"	POSITIVE . . . . . 1 NEGATIVE . . . . . 2 (SKIP TO 247) NOT PRESENT . . . . . 3 REFUSED . . . . . 4 OTHER . . . . . 5 (SKIP TO 248)	POSITIVE . . . . . 1 NEGATIVE . . . . . 2 (SKIP TO 247) NOT PRESENT . . . . . 3 REFUSED . . . . . 4 OTHER . . . . . 5 (SKIP TO 248)	POSITIVE . . . . . 1 NEGATIVE . . . . . 2 (SKIP TO 247) NOT PRESENT . . . . . 3 REFUSED . . . . . 4 OTHER . . . . . 5 (SKIP TO 248)
245	IF 243 AND 244 ARE POSITIVE, RESPONDENT IS HIV POSITIVE: INFORM SURVEY PARTICIPANT ABOUT POSITIVE HIV STATUS AND PROVIDE POST-TEST COUNSELING. AS PART OF POST-TEST COUNSELING, PROVIDE A REFERRAL TO THE NEAREST HEALTH FACILITY WHERE HIV CARE AND TREATMENT SERVICES ARE AVAILABLE. SKIP TO 248			
246	IF 243 IS NEGATIVE, RESPONDENT IS HIV NEGATIVE: INFORM THE RESPONDENT OF NEGATIVE TEST RESULT, AND CONDUCT POST-TEST COUNSELING. SKIP TO 248			
247	IF 243 IS POSITIVE AND 244 IS NEGATIVE, RESPONDENT'S HIV STATUS IS INDETERMINATE: INFORM THE RESPONDENT OF INDETERMINATE TEST RESULT, AND CONDUCT POST-TEST COUNSELINTG. AS PART OF POST-TEST COUNSELING, RECOMMEND THAT RESPONDENT IS RETESTED IN 14 DAYS AND PROVIDE A REFERRAL TO THE NEAREST HEALTH FACILITY WHERE HIV TESTING CAN BE CONDUCTED.			
248	WHILE TESTING THIS PERSON, WAS ANY RDT INVALID/DID ANY RDT FAIL TO RUN, THAT IS, THE CONTROL BAND DID NOT APPEAR?	RDT CONDUCTED, YES ANY INVALID . . . . . 1 RDT CONDUCTED, NONE INVALID . . . . . 2 NO RDT CONDUCTED . . . . 3 (SKIP TO 251)	RDT CONDUCTED, YES ANY INVALID . . . . . 1 RDT CONDUCTED, NONE INVALID . . . . . 2 NO RDT CONDUCTED . . . . 3 (SKIP TO 251)	RDT CONDUCTED, YES ANY INVALID . . . . . 1 RDT CONDUCTED, NONE INVALID . . . . . 2 NO RDT CONDUCTED . . . . 3 (SKIP TO 251)
249	RECORD NUMBER OF INVALID RESULTS USING "DETERMINE HIV RDT"	☐☐ RECORD NUMBER OF INVALID RESULTS, IF NONE ENTER 00	☐☐ RECORD NUMBER OF INVALID RESULTS, IF NONE ENTER 00	☐☐ RECORD NUMBER OF INVALID RESULTS, IF NONE ENTER 00
250	RECORD NUMBER OF INVALID RESULTS USING "UNIGOLD HIV RDT" HERE	☐☐ RECORD NUMBER OF INVALID RESULTS, IF NONE ENTER 00	☐☐ RECORD NUMBER OF INVALID RESULTS, IF NONE ENTER 00	☐☐ RECORD NUMBER OF INVALID RESULTS, IF NONE ENTER 00
251	GO BACK TO 202 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF AN ADDITIONAL QUESTIONNAIRE; IF NO MORE WOMEN, GO TO 301			

HIV TESTING FOR MEN AGE 15-59

301	**INTERVIEWER:** USE THE APPROPRIATE OPTION FROM THE INTERVIEWER'S MENU TO LIST ALL MEN AGE 15-59 ELIGIBLE FOR BIOMARKER TESTING. IN EACH COLUMN, WRITE THE COMPLETE NAME, AGE AND LINE NUMBER AS THEY APPEAR IN THE REPORT ON YOUR TABLET. ALSO CIRCLE THE APPROPRIATE CODE FOR QUESTION 308. IF THE MAN'S AGE IS 15-17, COMPLETE QUESTION 309 USING THE MARITAL STATUS INFORMATION PRINTED IN THE TABLET'S REPORT. IF THERE ARE MORE THAN THREE WOMEN, USE ADDITIONAL QUESTIONNAIRE(S).			
		MAN 1	MAN 2	MAN 3
302	CHECK TABLET'S REPORT: WRITE MAN'S AGE WRITE MAN'S LINE NUMBER	NAME _____ AGE . . . . . ☐☐ LINE NUMBER . . . . . ☐☐	NAME _____ AGE . . . . . ☐☐ LINE NUMBER . . . . . ☐☐	NAME _____ AGE . . . . . ☐☐ LINE NUMBER . . . . . ☐☐
308	CIRCLE CODE FOR AGE GROUP:	15-17 YEARS . . . . . 1 18-59 YEARS . . . . . 2 (SKIP TO 310)	15-17 YEARS . . . . . 1 18-59 YEARS . . . . . 2 (SKIP TO 310)	15-17 YEARS . . . . . 1 18-59 YEARS . . . . . 2 (SKIP TO 310)
309	CIRCLE CODE FOR MARITAL STATUS:	CODE 4 (NEVER IN UNION) . 1 (SKIP TO 316) OTHER 2	CODE 4 (NEVER IN UNION) . 1 (SKIP TO 316) OTHER 2	CODE 4 (NEVER IN UNION) . 1 (SKIP TO 316) OTHER 2

HIV TESTING FOR MEN AGE 15-59

		MAN 1	MAN 2	MAN 3
	NAME FROM COLUMN 2.	NAME _____	NAME _____	NAME _____
	BIOMARKER: BEFORE PROCEEDING WITH THE CONSENT STATEMENTS, ASK THE RESPONDENT HIS AGE AND MARITAL STATUS TO CONFIRM THE SKIP PATTERN IN Q308/Q309. IF THERE ARE ANY DISCREPANCIES THAT AFFECT THE INFORMED CONSENT PATTERN (MINOR VS. ADULT); GO BACK TO Q308/Q309 AND MAKE CORRECTIONS AND FOLLOW THE NEW SKIP PATTERN. PLEASE INFORM THE INTERVIEWER OF NEEDED ADJUSTMENTS IN THE HOUSEHOLD SCHEDULE (QH07/QH08), IF NECESSARY:			

ADULT RESPONDENT CONSENT FOR DBS COLLECTION

ADULT RESPONDENT CONSENT

310	ASK CONSENT FOR DBS COLLECTION.	As part of the survey we also are asking people all over the country to give blood for HIV testing to be done in a laboratory. HIV is the virus that can lead to AIDS. The HIV testing is being done to see how many people have HIV. For the HIV testing, we need a few drops of blood from a finger. The blood will be collected on a paper card. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after we take your blood. No names will be written on the paper card so we will not be able to tell you the test results. No one else will be able to know your test results either. Do you have any questions? You can say yes or no. It is up to you to decide. Will you give blood on a paper card for HIV testing in a laboratory?		
311	CIRCLE THE CODE, SIGN YOUR NAME, AND ENTER YOUR FIELDWORKER NUMBER.	GRANTED . . . . . 1 RESPONDENT REFUSED . . . 2 _____ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) ☐☐☐☐ (IF REFUSED, SKIP TO 314) NOT PRESENT/OTHER . . . . 3 (SKIP TO 314)	GRANTED . . . . . 1 RESPONDENT REFUSED . . . 2 _____ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) ☐☐☐☐ (IF REFUSED, SKIP TO 314) NOT PRESENT/OTHER . . . . 3 (SKIP TO 314)	GRANTED . . . . . 1 RESPONDENT REFUSED . . . 2 _____ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) ☐☐☐☐ (IF REFUSED, SKIP TO 314) NOT PRESENT/OTHER . . . . 3 (SKIP TO 314)

		MAN 1	MAN 2	MAN 3
	NAME FROM COLUMN 2.	NAME _____	NAME _____	NAME _____

ADULT RESPONDENT CONSENT

ADULT RESPONDENT CONSENT FOR ADDITIONAL TESTING

312	ASK CONSENT FOR ADDITIONAL TESTING.	We ask you to allow the Ministry of Health to store part of the blood sample at the laboratory for additional tests or research. These additional tests could include tests to see if individuals are protected against diseases such as measles and rubella, or other tests. The blood sample will not have any name or other data attached that could identify you. You do not have to agree. If you do not want the blood sample stored for additional testing, you can still participate in the HIV testing in this survey. Will you allow us to keep the blood sample stored for additional testing?		
313	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . . 1 RESPONDENT REFUSED . . . 2 _____ (SIGN)	GRANTED . . . . . 1 RESPONDENT REFUSED . . . 2 _____ (SIGN)	GRANTED . . . . . 1 RESPONDENT REFUSED . . . 2 _____ (SIGN)

ADULT RESPONDENT CONSENT

ADULT RESPONDENT CONSENT FOR RDT TEST

314	ASK CONSENT FOR RDT TEST.	If you want to know your HIV status right now, we can do a rapid test and tell you the result. The testing is free and we will offer counselling before and after the test. For the rapid HIV test, we need a few (more) drops of blood from a finger. We will use the same rapid tests used in the hospitals in Zambia. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The result of the test will be available in 20-30 minutes. If the test is positive, I will give you a referral form to go to the nearest health facility for follow up with medical personnel, as is recommended by the Ministry of Health. Do you have any questions? You can say yes or no. It is up to you to decide. Will you give blood for the rapid HIV testing?		
315	CIRCLE THE CODE, SIGN YOUR NAME, AND ENTER YOUR FIELDWORKER NUMBER.	GRANTED . . . . . 1 RESPONDENT REFUSED . . . 2 _____ (SIGN, ENTER YOUR FIELDWORKER NUMBER, AND SKIP TO 332) ☐☐☐☐ NOT PRESENT/OTHER . . . . 3 (SKIP TO 332)	GRANTED . . . . . 1 RESPONDENT REFUSED . . . 2 _____ (SIGN, ENTER YOUR FIELDWORKER NUMBER, AND SKIP TO 332) ☐☐☐☐ NOT PRESENT/OTHER . . . . 3 (SKIP TO 332)	GRANTED . . . . . 1 RESPONDENT REFUSED . . . 2 _____ (SIGN, ENTER YOUR FIELDWORKER NUMBER, AND SKIP TO 332) ☐☐☐☐ NOT PRESENT/OTHER . . . . 3 (SKIP TO 332)

ADULT RESPONDENT CONSENT

		MAN 1	MAN 2	MAN 3
	NAME FROM COLUMN 2.	NAME _____	NAME _____	NAME _____
316	WRITE THE NAME OF THE PARENT/OTHER ADULT RESPONSIBLE FOR ADOLESCENT	NAME _____	NAME _____	NAME _____

PARENT — RESP ADULT CONSENT

PARENTAL/RESPONSIBLE ADULT CONSENT FOR DBS COLLECTION

317	ASK CONSENT FOR DBS COLLECTION FROM PARENT/ADULT.	As part of the survey we also are asking people all over the country to give blood for HIV testing to be done in a laboratory. HIV is the virus that can lead to AIDS. The HIV testing is being done to see how many people have HIV. For the HIV testing, we need a few drops of blood from a finger. The blood will be collected on a paper card. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after we take the blood. No names will be written on the paper card so we will not be able to tell you the results of (NAME OF MINOR)'s test. No one else will be able to know (NAME OF MINOR)'s test results either. Do you have any questions? You can say yes or no. It is up to you to decide. Will you allow (NAME OF MINOR) to give blood on a paper card for HIV testing in a laboratory?		
318	CIRCLE THE CODE, SIGN YOUR NAME, AND ENTER YOUR FIELDWORKER NUMBER.	GRANTED . . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . 2 ← _____ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) ☐☐☐☐ (IF REFUSED, SKIP TO 321) NOT PRESENT/OTHER . . . . 3 → (SKIP TO 321)	GRANTED . . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . 2 ← _____ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) ☐☐☐☐ (IF REFUSED, SKIP TO 321) NOT PRESENT/OTHER . . . . 3 → (SKIP TO 321)	GRANTED . . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . 2 ← _____ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) ☐☐☐☐ (IF REFUSED, SKIP TO 321) NOT PRESENT/OTHER . . . . 3 → (SKIP TO 321)

PARENT — RESP ADULT CONSENT

PARENTAL/RESPONSIBLE ADULT CONSENT FOR ADDITIONAL TESTING

319	ASK CONSENT FOR ADDITIONAL TESTING FROM PARENT/ADULT.	We ask you to allow the Ministry of Health to store part of the blood sample at the laboratory for additional tests or research. These additional tests could include tests to see if individuals are protected against diseases such as measles and rubella, or other tests. The blood sample will not have any name or other data attached that could identify (NAME OF MINOR). You do not have to agree. If you do not want the blood sample stored for additional testing, (NAME OF MINOR) can still participate in the HIV testing in this survey. Will you allow us to keep the blood sample stored for additional testing?		
320	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . 2 ← _____ (SIGN)	GRANTED . . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . 2 ← _____ (SIGN)	GRANTED . . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . 2 ← _____ (SIGN)

		MAN 1	MAN 2	MAN 3
	NAME FROM COLUMN 2.	NAME _____	NAME _____	NAME _____

PARENT — RESP ADULT CONSENT

PARENTAL/RESPONSIBLE ADULT CONSENT FOR RDT TEST

321	ASK CONSENT FOR RDT TEST FROM PARENT/ADULT.	If you want (NAME OF MINOR) to know his HIV status right now, we can do a rapid test and tell you the result. The testing is free and we will offer counselling before and after the test. For the rapid HIV test, we need a few (more) drops of blood from a finger. We will use the same rapid tests used in the hospitals in Zambia. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The result of the test will be available in 20-30 minutes. If the test is positive, I will give (NAME OF MINOR) a referral form to go to the nearest health facility for follow up with health technicians, as is recommended by the Ministry of Health. Do you have any questions? You can say yes to the test, or you can say no. It is up to you to decide. Will you allow (NAME OF MINOR) to give blood for the rapid HIV test?

		MAN 1	MAN 2	MAN 3
322	CIRCLE THE CODE, SIGN YOUR NAME, AND ENTER YOUR FIELDWORKER NUMBER.	GRANTED . . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . 2 (SIGN AND ENTER YOUR FIELDWORKER NUMBER) NOT PRESENT/OTHER 3	GRANTED . . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . 2 (SIGN AND ENTER YOUR FIELDWORKER NUMBER) NOT PRESENT/OTHER 3	GRANTED . . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . 2 (SIGN AND ENTER YOUR FIELDWORKER NUMBER) NOT PRESENT/OTHER 3

MINOR RESPONDENT CONSENT

MINOR RESPONDENT CONSENT FOR DBS COLLECTION

		MAN 1	MAN 2	MAN 3
323	CHECK 318: WAS CONSENT GRANTED?	YES ☐ NO OR NOT ASKED ☐ → ##	YES ☐ NO OR NOT ASKED ☐ → ##	YES ☐ NO OR NOT ASKED ☐ → ##

324	ASK CONSENT FOR DBS COLLECTION FROM MINOR RESPONDENT.	As part of the survey we also are asking people all over the country to give blood for HIV testing to be done in a laboratory. HIV is the virus that can lead to AIDS. The HIV testing is being done to see how many people have HIV. For the HIV testing, we need a few drops of blood from a finger. The blood will be collected on a paper card. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after we take your blood. No names will be written on the paper card so we will not be able to tell you the test results. No one else will be able to know your test results either. Do you have any questions? You can say yes or no. It is up to you to decide. Will you give blood on a paper card for HIV testing in a laboratory?

		MAN 1	MAN 2	MAN 3
325	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . . 1 MINOR RESPONDENT REFUSED . . . . . 2 (SIGN) (IF REFUSED, SKIP TO 329) NOT PRESENT/OTHER . . . . 3 (SKIP TO 329)	GRANTED . . . . . 1 MINOR RESPONDENT REFUSED . . . . . 2 (SIGN) (IF REFUSED, SKIP TO 329) NOT PRESENT/OTHER . . . . 3 (SKIP TO 329)	GRANTED . . . . . 1 MINOR RESPONDENT REFUSED . . . . . 2 (SIGN) (IF REFUSED, SKIP TO 329) NOT PRESENT/OTHER . . . . 3 (SKIP TO 329)

MINOR RESPONDENT CONSENT

		MAN 1	MAN 2	MAN 3
	NAME FROM COLUMN 2.	NAME _____	NAME _____	NAME _____

MINOR RESPONDENT CONSENT

MINOR RESPONDENT CONSENT FOR ADDITIONAL TESTING

326	CHECK 320: WAS CONSENT GRANTED?	YES → NO OR NOT ASKED → ##	YES → NO OR NOT ASKED → ##	YES → NO OR NOT ASKED → ##
327	ASK CONSENT FOR ADDITIONAL TESTING FROM MINOR RESPONDENT.	We ask you to allow the Ministry of Health to store part of the blood sample at the laboratory for additional tests or research. These additional tests could include tests to see if individuals are protected against diseases such as measles and rubella, or other tests. The blood sample will not have any name or other data attached that could identify you. You do not have to agree. If you do not want the blood sample stored for additional testing, you can still participate in the HIV testing in this survey. Will you allow us to keep the blood sample stored for additional testing?		
328	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . . 1 MINOR RESPONDENT REFUSED . . . . . 2 _____ (SIGN)	GRANTED . . . . . 1 MINOR RESPONDENT REFUSED . . . . . 2 _____ (SIGN)	GRANTED . . . . . 1 MINOR RESPONDENT REFUSED . . . . . 2 _____ (SIGN)

		MAN 1	MAN 2	MAN 3
	NAME FROM COLUMN 2.	NAME _____	NAME _____	NAME _____

MINOR RESPONDENT CONSENT

MINOR RESPONDENT CONSENT FOR RDT TEST

		MAN 1	MAN 2	MAN 3
329	CHECK 322: WAS CONSENT GRANTED?	YES ☐ → NO OR NOT ASKED ☐ → ##	YES ☐ → NO OR NOT ASKED ☐ → ##	YES ☐ → NO OR NOT ASKED ☐ → ##
330	ASK CONSENT FOR RDT TEST FROM MINOR RESPONDENT.	If you want to know your HIV status right now, we can do a rapid test and tell you the result. The testing is free and we will offer counselling before and after the test. For the rapid HIV test, we need a few (more) drops of blood from a finger. We will use the same rapid tests used in the hospitals in Zambia. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The result of the test will be available in 20-30 minutes. If the test is positive, I will give you a referral form to go to the nearest health facility for follow up with health technicians, as is recommended by the Ministry of Health. Do you have any questions? You can say yes or no. It is up to you to decide. Will you give blood for the rapid HIV testing?		
331	CIRCLE THE CODE, SIGN YOUR NAME, AND ENTER YOUR FIELDWORKER NUMBER.	GRANTED . . . . . 1 MINOR RESPONDENT REFUSED . . . . . 2 _____ (SIGN) NOT PRESENT/OTHER 3	GRANTED . . . . . 1 MINOR RESPONDENT REFUSED . . . . . 2 _____ (SIGN) NOT PRESENT/OTHER 3	GRANTED . . . . . 1 MINOR RESPONDENT REFUSED . . . . . 2 _____ (SIGN) NOT PRESENT/OTHER 3

HIV TESTING FOR MEN AGE 15-59

		MAN 1	MAN 2	MAN 3
	NAME FROM COLUMN 2.	NAME _____	NAME _____	NAME _____

332	PREPARE EQUIPMENT AND SUPPLIES ONLY FOR THE TEST(S) FOR WHICH CONSENT HAS BEEN OBTAINED AND PROCEED WITH THE TEST(S).			
333	ADDITIONAL TESTS.	IF ADULT RESPONDENT, CHECK 313; IF MINOR RESPONDENT, CHECK 320 AND 328. IF CONSENT HAS NOT BEEN GRANTED, WRITE "NO ADDITIONAL TESTS" ON THE FILTER PAPER.	IF ADULT RESPONDENT, CHECK 313; IF MINOR RESPONDENT, CHECK 320 AND 328. IF CONSENT HAS NOT BEEN GRANTED, WRITE "NO ADDITIONAL TESTS" ON THE FILTER PAPER.	IF ADULT RESPONDENT, CHECK 313; IF MINOR RESPONDENT, CHECK 320 AND 328. IF CONSENT HAS NOT BEEN GRANTED, WRITE "NO ADDITIONAL TESTS" ON THE FILTER PAPER.
334	PLACE BAR CODE LABEL.	PUT THE 1ST BAR CODE LABEL HERE. NOT PRESENT . . . . . 99994 REFUSED . . . . . 99995 OTHER . . . . . 99996 PUT THE 2ND BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER AND THE 3RD ON THE TRANSMITTAL FORM.	PUT THE 1ST BAR CODE LABEL HERE. NOT PRESENT . . . . . 99994 REFUSED . . . . . 99995 OTHER . . . . . 99996 PUT THE 2ND BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER AND THE 3RD ON THE TRANSMITTAL FORM.	PUT THE 1ST BAR CODE LABEL HERE. NOT PRESENT . . . . . 99994 REFUSED . . . . . 99995 OTHER . . . . . 99996 PUT THE 2ND BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER AND THE 3RD ON THE TRANSMITTAL FORM.

HIV TESTING FOR MEN AGE 15-59

		MAN 1	MAN 2	MAN 3
	NAME FROM COLUMN 2.	NAME _____	NAME _____	NAME _____
335	RECORD THE RESULT OF THE "DETERMINE HIV RDT" HERE.	POSITIVE . . . . . 1 NEGATIVE . . . . . 2 → (SKIP TO 338) NOT PRESENT . . . . . 3 REFUSED . . . . . 4 OTHER . . . . . 5 → (SKIP TO 340)	POSITIVE . . . . . 1 NEGATIVE . . . . . 2 → (SKIP TO 338) NOT PRESENT . . . . . 3 REFUSED . . . . . 4 OTHER . . . . . 5 → (SKIP TO 340)	POSITIVE . . . . . 1 NEGATIVE . . . . . 2 → (SKIP TO 338) NOT PRESENT . . . . . 3 REFUSED . . . . . 4 OTHER . . . . . 5 → (SKIP TO 340)
336	RECORD THE RESULT OF THE "UNIGOLD HIV RDT"	POSITIVE . . . . . 1 NEGATIVE . . . . . 2 → (SKIP TO 339) NOT PRESENT . . . . . 3 REFUSED . . . . . 4 OTHER . . . . . 5 → (SKIP TO 340)	POSITIVE . . . . . 1 NEGATIVE . . . . . 2 → (SKIP TO 339) NOT PRESENT . . . . . 3 REFUSED . . . . . 4 OTHER . . . . . 5 → (SKIP TO 340)	POSITIVE . . . . . 1 NEGATIVE . . . . . 2 → (SKIP TO 339) NOT PRESENT . . . . . 3 REFUSED . . . . . 4 OTHER . . . . . 5 → (SKIP TO 340)
337	IF 335 AND 336 ARE POSITIVE, RESPONDENT IS HIV POSITIVE: INFORM SURVEY PARTICIPANT ABOUT POSITIVE HIV STATUS AND PROVIDE POST-TEST COUNSELING. AS PART OF POST-TEST COUNSELING, PROVIDE A REFERRAL TO THE NEAREST HEALTH FACILITY WHERE HIV CARE AND TREATMENT SERVICES ARE AVAILABLE. SKIP TO 340			
338	IF 335 IS NEGATIVE, RESPONDENT IS HIV NEGATIVE: INFORM THE RESPONDENT OF NEGATIVE TEST RESULT, AND CONDUCT POST-TEST COUNSELING. SKIP TO 340			
339	IF 335 IS POSITIVE AND 336 IS NEGATIVE, RESPONDENT'S HIV STATUS IS INDETERMINATE: INFORM THE RESPONDENT OF INDETERMINATE TEST RESULT, AND CONDUCT POST-TEST COUNSELINTG. AS PART OF POST-TEST COUNSELING, RECOMMEND THAT RESPONDENT IS RETESTED IN 14 DAYS AND PROVIDE A REFERRAL TO THE NEAREST HEALTH FACILITY WHERE HIV TESTING CAN BE CONDUCTED.			
340	WHILE TESTING THIS PERSON, WAS ANY RDT INVALID/DID ANY RDT FAIL TO RUN, THAT IS, THE CONTROL BAND	RDT CONDUCTED, YES ANY INVALID . . . . . 1 RDT CONDUCTED, NONE INVALID . . . . . 2 NO RDT CONDUCTED . . . . 3 → (SKIP TO 343)	RDT CONDUCTED, YES ANY INVALID . . . . . 1 RDT CONDUCTED, NONE INVALID . . . . . 2 NO RDT CONDUCTED . . . . 3 → (SKIP TO 343)	RDT CONDUCTED, YES ANY INVALID . . . . . 1 RDT CONDUCTED, NONE INVALID . . . . . 2 NO RDT CONDUCTED . . . . 3 → (SKIP TO 343)
341	RECORD NUMBER OF INVALID RESULTS USING "DETERMINE HIV RDT"	□□ RECORD NUMBER OF INVALID RESULTS, IF NONE ENTER 00	□□ RECORD NUMBER OF INVALID RESULTS, IF NONE ENTER 00	□□ RECORD NUMBER OF INVALID RESULTS, IF NONE ENTER 00
342	RECORD NUMBER OF INVALID RESULTS USING "UNIGOLD HIV RDT" HERE	□□ RECORD NUMBER OF INVALID RESULTS, IF NONE ENTER 00	□□ RECORD NUMBER OF INVALID RESULTS, IF NONE ENTER 00	□□ RECORD NUMBER OF INVALID RESULTS, IF NONE ENTER 00
343	GO BACK TO 302 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF AN ADDITIONAL QUESTIONNAIRE; IF NO MORE MEN, END INTERVIEW.			

FIELDWORKER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING BIOMARKERS

SUPERVISOR'S OBSERVATIONS

EDITOR'S OBSERVATIONS

ADDITIONAL DHS PROGRAM RESOURCES

The DHS Program Website – Download free DHS reports, standard documentation, key indicator data, and training tools, and view announcements.	DHSprogram.com	
STATcompiler – Build custom tables, graphs, and maps with data from 90 countries and thousands of indicators.	Statcompiler.com	
DHS Program Mobile App – Access key DHS indicators for 90 countries on your mobile device (Apple, Android, or Windows).	Search DHS Program in your iTunes or Google Play store	
DHS Program User Forum – Post questions about DHS data, and search our archive of FAQs.	userforum.DHSprogram.com	
Tutorial Videos – Watch interviews with experts and learn DHS basics, such as sampling and weighting, downloading datasets, and how to read DHS tables.	www.youtube.com/DHSProgram	
Datasets – Download DHS datasets for analysis.	DHSprogram.com/Data	
Spatial Data Repository – Download geographically-linked health and demographic data for mapping in a geographic information system (GIS).	spatialdata.DHSprogram.com	

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