

**Zimbabwe  
Demographic  
and Health  
Survey  
2010-11**

**Preliminary Report**

**Zimbabwe National Statistics Agency  
Harare, Zimbabwe**

**MEASURE DHS, ICF Macro  
Calverton, Maryland, USA**

The 2010-11 Zimbabwe Demographic and Health Survey (2010-11 ZDHS) was implemented by the Zimbabwe National Statistics Agency (ZIMSTAT). The funding for the ZDHS was provided by the United States Agency for International Development (USAID), the Centers for Disease Control and Prevention (CDC), the United Nations Population Fund (UNFPA), the United Nations Development Program (UNDP), the United Nations Children's Fund (UNICEF), the United Kingdom Department for International Development (DFID), the European Union (EU), and the Government of Zimbabwe. ICF Macro supported the project through the MEASURE DHS project, a USAID-funded project providing support, technical assistance, and funding for population and health surveys in countries worldwide.

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## ACRONYMS

AIDS	Acquired Immunodeficiency Syndrome
ANC	Antenatal Care
ARI	Acute Respiratory Infection
BCG	Bacille Calmette-Guérin (vaccine)
CDC	Centers for Disease Control and Prevention
CHTTS	CSPRO HIV Test Tracking System
CPR	Contraceptive Prevalence Rate
CSPRO	Census and Survey Processing System
DFID	Department for International Development
DPT	Diphtheria Pertussis Tetanus (vaccine)
EIA	Enzyme Immunoassay
ELISA	Enzyme-Linked Immunosorbent Assay
EU	European Union
GPS	Global Positioning System
HepB	Hepatitis B (vaccine)
Hib	Haemophilus influenzae type B (vaccine)
HIV	Human Immunodeficiency Virus
IPTp	Intermittent Preventive Treatment in Pregnancy
ITN	Insecticide-Treated Net
IUD	Intrauterine device
IYCF	Infant and Young Child Feeding
LAM	Lactational Amenorrhoea Method
MDG	Millennium Development Goal
MOHCW	Ministry of Health and Child Welfare
MRCZ	Medical Research Council of Zimbabwe
NAC	National AIDS Council
NGO	Non-Governmental Organization
NMRL	National Microbiology Reference Laboratory
ORS	Oral Rehydration Salts
ORT	Oral Rehydration Therapy
PAHO	Pan American Health Organization
PSI	Population Services International
SP	Sulfadoxine-pyrimethamine
STI	Sexually Transmitted Infection
TFR	Total Fertility Rate
TOT	Training of Trainers
UNAIDS	Joint United Nations Programmes on HIV and AIDS
UNDP	United Nations Development Program
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
UZ	University of Zimbabwe
VCT	Voluntary Counselling and Testing
WHO	World Health Organisation
ZDHS	Zimbabwe Demographic and Health Survey
ZIMSTAT	Zimbabwe National Statistics Agency
ZNFPC	Zimbabwe National Family Planning Council



## I. INTRODUCTION

The 2010-11 Zimbabwe Demographic and Health Survey (2010-11 ZDHS) was implemented by the Zimbabwe National Statistics Agency from late September 2010 through March 2011 with a nationally representative sample of nearly 11,000 households. All women age 15-49 and all men age 15-54 in these households were eligible for individual interview.

Other agencies and organizations facilitating the successful implementation of the survey through technical and donor support include the Ministry of Health and Child Welfare (MOHCW), the National Microbiology Reference Laboratory (NMRL), the USAID/Zimbabwe Mission, the United Nations Population Fund (UNFPA), the United Nations Development Program (UNDP), the United Nations Children's Fund (UNICEF), the Centers for Disease Control and Prevention (CDC), and the United Kingdom Department for International Development (DFID), the European Union (EU), the National AIDS Council (NAC), Population Services International (PSI), University of Zimbabwe (UZ), the Joint United Nations Programmes on HIV and AIDS (UNAIDS), the Zimbabwe National Family Planning Council (ZNFPC), and the World Health Organization (WHO). ICF Macro provided technical assistance and funding to the 2010-11 ZDHS through the MEASURE DHS project, a USAID-funded programme supporting the implementation of population and health surveys in countries worldwide.

The 2010-11 ZDHS is a follow-up to the 1988, 1994, 1999 and 2005-06 ZDHS surveys and provides updated estimates of basic demographic and health indicators. In contrast to past ZDHS, the 2010-11 ZDHS was carried out using electronic personal digital assistants (PDAs) rather than paper questionnaires for recording responses during interviews.

This preliminary report presents a first look at selected results of the 2010-11 ZDHS. A comprehensive analysis of the data will appear in a final report to be published in 2012. Although the results presented here are considered provisional, they are not expected to differ significantly from those presented in the final report.

## II. SURVEY IMPLEMENTATION

### A. Sample Design

The sample for the 2010-11 ZDHS was designed to provide population and health indicator estimates at the national and provincial levels. The sample design allowed for specific indicators, such as contraceptive use, to be calculated for each of Zimbabwe's 10 provinces (Manicaland, Mashonaland Central, Mashonaland East, Mashonaland West, Matabeleland North, Matabeleland South, Midlands, Masvingo, Harare, and Bulawayo). The sampling frame used for the 2010-11 ZDHS was the 2002 Population Census.

Administratively, each province in Zimbabwe is divided into districts and each district into smaller administrative units called wards. During the 2002 Population Census, each of the wards was subdivided into convenient areas called census enumeration areas (EAs). The 2010-11 ZDHS sample was selected using a stratified, two-stage cluster design, and EAs were the sampling units for the first stage. The 2010-11 ZDHS sample included 406 EAs, 169 in urban areas and 237 in rural areas.

Households comprised the second stage of sampling. A complete listing of households was carried out in each of the 406 selected EAs in July and August 2010. Maps were drawn for each of the clusters and all private households were listed. The listing excluded institutional living arrangements (e.g., army barracks, hospitals, police camps, and boarding schools). A representative sample of 10,828 households was selected for the 2010-11 ZDHS survey.

All women age 15-49 and all men age 15-54 who were either permanent residents of the selected households or visitors who stayed in the household the night before the survey were eligible to be interviewed. Anaemia testing was performed in each household, among eligible women and men who consented to being tested. With the parent's or guardian's consent, children age five and under were also tested for anaemia in each household. Blood samples were collected for laboratory testing of HIV in each household, among eligible women and men who consented. In addition, a sub-sample of one eligible woman in each household was randomly selected to be asked additional questions about domestic violence.

### B. Questionnaires

Three questionnaires were used for the 2010-11 ZDHS: the Household Questionnaire, the Woman's Questionnaire, and the Man's Questionnaire. These questionnaires were adapted from model survey instruments developed for the MEASURE DHS project to reflect the population and health issues relevant to Zimbabwe. Issues were identified at a series of meetings with various stakeholders from government ministries and agencies, non-governmental organizations (NGOs), and international donors. In addition to English, the questionnaires were translated into two major languages, Shona and Ndebele.

The Household Questionnaire was used to list all the usual members and visitors of selected households. Some basic information was collected on the characteristics of each person listed, including his or her age, sex, education, and relationship to the head of the household. For children under age 18, survival status of the parents was determined. The data on the age and sex of household members obtained in the Household Questionnaire was used to identify women and men who were eligible for the individual interview. Additionally, the Household Questionnaire collected information on characteristics of the household's dwelling unit, such as the source of water, type of toilet facilities, materials used for the floor of the house, ownership of various durable goods, and ownership and use of mosquito nets (to assess the coverage of malaria prevention programmes).

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

- Background characteristics (age, education, media exposure, etc.)
- Birth history and childhood mortality
- Knowledge and use of family planning methods
- Fertility preferences
- Antenatal, delivery, and postnatal care
- Breastfeeding and infant feeding practices
- Vaccinations and childhood illnesses
- Marriage and sexual activity
- Women's work and husband's background characteristics
- Malaria prevention and treatment
- Awareness and behaviour regarding AIDS and other sexually transmitted infections (STIs)
- Adult mortality, including maternal mortality
- Domestic violence

The Man's Questionnaire was administered to all men age 15-54 in each household in the 2010-11 ZDHS sample. The Man's Questionnaire collected much of the same information found in the Woman's Questionnaire but was shorter because it did not contain a detailed reproductive history or questions on maternal and child health.

In this survey, instead of using paper questionnaires, interviewers used personal digital assistants (PDAs) to record responses during interview. The PDAs were equipped with Bluetooth technology to enable remote electronic transfer of files, such as assignment sheets from the team supervisor to the interviewers, household questionnaires among survey team members, and completed questionnaires from interviewers to team supervisors. The PDA programming was developed in the mobile version of CSPro developed by the MEASURE DHS project in collaboration with the U.S. Census Bureau.

### **C. Anthropometry, Anaemia, and HIV Testing**

The 2010-11 ZDHS incorporated three 'biomarkers': anthropometry, anaemia testing, and HIV testing. In contrast to household and individual interviews, data related to the coverage of the biomarker component, the anthropometric measures and the result of the anaemia testing was initially recorded in a paper form called the Biomarker Data Collection Form, and then subsequently entered into the PDA. The protocol for anaemia testing and for the blood specimen collection for HIV testing was reviewed and approved by the Medical Research Council of Zimbabwe (MRCZ), the Institutional Review Board of ICF Macro, and the Centers for Disease Control and Prevention (CDC) in Atlanta.

**Anthropometry.** In all households, height and weight measurements were recorded for children age 0-59 months, women age 15-49 years, and men age 15-54.

**Anaemia testing.** Blood specimens were collected for anaemia testing from all children age 6-59 months, women age 15-49 years and men age 15-54 years who voluntarily consented to the testing. Blood samples were drawn from a drop of blood taken from a finger prick (or a heel prick in the case of young children with small fingers) and collected in a microcuvette. Haemoglobin analysis was carried out on site using a battery-operated portable HemoCue analyzer. Results were given verbally and in writing. Parents of children with a haemoglobin level under 7 g/dl were instructed to take the child to a health facility for follow-up care. Likewise, non-pregnant women, pregnant women, and men were referred for follow-up care if their haemoglobin level was below 7 g/dl, 9 g/dl and 9 g/dl, respectively. All households in which anthropometry and/or anaemia testing was conducted were given a brochure explaining the causes and prevention of anaemia. Anaemia data must be adjusted for altitude prior to being tabulated, a process that as of June 2011 has yet to be completed. Thus, anaemia data will be published in the 2010-11 ZDHS Final Report.

**HIV testing.** Blood specimens were collected by the ZDHS biomarker technicians for laboratory testing of HIV from all women age 15-49 and men age 15-54 who consented to the test. The protocol for the blood specimen collection and analysis was based on the anonymous linked protocol developed for MEASURE DHS. This protocol allows for the merging of the HIV test results with the socio-demographic data collected in the individual questionnaires, after all information that could potentially identify an individual is destroyed.

Interviewers explained the procedure, the confidentiality of the data, and the fact that the test results would not be made available to the respondent. If a respondent consented to the HIV testing, five blood spots from the finger prick were collected on a filter paper card to which a barcode label unique to the respondent was affixed. Respondents were asked whether they consented to having the laboratory store their blood sample for future unspecified testing. If the respondent did not consent to additional testing using their sample, it was indicated on the Biomarker Data Collection Form that the respondent refused additional tests using their specimen, and the words 'no additional testing' were written on the filter paper card. Each household, whether individuals consented to HIV testing or not, was given an informational brochure on HIV/AIDS and a list of fixed sites providing voluntary counselling and testing (VCT) services in surrounding districts within the province.

Each blood sample was given a barcode label, with a duplicate label attached to the Biomarker Data Collection Form. A third copy of the same barcode was affixed to the Blood Sample Transmittal Form to track the blood samples from the field to the laboratory. Blood samples were dried overnight and packaged for storage the following morning. Samples were periodically collected in the field, along with the completed questionnaires, and transported to ZIMSTAT in Harare to be logged in, and checked; blood samples were then transported to the National Microbiology Reference Laboratory (NMRL) in Harare.

Upon arrival at NMRL, each blood sample was logged into the CSPro HIV Test Tracking System (CHTTS) database, given a laboratory number, and stored at -20°C until tested. The HIV testing protocol stipulates that testing of blood can only be conducted after the questionnaire data entry is completed, verified, and cleaned, and all unique identifiers are removed from the questionnaire file except the anonymous barcode number. As of this preliminary report, HIV testing has not yet begun. The testing algorithm calls for testing all samples on the first assay test, an ELISA, the Ani Labsystems HIV EIA. A negative result is rendered negative. All positives are subjected to a second ELISA, the Vironostika® HIV Uni-Form II Plus O (Biomerieux). Positive samples on the second test are rendered positive. If the first and second tests are discordant, a third confirmatory test, the HIV 2.2 western blot (DiaSorin), will be administered. The final result will be rendered positive if the western blot confirms the result to be positive and rendered negative if the western blot confirms it to be negative. If the western blot results are indeterminate, the sample will be rendered indeterminate.

Upon finalizing HIV testing, the HIV test results for the 2010-11 ZDHS will be entered into a spreadsheet with a barcode as the unique identifier to the result. The barcode will be used to link the HIV test results with the data from the individual interviews. Data from the HIV results and linked demographic and health data will be published in the 2010-11 ZDHS Final Report.

#### **D. Training of Field Staff**

ZIMSTAT staff and a variety of experts from government ministries, NGOs, and donor organizations participated in a three-day training of trainers (TOT) conducted from 30 June–2 July 2010. Immediately following the TOT, the pretest training and fieldwork took place. For two weeks in July 2010, 16 participants were trained to administer both paper and electronic questionnaires, take anthropometric measurements, and collect blood samples for anaemia and HIV testing. A representative from the National Microbiology Reference Laboratory (NMRL) assisted in training participants on the finger prick for blood collection, and proper handling and storage of the dried blood spots (DBS) for HIV testing. The pretest fieldwork was conducted over four days, covering

approximately 100 households. Debriefing sessions were held with the pretest field staff, and modifications to the questionnaires were made based on lessons drawn from the exercise.

ZIMSTAT recruited and trained 125 people for the main fieldwork to serve as supervisors, deputy supervisors, male and female interviewers, and reserve interviewers. Training of field staff for the main survey was conducted during a four-week period in late August and September 2010. The training course consisted of instruction regarding interviewing techniques and field procedures, a detailed review of the questionnaire content, instruction and practice in weighing and measuring children, mock interviews between participants in the classroom, and practice interviews with real respondents in areas outside the 2010-11 ZDHS sample points. Field practice in anthropometry, anaemia testing and DBS collection was also carried out for interviewers who were assigned as team biomarker technicians. Team supervisors and deputy supervisors were trained in methods of data quality control procedures, fieldwork coordination, and the use of special programs for the PDA. Deputy supervisors were also trained in using Global Positioning System (GPS) receivers to collect the coordinates of the 2010-11 ZDHS sample clusters.

## **E. Fieldwork**

Fifteen interviewing teams carried out data collection for the 2010-11 ZDHS. Each team consisted of one team supervisor, one deputy supervisor, three female interviewers, three male interviewers, and one driver. Electronic data files were transferred from each interviewer's PDA to the team supervisor's PDA every day. Thirteen senior staff members from ZIMSTAT coordinated and supervised fieldwork activities. Electronic data files were transferred to ZIMSTAT staff PDAs during field visits. An ICF Macro technical specialist, consultant, and two data processing staff as well as representatives from other organizations supporting the survey including NMRL, UNFPA, USAID, and ZNFPC participated in fieldwork monitoring. Data collection took place over a six-month period, from 29 September 2010 through late March 2011.

## **F. Data Processing**

All electronic data files for the ZDHS were returned to the ZIMSTAT central office in Harare, where they were stored on a password-protected computer. The data processing operation consisted of secondary editing, which involved editing computer-identified inconsistencies and coding of open-ended questions. The data were processed by a team of 2 data processing staff. Data editing was accomplished using the CSPro software. The process of office editing and data processing was initiated in October 2010 and completed in May 2011.

### III. RESULTS

#### A. Response Rates

The household and individual response rates for the 2010-11 ZDHS are shown in Table 1. A total of 10,828 households were selected for inclusion in the 2010-11 ZDHS, and of these, 10,166 were found to be occupied. Of the 10,166 occupied households, 9,756 were successfully interviewed, yielding a response rate of 96 percent.

In the interviewed households, a total of 9,831 women were identified to be eligible for the individual interview, and 93 percent of them were successfully interviewed. For men, 8,723 were identified as eligible for interview, and 86 percent of them were successfully interviewed.

The 2010-11 ZDHS achieved a higher male response rate (86 percent) than did the 2005-06 ZDHS (82 percent). As was the pattern in previous ZDHS, the response rates were higher for rural than urban areas, especially among men.

Table 1. Results of the household and individual interviews

Number of households, number of interviews, and response rates, according to residence (unweighted), Zimbabwe 2010-11

Result	Residence		Total
	Urban	Rural	
<b>Household interviews</b>			
Households selected	3,718	7,110	10,828
Households occupied	3,558	6,608	10,166
Households interviewed	3,325	6,431	9,756
Household response rate <sup>1</sup>	93.5	97.3	96.0
<b>Interviews with women age 15-49</b>			
Number of eligible women	3,808	6,023	9,831
Number of eligible women interviewed	3,437	5,734	9,171
Eligible women response rate <sup>2</sup>	90.3	95.2	93.3
<b>Interviews with men age 15-54</b>			
Number of eligible men	3,253	5,470	8,723
Number of eligible men interviewed	2,539	4,941	7,480
Eligible men response rate <sup>2</sup>	78.1	90.3	85.8

<sup>1</sup> Households interviewed/households occupied

<sup>2</sup> Respondents interviewed/eligible respondents

#### B. Characteristics of the Respondents

Table 2 shows the distribution of women and men age 15-49 years in the 2010-11 ZDHS sample, by background characteristics. The size of the population steadily declines with increasing age. Forty-one and 44 percent of women and men, respectively, are 15 to 24 years old.

Women who are in union (i.e., currently married or living with a man) constitute nearly two-thirds of all interviewed women (62 percent), and half of men age 15-49 are currently in union (51 percent). The proportion of men age 15-49 who have never been married is almost double that of women who have never been married, 45 percent compared with 24 percent.

Table 2 also shows that the majority of women (61 percent) and men (63 percent) live in rural areas.

Education in Zimbabwe is widespread; few women and even fewer men have never attended formal education (approximately 2 percent of women and 1 percent of men). Most Zimbabweans reach secondary level of schooling; Seventy-eight percent of men and 70 percent of women attended at least some secondary school.



Table 2. Background characteristics of respondents

Percent distribution of women and men age 15-49 by selected background characteristics, Zimbabwe 2010-11

Background characteristic	Women			Men		
	Weighted percent	Weighted number	Unweighted number	Weighted percent	Weighted number	Unweighted number
<b>Age</b>						
15-19	21.2	1,945	1,980	24.4	1,735	1,848
20-24	20.1	1,841	1,815	19.3	1,372	1,332
25-29	18.4	1,688	1,697	17.4	1,237	1,187
30-34	14.1	1,295	1,286	13.6	970	961
35-39	11.5	1,051	1,034	11.6	827	817
40-44	8.0	732	727	8.3	590	571
45-49	6.8	620	632	5.3	379	388
<b>Religion</b>						
Traditional	0.6	57	63	3.9	280	249
Roman Catholic	8.4	773	764	10.0	712	696
Protestant	16.8	1,539	1,511	13.9	991	935
Pentecostal	21.1	1,939	1,850	14.5	1,030	997
Apostolic Sect	38.0	3,488	3,396	27.7	1,968	1,955
Other Christian	8.4	768	953	7.7	550	556
Muslim	0.5	43	40	0.6	42	41
None	6.1	558	589	21.5	1,526	1,666
Other	0.1	6	5	0.1	10	9
<b>Marital status</b>						
Never married	24.0	2,197	2,332	45.3	3,221	3,322
Married	59.4	5,443	5,317	49.7	3,531	3,402
Living together	2.8	260	261	0.8	53	62
Divorced/separated	7.8	711	680	3.4	238	255
Widowed	6.1	560	581	0.9	66	63
<b>Residence</b>						
Urban	38.7	3,548	3,437	36.9	2,621	2,412
Rural	61.3	5,623	5,734	63.1	4,488	4,692
<b>Region</b>						
Manicaland	13.4	1,227	1,011	13.7	972	789
Mashonaland Central	9.5	871	904	10.4	738	789
Mashonaland East	9.0	824	847	9.4	667	714
Mashonaland West	11.2	1,026	970	12.3	872	836
Matebeleland North	4.8	443	767	4.9	349	557
Matebeleland South	5.1	467	835	4.9	352	650
Midlands	12.2	1,123	979	12.5	885	808
Masvingo	9.9	909	816	8.2	585	517
Harare	18.8	1,722	1,196	18.4	1,307	894
Bulawayo	6.1	558	846	5.4	382	550
<b>Education</b>						
No education	2.3	212	224	0.8	56	69
Primary	28.0	2,568	2,650	21.2	1,508	1,671
Secondary	65.1	5,966	5,904	70.7	5,027	4,893
More than secondary	4.6	424	393	7.3	519	471
Total 15-49	100.0	9,171	9,171	100.0	7,110	7,104
50-54	na	na	na	na	370	376
Total 15-54	na	na	na	na	7,480	7,480

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

na = Not applicable

### C. Fertility

To generate data on fertility, all women who were interviewed were asked to report the total number of sons and daughters to whom they had ever given birth in their lifetime. To ensure all information was reported, women were asked separately about children still living at home, those living elsewhere, and those who had died. A complete birth history was then obtained, including information on sex, date of birth, and survival status of each child; age at death for dead children was also recorded.

Table 3 shows age-specific fertility rates of women by five-year age groups for the three-year period preceding the survey. Age-specific and total fertility rates were calculated directly from the birth history data. The sum of age-specific fertility rates (known as the total fertility rate, or TFR) is a summary measure of the level of fertility. It can be interpreted as the number of children a woman would have by the end of her childbearing years if she were to pass through those years bearing children at the current observed age-specific rates. If fertility were to remain constant at current levels, a Zimbabwean woman would bear an average of 4.1 children in her lifetime. This represents an increase of 0.3 children in the 5 years since the 2005-06 ZDHS, when the TFR was 3.8 births per woman. Fertility is significantly higher among rural women than among urban women; rural women will give birth to nearly two more children during their reproductive years than urban women (4.8 and 3.1, respectively).

Figure 1 shows the trends in TFR between the 1988 and 2010-11 ZDHS surveys.

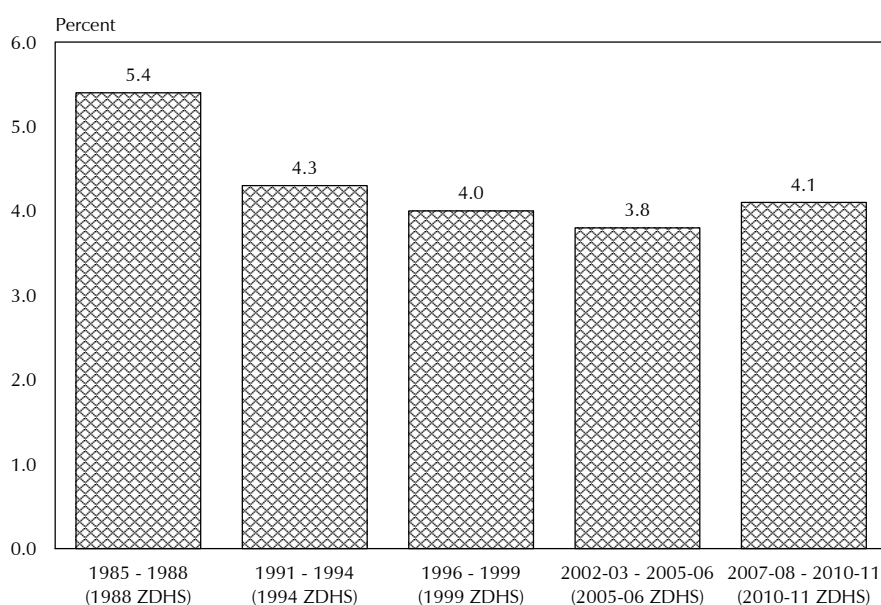
Table 3. Current fertility

Age-specific and total fertility rates, the general fertility rate, and the crude birth rate for the three years preceding the survey, by residence, Zimbabwe 2010-11

Age group	Residence		Total
	Urban	Rural	
15-19	71	144	115
20-24	167	245	212
25-29	160	217	194
30-34	120	167	149
35-39	79	117	104
40-44	14	46	35
45-49	5	15	12
TFR (15-49)	3.1	4.8	4.1
GFR	115	172	150
CBR	33.8	34.3	34.1

Note: Age-specific fertility rates are per 1,000 women. Rates for age group 45-49 may be slightly biased due to truncation. Rates are for the period 1-36 months prior to interview.  
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

**Figure 1 Trends in Total Fertility Rate, Zimbabwe 1984-2011**



Note: Rates are for the three years preceding the survey.

#### D. Fertility Preferences

Information on fertility preferences is used to assess the potential demand for family planning services for the purposes of spacing or limiting future childbearing. To elicit information on fertility preferences, several questions were asked of women (pregnant or not) on whether they want to have another child, and if so, how soon.

Table 4 shows that 18 percent of women want to have another child soon (within the next two years) and 33 percent want to have another child later (in two or more years). Thirty-nine percent of women want no more children.

Table 4. Fertility preferences by number of living children

Percent distribution of currently married women age 15-49 by desire for children, according to number of living children, Zimbabwe 2010-11

Desire for children	Number of living children <sup>1</sup>							Total
	0	1	2	3	4	5	6+	
Have another soon <sup>2</sup>	82.0	23.5	15.9	12.1	9.4	4.2	3.8	17.9
Have another later <sup>3</sup>	4.5	60.1	42.2	27.7	15.1	7.7	3.9	33.4
Have another, undecided when	1.2	2.0	2.0	1.0	0.8	1.1	0.1	1.4
Undecided	1.1	4.5	7.0	7.2	6.0	5.3	2.6	5.6
Want no more	3.2	9.4	31.7	49.5	65.2	78.1	85.2	39.3
Sterilized	0.0	0.3	0.3	1.9	2.4	2.6	2.2	1.1
Declared infecund	8.1	0.2	0.8	0.6	1.1	1.0	2.2	1.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	288	1,309	1,548	1,093	714	376	375	5,703

<sup>1</sup> The number of living children includes current pregnancy

<sup>2</sup> Wants next birth within 2 years

<sup>3</sup> Wants to delay next birth for 2 or more years

Fertility preference is closely related to the number of living children. More than four out of five women with no living children (82 percent) want a child soon, compared with only 4 percent of women with six or more children who still want another child in the next two years. The more children a woman has, the higher the likelihood that she does not want another child.

## E. Family Planning

Family planning refers to a conscious effort by a couple to limit or space the number of children they want to have through the use of contraceptive methods. Information about the knowledge of family planning methods was collected from female and male respondents by asking them if they had heard of various specific methods by which a couple can delay or avoid a pregnancy. Respondents were also asked if they were currently using a method, and if so, which method they were using, and where they had obtained the method they were using.

Contraceptive methods are classified as modern or traditional methods. Modern methods include female sterilisation, male sterilisation, the pill, the intrauterine device (IUD), injectables, implants, male condom, female condom, diaphragm, and lactational amenorrhoea method (LAM). Methods such as rhythm (periodic abstinence), withdrawal, and folk methods are grouped as traditional.

Table 5 shows the percent distribution of currently married women by the contraceptive method currently being used. Overall, 59 percent of currently married women are currently using a method of family planning, and nearly all use is a modern method; only one percent of currently married women are using a traditional method. The most popular methods are the pill (used by 41 percent of currently married women) and injectables (8 percent). One percent of married women have been sterilized, three percent reported using implants and three percent are using male condoms. The contraceptive prevalence rate (CPR) increases with age, reaching a peak at age 30-34 years (64 percent), and then declines to 44 percent among women 45-49 years.

The CPR in Zimbabwe observed in the 2010-11 ZDHS is unchanged from that reported in the 2005-06 ZDHS (59 percent compared to 60 percent). This stands in contrast to the steady increase in the CPR observed over the 22 years prior to the 2005-06 ZDHS, from 38 percent in 1984 to 60 percent in 2005-06. While CPR among rural women (57 percent) is similar to what it was five years ago (55 percent), CPR has fallen from 70 percent in 2005-06 to 62 percent in 2010-11 among urban women.

Table 5. Current use of contraception by background characteristics

Percent distribution of currently married women age 15-49 by contraceptive method currently used, according to background characteristics, Zimbabwe 2010-11

Background characteristic	Modern method					Any traditional method			Not currently using			Total	Number of women			
	Any method	Female sterilization	Pill	IUD	Injectables	Implants	Male condom	Female condom	LAM	Any traditional method	Rhythm			Withdrawal	Other	
<b>Age</b>																
15-19	36.2	0.0	29.9	0.0	3.5	0.3	0.9	0.0	0.8	0.0	0.8	0.0	0.0	63.8	100.0	452
20-24	60.2	0.0	48.6	0.1	7.4	1.3	1.2	0.1	0.3	0.0	1.1	0.0	0.0	39.8	100.0	1,210
25-29	63.4	0.1	46.7	0.0	8.9	3.8	2.2	0.2	0.1	0.0	1.4	1.0	0.3	36.6	100.0	1,330
30-34	63.8	0.4	43.2	0.6	9.9	4.6	3.9	0.2	0.1	0.0	0.9	0.1	0.1	36.2	100.0	1,011
35-39	60.3	1.1	40.8	0.3	8.9	2.2	5.5	0.5	0.1	0.0	1.0	0.0	0.1	39.7	100.0	815
40-44	59.5	3.9	32.4	0.0	11.4	3.8	5.3	1.1	0.0	0.0	1.5	0.2	0.4	40.5	100.0	488
45-49	44.2	7.9	21.3	0.1	5.4	1.6	4.4	0.5	0.0	0.0	3.0	0.2	0.4	55.8	100.0	397
<b>Residence</b>																
Urban	61.5	1.5	42.9	0.3	6.8	4.0	4.2	0.4	0.2	0.0	1.1	0.2	0.1	38.5	100.0	1,937
Rural	57.0	0.9	40.5	0.1	9.1	2.1	2.5	0.2	0.2	0.0	1.3	0.1	0.2	43.0	100.0	3,766
<b>Region</b>																
Manicaland	56.2	1.3	35.8	0.1	10.8	1.4	3.9	0.5	0.6	0.0	1.6	0.1	0.2	43.8	100.0	798
Mashonaland Central	63.8	1.3	49.9	0.1	5.9	1.1	2.9	0.4	0.0	0.0	2.2	0.0	0.4	36.2	100.0	626
Mashonaland East	62.5	1.0	43.4	0.3	9.4	3.1	2.9	0.5	0.0	0.0	1.7	0.0	0.0	37.5	100.0	541
Mashonaland West	62.1	0.3	46.0	0.1	9.0	2.2	3.3	0.3	0.0	0.0	0.9	0.3	0.0	37.9	100.0	718
Matabeleland North	50.8	0.7	27.6	0.8	12.2	6.5	1.6	0.0	0.0	0.0	1.4	0.0	0.5	49.2	100.0	257
Matabeleland South	46.2	1.2	19.8	0.2	15.7	3.9	4.3	0.0	0.0	0.0	1.0	0.0	0.7	53.8	100.0	230
Midlands	58.5	0.8	41.7	0.0	10.2	2.9	1.9	0.0	0.2	0.0	0.9	0.0	0.3	41.5	100.0	695
Masvingo	54.2	1.2	41.4	0.0	7.6	1.8	1.7	0.2	0.0	0.2	0.2	0.0	0.0	45.8	100.0	626
Harare	59.4	1.1	45.8	0.3	3.5	3.5	3.2	0.4	0.4	0.0	1.2	1.0	0.0	40.6	100.0	972
Bulawayo	61.0	4.6	33.9	0.0	6.5	6.0	7.8	0.4	0.0	0.0	1.8	0.3	0.0	39.0	100.0	239
<b>Education</b>																
No education	43.0	1.3	31.9	0.0	5.3	0.8	1.8	0.9	0.0	0.0	1.0	0.0	0.0	57.0	100.0	154
Primary	54.5	1.5	38.1	0.2	7.7	1.7	3.1	0.4	0.2	0.0	1.6	1.3	0.3	45.5	100.0	1,827
Secondary	60.7	0.8	43.3	0.2	8.8	2.9	3.0	0.3	0.2	0.0	1.1	0.1	0.1	39.3	100.0	3,485
More than secondary	67.4	3.2	42.0	0.0	7.1	9.6	4.6	0.0	0.0	0.0	0.8	0.6	0.0	32.6	100.0	237
<b>Number of living children</b>																
0	5.6	0.0	2.4	0.0	0.2	0.2	2.1	0.4	0.0	0.0	0.4	0.0	0.0	94.4	100.0	468
1-2	62.6	0.3	47.9	0.2	7.9	2.5	2.6	0.2	0.2	0.0	0.8	0.1	0.0	37.4	100.0	2,840
3-4	67.7	2.2	45.0	0.3	10.3	3.6	3.9	0.3	0.2	0.0	1.9	0.0	0.3	32.3	100.0	1,686
5+	55.3	2.6	31.8	0.1	10.9	3.2	3.7	0.6	0.1	0.0	2.2	0.3	0.6	44.7	100.0	708
Total	58.5	1.1	41.3	0.2	8.3	2.7	3.1	0.3	0.2	0.0	1.3	0.1	0.2	41.5	100.0	5,703

Note: If more than one method is used, only the most effective method is considered in this tabulation.

LAM = Lactational amenorrhoea method

There are large differences in levels of contraceptive use by region. While use of modern methods is nearly 60 percent or more among women in Harare, Bulawayo, Mashonaland East, Mashonaland West, Mashonaland Central, and Midlands, the corresponding rate in both Matabeleland North and Matabeleland South is below 50 percent.

Contraceptive use increases with educational attainment and with the number of living children a woman has. Six percent of women who have no children are currently using family planning, compared with 63 percent of women with one or two children. The CPR is highest for women with three or four children (68 percent).

## F. Early Childhood Mortality

Infant and child mortality rates are basic indicators of a country's socioeconomic situation and quality of life (UNDP, 2007). Estimates of childhood mortality are based on information collected in the birth history section of the questionnaire administered to individual women. The section begins with questions about the aggregate childbearing experience of respondents (i.e., the number of sons and daughters who live with the mother, the number who live elsewhere, and the number who have died). Table 6 presents estimates for three successive five-year periods prior to the 2010-11 ZDHS. The rates are estimated directly from the information in the birth history on a child's birth date, survivorship status, and age at death for children who died. This information is used to directly estimate the following five mortality rates:

<b>Neonatal mortality:</b>	the probability of dying within the first month of life
<b>Post-neonatal mortality:</b>	the difference between infant and neonatal mortality
<b>Infant mortality:</b>	the probability of dying before the first birthday
<b>Child mortality:</b>	the probability of dying between the first and fifth birthday
<b>Under-5 mortality:</b>	the probability of dying between birth and the fifth birthday

All rates are expressed per 1,000 live births, except for child mortality, which is expressed per 1,000 children surviving to 12 months of age.

Table 6 presents infant, child, and under-5 mortality estimates based on the data from the 2010-11 ZDHS for the five years immediately preceding the survey (2006–2011); the infant mortality rate was 57 deaths per 1,000 live births. The estimate of child mortality is 29 deaths per 1,000 children surviving to 12 months of age, while the overall under-5 mortality rate for the same period is 84 deaths per 1,000 live births. Sixty-eight percent of all deaths to children under-5 in Zimbabwe take place before a child's first birthday, with 37 percent occurring during the first month of life.

The 2010-11 ZDHS documents a pattern of increasing under-5 mortality during the fifteen years prior to the survey. Further investigation of this pattern is warranted.

Years preceding the survey	Neonatal mortality (NN)	Post-neonatal mortality (PNN) <sup>1</sup>	Infant mortality ( <sub>1</sub> q <sub>0</sub> )	Child mortality ( <sub>4</sub> q <sub>1</sub> )	Under-five mortality ( <sub>5</sub> q <sub>0</sub> )
0-4	31	26	57	29	84
5-9	25	27	51	19	70
10-14	25	21	46	17	62

<sup>1</sup> Computed as the difference between the infant and neonatal mortality rates

## **G. Maternal Care**

Proper care during pregnancy and delivery is important for the health of both the mother and the baby, and is the fifth Millennium Development Goal (MDG). In the 2010-11 ZDHS, women who had given birth in the five years preceding the survey were asked a number of questions about maternal care. Mothers were asked whether they had received tetanus toxoid injections while pregnant and whether they had obtained antenatal care during the pregnancy for their most recent live birth in the last five years. For each live birth over the same period, the mothers were also asked what type of assistance they received at the time of delivery. Table 7 summarizes information on the coverage of these maternal health services.

### **Antenatal Care**

Antenatal care (ANC) from a trained provider is important to monitor the pregnancy and reduce morbidity and mortality risks for the mother and child during pregnancy and delivery. The 2010-11 ZDHS results show that 90 percent of women who gave birth in the five years preceding the survey received antenatal care from a trained health professional at least once for their last birth. Urban and rural women are equally likely to have received ANC from a health professional. Antenatal care is most common among women with higher than secondary education (95 percent).

### **Tetanus Toxoid**

Tetanus toxoid injections are given during pregnancy to prevent neonatal tetanus, a major cause of early infant death in many developing countries, often due to failure to observe hygienic procedures during delivery. Table 7 indicates that 49 percent of last births were protected against neonatal tetanus. Births to mothers from the Matebeleland South (79 percent) and Mashonaland East (68 percent) are most likely to be protected against neonatal tetanus compared with births to mothers elsewhere (41-50 percent). Nationally, protection against neonatal tetanus has decreased from 58 percent in 2005-06.

### **Delivery Care**

Access to proper medical attention and hygienic conditions during delivery can reduce the risk of complications and infections that may lead to death or serious illness for the mother and/or baby (Van Lerberghe, W., and V. De Brouwere, 2001; WHO, 2006). Table 7 shows that 66 percent of women reported that their last live birth in the last five years was delivered by a health professional. Sixty-five percent of births were delivered in a health facility, similar to the level reported in the 2005-06 ZDHS (68 percent).

Eighty-six percent of births to urban mothers were attended to by a health professional and 85 percent were delivered in a health facility, compared with 58 percent and 57 percent, respectively, of births to rural women. Mothers residing in Bulawayo are the most likely to be attended to at delivery by a health professional (88 percent) and the most likely to deliver in the health facility (88 percent) compared with mothers of other regions.

Mothers' educational status is highly correlated on whether delivery is assisted by a health professional and whether the birth is delivered in a health facility. For example, 39 percent of births to mothers with no education were attended to by a health professional and 36 percent were delivered in a health facility compared with 95 percent of births to mothers with more than secondary education.

**Table 7. Maternal care indicators**

Among women age 15-49 who had a live birth in the five years preceding the survey, percentage who received antenatal care from a skilled provider for the last live birth and percentage whose last live birth was protected against neonatal tetanus, and among all live births in the five years before the survey, percentage delivered by a skilled provider and percentage delivered in a health facility, by background characteristics, Zimbabwe 2010-11

Background characteristic	Percentage with antenatal care from a skilled provider <sup>1</sup>	Percentage whose last live birth was protected against neonatal tetanus <sup>2</sup>	Number of women	Percentage delivered by a skilled provider <sup>1</sup>	Percentage delivered in a health facility	Number of births
<b>Mother's age at birth</b>						
<20	86.4	48.2	758	64.8	63.6	1,091
20-34	90.7	49.2	3,206	67.1	66.1	3,978
35-49	89.3	44.2	462	62.7	60.7	528
<b>Residence</b>						
Urban	89.9	46.3	1,382	86.0	85.1	1,666
Rural	89.8	49.5	3,043	57.9	56.6	3,931
<b>Region</b>						
Manicaland	86.7	43.6	628	60.3	60.7	846
Mashonaland Central	91.8	46.3	471	51.4	50.3	603
Mashonaland East	86.8	68.0	426	59.9	59.0	530
Mashonaland West	87.4	50.1	552	55.0	52.6	701
Matebeleland North	92.9	47.7	215	65.7	63.5	265
Matebeleland South	95.9	79.2	213	71.6	69.3	273
Midlands	91.5	43.0	547	64.7	63.5	699
Masvingo	94.1	41.1	496	75.2	73.4	627
Harare	87.0	41.9	689	83.5	82.7	826
Bulawayo	92.1	47.2	189	88.4	88.3	227
<b>Mother's education</b>						
No education	90.4	39.2	77	38.9	35.6	95
Primary	85.1	44.7	1,374	49.8	48.5	1,814
Secondary	91.8	50.7	2,835	74.1	73.0	3,522
More than secondary	94.6	47.5	139	95.0	95.0	166
Total	89.8	48.5	4,425	66.2	65.1	5,597

<sup>1</sup> Skilled provider includes doctor, nurse midwife, or nurse.  
<sup>2</sup> Includes mothers with two injections during the pregnancy of her last live birth, or two or more injections (the last within 3 years of the last live birth), or three or more injections (the last within 5 years of the last live birth), or four or more injections (the last within ten years of the last live birth), or five or more injections at any time prior to the last live birth

## H. Child Health and Nutrition

The 2010-11 ZDHS collected data on a number of key child health indicators, including immunization of young children, infant feeding practices, and treatment practices when a child is ill.

### Vaccination of Children

According to the World Health Organization (WHO), a child is considered fully vaccinated if he or she has received a BCG vaccination against tuberculosis; three doses of DPT vaccine to prevent diphtheria, pertussis, and tetanus (DPT); at least three doses of polio vaccine; and one dose of measles vaccine. These vaccinations should be received during the first year of life. The 2010-11 ZDHS collected information on the coverage for these vaccinations among all children born in the five years preceding the survey. In Zimbabwe, since 2008, three doses of pentavalent vaccine (DPT-HepB-Hib) are given in place of the three doses of DPT vaccine. BCG vaccine should be given at birth, and pentavalent and polio vaccines should be given at approximately 3, 4, and 5 months of age. Measles vaccine should be given at or soon after the child reaches nine months of age. It is also recommended that children receive the complete schedule of vaccinations before their first birthday, and that the vaccinations be recorded on a health card that is given to the parents or guardians.

In the 2010-11 ZDHS, information on vaccination coverage was obtained in two ways—from health cards and from mothers’ verbal reports. All mothers were asked to show the interviewer the health cards where immunisation dates are recorded for all children born since January 2006. If the card was available, the interviewer then recorded from the cards the dates of each vaccination received into the electronic questionnaire. If a child never received a health card, or if the mother was unable to show the card to the interviewer, the child’s vaccination information was based on the mother’s recall. The mother was asked to recall whether the child had received BCG, polio, DPT/pentavalent and measles vaccines. If she indicated that the child had received the polio or DPT/pentavalent vaccines, she was asked about the number of doses that the child received. The mother was then asked whether the child had received other vaccinations that were not recorded on the card, and if so, they too were recorded. The results presented here are based on both health card information and, for those children without a card, information provided by the mother.

Table 8 pertains to children age 12-23 months, the age by which they should have received all vaccinations. Mothers were able to produce health cards for 68 percent of these children. Overall, 64 percent of children age 12-23 months are fully vaccinated. Basic vaccination coverage has increased by 11 percent since the 2005-06 ZDHS estimate (53 percent). Over 87 percent of children received BCG and the first dose of polio vaccine, and 86 percent of children received the first dose of DPT/pentavalent. Seventy-three percent of children completed the required three doses of the DPT/pentavalent and polio vaccines. Coverage of vaccination against measles is 79 percent. Overall, 12 percent of children in Zimbabwe have not received any vaccinations. This represents an improvement from 2005-06 ZDHS in which 21 percent of children were reported to have not received any vaccinations.

Table 8. Vaccinations by background characteristics

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), and percentage with a vaccination card, by background characteristics, Zimbabwe 2010-11

Background characteristic	BCG	DPT			Polio			Measles	All basic vaccinations <sup>1</sup>	No vaccinations	Percentage with a vaccination card seen	Number of children
		1	2	3	1	2	3					
<b>Sex</b>												
Male	87.3	85.3	80.3	71.1	86.2	81.8	70.7	78.0	62.4	12.0	66.4	518
Female	86.5	85.8	81.7	74.7	87.2	83.4	75.3	80.0	66.3	12.5	69.3	515
<b>Residence</b>												
Urban	87.3	87.4	84.6	75.1	87.6	85.9	77.3	83.1	69.9	12.0	63.6	298
Rural	86.7	84.8	79.5	72.0	86.4	81.2	71.3	77.4	62.1	12.3	69.5	735
<b>Region</b>												
Manicaland	70.7	67.2	61.1	52.1	69.7	64.4	52.2	64.5	45.6	27.1	54.3	173
Mashonaland Central	90.3	90.0	86.7	78.4	91.0	86.7	78.6	81.0	67.3	9.0	82.6	91
Mashonaland East	88.5	87.8	86.5	85.9	88.4	87.1	84.9	82.0	79.6	10.9	68.6	120
Mashonaland West	93.9	92.3	90.7	83.9	92.0	88.3	81.8	80.8	73.1	6.1	77.6	107
Matebeleland North	98.0	92.6	91.0	80.2	98.0	95.1	81.4	91.0	65.7	2.0	74.2	54
Matebeleland South	95.6	95.6	90.4	83.0	97.3	91.1	77.7	85.6	72.6	2.7	62.1	62
Midlands	86.9	87.1	76.6	67.4	87.3	79.3	70.1	79.9	57.3	10.6	72.1	124
Masvingo	88.4	87.0	79.8	69.3	88.4	82.7	69.2	77.9	55.9	11.6	71.1	110
Harare	85.7	85.7	82.7	70.1	85.7	85.1	72.9	81.1	67.7	14.3	57.3	143
Bulawayo	95.0	94.0	92.0	89.3	95.0	91.7	89.3	88.0	83.3	5.0	77.6	49
<b>Mother's education</b>												
No education	*	*	*	*	*	*	*	*	*	*	*	11
Primary	84.5	82.8	75.3	62.8	83.8	76.9	63.4	72.7	52.0	15.2	65.3	302
Secondary	87.8	86.6	83.3	76.8	87.8	84.7	77.0	81.3	69.0	11.1	69.3	685
More than secondary	(88.0)	(88.0)	(88.0)	(84.2)	(88.0)	(88.0)	(84.2)	(88.0)	(84.2)	(12.0)	(56.1)	35
Total	86.9	85.6	81.0	72.9	86.7	82.6	73.0	79.0	64.3	12.2	67.8	1,033

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.

<sup>1</sup> BCG, measles, and three doses each of DPT or Pentavalent vaccine and polio vaccine



Children in urban areas are more likely than rural children to be fully vaccinated (70 percent compared with 62 percent, respectively). Regionally, children with full vaccination coverage range from a high of 83 percent in the Bulawayo to a low of 46 percent in Manicaland.

### **Childhood Acute Respiratory Infection, Fever, and Diarrhoea**

Acute respiratory infection (ARI), fever, and dehydration from diarrhoea are important contributing causes of childhood morbidity and mortality in developing countries (WHO, 2003). Prompt medical attention when a child has the symptoms of these illnesses is, therefore, crucial in reducing child deaths. In the 2010-11 ZDHS, for each child under age 5, mothers were asked if the child had experienced an episode of diarrhoea, a cough accompanied by short, rapid breathing (symptoms of ARI), or fever in the two weeks preceding the survey. Respondents were also asked if treatment was sought when the child was ill. Overall, 4 percent of children under age 5 showed symptoms of ARI, 10 percent exhibited fever, and 13 percent experienced diarrhoea in the two weeks preceding the survey. It should be noted that the morbidity data collected are subjective because they are based on a mother's perception of illnesses without validation by medical personnel.

Table 9 shows that treatment from a health facility or provider was sought for 47 percent of the children with ARI symptoms and 37 percent of the children with fever symptoms. Treatment was sought from a health facility or health provider for 36 percent of children with diarrhoea, and 63 percent of children with diarrhoea received a rehydration solution from an ORS packet or a recommended home fluid. Children of rural mothers were more likely than children of urban mothers to receive treatment from a health facility or health provider when they were sick with symptoms of ARI, or fever, but not diarrhoea.

Table 9. Treatment for acute respiratory infection, fever, and diarrhoea

Among children under five years who had symptoms of acute respiratory infection (ARI) or were sick with fever in the two weeks preceding the survey, percentage for whom treatment was sought from a health facility or provider, and among children under five years who were sick with diarrhoea during the two weeks preceding the survey, percentage for whom treatment was sought from a health facility or provider, percentage given a solution made from oral rehydration salt (ORS) packets and percentage given any oral rehydration therapy (ORT) by background characteristics, Zimbabwe 2010-11

Background characteristic	Children with symptoms of ARI <sup>1</sup>		Children with fever		Children with diarrhoea			
	Percentage for whom treatment was sought from a health facility/provider <sup>2</sup>	Number with ARI	Percentage for whom treatment was sought from a health facility/provider <sup>2</sup>	Number with fever	Percentage for whom treatment was sought from a health facility/provider <sup>2</sup>	Percentage given solution from ORS packet	Percentage given any ORT <sup>3</sup>	Number with diarrhoea
<b>Age in months</b>								
<6	(39.7)	22	32.7	49	(16.6)	(12.4)	(28.0)	41
6-11	(57.0)	35	43.7	92	34.5	15.7	54.2	136
12-23	57.6	52	33.9	105	39.6	23.3	66.3	244
24-35	(36.6)	41	31.1	112	36.8	21.3	70.5	135
36-47	(41.9)	33	46.0	75	36.9	32.4	75.4	91
48-59	(45.5)	34	33.8	73	(26.6)	(4.9)	(59.9)	41
<b>Sex</b>								
Male	41.0	110	36.3	246	34.0	21.2	62.6	371
Female	54.0	107	37.1	261	37.4	20.6	64.0	317
<b>Residence</b>								
Urban	(40.2)	38	29.8	134	36.5	25.9	68.0	230
Rural	48.9	179	39.2	372	35.1	18.4	60.9	458
<b>Region</b>								
Manicaland	(35.8)	39	35.7	124	38.4	19.5	62.1	121
Mashonaland Central	*	16	42.2	85	30.6	25.1	60.9	80
Mashonaland East	*	9	(34.6)	38	49.6	22.7	78.1	62
Mashonaland West	(37.1)	26	(24.9)	52	21.3	9.6	44.4	92
Matebeleland North	*	12	49.9	35	60.0	21.7	59.2	36
Matebeleland South	(42.9)	15	56.2	27	(34.9)	(12.3)	(77.6)	20
Midlands	(48.2)	46	(39.3)	34	30.7	28.4	61.7	87
Masvingo	(64.5)	27	(31.9)	40	(46.1)	(14.1)	(68.1)	50
Harare	*	19	(31.7)	54	31.6	27.7	68.3	119
Bulawayo	*	7	(20.9)	17	(34.0)	(10.4)	(77.7)	21
<b>Mother's education</b>								
No education	*	*	*	*	*	*	*	9
Primary	43.0	102	38.6	176	31.6	15.4	60.9	233
Secondary	51.8	111	36.1	304	38.1	24.0	64.9	434
More than secondary	*	*	*	*	*	*	*	12
<b>Total</b>	<b>47.4</b>	<b>217</b>	<b>36.7</b>	<b>506</b>	<b>35.6</b>	<b>20.9</b>	<b>63.3</b>	<b>688</b>

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.

<sup>1</sup> Symptoms of ARI (cough accompanied by short, rapid breathing which was chest-related and/or by difficult breathing which was chest-related) are considered a proxy for pneumonia.

<sup>2</sup> Excludes pharmacy, shop, and traditional practitioner

<sup>3</sup> Includes ORS from packets and recommended home fluid

## Infant and Young Child Feeding Practices

Breastfeeding is sufficient and beneficial for infant nutrition in the first 6 months of life. Breastfeeding immediately after birth also helps the uterus retract, hence reducing the mother's postpartum blood loss. Supplementing breast milk before the child is 6 months of age is discouraged because it may inhibit breastfeeding and expose the newborn infant to illness. At a later stage of the baby's development, breast milk should be supplemented by other liquids and eventually by solid or mushy food to provide adequate nourishment (PAHO, 2002).

The 2010-11 ZDHS collected data on infant and young child feeding (IYCF) practices for all children born in the two years preceding the survey. As shown in Table 10, 32 percent of children under 6 months are exclusively breastfed. This represents a sizeable increase over 2005-06, when 22 percent of children under the age of 6 months were exclusively breastfed. In addition to breast milk, 26 percent of infants under 6 months are given plain water only, while 2 percent are given non-milk liquids and juice, and 1 percent are given milk other than breast milk. Furthermore, 36 percent of infants under 6 months are given complementary foods. By age 6-9 months, 83 percent of infants are given complementary foods. Six percent of infants under 6 months are fed using a bottle with a nipple, a practice that is discouraged because of the risk of illness to the child.

Table 10. Breastfeeding status by age

Percent distribution of youngest children under two years who are living with their mother, by breastfeeding status and the percentage currently breastfeeding; and the percentage of all children under two years using a bottle with a nipple, according to age in months, Zimbabwe 2010-11

Age in months	Percent distribution of youngest children under two living with their mother by breastfeeding status							Percentage currently breast-feeding	Number of youngest children under two years	Percentage using a bottle with a nipple	Number of all children under two years
	Not breast-feeding	Breastfeeding and consuming:					Total				
		Exclusively breastfed	Plain water only	Non-milk liquids/juice	Other milk	Complementary foods					
0-1	2.7	60.6	24.3	0.5	1.9	10.0	100.0	97.3	167	1.5	169
2-3	4.1	30.2	25.2	3.5	1.5	35.5	100.0	95.9	236	6.6	238
4-5	3.0	14.9	28.2	2.0	0.6	51.3	100.0	97.0	273	8.9	279
6-8	3.5	4.5	9.4	0.0	0.3	82.3	100.0	96.5	327	8.7	334
9-11	6.8	0.2	3.3	1.2	0.3	88.2	100.0	93.2	324	9.4	331
12-17	17.2	1.8	2.2	0.2	0.1	78.5	100.0	82.8	583	8.9	597
18-23	70.3	0.4	0.8	0.4	0.2	27.9	100.0	29.7	379	6.6	436
0-3	3.5	42.8	24.8	2.3	1.7	24.9	100.0	96.5	403	4.4	407
0-5	3.3	31.5	26.2	2.2	1.2	35.6	100.0	96.7	676	6.2	686
6-9	4.3	3.6	8.6	0.5	0.2	82.8	100.0	95.7	424	8.5	431
12-15	12.0	2.0	2.7	0.2	0.0	83.1	100.0	88.0	410	9.3	418
12-23	38.1	1.3	1.6	0.2	0.2	58.5	100.0	61.9	962	7.9	1,033
20-23	80.5	0.6	0.9	0.0	0.0	17.9	100.0	19.5	252	5.7	296

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/juice, other milk, and complementary foods (solids and semi-solids) are hierarchical and mutually exclusive, and their percentages add to 100 percent. 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.

## Nutritional Status of Children

Anthropometric indicators for young children were collected in the 2010-11 ZDHS to provide outcome measures of nutritional status. As recommended by the WHO, evaluation of nutritional status in this report is based on the comparison of three indices for the children in this survey with indices reported for a reference population of well-nourished children (WHO Multicentre Growth Reference Study Group, 2006). Importantly, however, the WHO Child Growth Standards reference population for the 2010-11 ZDHS differs from that used in past DHS surveys, and thus the measures from the 2010-11 ZDHS are not directly comparable to previous ZDHS results. The three indices are expressed as standard deviation units from the median for the reference group. Children who fall below minus two standard deviations (-2 SD) from the median of the reference population are regarded as moderately malnourished, while those who fall below minus three standard deviations (-3 SD) from the median of the reference population are considered severely malnourished. Marked differences, especially with regard to height-for-age and weight-for-age are often seen between different sub-groups of children within a country.

Table 11 shows nutritional status for children under age 5 years, according to the three anthropometric indices, by background characteristics. Height-for-age is the measure of linear growth. A child who is below minus two standard deviations from the reference mean for height-for-age is considered short for his/her age, or stunted, a condition reflecting the cumulative effect of chronic malnutrition. The percentage of children who are stunted (below -2 SD) is 32 percent. In the 2010-11 ZDHS, results show a higher proportion of males (36 percent) than females (28 percent) who are stunted. In rural areas, 33 percent of children are stunted, versus 28 percent of children in urban areas. Thirty percent or more of children are stunted in all regions except Bulawayo (26 percent) and Harare (29 percent). Stunting steadily decreases as level of mother's education increases, from a high of 41 percent among children of mothers with no education to a low of 19 percent among children of mothers with more than secondary education.

Table 11. Nutritional status of children

Percentage of children under five years classified as malnourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height, and weight-for-age, by background characteristics, Zimbabwe 2010-11

Background characteristic	Height-for-age <sup>1</sup>			Weight-for-height			Weight-for-age			Number of children
	Percentage below -3 SD	Percentage below -2 SD <sup>2</sup>	Mean Z-score (SD)	Percentage below -3 SD	Percentage below -2 SD <sup>2</sup>	Mean Z-score (SD)	Percentage below -3 SD	Percentage below -2 SD <sup>2</sup>	Mean Z-score (SD)	
<b>Age in months</b>										
<6	3.4	9.7	-0.3	1.3	5.2	0.3	1.2	5.2	0.0	577
6-8	3.1	13.6	-0.6	1.6	3.7	0.1	0.7	5.1	-0.3	320
9-11	8.7	17.4	-0.9	1.6	8.0	0.0	2.8	10.7	-0.5	313
12-17	9.9	30.3	-1.3	0.7	3.3	0.0	1.7	10.2	-0.6	595
18-23	20.2	47.3	-1.8	1.0	5.4	0.0	3.4	15.8	-0.9	436
24-35	17.8	48.4	-1.9	0.5	1.7	0.4	2.5	11.1	-0.8	1,066
36-47	11.4	37.4	-1.7	0.1	1.2	0.2	1.8	10.0	-0.8	1,037
48-59	5.5	25.8	-1.4	0.1	1.7	0.0	1.0	8.6	-0.8	916
<b>Sex</b>										
Male	12.4	35.6	-1.5	0.8	3.6	0.2	1.8	11.0	-0.7	2,605
Female	9.0	28.3	-1.3	0.5	2.3	0.1	1.9	8.4	-0.6	2,655
<b>Residence</b>										
Urban	8.0	27.5	-1.3	0.6	2.1	0.2	1.3	8.1	-0.5	1,304
Rural	11.6	33.4	-1.4	0.7	3.2	0.1	2.0	10.2	-0.7	3,956
<b>Region</b>										
Manicaland	8.9	33.3	-1.5	0.1	2.1	0.4	1.7	8.1	-0.6	787
Mashonaland Central	10.5	32.9	-1.4	0.3	3.8	0.0	2.2	12.0	-0.8	576
Mashonaland East	13.2	34.8	-1.4	1.0	3.7	0.1	2.4	9.2	-0.7	569
Mashonaland West	12.0	31.2	-1.3	1.1	2.4	0.2	1.6	10.2	-0.6	642
Matebeleland North	11.0	34.2	-1.4	1.9	5.8	-0.1	2.4	14.4	-0.9	258
Matebeleland South	12.8	31.0	-1.4	1.4	4.1	0.1	2.1	12.1	-0.7	304
Midlands	11.9	32.8	-1.4	0.2	2.7	0.1	1.8	10.5	-0.8	714
Masvingo	9.9	30.7	-1.3	0.6	2.1	0.3	1.5	6.5	-0.5	618
Harare	9.3	29.0	-1.4	0.8	2.8	0.2	2.0	8.9	-0.6	601
Bulawayo	5.1	26.2	-1.2	0.0	2.3	0.3	0.8	7.9	-0.4	191
<b>Mother's education<sup>3</sup></b>										
No education	11.9	40.5	-1.6	1.2	2.8	0.1	2.6	10.8	-0.9	95
Primary	11.7	33.5	-1.4	0.8	3.6	0.1	2.0	11.2	-0.7	1,493
Secondary	10.0	29.8	-1.3	0.6	3.0	0.2	1.6	8.8	-0.6	2,795
More than secondary	5.8	18.5	-0.8	0.0	1.0	0.6	1.0	2.1	0.0	113
<b>Mother's interview status</b>										
Mother interviewed	10.5	31.0	-1.3	0.7	3.1	0.2	1.6	9.4	-0.6	4,309
Mother not interviewed, but in household	12.0	29.6	-1.3	0.6	3.4	0.2	3.6	10.5	-0.5	185
Mother not interviewed and not in household <sup>4</sup>	11.8	37.8	-1.6	0.2	1.8	0.2	2.6	11.0	-0.8	762
Missing	*	*	*	*	*	*	*	*	*	3
Total	10.7	31.9	-1.4	0.6	3.0	0.2	1.9	9.7	-0.7	5,260

Note: 1) Table is based on children who spent the night before the interview in the household. Each of the indices is expressed in standard deviation units (SD) from the median of the WHO Child Growth Standards adopted in 2006. The indices in this table are NOT comparable to those based on the previously used 1977 NCHS/CDC/WHO Reference. Table is based on children with valid dates of birth (month and year) and valid measurement of both height and weight. 2) 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.

<sup>1</sup> Recumbent length is measured for children under age 2 and less than 85 cm; standing height is measured for all other children.

<sup>2</sup> Includes children who are below -3 standard deviations (SD) from the WHO Growth Standards population median

<sup>3</sup> For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire.

<sup>4</sup> Includes children whose mothers are deceased

Weight-for-height describes current nutritional status. A child who is below minus two standard deviations from the reference mean for weight-for-height is considered too thin for his/her height, or wasted, a condition reflecting acute or recent nutritional deficit. Overall, 3 percent of children are wasted. Small differences are observed by sex and urban-rural residence, with 4 percent of male children being wasted compared with 2 percent of female children and 3 percent of children in rural areas compared with 2 percent of children in urban areas. A higher percentage of children were found to be wasted in the Matebeleland North (6 percent) than any other region. Wasting is highest among children of mothers with a primary education (4 percent) and lowest among children of mothers with more than secondary education (1 percent).

Weight-for-age is a composite index of weight-for-height and height-for-age, and thus does not distinguish between acute malnutrition (wasting) and chronic malnutrition (stunting). A child can be underweight for his/her age because he or she is stunted, wasted, or both. Weight-for-age is an overall indicator of a population's nutritional health. Overall, 10 percent of all children are underweight, and 2 percent of children are severely underweight. A higher percentage of males are underweight compared with females (11 and 8 percent, respectively). Ten percent of rural children are underweight compared with 8 percent of urban children. Similar to the other two indices, Matebeleland North (14 percent) has the greatest percentages of children who are underweight. The percentage of children born to uneducated mothers who are underweight is over five times as high as the percentage underweight among children whose mothers have more than secondary education (11 percent versus 2 percent).

## **I. Malaria**

Malaria is one of the leading causes of death in developing countries (WHO, 2008). The 2010-11 ZDHS collected data on measures to prevent malaria, including the use of mosquito nets among women and children and the prophylactic use of antimalarial drugs.

### **Ownership of Mosquito Nets**

Table 12 shows that 41 percent of households nationwide own at least one mosquito net of any type. More urban (47 percent) than rural (38 percent) households own a net. Twenty-nine percent of households own at least one insecticide-treated net (ITN). The pattern by urban-rural residence in ownership of ITNs contrasts to that of ownership of a net of any type; 23 percent of urban households own an ITN compared to 32 percent of rural households. Overall, ownership of nets has increased markedly since the 2005-06 ZDHS, at which time only 20 percent of households owned a mosquito net of any type and 9 percent owned at least one ITN.

### **Use of Mosquito Nets**

Table 12 shows that only 14 percent of children under age 5 slept under a mosquito net the night before the survey. Nineteen percent of children under age 5 in urban areas slept under a mosquito net the night before the survey compared with 12 percent in rural areas. Eleven percent of children under age 5 in urban areas were reported to have slept under an ITN the night before the survey compared with 10 percent in rural areas. Among those in households owning at least one ITN, 41 percent of children under age 5 in urban areas and 27 percent in rural areas slept under an ITN the night before the survey.

Overall, 15 percent of pregnant women age 15-49 slept under a mosquito net the night before the survey, 17 percent in urban areas versus 14 percent in rural areas. Nine percent of pregnant women in urban areas and 10 percent of pregnant women in rural areas slept under an ITN the night before the survey. Among pregnant women in households owning at least one ITN, 37 percent in urban areas and 28 percent in rural areas slept under an ITN the night before the survey.

Table 12 Malaria indicators

Possession and use of mosquito nets, preventive malaria treatment during pregnancy, and treatment of children with fever using antimalarial drugs, by urban-rural residence, Zimbabwe 2010-11

Malaria indicators	Urban		Rural		Total	
	Percentage	Number	Percentage	Number	Percentage	Number
<b>Mosquito nets</b>						
Percentage of households with at least one mosquito net (treated or untreated)	46.9	3,290	38.2	6,466	41.1	9,756
Percentage of households with at least one insecticide-treated net (ITN) <sup>1</sup>	23.2	3,290	31.6	6,466	28.8	9,756
Percentage of children under five years who slept under a mosquito net (treated or untreated) last night	19.2	1,623	11.7	4,362	13.7	5,985
Percentage of children under five years who slept under an insecticide-treated net (ITN) last night <sup>1</sup>	10.6	1,623	9.5	4,362	9.8	5,985
Percentage of children under five years who slept under an insecticide-treated net (ITN) last night in households with an ITN <sup>1</sup>	40.5	427	27.4	1,516	30.3	1,942
Percentage of pregnant women age 15-49 who slept under a mosquito net (treated or untreated) last night	16.9	251	13.6	513	14.6	764
Percentage of pregnant women age 15-49 who slept under an insecticide-treated net (ITN) last night <sup>1</sup>	8.9	251	10.1	513	9.7	764
Percentage of pregnant women age 15-49 who slept under an insecticide-treated net (ITN) last night in households with an ITN <sup>1</sup>	36.7	61	28.1	185	30.2	246
<b>Indoor Residual Spraying (IRS)</b>						
Percentage of households sprayed with a residual insecticide in the past 12 months	3.8	3,290	23.7	6,466	17.0	9,756
Percentage of children under five years who slept under an ITN last night or in a household sprayed with IRS in the past 12 months <sup>1</sup>	13.8	1,623	28.8	4,362	24.8	5,985
Percentage of pregnant women who slept under an ITN last night or in a household sprayed with IRS in the past 12 months <sup>1</sup>	11.5	251	28.9	513	23.2	764
<b>Preventive malaria treatment during pregnancy</b>						
Percentage of last births in the two years preceding the survey for which the mother took antimalarial drugs for prevention during the pregnancy	19.5	720	27.9	1,730	25.4	2,450
Percentage of last births in the two years preceding the survey for which the mother got intermittent preventive treatment (IPTp) during an antenatal visit <sup>2</sup>	5.5	720	8.0	1,730	7.3	2,450
<b>Treatment of fever</b>						
Among children under age 5 with fever in the two weeks preceding the survey, percentage who took antimalarial drugs:						
Any antimalarial drug	3.6	135	1.8	372	2.3	506
SP/Fansidar	0.0	135	0.2	372	0.2	506
Chloroquine	0.3	135	0.8	372	0.7	506
Quinine	1.3	135	0.0	372	0.3	506
Combination with artemisinin	2.0	135	0.8	372	1.1	506
Other antimalarial	0.0	135	0.0	372	0.0	506
Among children under age 5 with fever in the two weeks preceding the survey, percentage who took antimalarial drugs the same day/next day after developing fever:						
Any antimalarial drug	3.3	135	1.5	372	1.9	506
SP/Fansidar	0.0	135	0.2	372	0.2	506
Chloroquine	0.0	135	0.5	372	0.3	506
Quinine	1.3	135	0.0	372	0.3	506
Combination with artemisinin	2.0	135	0.8	372	1.1	506
Other antimalarial	0.0	135	0.0	372	0.0	506

<sup>1</sup> An insecticide-treated net (ITN) is a permanent net that does not require any treatment, a pretreated net obtained within the past 12 months or a net that has been soaked with insecticide within the past 12 months.

<sup>2</sup> Intermittent preventive treatment during pregnancy (IPTp) is preventive treatment with at least two doses of SP/Fansidar at least one of which was received during an antenatal visit.

## **Indoor Residual Spraying**

Another means to reduce malaria transmission is indoor residual spraying (IRS). Specially trained staff of a government or NGO malaria control programme visit a household and spray insecticide on the interior walls of a dwelling. This insecticide helps to kill mosquitoes for several months. In the 2010-11 ZDHS, 17 percent of the households had received IRS in the 12 months preceding the survey. Households in rural areas were far more likely to have received IRS than those in urban areas (24 and 4 percent, respectively). Overall, 25 percent of children and 23 percent of pregnant women had slept the night before the interview either under an ITN or in a household that had been sprayed with IRS in the past 12 months.

## **Preventive Malaria Treatment during Pregnancy**

The 2010-11 ZDHS also collected data on preventive malaria treatment during pregnancy. WHO recommendations to prevent malaria during pregnancy include intermittent preventive treatment (IPTp) with at least two doses of an effective antimalarial drug, such as sulfadoxine-pyrimethamine (SP), during routine antenatal clinic visits (WHO, 2008). Table 12 shows that 25 percent of pregnant women in Zimbabwe took antimalarial drugs for malaria prevention during their last pregnancy in the two years preceding the survey. A higher proportion of pregnant women in rural areas took antimalarial drugs during their last pregnancy when compared with pregnant women in urban areas (28 percent versus 20 percent). However, only 7 percent of pregnant women received IPTp – that is, received at least two doses of SP/Fansidar during ANC visits. There is little difference in IPTp by urban-rural residence (6 percent among women in urban areas and 8 percent among women in rural areas).

## **Treatment of Children with Fever**

Table 12 shows that overall, among children under age 5 with fever in the two weeks preceding the survey, only two percent took antimalarial drugs. The vast majority of these children took the antimalarials the same day or the next day after developing their fever.

## **J. HIV/AIDS Awareness, Knowledge, and Behaviour**

The 2010-11 ZDHS included a series of questions that addressed respondents' knowledge about HIV and AIDS, their awareness of modes of HIV transmission, and behaviours that can prevent the spread of HIV.

Table 13 shows that HIV/AIDS awareness is universal in Zimbabwe where 98 percent of women and men have heard of HIV or AIDS. Awareness does not vary by background characteristics except by education, those with no education being less likely to have heard of HIV/AIDS.

Table 13. Knowledge of AIDS				
Percentage of women and men who have heard of AIDS, by background characteristics, Zimbabwe 2010-11				
Background characteristic	Women		Men	
	Have heard of AIDS	Number of women	Have heard of AIDS	Number of men
<b>Age</b>				
15-24	96.9	3,786	97.3	3,107
15-19	96.0	1,945	96.0	1,735
20-24	97.8	1,841	98.9	1,372
25-29	98.6	1,688	99.2	1,237
30-39	98.4	2,345	99.4	1,797
40-49	98.2	1,352	99.3	969
<b>Marital status</b>				
Never married	97.0	2,197	97.3	3,221
Ever had sex	96.9	539	98.5	1,430
Never had sex	97.0	1,658	96.3	1,791
Married or living together	97.9	5,703	99.4	3,584
Divorced/separated/widowed	98.8	1,271	98.9	304
<b>Residence</b>				
Urban	99.1	3,548	99.5	2,621
Rural	97.0	5,623	97.8	4,488
<b>Region</b>				
Manicaland	97.3	1,227	99.1	972
Mashonaland Central	99.6	871	99.7	738
Mashonaland East	99.4	824	99.3	667
Mashonaland West	97.6	1,026	99.5	872
Matebeleleland North	95.3	443	90.5	349
Matebeleleland South	97.0	467	97.7	352
Midlands	97.7	1,123	96.2	885
Masvingo	93.8	909	98.3	585
Harare	99.4	1,722	99.7	1,307
Bulawayo	98.3	558	99.3	382
<b>Education</b>				
No education	93.5	212	83.7	56
Primary	95.6	2,568	96.5	1,508
Secondary	98.8	5,966	99.0	5,027
More than secondary	99.0	424	99.8	519
Total 15-49	97.8	9,171	98.4	7,110
50-54	na	na	98.4	370
Total 15-54	na	na	98.4	7,480
na = Not applicable				

Table 14 shows that 81 percent of women and 82 percent of men age 15-49 years know that consistent use of condoms is a means of preventing the spread of HIV. Ninety percent of women and 91 percent of men know that limiting sexual intercourse to one faithful and uninfected partner can reduce the chances of contracting HIV. The proportion knowing both that using condoms and limiting sexual intercourse to one uninfected partner is 77 percent among women and 79 percent among men.

Women who have never been married and never had sex are least likely to know that using condoms and limiting sexual intercourse to one uninfected partner reduces the risk of HIV transmission (66 percent). Women who are divorced, separated, or widowed are most likely to know that using condoms and limiting sexual intercourse to one uninfected partner reduces the risk of HIV transmission (82 percent). Among men, those who have never been married and never had sex are least likely to be aware that using condoms and limiting sexually intercourse to one uninfected partner reduces the risk of HIV transmission (68 percent). On the other hand, men who are married or who have been married previously are most likely to be aware of these prevention methods (83 percent).



Table 14. 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 the AIDS virus by using condoms every time they have sexual intercourse and by having one partner who is not infected and has no other partners, by background characteristics, Zimbabwe 2010-11

Background characteristic	Women				Men			
	Percentage who say HIV can be prevented by:				Percentage who say HIV can be prevented by:			
	Using condoms <sup>1</sup>	Limiting sexual intercourse to one uninfected partner <sup>2</sup>	Using condoms and limiting sexual intercourse to one uninfected partner <sup>1,2</sup>	Number of women	Using condoms <sup>1</sup>	Limiting sexual intercourse to one uninfected partner <sup>2</sup>	Using condoms and limiting sexual intercourse to one uninfected partner <sup>1,2</sup>	Number of men
<b>Age</b>								
15-24	75.9	86.6	71.5	3,786	78.5	87.0	72.7	3,107
15-19	70.9	83.4	65.7	1,945	74.5	82.9	67.2	1,735
20-24	81.2	90.0	77.6	1,841	83.4	92.2	79.7	1,372
25-29	84.9	91.8	81.7	1,688	85.5	94.2	82.7	1,237
30-39	84.4	92.6	81.2	2,345	85.5	94.4	83.0	1,797
40-49	84.0	91.7	80.8	1,352	85.6	94.2	83.0	969
<b>Marital status</b>								
Never married	74.5	85.5	69.5	2,197	79.0	87.2	73.5	3,221
Ever had sex	84.7	89.6	80.5	539	84.7	91.2	80.0	1,430
Never had sex	71.2	84.2	66.0	1,658	74.4	84.0	68.3	1,791
Married or living together	82.3	91.2	79.1	5,703	85.3	94.4	82.6	3,584
Divorced/separated/widowed	86.0	91.4	82.2	1,271	85.4	93.4	82.6	304
<b>Residence</b>								
Urban	83.9	91.7	80.4	3,548	85.6	94.0	82.7	2,621
Rural	79.1	88.7	75.3	5,623	80.6	89.4	76.0	4,488
<b>Region</b>								
Manicaland	77.6	87.2	73.0	1,227	86.6	94.9	84.5	972
Mashonaland Central	81.4	91.1	77.4	871	82.1	91.7	76.9	738
Mashonaland East	83.1	94.8	80.8	824	80.9	90.1	74.9	667
Mashonaland West	80.3	89.7	76.3	1,026	88.3	96.2	85.7	872
Matebeleleland North	75.7	78.8	68.8	443	55.7	64.0	47.0	349
Matebeleleland South	88.1	92.4	85.6	467	82.5	88.7	77.7	352
Midlands	81.9	91.0	78.7	1,123	77.9	88.5	73.4	885
Masvingo	77.3	86.1	73.8	909	83.8	91.8	80.3	585
Harare	80.9	91.5	77.7	1,722	84.5	93.5	81.4	1,307
Bulawayo	87.4	91.8	83.9	558	87.3	94.1	83.7	382
<b>Education</b>								
No education	65.8	75.4	60.3	212	49.3	59.0	39.5	56
Primary	76.3	85.1	71.5	2,568	75.9	84.0	69.4	1,508
Secondary	82.9	91.9	79.5	5,966	83.6	92.9	80.2	5,027
More than secondary	89.1	97.4	88.4	424	93.6	97.4	92.3	519
Total 15-49	80.9	89.9	77.2	9,171	82.4	91.1	78.5	7,110
50-54	na	na	na	na	86.2	92.8	83.1	370
Total 15-54	na	na	na	na	82.6	91.2	78.7	7,480

na = Not applicable

<sup>1</sup> Using condoms every time they have sexual intercourse

<sup>2</sup> Partner who has no other partners

Overall, women residing in urban areas are somewhat more likely to be knowledgeable about HIV prevention methods than their counterparts residing in rural areas. The same pattern is true for men. Knowledge varies across regions, with the lowest in Matebeleleland North. Higher educational attainment is positively associated with increased awareness of HIV prevention methods for both women and men.

Knowledge of HIV prevention methods has increased since 2005-06, especially among women. According to the 2005-06 ZDHS, 65 percent of women knew that HIV could be prevented by using a condom and by limiting sexual partners; this compares with 77 percent in 2010-11. Among men, this percentage increased from 71 percent in 2005-06 to 79 percent in 2010-11.

To obtain information on risk factors, respondents were also asked detailed questions about their sexual behaviour, including the number of partners they had in the 12 months preceding the survey. Women and men were also asked about condom use in the 12 months preceding the survey. The results are shown in Table 15.1 for women and Table 15.2 for men.

Overall, only 2 percent of women reported that they had two or more partners in the past 12 months. Among women who had two or more partners in the past 12 months, 48 percent reported using a condom at the last sexual intercourse. Among all female respondents who have ever had sexual intercourse, the mean number of partners in their lifetime is 2.2.

Table 15.1 Multiple sexual partners in the past 12 months: Women						
Among all women age 15-49, the percentage who had sexual intercourse with more than one sexual partner in the past 12 months; among those having more than one partner in the past 12 months, the percentage reporting that a condom was used at last intercourse; and the mean number of sexual partners during her lifetime for women who ever had sexual intercourse, by background characteristics, Zimbabwe 2010-11						
Background characteristic	All women		Among women who had 2+ partners in the past 12 months:		Among women who ever had sexual intercourse <sup>1</sup> :	
	Percentage who had 2+ partners in the past 12 months	Number of women	Percentage who reported using a condom during last sexual intercourse	Number of women	Mean number of sexual partners in lifetime	Number of women
<b>Age</b>						
15-24	2.3	3,786	(38.5)	48	2.0	2,219
15-19	1.7	1,945	*	17	1.3	660
20-24	2.9	1,841	(54.0)	31	2.3	1,559
25-29	2.0	1,688	*	19	2.1	1,620
30-39	1.8	2,345	*	17	2.3	2,288
40-49	3.4	1,352	*	16	2.7	1,340
<b>Marital status</b>						
Never married	2.1	2,197	(41.6)	19	3.3	530
Married/living together	1.6	5,703	(22.9)	38	2.0	5,675
Divorced/separated/widowed	5.4	1,271	(72.8)	44	2.8	1,262
<b>Residence</b>						
Urban	2.8	3,548	(66.6)	51	2.6	2,713
Rural	1.9	5,623	28.5	49	2.0	4,753
<b>Region</b>						
Manicaland	1.5	1,227	*	10	1.5	1,006
Mashonaland Central	1.2	871	*	5	1.7	751
Mashonaland East	0.9	824	*	8	1.7	694
Mashonaland West	2.7	1,026	*	14	3.8	868
Matebeleland North	5.1	443	*	1	2.1	375
Matebeleland South	3.6	467	(20.1)	14	3.2	382
Midlands	2.2	1,123	*	12	1.6	893
Masvingo	1.2	909	*	1	1.3	763
Harare	3.1	1,722	*	29	3.1	1,330
Bulawayo	2.6	558	*	8	2.2	404
<b>Education</b>						
No education	4.9	212	*	2	1.6	205
Primary	2.7	2,568	(26.7)	36	2.3	2,343
Secondary	2.0	5,966	60.4	61	2.3	4,571
More than secondary	1.7	424	*	2	1.7	348
<b>Total</b>	<b>2.3</b>	<b>9,171</b>	<b>48.0</b>	<b>101</b>	<b>2.2</b>	<b>7,467</b>

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.  
<sup>1</sup> Means are calculated excluding respondents who gave non-numeric responses.

Table 15.2 Multiple sexual partners in the past 12 months: Men

Among all men age 15-49, the percentage who had sexual intercourse with more than one sexual partner; among those having more than one partner in the past 12 months, the percentage reporting that a condom was used at last intercourse; and the mean number of sexual partners during his lifetime for men who ever had sexual intercourse, by background characteristics, Zimbabwe 2010-11

Background characteristic	All men		Among men who had 2+ partners in the past 12 months:		Among men who ever had sexual intercourse <sup>1</sup> :	
	Percentage who had 2+ partners in the past 12 months	Number of men	Percentage who reported using a condom during last sexual intercourse	Number of men	Mean number of sexual partners in lifetime	Number of men
<b>Age</b>						
15-24	8.3	3,107	50.5	238	3.5	1,392
15-19	3.3	1,735	66.2	43	2.3	417
20-24	14.7	1,372	47.0	195	4.0	975
25-29	15.8	1,237	34.1	178	5.1	1,070
30-39	15.1	1,797	19.3	248	6.7	1,680
40-49	10.4	969	23.2	87	8.3	892
<b>Marital status</b>						
Never married	7.2	3,221	76.4	202	4.1	1,372
Married/living together	15.1	3,584	11.6	504	6.1	3,383
Divorced/separated/widowed	17.5	304	(79.7)	45	9.8	280
<b>Residence</b>						
Urban	13.5	2,621	40.3	309	6.5	1,837
Rural	10.5	4,488	28.1	442	5.4	3,198
<b>Region</b>						
Manicaland	12.8	972	27.1	118	4.7	689
Mashonaland Central	11.8	738	26.3	85	5.3	567
Mashonaland East	10.0	667	38.6	62	6.3	459
Mashonaland West	9.2	872	29.9	73	6.3	587
Matebeleland North	11.2	349	(28.6)	33	6.2	253
Matebeleland South	11.4	352	40.7	36	5.9	265
Midlands	11.7	885	31.8	95	6.2	641
Masvingo	11.2	585	25.4	58	4.7	404
Harare	12.7	1,307	39.0	157	6.5	922
Bulawayo	13.8	382	(54.3)	34	5.0	247
<b>Education</b>						
No education	7.5	56	*	4	(7.6)	37
Primary	9.9	1,508	27.9	138	5.4	1,121
Secondary	11.7	5,027	34.5	537	5.8	3,446
More than secondary	15.9	519	33.1	72	6.3	431
15-49	11.6	7,110	33.1	751	5.8	5,034
Men 50-54	13.2	370	(11.0)	39	9.8	310
Total 15-54	11.7	7,480	32.0	790	6.0	5,344

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.

<sup>1</sup> Means are calculated excluding respondents who gave non-numeric responses.

Overall, 12 percent of men age 15-49 reported that they had two or more partners in the past 12 months. Among men who had two or more partners in the past 12 months, 33 percent reported using a condom at the last sexual intercourse. Among all male respondents age 15-49 who have ever had sexual intercourse, the mean number of partners in their lifetime is 5.8, more than twice that of women.

Men age 25-29 are twice as likely as their younger counterparts ages 15-24 to have had two or more partners in the past 12 months (16 and 8 percent, respectively). Married men are more likely to have had two or more partners in the past 12 months (15 percent) than their never-married counterparts (7 percent) but less likely to have had two or more partners than formerly married men (18 percent). Three-quarters of never-married men (76 percent) and formerly married men (80 percent) who have had two or more partners in the past 12 months reported using a condom during the last sexual intercourse, compared with only 12 percent of currently married men.

A higher proportion of urban men (14 percent) than rural men (11 percent) have had two or more partners in the past 12 months. Forty percent of urban men and 28 percent of rural men who had two or more partners in the past 12 months reported using a condom at their last sexual intercourse.

As education levels increase, men are more likely to have had two or more partners in the past 12 months (16 percent of those with more than secondary education compared to 8 percent of those with no education) but are only slightly more likely than men with primary education to have used a condom at their last sexual intercourse.

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