Swaziland

Monitoring the situation of children, women and men

Multiple Indicator Cluster Survey 2010

Government of Swaziland

National Emergency Response Council on HIV and AIDS

United Nations Population Fund

Joint United Nation's Programme on HIV/AIDS

United Nations Children's Fund

MICS

Swaziland MICS

Multiple Indicator Cluster Survey 2010

Final Report

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The Swaziland Multiple Indicator Cluster Survey (MICS) was carried out in 2010 by the Central Statistical Office in collaboration with the United Nations Children's Fund (UNICEF). Financial support was provided by the Government of the Kingdom of Swaziland, UNICEF, the United Nations Population fund (UNFPA), the National Emergency Response Council on HIV/AIDS (NERCHA) and the Joint United Nations Programme on HIV/AIDS.

MICS is an international household survey programme developed by UNICEF. The Swaziland MICS was conducted as part of the fourth global round of MICS surveys (MICS4). MICS provides up-to-date information on the situation of children and women and measures key indicators that allow countries to monitor progress towards the Millennium Development Goals (MDGs) and other internationally agreed upon commitments. Additional information on the global MICS project may be obtained from www.childinfo.org.

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Preface

In 2010, the Central Statistical Office (CSO) conducted the fourth round of the Multiple Indicator Cluster Survey (MICS), an international household survey developed by UNICEF to monitor progress towards the goals and targets of the Plan of Action for the World Fit For Children (WFFC) Declaration and the Millennium Declaration. The 2010 Swaziland MICS was implemented in collaboration with various ministries and agencies, including the Deputy Prime Minister's Office, the Ministry of Health, the Ministry of Education and Training, the Ministry of Natural Resources and Energy, the National Emergency Response Council on HIV/AIDS (NERCHA), and United Nations agencies. This report presents results of the 2010 Swaziland MICS.

CSO wishes to acknowledge the expert contributions of the MICS Technical and Steering Committees and the UNICEF Country Office for their invaluable guidance in all the phases of this work. We greatly appreciate the contribution and commitment made by CSO staff throughout the survey process. Special recognition is due to all field teams for working tirelessly to bring the survey to a successful conclusion. Lastly, sincere appreciation goes to all interviewed households for their time and cooperation, without which the survey could have not taken place.

We are indebted to the UNICEF Global and Regional Offices for the technical backstopping for the survey. We are also grateful for the financial support from the Government of the Kingdom of Swaziland, UNICEF, UNFPA, NERCHA and UNAIDS. It is hoped that the findings will contribute to informed policies and programmes that help improve the lives of the Swazi population.

Amos M. Zwane
Director, Central Statistical Office

Summary Table of Findings

Multiple Indicator Cluster Surveys (MICS) and Millennium Development Goals (MDG) Indicators, Swaziland, 2010

Topic	MICS4 Indicator Number	MDG Indicator Number	Indicator	Value	
CHILD MORTALITY					
Child mortality	1.1	*4.1*	Under-five mortality rate	104	per thousand
	1.2	*4.2*	Infant mortality rate	79	per thousand
	1.3		Neonatal mortality rate	19	per thousand
	1.4		Post-neonatal mortality rate	60	per thousand
	1.5		Child mortality rate	27	per thousand
NUTRITION					
Nutritional status		*1.8*	Underweight prevalence		
	2.1a		Moderate and Severe (- 2 SD)	5.8	percent
	2.1b		Severe (- 3 SD)	1.0	percent
			Stunting prevalence		
	2.2a		Moderate and Severe (- 2 SD)	30.9	percent
	2.2b		Severe (- 3 SD)	10.0	percent
			Wasting prevalence		
	2.3a		Moderate and Severe (- 2 SD)	0.8	percent
	2.3b		Severe (- 3 SD)	0.4	percent
Breastfeeding and infant feeding	2.4		Children ever breastfed	90.9	percent
	2.5		Early initiation of breastfeeding	54.5	percent
	2.6		Exclusive breastfeeding under 6 months	44.1	percent
	2.7		Continued breastfeeding at 1 year	60.0	percent
	2.8		Continued breastfeeding at 2 years	10.7	percent
	2.9		Predominant breastfeeding under 6 months	59.2	percent
	2.10		Duration of breastfeeding	13.8	months
	2.11		Bottle feeding	29.8	percent
	2.12		Introduction of solid, semi-solid or soft foods	66.3	percent
	2.13		Minimum meal frequency	55.4	percent
	2.14		Age-appropriate breastfeeding	40.3	percent
	2.15		Milk feeding frequency for non-breastfed children	39.0	percent
Salt iodization	2.16		Iodized salt consumption	51.6	percent
Vitamin A	2.17		Vitamin A supplementation (children under age 5)	68.0	percent
Low birth weight	2.18		Low birth weight infants	8.7	percent
	2.19		Infants weighed at birth	91.3	percent
CHILD HEALTH					
Vaccinations	3.1		Tuberculosis immunization coverage	98.2	percent
	3.2		Polio immunization coverage	85.0	percent
	3.3		Immunization coverage for diphtheria, pertussis and tetanus (DPT)	90.6	percent
	3.4	*4.3*	Measles immunization coverage	97.8	percent
	3.5		Hepatitis B immunization coverage	90.6	percent

Topic	MICS4 Indicator Number	MDG Indicator Number	Indicator		Value
Tetanus toxoid	3.7		Neonatal tetanus protection	79.0	percent
Care of illness	3.8		Oral rehydration therapy with continued feeding	48.1	percent
	3.9		Care seeking for suspected pneumonia	57.6	percent
	3.10		Antibiotic treatment of suspected pneumonia	60.5	percent
Solid fuel use	3.11		Solid fuels	69.5	percent
Malaria	3.12		Household availability of insecticide-treated nets (ITNs)	9.9	percent
	3.13		Households protected by a vector control method	16.2	percent
	3.14		Children under age 5 sleeping under any mosquito net	1.7	percent
	3.15	*6.7*	Children under age 5 sleeping under insecticide-treated nets (ITNs)	1.5	percent
	3.16		Malaria diagnostics usage	13.6	percent
	3.17		Antimalarial treatment of children under 5 the same or next day	1.0	percent
	3.18	*6.8*	Antimalarial treatment of children under age 5	1.7	percent
	3.19		Pregnant women sleeping under insecticide-treated nets (ITNs)	1.7	percent
	3.20		Intermittent preventive treatment for malaria	9.9	percent
WATER AND SANITATION					
Water and sanitation	4.1	*7.8*	Use of improved drinking water sources	67.3	percent
	4.2		Water treatment	15.0	percent
	4.3	*7.9*	Use of improved sanitation facilities	53.8	percent
	4.4		Safe disposal of child's faeces	60.6	percent
	4.5		Place for handwashing	47.0	percent
	4.6		Availability of soap	88.8	Percent
REPRODUCTIVE HEALTH					
Contraception and unmet need	5.1	*5.4*	Adolescent birth rate	89	per 1,000
	5.2		Early childbearing	22.1	percent
	5.3	*5.3*	Contraceptive prevalence rate	65.2	percent
	5.4	*5.6*	Unmet need	13.0	percent
Maternal and newborn health		*5.5*	Antenatal care coverage		
	5.5a		At least once by skilled personnel	96.8	percent
	5.5b		At least four times by any provider	76.6	percent
	5.6		Content of antenatal care	80.6	percent
	5.7	*5.2*	Skilled attendant at delivery	82.0	percent
	5.8		Institutional deliveries	80.4	percent
	5.9		Caesarean section	12.3	percent
CHILD DEVELOPMENT					
Child development	6.1		Support for learning	50.0	percent
	6.2		Father's support for learning	9.8	percent
	6.3		Learning materials: children's books	3.8	percent
	6.4		Learning materials: playthings	68.6	percent
	6.5		Inadequate care	14.9	percent
	6.6		Early child development index	62.0	percent
	6.7		Attendance to early childhood education	33.0	percent

Topic	MICS4 Indicator Number	MDG Indicator Number	Indicator		Value
EDUCATION					
Literacy and education	7.1	*2.3*	Literacy rate among (young women)	94.2	percent
			(young men)	90.9	percent
	7.2		School readiness	52.5	percent
	7.3		Net intake rate in primary education	88.3	percent
	7.4	*2.1*	Primary school net attendance ratio (adjusted)	96.5	percent
	7.5		Secondary school net attendance ratio (adjusted)	47.2	percent
	7.6	*2.2*	Children reaching last grade of primary	92.7	percent
	7.7		Primary completion rate	91.3	percent
	7.8		Transition rate to secondary school	84.0	percent
	7.9		Gender parity index (primary school)	1.01	ratio
	7.10		Gender parity index (secondary school)	1.24	ratio
CHILD PROTECTION					
Birth registration	8.1		Birth registration	49.5	percent
Child labour	8.2		Child labour	42.2	percent
	8.3		School attendance among child labourers	93.0	percent
	8.4		Child labour among students	42.5	percent
Child discipline	8.5		Violent discipline	88.9	percent
Early marriage and polygamy	8.6		Marriage before age 15 (women)	2.3	percent
			(men)	0.4	Percent
	8.7		Marriage before age 18 (women)	10.9	Percent
			(men)	1.7	Percent
	8.8		Young women age 15-19 currently married or in union	4.3	Percent
			Young men age 15-19 currently married or in union	0.0	Percent
	8.9		Polygamy among women	13.1	percent
			Polygamy among men	6.5	percent
	8.10		Spousal age difference 5-9 years (women age 20-24 years)	21.5	percent
Domestic violence	8.14		Attitudes towards domestic violence (women)	39.1	Percent
			(men)	33.4	percent

Topic	MICS4 Indicator Number	MDG Indicator Number	Indicator	Value	
HIV/AIDS, SEXUAL BEHAVIOUR, AND ORPHANED AND VULNERABLE CHILDREN					
HIV/AIDS knowledge and attitudes	9.1		Comprehensive knowledge about HIV prevention (women)	58.7	percent
			(men)	54.6	Percent
	9.2	*6.3*	Comprehensive knowledge about HIV prevention among young women (age 15-24 years)	58.2	Percent
			young men (age 15-24 years)	53.6	percent
	9.3		Knowledge of mother-to-child transmission of HIV (women)	60.7	percent
			(men)	50.1	percent
	9.4		Accepting attitude towards people living with HIV (women)	47.1	percent
			(men)	45.7	percent
	9.5		Women who know where to be tested for HIV	94.4	percent
			Men who know where to be tested for HIV	90.0	Percent
	9.6		Women who have been tested for HIV and know the results	47.3	Percent
			Men who have been tested for HIV and know the results	32.2	Percent
	9.7		Sexually active young women who have been tested for HIV and know the results	59.0	percent
			Sexually active men who have been tested for HIV and know the results	31.6	percent
	9.8		HIV counselling during antenatal care	81.5	Percent
	9.9		HIV testing during antenatal care	77.4	percent
Sexual behaviour	9.10		Young women who have never had sex	55.0	percent
			Young men who have never had sex	64.0	percent
	9.11		Sex before age 15 (young women)	3.8	percent
			(young men)	2.6	percent
	9.12		Age-mixing among sexual partners (women)	14.1	percent
			(men)	0.5	percent
	9.13		Sex with multiple partners (women)	2.7	percent
			(Men)	15.4	percent
	9.14		Condom use during sex with multiple partners (women)	73.1	percent
			(men)	69.2	percent
	9.15		Sex with non-regular partners (women)	67.0	percent
			(men)	93.1	percent
	9.16	*6.2*	Condom use with non-regular partners (women)	73.1	percent
			(men)	90.6	percent
Male circumcision	9.21		Men age 15-59 circumcised	19.1	percent
Orphaned children	9.17		Children living with both parents	22.1	percent
	9.18		Children with at least one parent dead	23.6	percent
	9.19	*6.4*	School attendance of orphans	97.2	percent
	9.20	*6.4*	School attendance of non-orphans	98.6	percent
			Vulnerable children	29.5	percent
			Orphans and vulnerable children	45.1	percent

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Acronyms

AIDS	Acquired Immune-Deficiency Syndrome
ANC	Antenatal Care
ART	Anti-Retroviral Therapy
BCG	Bacillus Calmette-Guérin (tuberculosis vaccine)
BFHI	Baby Friendly Hospital Initiative
CDC	Centers for Disease Control and Prevention
CEDAW	Convention on the Elimination of All Forms of Discrimination Against Women
CPR	Contraceptive Prevalence Rate
CRC	Convention on the Rights of the Child
CSPro	Census and Survey Processing System
DPT	Diphtheria, Pertussis, Tetanus
EA	Enumeration Area
ECCE	Early Childhood Care and Education
ECCI	Early Childhood Care Index
EFA	Education For All
EPI	Expanded Programme on Immunization
GDP	Gross Domestic Product
GPI	Gender Parity Index
HIV	Human Immunodeficiency Virus
HMIS	Health Management Information System
IDD	Iodine Deficiency Disorders
IGME	Inter-agency Group for Child Mortality Estimation
ILO	International Labour Organization
IPT	Intermittent preventive therapy (for malaria)
IRS	Indoor Residual Spraying
ITN	Insecticide-treated Net
IUD	Intrauterine device
LAM	Lactational amenorrhea method
LLIN	Long-lasting Insecticide Net
MDG	Millennium Development Goal
MICS	Multiple Indicator Cluster Survey
MoEPD	Ministry of Economic Planning and Development
MoET	Ministry of Education and Training
MoH	Ministry of Health
MTCT	Mother-to-Child Transmission (of HIV)
NAR	Net Attendance Ratio
NERCHA	National Emergency Response Council on HIV/AIDS
NGO	Non-governmental Organization
NPA	National Plan of Action for Children
NCP	Neighbourhood Care Point
NSF	National Multi-Sectoral Strategic Framework for HIV/AIDS
ORS	Oral Rehydration Salts

ORT	Oral Rehydration Therapy
OVC	Orphaned and Vulnerable Children
PMTCT	Prevention of Mother-to-Child Transmission
ppm	Parts per million
PSU	Primary Sampling Unit
SACMEQ	Southern and Eastern Africa Consortium for Monitoring Educational Quality
SDHS	Swaziland Demographic and Health Survey
SPSS	Statistical Package for Social Sciences
STI	Sexually transmitted infection
TB	Tuberculosis
TFR	Total Fertility Rate
UN	United Nations
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNDAF	United Nations Development Assistance Framework
UNFPA	United Nations Population Fund
UNGASS	United Nations General Assembly 26th Special Session
UNICEF	United Nations Children's Fund
WFFC	World Fit For Children
WFP	World Food Programme
WHO	World Health Organization

Executive Summary

This report presents results of the fourth round of the Multiple Indicator Cluster Survey (MICS) carried out by Central Statistical Office (CSO) in 2010. MICS is an international household survey initiative developed by UNICEF to monitor progress towards the goals and targets of the Plan of Action for the World Fit For Children (WFFC) Declaration and the Millennium Declaration. The 2010 Swaziland MICS was designed to provide estimates for indicators on the situation of the country at the national level, for urban and rural areas, and for the four administrative regions of Swaziland: Hhohho, Manzini, Shiselweni and Lubombo.

The 2010 Swaziland MICS consists of four main questionnaires including a household questionnaire, women's and men's questionnaires and a questionnaire for children under age five. The survey includes information on key indicators on the following topics:

Household questionnaire: age, sex, urban vs. rural residency, household composition, education of household members, household assets, water and sanitation, use of iodized salt, use of insecticide-treated nets (ITNs), orphanhood and vulnerability of children, child labor and child discipline.

Questionnaire for children under five: birth registration, early childhood development, infant and young child feeding, care of illness (including diarrhoea and pneumonia), malaria, immunization and anthropometry.

Women's questionnaire: child mortality, birth history, desire for last birth, maternal an newborn health, illness symptoms, contraception, unmet need, marriage/union, sexual behaviour, HIV/AIDS, sexually transmitted infections (STIs), and attitudes towards domestic violence.

Men's questionnaire: marriage/union, attitudes towards contraception, sexual behaviour, HIV/AIDS, STIs, male circumcision and attitudes towards domestic violence.

Sample Coverage

The 2010 Swaziland MICS is based on a nationally representative sample of 5,475 households selected from 365 enumeration areas distributed in the four regions of the country. The target populations were men age 15–59 years, women age 15–49 years and children under five years of age.

Among the sampled households, a total of 4,834 households were successfully interviewed, which included 4,956 women age 15–49 years, 4,646 men age 15–59 years and 2,711 children age five years. Response rates were generally high for all target population. The overall household response rate was 95 percent.

Child Mortality

Identifying groups of children with the highest risk of dying enables policy makers and programme planners to better channel resources and efforts to improve child survival and lower the exposure of infants and young children to risk.

Age specific child mortality is defined as follows:

- Neonatal mortality: the probability of dying within the first month of life
- Infant mortality: the probability of dying before the first birthday
- Postneonatal mortality: the difference between infant and neonatal mortality
- Child mortality: the probability of dying between the first and fifth birthday
- Under-five mortality: the probability of dying between birth and the fifth birthday

In the 2010 Swaziland MICS, a direct method based on birth histories of women was used to estimate child mortality rates in Swaziland. 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.

The results indicate that infant mortality in the five years preceding the survey is 79 per 1,000 live births and under-five mortality in the five years preceding the survey is 104 per 1, 000 live births.

Nutrition

Children's nutritional status is a reflection of their overall health. When children are not exposed to repeated illnesses, are well cared for and have access to an adequate food supply – varied enough and rich in micronutrients, such as vitamin A – they have better chances to reach their growth potential. In the 2010 Swaziland MICS, weights and heights of all children under five years of age were measured using anthropometric equipment recommended by UNICEF. The reference population used in this report is based on new WHO growth standards.

Underweight: Nationally, six percent of children under five are underweight, i.e., they are thin for their age. Children most affected are those within 6–11 months of age (nine percent), those born from mothers with no or primary education and those from the poorest households (eight percent) for each group.

Stunting: Overall, 31 percent of under-five children are stunted, i.e., they are short for their age. Stunting is more prevalent in rural areas compared with urban areas (33 percent vs. 23 percent). The stunting rate is especially high in Shiselweni region (38 percent). Children whose mothers have no education or primary education and those from the poorest households have the highest rates of stunting (40 percent, 38 percent and 42 percent, respectively).

Wasting: Only one percent of under-five children are wasted, meaning that they are thin for their height.

Overweight: Eleven percent of under-five children are overweight for their age.

WHO guidelines on infant and young child feeding recommend that infants be breastfed within one hour of birth, breastfeed exclusively for the first six months of life and continue to breastfeed for two years or more, while introducing nutritionally adequate, safe and age appropriate, complementary feeding starting at six month.

The Swaziland MICS shows that 55 percent of children are breastfed within the first hour of birth and 44 percent of children less than six months are exclusively breastfed. The mean duration of exclusive breastfeeding is three months. Further analysis shows that other foods are introduced too early before the age of six months.

At six months of age onwards, children should be introduced to two or more meals of solid, semi-solid or soft foods. Only 67 percent children 6–8 months are introduced to other foods and 53 percent are fed adequately, which means they receive solids, semi-solids and soft foods a minimum number of times required per day. Thirty percent of children 0–2 months are bottle-fed.

Use of non-iodized salt can pose a risk to children's mental growth and development and can contribute to poor school performance, reduced intellectual ability and impaired work performance. Only 52 percent of households use iodized salt. Use of adequately iodized salt is lowest in the Lubombo region (41 percent) and highest in the Hhohho region (61 percent). Fifty-seven percent of urban households were found to be using adequately iodized salt compared with 49 percent in rural areas.

Vitamin A is essential for proper functioning of the immune system, including eye health. The 2010 Swaziland MICS shows that 68 percent of children

age 6–59 months received vitamin A during the six months preceding the survey. The percentage of children who received vitamin A supplementation was highest in the Shiselweni region (81 percent) and lowest in the Lubombo region (55 percent).

Low birth weight is when a newborn baby weighs less than 2,500 grams. This carries a range of critical health risks for children, such as death during their early months and years, and those who survive have impaired immune function and increased risk of disease among other risks. The 2010 Swaziland MICS shows that nine percent of infants have low birth weight. The low birth weight prevalence is higher for children born from mothers with no education (12 percent) compared with those born from mothers with high education (five percent).

Child Health

Overall, 83 percent of children aged 12–23 months are fully immunized before they reach their fifth birthday. Almost all these children receive recommended vaccinations at birth; 98 percent and 97 percent received BCG and polio vaccination at birth, respectively. The coverage for measles vaccine by 12 months is 98 percent.

The tetanus toxoid vaccine (TT) prevents tetanus among pregnant women and among infants. Nationally, 79 percent women age 15–49 years with a live birth in the last 12 months received TT. A higher proportion of women residing in the Manzini region (84 percent) are vaccinated against tetanus compared with those in the Hhohho and Lubombo regions (75 percent and 74 percent, respectively).

The 2010 Swaziland MICS found that 16 percent of children had diarrhoea the two weeks preceding the survey. A total of 81 percent of these children received oral rehydration therapy (ORT), that is, they received an oral rehydration solution or a recommended sugar salt solution with increased fluids while only 48 percent received ORT and continued feeding.

Educating mothers or caretakers on the signs of pneumonia is important to this major killer of young children. The two most dangerous signs of pneumonia for children are fast breathing and difficult breathing. The survey indicates that only two percent of mothers know of these two danger signs.

Nationally, 11 percent of households have at least one mosquito net. Ownership of a mosquito net is higher among households in endemic areas compared with those in non-endemic areas (28 percent vs. three percent). Twelve percent of households had interior walls sprayed to prevent against mosquitoes in the past 12 months. Indoor residual spraying (IRS) is high in households within endemic areas (36 percent) and in households located in the Lubombo region (50 percent). Use of mosquito nets is low for both children and pregnant women (2 percent). Sleeping under an ITN for these populations is most common in malaria-endemic areas and in the Lubombo region. However, caution is necessary when interpreting the results as the survey was conducted in August–November, a period outside the malaria transmission period.

Water and Sanitation

Nationally, 67 percent of the population is using an improved source of drinking water – 91 percent in urban areas and 60 percent in rural areas. The main source of drinking water is piped water into the dwelling, yard or plot (used by 37 percent of the population), followed by a public tape (16 percent). Improved water sources are piped water into the dwelling, yard or plot, a public water tap, a borehole, a protected well, and a protected spring or rain water.

Improved sanitation facilities refer to: (1) flush or pour-flush to a piped water system, a septic tank or pit latrine; (2) a ventilated improved pit latrine; and (3) a pit latrine with a slab. Data form the 2010 Swaziland MICS indicate that 54 percent of the population use improved (and non-shared) sanitation. A total of 15 percent use the veld or

open place for excreting waste. Open defecation is most common in the Lubombo region (27 percent), in rural areas (20 percent), among populations with no education (30 percent) and those from the poorest households (47 percent).

Hand washing with water and soap is an effective measure to prevent the spread of diarrhoea and other communicable diseases among children. Seventy-four percent of the households have visible places for hand washing and of these 47 percent have both water and soap available.

Reproductive Health

Overall, a Swazi woman gives birth to 3.7 children during her entire reproductive lifespan. Rural women have a higher fertility rate (3.9) compared with urban women (3.1).

Sexual debut is earlier for women compared with men. By the time women reach the age of 17, half of them would have had their first sex, while among men this occurs at age 19.

The contraceptive prevalence is 65 percent among married or in union women and 49 percent for all women. The most frequently used contraceptive methods are male condoms (used by 22 percent of married or in union women), injectables (15 percent) and pills (7 percent). The total unmet need, i.e., the proportion of women who are not using any method of contraception but who wish to postpone the next birth or who wish to stop childbearing altogether, is 13 percent.

Ninety-seven percent of pregnant women visit qualified health personnel for ANC and most (77 percent) visit four or more times. Overall, 80 percent of deliveries occur in health facilities and 82 percent of pregnant women are delivering babies with the assistance of skilled personnel. A total of 15 percent of deliveries occur at home.

Nine percent of women who have ever been pregnant had an abortion or miscarriage. Two percent of ever pregnant women have at least one stillbirth. Almost eight percent of women in the reproductive age group who gave birth the two years preceding the survey have or have had obstetric fistula, a condition in which a woman suffers from incontinence of urine and/ or stool.

Child Development

In Swaziland, one in three children age 36–59 months is attending Early Childhood Care and Education (ECCE). There are marked differences of attendance by region with the highest attendance rate in Lubombo (49 percent) and the lowest attendance rate in Manzini (23 percent).

Engagement of adult household members in activities that promote learning and school readiness (such as playing, reading, counting and drawing) for children age 36–59 months is essential. Overall, among 50 percent of the children, an adult household member participated in more than four activities that promote learning and school readiness during the three days preceding the survey.

Sixty-nine percent of children age 0–59 months had two or more types of playthings to play with in their homes. However, only four percent of households have three or more books to enhance learning for these children.

Leaving children alone or in the presence of other young children is known to increase the risk of accidents. The results reveal that 15 percent of under-five children are exposed to that risk. The practice is more common in rural areas (16 percent of children) than in urban area (10 percent).

Literacy and Education

The literacy rate is 94 percent among women age 15-24 years and 91 percent among men age 15–24 years.

Overall, 53 percent of children attended pre-school the previous year. Pre-school attendance is higher

among children residing in urban areas compared with those in rural areas (74 percent vs. 50 percent). Regional disparity is also pronounced; 62 percent of first graders in Hhohho and Manzini attended pre-school compared with 44 percent for Shiselweni and 40 percent for Lubombo.

Nationally, 97 percent of children age 6–12 years attend primary or secondary school. The net primary school attendance is 96 percent for boys and 97 percent for girls, indicating gender parity in primary school attendance. School attendance is substantially lower for secondary school children, with a net secondary school attendance ratio of 47 percent.

There is a high proportion of over-aged children in primary and secondary schools: out of children age 13–17 years who are expected to be in secondary school at the beginning of the 2010 school year, 14 percent of those age 17 years were still in primary school. About 40 percent of children age 15 years and 25 percent of children age 16 years were still attending primary school.

The primary completion rate is the ratio of the total number of students, regardless of age, entering the last grade of primary school for the first time, to the number of children of the primary graduation age at the beginning of the current (or most recent) school year. The rate can exceed 100 percent. In Swaziland, the primary school completion rate is 91 percent. The high completion ratio is likely to reflect the high proportion of secondary school going age children still attending primary school.

The transition rate to secondary school is defined as the proportion of children attending the last grade of primary school during the previous school year who are in the first grade of secondary school during the current school year to the total number of children who are attending the first grade of secondary school. The transition rate to secondary school in Swaziland is 84 percent.

Child Protection

The Birth, Marriage and Death Registration Act mandates the compulsory registration of births in Swaziland. The target in 2011 is to increase the registration of births to 80 percent by year 2015. The 2010 Swaziland MICS found that overall, 50 percent of children under five years have been officially registered and 30 percent own birth certificates.

In the 2010 Swaziland MICS, a child is considered to be involved in child labour activities at the moment of the survey if during the week preceding the survey they did 28 hours of domestic work or at least one hour of economic work for those age 5–11 years or 14 hours of economic work for those age 12–14 years. The survey found that overall, 42 percent of children in Swaziland engage in child labour. This largely reflects a high proportion of children age 5–11 years performing one or more hours of economic work (59 percent). Overall, child labour is more prevent in rural areas compared to urban areas (46 percent vs. 20 percent) and is highest in the Lubombo region (49 percent).

The levels of child discipline are high. Eighty-nine percent of children age 2–14 years experience at least one form of psychological aggression or physical punishment by their caretakers or other household members. Boys are more prone to receiving physical discipline than girls. Noteworthy is that 82 percent of respondents believe that children should be physically punished.

Overall, (39 percent) of women and (33 percent) of men believe that there are circumstances under which hitting their partner could be justified. For both women and men, the most frequently cited reason was when spouses or partners ‘sleep with another man or woman.’ It is interesting to note that the percentage of respondents that believe that spouse/partner beating could be justified is the highest among the youngest age groups (15–19 years and 20–24 years).

HIV and AIDS

Nationally, almost all women and men (99 percent) have heard of HIV. However, only 59 percent of women and 55 percent of men have comprehensive knowledge about HIV transmission. Knowledge of a place to get tested is 94 percent for women and 90 percent for men. More women have ever been tested (73 percent) compared with men (47 percent). The proportion of women and men ever been tested for HIV and received results is relatively low, at 47 percent for women and 32 percent for men. Eighty-nine percent of women who attended ANC tested for HIV during pregnancy.

In the 2010 Swaziland MICS, a sexual behaviour module was administered to women age 15–49 years and men age 15–59 years to assess risk of HIV infection. The results are also tabulated separately for young women and men (age 15–24 years). The survey found that nationally, 55 percent of never married women age 15–24 years and 64 percent of never married men age 15–24 years have never had sex. Only a small proportion (four percent of women age 15–24 years and three percent of men age 15–24 years) had sex before age 15.

Sex with multiple partners is more common among men than among women; 15 percent of men age 15–59 years had sex with more than one partner in the last 12 months, whereas only three percent of women age 15–49 years engaged in such an activity in the last 12 months. Of those that had sex with more than one partner, 69 percent of men and 73 percent of women reported using a condom during last sex.

Sexually Transmitted Infections (STIs)

The self-reported prevalence of STI symptoms in the last 12 months is six percent for both women and men. Among those who have had STI symptoms in the last 12 months, a larger proportion of women than men reported to their partners with whom they had sex (82 percent vs. 64 percent). Among those who reported having had STIs in the last 12 months, 86 percent of women and 80 percent of men sought advice or treatment.

Male Circumcision

The male circumcision rate among men age 15–59 years is 19 percent; the rate is higher among urban men compared with rural men (26 percent vs. 16 percent). Male circumcision varies according to region. The rate is higher for men residing in the Manzini region compared with those residing in the Shiselweni region (25 percent vs. 14 percent). Of those who are circumcised, 20 percent reported that they were circumcised below age one.

The most frequently reported reason for getting circumcised was “health/hygiene” (52 percent), followed by “HIV/AIDS prevention” and “tradition/religion” (22 percent and 18 percent, respectively). A significant 81 percent of men reported that they want their sons to be circumcised. Among those who reported that they would not want their sons to be circumcised, the most frequently cited reason was “tradition/religion” (37 percent), followed by “fear/pain” and “other” (29 percent and 27 percent, respectively).

Orphaned and Vulnerable Children (OVC)

The proportion of OVC is 45 percent; 24 percent are single or double orphans and 30 percent are considered vulnerable. The Shiselweni region tends to have a slightly higher percentage of orphaned children (26 percent) while the Lubombo region has the highest percentage of vulnerable children (37 percent).

In the 2010 Swaziland MICS, the availability of basic material needs (one meal per day, two pairs of clothing and one pair of shoes) was assessed for all children age 5–17 years. The survey shows that when compared with non-OVC, OVC are generally disadvantaged in terms of meeting their basic material needs: 62 percent of OVC have all three

material needs met compared with 80 percent for non-OVC.

The percentage of OVC currently attending school is 98 percent for age 10–14 years and 94 percent for age of 6–17 years, while that of non-OVC currently attending school is 98 percent for age 0–14 years and 96 percent for age 6–17 years. The comparisons of school attendance rates between OVC and non-OVC suggest that OVC do almost as well as non-OVC in terms of school attendance, especially for those age 10–14 years.

Overall, malnutrition is more prevalent among OVC compared with children non-OVC. Nationally, 39 percent of OVC under five years of age are stunted compared with 28 percent for non-OVC counterparts. For underweight, the comparable figures are eight percent for OVC and five percent for non-OVC.

The percentage of children age 15–17 years who had sex before 15 years of age is marginally higher among OVC than those not orphaned or vulnerable. This differential is driven primarily by female children; 4.3 percent of orphaned or vulnerable females age 15–17 years had sex before age 15 years, while 2.4 percent of females not orphaned or vulnerable had sex before age 15 years.

1. Introduction

Background

This report presents results of the 2010 Swaziland MICS, carried out by CSO in collaboration with UNICEF and other partners. Since its launch in the mid-1990s, MICS has become one of the largest sources of information on a range of indicators including child health, nutrition, water and sanitation, reproductive health, education, child protection and HIV/AIDS. The 2010 Swaziland MICS was implemented to assess the current situation of the Swazi population, particularly children and women, as well as to measure progress towards goals and targets emanating from international agreements: the Millennium Declaration, adopted by all 191 United Nations Member States in September 2000, and the WFFC Plan of Action, adopted by 189 Member States at the United Nations (UN) Special Session on Children in May 2002. Both of these commitments build upon promises made by the international community at the 1990 World Summit for Children.

In signing these international agreements, governments committed themselves to improving conditions for children and to monitoring progress towards that end. UNICEF was assigned a supporting role in this task (see Box 1).

Box 1: A commitment to action: national and international reporting responsibilities

The governments that signed the Millennium Declaration and the WFFC Declaration and plan of action also committed themselves to monitoring progress towards the goals and objectives they contained:

"We will monitor regularly at the national level and, where appropriate, at the regional level and assess progress towards the goals and targets of the present plan of action at the national, regional and global levels. Accordingly, we will strengthen our national statistical capacity to collect, analyze and disaggregate data, including by sex, age and other relevant factors that may lead to disparities, and support a wide range of child-focused research. We will enhance international cooperation to support statistical capacity-building efforts and build community capacity for monitoring, assessment and planning." (WFFC, paragraph 60)

"…We will conduct periodic reviews at the national and subnational levels of progress in order to address obstacles more effectively and accelerate actions…." (WFFC, paragraph 61)

The plan of action (paragraph 61) also calls for the specific involvement of UNICEF in the preparation of periodic progress reports:

"… As the world's lead agency for children, UNICEF is requested to continue to prepare and disseminate, in close collaboration with governments, relevant funds, programmes and the specialized agencies of the UN system, and all other relevant actors, as appropriate, information on the progress made in the implementation of the declaration and the plan of action."

Similarly, the Millennium Declaration (paragraph 31) calls for periodic reporting on progress:

"…We request the General Assembly to review on a regular basis the progress made in implementing the provisions of this Declaration, and ask the Secretary-General to issue periodic reports for consideration by the General Assembly and as a basis for further action."

In addition to the Millennium Declaration and WFFC Plan of Action, Swaziland is party to a number of international conventions and treaties supporting the rights of children, including the Convention on the Rights of the Child (CRC) and the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW).

In line with the Government of Swaziland's commitments under the CRC and CEDAW, a number of policies and laws have been developed to improve policy and legal framework for the protection of children's rights. Above all, the Constitution of the Kingdom of Swaziland (2005) provides a legal framework for the protection of its population. It specifically provides for the right of children to be cared for by their parents or guardians, access to education, medical treatment, and protection from all forms of exploitation and abuse, and abolishes the status of illegitimacy for children born out of wedlock. Other legal instruments and policies that have been put in place to promote the protection of children as well as their overall well-being include: the People Trafficking and People Smuggling Prohibition Act, the Child Protection and Welfare Bill, the Sexual Offences and Domestic Violence Bill, the Free Primary Education Act, the Children's Policy, the Social Development Policy, the Gender Policy, the Health Policy and the Education Policy.

A battery of strategic plans has also been developed to guide implementation of these policies. The draft National Plan of Action (NPA) for Children 2011–2015 is a strategic plan for the Children's Policy and provides an overarching framework for the implementation of children's programmes and interventions in Swaziland. The NPA is not only aligned with the Children's Policy but also the National Multi-Sectoral Strategic Framework for HIV/AIDS 2009–2014 (referred to as NSF 2009–2014), which provides a guiding framework for the national response to HIV/AIDS.

The 2010 Swaziland MICS is an important source of information for measuring progress towards targets set by these various strategic plans, as well international declarations including the MDGs, the United Nations General Assembly Special Session Declaration of Commitment on HIV/AIDS (UNGASS) and others commitments.

The Swaziland MICS was carried out by CSO under the Ministry of Economic Planning and Development (MoEPD), with support from UNICEF, UNFPA, UNAIDS and NERCHA. Other ministries supporting children's overall development also took part in the survey. These included the Deputy Prime Minister's Office, the Ministry of Education and Training, the Ministry of Health (MoH), the Ministry of Home Affairs and the Ministry of Natural Resources.

This report presents the results of the indicators and topics covered in the 2010 Swaziland MICS survey.

Survey objectives

The primary objectives of the 2010 Swaziland MICS are as follows:

- ✓ Assess the current situation of women, children and other vulnerable populations in Swaziland to provide a baseline for the country's development priorities;

- ✓ Provide decision makers with evidence on children's, women's and vulnerable populations' rights;
- ✓ Provide data not covered in the national routine data collection system;
- ✓ Shed light on current infant and child mortality issues; and
- ✓ Strengthen national capacity in data collection and analysis.

2. Sample and Survey Methodology

Sample design

The sample for the 2010 Swaziland MICS was designed to provide estimates for indicators on the situation of the country at the national level, for urban and rural areas, and for the four administrative regions of Swaziland: Hhohho, Manzini, Shiselweni and Lubombo.

A two-staged stratified cluster sample was used. A representative sample of 5,475 households was selected in 365 enumeration areas (EAs) (55 percent rural and 45 percent urban) of the 2007 Swaziland Population and Housing Census to serve as primary sampling units (PSUs). This included a necessary oversampling of the Shiselweni region, as a selection in accordance with probability proportional to size would have made the number of households selected in the region inadequate for presentation of regional estimates of a large number of indicators.

Prior to the survey implementation, a complete listing of households in all the 365 EAs was conducted. Based on the total number of households in each EA, a systematic sample of 15 households was selected and included in the survey. In the selected households, all females age 15–49 and men age 15–59 were identified for individual interviews. In addition, all children under five years in all selected households were also identified and their mothers (or caretakers) were interviewed on their behalf. This formed the second stage of sampling. A more detailed description of the sample design can be found in Appendix A.

Questionnaires

Four sets questionnaires were used in the survey:

- A household questionnaire which was used to collect information on all household members, dwelling, household characteristics and to identify eligible individuals;
- An under-five children's questionnaire, administered to mothers or caretakers of all children under five years[1] living in the household. Usually, this questionnaire was administered to mothers of under-five children. In cases when the mother was not listed in the household roster or was incapacitated, a primary caretaker for the child was identified and interviewed
- A women's questionnaire administered in each selected household to all women age 15–49 years; and
- A men's questionnaire administered in each selected household to all men age 15–59 years.

The questionnaires included the following modules:

- Household questionnaire
  - Household listing form
  - Children orphaned or made vulnerable

[1] The terms "children under five", "children age 0–4 years", "under-fives", and "children age 0–59 months" are used interchangeably in this report.

- Education and basic needs
- Water and sanitation
- Household characteristics
- Insecticide-treated nets
- Indoor residual spraying
- Child labour
- Child discipline
- Hand washing
- Salt iodization

- Questionnaire for individual women
  - Women's background
  - Child mortality
  - Birth history
  - Desire for last birth
  - Maternal and newborn health
  - Illness symptoms
  - Contraception
  - Unmet need
  - Marriage/union
  - Sexual behaviour
  - Attitudes toward domestic issues (violence)
  - HIV/AIDS
  - Other sexually transmitted infections (STIs)

- Questionnaire for children under five
  - Age
  - Birth registration
  - Early childhood development
  - Breastfeeding
  - Care of illness
  - Malaria
  - Immunization
  - Anthropometry

- Questionnaire for individual men
  - Men's background
  - Marriage/union
  - Attitudes towards contraception
  - Sexual behaviour
  - Attitude towards domestic issues (violence)
  - HIV/ AIDS
  - Other STIs
  - Other health issues (male circumcision)

The questionnaires were based on the version of the global MICS4 model questionnaires that was available at the time of the survey. The generic questionnaires were then customized to fit country-specific conditions and standards. In addition, a number of county-specific modifications were also made to better serve the data needs of the country. The modifications include the following:

Modules that are not part of generic MICS4 modules that have been added either from MICS3 modules or the 2006/07 Swaziland Demographic Health Survey (SDHS):

- Household Questionnaire
    - Children orphaned or made vulnerable (children age 0–17)
    - Basic needs (children age 5–17)
- Questionnaire for individual women
    - Attitudes toward domestic issues (violence)
    - STIs
- Questionnaire for individual men
    - Attitudes toward domestic issues (violence)
    - STIs
    - Male circumcision

Modules that are not part of generic MICS that have been added:

- Questionnaire for individual women
    - Obstetric fistula

Modules that are part of generic MIC4 modules that have been omitted:

- Questionnaire for individual women
    - Female genital mutilation/cutting

After the modifications, the questionnaires were translated from English into siSwati. Both the English and siSwati versions were pre-tested in the Mbabane and Lubombo regions during the training of trainers workshop conducted over the period of 28 June through 6 July 2010. Two teams made up of a supervisor and eight interviewers were formed, who were then assigned to two pre-selected localities (one urban and one rural) outside the sampled clusters to test the entirety of survey procedures and questionnaires. Based on the results of the two pre-tests, further modifications were made, including the wording and flow of the questionnaires. Non-MICS questions that did not yield the intended results were dropped from the questionnaires. All four siSwati questionnaires were back-translated into English.

In addition to the administration of questionnaires, fieldwork teams tested the salt used for cooking in the households for iodine content, measured children's weights and heights and also tested for the presence of oedema in children under five years. Details and findings of these measurements are provided in the respective sections of the report.

Training and Fieldwork

A total of 67 interviewers (including some of the trainees of the training of trainers), two office editors, data entry administrators and supervisors participated in the main fieldwork training, conducted from 19 July to 7 August 2010. Office editors and data entry administrators and supervisors participated in the main training to get a better understanding of the questionnaires and survey techniques. The training included lectures on interviewing techniques, background presentations on the various themes, presentation and discussion of the questionnaires, local

language (siSwati) discussion of the questionnaires, class exercises and mock interviews among trainees to acquire skills in the asking of questions. All interviewers were further trained in testing and identification of oedema, salt testing and taking of anthropometric (height and weight) measurements of under-five children. Towards the end of the training period, trainees spent three days conducting field interviews in different urban and rural settings. Areas outside the sample were selected to provide the field staff a better understanding of working in different environments.

Supervisors and interviewers were selected based on their performance in the field practices, participation in class, assessment tests, fluency and understanding of siSwati and leadership qualities. A total of 48 out of the 67 enumerators trained were selected to be part of the data collection team. The remaining trainees were put on stand-by teams and were called upon as and when the need arose.

Data collection commenced on 12 August and ended on 27 November 2010. The data were collected by six teams. Each team was made up of six interviewers, a driver, a field editor, a measurer and a supervisor.

As part of the data collection activities, and for ethical reasons, female respondents suffering from fistula were asked if they wanted to be referred to medical practitioners for further examination and treatment. Those who responded in the affirmative were asked to complete a referral form or the form was completed on their behalf by the field supervisor and returned to the survey coordinator in the office. The same was done for respondents who had suffered from domestic abuse and for under-five children suffering from oedema. This protocol was specific to the 2010 Swaziland MICS and was not part of the standard procedures for the MICS4 globally. See Appendix G for a sample of the referral forms.

Data processing

Data entry commenced on 3 September after an initial training and ended on 17 December 2010. Data were entered on 10 computers by 10 data entry operators and two data entry supervisors using the CSPro software. In order to ensure quality control, all questionnaires were double entered and two secondary editors complemented the efforts of entry supervisors to perform internal consistency checks. Procedures and standard programmes developed under the global MICS4 survey were adapted, based on the modified Swaziland MICS questionnaires, and used throughout the processing. Data were analyzed using the Statistical Package for Social Sciences (SPSS) software programme, and syntax and tabulation plans developed for the global MICS4 were customized for this purpose.

3. Sample Coverage and Characteristics of Households and Respondents

This section presents information on the sample coverage and respondents, and socio-economic and demographic characteristics of the household population, focusing on age, sex, district, place of residence, and socio-economic conditions of households.

Sample coverage and response rate

Of the 5,475 households selected for the sample nationally, 5,074 households were found to be occupied. Of these, 4,834 households were interviewed successfully yielding a household response rate of 95 percent. Among the interviewed households, 4,956 women age 15–49 years and 4,646 men age 15–59 years were identified. Of this number, 4,688 women and 4,179 men were successfully interviewed, yielding a response rate of 95 percent and 90 percent respectively. In addition, 2,711 children under age five were listed in the household questionnaire. Of these, questionnaires were completed for 2,647, corresponding to a response rate of 98 percent. Overall response rates of 90, 86 and 93 percent are calculated for under-five's, women's and men's interviews respectively (Table HH.1).

Responses varied slightly by residence with higher rates for women and men in rural areas than in urban areas. The situation was the reverse for children under-five where rural areas had higher response rates than urban areas. The overall response rate for women, men and children under five years in rural areas were, however, higher than in urban areas. The main reason for non-response among households and eligible individuals was the failure to find these individuals at home despite several visits to the households. Regional differentials also exist with all the regions having a 90 percent or higher response rate for all the questionnaires with the exception of Hhohho and Shiselweni regions that had 88 and 89 percent response rate, respectively, for the men's questionnaire.

Characteristics of households

The age and sex distribution of the survey population is provided in Table HH.2. The distribution is also used to produce the population pyramid in Figure HH.1. In the 4,834 households successfully interviewed in the survey, 20,600 household members were listed. Of these, 9,710 were males, and 10,891 were females. These figures also indicate that the survey estimated the average household size at 4.3.

Table HH.1: Results of household, women's, men's and under-fives' interviews

Numbers of households, women, men and children under five by results of the household, women's, men's and under-fives' interviews, and household, women's, men's and under-fives' response rates, Swaziland, 2010

	Residence		Region				Total
	Urban	Rural	Hhohho	Manzini	Shiselweni	Lubombo	
Households							
Sampled	2,490	2,985	1,455	1,515	1,170	1,335	5,475
Occupied	2,260	2,814	1,324	1,430	1,102	1,218	5,074
Interviewed	2,095	2,739	1,237	1,368	1,079	1,150	4,834
Response rate	92.7	97.3	93.4	95.7	97.9	94.4	95.3
Women							
Eligible	1,839	3,117	1,301	1,364	1,223	1,068	4,956
Interviewed	1,757	2,931	1,212	1,309	1,143	1,024	4,688
Response rate	95.5	94.0	93.2	96.0	93.5	95.9	94.6
Overall response rate	88.6	91.5	87.0	91.8	91.5	90.5	90.1
Men							
Eligible	1,900	2,746	1,241	1,326	1,044	1,035	4,646
Interviewed	1,721	2,458	1,097	1,195	926	961	4,179
Response rate	90.6	89.5	88.4	90.1	88.7	92.9	89.9
Overall response rate	84.0	87.1	82.6	86.2	86.8	87.7	85.7
Children Under 5							
Eligible	699	2,012	593	690	781	647	2,711
Mother/ Caretaker Interviewed	672	1,975	570	666	772	639	2,647
Response rate	96.1	98.2	96.1	96.5	98.8	98.8	97.6
Overall response rate	89.1	95.5	89.8	92.3	96.8	93.2	93.0

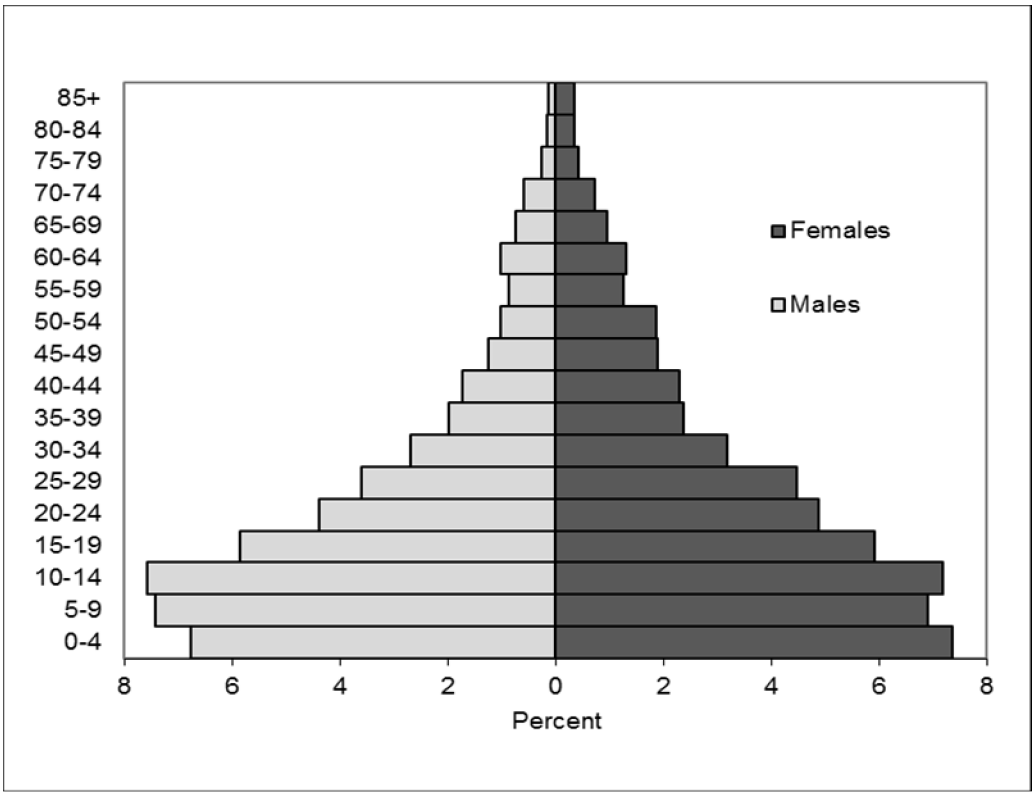
Table HH.2: Household age distribution by sex

Per cent and frequency distribution of the household population by five-year age groups, dependency age groups, and by child (age 0–17 years) and adult populations (age 18 or more), by sex, Swaziland, 2010

	Males		Females		Total	
	Number	Per cent	Number	Per cent	Number	Per cent
Age						
0–4	1,369	14.1	1,490	13.7	2,860	13.9
5–9	1,501	15.5	1,399	12.8	2,899	14.1
10–14	1,532	15.8	1,454	13.4	2,986	14.5
15–19	1,186	12.2	1,199	11.0	2,385	11.6
20–24	888	9.1	989	9.1	1,876	9.1
25–29	729	7.5	906	8.3	1,635	7.9
30–34	542	5.6	647	5.9	1,189	5.8
35–39	399	4.1	480	4.4	879	4.3
40–44	348	3.6	465	4.3	813	3.9
45–49	252	2.6	383	3.5	634	3.1
50–54	204	2.1	381	3.5	585	2.8
55–59	175	1.8	253	2.3	428	2.1
60–64	205	2.1	265	2.4	471	2.3
65–69	149	1.5	194	1.8	343	1.7
70–74	120	1.2	150	1.4	270	1.3
75–79	50	0.5	87	0.8	137	0.7
80–84	34	0.3	72	0.7	106	0.5
85+	25	0.3	73	0.7	98	0.5
Missing/DK	2	0.0	4	0.0	6	0.0
Dependency age groups						
0–14	4,402	45.3	4,343	39.9	8,745	42.4
15–64	4,927	50.7	5,968	54.8	10,895	52.9
65+	3,79	3.9	576	5.3	955	4.6
Missing/DK	2	0.0	4	0.0	6	0.0
Children and adult populations						
Children age 0–17 years	5,129	52.8	5,106	46.9	10,234	49.7
Adults age 18+ years	4,579	47.2	5,781	53.1	10,360	50.3
Missing/DK	2	0.0	4	0.0	6	0.0
Total	**9,710**	**100.0**	**10,891**	**100.0**	**20,600**	**100.0**

* DK = Don't Know

Figure HH.1: Age and sex distribution of household population, Swaziland, 2010



Source: Swaziland MICS 2010

Table HH2A: Population distribution by sex

Percent of population by broad age groups and sex

	2010 MICS			2007 Population Census		
Age Group	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
0–14	45.3	39.9	42.4	41.4	37.7	39.6
15–64	50.7	54.8	52.9	55.6	58.0	56.6
65+	3.9	5.3	4.6	3.0	4.3	3.9
Missing/don't know	-	-	-	0.1	0.1	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0

Age and sex distribution

Table HH.2A compares the age and sex distribution of the 2010 Swaziland MICS survey population with that from the 2007 Census. While these two data sets are not exactly comparable, the analysis will serve to give a rough indication of the quality of the Swaziland MICS survey data. The comparison shows that the population age and sex distributions of the two data sets do not differ markedly. As expected, the proportion of the population below 15 years is large and is approximately 40 percent. Children age 0–17 years compose 53 percent of the MICS survey population, which is a reflection of the youthful nature of the Swazi population. The proportion of the population in the 0–14 and 65+ age groups obtained from the MICS is slightly higher than from the Census. Consequently the

proportion of the population in the economically active age groups (age 15–64 years) is somewhat lower in the Swaziland MICS than in the Census. A comparison of the age distribution of the female population from the two surveys shows striking similarities, especially for the age groups below 65 years. The comparison of the age and sex distribution of the two data sets suggests that the 2010 Swaziland MICS data are representative of the population of Swaziland.

The population pyramid is typically cone shaped with a broad base which is again a reflection of the youthful nature of the population (Figure HH.1). The proportion of the population in the 0–4 age group is less than that in the 5–9 age group for males. This is a typical characteristic of the Swaziland population pyramid, which may be attributable to factors such as delining fertlity, increasing mortality for the 0–4 age group, and under-enumeration of children in this age group. However, this is not the case for females as there are more 0–4 year-olds than 5–9 year-olds. The pyramid shows that the largest number of household members are in the 10–14 age group but the proportions decrease thereafter, especially for the age groups below 40 years, to an extent that has been not been observed previously. This notable attrition is presumably due to HIV/AIDS. One other notable feature is that the number of both male and female respondents in the 60–64 age group is larger than in the preceeding one. Also for females, the proportion of the population in the 50–54 age group is almost equal to the preceding one (age 45–49 years). This may be due to varous factors such as digit preference or a deliberate effort to avoid certain components of the questionnaire that require detailed responses. These factors may also have caused the heaping in the 10–14 age group. Refer to the data quality tables presented in Appendix D for detailed information.

Table HH.3 provides basic background information on the households. Within households, the sex of the household head, region, urban/rural residency, number of household members, education of household head, households with at least one child, and religion are shown in the table. The total weighted and unweighted numbers of households are equal, since sample weights were normalized (see Appendix A). The table also shows the proportions of households where at least one child under 18 years, at least one child under five years of age, and at least one eligible woman age 15–49 years were found.

Table HH.3 also indicates that 53 percent of households are headed by males while 47 percent have female heads. The Manzini region has the highest proportion of sampled households at 34 percent followed by the Hhohho region at 26 percent. Thirty-five percent of households reside in urban areas while 65 percent are in rural areas. Close to 70 percent of surveyed households had at least one child under 18 years, 40 percent had at least one child under five years of age, and 67 percent at least one eligible woman age 15–49 years. The table also shows that 22 percent of households have only one member while only six percent have 10 or more members. Close to 20 percent of households are headed by persons with no education. The majority of household heads have primary education (30 percent) followed by secondary education (21 percent). Only 17 percent and 12 percent have high school and tertiary education, respectively.

Table HH.3: Household composition			
Percent distribution of households by selected characteristics, Swaziland, 2010			
	Weighted percent	Number of households	
		Weighted	Unweighted
Sex of household head			
Male	53.1	2,565	2585
Female	46.9	2,269	2249
Region			
Hhohho	26.1	1,261	1237
Manzini	33.6	1,624	1368
Shiselweni	20.1	969	1079
Lubombo	20.3	979	1150
Area			
Urban	34.8	1,680	2095
Rural	65.2	3,154	2739
Number of household members			
1	22.0	1,061	1,153
2	12.7	613	635
3	13.2	640	641
4	13.0	629	622
5	10.5	508	495
6	8.4	407	382
7	6.4	310	288
8	4.2	201	191
9	3.2	153	141
10+	6.4	311	286
Education of household head			
None	19.7	950	888
Primary	29.8	1,439	1,405
Secondary	20.8	1,005	1,004
High	17.4	842	894
Tertiary	12.2	589	634
Missing/DK	0.2	10	9
Total	**100.0**	**4,834**	**4,834**
Households with at least			
One child age 0–4 years	40.1	4,834	4,834
One child age 0–17 years	67.4	4,834	4,834
One woman age 15–49 years	68.8	4,834	4,834
One man age 15–59 years	63.1	4,834	4,834
Mean household size	**4.3**	**4,834**	**4,834**

Characteristics of respondents

Tables HH.4, HH.4M and HH.5 provide information on the background characteristics of female respondents age 15–49 years, male respondents age 15–59 years, and children under age five. In addition to providing useful information on the background characteristics of women, men and children under five, the tables are also intended to show the number of observations in each background category. These categories are used in the subsequent tabulations of this report.

Tables HH.4 and HH.4M include information on the distribution of female respondents age 15–49 years and male respondents age 15–59 years according to region, urban/rural areas, age, marital status, motherhood status, births in the last two years, education[2] and wealth index quintiles[3]. Table HH.4M shows background characteristics of male respondents 15–59 years of age. These are region, urban-rural areas, age, marital status, education and wealth index quintiles.

The results in Table HH.4 reveal that Manzini has the highest distribution of women and men at 32 percent and 34 percent, respectively, followed by Hhohho (27 percent for both women and men), Shiselweni (22 percent for women and 20 percent for men) and Lubombo (18 percent for women and 19 percent for men). In terms of urban vs. rural residency, about one in three women and men reside in urban areas compared to one in seven for rural areas.

The table shows that the majority of respondents have never been married or in a union, with the proportion of women and men who are in this category at 50 percent and 60 percent, respectively. This is consistent with results from various surveys and censuses that indicate that a large proportion of the Swazi population remains unmarried. Forty percent of women are married or in a union compared with 35 percent for men. Only a negligible proportion of respondents (less than one percent) are officially divorced, while close to four percent are separated. This is true for both women and men. This is to be expected since divorce is not condoned culturally and *lobola* (bride price) is primarily aimed at cementing the relationship between the couple and the two families for life. Over 70 percent of women have given birth to at least one child and 22 percent of women had given birth in the past two years.

Five percent of women respondents are uneducated while 27 percent, 34 percent, 26 percent and eight percent have completed primary education, secondary education, high school and tertiary education, respectively. The corresponding proportions for men are seven percent, 30 percent, 29 percent, 26 percent and 10 percent, respectively. The results indicate that a slightly higher proportion of men have no education compared with women. They also show that a larger proportion of women have secondary education. However, a slightly higher proportion of men have tertiary education

[2] Unless otherwise stated, "education" refers to the educational level attended by the respondent throughout this report when it is used as a background variable.

[3] Principal components analysis was performed by using information on the ownership of consumer goods, dwelling characteristics, water and sanitation, and other characteristics that are related to the household's wealth to assign weights (factor scores) to each of the household assets. Each household was then assigned a wealth score based on these weights and the assets owned by that household. The survey household population was then ranked according to the wealth score of the household they are living in, and was finally divided into 5 equal parts (quintiles) from lowest (poorest) to highest (richest). Further information on the construction of the wealth index can be found in Filmer and Pritchett, 2001, Gwatkin, Rutstein, Johnson et al., 2000, and Rutstein and Johnson, 2004.

compared with women. In respect to the other educational levels, men and women are almost at par, which bodes well for socio-economic development.

Table HH.4 further shows that the largest proportion of women and men are classified under the richest wealth quintile (25 percent for women and 27 percent for men), followed by those in the fourth quintile (22 percent for women and 23 percent for men). Only 16 percent and 14 percent of all women and men, respectively, fall under the poorest wealth quintile. As wealth is measured at the household level and the wealth quintiles each represent 20 percent of the households, this finding is expected: households with members from the economically active age groups are generally wealthier.

Background characteristics of children under five are presented in Table HH.5. These include the distribution of children by several attributes: sex, region and area of residence, age in months, mother's or caretaker's education and household wealth.

The results show that 52 percent of children are female and 48 percent are male. Eighty percent of children live in rural areas with only 20 percent residing in urban areas. The largest proportion of children under five is found in the Manzini region (30 percent), followed by the Shiselweni, Hhohho and Lubombo regions (26 percent, 25 percent and 20 percent, respectively). Ten percent are less than six months old or 6–11 months old. The remaining children under five are equally distributed among the 12–23, 24–35, 36–47, and 48–59 month age groups (20 percent for each). Most mothers have either primary education (34 percent) or secondary education (29 percent). Only 12 percent have no education and seven percent have tertiary education. The result shows that children under five in the household are more concentrated among poorer households; close to a quarter of under fives belong to the poorest wealth quintile compared to 16 percent for the richest quintile.

Table HH.4: Women's background characteristics

Per cent and frequency distribution of women age 15–49 years by selected characteristics, Swaziland, 2010

	Weighted per cent	Number of women	
		Weighted	Unweighted
Region			
Hhohho	27.4	1,286	1,212
Manzini	32.3	1,515	1,309
Shiselweni	22.0	1,033	1,143
Lubombo	18.2	854	1,024
Area			
Urban	28.9	1,353	1,757
Rural	71.1	3,335	2,931
Age of woman			
15–19	23.4	1,098	1,079
20–24	19.3	904	909
25–29	18.1	847	857
30–34	12.7	595	601
35–39	9.7	456	465
40–44	9.2	433	431
45–49	7.6	355	346
Marital/Union status			
Currently married/in union	40.1	1,882	1,851
Widowed	5.0	232	220
Divorced	(0.7)	33	35
Separated	3.8	179	189
Never married/in union	50.4	2,362	2,393
Motherhood status			
Ever gave birth	70.2	3,292	3,291
Never gave birth	29.8	1,396	1,397
Births in the last two years			
Had a birth in the last two years	22.0	1,031	1,018
Had no birth in the last two years	78.0	3,657	3,670
Education			
None	5.2	242	222
Primary	27.1	1,269	1,231
Secondary	34.0	1,592	1,565
High	25.6	1,202	1,247
Tertiary	8.2	382	423
Wealth index quintiles			
Poorest	15.7	737	698
Second	17.1	802	738
Middle	19.8	930	906
Fourth	22.2	1,041	1,024
Richest	25.1	1,179	1,322
Total	**100.0**	**4,688**	**4,688**

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

Table HH.4M: Men's background characteristics

Per cent and frequency distribution of men age 15–59 years by selected characteristics, Swaziland, 2010

	Weighted per cent	Number of men	
		Weighted	Unweighted
Region			
Hhohho	27.4	1,143	1,097
Manzini	33.7	1,406	1,195
Shiselweni	20.3	847	926
Lubombo	18.7	782	961
Area			
Urban	32.2	1,347	1,721
Rural	67.8	2,832	2,458
Age of man			
15–19	25.7	1,075	1,036
20–24	18.7	783	781
25–29	15.1	629	647
30–34	11.6	484	496
35–39	8.5	354	361
40–44	7.0	292	302
45–49	5.3	221	218
50–54	4.4	183	187
55–59	3.8	159	151
Marital/Union status			
Currently married/in union	34.9	1,459	1,476
Widowed	1.5	63	59
Divorced	0.3	11	12
Separated	3.6	152	154
Never married/in union	59.7	2,495	2,478
Education			
None	6.7	280	275
Primary	29.7	1,240	1,198
Secondary	28.6	1,195	1,176
High	25.5	1,067	1,114
Tertiary	9.5	397	416
Wealth index quintiles			
Poorest	13.6	570	537
Second	17.7	740	667
Middle	19.7	821	804
Fourth	22.5	940	942
Richest	26.5	1,107	1,229
Total	**100.0**	**4,179**	**4,179**

Table HH.5: Under-fives' background characteristics

Per cent and frequency distribution of children under five years of age by selected characteristics, Swaziland, 2010

	Weighted per cent	Number of children	
		Weighted	Unweighted
Sex			
Male	47.8	1,265	1,272
Female	52.2	1,382	1,375
Region			
Hhohho	24.7	655	570
Manzini	29.7	787	666
Shiselweni	25.8	683	772
Lubombo	19.7	523	639
Area			
Urban	19.9	527	672
Rural	80.1	2,120	1,975
Age			
0–5 months	10.3	273	269
6–11 months	9.5	251	258
12–23 months	19.7	521	515
24–35 months	20.2	534	530
36–47 months	20.1	533	537
48–59 months	20.2	536	538
Mother's education			
None	11.5	303	296
Primary	33.7	891	877
Secondary	28.6	757	748
High	19.7	523	534
Tertiary	6.5	171	189
Missing/DK	0.1	3	3
Wealth index quintiles			
Poorest	24.4	646	641
Second	21.0	557	525
Middle	20.5	544	536
Fourth	18.5	489	479
Richest	15.5	411	466
Total	**100.0**	**2,647**	**2,647**

Tables HH.6 and HH.6M present the percentage of women and men by current marital status and by type of marriage/union. A total of 50 percent of women and 60 percent of men reported that they were never married. Approximately 33 percent of women and 28 percent of men reported that they were married or in union. The most common type of marriage/union is marriage through Swazi law and custom[4] (26 percent for women and 21 percent for men). This is followed by civil rites (6 percent for both women and men) and living with a partner (8 percent for women and 7 percent for men).

Disaggregation of the results by background characteristics shows that marriage through Swazi law and custom is more common in rural areas at 29 percent, compared with urban areas at 18 percent. Swazi marriage is most prevalent in the Lubombo region and least prevalent in the Shiselweni region: 31 percent of women and 25 percent of men have been married through Swazi law and custom in the Lubombo region, while in the Shiselweni region the comparative figures

[4] Swaziland has a dual legal system comprising of both common law and Swazi traditional law and custom.

were 22 percent for women and 13 percent for men. For both women and men civil marriage is more common in urban than rural areas.

Living with partner is most common among women and men with no education (19 percent for women and 12 percent for men) compared with three percent among women with tertiary education and seven percent among men with tertiary education. Divorce is higher among women with tertiary education with three percent, compared with two percent among women with tertiary education and less than one percent among women with primary education. Civil marriage is also higher among women and men in the highest wealth quintile (16 percent among both women and men) compared to those in the lowest quintile (less than one percent among women and zero percent among men).

Table HH.6: Current marital status: women

Percent distribution of women age 15–49 years by marital status, by selected characteristics, Swaziland, 2010

	Percentage of women who:												
	Are currently married/in union:					Were formerly married/in union:							
	By type of marriage:												
	Swazi marriage	Civil marriage	Other/ Missing	Any type	In union	Widowed	Divorced	Separated	Formerly in union	Were formerly married/in union	Are currently married/in union	Were never married/in union	Total	Number of women age 15–49 years
Region														
Hhohho	29.0	6.0	0.1	35.1	6.1	3.8	1.4	1.3	3.1	9.5	41.2	49.3	100.0	1,286
Manzini	23.5	8.6	0.8	32.9	9.4	4.6	0.5	1.3	4.2	10.7	42.3	47.0	100.0	1,515
Shiselweni	21.5	4.5	0.2	26.2	6.8	4.9	0.1	1.7	2.0	8.8	33.0	58.2	100.0	1,033
Lubombo	31.2	4.5	0.2	35.9	7.4	3.1	0.7	0.9	3.5	8.2	43.3	48.6	100.0	854
Area														
Urban	18.4	10.9	0.8	30.1	11.0	3.3	0.9	1.7	4.9	10.8	41.1	48.1	100.0	1,353
Rural	29.0	4.4	0.2	33.6	6.2	4.5	0.6	1.2	2.6	8.9	39.8	51.3	100.0	3,335
Age of woman														
15–19	2.1	0.1	0.1	2.3	2.0	0.0	0.0	0.1	0.1	0.2	4.3	95.6	100.0	1,098
20–24	18.0	2.1	0.3	20.4	10.5	0.1	0.2	0.4	1.7	2.4	30.9	66.7	100.0	904
25–29	31.6	5.9	0.7	38.2	10.7	1.4	0.4	1.7	3.4	6.8	48.9	44.3	100.0	847
30–34	38.4	11.6	0.3	50.3	8.1	4.7	1.6	2.4	5.0	13.7	58.4	27.9	100.0	595
35–39	43.8	12.7	0.3	56.9	9.8	8.4	0.8	1.5	5.6	16.4	66.7	16.9	100.0	456
40–44	42.3	11.7	0.5	54.5	7.9	12.9	2.2	3.1	6.9	25.1	62.4	12.5	100.0	433
45–49	43.0	12.8	0.5	56.3	5.6	17.1	1.5	2.4	6.6	27.6	62.0	10.5	100.0	355
Education														
None	40.5	1.2	0.8	42.4	19.4	11.1	1.7	1.1	8.2	22.2	61.8	16.0	100.0	242
Primary	31.6	2.1	0.4	34.1	10.4	5.3	0.7	1.3	4.5	11.9	44.5	43.6	100.0	1,269
Secondary	25.3	3.8	0.3	29.3	6.9	3.6	0.4	1.4	2.8	8.3	36.3	55.5	100.0	1,592
High	19.4	7.8	0.3	27.6	4.5	2.4	0.2	1.2	2.3	6.1	32.1	61.8	100.0	1,202
Tertiary	21.5	28.2	0.7	50.4	3.1	3.7	2.5	1.4	1.4	8.9	53.5	37.6	100.0	382
Wealth index quintiles														
Poorest	31.2	0.3	0.1	31.6	10.9	4.9	1.0	1.1	3.3	10.3	42.5	47.2	100.0	737
Second	27.3	2.1	0.4	29.8	6.8	5.5	0.4	1.1	3.4	10.5	36.7	52.8	100.0	802
Middle	29.0	1.8	0.1	30.8	7.9	4.0	0.6	2.1	4.2	10.8	38.7	50.4	100.0	930
Fourth	26.5	6.6	0.2	33.2	6.8	3.2	0.5	0.8	3.1	7.7	40.1	52.2	100.0	1,041
Richest	19.0	16.0	0.9	35.9	6.4	3.7	1.0	1.4	2.6	8.7	42.2	49.1	100.0	1,179
Total	26.0	6.2	0.4	32.6	7.6	4.2	0.7	1.3	3.3	9.5	40.1	50.4	100.0	4,688

Table HH.6M: Current marital status: men

Percent distribution of men age 15–59 years by marital status, by selected characteristics, Swaziland, 2010

	Percentage of men who:													
	Are currently married/in union:					Were formerly married/in union:								
	By type of marriage:													
	Swazi marriage	Civil marriage	Other/ Missing	Any type	In union	Widowed	Divorced	Separated	Formerly in union	Were formerly married/in union	Are currently married/in union	Were never married/in union	Total	Number of men age 15–59 years
Region														
Hhohho	24.3	7.1	0.5	31.8	5.1	1.1	0.1	1.0	2.5	4.8	36.9	58.3	100.0	1,143
Manzini	20.9	7.8	1.1	29.9	9.4	1.2	0.4	1.1	3.9	6.6	39.2	54.2	100.0	1,406
Shiselweni	13.3	4.0	0.2	17.5	5.4	1.1	0.1	1.2	3.1	5.6	22.8	71.6	100.0	847
Lubombo	25.3	4.9	0.2	30.5	6.8	0.7	0.4	0.7	2.3	4.1	37.3	58.7	100.0	782
Area														
Urban	23.0	10.5	1.2	34.7	11.1	0.8	0.3	0.8	3.7	5.6	45.7	48.7	100.0	1,347
Rural	20.2	4.3	0.3	24.8	4.9	1.2	0.3	1.1	2.7	5.3	29.8	64.9	100.0	2,832
Age of woman														
15–19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	1,074
20–24	2.6	0.1	0.1	2.9	3.8	0.0	0.0	0.0	1.2	1.2	6.7	92.1	100.0	784
25–29	15.4	2.6	0.7	18.7	10.8	0.6	0.2	0.4	4.4	5.6	29.5	64.9	100.0	629
30–34	30.4	10.6	1.6	42.6	11.6	0.3	0.6	1.8	7.2	9.9	54.1	35.9	100.0	484
35–39	44.2	15.7	0.3	60.2	10.6	2.2	0.2	3.4	3.9	9.7	70.8	19.5	100.0	354
40–44	51.9	14.7	1.0	67.6	10.1	3.5	1.0	2.0	6.0	12.6	77.7	9.7	100.0	292
45–49	52.5	19.3	1.1	72.9	14.1	1.3	0.4	2.3	4.3	8.3	87.0	4.7	100.0	221
50–54	55.1	17.0	2.4	74.5	11.8	6.1	1.2	1.9	2.6	11.9	86.3	1.8	100.0	183
55–59	58.5	14.3	0.4	73.2	9.6	4.6	0.0	3.3	5.8	13.6	82.8	3.6	100.0	159
Education														
None	43.7	1.3	1.0	46.0	12.4	3.7	0.7	4.1	5.9	14.4	58.4	27.2	100.0	280
Primary	22.1	2.2	0.7	25.0	8.0	1.1	0.2	1.4	4.4	7.0	33.0	59.9	100.0	1,240
Secondary	19.3	3.1	0.5	22.9	5.7	1.1	0.2	0.3	2.4	3.9	28.5	67.6	100.0	1,195
High	16.7	7.0	0.6	24.3	5.6	0.5	0.2	0.5	2.3	3.5	30.0	66.6	100.0	1,067
Tertiary	19.2	30.5	0.3	50.0	6.6	0.7	0.6	1.3	1.0	3.7	56.7	39.7	100.0	397
Wealth index quintiles														
Poorest	20.9	0.0	0.3	21.2	8.6	2.6	0.2	2.3	4.1	9.1	29.7	61.1	100.0	570
Second	18.1	1.3	0.3	19.7	6.6	1.4	0.3	1.2	3.2	6.2	26.3	67.5	100.0	740
Middle	21.6	2.3	0.7	24.6	7.1	0.7	0.3	0.9	4.1	6.0	31.6	62.4	100.0	821
Fourth	21.7	6.0	0.6	28.2	6.3	1.1	0.1	0.5	1.9	3.6	34.5	61.9	100.0	940
Richest	22.4	16.1	1.0	39.5	6.6	0.3	0.4	0.8	2.6	4.0	46.1	49.9	100.0	1,107
Total	21.1	6.3	0.6	28.0	6.9	1.1	0.3	1.0	3.0	5.4	34.9	59.7	100.0	4,179

4. Child Mortality

One of the overarching goals of the MDGs is to reduce infant and under-five mortality. Specifically, the MDGs call for the reduction in under-five mortality by two-thirds between 1990 and 2015. Monitoring progress towards this goal is an important but difficult objective. Measuring childhood mortality may seem easy, but attempts using direct questions such as, "*Has anyone in this household died in the last year?*" give inaccurate results. Using direct measures of child mortality from birth histories is time consuming, more expensive, and requires greater attention to training and supervision. Alternatively, indirect methods developed to measure child mortality produce robust estimates that are comparable with the ones obtained from other sources. Indirect methods minimize the pitfalls of memory lapses, inexact or misinterpreted definitions, and poor interviewing technique. However, the indirect methods cannot provide estimates of the age at death distribution beyond infant and child mortality and do not provide the richness of data available from collecting birth histories. As child mortality drops across the world, due to commitment and action, evidence shows that reductions are predominantly made in deaths occurring past infancy and increasingly there is a demand for precision in and analysis of the period where most deaths occur.

The 2010 Swaziland MICS therefore employed a full birth history as part of the women's questionnaire and paid exceptional attention to meeting the known pitfalls and shortcomings of the technique through careful training and fieldwork monitoring. Regardless of these efforts, measuring mortality is one of the most difficult tasks undertaken in a household survey and special attention has therefore also been given to reporting of estimates and the quality of these in this chapter – and in annexed tables and deeper analysis.

Understanding child mortality in Swaziland is further complicated due to the HIV/AIDS pandemic. The birth histories of women only represent those of living women age 15–49 residing in the randomly selected sample of households. In a typical population without any major emigration or adult mortality in the eligible age group (such as from a disaster), the birth histories of living and deceased women will be more or less the same, that is, without biasing the mortality results. However, the impact of an estimated HIV prevalence among women in the eligible age group of near 30 percent has profound impact. This is because there is a higher probability of death among young children of mothers who have died of AIDS than among children whose mothers are alive. Part of this is due to the vertical transmission of HIV, which has a significant impact on the survival of children.

Prevention of mother-to-child transmission (PMTCT) programmes, paediatric anti-retroviral therapy (ART) and preventive measures in general are starting to reverse the impact of the problem of mortality measurement through birth histories, but currently there is still need to look at any mortality

results carefully and – as done by the Inter-Agency Group for Mortality Estimation[5] (IGME) – make appropriate adjustments to the measured rates.

Besides this measurement issue that exists and regardless of the quality of the household survey, there are three main issues that could influence the precision of measurement[6]: 1) birth transference (aging children to reduce workload); 2) event omission (excluding children to reduce workload or avoiding painful recollection); and 3) incorrect sampling frame (poor or severely outdated censuses). In almost every case perceivable, each of the three issues contributes to underestimation of mortality and it is therefore safe to say that nearly every household survey underestimates child mortality.

Attention is here directed to the specific data quality tables (Appendix D) produced for the birth history data. The quality of birth history data is briefly addressed under the findings, but specifically related to the impact of HIV/AIDS on the Swazi population, further studies of quality and results are necessary.

The issue of missing data is important to all variables in the survey. Generally, data for missing cases are not imputed, with the exception of the variables in the birth history, where a bias would often be significant, as dates of events are more often missing for the least educated and the less wealthy women. It is typical that children of these women also suffer the largest mortality, and without imputation, mortality would often be underestimated. However, in the 2010 Swaziland MICS, imputation was only necessary in just over 20 cases and therefore had insignificant impact on the results. The imputed data can be accessed in the MICS data set.

Results

The mortality results presented are defined as follows:

- Neonatal mortality: the probability of dying within the first month of life
- Infant mortality: the probability of dying before the first birthday
- Post-neonatal mortality: the difference between infant and neonatal mortality
- Child mortality: the probability of dying between the first and fifth birthday
- Under-five mortality: 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 CM.1 shows the trends in neonatal, post-neonatal, infant, child, and under-five mortality rates for the three successive five-year periods preceding the survey. For the most recent five-year period preceding the survey, infant mortality is 79 deaths per 1,000 live births, and under-five mortality is 104 deaths per 1,000 live births. This means that more than one in every 10 children born in Swaziland dies before reaching his or her fifth birthday.

[5] Sullivan JM, 2008. Visit www.childmortality.org for information on IGME's work and global estimates.
[6] UNICEF, Childinfo, http://www.childinfo.org/files/IGME_Overall_Results_of_Analysis.pdf

Table CM.1: Early childhood mortality rates

Neonatal, post-neonatal, Infant, child and under-five mortality rates for five year periods preceding the survey, Swaziland, 2010

	Neonatal mortality rate[1]	Post-neonatal mortality rate[2]	Infant mortality rate[3]	Child mortality rate[4]	Under-five mortality rate[5]
Years preceding the survey					
0–4	19	60	79	27	104
5–9	19	51	70	26	94
10–14	20	39	59	18	76

[1] MICS indicator 1.3

[2] MICS indicator 1.4

[3] MICS indicator 1.2; MDG indicator 4.2

[4] MICS indicator 1.5

[5] MICS indicator 1.1; MDG indicator 4.1

Note: Post-neonatal mortality rates are computed as the difference between the infant and neonatal mortality rates

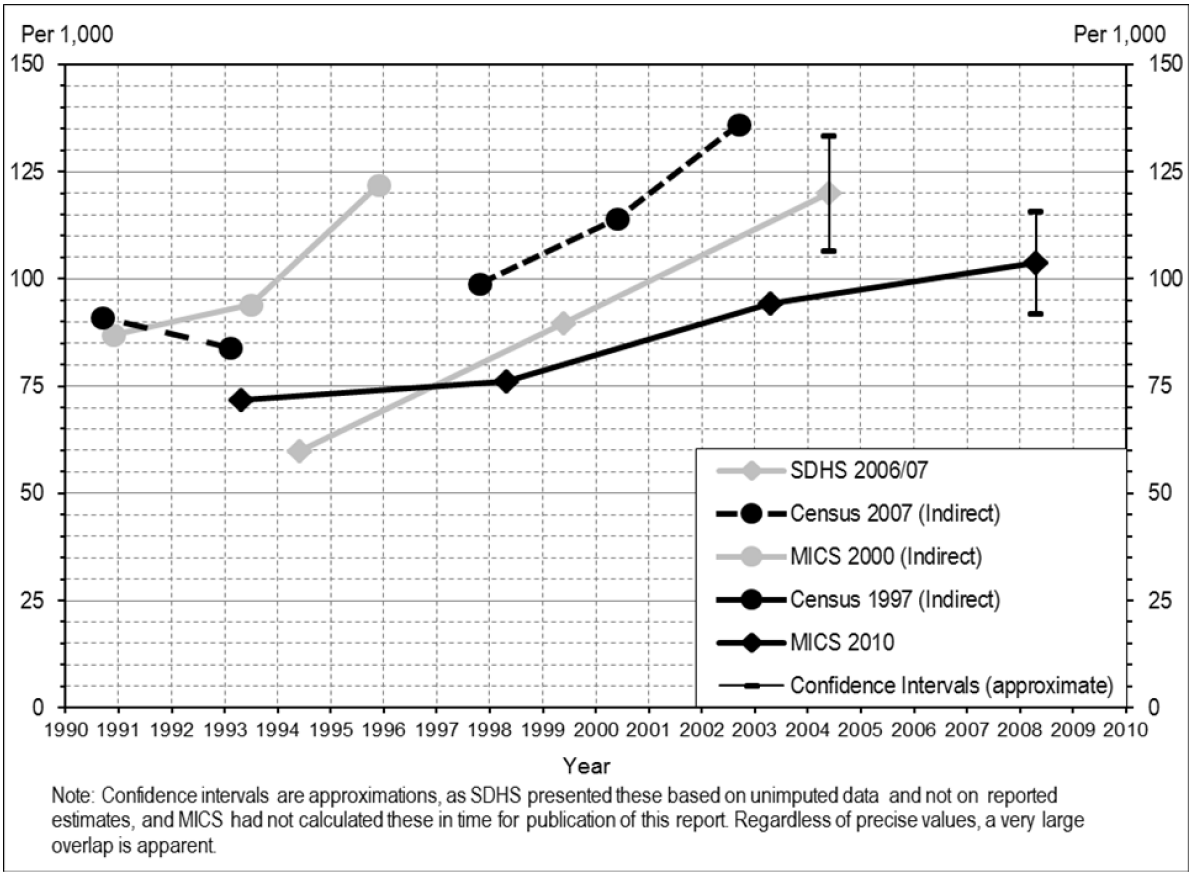
Looking at the age pattern of mortality during the five-year period immediately prior to the survey, three-quarters of the deaths took place during the first year of the child's life. Examining infancy deaths, again three-quarters of these deaths occurred during the post-neonatal period, i.e., the child had survived at least one month before dying. Nevertheless, it is observed that nearly one in five of under-five deaths happen in the first month of life.

The trend in early childhood mortality since the mid-1990s can also be examined by looking at changes in the mortality rates over the three successive five-year periods prior to the survey. From the 2010 Swaziland MICS results, there is evidence that all mortality rates but that of neonatals have increased over the period. For example, post-neonatal and child mortality rates during the most recent period (2006–2010) are 50 percent higher than the levels estimated for the period 10–14 years before the survey (1996–2000). This confirms the upward trend observed in the 2006/07 SDHS, albeit at a somewhat lower rate of increase. In the Swaziland MICS it can be seen that the rate of increase between the two most recent five-year periods is smaller than the rate of increase in the previous period.

Figure CM.1 shows the series of under-five mortality rate estimates of the survey and those estimated in the 2006/07 SDHS. As mentioned, the Swaziland MICS results are in broad agreement with the SDHS results in terms of having measured increasing mortality. Other recent data points confirm this finding as well. However, the survey results differ somewhat on the level of mortality.

Further qualification of these apparent increases and differences as well as their determinants should be taken up in a more detailed and separate analysis.

Figure CM.1: Trend in under-five mortality rates, Swaziland, 2010



Data quality observations

Some caution is necessary when interpreting the mortality trend suggested by the 2010 Swaziland MICS. As described and seen above, a thorough analysis of data quality including the impact of HIV/AIDS is necessary, as well as comparisons between data sources. Typically, a large difference between estimates from comparable surveys and overlapping periods, such as the 2006/07 SDHS estimate plotted in 2004 and the 2010 MICS estimate plotted in 2003, is pointing towards relatively less quality of the lowest estimate. However, in the case of Swaziland this may not be the case and may be due to the impact of HIV/AIDS as described earlier.

In a brief overview of the data quality tables presented in Appendix D, the following observations also point to caution. However, these observations are not different from what is found in the majority of other surveys, in Swaziland and globally:

- Table DQ.1: The large number of 50 year-old women compared with those of age 49 years is of concern, as well as the large number of 14 year-old girls. While this age heaping is common – both for natural reasons and because of work-reducing behaviour of interviewers, the impact on quality is the loss of birth histories of probably up to 100 women or around two percent of the sample.
- Table DQ.4A: Here it can be observed that there are marginally worse interview completion rates for women in settings that typically carry a higher risk of mortality: rural, large households and poor.
- Table DQ.16: While there is room for slight fluctuation, the sex ratio (boys:girls) of children ever born should be around 1.05. None of the age groups presented achieve this, and for women age 15–24 the data reveal more girls than boys. While this is possible, due to sampling error, the age group of 20–24 year-old women, in particular, looks uncomfortably low. Assuming that all births of female children were captured, there is evidence that the MICS failed to capture less than five percent of male births. Although this seems relatively low, it contributes to cautionary interpretation of results.
- Table DQ.17: While interviewers performed very well in obtaining complete birth dates (column 2), a similar picture to that observed in DQ.16 appears; the sex ratio is lower than expected (column 3). However, there is evidence of some distortion (column 4). Were the obtained birth dates correct? Again allowing room for sampling error, there seems to be typical heaping on calendar years 1990 and 2000, where some women without readily available precise information may have 'rounded off' – often with the assistance of the interviewer. This heaping is not critical as such, but does have a slight impact of past mortality figures. Instead, focus is drawn to the period of 2006–2008, where there is high fluctuation in ratios. This can partly be explained by the survey finding that there are more two year-olds than one year-old children, but closer investigation is necessary.
- Table DQ.18: This table should clarify on the quality of information obtained on age at death, when the death occurred before age one month. Overall the figures show some heaping, particularly for the most recent period of 0–4 years before the survey, on age one day and one, two, and three weeks old.
- Table DQ.19: A similar table is designed to capture quality of information obtained on age at death in months. The focus is to review whether respondents and interviewers are heaping at age one month and at age 12 months as these are the cut-offs for the specific mortality rates. While there is evidence of some heaping, the data do not suggest heaping at cut-off points.

In summary, while the data show some of the typical quality issues, there is no apparent major concern on overall quality.

Demographic and socio-economic results

Differentials in early childhood mortality rates by selected socio-economic and demographic characteristics are presented in Tables CM.2 and CM.3. In order to ensure a sufficient number of births to study mortality differentials across the population sub-groups, period-specific rates are presented

for the 10-year period preceding the survey (approximately 2001 to 2010) in these tables. Differences in the mortality rates across the sub-groups should, nevertheless, be interpreted cautiously because the sampling error remains comparatively large even for the 10-year rates (see Appendix C).

The results in Table CM.2 indicate that the risk of dying early is near identical for urban and rural children and within their respective confidence intervals. Overall, the under-five mortality rate is 98 deaths per 1,000 live births in rural areas and 102 in urban areas.

The differentials in mortality levels are somewhat larger by region. Hhohho has the lowest under-five mortality rate of 78 per 1,000 live births, which is predominantly due to the lowest post-neonatal and child mortality rates. Manzini has the highest under-five mortality rate of 114, which is due to the highest mortality rates in all but that of neonates.

Table CM.2: Early childhood mortality rates by socio-economic characteristics

Neonatal, post-neonatal, infant, child and under-five mortality rates for the ten year period preceding the survey, by socio-economic characteristics, Swaziland, 2010

	Neonatal mortality rate	Post-neonatal mortality rate[**]	Infant mortality rate	Child mortality rate	Under-five mortality rate
Region					
Hhohho	21	36	57	22	78
Manzini	17	68	86	32	114
Shiselweni	22	59	81	30	108
Lubombo	16	57	73	23	94
Residence					
Urban	18	59	77	28	102
Rural	19	54	74	26	98
Mother's education					
None	(20)	(51)	(70)	(41)	(108)
Primary	25	62	86	30	114
Secondary	20	62	81	27	106
High	11	50	61	17	76
Tertiary	(13)	(22)	(36)	(16)	(51)
Wealth index quintile					
Poorest	24	58	82	36	115
Second	13	53	66	29	93
Middle	18	63	81	29	108
Fourth	19	52	71	18	87
Richest	20	51	71	22	92

[**] Post-neonatal mortality rates are computed as the difference between the infant and neonatal mortality rates.

Note: Estimates in parentheses are based on 250–499 years of exposure. Caution is advised with these figures.

As expected, a mother's education is near inversely related to a child's risk of dying, although the under-five mortality rate for children of mothers with no education is lower than that of mothers with primary education. Looking at the child mortality rates, however, the pattern is completely as expected. Overall, children of mothers with no education have twice the mortality rates of children of mothers with tertiary education.

The relationship between wealth and mortality is not consistent, although children born to mothers in the highest wealth quintile have a much lower risk of dying than children born to mothers in the poorest quintiles.

The demographic characteristics of both mother and child have been found to play an important role in the survival probability of children. Table CM.3 presents mortality rates by demographic characteristics (i.e., sex of child, mother's age at birth, birth order, and previous birth interval). The data show some difference in mortality between male and female children in infancy, with infant mortality rates at 79 and 70 per 1,000 live births for males and females, respectively.

Typically, the relationship between maternal age at birth and childhood mortality is U-shaped, being relatively higher among children born to mothers under age 20 years and over age 35 years than among mothers in the middle age groups. This pattern is also found in Swaziland, where mortality among children born to mothers whose age at birth was less than 20 years, in particular, is high across all mortality rates. The birth order of the child has little influence on children's mortality risks, although there is a slightly reduced risk for first-borns observed in the under-five mortality rate.

Research has shown that short birth intervals significantly reduce a child's chance of survival, and this is confirmed by the Swaziland MICS: children have an elevated risk of dying if they were born within two years of a preceding birth. The risk reduces to its lowest at a birth spacing of three years, but then increases sharply at four years or more between births.

Table CM.3: Early childhood mortality rates by demographic characteristics

Neonatal, post-neonatal, infant, child and under-five mortality rates for the ten year period preceding the survey, by demographic characteristics, Swaziland, 2010

	Neonatal mortality rate	Post-neonatal mortality rate[**]	Infant mortality rate	Child mortality rate	Under-five mortality rate
Sex of child					
Male	22	57	79	27	104
Female	16	54	70	27	95
Mother's age at birth					
Less than 20	25	63	88	32	117
20–34	16	54	70	25	93
35–49	24	54	78	(26)	(102)
Birth order					
1	20	51	71	21	91
2–3	17	61	78	27	103
4–6	19	55	74	33	104
7+	(25)	(49)	(74)	(28)	(100)
Previous birth interval [*]					
< 2 years	24	(65)	(90)	(34)	(121)
2 years	19	47	66	32	96
3 years	11	47	57	(28)	(84)
4+ years	19	67	86	25	109

[*] Excludes first order births

[**] Post-neonatal mortality rates are computed as the difference between the infant and neonatal mortality rates.

Note: Estimates in parentheses are based on 250-499 years of exposure. Caution is advised with these figures.

5. Nutrition

Nutritional status

Children's nutritional status is a reflection of their overall health. When children have access to adequate and nutritious food supply, are not exposed to repeated illness, and are well cared for, they reach their growth potential and are considered well nourished. Malnutrition is associated directly and indirectly with more than half of all child deaths worldwide. Undernourished children are more likely to die from common childhood ailments, and those who survive, have recurring sicknesses and faltering growth. Such children may not reach their full potential as productive adults. The MDG target is to reduce by half the proportion of people who suffer from hunger between 1990 and 2015. A reduction in the prevalence of malnutrition will assist in the goal to reduce child mortality, especially for Swaziland, which has a high child mortality rate.

In a well-nourished population, there is a reference distribution of height and weight for children under age five. Under-nourishment in a population can be gauged by comparing children to the reference population. The reference population used in this report is based on new WHO growth standards.[7] Each of the three nutritional status indicators can be expressed in standard deviation units (z-scores) from the median of the reference population.

Weight-for-age (underweight) is a measure of both acute and chronic malnutrition. It is a reflection of both recent and prolonged deprivation of food and or illness. Children whose weight-for-age is more than two standard deviations below the median of the reference population are considered *moderately or severely underweight* while those whose weight-for-age is more than three standard deviations below the median are classified as *severely underweight.*

Height-for-age (stunting) is a measure of linear growth. It is a reflection of deprivation of nutritious food over a long period and/or recurrent or chronic illness. Children whose height-for-age is more than two standard deviations below the median of the reference population are considered short for their age and are classified as *moderately or severely stunted.* Those whose height-for-age is more than three standard deviations below the median are classified as *severely stunted.*

Weight-for-height (wasting) is usually the result of a recent nutritional deficiency. The indicator may exhibit significant seasonal shifts associated with changes in the availability of food or disease prevalence. Children whose weight-for-height is more than two standard deviations below the median of the reference population are classified as *moderately or severely wasted,* while those who fall more than three standard deviations below the median are *severely wasted*.

[7] WHO, 2007, WHO Child Growth Standards.

In the 2010 Swaziland MICS, weights and heights of all children under five years of age were measured using anthropometric equipment recommended by UNICEF. Findings in this section are based on the results of these measurements.

Table NU.1 shows percentages of children classified into each of these categories, based on the anthropometric measurements taken during fieldwork. Additionally, the table includes the percentage of children who are overweight, which takes into account those children whose weight-for-height is above two standard deviations from the median of the reference population.

Almost six percent of children under age five in Swaziland are underweight and one percent are classified as severely underweight. Almost one in every three children (31 percent) is stunted and 10 percent are severely stunted. One percent of children under five are wasted and half of these are classified as severely wasted.

Stunting is more prevalent among males than females (34 percent vs. 28 percent) and in rural areas than urban areas (33 percent vs. 23 percent). Across the four regions, the prevalence is highest in the Shiselweni region at 38 percent. Children whose mothers have secondary or higher education are the least likely to be underweight, wasted and stunted compared with children of mothers with lower or no education. The same applies to household wealth: children from richer households are less likely to be underweight, wasted and stunted compared with those from poorer households.

The age pattern shows that underweight was most prevalent among children age 6–11 months (nine percent) compared with other age groups, which range from four to six percent. Stunting is highest in the 24–35 months age group, at 39 percent, and lowest in the 0–5 months age group at 19 percent. This pattern is expected and is related to the age when children ceased to be breastfed. In contrast, wasting is more likely in the 0–11 month age group, a group that is expected to be well taken care of nutritionally.

The results also show that 11 percent of under-five children are overweight. Urban children are slightly more likely to be overweight than rural children (15 percent vs. 10 percent). There is no significant difference between regions. Similarly, there is no significant difference between boys and girls.

Children whose mothers reached higher levels of education are more likely to be overweight than those whose education levels are low or did not attend school at all. Similarly, children from the richest households are more likely to be overweight than children from the poorest households (18 percent vs. eight percent).

Table NU.1: Nutritional status of children

Percentage of children under age five by nutritional status according to three anthropometric indices: weight-for-age, height-for-age, and weight-for-height, Swaziland, 2010

	Weight-for-age				Height-for-age				Weight-for-height				
	Underweight			Number of children under age five	Stunted			Number of children under age five	Wasted		Overweight	Mean Z-Score (SD)	Number of children under age five
	percent below		Mean Z-Score (SD)		percent below		Mean Z-Score (SD)		percent below		percent above		
	-2 SD [1]	-3 SD [2]			-2 SD [3]	-3 SD [4]			-2 SD [5]	-3 SD [6]	+2 SD		
Sex													
Male	6.7	1.2	-.03	1,226	34.0	11.7	-1.5	1222	0.5	0.1	10.1	0.7	1,222
Female	5.0	0.8	-.03	1,346	28.1	8.4	-1.4	1340	1.0	0.6	11.2	0.7	1,338
Area													
Urban	4.2	0.6	.00	506	23.1	5.9	-1.1	508	1.2	0.6	14.6	0.8	506
Rural	6.2	1.1	-.04	2,066	32.9	11.0	-1.5	2054	0.6	0.3	9.7	0.7	2,054
Region													
Hhohho	6.4	1.3	-.03	641	28.2	11.5	-1.4	636	0.9	0.7	12.1	0.8	636
Manzini	5.0	0.8	-.02	761	28.1	7.8	-1.2	765	1.1	0.4	11.4	0.7	763
Shiselweni	6.8	1.2	-.04	653	37.7	12.7	-1.7	647	0.3	0.0	10.5	0.8	648
Lubombo	5.2	0.7	-.04	516	30.1	8.1	-1.4	514	0.7	0.2	8.2	0.6	514
Age													
0–5 months	4.4	1.7	.00	266	19.0	6.1	-1.1	264	2.7	1.9	25.4	1.2	260
6–11 months	9.1	1.5	-.01	244	22.1	7.2	-1.1	243	1.7	0.0	14.1	0.7	244
12–23 months	5.5	1.7	-.03	513	33.8	10.4	-1.5	509	1.1	0.6	9.2	0.6	511
24–35 months	5.9	0.7	-.03	525	38.8	15.4	-1.6	523	0.0	0.0	9.8	0.8	526
36–47 months	5.5	0.4	-.04	511	33.8	9.6	-1.5	511	0.0	0.0	9.5	0.7	510
48–59 months	5.7	0.5	-.05	512	27.6	7.9	-1.3	513	0.6	0.3	5.3	0.5	510
Mother's education													
None	7.7	1.0	-0.6	295	39.9	16.0	-1.7	294	0.2	0.2	5.8	0.6	298
Primary	8.0	1.6	-0.5	870	38.2	13.0	-1.6	867	1.3	0.6	9.2	0.6	868
Secondary	4.3	0.7	-0.2	737	28.1	7.6	-1.4	734	0.6	0.3	11.1	0.8	732
High	4.7	0.7	-0.2	504	25.1	7.5	-1.3	501	0.8	0.3	11.9	0.7	500
Tertiary	1.3	0.0	0.6	163	7.0	1.9	-0.3	162	0.0	0.0	22.5	1.1	161
Missing/DK	*	*	*	3	*	*	*	3	*	*	*	*	3
Wealth index quintiles													
Poorest	8.4	1.4	-0.6	631	41.9	14.4	-1.8	627	0.5	0.0	7.5	0.6	628
Second	5.1	1.4	-0.4	539	32.3	11.6	-1.6	536	0.5	0.4	10.9	0.8	538
Middle	6.1	0.4	-0.4	533	33.4	10.6	-1.5	534	1.1	0.6	9.1	0.6	531
Fourth	4.9	0.8	-0.2	473	26.3	7.4	-1.3	470	0.7	0.2	10.4	0.7	468
Richest	3.6	0.6	0.2	397	14.0	3.1	-0.7	395	1.2	0.8	18.1	0.9	395
Total	**5.8**	**1.0**	**-0.3**	**2,572**	**30.9**	**10.0**	**-1.4**	**2562**	**0.8**	**0.4**	**10.7**	**0.7**	**2,560**

[1] MICS indicator 2.1a and MDG indicator 1.8
[2] MICS indicator 2.1b
[3] MICS indicator 2.2a, [4] MICS indicator 2.2b
[5] MICS indicator 2.3a, [6] MICS indicator 2.3b

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases

Figure NU.1: Percentage of children under age five who are underweight, stunted and wasted, Swaziland, 2010

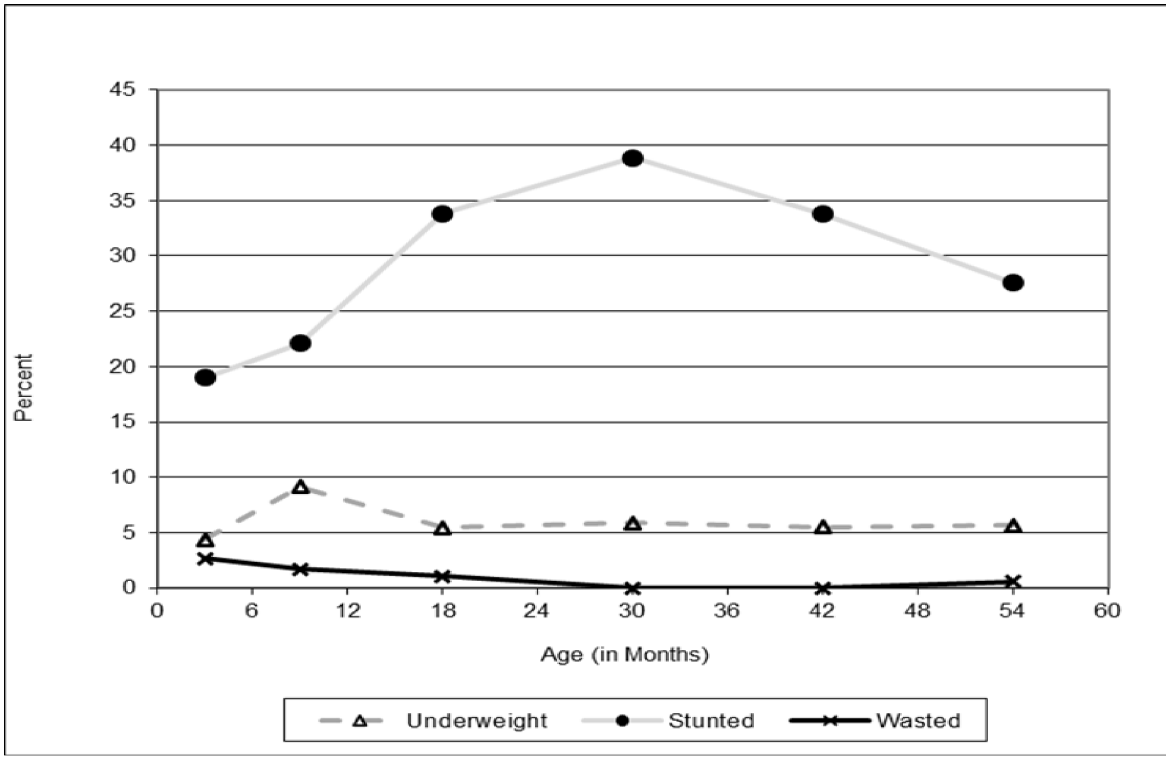


Figure NU.1 shows the pattern of under-nutrition as the child grows. Stunting starts off low and peaks in the 24–35 months age group, while underweight is almost static except for a peak in the 6–11 months age group. Due to survivor bias wasting levels go down with age.

Infant and young child feeding

Breastfeeding for the first few years of life protects children from infection, provides an ideal source of nutrients, and is economical and safe. However, many mothers stop breastfeeding too soon and there are often pressures to switch to infant formula, which can contribute to growth faltering and micronutrient malnutrition. Formula is also unsafe if clean water is not readily available. In Swaziland there are also high maternal HIV infections and this often leads to mothers not wanting to breastfeed or stopping breastfeeding earlier than recommended.

WHO/UNICEF have the following feeding recommendations:

- Early initiation of breastfeeding within the first hour of birth.
- Exclusive breastfeeding for first six months.
- Continued breastfeeding for two years or more.
- Safe, appropriate and adequate complementary foods beginning at six months.
- Frequency of complementary feeding: two times per day for 6–8 month olds; three times per day for 9–11 month olds.

It is also recommended that breastfeeding be initiated within one hour of birth.

While the above recommendations do apply to the general population, the new infant feeding guidelines in maternal HIV recommend that breastfeeding may be stopped at 12 months of age to reduce the transmission of HIV from the mother to the child. According to the 2010 ANC sentinel surveillance, this means that 42 percent of all mothers may stop breastfeeding at 12 months.

The indicators for recommended child feeding practices are as follows:

- Early initiation of breastfeeding within the first hour of birth.
- Exclusive breastfeeding rate (< 6 months).
- Timely complementary feeding rate (6–9 months).
- Continued breastfeeding rate (12–15 and 20–23 months).
- Frequency of complementary feeding (6–11 months).
- Adequately fed infants (0–11 months).
- Minimum meal frequency (6–23 months).
- Milk feeding frequency for non-breastfeeding children (6–23 months).
- Bottle-feeding (0–23 months).

Table NU.2 provides the proportion of women who started breastfeeding their infants within one hour of birth, and women who started breastfeeding within one day of birth (which includes those who started within one hour). Nationally 54 percent of children were breastfed within the first hour of birth and 82 percent were breastfed within the first day of birth. Figure NU.2 shows that across the four regions, children in the Manzini region were least likely to be breastfed within the first hour of birth but most likely to be breastfed within the first day of birth. Both rural and children were more or less equally likely to have been breastfed within the first hour or within the first day of birth. About nine in every 10 children (91 percent) have ever been breastfed. There are no significant differences among groups of different backgrounds.

Table NU.2 further shows differences by place of delivery, mother's education and household wealth. The results show that mothers who delivered in public sector health facilities were more likely to initiate breastfeeding within the first hour than those who delivered in private sector health facilities or at home, while those who delivered in public and private sector health facilities were more likely than those who delivered at home to have breastfed within one day of birth. There is no clear linear relationship between patterns of breastfeeding and mothers' education or household wealth.

Table NU.2: Initial breastfeeding

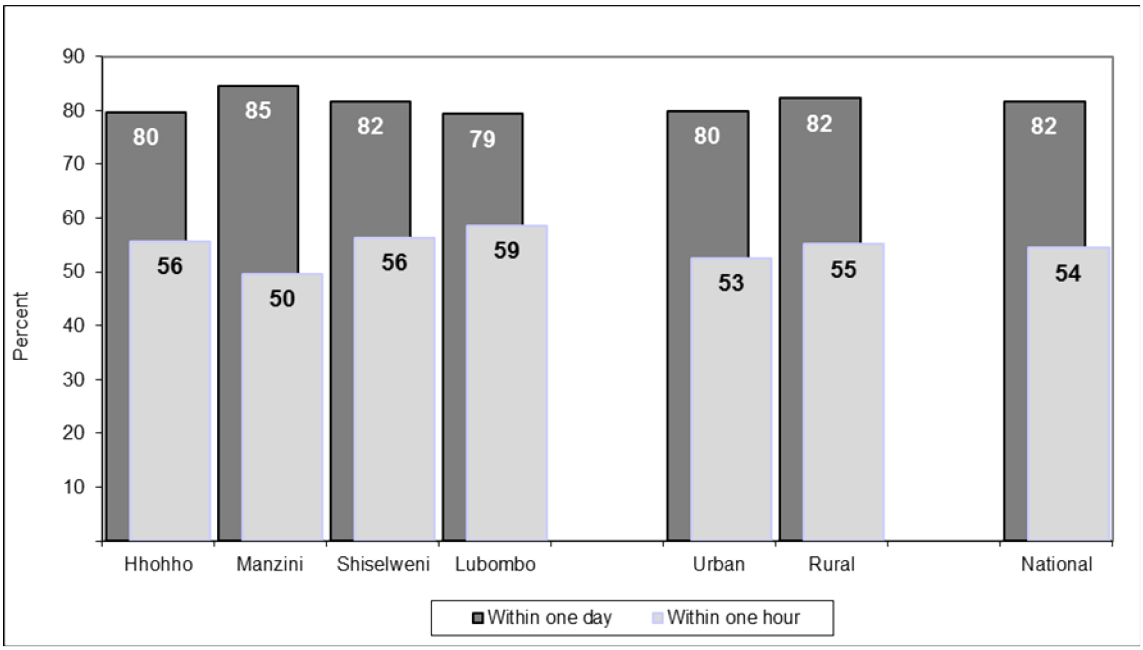
Percentage of last-born children in the two years preceding the survey who were ever breastfed, percentage who were breastfed within one hour of birth and within 1 day of birth, and percentage who received a prelacteal feed, Swaziland, 2010

	Percentage ever breastfed [1]	Percentage who were first breastfed: within one hour of birth [2]	Percentage who were first breastfed: within one day of birth	Percentage who received a prelacteal feed	Number of last-born children in the two years preceding the survey
Region					
Hhohho	89.2	55.7	79.7	17.7	253
Manzini	92.1	49.6	84.6	16.3	329
Shiselweni	90.8	56.3	81.7	17.2	253
Lubombo	91.3	58.7	79.3	12.9	195
Area					
Urban	87.8	52.6	79.9	13.5	255
Rural	92.0	55.1	82.3	17.1	776
Months since last birth					
0–11 months	92.7	52.0	81.6	18.4	531
12–23 months	91.6	57.9	83.9	14.2	471
Assistance at delivery					
Skilled attendant	93.2	56.6	84.6	16.0	845
Traditional birth attendant	*	*	*	*	4
Other	89.4	50.9	76.9	17.6	160
Missing	(10.6)	(4.6)	(10.6)	(0.0)	22
Place of delivery					
Public sector health facility	93.1	56.9	84.7	15.8	785
Private sector health facility	96.3	50.2	85.9	24.3	44
Home	91.8	50.7	77.6	20.1	151
Other	80.9	51.7	69.6	6.2	30
Missing	(4.9)	(4.9)	(4.9)	(0.0)	21
Mother's education					
None	91.3	54.4	79.2	11.4	57
Primary	93.4	62.4	85.8	13.8	291
Secondary	89.8	50.4	80.8	18.6	363
High	89.7	51.3	78.9	14.8	257
Tertiary	90.6	54.2	81.1	23.9	63
Wealth index quintiles					
Poorest	93.8	60.0	83.1	14.5	210
Second	90.5	49.4	77.8	20.4	204
Middle	91.4	53.7	81.7	14.4	222
Fourth	91.2	58.1	85.8	13.3	211
Richest	87.3	50.5	79.6	19.0	183
Total	**90.9**	**54.5**	**81.7**	**16.2**	**1,031**

[1] MICS indicator 2.4
[2] MICS indicator 2.5

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases. Figures in parentheses are based on 25–49 unweighted cases.

Figure NU.2 Percentage of mothers who started breastfeeding within one hour and within one day of birth, Swaziland, 2010



About 16 percent of last-born children in the two years preceding the survey received prelacteal feeds. Children in the Lubombo region were least likely to receive prelacteal feeds (13 percent) compared with other regions (16–18 percent). Rural children were also slightly more likely than urban children to receive prelacteal feeds (17 percent vs. 14 percent). The percentage of children who received a prelacteal feed was highest among those who were delivered in private sector health facilities (24 percent), followed by home (20 percent) and public sector health facilities (16 percent). Children with mothers with tertiary education were most likely to receive a prelacteal feed (24 percent) compared with other children. While prelacteal feeding in relation to household wealth follows no particular pattern, the proportions of children who received prelacteal feeds were somewhat higher among households in the highest and second lowest wealth quintiles.

In Table NU.3, breastfeeding status is based on the reports of mothers/caretakers of children's consumption of food and fluids in the 24 hours prior to the interview. *Exclusively breastfed* refers to infants who received only breast milk (and vitamins, mineral supplements, or medicine). The table shows exclusive breastfeeding of infants during the first six months of life, as well as continued breastfeeding of children at 12–15 and 20–23 months of age. Exclusive breastfeeding is recommended for the first six months for all mothers regardless of their HIV status. Nationally 44 percent of children less than six months of age are exclusively breastfed while 60 percent are predominantly breastfed. By age 12–15 months, 60 percent of children are still being breastfed, but by age 20–23 months, only 11 percent are still breastfed. Girls are slightly more likely to be continued on breastmilk than boys at age 20–23 months (15 percent versus seven percent).

Both exclusive breastfeeding and predominant breastfeeding are higher in the Lubombo and Hhohho regions compared with the Manzini and Shiselweni regions. Children from rural areas are more likely to be exclusively breastfed compared with those from urban areas (47 percent vs. 36 percent). Mother's education is linearly related to exclusive breastfeeding or dominant breastfeeding. The percentages of children who are exclusively breastfed or dominantly breastfed are highest among those with mothers who attended primary school only and lowest among those with mothers with tertiary education. A similar trend can also be observed within household wealth where the poorest mothers practice exclusive breastfeeding more (61 percent) than other groups with the richest group least likely to exclusively breastfeed (32 percent). The richer the household gets, the less likely the mother is to exclusively or predominantly breastfeed. However, children of the higher wealth quintiles are slightly more likely to be continued on breastmilk into the second year of life than other groups.

Figure NU.3 shows the detailed pattern of breastfeeding by age in months. Even during the early age before six months, many children are receiving liquids or foods other than breast milk. Exclusive breastfeeding is at its peak just over 60 percent by the first month and drops drastically at age 2–3 months. By the end of the fourth month less than 40 percent of children are still being exclusively breastfed. By the age of 22–23 months, only about 10 percent of children are receiving breast milk.

Figure NU.3: Percentage distribution of children age 0–23 months by feeding pattern, Swaziland, 2010

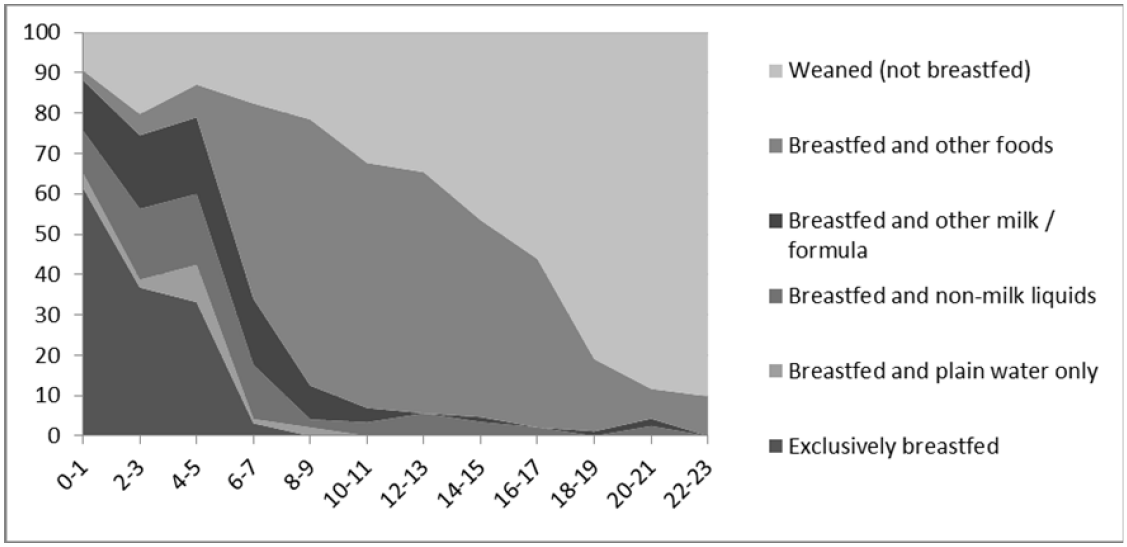


Table NU.3: Breastfeeding

Percentage of living children according to breastfeeding status at selected age groups, Swaziland, 2010

	Children 0–5 months			Children 12–15 months		Children 20–23 months	
	Percent exclusively breastfed [1]	Percent predominantly breastfed [2]	Number of children	Percent breastfed (continued breastfeeding at one year) [3]	Number of children	Percent breastfed (continued breastfeeding at two years) [4]	Number of children
Sex							
Male	44.4	59.0	121	60.0	86	7.2	103
Female	43.9	59.5	153	59.9	78	14.6	94
Region							
Hhohho	47.3	67.2	75	(53.7)	37	(16.2)	48
Manzini	42.5	51.6	97	(61.0)	40	5.5	61
Shiselweni	38.2	57.0	58	60.5	50	9.2	45
Lubombo	50.0	65.5	43	(64.3)	37	13.5	43
Area							
Urban	35.5	46.4	73	(63.0)	28	(14.2)	35
Rural	47.3	63.9	200	59.3	136	10.0	162
Mother's education							
None	*	*	12	*	13	*	21
Primary	57.0	70.9	74	58.2	46	10.9	74
Secondary	41.3	55.8	102	67.3	58	(10.5)	49
High	41.7	58.0	64	(56.2)	37	(3.6)	39
Tertiary	*	*	21	*	10	*	14
Wealth index quintiles							
Poorest	(60.9)	(70.7)	45	(68.4)	40	(7.9)	52
Second	43.2	67.2	60	(62.7)	35	(4.2)	41
Middle	49.4	62.1	55	(60.9)	36	(14.5)	30
Fourth	38.4	57.1	60	(52.2)	29	(16.1)	38
Richest	31.6	39.8	53	(50.1)	24	(13.4)	35
Total	**44.1**	**59.2**	**273**	**(60.0)**	**164**	**10.7**	**197**

[1] MICS indicator 2.6
[2] MICS indicator 2.9
[3] MICS indicator 2.7
[4] MICS indicator 2.8

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases. Figures in parentheses are based on 25–49 unweighted cases.

Table NU.4 shows the median duration of breastfeeding by selected background characteristics. Among children under age three, the median duration of breastfeeding is 14 months. There are no significant differences among mothers of different backgrounds. The median duration of exclusive breastfeeding is three months and predominant breastfeeding is four months. This shows that liquids and other foods are introduced too early before the age of six months.

The adequacy of infant feeding in children under 24 months is provided in Table NU.5. Different criteria of adequate feeding are used depending on the age of the child. For infants age 0–5 months, exclusive breastfeeding is considered as adequate feeding, while infants age 6–23 months are considered to be adequately fed if they are receiving breastmilk and solid, semi-solid or soft food (breastfeeding is recommended to be continued up to 24 months of age or beyond). The results show that most children are not fed in the appropriate way. Only 44 percent of children 0–5 months are exclusively breastfed. From six months of age, complementary feeding is to be introduced while breastfeeding continues. However, only 39 percent of children of children 6–23 months were receiving complementary foods and breastmilk at the same time. Overall, only about 40 percent of children of children 0–23 months are appropriately breastfed.

Adequate complementary feeding of children from six months to two years of age is particularly important for growth and development and the prevention of under nutrition.[9] Continued breastfeeding beyond six months should be accompanied by consumption of nutritionally adequate, safe and appropriate complementary food that help meet nutritional requirements when breastmilk is no longer sufficient. This means that for breastfed children, two or more meals of solid, semi-solid or soft foods are needed if they are six to eight months old, and three or more meals if they are 9–23 months of age. For children 6–23 months and older who are not breastfed, four or more meals of solid, semi-solid or soft foods or milk feeds are needed. Table NU.6 below shows the percentages of children receiving complementary foods from six to eight months.

Approximately two-thirds (67 percent) of currently breastfeeding infants age 6–8 months received solid, semi-solid of soft foods the day preceding the survey. Females were more likely to receive complementary foods compared with males (76 percent vs. 53 percent). Due to small numbers of unweighted cases, no inferences can be made on patterns of complementary feeding for infants who are not currently breastfeeding.

[9] The Swaziland Infant and Young Feeding Guidelines also recommend introduction of complementary feeding at six completed months

Table NU.4: Duration of breastfeeding

Median duration of any breastfeeding, exclusive breastfeeding, and predominant breastfeeding among children age 0–35 months, Swaziland, 2010

	Median duration (in months) of			Number of children age 0–35 months
	Any breastfeeding [1]	Exclusive breastfeeding	Predominant breastfeeding	
Sex				
Male	15.0	2.1	3.2	749
Female	15.2	1.6	3.4	830
Region				
Mbabane	14.5	2.2	3.7	399
Manzini	15.0	1.7	2.7	485
Shiselweni	15.0	0.7	3.1	395
Lubombo	16.1	2.5	3.7	300
Area				
Urban	14.8	1.4	2.2	336
Rural	15.2	2.2	3.7	1,243
Mother's education				
None	13.3	1.7	3.4	146
Primary	15.2	2.9	3.8	514
Secondary	16.0	1.7	3.2	487
High	14.5	0.9	3.2	337
Tertiary	11.4	0.4	0.6	95
Wealth index quintile				
Poorest	16.8	3.1	3.8	342
Second	15.5	1.7	4.1	341
Middle	14.3	2.5	3.6	335
Fourth	13.2	1.1	3.1	304
Richest	12.2	0.7	1.0	256
Median	15.1	1.9	3.3	1,579
Mean for all children (0–35 months)	**13.8**	**2.6**	**3.6**	**1,579**

[1] MICS indicator 2.10

Table NU.5: Age-appropriate breastfeeding

Percentage of children age 0–23 months who were appropriately breastfed during the previous day, Swaziland, 2010

	Children age 0–5 months		Children age 6–23 months		Children age 0–23 months	
	Percent exclusively breastfed [1]	Number of children	Percent currently breastfeeding and receiving solid, semi-solid or soft foods	Number of children	Percent appropriately breastfed [2]	Number of children
Sex						
Male	44.4	121	36.0	390	38.0	511
Female	43.9	153	42.0	382	42.5	534
Region						
Hhohho	47.3	75	36.4	184	39.6	260
Manzini	42.5	97	36.9	231	38.6	328
Shiselweni	38.2	58	44.5	206	43.1	264
Lubombo	50.0	43	37.8	151	40.5	193
Area						
Urban	35.5	73	34.6	152	34.9	225
Rural	47.3	200	40.1	620	41.8	820
Mother's education						
None	*	12	29.8	75	31.3	88
Primary	57.0	74	39.0	246	43.1	320
Secondary	41.3	102	46.8	227	45.1	328
High	41.7	64	34.4	183	36.3	247
Tertiary	*	21	(33.4)	41	29.4	62
Wealth index quintiles						
Poorest	(60.9)	45	46.1	181	49.1	226
Second	43.2	60	38.4	151	39.8	211
Middle	49.4	55	40.2	170	42.4	226
Fourth	38.4	60	36.8	152	37.2	212
Richest	31.6	53	29.9	118	30.4	170
Total	**44.1**	**273**	**39.0**	**772**	**40.3**	**1,045**

[1] MICS indicator 2.6
[2] MICS indicator 2.14

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases. Figures in parentheses are based on 25-49 unweighted cases.

Table NU.6: Introduction of solid, semi-solid or soft food

Percentage of infants age 6–8 months who received solid, semi-solid or soft foods during the previous day, Swaziland, 2010

	Currently breastfeeding		Currently not breastfeeding		All	
	Percent receiving solid, semi-solid or soft foods	Number of children age 6–8 months	Percent receiving solid, semi-solid or soft foods	Number of children age 6–8 months	Percent receiving solid, semi-solid or soft foods [1]	Number of children age 6–8 months
Sex						
Male	(52.7)	39	*	11	54.8	52
Female	75.7	61	*	9	74.8	70
Area						
Urban	*	21	*	5	(56.7)	28
Rural	69.3	78	*	14	69.2	94
Total	**66.7**	**100**	*	**19**	**66.3**	**122**

[1] MICS indicator 2.12

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases. Figures in parentheses are based on 25-49 unweighted cases.

To meet the nutritional needs of growing children, it is recommended that the meal frequency increases with age. Table NU.7 presents the proportion of children age 6–23 months who received semi-solid or soft foods the minimum number of times or more during the previous day according to breastfeeding status (see the note in Table NU.7 for the definitions of minimum number of times for different age groups).

For breastfeeding children, more than half (53 percent) receive solids, semi-solid and soft foods the minimum number of times required per day. This is also referred to as adequate feeding. Females are more likely to be adequately fed than males (59 percent vs. 46 percent). The percentage increases from age 6–8 months (48 percent) to a peak at 9–11 months (57 percent) and goes down again to 50 percent at 18–23 months. Children in the Manzini region are most likely to be adequately fed among all regions (at 61 percent). The percentage of children who are adequately fed is smallest in the Lubombo region (44 percent). Children of non-educated mothers are least likely to be adequately fed compared with other groups. There is no clear linear relationship between minimum meal frequency and household wealth.

Within the currently not breastfeeding group only 39 percent receive at least two milk feeds a day while 55 percent are adequately fed per day. Again, females are more likely to be adequately fed than males (60 percent vs. 55 percent). Only 61 percent of the children in the age group 6–8 months are adequately fed, with the rate peaking up to 79 percent at 9–11 months and eventually going down to 50 percent by 18–23 months. Children from the Manzini region are the most likely to be adequately fed (66 percent) while those from the Lubombo region are the least likely (46 percent). There is a significant difference between urban and rural children (74 percent vs. 53 percent). The percentage of children who are adequately fed increases positively with the mother's education: 82 percent of children whose mothers have attended tertiary education are adequately fed while 42 percent of children with non-educated mothers are adequately fed. The same trend is also noted for household wealth, where the richer the household, the more likely a child gets the minimum number of feeds.

Table NU.7: Minimum meal frequency

Percentage of children age 6–23 months who received solid, semi-solid, or soft foods (and milk feeds for non-breastfeeding children) the minimum number of times or more during the previous day, according to breastfeeding status, Swaziland, 2010

	Currently breastfeeding		Currently not breastfeeding			All	
	Percent receiving solid, semi-solid and soft foods the minimum number of times	Number of children age 6–23 months	Percent receiving at least two milk feeds [1]	Percent receiving solid, semi-solid and soft foods or milk feeds four times or more	Number of children age 6–23 months	Percent with minimum meal frequency [2]	Number of children age 6–23 months
Sex							
Male	46.3	168	37.7	55.2	222	51.3	390
Female	59.1	193	40.4	59.9	189	59.5	382
Age							
6–8 months	48.3	100	83.9	(61.3)	23	50.7	122
9–11 months	57.3	91	76.0	(79.2)	37	63.6	128
12–17 months	54.9	133	42.3	64.7	110	59.3	243
18–23 months	(50.0)	37	27.5	50.3	242	50.2	278
Region							
Hhohho	56.2	81	30.8	53.5	103	54.7	184
Manzini	60.5	104	45.5	65.7	127	63.4	231
Shiselweni	49.7	103	39.1	60.0	102	54.9	206
Lubombo	44.0	72	38.8	45.5	79	44.8	151
Area							
Urban	55.2	66	65.5	74.0	86	65.9	152
Rural	52.7	295	31.9	52.9	325	52.8	620
Mother's education							
None	(39.9)	29	31.3	(41.5)	47	40.9	75
Primary	53.9	112	23.6	46.8	134	50.0	246
Secondary	55.2	130	46.3	65.1	97	59.4	227
High	55.4	72	48.2	64.9	111	61.2	183
Tertiary	*	18	68.1	(81.5)	23	(66.1)	41
Wealth index quintiles							
Poorest	57.1	97	20.5	39.1	84	48.7	181
Second	48.1	68	25.3	50.5	83	49.4	151
Middle	51.7	83	40.4	54.9	87	53.3	170
Fourth	54.9	65	47.7	70.2	87	63.6	152
Richest	52.5	47	64.3	74.3	71	65.6	118
Total	**53.1**	**360**	**39.0**	**57.4**	**411**	**55.4**	**772**

[1] MICS indicator 2.15
[2] MICS indicator 2.13

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases. Figures in parentheses are based on 25-49 unweighted cases. Minimum number of meal frequency: solid, semi-solid, or soft foods, two times for infants age 6–8 months, 3 times for children 9–23 months; non-breastfeeding children: solid, semi-solid, or soft foods, or milk feeds, four times for children age 6–23 months.

Table NU.8: Bottle-feeding

Percentage of children age 0–23 months who were fed with a bottle with a nipple during the previous day, Swaziland, 2010

	Percentage of children age 0–23 months fed with a bottle with a nipple [1]	Number of children age 0–23 months:
Sex		
Male	28.8	511
Female	30.8	534
Age		
0–5 months	31.7	273
6–11 months	44.3	251
12–23 months	21.9	521
Region		
Hhohho	32.7	260
Manzini	29.6	328
Shiselweni	30.6	264
Lubombo	25.4	193
Area		
Urban	41.2	225
Rural	26.7	820
Mother's education		
None	23.3	88
Primary	21.7	320
Secondary	31.6	328
High	34.2	247
Tertiary	54.1	62
Wealth index quintiles		
Poorest	16.3	226
Second	29.1	211
Middle	28.2	226
Fourth	32.7	212
Richest	47.3	170
Total	**29.8**	**1,045**

[1] MICS indicator 2.11

Bottle-feeding is discouraged because of the possible contamination from unsafe water and lack of hygiene in preparation. However, a significant number of children still get their feeds from a bottle. Table NU.8 shows that bottle-feeding is prevalent in Swaziland. Thirty percent of children age 0-23 months are fed from a bottle. There is no difference between males and females. The 6-11 months age group are the highest at 44 percent while the least is the 12-23 months age group at 22 percent. There is no significant difference among the regions although urban children are more likely to be fed from bottles compared to their rural counterparts (41 percent vs. 27 percent). Children whose mothers attended tertiary education are most likely to be fed from bottles compared with the other levels of education. The same trend can be noted within the wealth index quintiles where the richer the household gets, the more likely the mothers are to have their children fed from a bottle (47 percent within the richest group down to 16 percent within the poorest group).

Salt iodization

Iodine Deficiency Disorders (IDD) is the world's leading cause of preventable mental retardation and impaired psychomotor development in young children. In its most extreme form, iodine deficiency causes cretinism. It also increases the risks of stillbirth and miscarriage in pregnant women. Iodine deficiency is most commonly and visibly associated with goitre. IDD takes its greatest toll in impaired mental growth and development, contributing in turn to poor school performance, reduced intellectual ability, and compromised work performance. The international goal is to achieve sustainable elimination of iodine deficiency by 2005. The indicator is the percentage of households consuming adequately iodized salt ($\geq$15 parts per million).

In about 92 percent of households, salt used for cooking was tested for iodine content by using salt test kits. Table NU.9 shows that in a small proportion of households (six percent), there was no salt available. In 52 percent of households, salt was found to contain 15 parts per million (ppm) or more of iodine (adequately iodized). Use of adequately iodized salt was lowest in the Lubombo region (41 percent) and highest in the Hhohho region (61 percent). About 57 percent of urban households were found to be using adequately iodized salt compared with 49 percent in rural areas. Figure NU.9 shows the trend in regions and areas.

Use of adequately iodized salt is positively correlated with the level of education of the household head. It ranges between 44 percent among the least educated group and 63 percent among the most educated group. This trend is also observed for household wealth, where use of adequately iodized salt increases from 40 percent among the poorest households to 63 percent among the richest households.

Figure NU.4 Percentage of households consuming adequately iodized salt, Swaziland, 2010

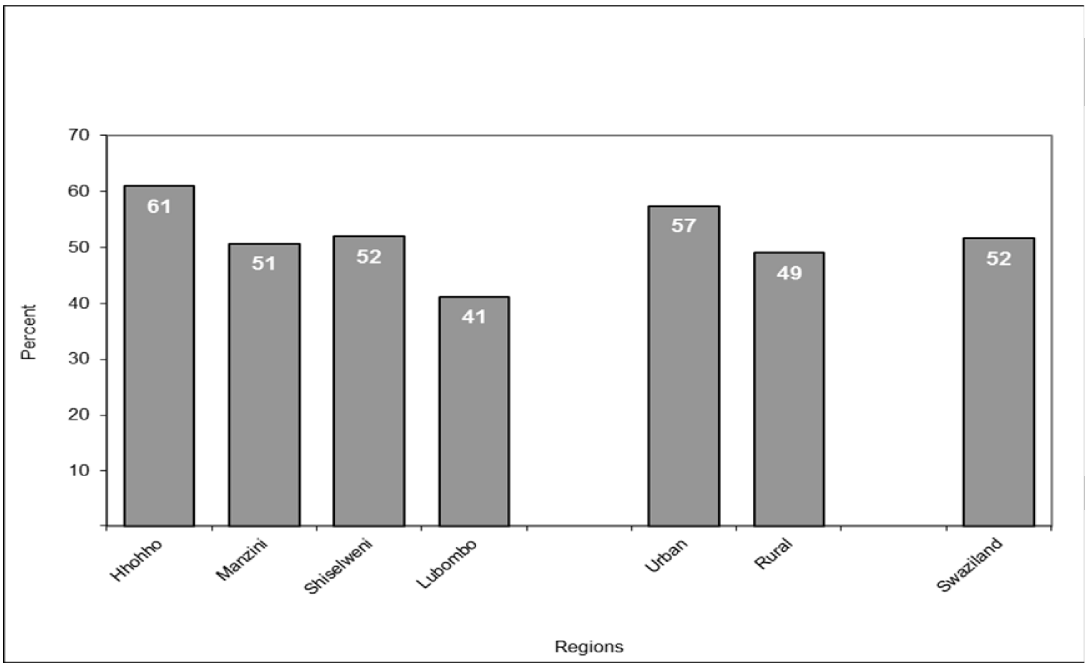


Table NU.9: Iodized salt consumption

Percent distribution of households by consumption of iodized salt, Swaziland, 2010

	Percentage of households in which salt was tested	Number of house-holds	Percent of households with salt test result				Total	Number of households in which salt was tested or with no salt
			No salt	Not iodized (0 PPM)	>0 and <15 PPM	Adequately iodized (15+ PPM) [1]		
Region								
Hhohho	89.5	1,261	6.4	5.6	27.1	60.9	100.0	1,205
Manzini	93.5	1,624	4.9	10.0	34.5	50.6	100.0	1,597
Shiselweni	92.7	969	5.3	10.2	32.5	52.0	100.0	949
Lubombo	92.3	979	6.7	9.9	42.3	41.1	100.0	968
Area								
Urban	92.1	1,680	5.5	7.4	29.7	57.4	100.0	1,636
Rural	92.0	3,154	5.9	9.7	35.9	48.5	100.0	3,084
Education of household head								
None	88.8	950	9.5	10.6	35.6	44.3	100.0	932
Primary	92.7	1,439	5.5	9.0	36.6	48.9	100.0	1,411
Secondary	92.0	1,005	5.6	8.7	33.0	52.6	100.0	980
High	93.6	842	4.3	7.3	33.0	55.4	100.0	823
Tertiary	93.7	589	2.3	8.6	26.3	62.7	100.0	565
Missing/DK	*	10	*	*	*	*	*	10
Wealth index quintiles								
Poorest	86.8	825	11.8	11.5	36.9	39.9	100.0	811
Second	91.6	785	6.7	8.9	35.8	48.7	100.0	770
Middle	91.7	923	5.9	8.4	35.3	50.4	100.0	900
Fourth	93.7	1,025	4.0	10.2	36.0	49.8	100.0	1,000
Richest	94.6	1,276	2.6	6.5	27.6	63.3	100.0	1,239
Total	**92.0**	**4,834**	**5.7**	**8.9**	**33.8**	**51.6**	**100.0**	**4,720**

[1] MICS indicator 2.16

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases.

Vitamin A supplements

Vitamin A is essential for eye health and proper functioning of the immune system. It is found in foods such as milk, liver, eggs, red and orange fruits, and green leafy vegetables, although the amount of vitamin A readily available to the body from these sources varies widely. In developing areas of the world, where vitamin A is largely consumed in the form of fruits and vegetables, daily per capita intake is often insufficient to meet dietary requirements. Inadequate intakes are further compromised by increased requirements for the vitamin as children grow or during periods of illness, as well as increased losses during common childhood infections. As a result, vitamin A deficiency is quite prevalent in the developing world, and particularly in countries with the highest burden of under-five deaths.

The 1990 World Summit for Children set the goal of virtual elimination of vitamin A deficiency and its consequences, including blindness, by the year 2000. This goal was also endorsed at the Policy Conference on Ending Hidden Hunger in 1991, the 1992 International Conference on Nutrition, and the UN General Assembly's Special Session on Children in 2002. The critical role of vitamin A for child health and immune

function also makes control of deficiency a primary component of child survival efforts, and therefore critical to the achievement of the fourth MDG: a two-thirds reduction in under-five mortality by the year 2015.

For countries with vitamin A deficiency problems, current international recommendations call for high-dose vitamin A supplementation every four to six months, targeted at all children between the ages of six to 59 months living in affected areas. Providing young children with two high-dose vitamin A capsules a year is a safe, cost-effective and efficient strategy for eliminating vitamin A deficiency and improving child survival. Giving vitamin A to new mothers who are breastfeeding helps protect their children during the first months of life and helps to replenish the mother's stores of the vitamin, which are depleted during pregnancy and lactation. For countries with vitamin A supplementation programmes, the definition of the indicator is the percentage of children 6–59 months of age receiving at least one high-dose vitamin A supplement in the last six months.

Based on UNICEF/WHO guidelines, MoH recommends that children age 6-11 months be given one high dose (100 000µg) vitamin A capsule and children age 12–59 months given a vitamin A capsule (200 000µg) every six months. Vitamin A capsules are linked to immunization services both routine and mass campaigns and are given when the child has contact with these services after six months of age. It is also recommended that mothers take a vitamin A supplement within eight weeks of giving birth.

Table NU.10 shows receipt of vitamin A supplementation nationally and by background characteristics. Within the six months preceding the MICS survey, 68 percent of children age 6–59 months received at least one high-dose vitamin A supplement. Age pattern of vitamin A supplementation shows that the receipt of vitamin A supplementation decreases with the age of the child (85 percent among the youngest age group and 54 percent among the oldest age group). Receipt of vitamin A supplementation was highest in Shiselweni (81 percent), followed by Manzini (72 percent) and Hhohho (60 percent). Lubombo had the lowest coverage of vitamin A supplementation at 55 percent. There were no gender differences in receipt of vitamin A supplementation.

Table NU.10: Children's vitamin A supplementation

Percent distribution of children age 6–59 months by receipt of a high-dose vitamin A supplement in the last six months, Swaziland, 2010

	Percentage who received Vitamin A according to:		Percentage of children who received vitamin A during the last six months [1]	Number of children age 6–59 months
	Child health book/card/vaccination card	Mother's report		
Sex				
Male	32.5	62.1	65.9	1,144
Female	34.2	66.8	69.8	1,230
Region				
Hhohho	30.1	52.1	60.2	579
Manzini	33.0	68.9	71.5	690
Shiselweni	34.2	79.2	81.0	625
Lubombo	36.7	54.3	55.3	480
Area				
Urban	34.6	67.4	69.1	454
Rural	33.0	63.9	67.7	1,920
Age				
6–11 months	67.1	80.3	85.3	251
12–23 months	55.6	76.1	81.0	521
24–35 months	32.4	69.0	73.8	534
36–47 months	18.1	54.2	55.6	533
48–59 months	12.0	51.8	53.6	536
Mother's education				
None	28.3	58.6	61.9	291
Primary	31.1	62.8	65.1	817
Secondary	35.4	67.1	71.8	655
High	40.2	67.1	72.0	458
Tertiary	25.1	67.3	67.3	150
Missing/DK	*	*	*	3
Wealth index quintiles				
Poorest	30.6	62.9	65.9	601
Second	30.2	63.6	66.6	497
Middle	36.4	62.3	66.5	488
Fourth	35.9	67.0	71.5	429
Richest	35.1	69.0	71.1	359
Total	**33.3**	**64.6**	**68.0**	**2,374**

[1] MICS indicator 2.17

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases.

Low birth weight

Weight at birth is a good indicator not only of a mother's health and nutritional status but also the newborn's chances for survival, growth, long-term health and psychosocial development. Low birth weight (less than 2,500 grams) carries a range of grave health risks for children. Babies who were undernourished in the womb face a greatly increased risk of dying during their early months and years. Those who survive have impaired immune function and increased risk of disease; they are likely to remain undernourished, with reduced muscle strength, throughout their lives, and suffer a higher incidence of diabetes and heart disease in later life. Children born underweight also tend to have a lower IQ and cognitive disabilities, affecting their performance in school and their job opportunities as adults.

In the developing world, low birth weight stems primarily from the mother's poor health and nutrition. Three factors have most impact: the mother's poor nutritional status before conception, short stature (due mostly to under nutrition and infections during her childhood), and poor nutrition during the pregnancy. Inadequate weight gain during pregnancy is particularly important since it accounts for a large proportion of foetal growth retardation. Moreover, diseases such as diarrhoea and malaria, which are common in many developing countries, can significantly impair foetal growth if the mother becomes infected while pregnant.

In the industrialized world, cigarette smoking during pregnancy is the leading cause of low birth weight. In developed and developing countries alike, teenagers who give birth when their own bodies have yet to finish growing run the risk of bearing underweight babies.

Table NU.11 and Figure NU.5 show the number of children weighed at birth and those with a low birth weight. In Swaziland, it is relatively easy to weigh the babies soon after delivery because 80 percent of deliveries occur in health facilities (see Table RH.10).

Overall, 91 percent of infants are weighed at birth and nine percent of infants weigh less than 2,500 grams at birth (Table NU.11). There is no significant variation by region as well as urban and rural areas. However there is some slight variation with the mother’s educational level as well as slight differences within the different wealth quintiles. Children whose mothers have reached tertiary education are least likely to be of low birth weight (five percent) than other groups while children whose mothers did not attend school (12 percent) are most likely to be of low birth weight.

Figure NU.5 Percentage of infants weighing less than 2,500 grams at birth, Swaziland, 2010

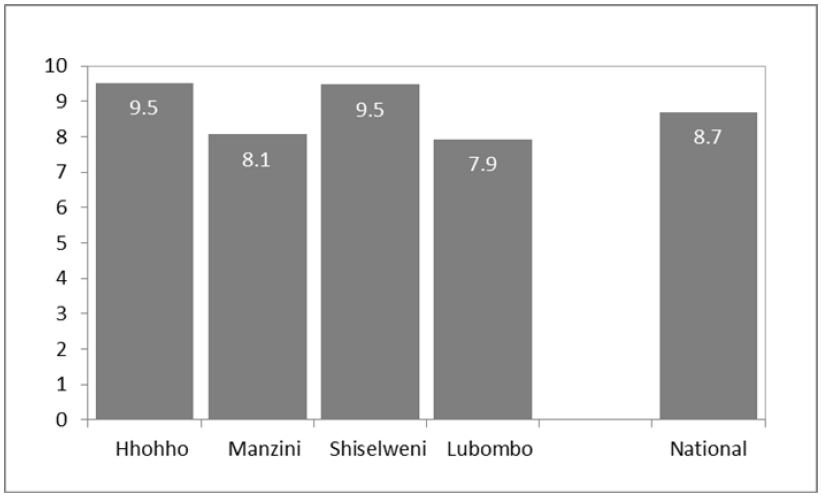


Table NU.11: Low birth weight infants

Percentage of last-born children in the two years preceding the survey that are estimated to have weighed below 2,500 grams at birth and percentage of live births weighed at birth, Swaziland, 2010

	Percent of live births:		Number of live births in the last two years
	Below 2,500 grams [1]	Weighed at birth [2]	
Region			
Hhohho	9.5	90.3	253
Manzini	8.1	93.1	329
Shiselweni	9.5	94.8	253
Lubombo	7.9	85.1	195
Area			
Urban	8.5	92.7	255
Rural	8.8	90.9	776
Education			
None	11.5	82.0	57
Primary	9.3	85.2	291
Secondary	8.9	92.7	363
High	8.1	96.9	257
Tertiary	5.4	97.5	63
Wealth index quintiles			
Poorest	8.0	86.8	210
Second	10.6	87.6	204
Middle	9.1	92.4	222
Fourth	8.9	95.1	211
Richest	6.9	95.1	183
Total	**8.7**	**91.3**	**1,031**

[1] MICS indicator 2.18
[2] MICS indicator 2.19

6. Child Health

Immunization

MDG 4 is to reduce child mortality by two-thirds between 1990 and 2015. Immunization plays a key part in this goal. Immunizations have saved the lives of millions of children in the three decades since the launch of the Expanded Programme on Immunization (EPI) in 1974. Worldwide there are still 27 million children overlooked by routine immunization and as a result, vaccine-preventable diseases cause more than two million deaths every year. A WFFC goal is to ensure full immunization of children less than one year of age at 90 percent nationally, with at least 80 percent coverage in every district or equivalent administrative unit.

The National Expanded Programme on Immunization (EPI) is committed to reducing morbidity, disability and mortality rates. Diseases that are targeted for prevention are tuberculosis, polio, diphtheria, whooping cough, tetanus, hepatitis B, rubella, and mumps and haemophilus influenza type B.

The national immunization calendar in Box 2 shows the vaccine schedule in Swaziland. The calendar recommends that a child should receive BCG and polio vaccines at birth, and by the age of nine months, a child should been vaccinated against all other preventable diseases. Swaziland has recently introduced pentavalent vaccine, which has five vaccines in one, referred to as the DPT/HepB/Hib vaccine. It prevents against diphtheria, pertussis, tetanus, haemophilus influenza type B and Hepatitis B.

Box 2: Swaziland National Immunization Calendar

Age	Vaccine
At birth	BCG and Polio 0
6 weeks	DPT/HepB/Hib1 OPV1
10 weeks	DPT/HepB/Hib2 OPV2
14 weeks	DPT/HepB/Hib3 OPV3
9 months	Measles
18 months	Measles booster
5 years	DT and Polio

In the 2010 Swaziland MICS, mothers/caretakers were asked to provide vaccination cards for children under the age of five. Interviewers copied vaccination information from the cards onto the MICS questionnaire. If the card was not available mothers/caretakers were asked to recall if the child was given the vaccination. Table CH.1 shows that about eight in 10 children age 12–23 months have a vaccination card.

Table CH.1: Vaccinations in the first year of life

Percentage of children age 12–23 months immunized against childhood diseases at any time before the survey and before the first birthday, Swaziland, 2010

	Vaccinated at any time before the survey according to:			Vaccinated by 12 months of age
	Vaccination card	Mother's report	Either	
BCG [1]	87.6	10.6	98.2	97.9
Polio				
At birth	86.5	10.1	96.7	96.3
1	87.0	10.0	97.0	96.3
2	86.2	5.9	92.1	90.1
3 [2]	82.7	2.3	85.0	83.8
DPT				
1	87.8	10.1	97.8	96.4
2	87.0	9.7	96.7	94.6
3 [3, 5]	84.1	6.5	90.6	89.4
HEPB				
1	87.8	10.1	97.8	96.4
2	87.0	9.7	96.7	94.6
3 [3, 5]	84.1	6.5	90.6	89.4
HIB				
1	87.8	10.1	97.8	96.4
2	87.0	9.7	96.7	94.6
3 [3, 5]	84.1	6.5	90.6	89.4
Measles [4]	84.7	13.1	97.8	93.9
Measles (Booster) *	33.5	0.0	33.5	2.1
All vaccinations **	82.1	1.0	83.1	77.3
No vaccinations **	0.0	1.6	1.6	1.6
Number of children age 12–23 months	521	521	521	521

[1] MICS indicator 3.1
[2] MICS indicator 3.2
[3] MICS indicator 3.3
[4] MICS indicator 3.4; MDG indicator 4.3
[5] MICS indicator 3.5

Note: * It is not possible to establish the coverage of measles booster from mothers' report because the vaccine was inadvertently omitted from the questionnaire.
** All and no vaccinations do not include Polio at birth and the Measles Booster .

Figure CH.1 and Table CH.2 show the percentage of children age 12–23 months who received each of the vaccinations based on the immunization card. Overall, 83 percent of children age 12–23 months are fully immunized. The graph indicates that most children receive the recommended vaccinations at birth. Ninety-eight percent and 97 percent received BCG and polio vaccination at birth, respectively. The coverage for measles vaccine by 12 months is 98 percent.

Coverage is high in the Shiselweni and Lubombo regions at 86 percent and 85 percent, respectively, and somewhat lower in the Manzini and Hhohho regions at 82 percent and 80 percent, respectively. Children residing in rural areas are most likely to be vaccinated compared with those residing in urban areas (85 percent vs. 77 percent). There are no differentials with regards to the education and the wealth status of the mother (Table CH.2).

Figure CH.1 Percentage of children aged 12–23 months who received the recommended vaccinations by 12 months, Swaziland, 2010

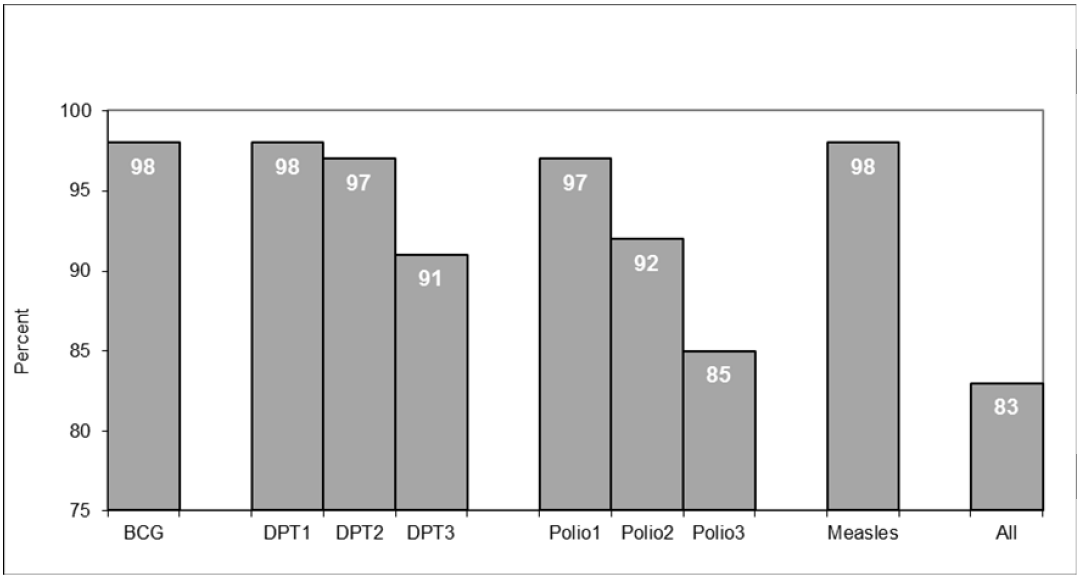


Table CH.2: Vaccinations by background characteristics

Percentage of children age 12–23 months currently vaccinated against childhood diseases, Swaziland, 2010

	Percentage of children who received:																		Percentage with vaccination card seen	Number of children age 12-23 months
	BCG	Polio				DPT			HEPB			HIB			Measles	Measles Booster *	None **	All **		
		At birth	1	2	3	1	2	3	1	2	3	1	2	3						
Sex																				
Male	98.7	97.9	97.1	92.6	84.6	98.3	97.4	90.8	98.3	97.4	90.8	98.3	97.4	90.8	97.9	34.9	1.3	82.8	87.1	281
Female	97.6	95.2	96.9	91.5	85.5	97.2	95.8	90.4	97.2	95.8	90.4	97.2	95.8	90.4	97.7	31.8	2.0	83.5	88.5	240
Region																				
Hhohho	97.2	96.1	95.2	89.7	81.4	97.2	97.2	87.8	97.2	97.2	87.8	97.2	97.2	87.8	97.1	31.0	2.8	80.4	84.9	133
Manzini	99.1	98.3	98.5	90.5	83.0	98.5	95.1	86.6	98.5	95.1	86.6	98.5	95.1	86.6	99.1	32.3	0.9	82.0	89.5	152
Shiselweni	97.2	95.8	97.2	94.4	87.0	96.5	96.5	93.7	96.5	96.5	93.7	96.5	96.5	93.7	95.2	32.7	2.8	85.5	86.3	129
Lubombo	99.2	96.1	96.9	94.6	89.9	99.2	98.4	96.2	99.2	98.4	96.2	99.2	98.4	96.2	100.0	39.3	0.0	85.3	90.7	107
Area																				
Urban	99.4	98.5	97.0	91.6	79.7	98.3	98.3	89.1	98.3	98.3	89.1	98.3	98.3	89.1	98.8	35.8	0.6	76.8	82.0	91
Rural	97.9	96.3	97.0	92.2	86.1	97.7	96.3	90.9	97.7	96.3	90.9	97.7	96.3	90.9	97.6	33.0	1.9	84.5	89.0	431
Mother's education																				
None	98.5	98.5	96.9	92.0	84.6	98.4	96.0	90.2	98.4	96.0	90.2	98.4	96.0	90.2	99.1	26.2	0.0	79.9	87.8	54
Primary	98.2	95.3	97.4	92.4	85.8	97.7	95.7	92.1	97.7	95.7	92.1	97.7	95.7	92.1	98.1	33.1	1.8	84.1	87.8	171
Secondary	96.1	95.5	95.3	88.7	82.1	95.3	94.4	87.2	95.3	94.4	87.2	95.3	94.4	87.2	94.6	29.7	3.9	79.9	85.2	141
High	100.0	99.3	97.6	95.5	89.7	100.0	100.0	94.3	100.0	100.0	94.3	100.0	100.0	94.3	100.0	39.0	0.0	89.1	92.1	124
Tertiary	(100.0)	(95.7)	(100.0)	(92.3	(75.5)	(100.0)	(100.0)	(83.8	(100.0)	(100.0)	(83.8	(100.0)	(100.0)	(83.8)	(100.0)	(43.8)	(0.0)	(74.8)	(81.6)	30
Wealth index quintiles																				
Poorest	99.2	97.8	97.9	93.6	84.3	97.8	96.0	89.7	97.8	96.0	89.7	97.8	96.0	89.7	99.2	33.3	0.8	83.6	88.4	121
Second	98.6	97.1	96.5	92.5	87.0	98.6	97.5	91.7	98.6	97.5	91.7	98.6	97.5	91.7	97.2	36.6	1.4	83.3	89.8	113
Middle	98.4	96.2	97.4	91.5	87.5	99.2	98.0	94.0	99.2	98.0	94.0	99.2	98.0	94.0	98.2	26.1	0.8	83.8	87.7	110
Fourth	94.9	93.6	94.9	92.6	85.8	94.9	94.9	92.1	94.9	94.9	92.1	94.9	94.9	92.1	94.6	30.7	5.1	85.2	87.6	102
Richest	100.0	99.0	98.7	89.3	78.6	98.7	96.9	83.6	98.7	96.9	83.6	98.7	96.9	83.6	100.0	43.7	0.0	78.4	84.0	76
Total	98.2	96.7	97.0	92.1	85.0	97.8	96.7	90.6	97.8	96.7	90.6	97.8	96.7	90.6	97.8	33.5	1.6	83.1	87.8	521

* Based on children with immunization cards only.

**All and no vaccinations do not include Polio at birth and the Measles Booster.

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

Tetanus Toxoid

One of the MDGs is to reduce by three-quarters the maternal mortality ratio, with one strategy to eliminate maternal tetanus. In addition, another goal is to reduce the incidence of neonatal tetanus to less than one case of neonatal tetanus per 1,000 live births in every district. A WFFC goal is to eliminate maternal and neonatal tetanus by 2005.

Preventing maternal and neonatal tetanus means making sure that all pregnant women receive at least two doses of the tetanus toxoid (TT) vaccine. However, if women have not received two doses of the vaccine during the pregnancy, they (and their newborn) are also considered to be protected if the following conditions are met:

- Received at least two doses of tetanus toxoid vaccine, the last within the prior three years;
- Received at least three doses, the last within the prior five years;
- Received at least four doses, the last within 10 years;
- Received at least five doses during lifetime.

Table CH.3 shows the tetanus protection status of women who had had a live birth within the last 12 months preceding the survey by major background characteristics. Almost eight in 10 women age 15–49 years with a live birth in the last two years are protected against tetanus. Residential area and education status of the mother seem to have an influence on how well a mother is protected from tetanus, as indicated in Figure CH.2. Mothers residing in urban areas are more likely to be protected against tetanus compared with those residing in rural areas. The likelihood of protection against tetanus increases with the increase in the educational status of the mother.

Figure CH.2 Percentage of women with a live birth in the last 12 months who are protected against neonatal tetanus, Swaziland, 2010

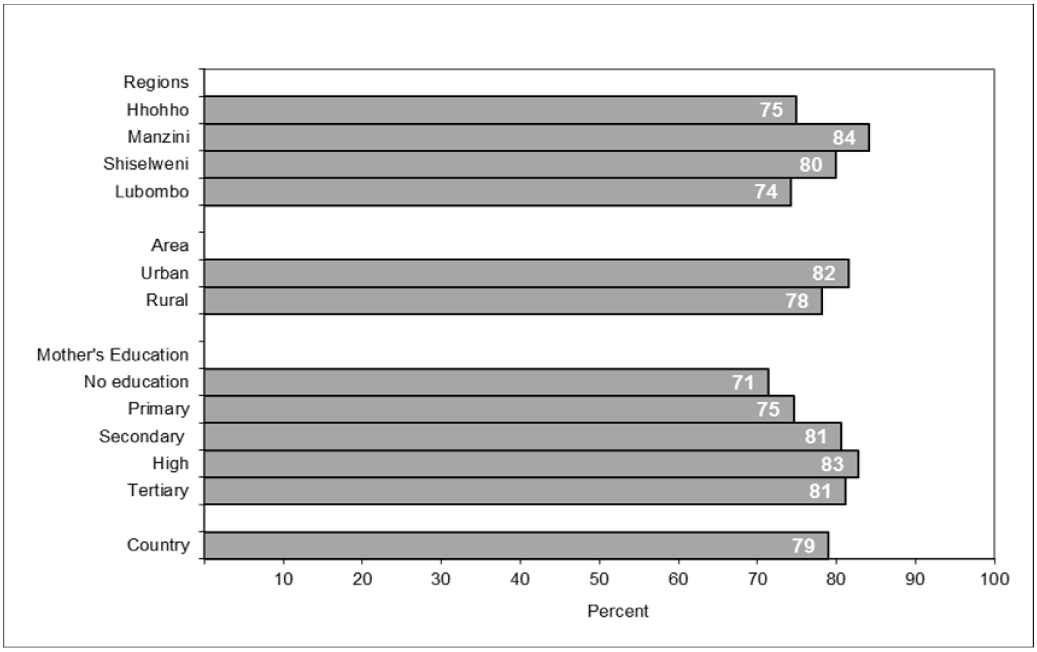


Table CH.3: Neonatal tetanus protection

Percentage of women age 15–49 years with a live birth in the last two years protected against neonatal tetanus, Swaziland, 2010

	Percentage of women who received at least two doses during last pregnancy	Percentage of women who did not receive two or more doses during last pregnancy but received:				Protected against tetanus [1]	Number of women with a live birth in the last two years
		Two doses, the last within prior three years	Three doses, the last within prior five years	Four doses, the last within prior 10 years	Five or more doses during lifetime		
Area							
Urban	71.1	9.7	0.8	0.0	0.0	81.6	255
Rural	70.8	6.8	0.4	0.0	0.2	78.1	776
Region							
Hhohho	67.2	7.1	0.6	0.0	0.0	74.9	253
Manzini	72.8	9.9	1.0	0.0	0.4	84.2	329
Shiselweni	73.9	6.1	0.0	0.0	0.0	80.0	253
Lubombo	68.4	5.8	0.0	0.0	0.0	74.2	195
Education							
None	59.3	12.1	0.0	0.0	0.0	71.4	57
Primary	66.0	8.2	0.4	0.0	0.0	74.6	291
Secondary	73.6	6.5	0.3	0.0	0.4	80.7	363
High	73.7	7.8	1.1	0.0	0.0	82.7	257
Tertiary	76.0	5.2	0.0	0.0	0.0	81.2	63
Wealth index quintiles							
Poorest	67.1	6.7	0.6	0.0	0.6	75.1	210
Second	68.1	5.7	0.0	0.0	0.0	73.8	204
Middle	72.3	8.2	1.6	0.0	0.0	82.2	222
Fourth	73.8	8.9	0.0	0.0	0.0	82.6	211
Richest	73.0	8.1	0.0	0.0	0.0	81.1	183
Total	**70.8**	**7.5**	**0.5**	**0.0**	**0.1**	**79.0**	**1,031**

[1] MICS indicator 3.7

Oral rehydration treatment

Diarrhoea is a leading cause of death among children under five across the world including Swaziland. Most diarrhoea-related deaths in children are due to dehydration from loss of large quantities of water and electrolytes from the body in liquid stools. Management of diarrhoea – either through oral rehydration salts (ORS) or a recommended home fluid – can prevent many of these deaths. Preventing dehydration and malnutrition by increasing fluid intake and continuing to feed the child are also important strategies for managing diarrhoea.

The goals are to: 1) reduce by one-half deaths due to diarrhoea among children under five by 2010 compared with 2000 (WFFC); and 2) reduce by two-thirds the mortality rate among children under five by 2015 compared with 1990 (MDGs). In addition, WFFC calls for a reduction in the incidence of diarrhoea by 25 percent. The indicators are:

- Prevalence of diarrhoea
- Oral rehydration therapy (ORT)
- Home management of diarrhoea
- ORT with continued feeding

In the 2010 Swaziland MICS, mothers (or caretakers) were asked to report whether their child had had diarrhoea in the two weeks prior to the survey. If so, the mother was asked a series of questions about what the child had to drink and eat during the episode and whether this was more or less than the child usually ate and drank. It is worthwhile to note that diarrhoea is mostly prevalent during the rainy season and in Swaziland, this is the period between October and March. The survey data collection was undertaken in the months of August to November. This period is outside the diarrhoea endemic period and this seasonality may have influenced the prevalence of diarrhoea among children under five found during the survey.

Table CH.4 shows that overall, 16 percent of under-five children had diarrhoea in the two weeks preceding the survey. The likelihood of a child to have diarrhoea decreases as the child grows. Diarrhoea is more prevalent among children age 0–11 months and 12–23 months, at 23 percent and 27 percent, respectively.

The table also shows the percentage of children receiving various types of recommended liquids during the episode of diarrhoea. About 74 percent received ORS or a recommended sugar salt solution; however, 57 percent of mothers reported to give ORS fluids from an ORS packet or pre-packed ORS fluids. Mothers residing in the Hhohho region are most likely to give ORS fluids from ORS packets or pre-packed ORS fluids (68 percent) compared with mothers residing in the Manzini region (50 percent). Mothers in the highest quintile are more likely to give their children ORT compared with those in the lowest quintile. Again, children residing in urban areas are more likely to receive recommended fluids during diarrhoea. There is no variation with regards to mother's education.

Mothers reporting to have given their children sugar salt solution as treatment for diarrhoea were asked to indicate how they prepare the solution. Table CH.4A highlights the lack of knowledge of some mothers to prepare the solution. A total of 24 percent of mothers either put eight level caps of salt and one cap of

sugar when preparing the solution or use other incorrect measurements. This practice is common in the Lubombo and Shiselweni regions.

Table CH.4: Oral rehydration solutions and recommended homemade fluids

Percentage of children age 0–59 months with diarrhoea in the last two weeks, and treatment with oral rehydration solutions and recommended homemade fluids, Swaziland, 2010

	Had diarrhoea in last two weeks	Number of children age 0–59 months	Children with diarrhoea who received: ORS (fluid from ORS packet or pre-packaged ORS fluid)	Children with diarrhoea who received: Recommended sugar salt solution	ORS or recommended sugar salt solution	Number of children age 0–59 months with diarrhoea
Sex						
Male	16.1	1,265	55.8	27.9	74.6	204
Female	15.7	1,382	58.1	23.6	74.3	217
Region						
Hhohho	16.2	655	67.9	24.0	81.2	106
Manzini	15.9	787	50.3	28.1	68.8	125
Shiselweni	14.8	683	56.3	29.3	77.0	101
Lubombo	17.0	523	54.1	20.2	71.4	89
Area						
Urban	13.8	527	64.7	19.1	76.7	73
Rural	16.4	2,120	55.4	27.0	74.0	349
Age						
0–11 months	22.8	524	54.3	20.5	68.5	119
12–23 months	26.5	521	61.1	28.5	79.1	138
24–35 months	14.7	534	59.6	23.7	76.0	78
36–47 months	8.8	533	(53.6)	(32.4)	(77.5)	47
48–59 months	7.2	536	(49.2)	(27.5)	(69.3)	39
Mother's education						
None	13.1	303	(59.1)	(20.5)	(67.4)	40
Primary	17.7	891	57.9	25.6	75.8	158
Secondary	16.0	757	54.3	22.8	72.9	121
High	15.8	523	57.3	30.8	74.5	82
Tertiary	11.5	171	*	*	*	20
Missing/DK	*	3	*	*	*	1
Wealth index quintiles						
Poorest	17.4	646	58.0	21.4	71.8	112
Second	16.7	557	55.8	28.3	74.3	93
Middle	17.2	544	60.5	30.6	79.4	94
Fourth	14.7	489	49.8	21.0	68.1	72
Richest	12.2	411	60.3	27.9	80.5	50
Total	**15.9**	**2,647**	**57.0**	**25.7**	**74.4**	**421**

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases. Figures in parentheses are based on 25–49 unweighted cases.

Table CH.4A: Preparation of recommended homemade fluids for treatment of diarrhoea

Percentage of children age 0–59 months with diarrhoea in the last two weeks, and treatment with oral rehydration solutions and preparation of sugar salt solution, Swaziland, 2010

	Had diarrhoea in the last two weeks	Number of children age 0–59 months	Percentage of children with diarrhoea who were given sugar salt solution	Preparation of sugar salt solution:					Number of children age 0–59 months with diarrhoea who were given sugar salt solution
				Eight level caps of sugar and one cap salt (correct method)	Eight level caps of salt and 1 cap sugar	Other	DK/ Missing	Total	
Sex									
Male	16.1	1,265	27.9	73.7	3.4	16.9	5.9	100.0	204
Female	15.7	1,382	23.6	66.3	8.8	18.0	6.8	100.0	217
Region									
Hhohho	16.2	655	24.0	83.5	6.1	4.4	6.1	100.0	106
Manzini	15.9	787	28.1	79.4	6.6	6.6	7.4	100.0	125
Shiselweni	14.8	683	29.3	55.3	3.1	32.4	9.2	100.0	101
Lubombo	17.0	523	20.2	57.9	9.4	32.8	0.0	100.0	89
Area									
Urban	13.8	527	19.1	73.8	7.4	18.8	0.0	100.0	73
Rural	16.4	2,120	27.0	69.7	5.8	17.3	7.3	100.0	349
Age									
0–11 months	22.8	524	20.5	63.4	3.4	29.4	3.7	100.0	119
12–23 months	26.5	521	28.5	74.3	7.8	12.3	5.6	100.0	138
24–35 months	14.7	534	23.7	50.7	13.8	20.2	15.3	100.0	78
36–47 months	8.8	533	(32.4)	(79.6)	(0.0)	(14.5)	(6.0)	100.0	47
48–59 months	7.2	536	(27.5)	(91.4)	(0.0)	(8.6)	(0.0)	100.0	39
Mother's education									
None	13.1	303	(20.5)	(78.5)	(0.0)	(10.3)	(11.2)	100.0	40
Primary	17.7	891	25.6	79.3	2.1	12.1	6.4	100.0	158
Secondary	16.0	757	22.8	55.7	6.7	32.0	5.6	100.0	121
High	15.8	523	30.8	65.0	14.8	13.0	7.2	100.0	82
Tertiary	11.5	171	*	*	.*	*	*	*	20
Missing/DK	*	3	*	*	*	*	*	*	1
Wealth index quintiles									
Poorest	17.4	646	21.4	64.3	3.5	23.1	9.2	100.0	112
Second	16.7	557	28.3	64.8	10.8	17.5	6.9	100.0	93
Middle	17.2	544	30.6	79.7	3.6	12.2	4.5	100.0	94
Fourth	14.7	489	21.0	66.1	5.6	18.1	10.3	100.0	72
Richest	12.2	411	27.9	75.7	6.5	17.8	0.0	100.0	50
Total	**15.9**	**2,647**	**25.7**	**70.2**	**6.0**	**17.5**	**6.4**	**100.0**	**421**

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases. Figures in parentheses are based on 25–49 unweighted cases.

Feeding practices during diarrhoeal episodes are important to avoid dehydration and further complications among children. Table CH.5 shows the amount of liquids and food given to children during an episode of diarrhoea. Twenty-three percent of under-five children with diarrhoea drank more than usual while 74 percent were given about the same to drink, less or much less. Two percent of children were given nothing to drink during the episode of diarrhoea. Regarding food given to children during a diarrhoeal episode, 28 percent were given the same amount to eat while 53 percent ate somewhat or much less. Ten percent of children did not take any food during an episode of diarrhoea. Children in urban areas are least likely to stop eating during a diarrhoeal episode compared with children in rural areas (two percent vs. 11 percent). There is also a variation with regards to wealth status of the mother; the poorer the mother, the most likely that the child would stop eating during a diarrhoeal episode.

Table CH.6 provides the proportion of children age 0–59 months with diarrhoea in the last two weeks who received ORT with continued feeding, and the percentage of children with diarrhoea who received other treatments. Overall, 66 percent of children with diarrhoea received ORS or increased fluids, 81 percent received ORT (ORS or recommended homemade fluids or increased fluids). Combining the information in Table CH.5 with those in Table CH.4 on ORT, it is observed that 48 percent of children received ORT and, at the same time, feeding was continued, as is the recommendation. There are marked differences in the home management of diarrhoea by background characteristics. In the Shiselweni region, only 39 percent of children received ORT and continued feeding while 51 percent of children in all the other regions received ORT and continued feeding.

Almost one in five of children (21 percent) with diarrhoea received antibiotic and only two percent received antimotility medication, in the form of a pill or syrup, as treatment for diarrhoea. One in 10 children (11 percent) was not given any treatment or drug and five percent were given a home remedy or herbal medicine. Treatment of diarrhoea with antibiotic syrup or pills is likely in urban areas compared with rural areas (29 percent vs. 19 percent), while treatment of diarrhoea using home remedy or herbal medicine is more common in rural areas compared with urban areas (six percent vs. one percent).

Table CH.5: Feeding practices during diarrhoea

Percent distribution of children age 0–59 months with diarrhoea in the last two weeks by amount of liquids and food given during an episode of diarrhoea, Swaziland, 2010

	Had diarrhoea in the last two weeks	Number of children age 0-59 months	Drinking practices during diarrhoea:						Total	Eating practices during diarrhoea:						Total	Number of children age 0–59 months with diarrhoea
			Given much less to drink	Given somewhat less to drink	Given about the same to drink	Given more to drink	Given nothing to drink	Miss-ing/ DK		Given much less to eat	Given some-what less to eat	Given about the same to eat	Given more to eat	Stop-ped food	Had never been given food		
Sex																	
Male	16.1	1265	13.1	22.8	38.0	24.5	0.9	0.6	100.0	22.9	27.1	31.5	7.5	8.4	2.7	100.0	204
Female	15.7	1382	15.9	24.2	34.5	21.5	3.5	0.4	100.0	29.2	25.7	25.3	4.0	11.1	4.7	100.0	217
Region																	
Hhohho	16.2	655	15.1	28.5	41.6	12.8	2.0	0.0	100.0	27.8	29.6	30.2	2.5	6.4	3.5	100.0	106
Manzini	15.9	787	9.3	17.3	44.1	24.4	3.9	1.0	100.0	25.4	22.6	33.6	7.8	6.0	4.5	100.0	125
Shiselweni	14.8	683	16.2	25.2	31.5	24.3	1.8	0.9	100.0	22.5	22.5	24.8	5.0	20.7	4.5	100.0	101
Lubombo	17.0	523	19.3	24.4	23.9	31.5	0.9	0.0	100.0	29.3	32.3	22.6	7.4	6.6	1.9	100.0	89
Area																	
Urban	13.8	527	17.9	23.0	40.4	15.4	3.2	0.0	100.0	22.9	34.2	28.6	7.1	2.2	5.0	100.0	73
Rural	16.4	2120	13.8	23.6	35.3	24.5	2.1	0.6	100.0	26.8	24.8	28.3	5.4	11.3	3.4	100.0	349
Age																	
0–11 months	22.8	524	14.7	24.3	44.2	14.2	1.8	0.8	100.0	18.7	19.7	34.1	5.7	11.9	10.0	100.0	119
12–23 months	26.5	521	14.0	29.6	30.9	22.2	2.4	0.9	100.0	21.6	36.6	24.9	4.0	10.9	2.0	100.0	138
24–35 months	14.7	534	9.9	18.6	32.6	36.5	2.4	0.0	100.0	32.0	23.6	27.0	12.0	5.4	.0	100.0	78
36–47 months	8.8	533	(18.5)	(17.7)	(38.9)	(24.9)	(0.0)	(0.0)	100.0	(31.7)	(26.0)	(28.3)	(3.1)	(8.9)	(1.9)	100.0	47
48–59 months	7.2	536	(20.5)	(16.2)	(34.9)	(22.7)	(5.7)	(0.0)	100.0	(46.5)	(17.1)	(25.2)	(2.2)	(9.1)	(0.0)	100.0	39
Mother's education																	
None	13.1	303	(8.7)	(23.2)	(41.4)	(17.0)	(6.5)	(3.3)	100.0	(23.6)	(35.6)	(28.2)	(5.4)	(4.6)	(2.6)	100.0	40
Primary	17.7	891	12.7	28.0	34.7	22.0	1.9	0.6	100.0	31.6	24.1	27.4	4.7	8.4	3.8	100.0	158
Secondary	16.0	757	15.6	22.5	29.2	31.0	1.7	0.0	100.0	23.5	23.7	30.1	8.5	11.6	2.7	100.0	121
High	15.8	523	17.8	19.5	42.8	17.5	2.3	0.0	100.0	24.1	28.1	24.6	5.1	13.5	4.6	100.0	82
Tertiary	11.5	171	*	*	*	*	*	*	*	*	*	*	*	*	*	*	20
Missing/DK	*	3	*	*	*	*	*		*	*	*	*	*	*	*	*	1
Wealth index quintiles																	
Poorest	17.4	646	16.9	22.7	28.3	27.9	2.2	2.0	100.0	34.4	24.5	19.6	2.7	13.6	5.3	100.0	112
Second	16.7	557	12.5	22.1	38.0	26.0	1.4	0.0	100.0	29.1	23.9	26.9	8.3	9.5	2.4	100.0	93
Middle	17.2	544	15.7	23.6	36.5	20.1	4.0	0.0	100.0	24.1	29.0	30.4	6.0	9.5	1.0	100.0	94
Fourth	14.7	489	13.3	24.1	41.0	19.8	1.8	0.0	100.0	15.5	25.8	40.3	6.7	8.8	2.9	100.0	72
Richest	12.2	411	12.4	26.8	43.4	15.9	1.5	0.0	100.0	21.1	31.4	29.4	5.8	3.5	8.8	100.0	50
Total	**15.9**	**2,647**	**14.5**	**23.5**	**36.2**	**22.9**	**2.3**	**0.5**	**100.0**	**26.1**	**26.4**	**28.3**	**5.7**	**9.7**	**3.7**	**100.0**	**421**

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases. Figures in parentheses are based on 25–49 unweighted cases.

Table CH.6: Oral rehydration therapy with continued feeding and other treatments

Percentage of children age 0–59 months with diarrhoea in the last two weeks who received ORT with continued feeding, and percentage of children with diarrhoea who received other treatments, Swaziland, 2010

	Children with diarrhoea who received:			Other treatment:											
				Pill or syrup:				Injection:						Not given any treatment or drug	Number of children age 0–59 months with diarrhoea
	ORS or increased fluids	ORT (ORS or a recommended sugar salt solution or increased fluids)	ORT with continued feeding [1]	Anti-biotic	Anti-motility	Other	Un-known	Anti-biotic	Non-antibiotic	Unknown	Intra-venous	Home remedy/ Herbal medicine	Other		
Sex															
Male	65.9	81.3	53.0	22.4	3.1	0.9	18.9	1.2	0.3	1.3	0.9	4.1	10.1	10.0	204
Female	66.7	79.9	43.4	19.0	1.1	2.8	15.1	1.1	0.0	2.0	0.3	6.2	7.4	12.8	217
Region															
Hhohho	69.9	83.2	50.9	20.7	4.1	2.0	20.6	0.5	0.5	0.5	1.1	1.5	6.5	8.5	106
Manzini	63.1	79.6	50.7	25.9	2.9	1.0	13.6	2.7	0.0	3.1	1.0	11.2	2.7	13.6	125
Shiselweni	65.3	79.7	39.2	20.7	0.0	3.6	16.7	0.9	0.0	1.8	0.0	3.6	9.9	9.9	101
Lubombo	67.7	79.8	51.0	13.0	0.9	0.9	17.5	0.0	0.0	0.9	0.0	2.8	18.6	13.6	89
Area															
Urban	71.3	82.8	57.3	28.8	5.2	0.8	9.2	3.6	0.8	0.8	1.5	1.4	9.0	11.2	73
Rural	65.3	80.1	46.1	18.9	1.4	2.1	18.5	0.6	0.0	1.9	0.4	5.9	8.7	11.5	349
Age															
0–11 months	60.5	72.5	40.3	24.3	3.1	3.8	15.1	1.9	0.0	3.7	0.5	3.6	4.9	13.2	119
12–23 months	72.0	85.6	52.8	18.6	1.7	1.8	19.7	1.1	0.4	0.9	0.0	5.3	9.7	8.3	138
24–35 months	71.3	86.5	56.4	18.7	0.7	0.0	10.7	1.3	0.0	0.0	0.0	8.0	13.9	11.2	78
36–47 months	(61.9)	(79.3)	(47.5)	(15.0)	(3.3)	(1.9)	(23.5)	(0.0)	(0.0)	(1.8)	(0.0)	(2.8)	(14.1)	(14.0)	47
48–59 months	(59.2)	(77.0)	(38.9)	(27.5)	(1.4)	(0.0)	(17.5)	(0.0)	(0.0)	(1.4)	(4.8)	(6.7)	(0.0)	(14.6)	39
Mother's education															
None	(63.5)	(69.6)	(50.3)	(4.4)	(1.4)	(0.0)	(27.5)	(0.0)	(1.4)	(0.0)	(0.0)	(0.0)	(6.5)	(20.7)	40
Primary	65.5	79.8	44.3	19.2	2.7	2.3	14.8	1.5	0.0	0.0	0.4	6.8	3.0	13.7	158
Secondary	66.8	80.7	49.5	22.8	1.5	1.5	15.0	0.8	0.0	4.6	1.1	4.6	15.6	7.7	121
High	70.0	85.6	48.4	24.6	2.6	2.9	16.9	1.9	0.0	1.8	0.7	5.4	8.6	8.5	82
Tertiary	*	*	*	*	*	*	*	*	*	*	*	*	*	*	20
Missing/DK	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1
Wealth index quintiles															
Poorest	65.8	75.5	34.4	19.0	1.2	2.1	24.1	0.0	0.5	1.6	0.0	5.6	5.9	12.9	112
Second	66.1	83.5	48.5	18.5	2.3	1.0	9.3	0.0	0.0	0.9	0.6	9.3	5.5	9.9	93
Middle	70.8	85.4	56.9	17.1	3.2	1.4	21.5	3.1	0.0	4.7	2.0	2.8	10.0	9.0	94
Fourth	60.8	74.8	53.3	18.8	1.8	3.8	12.7	1.3	0.0	0.0	0.0	3.0	13.8	14.1	72
Richest	67.3	85.7	53.8	37.4	2.0	1.1	12.4	2.0	0.0	0.0	0.0	3.8	11.6	11.8	50
Total	**66.3**	**80.6**	**48.1**	**20.6**	**2.1**	**1.9**	**16.9**	**1.1**	**0.1**	**1.7**	**0.6**	**5.1**	**8.7**	**11.4**	**421**

[1] MICS indicator 3.8

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases. Figures in parentheses are based on 25–49 unweighted cases.

Care seeking and antibiotic treatment of pneumonia

Pneumonia is another leading cause of death in children and the use of antibiotics in under-fives with suspected pneumonia is a key intervention. A WFFC goal is to reduce by one-third the deaths due to acute respiratory infections.

Children with suspected pneumonia are those who had an illness with a cough, accompanied by rapid or difficult breathing, and whose symptoms were NOT due to a problem in the chest and a blocked nose. The indicators for care seeking and antibiotic treatment of pneumonia are:

- Prevalence of suspected pneumonia;
- Care seeking for suspected pneumonia;
- Antibiotic treatment for suspected pneumonia; and
- Knowledge of the danger signs of pneumonia.

Again it is worth noting that coughing is common during the cold season (April to September) in Swaziland while the survey data collection was undertaken in the months of August to November. This seasonality may have influenced the prevalence of pneumonia among children under five found during the survey.

Table CH.7 presents the prevalence of suspected pneumonia and, if care was sought outside the home, the site of care and the percentage of children who received antibiotics. Thirteen percent of children age 0–59 months had suspected pneumonia during the two weeks preceding the survey. Suspected pneumonia rates vary with the mother's education; children whose mothers have no education are more likely to have had pneumonia in the last two weeks preceding the survey compared with mothers with tertiary education, 16 percent and seven percent, respectively.

Overall, a total of 58 percent of children were taken to any appropriate provider. Slightly above half of children with suspected pneumonia were taken to a public institution for care. Twenty-nine percent, 17 percent and five percent were taken to a government clinic/public health unit, a government hospital and a government health centre, respectively, for treatment of pneumonia. Ten percent and 2 percent of children were taken to private sources and other sources of healthcare, respectively.

Knowledge of the danger signs of pneumonia is an important determinant for early care-seeking behaviour. Mothers and caretakers of children age 0–59 months were asked to name symptoms that would cause them to take the child immediately to a health facility. Table CH.8 highlights that mothers would take a child immediately to a health facility when the child develops a fever (58 percent), has diarrhoea (55 percent) and becomes sicker (47 percent). Only two percent of mothers know of the two danger signs of pneumonia – fast and difficult breathing. Mothers with no education are most likely to know of the two danger signs of pneumonia compared with mothers with tertiary education (three percent and 0.2 percent, respectively).

Table CH.7: Care seeking for suspected pneumonia and antibiotic use during suspected pneumonia

Percentage of children age 0–59 months with suspected pneumonia in the last two weeks who were taken to a health provider and percentage of children who were given antibiotics, Swaziland, 2010

	Had suspected pneumonia in the last two weeks	Number of children age 0–59 months	Children with suspected pneumonia who were taken to:																
			Public sources:						Private sources:				Other sources:						
			Gov't hospital	Gov't health center	Gov't clinic/ PHU	Out-reach site	Rural health motivator	Other	Hospital	Pharmacy	Clinic	Other	Relative /friend	Shop	Tradit-ional practitio ner	Other	Any appro-priate provider [1]	Percentage of children with suspected pneumonia who received antibiotics in the last two weeks [2]	Number of children age 0–59 months with suspected pneumonia in the last two weeks
Sex																			
Male	15.0	1,265	16.8	6.3	28.7	0.5	0.4	2.1	0.4	5.9	2.9	0.0	0.9	1.0	0.0	0.5	57.2	58.4	189
Female	11.2	1,382	17.9	3.9	28.9	0.0	0.7	1.5	0.4	4.4	4.8	0.6	0.0	1.8	0.7	0.0	58.0	63.1	155
Region																			
Hhohho	10.0	655	23.3	2.4	13.6	0.0	0.0	4.7	0.9	6.5	9.5	0.0	0.0	2.4	0.0	0.0	51.9	56.9	65
Manzini	14.2	787	25.1	3.9	23.1	0.0	0.9	2.1	0.0	8.6	2.3	0.0	0.0	2.0	0.9	0.0	57.5	74.5	111
Shiselweni	14.5	683	10.1	7.4	40.5	0.9	0.0	0.9	0.0	1.8	0.0	0.9	0.9	0.0	0.0	0.9	60.8	58.5	99
Lubombo	13.1	523	9.2	6.8	35.4	0.0	1.2	0.0	1.1	3.5	6.0	0.0	1.2	1.2	0.0	0.0	58.6	44.2	68
Area																			
Urban	12.4	527	34.4	6.8	13.7	0.0	1.6	1.6	2.0	8.7	1.2	0.0	0.0	3.4	1.6	0.0	61.2	68.2	65
Rural	13.1	2,120	13.3	4.8	32.3	0.3	0.3	1.9	0.0	4.4	4.4	0.3	0.6	0.9	0.0	0.3	56.8	58.7	278
Age																			
0–11 months	10.4	524	22.6	12.2	28.6	0.0	0.0	2.8	0.0	3.9	4.3	0.0	0.0	0.0	0.0	0.0	68.9	63.0	54
12–23 months	15.2	521	19.9	9.2	25.8	0.0	0.0	3.2	1.0	1.6	3.0	0.0	1.1	1.5	0.0	0.0	62.1	60.0	79
24–35 months	14.2	534	15.7	1.1	25.1	1.2	0.0	2.9	0.7	10.4	4.5	1.2	0.0	4.5	1.3	0.0	52.5	69.0	76
36–47 months	14.2	533	13.8	2.9	30.6	0.0	1.4	0.0	0.0	7.4	4.3	0.0	0.0	0.0	0.0	0.0	50.8	52.7	76
48–59 months	10.9	536	15.5	1.6	35.2	0.0	1.4	0.0	0.0	1.8	2.7	0.0	1.4	0.0	0.0	1.6	56.4	58.1	58
Mother's education																			
None	15.9	303	(0.0)	(3.5)	(39.9)	(0.0)	(0.0)	(3.2)	(0.0)	(2.7)	(5.0)	(1.9)	(1.9)	(0.0)	(0.0)	(0.0)	(53.4)	(46.5)	48
Primary	14.8	891	14.0	4.8	25.7	0.7	1.4	1.9	0.0	2.7	1.2	0.0	0.6	1.2	0.8	0.7	49.7	52.1	132
Secondary	13.0	757	22.8	8.1	28.3	0.0	0.0	2.4	0.0	8.8	2.2	0.0	0.0	0.9	0.0	0.0	63.7	70.6	98
High	10.2	523	24.8	3.6	29.4	0.0	0.0	0.0	2.5	7.0	7.4	0.0	0.0	1.9	0.0	0.0	67.8	73.7	53
Tertiary	7.3	171	43.1	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	13
Missing/DK	*	3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0
Wealth index quintiles																			
Poorest	16.6	646	10.8	5.4	39.4	0.8	0.8	1.4	0.0	0.0	2.2	0.8	1.6	0.0	0.0	0.8	61.9	57.0	107
Second	11.1	557	15.0	1.5	26.6	0.0	1.7	.0	0.0	3.6	1.4	0.0	0.0	1.4	1.7	0.0	46.1	49.9	62
Middle	12.6	544	17.7	5.2	28.3	0.0	0.0	4.7	0.0	3.9	1.2	0.0	0.0	3.7	0.0	0.0	57.1	58.0	69
Fourth	12.3	489	23.7	5.4	23.9	0.0	0.0	2.6	1.3	11.5	1.3	0.0	0.0	0.0	0.0	0.0	58.1	69.0	60
Richest	11.2	411	(26.5)	(9.5)	(13.8)	(0.0)	(0.0)	(0.0)	(1.2)	(13.3)	(17.5)	(0.0)	(0.0)	(2.6)	(0.0)	(0.0)	(63.3)	(75.8)	46
Total	**13.0**	**2,647**	**17.3**	**5.2**	**28.8**	**0.3**	**0.5**	**1.8**	**0.4**	**5.2**	**3.8**	**0.3**	**0.5**	**1.3**	**0.3**	**0.3**	**57.6**	**60.5**	**344**

[1] MICS indicator 3.9
[2] MICS indicator 3.10

Table CH.8: Knowledge of the two danger signs of pneumonia

Percentage of mothers and caretakers of children age 0–59 months by symptoms that would cause them to take the child immediately to a health facility, and percentage of mothers who recognize fast and difficult breathing as signs for seeking care immediately, Swaziland, 2010

	Percentage of mothers/caretakers who think that a child should be taken immediately to a health facility if the child:									Mothers/caretakers who recognize the two danger signs of pneumonia	Number of mothers/caretakers of children age 0–59 months
	Is not able to drink or breastfeed	Becomes sicker	Develops a fever	Has fast breathing	Has difficulty breathing	Has blood in stool	Is drinking poorly	Has diarhoea	Has other symptoms		
Region											
Hhohho	18.7	42.5	58.9	12.6	26.0	8.4	3.4	60.3	23.3	2.6	479
Manzini	25.1	50.0	56.1	10.9	13.6	8.9	7.8	52.7	19.7	1.8	544
Shiselweni	14.0	48.2	53.2	4.7	10.0	1.5	5.7	54.7	46.9	0.7	423
Lubombo	13.9	44.4	64.2	8.3	9.3	5.1	3.5	50.1	34.4	1.0	351
Area											
Urban	18.2	51.9	58.0	10.6	15.1	9.0	7.4	53.8	19.4	1.0	412
Rural	18.7	44.9	57.7	9.0	15.2	5.5	4.7	54.9	33.1	1.8	1,386
Education											
None	20.2	42.7	50.4	10.5	19.1	8.1	2.3	61.6	30.1	2.6	130
Primary	18.5	44.1	58.3	11.6	14.9	5.6	6.0	53.8	30.8	2.2	540
Secondary	16.6	46.2	57.9	7.0	13.4	4.4	5.2	55.3	30.8	0.6	573
High	20.4	51.9	58.5	9.1	16.2	7.8	5.7	52.7	28.3	2.1	422
Tertiary	20.1	43.9	59.8	10.4	17.3	11.0	5.0	55.1	27.6	0.4	132
Wealth index quintiles											
Poorest	17.2	43.4	58.5	10.0	14.6	5.8	4.9	55.4	31.5	2.2	388
Second	19.7	43.5	55.2	7.2	15.0	5.5	7.1	56.0	33.2	2.2	362
Middle	20.6	48.8	55.8	10.5	14.7	5.7	5.3	55.7	30.6	1.7	356
Fourth	19.4	47.8	59.7	10.9	13.9	5.7	4.1	54.0	29.1	1.4	366
Richest	15.9	49.4	59.5	8.1	18.2	9.0	5.3	52.1	24.5	0.2	326
Total	**18.6**	**46.5**	**57.7**	**9.4**	**15.2**	**6.3**	**5.3**	**54.7**	**29.9**	**1.6**	**1,797**

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases. Figures in parentheses are based on 25–49 unweighted cases.

Solid fuel use

More than three billion people around the world rely on solid fuels (biomass and coal) for their basic energy needs, including cooking and heating. Cooking and heating with solid fuels leads to high levels of indoor smoke, a complex mix of health-damaging pollutants. The main problem with the use of solid fuels is products of incomplete combustion, including carbon monoxide (CO), polyaromatic hydrocarbons, sulpher dioxide (SO_2), and other toxic elements. Use of solid fuels increases the risks of acute respiratory illness, pneumonia, chronic obstructive lung disease, cancer, and possibly TB, low birth weight, cataracts, and asthma. The primary indicator is the proportion of the population using solid fuels as the primary source of domestic energy for cooking.

Table CH.9 shows the type of cooking fuel used in households. Overall, seven in 10 households are using solid fuels for cooking. Use of solid fuels is low in urban areas (15 percent), but very high in rural areas (86 percent). Differentials with respect to the educational level of the household head and wealth household are also marked. Solid fuels use is very common among households where the head of household has a low level of education and among those in the lowest wealth quintile. The findings also reveal that the use of solid fuel for cooking is highest in the Shiselweni region (88 percent) and lowest in the Manzini region (51 percent).

Electricity use for cooking is mostly in use among urban households (50 percent), and among those residing in the Manzini region (28 percent). The higher the level of education of household head, the more likely it is for the household to use electricity. Electricity use for cooking is prevalent among households in the highest wealth quintile.

Solid fuel use alone is a poor proxy for indoor air pollution, since the concentration of the pollutants is different when the same fuel is burnt in different stoves or fires. Use of solid fuel in a separate room minimizes indoor pollution, and 62 percent of households using solid fuels cook in a separate building, while 20 percent cook in a separate room used as kitchen and 16 percent outdoors. Only two percent cook with solid fuels elsewhere in the house (Table CH.10).

Table CH.9: Solid fuel use

Percent distribution of household members according to type of cooking fuel used by the household, and percentage of household members living in households using solid fuels for cooking, Swaziland, 2010

	Percentage of household members in households using:														
					Solid fuels									Solid fuels for cooking [1]	Number of household members
	Electricity	Liquefied Petroleum Gas (LPG)	Bio-gas	Kerosene	Coal / Lignite	Char-coal	Wood	Straw / Shrubs / Grass	Animal dung	No food cooked in household	Other	Missing	Total		
Region															
Hhohho	19.2	9.7	0.1	3.4	0.0	0.2	66.5	0.0	0.0	0.1	0.7	0.1	100.0	66.7	5,457
Manzini	27.7	16.0	0.6	4.3	0.2	0.2	50.0	0.2	0.3	0.2	0.1	0.1	100.0	50.9	6,133
Shiselweni	5.8	4.4	0.3	0.9	0.0	0.2	87.0	1.0	0.2	0.1	0.1	0.1	100.0	88.3	4,975
Lubombo	10.7	8.6	1.3	0.7	0.4	0.6	77.5	0.0	0.0	0.1	0.0	0.0	100.0	78.5	4,035
Area															
Urban	49.6	25.2	1.2	8.8	0.3	0.6	13.8	0.0	0.0	0.4	0.0	0.1	100.0	14.7	4,777
Rural	6.9	5.6	0.3	0.7	0.1	0.2	85.3	0.4	0.2	0.1	0.3	0.1	100.0	86.1	15,823
Education of household head															
None	3.3	2.6	0.0	1.4	0.1	0.2	91.6	0.3	0.4	0.1	0.0	0.0	100.0	92.6	4,982
Primary	4.7	5.0	0.3	3.0	0.2	0.5	85.1	0.5	0.1	0.1	0.5	0.1	100.0	86.3	6,887
Secondary	15.3	16.2	0.9	4.3	0.0	0.2	62.2	0.4	0.0	0.2	0.2	0.1	100.0	62.8	3,899
High	37.8	21.8	1.6	2.5	0.0	0.2	35.3	0.0	0.0	0.5	0.2	0.0	100.0	35.6	2,717
Tertiary	65.9	18.1	0.4	0.3	0.7	0.0	14.4	0.0	0.0	0.1	0.0	0.0	100.0	15.1	2,057
Missing/DK	0.0	21.8	0.0	5.5	0.0	0.0	72.7	0.0	0.0	0.0	0.0	0.0	100.0	72.7	58
Wealth index quintiles															
Poorest	0.0	0.0	0.0	0.6	0.0	0.2	98.4	0.4	0.2	0.0	0.0	0.2	100.0	99.2	4,127
Second	0.0	0.9	0.0	3.2	0.0	0.0	95.4	0.4	0.1	0.1	0.0	0.0	100.0	95.9	4,124
Middle	0.4	11.4	0.3	7.0	0.0	0.5	79.4	0.2	0.4	0.3	0.1	0.0	100.0	80.5	4,107
Fourth	13.6	17.7	0.9	1.6	0.7	0.5	63.0	0.5	0.0	0.3	1.0	0.1	100.0	64.8	4,123
Richest	70.3	20.7	1.3	0.3	0.0	0.0	7.3	0.0	0.0	0.0	0.0	0.0	100.0	7.3	4,119
Total	**16.8**	**10.1**	**0.5**	**2.5**	**0.2**	**0.3**	**68.7**	**0.3**	**0.1**	**0.1**	**0.2**	**0.1**	**100.0**	**69.5**	**20,600**

[1] MICS indicator 3.11

Table CH.10: Solid fuel use by place of cooking

Percent distribution of household members in households using solid fuels by place of cooking, Swaziland, 2010

	Place of cooking:						Number of household members in households using solid fuels for cooking
	In a separate room used as kitchen	Elsewhere in the house	In a separate building (*Lidladla*[10])	Outdoors	Missing	Total	
Region							
Hhohho	13.9	2.2	65.3	18.6	0.0	100.0	3,642
Manzini	21.7	2.0	52.8	23.5	0.1	100.0	3,123
Shiselweni	33.3	2.1	58.6	5.7	0.3	100.0	4,395
Lubombo	4.8	0.3	73.7	21.2	0.0	100.0	3,168
Area							
Urban	42.9	0.9	21.3	34.9	0.0	100.0	702
Rural	18.3	1.7	64.5	15.3	0.1	100.0	13,625
Education of household head							
None	13.0	0.8	72.3	14.0	0.0	100.0	4,612
Primary	19.3	1.9	63.0	15.6	0.2	100.0	5,947
Secondary	25.3	2.8	52.4	19.6	0.0	100.0	2,450
High	31.7	2.9	42.8	22.6	0.0	100.0	966
Tertiary	42.0	0.3	46.8	10.9	0.0	100.0	310
Missing/DK	0.0	0.0	29.8	70.2	0.0	100.0	42
Wealth index quintiles							
Poorest	5.8	1.3	77.3	15.4	0.2	100.0	4,093
Second	13.7	1.2	67.4	17.8	0.0	100.0	3,953
Middle	24.9	1.6	57.4	16.1	0.0	100.0	3,308
Fourth	40.0	3.0	42.1	14.8	0.2	100.0	2,671
Richest	43.2	4.7	28.1	24.0	0.0	100.0	302
Total	**19.5**	**1.7**	**62.4**	**16.3**	**0.1**	**100.0**	**14,327**

[10] *Lidladla* is a traditional cooking hut found mostly in in rural areas of Swaziland.

Malaria transmission

Malaria transmission is prevalent along the country's eastern border, particularly in the Lubombo region. Approximately 30 percent of the population lives in malaria-endemic areas and transmission occurs in the rainy season between November and May, with a peak in February and March.[11] The spread of malaria in Swaziland is unstable and closely linked to the level of rainfall, which varies substantially each year. This indicates that acquired immunity by populations at risk to malaria is insignificant and all age groups are thus at risk of developing clinical malaria. A majority of malaria cases (99 percent) are as a result of *P. falciparum.*

New strategies for eliminating malaria are being implemented and focus on the following key intervention areas:

- Effective case management through definitive diagnosis and proper case management.
- Integrated vector management, a combination of IRS and long-lasting insecticide-treated nets (LLINs).
- Surveillance and epidemic preparedness and response.
- Comprehensive information, education, and communication campaign.

The National Malaria Control Programme has identified key strategies to address malaria, such as the use of ITNs by every household in malaria transmission areas and by treating all malaria confirmed cases with Artemisinin-based Combination Therapy (ACT).

Malaria has adverse effects especially for children and pregnant women. It contributes to anaemia in children and undesirable pregnancy outcomes in pregnant women such as spontaneous abortion, stillbirth, premature delivery and low birth weight.

The 2010 Swaziland MICS survey incorporates questions on the availability and use of bed nets, both at the household level and among children under five years of age and pregnant women, as well as anti-malarial treatment, and intermittent preventive therapy (IPT) for malaria and indoor spraying of households. The results take into consideration that malaria is endemic in some part of the country and makes a comparison of the situation between endemic and non-endemic areas.

Data collection of the survey was conducted in August to November, a period outside the malaria transmission period. The results should be interpreted with caution because of this seasonality effect. The results on the use of mosquito nets, diagnostics and treatment of malaria were likely to have been affected due to the seasonality effect. Ownership and IRS as preventative methods are measured over a long period of time, and as such the results were less likely to have been affected.

Malaria endemicity

Table CH.10A shows the distribution of households living in malaria-endemic and non-endemic areas. Thirty-two percent of the population resides in malaria-endemic areas. The variation according to regions is visible. All households within the Lubombo region are in malaria-endemic areas and only nine percent of households in the Manzini region are in malaria-endemic areas.

[11] MoH, Malaria Elimination Strategy 2008 -2015.

Table CH.10A: Malaria endemicity

Distribution of households living in malaria-endemic/non-endemic areas by region and area, Swaziland, 2010

	Percentage of households living in:			Number of households
	Malaria endemic areas [*]	Non-endemic areas	Total	
Region				
Hhohho	21.9	78.1	100.0	1,261
Manzini	9.4	90.6	100.0	1,624
Shiselweni	14.5	85.5	100.0	969
Lubombo	100.0	0.0	100.0	979
Area				
Urban	18.2	81.8	100.0	1,680
Rural	39.5	60.5	100.0	3,154
Total	32.1	67.9	100.0	4,834

[*] As defined by enumeration areas selected in the 2010 Swaziland MICS that lie within malaria endemic areas as determined by the National Malaria Control Programme, MoH.

Ownership of mosquito nets

Table CH.11 shows that nationally, 11 percent of households have at least one mosquito net. Nearly all of these households (10 percent) own an ITN or LLIN. Ownership of mosquito nets is high in households within endemic areas. Twenty-eight percent of households in endemic areas and only three percent in non-endemic areas own at least one mosquito net.

Ownership of mosquito nets is indeed high in the Lubombo region where malaria transmission is prevalent. Thirty-six percent of households in that region own at least on mosquito net. Ownership of these nets is low in other regions: six percent in the Hhohho region, five percent in the Manzini region and only one percent in the Shiselweni region. Those residing in rural areas are most likely to own a net compared with those in urban areas (13 percent vs. six percent). Education and the wealth status of the household head also have a positive relationship with ownership of a mosquito net. Ownership of ITNs is high among households whose heads are less educated and among those within a lower wealth quintiles.

Nationally, 16 percent of households have either at least one ITN or have received IRS in the last 12 months. However, this is prevalent in households within endemic areas compared with those in non-endemic areas (46 percent vs. two percent). Comparison among regions shows that about six in 10 households have at least one ITN or have received IRS in the Lubombo region. The Shiselweni region has only one percent of households with at least one ITN or have received IRS during the last 12 months.

Table CH.11: Household availability of insecticide-treated nets and protection by a vector control methods

Percentage of households with at least one mosquito net, percentage of households with at least one LLIN, percentage of households with at least one ITN and percentage of households which either have at least one ITN or have received spraying through an IRS campaign in the last 12 months, Swaziland, 2010

	Percentage of households with at least one mosquito net	Percentage of households with at least one LLIN	Percentage of households with at least one ITN [1]	Percentage of households with at least one ITN or received IRS during the last 12 months [2]	Number of households
Malaria endemicity					
Non-endemic	2.7	2.0	2.1	2.3	3284
Endemic	28.2	26.3	26.4	45.6	1550
Region					
Hhohho	5.9	5.4	5.4	7.0	1261
Manzini	5.4	4.2	4.4	5.0	1624
Shiselweni	1.0	1.0	1.0	1.2	969
Lubombo	36.0	33.5	33.7	61.5	979
Area					
Urban	6.4	5.2	5.4	12.8	1680
Rural	13.2	12.3	12.3	18.0	3154
Education of household head					
None	16.1	15.2	15.2	25.2	950
Primary	12.4	11.3	11.3	17.6	1439
Secondary	7.7	6.9	7.1	11.9	1005
High	7.6	6.4	6.5	12.1	842
Tertiary	7.9	6.8	7.0	11.2	589
Missing/DK	*	*	*	*	10
Wealth index quintiles					
Poorest	15.2	14.2	14.2	22.8	825
Second	12.5	11.9	11.9	17.6	785
Middle	10.4	9.2	9.3	14.3	923
Fourth	10.1	9.1	9.2	14.8	1025
Richest	8.0	6.7	6.9	13.7	1276
Total	10.9	9.8	9.9	16.2	4834

[1] MICS indicator 3.12
[2] MICS indicator 3.13

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases.

Indoor residual spraying

CH.11A shows that nationally, about 12 percent of households had interior walls sprayed against mosquitoes in the past 12 months. A comparison of households within endemic and non-endemic areas reveals that IRS is high in households in endemic areas (36 percent). IRS is also high in the Lubombo region (50 percent) compared with other regions. Households in rural areas are most likely to receive IRS compared with those in urban areas (13 percent vs. nine percent). IRS varies according to the education level of household head and wealth status of the household. The lower the level of education, the more likely a household is to receive IRS. IRS is high in households where the head of the household has no education (20 percent) and low among those with tertiary education (six percent). Again IRS among households within the poorest wealth quintile is high (18 percent) compared with those in the richest wealth quintile (nine percent). Most households received IRS from the government (78 percent). However, a small proportion of households receive IRS from private companies and non-governmental organizations (NGOs), at four percent and one percent, respectively.

Use of mosquito nets by children under five and pregnant women

The National Malaria Control Programme aims to achieve at least 60 percent of pregnant women and children under five in the malaria areas sleeping under an ITN. Table CH.12 reveals that only about two percent of children slept under an ITN during the previous night of the survey. Sleeping under an ITN for children is mostly prevalent in endemic areas (four percent) and in the Lubombo region (six percent). In other regions a small number of children slept under a mosquito net. A total of 12 percent children living in households with at least one ITN slept under an ITN the previous night of the survey. Further analysis of the variations in different characteristics is not possible due to fewer cases.

Data table presenting the proportion of pregnant women who slept under a mosquito net during the previous night of the survey is not shown due to a low number of cases. Overall, two percent of the pregnant women slept under any mosquito net the night prior to the survey and all of them lived in malaria-endemic areas (four percent). Almost all the women who slept under a mosquito net, slept under an ITN. None of pregnant women slept in a mosquito net in malaria non-endemic areas. This result may be due to the seasonality effect mentioned previously.

Table CH.11A: Indoor residual spraying

Percentage of households whose interior walls have been sprayed against mosquitoes in the last 12 months by who did the spraying, Swaziland, 2010

	Percent-age of households in which interior walls were sprayed against mosquitoes in the past 12 months	Total number of households	Who sprayed dwelling:					Number of households in which interior walls were sprayed against mosquitoes in the past 12 months
			Government worker/ programme	Private company	NGO	Other	Don't Know/ Missing	
Malaria endemicity								
Non-endemic	0.3	3,284	*	*	*	*	*	11
Endemic	36.3	1,550	79.1	3.2	0.4	0.0	17.2	562
Region								
Hhohho	5.1	1,261	(90.8)	(0.8)	(0.0)	(3.4)	(5.0)	64
Manzini	1.1	1,624	*	*	*	*	*	18
Shiselweni	.2	969	*	*	*	*	*	2
Lubombo	49.9	979	78.1	3.1	0.2	0.0	18.6	489
Area								
Urban	9.2	1,680	67.3	10.7	1.5	0.4	20.9	154
Rural	13.3	3,154	82.0	1.4	0.2	0.7	15.7	419
Education of household head								
None	20.2	950	80.4	1.4	0.0	0.7	17.5	192
Primary	13.1	1,439	82.4	1.4	0.5	0.0	15.8	189
Secondary	8.3	1,005	75.1	5.2	0.0	0.0	19.7	83
High	8.6	842	70.3	11.1	1.8	0.0	18.3	72
Tertiary	5.7	589	63.7	14.3	3.2	6.5	12.3	34
Missing/DK	*	10	*	*	*	*	*	3
Wealth index quintiles								
Poorest	18.1	825	81.9	1.2	0.0	0.9	16.0	149
Second	13.8	785	82.5	1.6	0.0	0.0	15.9	108
Middle	9.8	923	80.7	0.0	1.0	0.0	18.3	91
Fourth	10.4	1,025	76.8	5.2	0.0	0.0	18.0	107
Richest	9.2	1,276	68.0	11.3	2.0	1.9	17.8	118
Total	11.8	4,834	78.0	3.9	0.6	0.6	17.1	573

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases. Figures in parentheses are based on 25–49 unweighted cases.

Table CH.12: Children sleeping under mosquito nets

Percentage of children age 0–59 months who slept under a mosquito net during the previous night, by type of net, Swaziland, 2010

	Percentage of children age 0–59 months who stayed in the household the previous night	Number of children age 0–59 months	Percentage of children who: Slept under any mosquito net [1]	Percentage of children who: Slept under an ITN [2]	Number of children age 0–59 months who slept in the household the previous night	Percentage of children who slept under an ITN living in households with at least one ITN	Number of children age 0–59 months living in households with at least one ITN
Malaria endemicity							
Non-endemic	96.8	1,737	0.4	0.2	1,682	(11.9)	34
Endemic	98.9	910	4.2	3.7	900	12.4	273
Sex							
Male	97.9	1,265	1.9	1.7	1,238	13.7	153
Female	97.2	1,382	1.5	1.3	1,344	11.0	154
Region							
Hhohho	96.4	655	0.7	0.7	631	(11.4)	41
Manzini	96.6	787	1.0	0.7	760	(14.8)	36
Shiselweni	98.5	683	0.3	0.3	673	*	9
Lubombo	99.0	523	5.8	5.0	518	11.8	220
Area							
Urban	96.3	527	1.4	1.0	507	(11.6)	42
Rural	97.9	2,120	1.8	1.6	2,075	12.4	265
Age							
0–11months	96.8	524	3.1	2.3	507	(27.0)	44
12–23 months	98.1	521	1.8	1.6	512	12.5	66
24–35 months	97.9	534	1.6	1.6	523	12.9	64
36–47 months	97.7	533	0.8	0.7	520	6.1	58
48–59 months	97.1	536	1.3	1.1	520	7.9	75
Mother's education							
None	98.0	303	3.6	3.3	297	19.3	52
Primary	98.0	891	1.6	1.5	873	11.9	113
Secondary	97.8	757	2.0	1.7	741	19.3	65
High	96.8	523	0.9	0.4	506	3.2	58
Tertiary	95.2	171	0.0	0.0	163	*	18
Missing/DK	*	3	*	*	3	*	2
Wealth index quintiles							
Poorest	98.3	646	2.6	2.6	635	16.3	102
Second	98.3	557	1.1	0.8	547	6.5	64
Middle	97.3	544	2.0	1.8	529	15.4	63
Fourth	97.8	489	0.6	0.4	478	(5.0)	37
Richest	95.4	411	2.0	1.4	392	(13.5)	39
Total	97.5	2,647	1.7	1.5	2,582	12.3	307

[1] MICS indicator 3.14
[2] MICS indicator 3.15; MDG indicator 6.7

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases. Figures in parentheses are based on 25–49 unweighted cases.

Anti-malarial treatment for children

Questions on the prevalence and treatment of fever were asked for all children under five. Almost one in 10 children under five was ill with fever in the two weeks prior to the survey (Table CH.14). Fever prevalence in endemic areas was 11 percent compared with nine percent in non-endemic areas. The prevalence of fever is higher in the Lubombo region (14 percent). There are no major differentials with education and wealth status of the household.

Mothers were asked to report all of the medicines given to a child to treat the fever, including both medicines given at home and medicines given or prescribed at a health facility. Overall, less than two percent of children reported to be ill with fever in the two weeks prior to the survey were given anti-malarial drugs. A large proportion of children (86 percent) were given other types of medicines that are not anti-malarias, including anti-pyretics such as paracetamol, aspirin or ibuprofen.

In as much as the proportion of children given appropriate anti-malarial drugs is small, children in Lubombo are most likely to be given such treatment. About one percent of children in Lubombo with fever were given Fansidar, Quinine, ACT, and Mefloquine, respectively, while two percent were given Chloroquine. Similar proportions of treatment are observed in children within endemic areas. Again, the prevalence of fever and use of anti-malarial drugs among children, especially in malaria-endemic areas, may have been influenced by the fact that malaria was off-season during the survey data collection period.

Malaria diagnostic usage in children

Table CH.15 shows malaria diagnostic usage among children. Overall, 14 percent of children with a fever in the two weeks prior to the survey had a finger or heel stick to diagnose malaria. This is common practice in both endemic and non-endemic areas, at 13 percent and 14 percent, respectively. Children in the Shiselweni region (21 percent) and the Manzini region (16 percent) are more likely to have a finger or heel stick for diagnosing malaria compared with children in the Lubombo and Hhohho regions, at seven percent and three percent, respectively.

Children age 12–23 months are most likely to have a finger or heel stick compared with those in other age groups. There are no major patterns with regards to the mother's education and wealth status of the household. This may be as a result of the seasonal effect mentioned in the previous paragraphs.

Intermittent preventive treatment

IPT for malaria in pregnant women who gave birth in the two years preceding the survey is presented in Table CH.16. One in ten pregnant women in Swaziland took some medicine to prevent malaria at any ANC visit during pregnancy. About three percent took Fansidar at least once and only one percent took it more than once during pregnancy. IPT differs slightly in endemic areas compared with non-endemic areas (12 percent and nine percent, respectively). Regional comparison of IPT shows that pregnant women in Shiselweni (14 percent) and those residing in rural areas (11 percent) receive IPT. There are no conclusive differences with regards to education of the woman and wealth status of the household.

Table CH.14: Anti-malarial treatment of children with anti-malarial drugs

Percentage of children age 0–59 months who had fever in the last two weeks who received anti-malarial drugs, Swaziland, 2010

			Children with a fever in the last two weeks who were treated with:																
			Anti-malarials:							Other medications:									
	Had a fever in the last two weeks	Number of children age 0-59 months	SP / Fansidar	Chloro-quine	Qui-nine	Combin-ation with Artemisinin (Coartem)	Meflo-quine	Other Anti-malarial	Any anti-malarial drug [1]	Antibiotic pill or syrup	Doxycy-cline injection	Other antibiotic injection	Parace-tamol/ Panadol/ Acetami-nophan	Aspirin	Ibuprofen	Other	Don't know	Percentage who took an anti-malarial drug same or next day [2]	Number of children with fever in the last two weeks
Malaria endemicity																			
Non-endemic	9.0	1,737	0.0	0.0	0.0	0.0	0.6	0.0	0.6	13.7	0.4	4.3	50.4	0.0	2.0	7.8	0.0	0.6	156
Endemic	11.2	910	0.8	1.6	0.8	0.8	0.8	0.0	3.3	12.9	0.0	4.0	61.5	0.0	0.0	18.1	0.0	1.6	102
Sex																			
Male	10.6	1,265	0.6	0.0	0.0	0.0	0.7	0.0	1.3	11.1	0.0	6.8	47.4	0.0	0.4	9.2	0.0	1.3	134
Female	9.0	1,382	0.0	1.4	0.7	0.7	0.7	0.0	2.0	15.9	0.4	1.4	62.8	0.0	2.1	14.8	0.0	0.7	124
Region																			
Hhohho	3.3	655	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(25.8)	(2.6)	(7.8)	(48.5)	(0.0)	(2.6)	(12.4)	(0.0)	(0.0)	22
Manzini	11.8	787	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.6	0.0	3.9	48.6	0.0	2.8	2.5	0.0	0.0	93
Shiselweni	10.3	683	0.0	0.0	0.0	0.0	1.3	0.0	1.3	6.4	0.0	2.0	54.8	0.0	0.0	14.2	0.0	1.3	71
Lubombo	14.0	523	1.1	2.3	1.1	1.1	1.1	0.0	4.6	13.8	0.0	5.6	64.4	0.0	0.0	21.5	0.0	2.3	73
Area																			
Urban	8.9	527	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.5	1.2	8.3	58.3	0.0	1.2	9.4	0.0	0.0	47
Rural	10.0	2,120	0.4	0.8	0.4	0.4	0.8	0.0	2.0	11.8	0.0	3.2	54.0	0.0	1.2	12.4	0.0	1.2	211
Age																			
0–11months	9.9	524	1.6	1.6	0.0	0.0	0.0	0.0	3.2	10.7	0.0	3.1	68.0	0.0	2.5	16.5	0.0	1.6	52
12–23 months	9.8	521	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.8	0.0	2.9	64.0	0.0	0.0	4.9	0.0	0.0	51
24–35 months	12.2	534	0.0	0.0	1.3	1.3	1.4	0.0	2.7	20.2	0.9	3.3	57.6	0.0	2.0	15.2	0.0	1.4	65
36–47 months	7.2	533	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(9.3)	(0.0)	(4.9)	(37.8)	(0.0)	(1.5)	(19.2)	(0.0)	(0.0)	38
48–59 months	9.8	536	0.0	1.6	0.0	0.0	1.6	0.0	1.6	11.3	0.0	7.1	41.8	0.0	0.0	4.7	0.0	1.6	52
Mother's education																			
None	8.2	303	(0.0)	(3.4)	(0.0)	(0.0)	(3.4)	(0.0)	(3.4)	(19.4)	(0.0)	(3.7)	(43.3)	(0.0)	(0.0)	(17.4)	(0.0)	(3.4)	25
Primary	10.2	891	0.0	0.9	0.0	0.0	1.0	0.0	1.9	7.8	0.0	2.9	48.5	0.0	0.0	11.5	0.0	1.0	91
Secondary	11.0	757	1.0	0.0	1.0	1.0	0.0	0.0	2.0	18.0	0.0	5.2	60.7	0.0	3.1	10.8	0.0	1.0	83

High	9.1	523	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.6	1.2	2.4	63.9	0.0	1.2	9.6	0.0	0.0	47
Tertiary	7.1	171	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	12
Missing/DK	*	3	*	*	*	*	*	*	*	.	.	.	*	*	*	*	*	*	0
Wealth index quintiles																			
Poorest	11.2	646	0.0	2.3	0.0	0.0	1.2	0.0	2.3	13.4	0.0	0.0	54.6	0.0	0.0	10.9	0.0	1.2	72
Second	10.5	557	0.0	0.0	0.0	0.0	1.6	0.0	1.6	15.6	0.0	4.4	51.6	0.0	0.0	11.5	0.0	1.6	59
Middle	10.1	544	0.0	0.0	1.5	1.5	0.0	0.0	1.5	9.6	0.0	6.8	50.9	0.0	0.0	9.9	0.0	0.0	55
Fourth	7.8	489	(2.2)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(2.2)	(10.6)	(0.0)	(5.6)	(72.0)	(0.0)	(6.8)	(12.1)	(0.0)	(2.2)	38
Richest	8.4	411	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(18.8)	(1.6)	(6.8)	(47.7)	(0.0)	(1.6)	(17.7)	(0.0)	(0.0)	35
Total	9.8	2,647	0.3	0.7	0.3	0.3	0.7	0.0	1.7	13.4	0.2	4.2	54.8	0.0	1.2	11.9	0.0	1.0	258

[1] MICS indicator 3.18; MDG indicator 6.8
[2] MICS indicator 3.17

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases. Figures in parentheses are based on 25–49 unweighted cases.

Table CH.15: Malaria diagnostics usage

Percentage of children age 0–59 months who had a fever in the last two weeks and who had a finger or heel stick for malaria testing, Swaziland, 2010

	Had a finger or heel stick [1]	Number of children age 0–59 months with fever in the last two weeks
Malaria endemicity		
Non-endemic	14.0	156
Endemic	13.1	102
Sex		
Male	16.7	134
Female	10.3	124
Region		
Hhohho	(2.6)	22
Manzini	15.8	93
Shiselweni	21.3	71
Lubombo	6.7	73
Area		
Urban	12.0	74
Rural	14.0	211
Age		
0–11months	15.3	52
12–23 months	21.8	51
24–35 months	15.0	65
36–47 months	(4.6)	38
48–59 months	9.0	52
Mother's education		
None	(3.1)	25
Primary	14.1	91
Secondary	15.9	83
High	17.8	47
Tertiary	0.0	12
Wealth index quintiles		
Poorest	15.9	72
Second	11.0	59
Middle	20.8	55
Fourth	(10.6)	38
Richest	(5.4)	35
Total	13.6	258

[1] MICS indicator 3.16

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

Table CH.16: Intermittent preventive treatment for malaria

Percentage of women age 15–49 years who had a live birth during the two years preceding the survey and who received IPT for malaria during pregnancy at any ANC visit, Swaziland, 2010

	Percentage of women who received ANC	Number of women who gave birth in the preceding two years	Percentage of pregnant women who took:			Number of women who had a live birth in the last two years and who received antenatal care
			Any medicine to prevent malaria at any ANC visit during pregnancy	SP/ Fansidar at least once	SP/ Fansidar two or more times [1]	
Malaria endemicity						
Non-endemic	97.3	691	8.9	2.5	1.6	673
Endemic	95.8	339	12.0	3.1	1.0	325
Region						
Hhohho	94.1	253	8.6	4.6	1.6	238
Manzini	98.5	329	7.6	0.7	0.3	324
Shiselweni	97.1	253	13.6	4.1	2.9	246
Lubombo	96.9	195	10.7	1.8	0.9	189
Area						
Urban	94.8	255	5.6	1.1	0.9	241
Rural	97.4	776	11.3	3.2	1.6	756
Education						
None	93.5	57	13.2	1.6	1.6	53
Primary	96.9	291	10.7	3.2	1.7	282
Secondary	96.7	363	10.2	3.2	1.4	352
High	97.7	257	9.5	1.9	1.3	251
Tertiary	96.0	63	3.3	1.6	0.0	61
Wealth index quintiles						
Poorest	98.4	210	12.2	4.9	2.0	207
Second	96.1	204	9.4	1.6	1.3	196
Middle	97.6	222	11.6	3.9	2.8	217
Fourth	96.0	211	9.1	0.6	0.0	203
Richest	95.6	183	6.6	2.1	0.6	175
Total	96.8	1,031	9.9	2.7	1.4	998

[1] MICS indicator 3.20

7. Water and Sanitation

The fundamental environmental elements to health, survival, growth and development are safe drinking water, sanitation and good hygiene. However, these basic necessities of life remain a luxury to many especially the poor. The health burdens due to many of the common illnesses such as diarrhoea or from waterborne diseases such as ascaris, dracunculiasis, hookworm, schistosomiasis and trachoma can be reduced drastically if majority of people have access to both safe drinking water and sanitation. In addition to its association with disease, access to safe drinking water may be particularly important for women and children, especially in rural areas, who bear the primary responsibility for carrying water, often for long distances.

The MDG goal is to reduce by half between 1990 and 2015 the proportion of people without sustainable access to safe drinking water and basic sanitation. The WFFC goal also calls for a reduction in the proportion of households without access to hygienic sanitation facilities and affordable and safe drinking water by at least one-third.

The list of indicators used in the 2010 Swaziland MICS is as follows:

Water:

- Use of improved drinking water sources[13]
- Use of adequate water treatment method
- Time to source of drinking water
- Person collecting drinking water

Sanitation:

- Use of improved sanitation facilities
- Sanitary disposal of child's faeces

Use of improved and unimproved water sources

The distribution of the population by source of drinking water is shown in Table WS.1. The population using *improved drinking water sources* are those who use any of the following types of supply: piped water (into the dwelling, yard or plot), a public tap, a borehole, a protected well and a protected spring or rainwater. Improved drinking water technologies are more likely to provide safe drinking water than those characterized as unimproved. Bottled water is considered as an improved water source only if the household is using an improved water source for other purposes, such as hand washing and cooking.[14] Overall, 67 percent of the Swazi population is using an improved source of drinking water – 91 percent in urban areas and 60 percent in rural areas. About four in five people in the Hhohho region are using an

[13] Bottled water is considered improved only when the household uses water from an improved source for cooking and personal hygiene.
[14] WHO/UNICEF, 2006, *Meeting the MDG Drinking Water and Sanitation Target: the Urban and Rural Challenge of the Decade.*

improved water source compared with the Shiselweni region that has smallest proportion of the population (49 percent) using an improved water source.

The proportion of household members using improved drinking water sources increases with the level of education of the household head. About nine in 10 household heads with tertiary education have improved water sources as compared with 56 percent with no education. The same can be said of the socio-economic status of the household in relation to improved sources of drinking water. The proportion of household members in the richest quintile who use improved drinking water (92 percent) is more than double (41 percent) that of households in the poorest quintile.

Figure WS.1 presents the percentage distribution of the different water sources used. It is worth noting that over one in five of people in Swaziland uses surface water such as rivers, streams, dams, lakes, ponds, canal or irrigation channels, which are considered as an unimproved source.

Figure WS.1 Percent distribution of household members by source of drinking water Swaziland, 2010

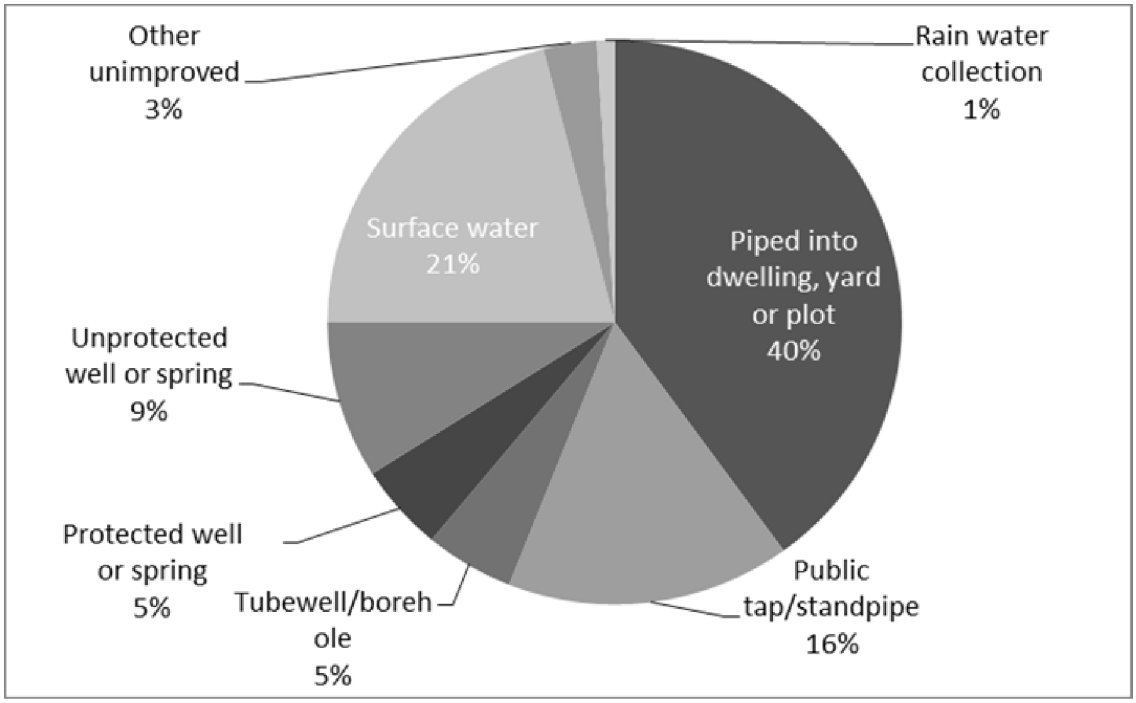


Table WS.1: Use of improved water sources

Percent distribution of household population according to main source of drinking water and percentage of household population using improved drinking water sources, Swaziland, 2010

	Main source of drinking water																			
	Improved sources									Unimproved sources							Total	Percentage using improved sources of drinking water [1]	Number of household members
	Piped water																		
	Into dwelling	Into yard/ plot	To neigh-bour	Public tap / stand-pipe	Tube well/ borehole	Protected well	Protected spring	Rain-water collec-tion	Bottled water	Un-protected well	Un-protected spring	Tanker -truck	Cart with small tank/ drum	Surface water	Other	Missing			
Region																			
Hhohho	17.1	32.9	3.6	20.4	2.9	0.5	1.7	0.2	0.0	2.3	4.8	0.6	0.4	12.4	0.2	0.1	100.0	79.3	5,457
Manzini	16.9	30.1	5.7	14.8	4.0	1.1	1.7	0.2	0.0	1.9	5.3	2.5	0.9	14.7	0.1	0.0	100.0	74.6	6,133
Shiselweni	4.0	14.4	2.5	11.5	8.0	3.0	5.1	0.7	0.0	3.9	9.0	2.8	0.4	34.6	0.3	0.0	100.0	49.1	4,975
Lubombo	14.1	12.0	0.6	17.0	8.9	3.3	4.5	2.1	0.0	4.0	4.4	2.2	1.4	25.6	0.0	0.0	100.0	62.4	4,035
Area																			
Urban	38.5	36.5	8.1	4.5	1.5	0.3	1.2	0.3	0.0	0.7	1.8	1.0	0.0	5.0	0.2	0.1	100.0	91.1	4,777
Rural	5.7	19.6	2.0	19.3	6.9	2.3	3.6	0.8	0.0	3.6	7.1	2.3	1.0	25.8	0.1	0.0	100.0	60.1	15,823
Education of household head																			
None	4.4	16.4	2.5	19.1	7.4	1.9	3.9	0.7	0.0	2.8	8.4	1.6	0.3	30.6	0.0	0.0	100.0	56.2	4,982
Primary	3.2	20.7	4.1	18.4	5.7	2.6	3.4	0.8	0.0	4.2	7.7	1.2	0.9	26.8	0.3	0.0	100.0	59.0	6,887
Secondary	10.5	32.0	3.8	15.6	5.0	2.0	3.3	0.6	0.0	2.8	5.1	1.7	0.4	17.0	0.0	0.1	100.0	72.9	3,899
High	26.5	32.9	4.4	12.5	4.4	0.5	1.9	0.8	0.1	2.0	2.1	2.6	1.3	7.9	0.0	0.0	100.0	84.1	2,717
Tertiary	55.6	21.9	0.6	5.0	4.0	0.3	1.2	0.6	0.1	0.4	0.3	5.5	0.4	3.7	0.4	0.0	100.0	89.2	2,057
Missing/DK	38.7	5.5	5.5	13.9	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.7	11.7	0.0	0.0	100.0	66.6	58
Wealth index quintiles																			
Poorest	0.3	7.5	1.5	15.8	8.0	2.5	5.3	0.2	0.0	5.5	10.1	0.3	0.6	42.4	0.0	0.0	100.0	41.1	4,127
Second	1.5	13.0	5.1	26.5	6.1	3.2	3.4	0.8	0.0	4.1	7.7	0.5	0.7	27.2	0.0	0.0	100.0	59.7	4,124
Middle	1.5	30.5	5.3	18.7	4.7	1.4	3.1	1.1	0.0	2.7	6.3	1.8	1.9	20.8	0.1	0.0	100.0	66.3	4,107
Fourth	5.8	38.2	3.5	16.0	7.4	1.9	3.2	1.1	0.0	1.8	4.7	2.3	0.4	13.2	0.4	0.1	100.0	77.0	4,123
Richest	57.3	28.4	1.5	2.4	1.9	0.0	0.4	0.4	0.1	0.3	0.6	5.1	0.1	1.4	0.1	0.0	100.0	92.4	4,119
Total	**13.3**	**23.5**	**3.4**	**15.9**	**5.6**	**1.8**	**3.1**	**0.7**	**0.0**	**2.9**	**5.9**	**2.0**	**0.7**	**21.0**	**0.1**	**0.0**	**100.0**	**67.3**	**20,600**

[1] MICS indicator 4.1; MDG indicator 7.8

Household water treatment

Table WS.2 presents the percentage distribution of the use of in-house water treatment by households and the percentage of households applying the most appropriate water treatment methods. Appropriate water treatment methods include: boiling, adding bleach or chlorine, using a water filter and using solar disinfection.[15]

Table WS.2: Household water treatment

Percentage of household population by drinking water treatment method used in the household, and for household members living in households where an unimproved drinking water source is used, the percentage who are using an appropriate treatment method, Swaziland, 2010

	Water treatment method used in the household							Number of household members	Percentage of household members in households using unimproved drinking water sources and using an appropriate water treatment method [1]	Number of household members in households using unimproved drinking water sources
	None	Boil	Add bleach / chlorine	Use water filter	Let it stand and settle	Other	Don't know			
Region										
Hhohho	91.5	4.6	3.8	0.4	0.0	0.1	0.0	5,457	15.8	1,130
Manzini	92.9	2.7	4.0	0.2	0.0	0.3	0.3	6,133	14.0	1,557
Shiselweni	86.5	2.9	10.2	0.5	0.7	0.1	0.0	4,975	16.8	2,530
Lubombo	90.3	2.3	4.5	0.1	0.2	3.4	0.0	4,035	12.6	1,518
Area										
Urban	94.1	2.3	2.8	0.3	0.0	0.6	0.4	4,777	23.9	426
Rural	89.4	3.4	6.4	0.3	0.3	0.8	0.0	15,823	14.4	6,309
Education of household head										
None	92.6	2.1	4.5	0.0	0.1	0.9	0.0	4,982	10.2	2,181
Primary	89.7	3.8	5.9	0.2	0.3	1.1	0.0	6,887	14.4	2,824
Secondary	89.7	2.9	6.7	0.0	0.2	0.9	0.0	3,899	21.0	1,059
High	91.8	2.2	5.4	0.6	0.4	0.2	0.0	2,717	21.1	431
Tertiary	87.8	5.4	4.6	1.7	0.0	0.2	0.9	2,057	28.6	222
Missing/DK	88.3	0.0	11.7	0.0	0.0	0.0	0.0	58	*	19
Wealth index quintiles										
Poorest	92.1	2.9	3.9	0.0	0.5	0.6	0.0	4,127	9.1	2,433
Second	92.2	2.4	4.4	0.2	0.1	1.2	0.0	4,124	11.6	1,661
Middle	87.9	4.2	7.0	0.3	0.2	1.5	0.0	4,107	17.2	1,382
Fourth	87.9	3.7	8.7	0.0	0.3	0.4	0.1	4,123	28.2	948
Richest	92.2	2.7	3.7	1.0	0.0	0.3	0.4	4,119	30.5	313
Total	**90.5**	**3.2**	**5.5**	**0.3**	**0.2**	**0.8**	**0.1**	**20,600**	**15.0**	**6,736**

[1] MICS indicator 4.2

[15] WHO and UNICEF, 2009, *Meeting the MDG Drinking water and Sanitation Target: the urban and rural challenge of the decade.*

The results show that 15 percent of all households using unimproved drinking water sources apply appropriate treatment method to the water. A total of 91 percent of all households do not apply any appropriate water treatment method to their drinking water. Six percent of households add bleach or chlorine; three percent boil and the remaining either use water filters, let the water stand and settle or apply other water treatment methods.

There are no marked regional differences in the use of appropriate water treatment method by households using unimproved water drinking sources. The use of appropriate water treatment varies by the educational level of the household head, with one in ten applying appropriate water treatments in households whose head has no education compared with 29 percent of households where the head has a tertiary education. The use of appropriate water treatment also increases with the level of household wealth, and the percentage using any appropriate water treatment method increases from nine percent among the poorest households to 31 percent among the richest households.

Time to source water

The amount of time it takes to obtain water is presented in Table WS.3. The result presented refers only to one round-trip from home to drinking water source. Information on the number of trips made in one day was not collected. For the household population using improved water sources, 42 percent have water on their premises. For 15 percent of the population using improved water sources, it takes less than 30 minutes to go to the water source and bring water back home, while 11 percent take more than 30 minutes to do the same activity.

Among the household population using unimproved water sources, only three percent have water on premises. For 12 percent of the population using unimproved water sources, it takes less than 30 minutes to get to the water source and bring water back home, while 18 percent of the population spend more than 30 minutes for this purpose.

Table WS.3: Time to source of drinking water

Percent distribution of household population according to time to go to source of drinking water, get water and return, for users of improved and unimproved drinking water sources, Swaziland, 2010

	Time to source of drinking water									
	Users of improved drinking water sources				Users of unimproved drinking water sources				Total	Number of household members
	Water on premises	Less than 30 minutes	30 minutes or more	Missing /DK	Water on premises	Less than 30 minutes	30 minutes or more	Missing /DK		
Region										
Hhohho	54.7	18.6	5.8	0.1	0.7	8.7	11.2	0.1	100.0	5,457
Manzini	54.4	12.0	8.2	0.0	2.4	11.7	11.2	0.1	100.0	6,133
Shiselweni	22.8	12.6	13.7	0.1	3.2	17.8	29.6	0.2	100.0	4,975
Lubombo	29.4	16.4	16.6	0.0	4.2	9.6	23.8	0.1	100.0	4,035
Area										
Urban	84.2	4.8	2.0	0.0	2.3	3.2	3.3	0.1	100.0	4,777
Rural	29.2	17.7	13.1	0.1	2.6	14.6	22.6	0.1	100.0	15,823
Education of household head										
None	24.8	17.6	13.7	0.1	2.3	16.1	25.1	0.3	100.0	4,982
Primary	29.7	16.6	12.7	0.0	1.7	15.9	23.3	0.0	100.0	6,887
Secondary	47.8	15.9	9.1	0.0	2.5	9.2	15.3	0.1	100.0	3,899
High	65.6	10.0	8.6	0.0	2.4	5.7	7.6	0.2	100.0	2,717
Tertiary	81.6	5.9	1.3	0.4	5.7	2.5	2.6	0.0	100.0	2,057
Missing/DK	49.6	13.9	3.1	0.0	0.0	0.0	33.4	0.0	100.0	58
Wealth index quintiles										
Poorest	9.8	15.2	15.9	0.1	1.2	23.0	34.4	0.4	100.0	4,127
Second	21.0	22.9	15.9	0.0	0.7	16.1	23.5	0.0	100.0	4,124
Middle	38.9	17.1	10.3	0.0	2.2	12.0	19.4	0.0	100.0	4,107
Fourth	50.6	16.5	9.9	0.0	3.8	7.1	11.9	0.1	100.0	4,123
Richest	89.5	2.0	0.7	0.2	4.5	1.6	1.3	0.1	100.0	4,119
Total	**42.0**	**14.7**	**10.5**	**0.1**	**2.5**	**12.0**	**18.1**	**0.1**	**100.0**	**20,600**

Person collecting water

Table WS.4 shows the distribution of households according to the person who usually collects water used in the household. This is to ascertain whether fetching drinking water is the responsibility of a particular sex or age group. The results show that women age 15 years or over are more likely to be responsible for fetching drinking water than men and children under 15 years when the water is not on the premises. In 69 percent of all households where water is not on premises, women age 15 years and over collect household water alone compared with one in five of men age 15 years and over. Children (both male and female under 15 years) form only nine percent of household members who collect water (Figure WS.2).

For households without water on their premises, the percentage distribution of person who usually collects water in the households varies by region. Across the four regions, Lubombo has a somewhat higher proportion of women age 15 years and over who collect water at 73 percent, compared with other regions (66-69 percent). Female children under 15 years are more likely to be responsible for collecting water if she resides in Shiselweni compared to other regions (8 percent vs. 4-5 percent). A higher proportion of men in Hhohho (24 percent) have the responsibility of collecting water compared with 17 percent for Lubombo. There is also a marked variation in the distribution of persons collecting water according to socio-economic status of the household. Women in 73 percent of households in the poorest wealth quintile collect water for their households compared with about half of women in households in the richest wealth quintile.

Figure WS.2: Percentage distribution of person who usually collects water in the household, Swaziland, 2010

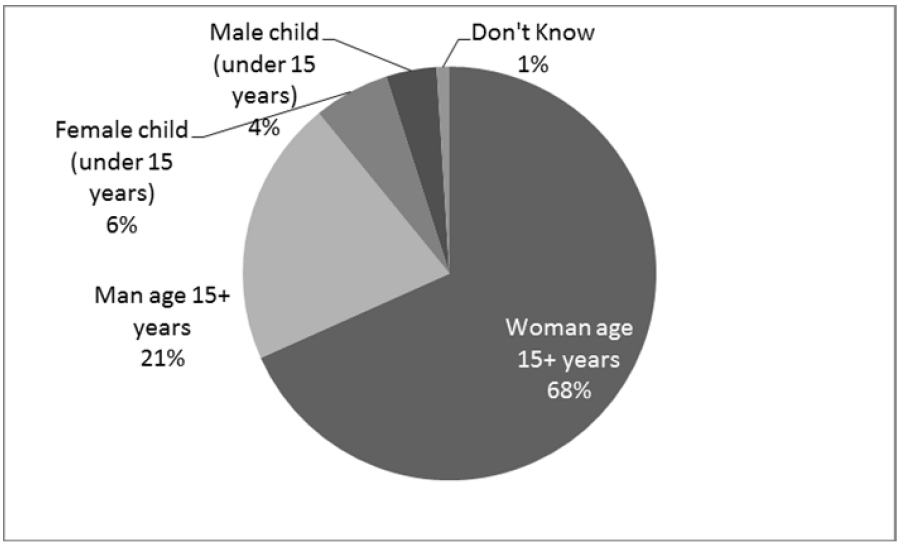


Table WS.4: Person collecting water

Percentage of households without drinking water on premises, and percent distribution of households without drinking water on premises according to the person usually collecting drinking water used in the household, Swaziland, 2010

	Percentage of households without drinking water on premises	Number of households	Person usually collecting drinking water							Number of households without drinking water on premises
			Woman age 15+ years	Man age 15+ years	Female child (under 15 years)	Male child (under 15 years)	Don't Know	Missing	Total	
Region										
Hhohho	40.0	1,261	66.0	24.2	3.5	4.5	0.3	1.4	100.0	505
Manzini	31.9	1,624	66.4	23.5	5.4	4.4	0.3	0.0	100.0	518
Shiselweni	68.8	969	68.7	20.3	8.0	2.3	0.0	0.6	100.0	667
Lubombo	53.7	979	73.3	17.2	4.9	3.8	0.3	0.5	100.0	526
Area										
Urban	12.5	1,680	57.3	38.2	2.0	2.1	0.0	0.3	100.0	211
Rural	63.6	3,154	69.9	19.4	6.0	3.8	0.2	0.7	100.0	2,005
Education of household head										
None	69.3	950	67.6	18.4	8.4	4.4	0.2	1.1	100.0	659
Primary	60.4	1,439	72.1	18.4	6.3	2.6	0.4	0.3	100.0	869
Secondary	41.1	1,005	69.6	24.9	2.0	2.6	0.0	1.0	100.0	413
High	25.3	842	56.0	34.1	3.0	7.0	0.0	0.0	100.0	213
Tertiary	10.0	589	69.0	22.0	1.6	7.3	0.0	0.0	100.0	59
Missing/DK	*	10	*	*	*	*	*	*	*	4
Wealth index quintiles										
Poorest	89.7	825	72.6	15.2	7.8	3.6	0.2	0.6	100.0	740
Second	75.5	785	68.2	21.8	6.7	2.4	0.5	0.4	100.0	593
Middle	50.9	923	67.3	25.4	3.7	3.1	0.0	0.5	100.0	470
Fourth	33.7	1,025	66.8	24.0	2.4	5.7	0.0	1.2	100.0	345
Richest	5.3	1,276	49.1	39.2	3.1	8.7	0.0	0.0	100.0	68
Total	**45.8**	**4,834**	**68.7**	**21.2**	**5.6**	**3.7**	**0.2**	**0.6**	**100.0**	**2,216**

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases.

Types of sanitation facilities

The distribution of the population by type of sanitation facility is seen in Table WS.5. Improved sanitation facilities refer to: (1) flush or pour-flush to a piped water system, a septic tank or pit latrine; (2) a ventilated improved pit latrine; and (3) a pit latrine with a slab. Unimproved sanitation refers to: (1) flush or pour-flush to elsewhere; (2) a pit latrine without a slab or an open pit; (3) a bucket; (4) other; and (5) open defecation (no facilities or bush or field).

Table WS.5 shows that a pit latrine with a slab is the dominant type of improved sanitation facility in Swaziland. The distribution by region shows that the distribution of household population that uses pit latrine with slab is approximately 50 percent for all regions, with the exception of Lubombo which is 29 percent. In Lubombo, after pit latrines with a slab, open defecation is the second most common type of sanitation facility with 27 percent. The region also has a higher percentage of the population using pit latrines without a slab (10 percent vs. 5–6 percent for other regions). The distribution of coverage by type

areas and 73 percent in rural areas. The six percent with unimproved sanitation facilities in urban areas may be attributable to the presence of an informal settlement within the urban boundary.

The distribution of sanitation facility by wealth quintile shows a marked disparity between households in the richest quintile and those in the poorest quintile. Ninety-nine percent of households in the richest quintile use improved sanitation compared with 42 percent of households in the poorest quintile. The table further shows that the education level of the household head has an influence on the type of sanitation facility used. Those with a tertiary-educated head show a 97 percent use of improved sanitation compared with 62 percent for uneducated heads of households.

Use and sharing of sanitation facilities

Table WS.6 shows the types of sanitation facilities and the percent distribution of the household population according to type of toilet facility used by households in Swaziland in 2010. The table shows that 54 percent of the population uses an improved sanitation facility, which is not shared. Use of a shared facility is more common among households using an improved sanitation facility: 16 percent of the population using an improved sanitation facility share with five households or less, while eight percent share with more than five households. Open defecation is again common, with 15 percent of the population using no facility, bush or field. Use of a public facility is minimal for both populations using improved and unimproved sanitation facilities (0.6 and 0.1 percent, respectively).

The urban and rural differential for not-shared facilities is marginal, with 55 percent for urban compared with 50 percent for rural. Open defecation is markedly higher in rural areas at 20 percent compared with one percent for urban areas. The wealth quintile of the households has an influence on the use and sharing of a sanitation facility. The use of improved unshared sanitation facilities for the richest quintile is 72 percent and is more than double the 32 percent for the poorest. Open defecation is practiced mainly by the poorest quintile at 47 percent compared with the richest quintile at 0.1 percent. The education of the household head has a bearing on the type of sanitation used by its household members. For households where the head has tertiary education three in four use improved not-shared sanitation facilities compared with one in two for households where the household head has no education. Open defecation is practiced in 30 percent of household where heads of households have no education.

Table WS.5: Types of sanitation facilities

Percent distribution of household population according to type of toilet facility used by the household, Swaziland, 2010

	Type of toilet facility used by household													
	Improved sanitation facility						Unimproved sanitation facility							
	Flush/ pour to:													
	Piped sewer system	Septic tank	Pit latrine	Unknown place /not sure /DK where	Ventilated Improved Pit latrine (VIP)	Pit latrine with slab	Flush to somewh ere else	Pit latrine without slab / open pit	Bucket	Other	Missing	Open defecation (no facility, bush, field)	Total	Number of household members
Region														
Hhohho	10.4	5.6	0.1	0.3	14.0	50.0	0.0	6.3	0.0	0.0	0.2	13.2	100.0	5,457
Manzini	14.0	7.0	0.1	0.1	16.1	49.1	0.1	5.0	0.0	0.1	0.0	8.4	100.0	6,133
Shiselweni	2.7	1.1	0.0	0.0	24.5	49.8	0.0	4.7	0.0	0.0	0.0	17.1	100.0	4,975
Lubombo	14.0	1.5	0.0	0.5	17.2	29.4	0.0	10.4	0.0	0.0	0.0	27.1	100.0	4,035
Area														
Urban	36.1	9.1	0.1	0.9	7.8	40.1	0.2	4.1	0.0	0.1	0.2	1.3	100.0	4,777
Rural	2.6	2.6	0.0	0.0	20.8	47.3	0.0	7.0	0.0	0.0	0.0	19.7	100.0	15,823
Education of household head														
None	1.9	1.3	0.0	0.0	17.3	41.6	0.0	7.8	0.0	0.0	0.0	30.2	100.0	4,982
Primary	3.0	1.0	0.0	0.1	18.2	51.1	0.0	9.1	0.0	0.1	0.0	17.4	100.0	6,887
Secondary	8.4	3.1	0.2	0.2	19.4	54.7	0.0	4.3	0.0	0.0	0.1	9.6	100.0	3,899
High	23.8	6.1	0.0	0.3	17.3	46.0	0.0	3.3	0.0	0.0	0.2	3.0	100.0	2,717
Tertiary	41.4	20.3	0.0	0.9	15.2	19.4	0.4	1.5	0.1	0.0	0.2	0.6	100.0	2,057
Missing/DK	0.0	16.4	0.0	0.0	19.4	38.8	0.0	.0	0.0	0.0	0.0	25.4	100.0	58
Wealth index quintiles														
Poorest	0.0	0.0	0.0	0.0	8.6	33.7	0.0	11.2	0.0	0.0	0.0	46.5	100.0	4,127
Second	0.0	0.0	0.0	0.0	17.3	51.3	0.0	9.2	0.0	0.1	0.0	22.1	100.0	4,124
Middle	0.9	0.3	0.2	0.0	23.8	60.8	0.0	6.5	0.0	0.0	0.0	7.5	100.0	4,107
Fourth	4.9	1.8	0.0	0.1	29.0	59.1	0.0	4.0	0.0	0.0	0.1	0.9	100.0	4,123
Richest	45.8	18.5	0.0	1.0	10.2	23.2	0.2	.7	0.1	0.0	0.2	0.1	100.0	4,119
Total	**10.3**	**4.1**	**0.0**	**0.2**	**17.8**	**45.6**	**0.0**	**6.3**	**0.0**	**0.0**	**0.1**	**15.4**	**100.0**	**20,600**

Table WS.6: Use and sharing of sanitation facilities

Percent distribution of household population by use of private and public sanitation facilities and use of shared facilities, by users of improved and unimproved sanitation facilities, Swaziland, 2010

	Improved Sanitation Facility					Unimproved Sanitation Facility				Open defecation (no facility, bush, field)	Total	Number of household members
	Not shared [1]	Public facility	Five households or less	More than five households	Missing/DK	Not shared	Public facility	Five households or less	More than five households			
Region												
Hhohho	54.9	0.5	18.0	6.7	0.3	5.1	0.0	1.0	0.3	13.2	100.0	5,457
Manzini	52.4	0.8	16.0	17.2	0.0	2.9	0.1	1.5	0.7	8.4	100.0	6,133
Shiselweni	58.9	0.2	16.6	2.5	0.0	4.0	0.1	0.6	0.1	17.1	100.0	4,975
Lubombo	48.2	0.8	10.5	3.0	0.0	8.6	0.1	1.6	0.2	27.1	100.0	4,035
Area												
Urban	50.7	0.8	16.6	26.0	0.0	2.0	0.0	1.4	1.2	1.3	100.0	4,777
Rural	54.7	0.5	15.3	2.7	0.1	5.7	0.1	1.1	0.1	19.7	100.0	15,823
Education of household head												
None	44.6	0.4	13.8	3.3	0.0	6.8	0.1	0.7	0.2	30.2	100.0	4,982
Primary	51.7	0.4	15.1	6.2	0.0	6.7	0.1	2.0	0.4	17.4	100.0	6,887
Secondary	53.4	0.7	20.4	11.3	0.2	3.0	0.0	1.0	0.5	9.6	100.0	3,899
High	59.4	0.7	16.3	16.9	0.3	2.3	0.0	0.8	0.4	3.0	100.0	2,717
Tertiary	76.0	0.8	12.3	8.1	0.0	1.1	0.0	0.8	0.2	0.6	100.0	2,057
Missing/DK	69.2	0.0	5.5	0.0	0.0	0.0	0.0	0.0	0.0	25.4	100.0	58
Wealth index quintiles												
Poorest	31.8	0.1	9.8	0.5	0.0	9.0	0.3	1.8	0.2	46.5	100.0	4,127
Second	49.9	0.4	16.3	2.0	0.0	6.9	0.1	2.0	0.3	22.1	100.0	4,124
Middle	54.2	0.3	21.9	9.4	0.2	4.9	0.0	1.1	0.5	7.5	100.0	4,107
Fourth	61.5	1.4	17.7	14.2	0.2	2.8	0.0	0.8	0.5	0.9	100.0	4,123
Richest	71.5	0.5	12.5	14.2	0.0	0.8	0.0	0.2	0.2	0.1	100.0	4,119
Total	**53.8**	**0.6**	**15.6**	**8.1**	**0.1**	**4.9**	**0.1**	**1.2**	**0.3**	**15.4**	**100.0**	**20,600**

[1] MICS indicator 4.3; MDG indicator 7.9

Disposal of child's faeces

Percent distribution of children age 0–2 years according to place of disposal of child's faeces, and the percentage of children age 0–2 years whose stools were disposed of safely the last time the child passed stools is shown in Table WS.7.

The table shows that 51 percent of the households using unimproved sanitation facilities put or rinse children's faeces into a toilet or latrine and 13 percent throw the faeces into the garbage (solid waste). Nine percent of households leave children's faeces in the open, while seven percent rinse them into drain or ditch and eight percent bury them.

Lubombo has the lowest rate of proper disposal of children's faeces, with 45 percent of households using unimproved sanitation facilities practicing disposal of children faeces into toilet or latrine. The proportion of households practicing proper disposal is 65 percent for Shiselweni and 64 percent for Hhohho and Manzini. The Lubombo also has a higher percentage of households leaving children's faeces in the open or burial (13 percent and 16 percent, respectively). Proper disposal of children's faeces is slightly higher among rural households using unimproved sanitation facilities compared with their urban counterparts (62 percent vs. 57 percent).

The percentage of households using unimproved sanitation facilities that practice proper disposal of children's faeces is highest among households where mothers have secondary or high school education compared with those with other levels of education. For household wealth, the percentage practicing proper disposal of children's faeces is highest among households in the fourth wealth quintile.

Table WS.7: Disposal of child's faeces

Percent distribution of children age 0–2 years according to place of disposal of child's faeces, and the percentage of children age 0–2 years whose stools were disposed of safely the last time the child passed stools, Swaziland, 2010

	Place of disposal of child's faeces									Total	Percentage of children whose stools were disposed of safely [1]	Number of children age 0–2 years
	Child used toilet / latrine	Put / rinsed into toilet or latrine	Put / rinsed into drain or ditch	Thrown into garbage (solid waste)	Buried	Left in the open	Other	DK	Missing			
Type of sanitation facility in dwelling												
Improved	11.3	60.0	5.4	11.7	4.6	4.2	1.3	0.3	1.2	100.0	71.3	1211
Unimproved	12.2	55.8	7.5	4.3	8.1	8.0	2.5	1.6	0.0	100.0	68.0	97
Open defecation	4.1	5.2	11.3	21.0	25.5	30.1	1.8	0.3	0.7	100.0	9.3	268
Region												
Hhohho	13.8	50.3	6.3	9.3	9.3	9.5	0.9	0.4	0.1	100.0	64.1	396
Manzini	11.6	52.2	6.4	16.7	3.6	5.3	2.3	0.7	1.2	100.0	63.9	485
Shiselweni	5.1	60.1	4.3	11.0	7.1	9.2	1.2	0.1	2.0	100.0	65.2	395
Lubombo	9.5	35.0	10.1	13.5	16.4	13.0	1.3	0.3	0.8	100.0	44.6	300
Area												
Urban	11.4	45.3	8.6	25.5	2.7	3.2	1.2	0.4	1.5	100.0	56.8	335
Rural	9.8	51.8	6.0	9.4	9.8	10.3	1.5	0.4	0.9	100.0	61.6	1,241
Mother's education												
None	10.0	33.7	8.8	11.1	17.8	16.6	1.5	0.0	0.6	100.0	43.6	146
Primary	10.1	45.1	8.4	11.3	10.7	11.4	2.0	0.3	0.7	100.0	55.2	513
Secondary	9.2	57.2	5.7	10.4	7.3	7.1	1.6	0.3	1.3	100.0	66.4	487
High	11.9	59.4	4.2	12.9	3.6	5.5	0.9	0.9	0.8	100.0	71.2	336
Tertiary	9.2	38.9	6.1	35.8	3.0	3.0	0.5	0.5	3.0	100.0	48.1	95
Wealth index quintiles												
Poorest	7.3	29.2	10.2	12.0	17.8	19.9	2.3	0.2	1.1	100.0	36.5	343
Second	11.7	56.4	3.9	9.0	8.5	8.4	1.0	0.0	1.1	100.0	68.1	338
Middle	8.4	57.3	7.3	9.5	7.2	7.4	1.5	0.4	0.9	100.0	65.7	335
Fourth	10.3	65.8	3.9	8.1	3.7	5.2	1.6	0.9	0.5	100.0	76.1	305
Richest	13.8	44.0	7.4	28.9	2.4	0.5	0.7	0.6	1.8	100.0	57.7	255
Total	**10.1**	**50.5**	**6.6**	**12.8**	**8.3**	**8.8**	**1.5**	**0.4**	**1.0**	**100.0**	**60.6**	**1,576**

[1] MICS indicator 4.4

Drinking water and sanitation ladders

A service ladder is a concept developed by the WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation to allow analysis of differences in the quality of drinking water and sanitation and rank the quality in a three rung 'ladder' for water and a four rung ladder for sanitation.[16] For sanitation, this gives an understanding of the proportion of the population with no sanitation facilities at all, of those reliant on technologies defined by JMP as "unimproved," of those sharing sanitation facilities of otherwise acceptable technology, and those using "improved" sanitation facilities.

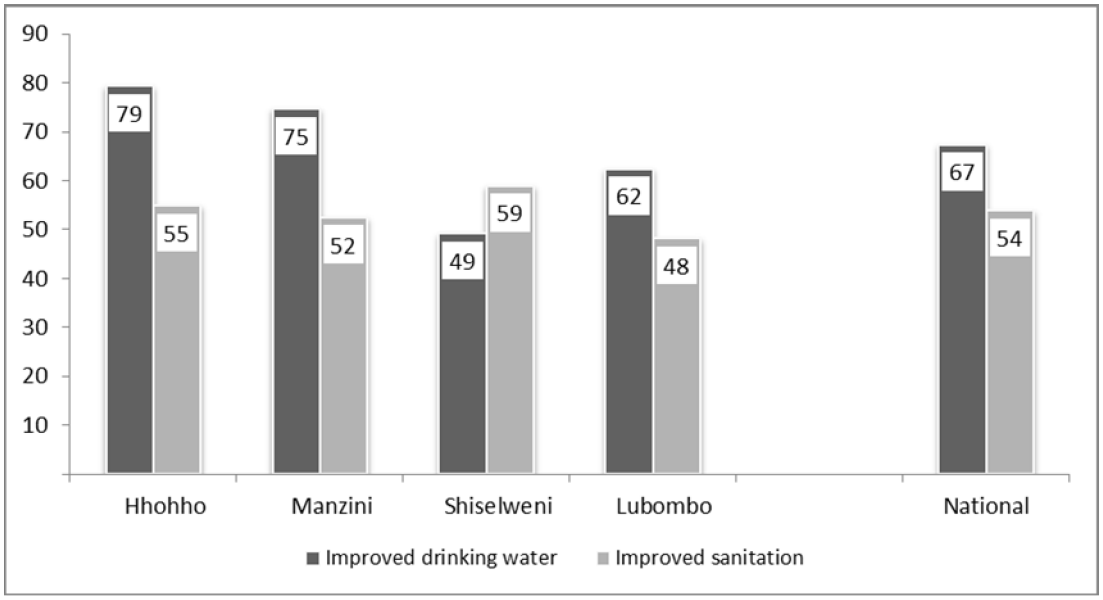
Table WS.8 presents the percentages of the household population by drinking water and sanitation ladders. The table also shows the percentage of household members using improved sources of drinking water and sanitary means of excreta disposal. In the 2010 Swaziland MICS, 37 percent of the population uses an improved drinking water from a source piped into the dwelling, pilot or yard, while 31 percent from other improved sources. The percentage of the population that uses the lowest level on the water ladder (unimproved drinking water) is 33 percent. For sanitation, nationally 54 percent of the population use improved sanitation facilities whereas 24 percent use shared improved facilities. Approximately seven percent of the population use unimproved facilities (the second lowest level on the sanitation ladder) and 15 percent use open defecation (the lowest level on the sanitation ladder).

Disaggregation of the results reveal marked regional disparity in the drinking water and sanitation ladders: the percentage using unimproved drinking water is significantly higher in Shiselweni (51 percent), followed by Lubombo (38 percent). Hhohho and Manzini have a substantially higher percentage of the population using improved drinking water form a source piped into the dwelling, plot or yard. Urban and rural disparities are also marked, with 75 percent of the urban population using improved drinking water from a source piped into the dwelling, plot or yard compared with 25 percent for the rural population, and 40 percent of the rural population using unimproved drinking water compared with nine percent for the urban population. For sanitation, the percentage of the population using improved sanitation facilities is the highest in Shiselweni with 59 percent and the lowest in Lubombo with 48 percent. The rural population has a slightly higher percentage using improved sanitation facilities compared with the urban population (55 percent vs. 51 percent). The percentage of the population using shared improved facilities is the highest in the Manzini region, with 34 percent, and lowest in the Lubombo region with 14 percent. The urban population has a much higher percentage using shared improved facilities compared with the rural population (43 percent vs. 19 percent). As mentioned previously, the lowest service level (i.e., open defecation) is used most frequently by the population in Lubombo (27 percent), followed by Shiselweni (17 percent). Twenty percent of rural households use open defecation compared with only one percent of households in urban areas.

Education of household head and household wealth are both positively related to the percentages of the population using the highest level on the water ladder and are negatively related to the percentage using the lowest level on the water ladder. Similar observations can be made for the sanitation ladder: education of household head and household wealth are positively associated with the percentages of the population using the highest level on the sanitation ladder and negatively associated with the percentages using the lowest level on the sanitation ladder.

[16] WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation, MDG assessment report.

Figure WS.3: Percentage of households using both improved drinking water sources and improved sanitation facilities, Swaziland, 2010



Hand washing

Hand washing with water and soap is the most cost-effective health intervention to reduce both the incidence of diarrhoea and pneumonia in children under five. It is most effective when done using water and soap after visiting a toilet or cleaning a child, before eating or handling food and, before feeding a child. Monitoring correct hand washing behaviour at these critical times is challenging. A reliable alternative to observations or self-reported behaviour is assessing the likelihood that correct hand washing behaviour takes place by observing if a household has a specific place where people most often wash their hands and observing if water and soap (or other local cleansing materials) are present at a specific place for hand washing.

Table WS.9 shows the availability of water and soap in households where a place for hand washing observed and percent distribution of households by availability of water and soap at a place for hand washing. The presence of both water and soap is an essential enabling agent for the practice of hand washing and is associated with reduced rates of diarrhoea.[17] The shortage of either water or soap reduces the effectiveness of hand washing to lower rates of diarrhoea.[18]

Hand washing places were observed in 74 percent of the households sampled. Further assessment of these households shows that 47 percent have both water and soap available, 25 percent have water and no soap, six percent have soap but no water and 22 percent do not have water and soap available for hand washing. In a large percentage of the households (21 percent) a place for hand washing was not observed, because the facility was located outside the household. The table further shows that Shiselweni has the lowest observed hand washing places with both water and soap available, at 33 percent, and also has the highest percentage of households with hand washing places with no water, at 29 percent. Manzini, at 13 percent, is the only region below 20 percent of households without water

[17] USAID, Water and Sanitation Indicators Measurement Guide.
[18] UNICEF Swaziland, 2006. *Report on the Assessment of Neighborhood Care Points*.

and soap and has the highest percentage of households observed with both water and soap available for hand washing at 54 percent.

Availability of soap

Table WS.10 shows availability of soap and percent distribution of households by availability of soap in the dwelling. The table also shows the availability of soap in households where a place for hand washing was observed and in households where a place for hand washing was not observed. The table further shows that in the households where a place for hand washing was observed 92 percent had soap. For the households where no place for hand washing was observed, 79 percent showed that they had soap. All in all, 89 percent of households have soap anywhere in the dwelling.

Disaggregated results show that the wealth of the household has a bearing on the availability of soap. Among all households, 70 percent from the poorest households had soap anywhere in the dwelling, compared to 99 percent for the richest households. The level of education of the household head is also positively related to the availability of soap. Among households where the household head has no education, 79 percent had soap, while 98 percent of households where the head has tertiary education had soap anywhere in the dwelling.

Table WS.8: Drinking water and sanitation ladders

Percentage of household population by drinking water and sanitation ladders, Swaziland, 2010

	Percentage of household population:										Number of household members
	Improved drinking water [1]		Unimproved drinking water	Total	Using improved sanitation facilities [2]	Unimproved sanitation			Total	Improved drinking water sources and improved sanitation	
	Piped into dwelling, plot or yard	Other improved				Shared improved facilities	Unimproved facilities	Open defecation			
Region											
Hhohho	50.0	29.3	20.7	100.0	54.9	25.4	6.5	13.2	100.0	43.7	5,457
Manzini	47.1	27.5	25.4	100.0	52.4	34.0	5.2	8.4	100.0	39.4	6,133
Shiselweni	18.4	30.8	50.9	100.0	58.9	19.3	4.8	17.1	100.0	29.3	4,975
Lubombo	26.1	36.2	37.6	100.0	48.2	14.4	10.4	27.1	100.0	35.6	4,035
Area											
Urban	75.1	15.9	8.9	100.0	50.7	43.4	4.6	1.3	100.0	47.3	4,777
Rural	25.2	34.9	39.9	100.0	54.7	18.6	7.0	19.7	100.0	34.4	15,823
Education of household head											
None	20.8	35.4	43.8	100.0	44.6	17.5	7.8	30.2	100.0	26.1	4,982
Primary	24.0	35.0	41.0	100.0	51.7	21.7	9.2	17.4	100.0	30.4	6,887
Secondary	42.5	30.4	27.1	100.0	53.4	32.6	4.5	9.6	100.0	39.1	3,899
High	59.6	24.6	15.9	100.0	59.4	34.2	3.4	3.0	100.0	49.5	2,717
Tertiary	77.6	11.6	10.8	100.0	76.0	21.2	2.2	0.6	100.0	68.7	2,057
Missing/DK	44.1	22.5	33.4	100.0	69.2	5.5	0.0	25.4	100.0	35.8	58
Wealth index quintiles											
Poorest	7.8	33.3	58.9	100.0	31.8	10.4	11.2	46.5	100.0	14.9	4,127
Second	14.6	45.2	40.3	100.0	49.9	18.7	9.3	22.1	100.0	28.2	4,124
Middle	32.0	34.4	33.7	100.0	54.2	31.8	6.5	7.5	100.0	33.9	4,107
Fourth	44.0	33.0	23.0	100.0	61.5	33.5	4.1	0.9	100.0	44.7	4,123
Richest	85.8	6.6	7.6	100.0	71.5	27.2	1.2	0.1	100.0	65.2	4,119
Total	**36.8**	**30.5**	**32.7**	**100.0**	**53.8**	**24.3**	**6.5**	**15.4**	**100.0**	**37.4**	**20,600**

[1] MICS indicator 4.1; MDG indicator 7.8
[2] MICS indicator 4.3; MDG indicator 7.9

Table WS.9: Water and soap at place for hand washing

Percentage of households where place for hand washing was observed and percent distribution of households by availability of water and soap at place for hand washing, Swaziland, 2010

	Percentage of households where place for hand washing was observed	Percentage of households where place for hand washing was not observed				Total	Number of households	Percent distribution of households where place for hand washing was observed, where:					Total	Number of households where place for hand washing was observed
		Not in dwelling/plot/ yard	No permission to see	Other reasons	Missing			Water and soap are available [1]	Water is available, soap is not available	Water is not available, soap is available	Water and soap are not available	Missing		
Region														
Hhohho	69.8	26.8	1.7	1.8	0.0	100.0	1,261	49.7	17.1	5.7	27.0	0.4	100.0	880
Manzini	75.9	14.4	7.1	2.6	0.0	100.0	1,624	54.2	23.6	9.4	12.8	0.0	100.0	1,233
Shiselweni	81.9	11.3	4.0	2.6	0.1	100.0	969	32.8	35.2	2.9	28.8	0.2	100.0	794
Lubombo	67.4	29.6	0.6	2.4	0.1	100.0	979	46.9	26.8	4.1	21.8	0.4	100.0	660
Area														
Urban	78.8	15.8	3.2	2.2	0.0	100.0	1,680	64.0	20.7	6.7	8.5	0.1	100.0	1,323
Rural	71.1	22.4	4.0	2.4	0.1	100.0	3,154	36.9	27.8	5.7	29.2	0.3	100.0	2,244
Education of household head														
None	65.4	27.4	3.7	3.4	0.1	100.0	950	31.8	23.7	6.0	38.1	0.4	100.0	622
Primary	70.4	23.6	3.8	2.1	0.1	100.0	1,439	35.6	29.3	6.3	28.3	0.5	100.0	1,013
Secondary	74.1	19.1	4.9	1.8	0.1	100.0	1,005	45.1	28.6	7.6	18.7	0.0	100.0	745
High	78.4	16.2	2.8	2.7	0.0	100.0	842	60.0	22.2	6.3	11.5	0.0	100.0	659
Tertiary	88.8	6.7	2.8	1.7	0.0	100.0	589	73.5	17.7	3.0	5.7	0.2	100.0	523
Missing/DK	*	*	*	*	*	*	10	*	*	*	*	*	*	5
Wealth index quintiles														
Poorest	61.0	32.4	3.3	3.3	0.0	100.0	825	20.0	28.3	4.2	47.0	0.5	100.0	503
Second	65.6	26.1	5.8	2.5	0.0	100.0	785	28.5	24.8	8.3	37.4	0.9	100.0	516
Middle	70.3	22.0	4.7	2.8	0.2	100.0	923	39.7	25.5	8.4	26.5	0.0	100.0	649
Fourth	74.9	20.1	2.7	2.3	0.1	100.0	1,025	44.1	32.9	8.4	14.5	0.1	100.0	768
Richest	88.7	7.1	2.9	1.3	0.0	100.0	1,276	73.5	18.5	2.8	5.0	0.1	100.0	1,132
Total	**73.8**	**20.1**	**3.7**	**2.3**	**0.1**	**100.0**	**4,834**	**47.0**	**25.2**	**6.0**	**21.6**	**0.2**	**100.0**	**3,567**

[1] MICS indicator 4.5

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases.

Table WS.10: Availability of soap

Percent distribution of households by availability of soap in the dwelling, Swaziland, 2010

	Place for hand washing observed						Place for hand washing not observed						
	Soap observed	Soap shown	No soap in household	Not able/ Does not want to show soap	Missing	Total	Soap shown	No soap in household	Not able/ Does not want to show soap	Missing	Total	Percentage of households with soap anywhere in the dwelling [1]	Number of households
Region													
Hhohho	55.4	36.0	7.8	0.4	0.4	100.0	82.8	16.1	1.0	0.0	100.0	88.8	1,261
Manzini	63.6	32.8	3.6	0.1	0.0	100.0	84.1	15.0	1.0	0.0	100.0	93.4	1,624
Shiselweni	35.7	52.8	11.2	0.0	0.2	100.0	74.0	26.0	0.0	0.0	100.0	85.9	969
Lubombo	51.0	40.1	8.3	0.3	0.4	100.0	70.3	28.9	0.3	0.6	100.0	84.3	979
Area													
Urban	70.7	27.1	2.1	0.1	0.1	100.0	86.2	12.9	0.9	0.0	100.0	95.3	1,680
Rural	42.6	46.6	10.2	0.2	0.3	100.0	75.9	23.3	0.6	0.2	100.0	85.4	3,154
Education of household head													
None	37.8	48.4	12.8	0.7	0.4	100.0	66.3	32.6	1.1	0.0	100.0	79.3	950
Primary	41.9	46.4	11.1	0.1	0.5	100.0	76.5	23.3	0.0	0.2	100.0	84.8	1,439
Secondary	52.8	41.7	5.4	0.1	0.0	100.0	87.5	11.5	1.0	0.0	100.0	92.7	1,005
High	66.3	31.1	2.6	0.0	0.0	100.0	89.3	10.0	0.6	0.0	100.0	95.6	842
Tertiary	76.5	22.0	1.3	0.0	0.2	100.0	92.6	5.7	1.7	0.0	100.0	97.8	589
Missing/DK	*	*	*	*	*	*	*	*	*	*	*	*	10
Wealth index quintiles													
Poorest	24.2	52.2	22.8	0.2	0.5	100.0	59.6	39.5	0.7	0.3	100.0	69.9	825
Second	36.9	50.0	11.6	0.6	0.9	100.0	83.4	15.7	0.9	0.0	100.0	85.7	785
Middle	48.1	46.3	5.3	0.3	0.0	100.0	80.2	18.5	1.0	0.3	100.0	90.2	923
Fourth	52.5	42.6	4.9	0.0	0.1	100.0	87.9	12.1	0.0	0.0	100.0	93.3	1,025
Richest	76.4	22.7	0.9	0.0	0.1	100.0	94.6	4.6	0.8	0.0	100.0	98.6	1,276
Total	**53.0**	**39.4**	**7.2**	**0.2**	**0.2**	**100.0**	**78.8**	**20.4**	**0.7**	**0.1**	**100.0**	**88.8**	**4,834**

[1] MICS indicator 4.6

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases.

8. Reproductive Health

Swaziland's plan for the provision of reproductive health services draws from a comprehensive framework including the International Conference on Population and Development (ICPD), the Beijing and Maputo Programmes of Action, the Poverty Reduction Strategy and Action Plan (PRSAP), the National Health Policy, and most importantly the National Sexual Reproductive Health (SRH) Policy. The key objectives of the SRH Policy are the following:

- Prevention of unintended pregnancies in all women including adolescents,
- Reduction of morbidity and mortality due to complications of abortion in all women including adolescents,
- Reduction of maternal and perinatal morbidity and mortality,
- Reduction of domestic and sexual violence and ensuring proper management of all survivors including adolescents.
- Reduction of morbidity and mortality due to STIs, HIV/AIDS and cancers of the reproductive system, and
- Improvement, management and coordination of the SRH programme including planning, monitoring and evaluation.

MoH, in collaboration with other development partners, addresses the above through a number of strategic actions aimed at improving the sexual and reproductive health status of all men, women, adolescents, children, and the survival of newborn babies by 2015.

This chapter deals with three fundamental aspects of women's reproductive health. The chapter begins by analyzing fertility, contraceptive method, ANC, assistance at delivery, place of delivery, abortions and miscarriages, stillbirth, obstetric fistula and age at first sex.

Fertility

The 2010 Swaziland MICS gathered information from each of the women interviewed about the history of their births, i.e. the number of live births, birth date, sex of each child, the condition of survival at the time of interview and the age at death of deceased children. Based on this information, it was possible to obtain estimates of the current levels their fertility.

Estimates of the current fertility rate were done through general and specific fertility information based on the reproductive histories of women age 15–49 years who were interviewed during the three years preceding the survey. Table RH.1A shows the specific fertility rates by area of residence. The total fertility rate (TFR) is a synthetic indicator of fertility that allows global comparisons. It refers to the average number of children that women have during their entire reproductive life, if the conditions of fertility remain constant.

Overall, a Swazi woman gives birth to 3.7 children during her entire reproductive lifespan. Rural women have higher fertility rate (3.9) compared with urban women (3.1). Notably, adolescent fertility is significant throughout the country (as shown in Table RH.1); for every 1,000 girls age 15–19 there are 89

births. Girls living in Shiselweni are most likely to have children compared with girls who live elsewhere in Swaziland. Further analysis shows that girls with lower education levels tend to have more children than those with higher levels of education. Similarly girls from the poorest wealth quintile have more children compared with girls from the richest wealth quintile.

Table RH.1A: Current fertility

Age-specific fertility and total fertility rate in the three years preceding the survey, by residence, Swaziland 2010

	Residence		
Age group	Urban	Rural	Total
15–19	79	91	89
20–24	168	222	205
25–29	136	167	156
30–34	116	141	132
35–39	78	107	98
40–44	31	57	50
45–49	10	3	5
Total Fertility Rate (TFR)	3.1	3.9	3.7
General Fertility Rate (GFR)	114	137	130
Crude Birth Rate (CBR)	31.5	44.2	39.6

Note:
TFR: Total fertility rate expressed per woman
GFR: General fertility rate expressed per 1,000 women
CBR: Crude birth rate expressed per 1,000 population

Table RH.1: Adolescent birth rate and total fertility rate

Adolescent birth rates and total fertility rates for the three years preceding the survey, Swaziland, 2010

	Adolescent birth rate[1] (age-specific fertility rate for women age 15–19 years)	Total fertility rate
Region		
Hhohho	63	3.3
Manzini	93	3.7
Shiselweni	105	4.0
Lubombo	90	3.8
Residence		
Urban	79	3.1
Rural	91	3.9
Education		
None	(277)	5.2
Primary	138	4.4
Secondary	94	3.9
High	43	3.0
Tertiary	(33)	2.4
Wealth index quintile		
Poorest	124	4.8
Second	87	4.6
Middle	95	3.9
Fourth	93	3.1
Richest	51	2.7
Total	89	3.7

[1] MICS indicator 5.1; MDG indicator 5.4

Early childbearing

In the 2010 Swaziland MICS, all women age 15–49 years were asked if they had been pregnant or had a live birth. For those who had a live birth they were asked to provide dates of all live births. Figure RH.1 shows that childbearing starts very early in Swaziland; overall a little over one in five women reported to have had their first live birth before their eighteenth birthday. There is no significant regional variation, with the exception of Hhohho, which has a slightly lower percentage of women who had their first live birth before 18 years of age. Between urban and rural women, the percentage is slightly higher for the former than the latter; however the difference is statistically insignificant.

Figure RH.1 shows that early childbearing has a strong association with education, i.e. the proportion of women who reported to have had a live birth by age 18 decreases with increasing educational levels. Thirty-five percent of women with primary education had a live birth by age 18 compared with only four percent of women with tertiary education. Table RH.2 further reveals that early childbearing is most common among women in the poorest quintile.

Figure RH.1: Percentage of women age 20–24 years who have had a live birth before age 18, Swaziland, 2010

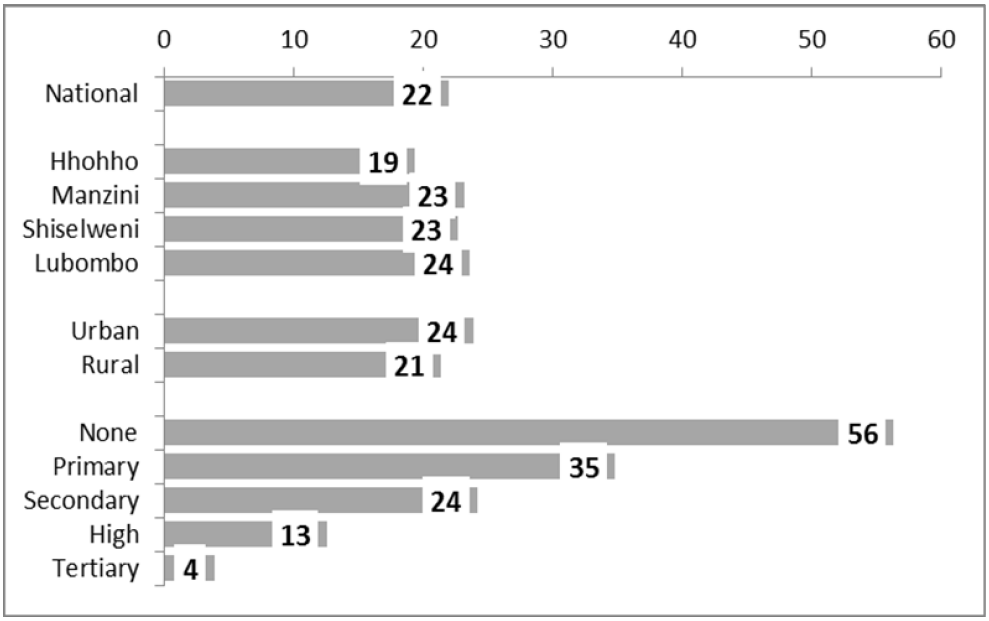


Table RH.2: Early childbearing

Percentage of women age 15–19 years who have had a live birth or who are pregnant with the first child, percentage of women age 15–19 years who have begun childbearing before age 15 years, and the percentage of women age 20–24 years who have had a live birth before age 18 years, Swaziland, 2010

	Number of women age 15–19 Years						
	Have had a live birth	Are pregnant with first child	Have begun childbearing	Have had a live birth before age 15	Number of women age 15–19	Percentage of women age 20–24 who have had a live birth before age 18 [1]	Number of women age 20–24
Region							
Hhohho	12.3	1.0	13.3	0.8	267	19.4	244
Manzini	14.1	3.0	17.8	0.9	299	23.2	304
Shiselweni	16.5	2.2	18.6	0.3	314	22.7	198
Lubombo	14.9	3.2	19.7	0.4	218	23.6	157
Area							
Urban	12.8	1.0	14.3	0.3	211	23.9	272
Rural	14.9	2.6	18.1	0.7	887	21.4	631
Education							
None	*	*	*	*	9	*	23
Primary	20.3	2.5	23.5	1.9	346	34.8	201
Secondary	12.5	2.4	15.2	0.0	501	24.2	308
High	9.6	1.9	11.9	0.0	240	12.5	321
Tertiary	*	*	*	*	3	3.9	50
Wealth index quintiles							
Poorest	18.9	4.2	24.0	1.1	196	27.3	144
Second	13.9	3.0	17.0	0.0	215	24.4	160
Middle	13.0	1.8	15.6	0.4	231	22.7	191
Fourth	17.0	2.6	20.0	0.8	243	20.5	212
Richest	9.9	.0	10.5	0.8	213	17.6	197
Total	**14.5**	**2.3**	**17.3**	**0.6**	**1,098**	**22.1**	**904**

[1] MICS indicator 5.2

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases.

Table RH.3: Trends in early childbearing

Percentage of women who have had a live birth by age 15 and 18 years, by age groups, Swaziland, 2010

	Urban				Rural				All			
	Percentage of women with a live birth before age 15	Number of women	Percentage of women with a live birth before age 18	Number of women	Percentage of women with a live birth before age 15	Number of women	Percentage of women with a live birth before age 18	Number of women	Percentage of women with a live birth before age 15	Number of women	Percentage of women with a live birth before age 18	Number of women
Age of woman												
15–19	0.3	211	NA	NA	0.7	887	NA	NA	0.6	1098	NA	NA
20–24	3.1	272	23.9	272	1.5	631	21.4	631	2.0	904	22.1	904
25–29	2.1	295	23.1	295	3.5	551	30.6	551	3.0	847	28.0	847
30–34	4.5	220	24.4	220	4.1	375	30.4	375	4.3	595	28.1	595
35–39	6.2	140	24.3	140	4.8	316	32.2	316	5.3	456	29.8	456
40–44	9.9	130	30.3	130	5.8	304	35.3	304	7.0	433	33.8	433
45–49	4.0	84	33.4	84	6.1	272	34.1	272	5.6	355	33.9	355
Total	**3.7**	**1,353**	**25.3**	**1,141**	**3.0**	**3,335**	**29.3**	**2,448**	**3.2**	**4,688**	**28.0**	**3,590**

Figure RH.2: Percentage of currently married or in-union women age 15–49 years and currently married or in-union men age 15-59 years who are using (or partner is using) a contraceptive method, Swaziland, 2010

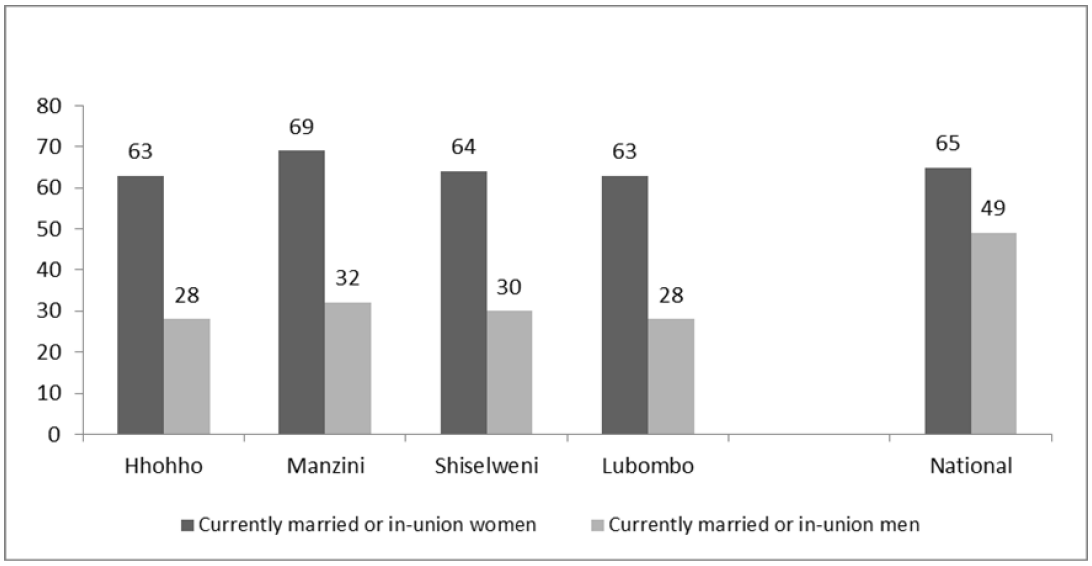
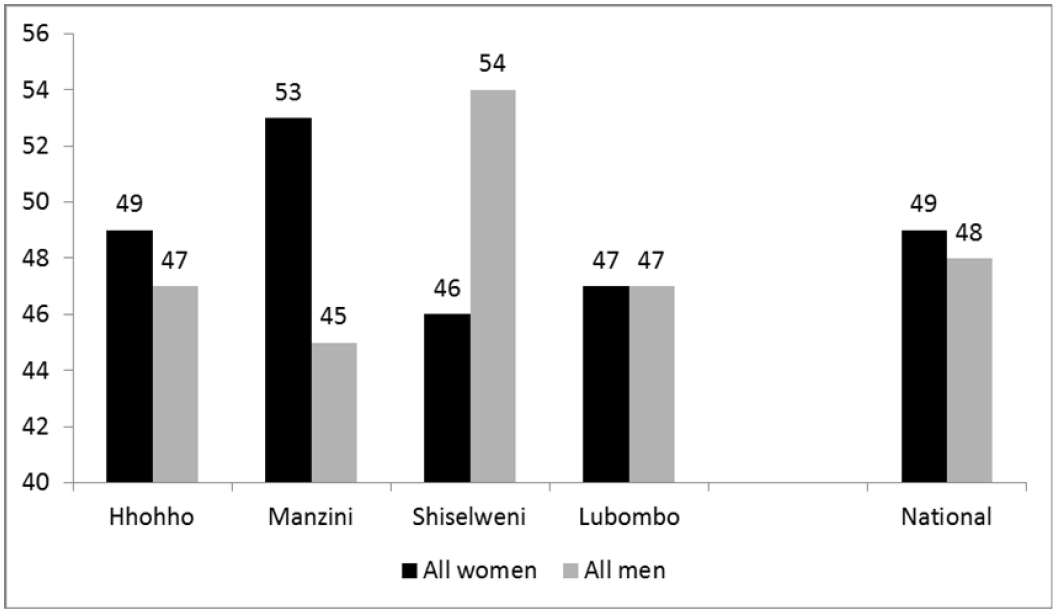


Figure RH.3: Percentage of women age 15–49 years and men age 15–59 years who are using (or partner is using) a contraceptive method, Swaziland, 2010



Contraception

Appropriate family planning is important for the health of women and children by: 1) preventing pregnancies that are too early or too late; 2) extending the period between births; and 3) limiting the number of children. A WFFC goal is access by all couples to information and services to prevent pregnancies that are too early, too closely spaced, too late or too many.

The 2010 Swaziland MICS asked women age 15–49 years who are currently married or in union to state any contraceptive method they use, or that used by their partner, for the estimation of the contraceptive prevalence rate (CPR). Figures RH.2 and RH.3 present the CPRs for married or in union women and for all women. The data indicate that the national CPR is 65 percent among married or in union women. However, when considering all women i.e. both married and unmarried CPR declines to 49 percent, reflecting a lower CPR among unmarried women than married.

Contraception use varies by one's place of residence and appears to be more prevalent in urban than rural areas. Among currently married women 72 percent of those living in urban areas use any form of contraception compared with 63 percent in rural areas. Women living in Manzini are most likely to use any form of contraception than other women living elsewhere in Swaziland.

Use of contraception is closely associated with the woman's level of education. Fifty-five percent of currently married women with no education use some form of contraception, while among women with tertiary education the use rate is 73 percent. Similarly, among all women, those with no education have a lower CPR (46 percent) than those with tertiary education (62 percent). Contraception use also varies by one's wealth status. Among currently married women in the poorest wealth quintile only 58 percent use contraception compared with 70 percent in the richest wealth quintile.

Table RH.4A shows that the male condom, injectables and pills are the most frequently used contraceptive methods for women who are currently married or in union. Twenty-two percent of these women use the male condom, while 15 percent and 7 percent use injectables and pills, respectively. The least popular methods include male sterilization, female condom and diaphragm/foam/jelly. Table RH.4 shows a similar trend in contraceptive method preference among all women (including married or unmarried).

Table RH.4A: Use of contraception: women currently married or in union

Percentage of women age 15–49 years currently married or in union who are using (or whose partner is using) a contraceptive method, Swaziland, 2010

	Percent of women (currently married or in union) who are using:														Any modern method	Any traditional method	Any method [1]	Number of women currently married or in union
	Not using any method	Female sterilization	Male sterilization/ vasectomy	IUCD	Inject-ables	Implants	Pill	Male condom	Female condom	Diaphragm/ foam/ jelly	LAM	Periodic abstinence/ rhythm	With-drawal	Other				
Region																		
Hhohho	37.3	5.7	0.3	1.6	20.3	1.1	10.6	21.2	0.0	0.0	0.0	0.0	1.2	0.8	60.6	2.1	62.7	530
Manzini	30.9	5.1	0.4	1.3	18.7	1.7	11.4	26.9	0.5	0.0	0.2	0.5	1.2	10.1	66.0	3.1	69.1	641
Shiselweni	36.3	4.0	0.0	0.3	23.5	3.8	10.9	20.1	0.3	0.0	0.3	0.0	0.3	0.3	62.9	0.8	63.7	341
Lubombo	36.7	6.2	0.2	0.9	25.0	0.9	9.4	18.4	0.0	0.2	0.0	0.2	1.4	0.4	61.2	2.0	63.3	369
Area																		
Urban	28.4	5.9	0.2	1.1	19.3	2.2	11.9	27.9	0.4	0.1	0.0	0.5	1.0	1.1	69.0	2.6	71.6	556
Rural	37.5	5.0	0.3	1.1	22.1	1.6	10.2	20.1	0.2	0.0	0.2	0.1	1.1	0.6	60.5	2.0	62.5	1,326
Age of woman																		
15–19	(45.8)	(0.0)	(0.0)	(0.0)	(24.2)	(0.0)	(10.5)	(19.5)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(54.2)	(0.00	(54.2)	47
20–24	32.3	0.4	0.0	0.5	29.6	2.2	10.5	22.9	0.0	0.0	0.3	0.3	0.8	0.3	66.0	1.7	67.7	279
25–29	31.1	1.3	0.0	0.3	27.3	1.5	12.4	24.4	0.3	0.0	0.0	0.2	0.8	0.4	67.5	1.4	68.9	414
30–34	25.7	3.0	0.5	1.0	23.8	3.1	13.5	26.2	0.3	0.2	0.4	0.0	1.5	0.7	71.6	2.7	74.3	348
35–39	28.8	5.0	0.3	1.6	21.0	1.6	12.7	27.2	0.0	0.0	0.0	0.3	0.9	0.5	69.5	1.7	71.2	304
40–44	36.4	16.6	0.3	3.2	12.6	0.8	8.2	17.9	0.4	0.0	0.0	0.0	1.9	1.8	60.0	3.7	63.6	270
45–49	63.4	10.0	0.6	0.6	5.8	1.4	3.5	11.4	0.5	0.0	0.0	0.6	1.0	1.2	33.8	2.8	36.6	220
Number of living children																		
0	67.2	0.0	0.0	0.0	2.8	0.0	2.7	25.8	0.0	0.0	0.0	0.7	0.0	0.7	31.3	1.4	32.8	137
1	39.5	0.0	0.0	0.8	18.6	1.7	8.6	29.6	0.4	0.2	0.0	0.5	0.0	0.0	59.9	.5	60.5	329
2	27.9	2.8	0.0	1.0	26.4	1.9	13.0	25.3	0.0	0.0	0.2	0.0	0.6	0.9	70.4	1.8	72.1	458
3	26.3	6.1	1.0	1.6	27.1	2.9	12.9	20.4	0.0	0.0	0.0	0.0	1.5	0.2	72.0	1.7	73.7	302
4+	34.5	10.3	0.3	1.4	20.2	1.6	10.7	16.9	0.5	0.0	0.2	0.2	2.1	1.2	61.9	3.7	65.5	657
Education																		
None	45.5	2.7	0.0	1.1	16.4	.3	11.2	16.8	0.0	0.0	1.5	0.0	2.4	2.0	48.5	6.0	54.5	150
Primary	40.9	5.1	0.0	0.3	22.7	1.0	9.5	18.8	0.2	0.0	0.0	0.0	1.2	0.3	57.6	1.5	59.1	565
Secondary	33.3	3.3	0.2	1.4	26.7	1.1	9.7	22.1	0.2	0.0	0.0	0.1	1.1	0.8	64.7	2.0	66.7	577
High	27.9	6.1	0.6	1.7	18.5	2.1	12.5	28.3	0.3	0.0	0.0	0.3	0.7	1.0	70.1	2.0	72.1	385
Tertiary	27.2	11.5	0.5	1.6	10.7	6.4	12.6	26.0	0.6	0.4	0.0	1.0	0.8	0.6	70.4	2.4	72.8	205

Wealth index quintiles																		
Poorest	41.8	2.8	0.0	0.8	26.0	0.6	9.2	15.8	0.0	0.0	0.0	0.0	2.1	0.7	55.4	2.8	58.2	313
Second	38.9	3.7	0.0	1.3	22.5	0.8	10.8	20.4	0.3	0.0	0.4	0.0	0.7	0.0	59.9	1.2	61.1	294
Middle	36.7	5.2	0.0	0.8	20.0	1.7	12.0	22.0	0.0	0.0	0.0	0.0	1.1	0.6	61.6	1.7	63.3	360
Fourth	31.0	5.4	0.2	1.2	25.5	1.1	9.7	22.6	0.2	0.0	0.2	0.3	1.2	1.3	66.0	3.0	69.0	417
Richest	29.8	7.6	0.8	1.4	14.8	3.7	11.4	27.8	0.5	0.2	0.0	0.6	0.6	0.8	68.2	2.0	70.2	498
Total	34.8	5.2	0.3	1.1	21.3	1.8	10.7	22.4	0.2	0.0	0.1	0.2	1.1	.7	63.0	2.2	65.2	1882
[1] MICS indicator 5.3; MDG indicator 5.3																		

Table RH.4: Use of contraception: all women

Percentage of women age 15–49 years who are using (or whose partner is using) a contraceptive method, Swaziland, 2010

	Percent of women who are using:																	
	Not using any method	Female steriliz-ation	Male sterilization/ vasectomy	IUCD	Injec-tables	Implants	Pill	Male condom	Female condom	Diaphragm/ foam/ jelly	LAM	Periodic abstinence/ rhythm	With-drawal	Other	Any modern method	Any traditional method	Any method [1]	Number of women age 15–49 years
Region																		
Hhohho	51.3	2.5	0.1	0.7	16.3	0.6	6.5	20.0	0.6	0.0	0.0	0.0	0.6	0.8	47.3	1.3	48.7	1,286
Manzini	46.5	2.7	0.2	0.7	13.1	0.9	7.3	26.6	0.5	0.0	0.1	0.3	0.7	0.5	51.9	1.6	53.5	1,515
Shiselweni	54.4	1.5	0.0	0.2	15.3	2.6	5.9	18.3	0.2	0.1	0.2	0.2	0.1	0.9	44.1	1.5	45.6	1,033
Lubombo	52.7	3.2	0.1	0.5	16.5	0.8	6.1	18.9	0.1	0.1	0.0	0.2	0.6	0.3	46.2	1.1	47.3	854
Area																		
Urban	44.0	2.8	0.1	0.6	13.3	1.2	7.1	28.7	0.6	0.1	0.0	0.4	0.6	0.5	54.5	1.5	56.0	1,353
Rural	53.4	2.3	0.1	0.5	15.8	1.2	6.3	18.7	0.3	0.0	0.1	0.1	0.5	0.6	45.2	1.3	46.6	3,335
Age of woman																		
15–19	83.5	0.0	0.0	0.0	5.1	0.3	1.3	8.7	0.1	0.0	0.1	0.1	0.0	0.9	15.4	1.0	16.5	1,098
20–24	39.8	0.2	0.0	0.1	20.4	1.5	7.2	29.1	0.7	0.0	0.1	0.2	0.2	0.4	59.3	0.9	60.2	904
25–29	32.1	0.7	0.0	0.4	25.0	1.6	9.2	29.3	0.7	0.0	0.0	0.3	0.5	0.3	66.9	1.0	67.9	847
30–34	34.0	2.1	0.3	0.8	19.5	2.1	11.0	27.9	0.3	0.1	0.2	0.0	1.1	0.6	64.1	1.9	66.0	595
35–39	35.9	4.2	0.2	1.1	17.8	1.5	10.9	27.0	0.0	0.0	0.0	0.2	0.8	0.4	62.7	1.4	64.1	456
40–44	49.4	11.1	0.2	2.0	9.4	0.6	6.3	17.9	0.4	0.0	0.0	0.0	1.2	1.5	47.9	2.6	50.6	433
45–49	70.0	7.9	0.4	0.4	5.0	1.0	2.2	10.2	0.3	0.3	0.0	0.6	1.0	0.7	27.6	2.4	30.0	355
Number of living children																		
0	81.0	0.0	0.0	0.0	1.0	0.0	1.3	15.2	0.2	0.0	0.0	0.3	0.0	0.9	17.8	1.1	19.0	1,485
1	36.3	0.2	0.0	0.4	21.0	1.7	7.2	31.7	0.7	0.1	0.1	0.3	0.3	0.0	63.0	0.7	63.7	966
2	30.5	1.9	0.0	0.8	24.8	2.0	10.8	27.6	0.5	0.0	0.1	0.0	0.3	0.7	68.4	1.1	69.5	814
3	35.3	3.7	0.6	1.0	23.7	2.3	10.1	21.9	0.0	0.0	0.0	0.0	1.1	0.1	63.4	1.3	64.7	510
4+	43.3	8.7	0.2	1.0	18.4	1.1	8.5	15.5	0.3	0.1	0.1	0.1	1.5	1.1	53.9	2.9	56.7	912
Education																		
None	54.5	2.4	0.0	0.7	13.3	0.2	7.3	17.4	0.0	0.0	0.9	0.0	2.0	1.3	41.3	4.2	45.5	242
Primary	54.6	2.8	0.0	0.2	16.7	0.7	6.3	17.5	0.3	0.1	0.0	0.0	0.5	0.4	44.5	0.9	45.4	1,269
Secondary	51.6	1.6	0.1	0.6	18.3	0.9	6.0	19.7	0.2	0.0	0.1	0.0	0.4	0.6	47.3	1.1	48.4	1,592
High	49.0	2.0	0.2	0.7	11.9	1.4	6.5	26.1	0.7	0.0	0.0	0.4	0.3	0.9	49.5	1.5	51.0	1,202
Tertiary	37.6	6.4	0.3	0.9	7.7	3.9	9.5	30.9	0.7	0.2	0.0	0.8	0.7	0.5	60.5	1.9	62.4	382

Wealth index quintiles																		
Poorest	55.1	1.6	0.0	0.4	20.2	0.5	6.6	13.9	0.1	0.1	0.0	0.0	0.9	0.6	43.4	1.5	44.9	737
Second	53.5	1.8	0.0	0.5	17.1	1.0	5.9	19.0	0.1	0.0	0.3	0.1	0.4	0.3	45.4	1.1	46.5	802
Middle	53.1	2.5	0.0	0.4	15.3	1.2	6.5	19.9	0.3	0.0	0.0	0.0	0.4	0.4	46.1	.8	46.9	930
Fourth	46.7	2.5	0.1	0.7	15.8	1.0	6.6	24.2	0.5	0.0	0.1	0.3	0.6	1.1	51.3	2.0	53.3	1,041
Richest	47.8	3.5	0.3	0.7	9.8	1.9	7.0	27.0	0.6	0.1	0.0	0.4	0.4	0.6	50.8	1.4	52.2	1,179
Total	**50.7**	**2.5**	**0.1**	**0.5**	**15.1**	**1.2**	**6.6**	**21.5**	**0.4**	**0.0**	**0.1**	**0.2**	**0.5**	**0.6**	**47.9**	**1.4**	**49.3**	**4,688**

[1] MICS indicator 5.3; MDG indicator 5.3

Table RH.4B: Non-use of contraception: women currently married or in union

Percentage of women age 15–49 years currently married or in union who are not using (or whose partners are not using) a contraceptive method and the reasons for not using a contraceptive method, Swaziland, 2010

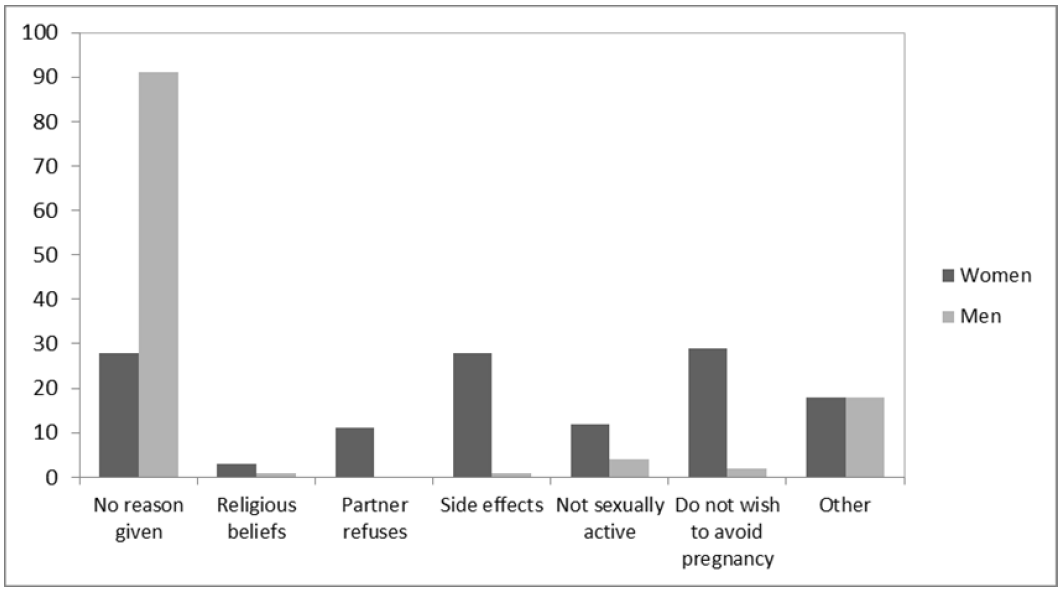
	Percentage not using any contraceptive method	Number of women age 15–49 years currently married or in union	Main reason for not using any contraceptive method:										Number of women currently not using any contraceptive method
			Religious beliefs	Partner refuses	Can't afford/ expensive	Side effects	Not sexually active	Do not wish to avoid pregnancy	Currently pregnant	Other	Missing /DK	Total	
Region													
Hhohho	37.3	530	1.7	8.8	0.0	21.0	11.8	21.5	21.8	13.5	0.0	100.0	198
Manzini	30.9	641	3.2	7.6	0.0	21.7	12.7	26.0	15.4	13.4	0.0	100.0	198
Shiselweni	36.3	341	0.8	9.8	1.2	30.5	7.0	22.3	19.9	8.6	0.0	100.0	124
Lubombo	36.7	369	2.3	8.3	0.6	19.8	4.0	21.8	21.9	21.4	0.0	100.0	136
Area													
Urban	28.4	556	2.0	7.1	0.3	19.4	10.1	28.5	21.5	11.1	0.0	100.0	158
Rural	37.5	1,326	2.1	9.0	0.4	23.8	9.4	21.4	18.9	15.1	0.0	100.0	497
Age of woman													
15–19	(45.8)	47	*	*	*	*	*	*	*	*	*	*	21
20–24	32.3	279	0.0	8.3	0.5	19.5	6.7	20.6	35.5	8.9	0.0	100.0	90
25–29	31.1	414	1.7	10.9	0.0	23.1	4.4	22.7	30.6	6.6	0.0	100.0	129
30–34	25.7	348	2.9	6.1	1.0	20.7	2.6	26.7	33.9	6.1	0.0	100.0	89
35–39	28.8	304	4.0	10.7	0.0	26.4	2.8	28.2	16.1	11.9	0.0	100.0	87
40–44	36.4	270	2.2	8.9	1.0	32.4	13.4	22.9	2.6	16.6	0.0	100.0	98
45–49	63.4	220	1.9	3.6	0.0	20.2	21.9	19.4	1.4	31.6	0.0	100.0	140
Number of living children													
0	67.2	137	2.0	3.9	0.0	3.4	.6	54.5	28.4	7.2	0.0	100.0	92
1	39.5	329	0.4	6.2	1.0	13.9	6.2	38.1	27.1	6.9	0.0	100.0	130
2	27.9	458	2.2	14.8	0.0	24.8	10.0	13.2	22.5	12.6	0.0	100.0	127
3	26.3	302	0.0	10.2	0.0	25.4	14.9	17.4	16.9	15.2	0.0	100.0	79
4+	34.5	657	3.7	7.5	0.4	33.6	13.0	9.3	10.8	21.7	0.0	100.0	226
Education													
None	45.5	150	4.3	8.9	0.0	24.1	6.9	19.6	14.7	21.5	0.0	100.0	68
Primary	40.9	565	2.0	12.4	0.2	24.7	9.3	16.6	18.1	16.6	0.0	100.0	231
Secondary	33.3	577	2.2	8.9	1.0	21.8	8.8	25.4	20.2	11.7	0.0	100.0	192
High	27.9	385	0.5	2.1	0.0	22.5	12.0	28.9	25.5	8.4	0.0	100.0	108
Tertiary	27.2	205	2.4	2.6	0.0	17.0	11.4	34.7	17.4	14.6	0.0	100.0	56

Wealth index quintiles													
Poorest	41.8	313	3.6	10.1	0.7	24.8	8.7	15.1	17.3	19.7	0.0	100.0	131
Second	38.9	294	0.8	10.4	0.4	29.2	7.0	20.7	25.4	6.1	0.0	100.0	114
Middle	36.7	360	1.4	9.0	0.7	18.6	8.9	21.0	24.9	15.5	0.0	100.0	132
Fourth	31.0	417	2.8	9.3	0.0	24.1	8.1	24.7	16.2	14.8	0.0	100.0	129
Richest	29.8	498	1.6	4.5	0.0	18.5	14.1	32.3	15.1	13.8	0.0	100.0	148
Total	**34.8**	**1,882**	**2.1**	**8.5**	**0.4**	**22.8**	**9.5**	**23.1**	**19.5**	**14.2**	**0.0**	**100.0**	**655**

* Currently pregnant women were not asked about current methods used to delay or prevent pregnancy. In the table they are included as not using a method and separately on main reason for not using any method.

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases. Figures in parentheses are based on 25–49 unweighted cases.

Figure RH. 4: Reasons for non-use of contraception among currently married women and men, Swaziland, 2010



In the 2010 Swaziland MICS, women and men who reported that they were not using any form of contraception were asked to indicate the reasons for not doing so. Overall, 35 percent of currently married women are not using any form of contraception. Figure RH.4 shows that nearly three in 10 women are reluctant to use contraception because of fear of side effects. The same proportion of women, i.e. three in 10, responded that they did not use contraception because they did not wish to avoid any pregnancy. Over one in 10 women are refused permission to use contraception by their spouses. It is worth noting that nine in 10 did not give any specific reasons for not using contraception.

Unmet need

The unmet need[19] for contraception refers to fecund women who are not using any method of contraception, but who wish to postpone the next birth or who wish to stop childbearing altogether. The unmet need is identified in the 2010 Swaziland MICS by using a set of questions eliciting current behaviours and preferences pertaining to contraceptive use, fecundity, and fertility preferences.

Women with an unmet need for spacing include women who are currently married (or in union), fecund (are currently pregnant or think that they are physically able to become pregnant), currently not using contraception, and want to space their births. Pregnant women are considered to want to space their births when they did not want the child at the time they got pregnant. Women who are not pregnant are classified in this category if they want to have a child/another child, but want to have the child at least two years later, or after marriage.

Women with an unmet need for limiting births are those women who are currently married (or in union), fecund (are currently pregnant or think that they are physically able to become pregnant), currently not using contraception, and want to limit their births. The latter group includes women who are currently

[19] The unmet need measurement in MICS is somewhat different than that used in other household surveys, such as the Demographic and Health Surveys (DHS). In DHS, more detailed information is collected on additional variables, such as postpartum amenorrhoea, and sexual activity. Results from the two types of surveys are strictly not comparable.

pregnant but had not wanted the pregnancy at all, and women who are not currently pregnant but do not want to have another child. The total unmet need for contraception is simply the sum of the unmet need for spacing and the unmet need for limiting.

Using information on contraception and unmet need, the percentage of demand for contraception satisfied is also estimated from the 2010 Swaziland MICS data. The percentage of demand for contraception satisfied is defined as the proportion of women currently married or in union who are currently using contraception, of the total demand for contraception. The total demand for contraception includes women who currently have an unmet need (for spacing or limiting), plus those who are currently using contraception.

Table RH.5 shows that the overall unmet need for contraception is 13 percent. The unmet need for contraception is highest among women in the poorest wealth quintile (21 percent) compared with women in the richest wealth quintile (eight percent). Similarly, the unmet need for contraception is more prevalent in rural areas (15 percent) than urban areas (nine percent). There are no significant variations on the unmet need for contraception among regions. However, the unmet need for contraception is lower among older women than young women.

Table RH.5: Unmet need for contraception

Percentage of women age 15–49 years currently married or in union with an unmet need for family planning and percentage of demand for contraception satisfied, Swaziland, 2010

	Met need for contraception			Unmet need for contraception					
	For spacing	For limiting	Total	For spacing	For limiting	Total [1]	Number of women currently married or in union	Percentage of demand for contraception satisfied	Number of women currently married or in union with need for contraception
Region									
Hhohho	23.2	39.5	62.7	6.0	7.8	13.8	530	82.0	405
Manzini	20.4	48.9	69.1	5.2	6.1	11.4	641	85.9	516
Shiselweni	20.5	43.2	63.7	5.1	9.2	14.3	341	81.7	266
Lubombo	19.7	43.9	63.3	6.0	7.8	13.7	369	82.2	284
Area									
Urban	24.7	46.9	71.6	4.2	5.2	9.4	556	88.4	450
Rural	19.5	43.1	62.5	6.1	8.5	14.5	1,326	81.1	1,022
Age of woman									
15–19	(32.2)	(22.0)	(54.2)	(28.6)	(0.0)	(28.6)	47	(65.5)	39
20–24	41.4	26.3	67.7	11.5	3.6	15.1	279	81.8	231
25–29	32.4	36.5	68.9	7.2	7.5	14.7	414	82.4	346
30–34	23.1	51.2	74.3	5.3	7.0	12.3	348	85.8	301
35–39	10.7	60.5	71.2	2.5	8.2	10.7	304	86.9	249
40–44	5.0	58.9	63.6	1.1	10.4	11.5	270	84.6	203
45–49	2.4	34.8	36.6	0.0	10.2	10.2	220	78.2	103
Education									
None	12.5	42.0	54.5	5.1	11.6	16.7	150	76.6	106
Primary	16.6	42.5	59.1	7.5	10.2	17.7	565	76.9	434
Secondary	23.3	43.6	66.7	4.8	6.3	11.1	577	85.7	449
High	26.2	46.1	72.1	6.2	5.8	12.0	385	85.7	324
Tertiary	23.5	49.2	72.8	1.2	3.6	4.8	205	93.8	159
Wealth index quintiles									
Poorest	13.8	44.4	58.2	9.4	11.6	21.1	313	73.4	248
Second	16.9	44.2	61.1	8.4	9.2	17.7	294	77.6	231
Middle	23.2	40.2	63.3	5.0	7.7	12.7	360	83.3	274
Fourth	24.2	45.0	69.0	4.5	5.5	10.0	417	87.3	329
Richest	24.0	46.5	70.2	2.6	5.4	8.0	498	89.8	389
Total	**21.1**	**44.2**	**65.2**	**5.5**	**7.5**	**13.0**	**1,882**	**83.3**	**1,472**

[1] MICS indicator 5.4; MDG indicator 5.6

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

Antenatal care

The antenatal period presents important opportunities for reaching pregnant women with a number of interventions that may be vital to their health and well-being and that of their infants. Better understanding of foetal growth and development and its relationship to the mother's health has resulted in increased attention to the potential of ANC as an intervention to improve both maternal and newborn health. For example, if the antenatal period is used to inform women and families about danger signs and symptoms and about the risks of labour and delivery, it may provide the route for ensuring that pregnant women do, in practice, deliver with the assistance of a skilled health care provider.

The antenatal period also provides an opportunity to supply information on birth spacing, which is recognized as an important factor in improving infant survival. Tetanus immunization during pregnancy can be life-saving for both the mother and infant. The prevention and treatment of malaria among pregnant women, management of anaemia during pregnancy and treatment of STIs can significantly improve foetal outcomes and improve maternal health. Adverse outcomes such as low birth weight can be reduced through a combination of interventions to improve women's nutritional status and prevent infections (e.g., malaria and STIs) during pregnancy. More recently, the potential of the antenatal period as an entry point for HIV prevention and care, in particular for the prevention of HIV transmission from mother to child, has led to renewed interest in access to and use of antenatal services.

WHO recommends a minimum of four antenatal visits based on a review of the effectiveness of different models of ANC. WHO guidelines are specific on the content on ANC visits, which include:

1. Blood pressure measurement
2. Urine testing for bateriuria and proteinuria
3. Blood testing to detect syphilis and severe anaemia
4. Weight/height measurement (optional)

Table RH.6 shows that coverage of ANC by qualified health personnel (doctor, nurse or midwife) is impressively high, at 97 percent of women who were pregnant in the two years preceding the survey attended ANC. Almost nine in 10 of these women were seen by a nurse and the rest by a doctor. ANC is accessible to all women as there are no marked differences by socio-economic status.

Table RH.6: Antenatal care provider

Percent distribution of women age 15–49 years who gave birth in the two years preceding the survey by type of personnel providing ANC, Swaziland, 2010

	Person providing ANC			No ANC received	Total	Any skilled personnel [1]	Number of women who gave birth in the preceding two years
	Doctor	Nurse / Midwife	Other/ missing				
Region							
Hhohho	10.0	84.2	0.0	5.9	100	94.1	253
Manzini	10.8	87.7	0.0	1.5	100	98.5	329
Shiselweni	7.4	89.7	0.4	2.5	100	97.1	253
Lubombo	7.7	89.2	0.0	3.1	100	96.9	195
Area							
Urban	10.6	84.2	0.0	5.2	100	94.8	255
Rural	8.7	88.7	0.1	2.4	100	97.4	776
Mother's age at birth							
Less than 20	9.6	88.8	0.0	1.7	100	98.3	184
20–34	8.7	87.6	0.1	3.6	100	96.3	732
35–49	11.4	85.9	0.0	2.7	100	97.3	114
Missing	*	*	*	*	*	*	1
Education							
None	7.1	86.4	0.0	6.5	100	93.5	57
Primary	7.1	89.7	0.0	3.1	100	96.9	291
Secondary	8.3	88.4	0.3	3.0	100	96.7	363
High	9.4	88.3	0.0	2.3	100	97.7	257
Tertiary	24.5	71.4	0.0	4.0	100	96.0	63
Wealth index quintiles							
Poorest	6.1	92.3	0.0	1.6	100	98.4	210
Second	6.3	89.8	0.0	3.9	100	96.1	204
Middle	7.1	90.5	0.0	2.4	100	97.6	222
Fourth	9.4	86.6	0.5	3.5	100	96.0	211
Richest	18.2	77.4	0.0	4.4	100	95.6	183
Total	**9.2**	**87.6**	**0.1**	**3.1**	**100**	**96.8**	**1,031**

[1] MICS indicator 5.5a; MDG indicator 5.5

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases.

Table RH 7 provides information on the number of ANC visits made by women who had a live birth in the two years preceding the survey. In general, most women (seven in 10) make four or more antenatal visits. Proportionately more women in Manzini (eight in 10) make the expected number of ANC visits than other women living elsewhere in Swaziland. Although reasonably high, Lubombo has the least number of women who make the expected number of ANC visits (seven in 10).

Younger women are less likely to make the required number of visits than older women. One notes that 68 percent of women age less than 20 years make at least four ANC visits compared with 78 percent age 20–34 years and 82 percent age 35 years and above.

While ANC attendance is high, it is worth noting that more than one in five women attending ANC do not make the expected minimum number of visits. Women who do not attend ANC are mainly those in the Hhohho region (six percent), urban areas (five percent) and with no education (seven percent).

Table RH.7: Number of ANC visits

Percentage of women who had a live birth during the two years preceding the survey by number of antenatal care visits by any provider, Swaziland, 2010

	Percent of women who had:						Total	Number of women who gave birth in the preceding two years
	No antenatal care visits	One visit	Two visits	Three visits	Four or more visits [1]	Missing/ DK		
Region								
Hhohho	5.9	1.1	3.6	12.5	76.3	0.6	100	253
Manzini	1.5	1.6	2.6	13.4	80.5	0.3	100	329
Shiselweni	2.5	3.8	4.4	12.6	76.7	0.0	100	253
Lubombo	3.1	1.8	8.0	16.7	70.4	0.0	100	195
Area								
Urban	5.2	2.0	1.4	11.2	79.7	0.4	100	255
Rural	2.4	2.1	5.3	14.4	75.6	0.2	100	776
Mother's age at birth								
Less than 20	1.7	3.1	6.1	21.7	67.5	0.0	100	184
20–34	3.6	1.8	3.5	12.7	78.0	0.4	100	732
35–49	2.7	2.0	6.8	6.3	82.2	0.0	100	114
Missing	*	*	*	*	*	*	*	1
Education								
None	6.5	0.0	1.5	10.9	81.0	0.0	100	57
Primary	3.1	2.9	9.3	15.6	68.2	0.9	100	291
Secondary	3.0	1.6	4.0	14.2	77.3	0.0	100	363
High	2.3	2.8	0.9	14.2	79.8	0.0	100	257
Tertiary	4.0	0.0	0.0	1.4	94.6	0.0	100	63
Wealth index quintiles								
Poorest	1.6	3.7	7.7	14.6	71.6	0.8	100	210
Second	3.9	0.9	5.9	17.6	71.6	0.0	100	204
Middle	2.4	2.3	3.7	14.0	77.2	0.5	100	222
Fourth	3.5	0.9	3.2	13.4	78.9	0.0	100	211
Richest	4.4	2.5	0.8	7.6	84.6	0.0	100	183
Total	**3.1**	**2.1**	**4.3**	**13.6**	**76.6**	**0.3**	**100**	**1,031**

[1] MICS indicator 5.5b; MDG indicator 5.5

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases.

Table RH 8 shows the content of ANC. Among the specific antenatal practices provided, the results indicate that more than nine out of 10 women had their blood pressure measured, 83 percent had their urine taken and 96 percent had a blood test. In general, there are no differentials in the content of ANC by socio-economic status except in the case of urine taking, where we note marginal differences, especially with the education status of the mother.

Table RH.8: Content of antenatal care

Percentage of women age 15–49 years who had their blood pressure measured, urine sample taken, and blood sample taken as part of ANC, Swaziland, 2010

	Percent of pregnant women who had:			Blood pressure measured, urine specimen and blood test taken [1]	Number of women who gave birth in the two years preceding survey
	Blood pressure measured	Urine specimen taken	Blood test taken		
Region					
Hhohho	89.0	80.4	92.6	75.7	253
Manzini	97.3	85.1	98.5	84.3	329
Shiselweni	95.6	80.3	96.8	79.6	253
Lubombo	93.4	84.5	96.9	81.8	195
Area					
Urban	94.8	85.8	94.5	85.6	255
Rural	93.9	81.6	96.9	78.9	776
Mother's age at birth					
Less than 20	94.8	72.2	98.3	70.5	184
20–34	93.6	84.7	95.7	82.3	732
35–49	96.2	86.5	97.3	85.3	114
Missing	*	*	*	*	1
Education					
None	87.8	82.0	93.5	76.3	57
Primary	92.9	77.9	96.6	75.7	291
Secondary	93.4	83.8	96.1	81.0	363
High	97.3	84.6	97.0	84.0	257
Tertiary	96.0	90.4	96.0	90.4	63
Wealth index quintiles					
Poorest	92.2	76.5	97.6	72.0	210
Second	91.7	84.1	95.2	82.0	204
Middle	95.9	78.5	96.9	76.4	222
Fourth	95.2	85.8	96.5	84.5	211
Richest	95.6	89.6	95.3	89.3	183
Total	**94.1**	**82.7**	**96.3**	**80.6**	**1,031**

[1]MICS indicator 5.6

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases.

Assistance at delivery

Three-quarters of all maternal deaths occur during delivery and the immediate post-partum period. The single most critical intervention for safe motherhood is to ensure a competent health worker with midwifery skills is present at every birth, and transport is available to a referral facility for obstetric care in case of an emergency. A WFFC goal is to ensure that women have ready and affordable access to skilled attendance at delivery. The indicators are the proportion of births with a skilled attendant and the proportion of institutional deliveries. The skilled attendant at delivery indicator is also used to track progress toward the MDG target of reducing the maternal mortality ratio by three-quarters between 1990 and 2015.

The 2010 Swaziland MICS included a set of questions to assess the proportion of births attended by a skilled attendant. *A skilled attendant* includes a doctor, nurse or midwife. Table RH.9 shows that 82 percent of births occurring in the two years prior to the survey were delivered by skilled personnel. This percentage is highest in Manzini at 90 percent and lowest in Lubombo at 72 percent. The more educated a woman is, the more likely she is to have delivered with the assistance of a skilled attendant.

Seven in 10 births in the two years prior to the Swaziland MICS survey were delivered with assistance of a nurse or midwife. Doctors assisted with the delivery of 12 percent of births. About 10 percent of births were delivered by a friend or relative, and of those the highest proportion was delivered in Lubombo (16 percent) and Shiselweni (14 percent), while the smallest proportion was delivered in Manzini (five percent). There are no marked differentials in the number of births delivered with the assistance of a friend or relative by age of the woman. However, the survey shows that women from the poorest quintile are more likely to be assisted by a friend or relative during delivery compared with those from the richest quintile.

Table RH.9 further shows that 12 percent of all births attended by skilled birth personnel are delivered by C-section. Hhohho has the highest number of births delivered by C-section (22 percent) while Lubombo has the least, at nine percent. Notably delivery by C-section is not age specific, i.e. women of all ages are equally likely to deliver by C-section. Most of C-section deliveries take place in private sector health facilities and are largely common among women with tertiary education and those from the richest wealth quintile.

Table RH.9: Assistance during delivery

Percent distribution of women age 15–49 who had a live birth in the two years preceding the survey by person assisting at delivery and percentage of births delivered by C-section, Swaziland, 2010

	Person assisting at delivery						No attendant	Total	Delivery assisted by any skilled attendant [1]	Percent delivered by C-section [2]	Number of women who gave birth in the preceding two years
	Doctor	Nurse / Midwife	Traditional birth attendant	Community health worker/ RHM	Relative / Friend	Other/ missing					
Region											
Hhohho	15.4	66.8	0.6	0.0	9.9	4.1	3.2	100.0	82.2	21.9	253
Manzini	14.8	75.5	0.0	1.9	4.5	1.6	1.6	100.0	90.3	9.5	329
Shiselweni	9.2	69.3	0.8	3.1	13.7	2.9	1.1	100.0	78.4	8.8	253
Lubombo	8.4	63.9	0.4	2.2	15.9	2.6	6.6	100.0	72.3	9.2	195
Area											
Urban	16.1	73.2	0.3	0.4	3.4	4.4	2.2	100.0	89.3	11.6	255
Rural	11.1	68.5	0.5	2.2	12.5	2.2	3.0	100.0	79.6	12.6	776
Mother's age at birth											
Less than 20	12.2	69.3	0.0	1.5	14.6	1.6	.7	100.0	81.5	10.7	184
20–34	11.8	71.7	0.4	1.4	9.0	2.7	3.1	100.0	83.5	12.9	732
35–49	16.1	57.7	1.4	4.0	11.3	5.0	4.5	100.0	73.8	11.7	114
Missing	*	*	*	*	*	*	*	*	*	*	1
Place of delivery											
Public sector health facility	13.8	85.9	0.0	0.0	0.0	0.3	0.0	100.0	99.7	14.5	785
Private sector health facility	43.5	56.5	0.0	0.0	0.0	0.0	0.0	100.0	100.0	31.1	44
Home	.0	1.2	2.9	11.5	64.4	2.3	17.7	100.0	1.2	.0	151
Other	(0.0)	(51.6)	(0.0)	(3.4)	(27.4)	(9.2)	(8.4)	(100.0)	(51.6)	(0.0)	30
Missing/DK	(0.0)	(4.9)	(0.0)	(0.0)	(0.0)	(95.1)	(0.0)	(100.0)	(4.9)	(0.0)	21
Education											
None	6.9	53.8	1.7	2.3	19.4	5.4	10.4	100.0	60.7	4.6	57
Primary	9.7	61.4	0.9	3.6	17.6	2.0	4.8	100.0	71.1	12.1	291
Secondary	11.5	71.7	0.2	1.1	10.6	2.6	2.3	100.0	83.3	8.1	363
High	13.4	80.3	0.0	1.1	1.9	2.9	.4	100.0	93.7	15.9	257
Tertiary	29.4	66.5	0.0	0.0	0.0	4.1	0.0	100.0	95.9	29.9	63
Wealth index quintiles											
Poorest	6.4	58.6	0.9	3.9	22.6	1.8	5.8	100.0	65.0	10.2	210
Second	10.3	65.6	0.4	2.1	14.3	3.5	3.9	100.0	75.9	9.7	204
Middle	12.8	74.1	0.7	1.9	6.9	2.4	1.3	100.0	86.9	13.2	222
Fourth	10.3	78.9	0.0	0.9	5.9	2.8	1.3	100.0	89.2	9.3	211
Richest	23.2	70.8	0.0	0.0	0.7	3.4	1.9	100.0	94.0	20.3	183
Total	**12.3**	**69.6**	**0.4**	**1.8**	**10.3**	**2.7**	**2.8**	**100.0**	**82.0**	**12.3**	**1,031**

[1] MICS indicator 5.7;MDG indicator 5.2
[2] MICS indicator 5.9

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases. Figures in parentheses are based on 25–49 unweighted cases.

Table RH.10: Place of delivery

Percent distribution of women age 15–49 years with a birth in the two years preceding the survey by place of delivery, Swaziland, 2010

	Place of delivery					Total	Delivered in health facility [1]	Number of women who gave birth in the preceding two years
	Public sector health facility	Private sector health facility	Home	Other	Missing/ DK			
Region								
Hhohho	76.9	4.2	12.6	3.9	2.4	100.0	81.1	253
Manzini	87.7	2.3	8.1	0.7	1.2	100.0	90.0	329
Shiselweni	77.5	.6	18.7	1.1	2.1	100.0	78.1	253
Lubombo	54.0	12.5	23.3	7.5	2.6	100.0	66.5	195
Area								
Urban	78.6	8.2	5.8	3.4	4.0	100.0	86.8	255
Rural	75.4	3.0	17.6	2.7	1.4	100.0	78.3	776
Mother's age at birth								
Less than 20	76.9	3.8	16.6	1.6	1.1	100.0	80.7	184
20–34	77.5	4.5	12.9	3.0	2.1	100.0	81.9	732
35–49	67.1	3.7	22.1	4.3	2.7	100.0	70.9	114
Missing	*	*	*	*	*	*	*	1
Number of ANC visits								
None	(7.9)	(0.0)	(17.7)	(13.6)	(60.8)	(100.0)	(7.9)	32
1–3 visits	71.9	3.1	23.7	1.3	0.0	100.0	74.9	206
4+ visits	80.0	4.8	12.3	2.9	0.1	100.0	84.7	790
Missing/DK	*	*	*	*	*	*	*	3
Education								
None	54.6	6.1	31.2	7.2	0.9	100.0	60.7	57
Primary	65.9	3.1	26.6	2.7	1.7	100.0	69.1	291
Secondary	79.6	2.2	13.3	3.0	2.0	100.0	81.8	363
High	87.8	3.7	3.2	2.8	2.5	100.0	91.5	257
Tertiary	75.7	21.8	0.0	0.0	2.5	100.0	97.5	63
Wealth index quintiles								
Poorest	61.9	2.3	31.7	3.2	0.9	100.0	64.2	210
Second	69.4	4.5	20.1	4.1	1.9	100.0	73.9	204
Middle	83.8	1.6	11.0	1.6	2.1	100.0	85.3	222
Fourth	84.6	2.3	6.8	3.4	2.8	100.0	86.9	211
Richest	81.2	11.7	2.6	2.1	2.4	100.0	92.9	183
Total	**76.2**	**4.3**	**14.7**	**2.9**	**2.0**	**100.0**	**80.4**	**1,031**

[1] MICS indicator 5.8

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases. Figures in parentheses are based on 25–49 unweighted cases.

Place of delivery

Table RH.10 show the percent distribution of women age 15–49 years with a birth in the two years preceding the MICS survey by place of delivery. The results show that 80 percent of deliveries occur in health facilities and 15 percent occur at home. One in three women in Lubombo does not deliver in a health facility. Women in Manzini are most likely to deliver in a health facility than those living elsewhere in Swaziland. The same is true of urban women. Eighty seven percent of urban women deliver in a health facility compared with 78 percent of rural women.

Home deliveries are most common among older women. Twenty-two percent of women age 35–49 years deliver at home compared with only 17 percent of women age 30–34 years and 13 percent of women age less than 20 years. Women who do not attend ANC are most likely to deliver at home than those who attend ANC. Similarly, rural women are three times more likely to deliver at home than urban women.

Education has a greater influence in determining a woman's place of delivery. As the woman's level of education improves her chances of choosing to deliver in a health facility also increase. Three in 10 women with no education deliver at home and none with tertiary education do so. Choosing to deliver in a health facility is also closely associated with a woman's level of wealth. Slightly over six in 10 women from the poorest wealth quintile deliver in a health facility compared with just over nine in 10 among women from the richest wealth quintile.

Abortions and miscarriages

Table RH.10A shows that, on the whole, nine percent of women who have ever been pregnant had an abortion or miscarriage. Proportionately more women in Lubombo (11 percent) who have ever been pregnant have had an abortion or miscarriage while women living in Shiselweni (seven percent) are the least likely to have an abortion or miscarriage. Differentials in the occurrence of abortions or miscarriages among women in rural and urban areas are only marginal. Worth noting is that older women are more prone to having abortions or miscarriages (12 percent at age 30–39 years and 19 percent at age 40–49 years) compared with one percent of women age 15–19 years and five percent at age 20–24 years.

Ever married women or women currently in union are more likely to have either an abortion or miscarriage (15 percent) due to their increased likelihood for conception compared with women who have never been married or in a union (two percent).

The results depict an unclear association between a woman's level of education and her chances of having either an abortion or a miscarriage. While the chances are highest among women with no education at 18 percent, they are lowest among women with high school education. Similarly, there are no pronounced variations in the occurrence of abortions or miscarriages by a woman's level of wealth.

Occurrence of stillbirths

For the first time in household survey undertaking, the 2010 Swaziland MICS asked all sampled women age 15–49 years who were ever pregnant, if they had, at any point in time during delivery, had a stillbirth. Table RH.10B shows that on the whole, two percent of ever pregnant women have had at least one stillbirth. The data also show that six percent of women age 40–49 years have ever had a stillbirth, and only one percent of women age 15–49 years have ever had a stillbirth. The results are to be expected as the 40-49 age cohort is at the end of the reproductive age spectrum and therefore more likely to have experienced greater exposure to pregnancy than any other cohort. Other groups of women who experience a sizeable proportion of stillbirths include women with no education (four percent) or primary education (three percent), those who are ever married or in a union (three percent) and those in the poorest wealth quintile (three percent). Women living in Manzini and Shiselweni are more likely to have a stillbirth than women in Hhohho and Lubombo.

Obstetric fistula

Obstetric fistula refers to a condition in which a woman suffers from incontinence of urine and/ or stool. It is caused by obstructed or prolonged labour without skilled medical care. Obstetric fistula results in serious physical as well as psychological effects. In the 2010 Swaziland MICS, women age 15–49 years were asked the following question: *"Sometimes, after a difficult child birth a woman can experience a constant leakage of urine or stool from her vagina during the day or night. Have you ever heard about this condition/problem?"* Table RH.10C indicates that 19 percent of women know about obstetric fistula and 25 percent of women know of someone who suffers from this condition. Eight percent responded that they were currently or had been suffering from obstetric fistula. The condition appears to be more common among women in older age groups (i.e., age 40-49 and 30-39 years). The results show that proportionately more women in the lower wealth quintile suffer from fistula than women in the richest wealth quintile. Among the women afflicted by the fistula condition, many said they would like to be referred for treatment.

Age at first sex

In the Swazi society where child bearing outside marriage is common, age at first sex is an important determinant of fertility. Table RH.10D shows that women initiate sex at younger ages than men. By the time women reach the age of 17 years, half of them would have had their first sex while among men this occurs at age 19. It is also evident that women with least or no education tend to have their first sex earlier (16 years) compared with women with tertiary education (19 years). A similar trend is also observed among men. Men with tertiary education have a median age at first sex of 20 years compared with 19 years for men with either primary or no education. Women who live in rural areas have their first sex one year earlier than women who live in urban areas. There are no remarkable differentials with regards to the wealth status of women and men.

Table RH.10A: Occurrence of abortions or miscarriages

Percentage of women age 15–49 years who have ever been pregnant, and among those, percentage of women who have ever aborted or miscarried, Swaziland, 2010

	Percentage of women who have ever been pregnant	Number of women age 15-49	Number of abortions or miscarriages:					Total	Percentage of women who have ever miscarried or aborted	Number of women who have ever been pregnant
			None	One	Two	Three or more	Missing/ DK			
Region										
Hhohho	70.7	1,286	91.9	6.4	1.2	0.5	0.0	100.0	8.1	910
Manzini	73.7	1,515	91.0	6.9	1.8	0.2	0.1	100.0	9.1	1,118
Shiselweni	68.4	1,033	93.4	5.1	0.7	0.5	0.3	100.0	6.5	707
Lubombo	69.9	854	89.4	7.8	1.6	1.1	0.1	100.0	10.6	597
Area										
Urban	74.5	1,353	92.0	6.3	1.3	0.2	0.1	100.0	8.0	1,007
Rural	69.7	3,335	91.3	6.6	1.4	0.7	0.1	100.0	8.7	2,323
Age										
15–19	15.4	1,098	98.7	1.1	0.0	0.1	0.1	100.0	1.3	169
20–24	69.0	904	95.5	3.9	0.2	0.4	0.1	100.0	4.7	624
25–29	89.6	847	92.3	6.0	1.1	0.4	0.1	100.0	7.7	758
30–39	95.8	1,051	87.6	9.5	2.3	0.4	0.2	100.0	12.4	1,007
40–49	98.0	789	81.2	13.6	3.6	1.6	0.0	100.0	18.8	773
Marital status										
Ever married/ in union	96.1	2,326	84.7	11.6	2.6	1.0	0.2	100.0	15.3	2,236
Never married/ In union	46.4	2,362	98.2	1.5	0.2	0.0	0.1	100.0	1.8	1,095
Education										
None	93.7	242	82.7	12.1	2.6	2.5	0.0	100.0	17.3	227
Primary	74.5	1,269	89.2	8.4	1.7	0.6	0.1	100.0	10.7	945
Secondary	66.9	1,592	92.6	5.7	1.0	0.6	0.1	100.0	7.4	1,065
High	64.8	1,202	94.8	4.0	1.0	0.0	0.2	100.0	5.4	779
Tertiary	82.2	382	89.8	7.8	2.1	0.3	0.0	100.0	10.2	314
Wealth index quintiles										
Poorest	73.6	737	90.3	7.3	1.5	0.8	0.1	100.0	9.7	542
Second	70.3	802	91.6	6.1	1.4	0.9	0.1	100.0	8.4	563
Middle	71.7	930	90.8	7.8	.8	0.3	0.3	100.0	9.2	667
Fourth	70.5	1,041	92.6	5.7	1.1	0.7	0.0	100.0	7.4	733
Richest	70.0	1,179	91.7	6.1	2.0	0.1	0.0	100.0	8.4	825
Total	**71.0**	**4,688**	**91.5**	**6.5**	**1.4**	**0.5**	**0.1**	**100.0**	**8.5**	**3,331**

Table RH.10B: Occurrence of stillbirth

Percentage of women age 15–49 years who have ever been pregnant, and among those, percentage of women who have ever had a stillbirth, Swaziland, 2010

	Percentage of women who have ever been pregnant	Number of women age 15–49	Number of stillbirths:				Total	Percentage of women who have ever had a stillbirth	Number of women who have ever been pregnant
			None	One	Two or more	Missing/ DK			
Region									
Hhohho	70.7	1,286	98.5	1.4	0.1	0.0	100.0	1.5	910
Manzini	73.7	1,515	97.3	2.4	0.3	0.0	100.0	2.7	1,118
Shiselweni	68.4	1,033	97.1	2.0	0.7	0.3	100.0	2.7	707
Lubombo	69.9	854	98.4	1.0	0.4	0.2	100.0	1.5	597
Area									
Urban	74.5	1,353	98.0	1.8	0.2	0.0	100.0	2.0	1,007
Rural	69.7	3,335	97.7	1.8	0.4	0.1	100.0	2.2	2,323
Age									
15–19	15.4	1,098	99.8	0.1	0.0	0.1	100.0	0.1	169
20–24	69.0	904	99.0	0.9	0.0	0.1	100.0	0.9	624
25–29	89.6	847	98.3	1.3	0.3	0.0	100.0	1.7	758
30–39	95.8	1,051	97.3	2.2	0.3	0.1	100.0	2.6	1,007
40–49	98.0	789	93.7	4.9	1.3	0.1	100.0	6.2	773
Marital status									
Ever married/ in union	96.1	2,326	96.6	2.7	0.6	0.1	100.0	3.3	2,236
Never married/ in union	46.4	2,362	98.9	0.9	0.1	0.1	100.0	1.0	1,095
Education									
None	93.7	242	96.0	3.2	0.8	0.0	100.0	4.0	227
Primary	74.5	1,269	96.5	2.8	0.5	0.1	100.0	3.4	945
Secondary	66.9	1,592	98.4	1.2	0.3	0.1	100.0	1.5	1,065
High	64.8	1,202	98.6	1.3	0.1	0.0	100.0	1.4	779
Tertiary	82.2	382	98.1	1.2	0.5	0.1	100.0	1.9	314
Wealth index quintiles									
Poorest	73.6	737	96.4	2.8	0.6	0.1	100.0	3.4	542
Second	70.3	802	97.7	1.7	0.6	0.0	100.0	2.3	563
Middle	71.7	930	98.1	1.2	0.5	0.2	100.0	1.7	667
Fourth	70.5	1,041	97.9	1.9	0.1	0.1	100.0	2.0	733
Richest	70.0	1,179	98.4	1.5	0.1	0.0	100.0	1.6	825
Total	**71.0**	**4,688**	**97.8**	**1.8**	**0.4**	**0.1**	**100.0**	**2.1**	**3,331**

Table RH.10C: Information on fistula

Percentage of women age 15–49 years who have given birth in the two years preceding the survey and have heard about fistula, percentage of women know someone suffering from or are themselves suffering fistula, and who want to be referred for medical care, Swaziland, 2010

	Percentage of women who have ever been pregnant	Number of women age 15–49	Percentage of women who have heard of fistula	Number of women who have ever been pregnant	Percentage of women who:				Number of women who have ever been pregnant and have heard of fistula
					Know someone who are or were suffering from fistula	Were currently or had been suffering from fistula:			
						Wanted medical referral	Did not want medical referral	Total	
Region									
Hhohho	70.7	1,286	21.9	910	24.5	5.2	4.2	9.4	282
Manzini	73.7	1,515	18.5	1,118	26.2	2.6	8.7	11.2	281
Shiselweni	68.4	1,033	14.9	707	31.1	2.5	3.1	5.7	154
Lubombo	69.9	854	19.2	597	19.6	.0	2.1	2.1	164
Area									
Urban	74.5	1,353	16.0	1,007	27.0	.9	5.5	6.4	216
Rural	69.7	3,335	19.9	2,323	24.7	3.6	4.9	8.5	664
Age									
15–19	15.4	1,098	3.9	169	(22.2)	(2.4)	(3.0)	(5.4)	43
20–24	69.0	904	13.6	624	27.7	2.9	4.0	6.9	123
25–29	89.6	847	21.3	758	22.9	2.7	4.1	6.8	181
30–39	95.8	1,051	25.5	1007	24.0	2.1	6.2	8.2	268
40–49	98.0	789	33.6	773	27.7	4.1	5.4	9.5	265
Marital status									
Ever married/ in union	96.1	2326	27.6	2,236	27.0	3.4	5.6	9.0	643
Never married/ in union	46.4	2362	10.1	1,095	20.7	1.6	3.5	5.1	237
Education									
None	93.7	242	33.9	227	19.1	8.3	3.9	12.3	82
Primary	74.5	1,269	20.5	945	22.8	3.0	3.4	6.4	260
Secondary	66.9	1,592	18.4	1,065	25.1	2.8	7.9	10.7	294
High	64.8	1,202	14.1	779	29.8	1.7	4.2	5.9	170
Tertiary	82.2	382	19.5	314	31.1	0.0	2.7	2.7	75
Wealth index quintiles									
Poorest	73.6	737	21.6	542	24.2	4.9	10.5	15.4	159
Second	70.3	802	21.1	563	23.2	6.0	4.2	10.2	169
Middle	71.7	930	17.9	667	25.5	2.4	3.2	5.6	166
Fourth	70.5	1,041	20.1	733	25.4	0.8	5.2	6.0	209
Richest	70.0	1,179	15.0	825	27.8	1.3	2.5	3.8	176
Total	**71.0**	**4,688**	**18.8**	**3,331**	**25.3**	**2.9**	**5.1**	**8.0**	**880**

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

Table RH.10D: Median age at first sex

Percentage of women age 15–49 years and men 15–59 years who have ever had sex, and, the median age at first sex, Swaziland, 2010

	Women				Men			
	Percentage of women have had sex	Number of women age 15–49	Median age at first sex [1]	Number of women who have had sex [2]	Percentage of men have had sex	Number of men age 15–59	Median age at first sex *	Number of men who have had sex **
Region								
Hhohho	80.0	1,286	18	1,022	71.8	1143	19	810
Manzini	82.1	1,515	17	1,245	76.4	1,406	18	1,068
Shiselweni	76.1	1,033	18	783	61.1	847	19	517
Lubombo	79.9	854	17	681	70.2	782	19	547
Area								
Urban	84.9	1,353	18	1,146	83.8	1,347	19	1,124
Rural	77.8	3,335	17	2,584	64.7	2,832	19	1,816
Education								
None	99.0	242	16	238	93.7	280	19	256
Primary	80.8	1,269	16	1,024	64.8	1,240	19	799
Secondary	74.9	1,592	17	1,189	60.5	1,195	19	718
High	77.2	1,202	18	924	75.9	1,067	19	805
Tertiary	93.1	382	19	355	91.7	397	20	363
Wealth index quintiles								
Poorest	80.3	737	17	591	63.6	570	19	356
Second	77.1	802	17	616	62.2	740	19	459
Middle	79.4	930	17	732	72.0	821	18	587
Fourth	80.0	1,041	17	833	67.8	940	19	632
Richest	81.5	1,179	18	958	82.2	1,107	19	907
Total	**79.8**	**4,688**	**17**	**3,731**	**70.9**	**4,179**	**19**	**2,941**

* Age at first sex was collected, hence median is without decimal point

** For women who answered that first sex was at marriage/union, only those with a reported age at marriage are included

9. Child Development

Early childhood is a critical time for a child's cognitive, social, emotional and physical development and plays a vital role in influencing a range of social and health outcomes in the course of a child's life. Effective and responsive care of the young child by the primary caregiver, family and community, together with access to and use of quality ECCE services, are necessary pre-conditions to ensure the best start in life for young children and to provide them with the opportunity to learn. This is particularly important for the most disadvantaged children.

Early childhood care and education

ECCE is the foundation of quality basic education. Between the ages of three and five years, most children learn the basics of their language, can identify simple emotions among themselves and others, know how to negotiate with others to achieve common goals, and can pay attention for at least a brief period of time. It is essential for them, in particular for the most disadvantaged children, including those coming from poorest families and communities or exposed to different types of risks, to participate in some form of an organized early learning programme. ECCE can provide them with the opportunity to acquire basic cognitive and language skills, social competency and emotional development to prepare them for learning in a school setting.

Attendance in good quality ECCE has benefits at many levels:

- For children: it improves a child's literacy and numeracy skills, socio-emotional development and enhances school-related achievements.[20]
- For caregivers: ECCE allows women to enter the workforce; increases family and community cohesion; provides a support and resource for parents.
- For society: it has helps to reduce poverty, increase GDP and public revenues, and therefore provides an opportunity to break the cycle of poverty.[21]

Research has shown that the benefits of ECCE are greater for poor children and for children from families with low levels of education among caregivers.[22] Childcare can "protect children from family-based risk" and from "the detrimental effects of both poverty and maternal depression" as well as domestic conflict.[23]

A variety of early learning programmes exists in Swaziland, including day care centres, pre-schools, kindergartens and community-based Neighbourhood Care Points (NCPs). In the 2010 Swaziland MICS, all children age 36–59 months were asked whether or not they were attending "*any organized learning or early childhood education programme, such as a private or government facility, including kindergarten or community child care*." The results show that one in three children age 36–59 months

[20] Engle, Ferdinand, Alderman et al., 2011.
[21] Ibid.
[22] Woodhead et al., 2009.
[23] Rahman, Malik, Sikander Roberts and Creed, 2008; National Research Council and Institute of Medicine, 2000.

in Swaziland is attending ECCE (Table CD.1). No gender and urban/rural differences exist, but there are marked differences among regions, with the highest frequency of attendance in Lubombo (49 percent) and the lowest frequency in Manzini (23 percent). As expected, attendance in ECCE increases with the age of children (at age 36–47 months, 26 percent of children attend ECCE compared with 40 percent of children at age 48–59 months) and the mother's education (34 percent of children whose mothers have no education attended ECCE, while 67 percent of children whose mothers have tertiary education attended ECCE). Approximately 50 percent of children from the richest households attend ECCE, which is higher than children coming from other socio-economic groups. However, the percentage of children who attend ECCE is somewhat higher for the poorest households than those with more wealth (36 percent vs. 25–29 percent), which may reflect that there may be targeted efforts to reach the poorest children with ECCE. However, caution is warranted when interpreting this result as the differences may be only marginally significant.

For caregivers who responded that their children were not attending ECCE, information was further sought to determine barriers to ECCE attendance. The highest percentage of caregivers (26 percent) mentioned that that the programme was too far, while 21 percent said that it was too costly for them. The geographical barrier of accessing ECCE was markedly higher among the poorest families (36 percent) compared with the richest families (nine percent). There appear to be some gender differences: caregivers of boys are less likely to identify physical distance as a barrier than those of girls (23 percent vs. 29 percent). The reverse is true for the cost as a barrier: parents of boys are more likely to identify the cost as a barrier than are the parents of girls (25 percent vs. 17 percent). This may indicate that ECCE is valued more for girls than boys. However, this interpretation needs to be treated with caution given relatively small numbers of cases. Finally, the fact that half of the parents identified "other" as the main barrier to accessing ECCE services shows that there are some other reasons why children are not attending ECCE, which are not captured with the questionnaire.

Support for learning

The process of nurturing young children to grow into creative and competent participants in society begins in the earliest stages of life and heavily depends on the environment in which a child is raised. Providing a safe and stimulating home environment is a critical component of this process and can have a long-lasting impact on children's chances of flourishing, attaining an optimal level of development and later becoming responsible and productive adults. A number of indicators were used to measure different aspects of the home environment that greatly influence the development of a young child: availability of children's books and playthings (items demonstrated to positively stimulate development of a young child), caregiver's direct engagement with the child in activities that stimulate learning and school readiness, and child left home alone or with other children.

The direct involvement of adult household members in support for young child learning was measured through the engagement in the following activities: reading books or looking at picture books, telling stories, singing songs, taking children outside the home, compound or yard, playing with children, and spending time with children naming, counting, or drawing things. The homes where household members were engaged in at least four different activities were considered to be stimulating for child development.

For every second child age 36-59 months (50 percent) an adult household member engaged in more than four activities that promote learning and school readiness during the three days preceding the survey (Table CD.2). The average number of activities that adults engaged with children was 3.3. The father's involvement in such activities was significantly lower: fathers of only 10 percent of children engaged in one or more activities. This could be largely due to the fact that most of the children of this age (71 percent) did not have a father living in the same household.

It is important to note that parents and other adults engaged in activities with young children with the same frequency regardless of the child's gender and age. Adults engaged in learning and school readiness activities with children more frequently in urban areas than in rural areas (59 percent vs. 48 percent). This difference was reflected in, and exacerbated by the father's involvement: fathers engaged with 24 percent of children in urban areas, but only with seven percent in rural areas. There were marked differences among regions: adults engaged in activities with 69 percent of children in the Hhohho region, but only with about half as many children in the Lubombo region (33 percent). There appears to be a linear increase in engagement in relation to both mother's and father's education level. For example, for children of mothers with tertiary education, over 80 percent had adults that engaged in four or more activities with them, and in the same households, 24 percent of fathers engaged in such activities. In contrast, for the children of mothers with no education, the comparable figures are 41 percent and six percent, respectively, which are substantially lower than those for households of mothers with tertiary education. Similarly, for children of fathers with tertiary education, 79 percent had adults who engaged in four or more activities with them, while only 38 percent of children of fathers with no education had such engagement by adults. A very similar association can be seen between the socio-economic status and adults' involvement with children: in the richest households, adults engage with 71 percent of children, but in the poorest households, only with 35 percent.

The availability of children's books and toys in the home is found to be a consistent correlate of children's cognitive development and is often used as a proxy for the measurement of the level of stimulation children receive at home. The mothers/caretakers of all children under five were asked about the number of children's books or picture books they have for this child, household objects or outside objects, and homemade toys or toys that came from a shop that are available at home. Households where three or more children's books and two or more different type of playthings are available for children to play with are considered to be simulative for their development.

In Swaziland, only four percent of children age 0–59 months are living in households where at least three children's books are present, and the percentage of children with 10 or more books in the household is less than one percent (Table CD.3). The proportion of household with children's books available is so small that any further analysis is not valid, except maybe to emphasize the positive correlation with the mother's education: while only one percent of children whose mothers have none or have primary education had three or more children's books, as much as 12 percent of children whose mothers have tertiary education had such books. Since the presence of books is a strong indicator of children's future achievement, these very low percentages suggest a clear opportunity for intervention.

Table CD.1: Early childhood education

Percentage of children age 36–59 months who are attending some form of organized early childhood education programme and percentage of children not attending, by reason for not attending, Swaziland, 2010

	Percentage of children age 36–59 months currently attending early childhood education [1]	Percentage not attending early childhood education	Percentage that don't know of attendance or with missing information	Number of children age 36–59 months	Main reason for not attending organized learning or ECD programme:							Total	Number of children age 36–59 months not attending any organized learning or ECD programme
					Too far	Too costly	Disability	Religion	Other	Don't Know	Missing		
Sex													
Male	32.0	67.6	0.5	516	23.2	24.5	1.7	0.4	50.1	0.2	0.0	100.0	349
Female	33.9	65.5	0.6	552	28.7	17.4	0.6	0.3	51.2	1.4	0.3	100.0	362
Region													
Hhohho	26.3	73.1	0.6	256	14.1	17.9	0.8	1.4	65.4	0.3	0.0	100.0	187
Manzini	23.4	76.2	0.4	301	23.1	32.3	2.1	0.0	41.4	1.0	0.0	100.0	230
Shiselweni	36.4	63.3	0.3	288	34.0	13.7	0.0	0.0	50.3	1.5	0.5	100.0	182
Lubombo	49.2	50.1	0.8	223	38.8	14.1	1.5	0.0	45.5	0.0	0.0	100.0	112
Area													
Urban	35.8	64.2	0.0	190	10.0	28.6	0.8	0.9	58.4	1.3	0.0	100.0	122
Rural	32.4	67.0	0.6	878	29.3	19.3	1.2	0.3	49.1	0.7	0.2	100.0	588
Age of child													
36–47 months	25.6	73.6	0.7	533	23.7	16.3	0.5	0.7	57.6	1.0	0.2	100.0	392
48–59 months	40.3	59.4	0.3	536	28.8	26.6	1.9	0.0	42.1	0.6	0.0	100.0	318
Mother's education													
None	33.6	66.4	0.0	158	31.4	26.7	0.0	0.0	41.9	0.0	0.0	100.0	105
Primary	28.6	70.8	0.6	376	29.8	22.5	0.5	0.0	46.4	0.9	0.0	100.0	267
Secondary	27.5	71.3	1.2	270	20.9	20.3	2.3	0.8	53.6	1.7	0.5	100.0	192
High	35.8	64.2	0.0	186	25.6	16.1	2.0	0.0	56.3	0.0	0.0	100.0	119
Tertiary	67.1	32.9	0.0	76	(6.7)	(10.3)	(0.0)	(4.5)	(78.5)	(0.0)	(0.0)	(100.0)	25
Missing/DK	*	*	*	3	*	*	*	*	*	*	*	*	3
Wealth index quintiles													
Poorest	35.7	63.7	0.6	304	36.1	18.6	0.7	0.0	44.7	0.0	0.0	100.0	194
Second	29.2	70.0	0.7	216	21.2	25.0	1.9	0.0	49.9	1.5	0.6	100.0	151
Middle	24.7	75.3	0.0	208	25.2	24.3	1.4	0.0	47.9	1.2	0.0	100.0	157
Fourth	27.8	71.0	1.2	185	27.8	20.0	0.6	1.2	49.7	0.7	0.0	100.0	131
Richest	50.0	50.0	0.0	155	8.7	13.5	1.3	1.4	74.3	0.7	0.0	100.0	77
Total	**33.0**	**66.5**	**0.5**	**1,068**	**26.0**	**20.9**	**1.1**	**0.4**	**50.7**	**0.8**	**0.1**	**100.0**	**711**

[1] MICS indicator 6.7

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases. Figures in parentheses are based on 25–49 unweighted cases

Table CD.2: Support for learning

Percentage of children age 36–59 months with whom an adult household member engaged in activities that promote learning and school readiness during the last three days, Swaziland, 2010

	Percentage of children aged 36–59 months		Mean number of activities			
	With whom adult household members engaged in four or more activities [1]	With whom the father engaged in one or more activities [2]	Any adult household member engaged with the child	The father engaged with the child	Percentage of children not living with their natural father	Number of children aged 36–59 months
Sex						
Male	50.2	9.3	3.3	0.2	74.9	516
Female	49.8	10.2	3.2	0.2	68.0	552
Region						
Hhohho	69.0	11.7	4.0	0.2	67.7	256
Manzini	56.3	14.9	3.6	0.3	64.2	301
Shiselweni	39.4	2.1	2.7	0.0	83.7	288
Lubombo	33.3	10.5	2.6	0.2	69.4	223
Area						
Urban	59.3	24.0	3.8	0.5	50.3	190
Rural	47.9	6.7	3.2	0.1	76.0	878
Age						
36–47 months	49.4	10.5	3.2	0.2	72.7	533
48–59 months	50.6	9.0	3.3	0.2	70.1	536
Mother's education						
None	40.8	5.6	2.7	0.1	76.9	158
Primary	41.3	6.0	2.8	0.1	76.6	376
Secondary	51.1	9.1	3.4	0.2	67.9	270
High	60.6	16.5	3.8	0.3	69.6	186
Tertiary	82.5	23.4	4.5	0.6	52.3	76
Missing/DK	*	*	*	*	*	3
Father's education						
None	38.3	22.7	2.8	0.5	na	40
Primary	45.2	23.9	3.1	0.5	na	82
Secondary	53.7	19.2	3.5	0.4	na	66
High	51.2	30.6	3.5	0.6	na	67
Tertiary	79.1	52.3	4.4	1.2	na	51
Father not in household	48.7	2.1	3.2	na	na	762
Wealth index quintiles						
Poorest	35.2	3.9	2.5	0.1	78.6	304
Second	54.3	7.7	3.4	0.2	78.0	216
Middle	45.5	8.9	3.1	0.1	74.0	208
Fourth	56.8	8.1	3.7	0.2	70.8	185
Richest	70.8	27.4	4.2	0.6	45.2	155
Total	**50.0**	**9.8**	**3.3**	**0.2**	**71.4**	**1,068**

[1] MICS indicator 6.1
[2] MICS Indicator 6.2

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases.

Table CD.3: Learning materials

Percentage of children under age five by numbers of children's books present in the household, and by playthings that child plays with, Swaziland, 2010

	Household has for the child:		Child plays with:			
	Three or more children's books [1]	10 or more children's books	Homemade toys	Toys from a shop/ manufactured toys	Household objects/ objects found outside	Two or more types of playthings [2]
Sex						
Male	3.0	0.5	53.3	54.8	84.6	69.1
Female	4.5	0.9	47.0	57.2	82.2	68.1
Region						
Hhohho	4.6	0.8	45.2	60.9	79.4	68.1
Manzini	5.7	1.4	51.6	60.0	82.9	72.8
Shiselweni	1.7	0.0	44.4	49.0	83.7	59.6
Lubombo	2.4	0.5	60.9	53.2	88.6	74.5
Area						
Urban	9.1	2.6	45.0	73.7	76.3	71.0
Rural	2.4	0.3	51.3	51.6	85.1	68.0
Age						
0–23 months	0.8	0.0	34.9	50.0	65.5	51.8
24–59 months	5.7	1.2	59.8	60.0	95.0	79.6
Mother's education						
None	1.1	0.0	48.9	38.0	92.0	59.2
Primary	1.1	0.0	52.6	43.3	85.7	65.6
Secondary	2.2	0.2	51.4	59.6	80.1	71.2
High	6.5	1.5	45.4	72.7	79.3	70.7
Tertiary	21.2	5.4	47.2	87.0	82.0	82.5
Missing/DK	0.0	0.0	0.0	100.0	100.0	100.0
Wealth index quintiles						
Poorest	1.1	0.0	52.8	36.5	90.1	63.8
Second	1.3	0.0	52.8	46.6	84.5	66.8
Middle	2.3	0.1	49.5	56.1	81.3	67.2
Fourth	4.6	1.1	50.7	70.1	81.5	74.0
Richest	12.2	3.2	41.8	82.9	76.0	74.0
Total	**3.8**	**0.7**	**50.0**	**56.0**	**83.3**	**68.6**

[1] MICS indicator 6.3
[2] MICS indicator 6.4

Table CD.3 also shows that 69 percent of children age 0–59 months had two or more types of playthings to play with in their homes. The playthings included homemade toys (such as dolls and cars, or other toys made at home), toys that came from a store, and household objects (such as pots and bowls) or objects and materials found outside the home (such as sticks, rocks, animal shells, or leaves). It is interesting to note that most of the children, 83 percent, play with household objects or objects founds outside; 56 percent are playing with toys that come from a store, and 50 percent of children play with homemade toys. There is not much difference in the proportion of children who have two or more playthings among girls and boys and among children living in urban and rural

areas. Availability of different type of playthings is highest in Lubombo (75 percent) and lowest in Shiselweni (60 percent). Some differences are observed related to the socio-economic status of the households, with 64 percent of children from the poorest households having two or more types of playthings compared with 74 percent of children of the same age living in the richest households. The proportion of children with two or more playthings whose mothers have tertiary education is 83 percent compared with 59 percent of children whose mothers have no education. The relatively high proportions of toys available, homemade toys and household objects in particular, are an encouraging finding, as these toys can assist even poor parents in stimulating the development of their young children. It is worth noting that both types of toys can be equally supportive to a child's development.

Inadequate care

Leaving a young child alone abrogates caregiving responsibilities and can have very harmful effects on young children. Leaving a child alone or in the care of another child not only exposes the children to increased risk of harm and injury, but also to the risk of abuse and neglect. In the 2010 Swaziland MICS, two questions were asked to find out whether children age 0–59 months were left alone during the week preceding the interview, and whether children were left in the care of other children under 10 years of age.

Ideally, no child should be left alone or in the care of another child. However, results from the survey showed that 15 percent of under-five children in Swaziland are exposed to that risk: 13 percent in the care of another child younger than 10 years and four percent left alone. The risky practice of leaving the child with inadequate care is highly associated with wealth, maternal education, age, region and urban/rural location of households. Inadequate care is more common in rural areas than in urban areas (16 percent vs. 10 percent), and in Manzini and Lubombo compared with Hhohho (19 percent vs. nine percent).

Inadequate care was more frequent among children whose mothers had no education (20 percent) or primary education (18 percent), as opposed to children whose mothers had secondary education (14 percent), higher secondary education (12 percent) or tertiary education (eight percent). The proportion of children left in inadequate care from the poorest household (20 percent) is significantly higher compared with children from the richest households (10 percent). Children age 24–59 months were left with inadequate care more (18 percent) than those who were age 0–23 months (10 percent). However, although the proportion of children age 0–23 months left alone in the past week for at least one hour is very small, at only two percent, those children are in particular danger because of their vulnerability related to age.

Table CD.4: Inadequate care

Percentage of children under age five left alone or left in the care of other children under the age of 10 years for more than one hour at least once during the past week, Swaziland, 2010

	Percentage of children under age five			
	Left alone in the past week	Left in the care of another child younger than 10 years of age in the past week	Left with inadequate care in the past week [1]	Number of children under age five
Sex				
Male	4.5	12.3	15.0	1,265
Female	4.1	12.8	14.8	1.382
Region				
Hhohho	2.5	8.0	8.7	655
Manzini	5.2	15.7	19.3	787
Shiselweni	5.1	9.4	12.6	683
Lubombo	4.1	17.8	19.2	523
Area				
Urban	4.3	7.3	9.7	527
Rural	4.3	13.9	16.2	2,120
Age				
0–23 months	2.2	8.7	10.2	1,045
24–59 months	5.7	15.1	18.0	1,602
Mother's education				
None	4.6	17.8	19.5	303
Primary	5.8	14.7	17.9	891
Secondary	4.1	11.0	13.5	757
High	2.8	9.9	11.6	523
Tertiary	1.4	7.8	7.8	171
Missing/DK	*	*	*	3
Wealth index quintiles				
Poorest	5.6	17.5	20.1	646
Second	3.4	12.2	14.3	557
Middle	5.2	12.4	15.4	544
Fourth	3.2	12.3	13.5	489
Richest	3.6	6.0	8.6	411
Total	**4.3**	**12.6**	**14.9**	**2,647**

[1] MICS indicator 6.5

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases.

Early Childhood Development Index

Early child development is defined as an orderly, predictable process along a continuous path in which a child learns to handle more complicated levels of moving, thinking, speaking, feeling and relating to others. Physical growth, literacy and numeracy skills, socio-emotional development and readiness to learn are vital domains of a child's overall development, which is a basis for overall human development.

A 10-item module that has been developed for the MICS4 was used to calculate the Early Child Development Index (ECDI). The indicator is based on some benchmarks that children would be expected to have if they were developing as the majority of children in that age group. Each of the 10 items is used in one of the four domains, to determine if children are developmentally on track in that domain. The domains in question are:

- Literacy-numeracy: Children are identified as being developmentally on track based on whether they can identify/name at least ten letters of the alphabet, whether they can read at least four simple, popular words, and whether they know the name and recognize the symbols of all numbers from 1 to 10. If at least two of these are true, then the child is considered developmentally on track.
- Physical: If the child can pick up a small object with two fingers, like a stick or a rock from the ground, and/or the mother/caretaker does not indicate that the child is sometimes too sick to play, then the child is regarded as being developmentally on track in the physical domain.
- In the social-emotional domain, children are considered to be developmentally on track if two of the following is true: If the child gets along well with other children, if the child does not kick, bite, or hit other children and if the child does not get distracted easily.
- Learning: If the child follows simple directions on how to do something correctly and/or when given something to do, is able to do it independently, then the child is considered to be developmentally on track in the learning domain.

ECDI is then calculated as the percentage of children who are developmentally on track in at least three of these four domains. The index is best interpreted in the context of all the other variables related to the support of early child development in the household and community.

The results are presented in Table CD.5. In Swaziland, 62 percent of children age 36–59 months are developmentally on track. As expected for an index based on child's development, ECDI is higher in the older age group (67 percent among 48–59 month-olds compared with 57 percent among 36–47 month-olds), since older children are more likely to have achieved more developmental milestones. ECDI is slightly higher among girls than boys (64 percent vs. 60 percent). Much higher ECDI is seen in children attending an ECCE programme (69 percent compared with 59 percent for those who are not attending ECCE).

ECDI is lower for children living in the poorest households compared with children living in the richest households (52 percent vs. 76 percent). ECDI appears to have an almost linear association with both wealth index and maternal education. A 14 percentage point gap separates rural and

urban regions, which mirrors earlier findings in relation to books, play and activities with parents. There is a similar difference across the regions: 71 percent of children in Hhohho are developmentally on track compared with 55 percent in Lubombo. Interestingly, Hhohho and Lubombo were the two regions where the largest gap in parent engagement was observed.

The analysis of four domains of child development shows that 97 percent and 93 percent of children are on track in the physical and learning domains, respectively, but a lower proportion of children (62 percent) are on track in the socio-emotional domain and a substantially lower proportion (15 percent) are on track in the literacy-numeracy domain. While there does not appear to be much variation in the physical and learning domains across different variables, whether or not a child is on track in literacy-numeracy and socio-emotional domains is associated with the child's age, mother's education, pre-school attendance and household wealth. More girls than boys are on track in the literacy-numeracy and social-emotional domains (17 percent vs. 12 percent and 64 percent vs. 59 percent, respectively). The smallest proportion of children who are on track in the literacy-numeracy domain can be found in Shiselweni and Lubombo (nine percent and 10 percent, respectively), the two regions where children are less likely to have a conducive home environment (i.e., adults are less involved in activities that stimulate early learning and children's books and playthings are less available) and children are less likely to attend ECCE.

Table CD.5: Early child development index

Percentage of children age 36–59 months who are developmentally on track in literacy-numeracy, physical, social-emotional, and learning domains, and the ECDI score, Swaziland, 2010

	Percentage of children age 36–59 months who are developmentally on track for indicated domains				ECDI score [1]	Number of children age 36–59 months
	Literacy-numeracy	Physical	Social-Emotional	Learning		
Sex						
Male	12.1	97.6	59.1	93.6	59.8	516
Female	17.1	97.1	64.1	92.6	64.1	552
Region						
Hhohho	18.9	99.8	70.9	93.7	70.8	256
Manzini	19.5	97.4	61.9	89.9	63.3	301
Shiselweni	9.3	95.6	57.9	96.2	58.2	288
Lubombo	10.4	96.6	55.6	92.7	55.1	223
Area						
Urban	23.2	99.3	70.1	93.8	73.9	190
Rural	12.9	96.9	59.8	92.9	59.4	878
Age						
36–47 months	8.8	95.0	60.4	92.5	57.2	533
48–59 months	20.6	99.7	63.0	93.7	66.9	536
Pre-school attendance						
Attending pre-school	30.8	98.0	62.4	94.6	68.7	352
Not attending pre-school	6.8	97.0	61.3	92.4	58.7	716
Mother's education						
None	7.2	95.8	58.3	94.9	56.5	158
Primary	10.0	97.0	60.1	92.0	58.0	376
Secondary	13.0	97.5	61.3	92.1	60.9	270
High	21.0	97.9	66.5	93.9	70.8	186
Tertiary	44.5	100.0	66.0	96.1	75.9	76
Missing/DK	*	*	*	*	*	3
Wealth index quintiles						
Poorest	8.2	95.5	54.4	91.8	51.8	304
Second	9.7	98.3	60.5	93.3	60.0	216
Middle	10.4	98.7	62.7	94.1	62.1	208
Fourth	15.9	95.8	68.0	93.5	69.4	185
Richest	38.8	99.4	68.7	93.6	75.9	155
Total	**14.7**	**97.3**	**61.7**	**93.1**	**62.0**	**1,068**

[1] MICS indicator 6.6

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases.

10. Literacy and Education

Education is a fundamental human right and essential for the exercise of all other human rights. It promotes individual freedom and empowerment and yields important development benefits. Yet millions of children and adults remain deprived of educational opportunities, many as a result of poverty. Education is a powerful tool by which economically and socially marginalized adults and children can lift themselves out of poverty and participate fully as citizens. It is therefore of no coincidence that the Government of Swaziland shares the same view point and sees the vital importance of education to economic growth and human capital development.

Swaziland is among the countries that signed the Education For All (EFA) and the Millennium Declaration, which aim to eradicate poverty through education. Goal 2 of EFA is to "ensure that all children, particularly girls, children in difficult circumstances and those belonging to ethnic minorities have access to and complete free and compulsory primary education of good quality by 2015". It is therefore in line with this goal that the Government of Swaziland, in its constitution, reaffirmed its commitment to ensuring that "every Swazi child shall within three years of the implementation of the constitution have a right to free education in public schools at least up to the end of primary school beginning from the first grade." The government, through the Ministry of Education and Training, reviewed its 1999 Educational Sector Policy in 2010, which was adopted by Cabinet and Parliament that same year. The main goal of the revised policy is "to provide an equitable and inclusive education system that affords all children of school-going age access to quality, free and compulsory basic and secondary education that enhances personal development and contributes to Swazi cultural development, socio-economic growth and global competitiveness".[24]

Adult literacy

Adult literacy rate is the percentage of women and men age 15 years and above who can, with understanding, read and write a short, simple statement on their everyday life. Youth and adult literacy rates are the test of an educational system. Basic reading, writing and numeracy skills are essential to individual well-being and societal development.

One of the WFFC goals is to assure adult literacy. Adult literacy is also an MDG indicator, relating to both men and women age 15–24 years. Literacy was assessed on the ability of women and men to read a short simple statement or on school attendance. The percent literate is presented in Table ED.1.

The results show that the literacy rate for the 15–24 year-olds is quite high overall as well as across all background characteristics. It is interesting to note that literacy is slightly higher among women than men (94 percent vs. 91 percent). This indicates an achievement of MDG 3: to promote gender equality and empower women through equal schooling for both boys and girls. The pattern is similar

[24] MoET, Education Sector Plan 2010 – 2022.

for other background characteristics. The only exception is for those with no education: literacy for that group is 19 percent among men and eight percent among women. However, the results are based on a fairly small number of cases and caution is thus warranted when interpreting these results. For both women and men literacy is positively associated with household wealth.

Table ED.1A: Literacy among young women and men

Percentage of women and men age 15–24 years who are literate, Swaziland, 2010

	Women			Men		
	Percentage literate [1]	Percentage not known	Number of women age 15–24 years	Percentage literate [1]	Percentage not known	Number of men age 15–24 years
Region						
Hhohho	94.0	0.7	512	91.8	0.5	474
Manzini	93.9	0.3	603	88.7	1.0	554
Shiselweni	95.7	0.8	512	93.8	1.3	483
Lubombo	92.8	1.2	375	89.1	1.2	347
Area						
Urban	93.1	0.5	484	89.6	1.7	410
Rural	94.5	0.8	1518	91.2	0.8	1,447
Education						
None	(7.8)	(3.2)	32	(18.8)	(6.2)	34
Primary	84.0	2.4	546	77.5	2.5	631
Secondary	100.0	0.0	809	100.0	0.0	650
High	100.0	0.0	561	100.0	0.0	488
Tertiary	100.0	0.0	53	100.0	0.0	54
Age						
15–19	95.0	0.7	1,098	92.0	1.1	1,075
20–24	93.1	0.7	904	89.4	0.8	783
Wealth index quintiles						
Poorest	91.0	1.0	340	86.9	1.3	282
Second	93.1	0.5	375	89.3	1.4	416
Middle	93.4	0.5	422	88.4	1.7	395
Fourth	95.7	1.1	454	93.3	0.2	440
Richest	96.8	0.4	410	96.2	0.3	325
Total	**94.2**	**0.7**	**2,002**	**90.9**	**1.0**	**1,858**

[1] MICS indicator 7.1; MDG indicator 2.3

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

Pre-school attendance and school readiness

Attendance to pre-school education in an organised learning or child education programme is important for the readiness of children to school. Figure ED.1 and Table ED.2 show the proportion of children in the first grade of primary school who attended pre-school the previous year.

Figure ED.1: Percentage of children attending the first grade who attended pre-school in the previous year, Swaziland, 2010

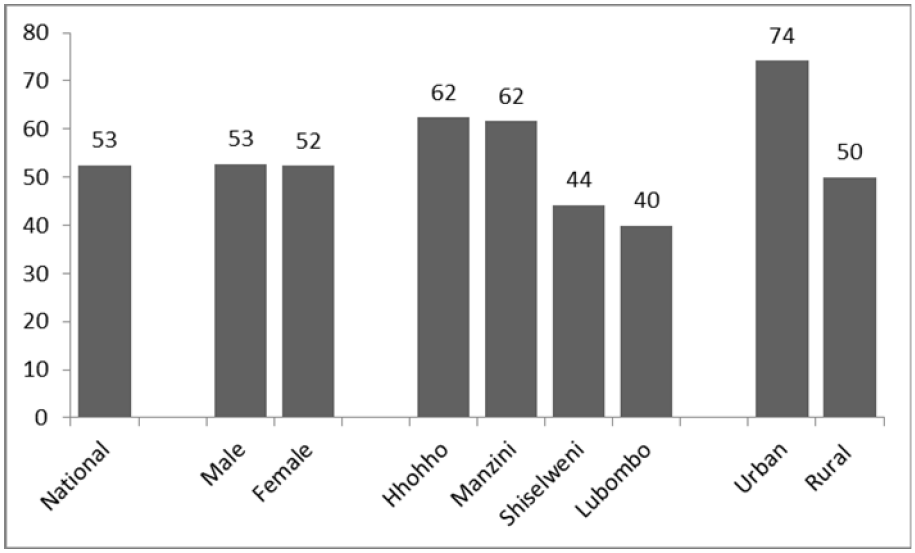


Figure ED.1 shows that overall, 53 percent of children attended pre-school the previous year. Pre-school attendance is higher among children residing in urban areas compared with those in rural areas (74 percent vs. 50 percent). Regional differentials are also pronounced; 62 percent of first graders in Hhohho and Manzini attended pre-school compared with 44 percent for Shiselweni and 40 percent for Lubombo. Male and female children were equally likely to have attended pre-school.

Socio-economic status appears to have a positive correlation with school readiness (Table ED.2). While the indicator is only 48 percent among children whose mothers have no education it increases to 82 percent among those whose mothers have tertiary education. This pattern is expected given that the more educated the mother the higher the appreciation of education for the child. Not surprisingly, school readiness has a strong correlation with household wealth, increasing from 36 percent among the poorest households to 79 percent among the richest households.

Table ED.2: School readiness		
Percentage of children attending the first grade of primary school who attended pre-school the previous year, Swaziland, 2010		
	Percentage of children attending the first grade who attended pre-school in the previous year [1]	Number of children attending the first grade of primary school
Sex		
Male	52.7	468
Female	52.3	417
Region		
Hhohho	62.4	236
Manzini	61.6	224
Shiselweni	44.2	235
Lubombo	39.9	190
Area		
Urban	74.2	110
Rural	49.5	775
Mother's education		
None	48.0	198
Primary	44.0	344
Secondary	58.6	193
High	65.4	94
Tertiary	81.6	52
Missing/DK	*	2
Wealth index quintiles		
Poorest	36.1	274
Second	50.1	208
Middle	59.2	172
Fourth	63.8	147
Richest	78.6	84
Total	**52.5**	**885**
[1] MICS indicator 7.2		

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

Primary and secondary school participation

Universal access to basic education and the achievement of primary education by the world's children is one of the MDGs and a WFFC goal. Education is a vital prerequisite for combating poverty, empowering women, protecting children from hazardous and exploitative labour and sexual exploitation, promoting human rights and democracy, protecting the environment, and influencing population growth.[25]

The indicators for primary and secondary school attendance include:

- Net intake rate in primary education
- Primary school net attendance ratio (adjusted)
- Secondary school net attendance ratio (adjusted)
- Female-to-male education ratio (or Gender Parity Index – GPI) in primary and secondary school

[25] UNESCO, Education for All, www.unesco.org/efa/goals

The indicators of school progression include:

- Children reaching the last grade of primary school
- Primary completion rate
- Transition rate to secondary school

In the MICS4, the degree to which children attend primary school in a timely manner is measured by the percentage of children who are of primary school entry age (six years) who attend the first grade of primary school (Table ED.3). Overall, the proportion of children of primary school entry age attending school is relatively high for all the background characteristics of the children, at 88 percent. This could be evidence of the Free Primary Education programme introduced by the Government of Swaziland in 2010. The roll out of free primary education affects only grade 1 through grade 3, with higher grades expected to be included in future.

Urban vs. rural and regional differentials are not much different – the figure is slightly higher at 89 percent in rural areas compared with 85 percent in urban areas. Attendance at primary school entry age is more prevalent in Manzini (91 percent), and lowest in Lubombo (83 percent). Eighty-nine percent of male children are attending primary school compared with 88 percent of female children, indicating gender equality in the net intake rate (Table ED.3). No pronounced differences and patterns can be observed with regards to mother's education or household wealth.

Primary School attendance

Table ED.4 indicates that 97 percent of children age 6-12 years are attending primary or secondary school. This also means that three percent of primary school age children were not attending school. The net attendance ratio is 96 percent for boys and 97 percent for girls, indicating gender parity in primary school attendance.

There are no marked regional differentials (ranging from 95 percent in the Lubombo region to 97 percent in the Hhohho and Manzini regions, respectively). There are also no differentials between urban and rural areas. Children born to mothers with higher educational levels have greater attendance in primary school at the correct age compared with children born to mothers with little or no education. A similar trend is also recorded in wealthier households compared with poorest households. However, it is worth noting that the differentials in wealth index quintiles and educational levels are insignificant. This might be due to the introduction of the Free Primary Education that has somewhat reduced the financial burden placed on poor families and has also encouraged mothers of little or no education to send their children to school.

Table ED.3: Primary school entry

Percentage of children of primary school entry age entering grade 1 (net intake rate), Swaziland, 2010

	Percentage of children of primary school entry age entering grade 1 [1]	Number of children of primary school entry age
Sex		
Male	88.9	301
Female	87.7	302
Region		
Hhohho	88.7	150
Manzini	91.4	174
Shiselweni	88.0	166
Lubombo	83.4	112
Area		
Urban	85.1	84
Rural	88.8	519
Mother's education		
None	88.4	96
Primary	86.5	232
Secondary	90.1	153
High	89.0	77
Tertiary	(93.5)	42
Missing/DK	*	2
Wealth index quintiles		
Poorest	88.6	143
Second	88.6	147
Middle	86.5	123
Fourth	90.8	107
Richest	86.6	83
Total	**88.3**	**603**

[1] MICS indicator 7.3

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

Table ED.4: Primary school attendance

Percentage of children of primary school age attending primary or secondary school (net attendance ratio), Swaziland, 2010

	Male		Female		Total	
	Net attendance ratio (adjusted)	Number of children	Net attendance ratio (adjusted)	Number of children	Net attendance ratio (adjusted) [1]	Number of children
Region						
Hhohho	96.5	550	97.7	508	97.1	1,059
Manzini	96.8	558	97.3	543	97.0	1,101
Shiselweni	95.0	549	97.8	526	96.4	1,075
Lubombo	95.5	401	95.0	448	95.3	849
Area						
Urban	96.4	318	97.3	321	96.9	639
Rural	95.9	1741	97.0	1,704	96.4	3,445
Age at beginning of school year						
6	89.9	301	91.2	302	90.6	603
7	94.1	299	97.4	303	95.7	602
8	98.2	253	97.7	253	97.9	506
9	98.4	317	97.3	336	97.8	653
10	98.0	291	98.8	251	98.4	541
11	97.0	307	98.6	300	97.8	607
12	96.7	291	98.6	281	97.7	573
Mother's education						
None	94.3	404	95.4	400	94.9	804
Primary	95.3	780	97.2	760	96.2	1,540
Secondary	96.4	481	97.5	467	96.9	948
High	98.9	253	98.4	254	98.6	507
Tertiary	99.6	136	97.9	139	98.7	275
Missing/DK	*	5	*	5	*	10
Wealth index quintiles						
Poorest	94.5	499	96.1	477	95.3	975
Second	96.0	466	97.3	476	96.6	943
Middle	95.7	416	95.0	412	95.4	828
Fourth	96.4	393	98.8	378	97.6	771
Richest	98.5	285	98.6	282	98.6	567
Total	**96.0**	**2059**	**97.0**	**2025**	**96.5**	**4,084**

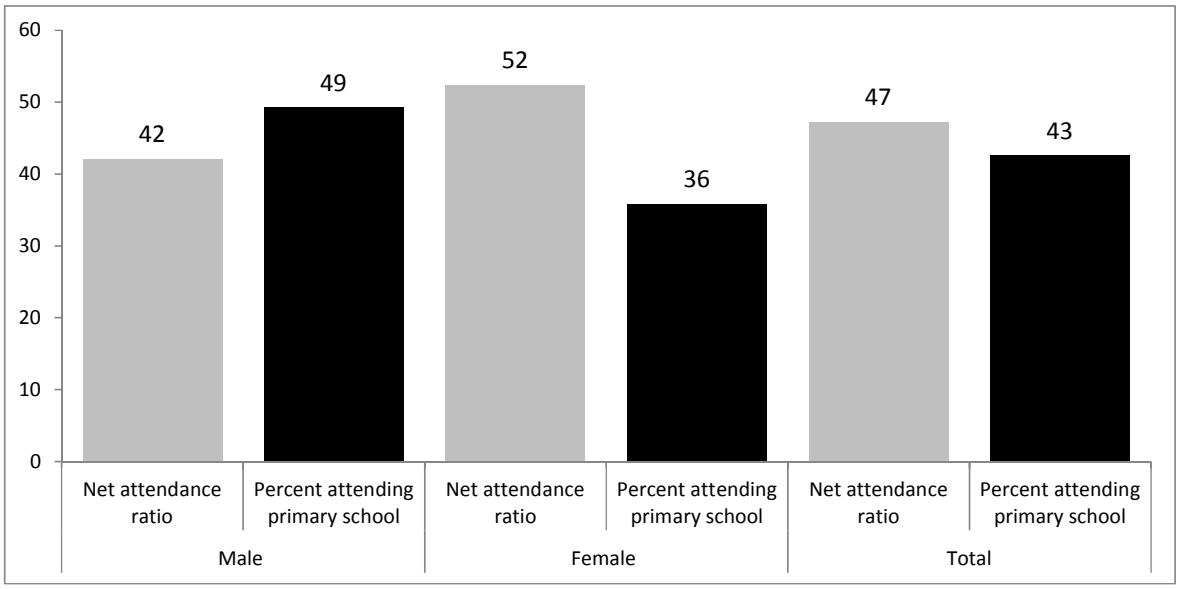
[1] MICS indicator 7.4; MDG indicator 2.1

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

Secondary School attendance

The secondary school net attendance ratio is presented in Table ED.5 and Figure ED.2. Nationally, 47 percent of children of secondary school age[26] are attending secondary school or higher (adjusted net attendance ratio). This is in contrast with the high primary school net attendance presented earlier. Males have a particularly lower net attendance ratio compared with females (42 percent vs. 52 percent). Of the remaining children, a substantial proportion of children who should be attending secondary school are still attending primary school (43 percent). The percentage of children of secondary school age who are attending primary school is particularly high for males at 49 percent, compared with females at 36 percent. This is consistent with the findings of the Southern and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ), which has consistently found high grade repetition rates among SACMEQ countries including Swaziland.[27]

Figure ED.2: Percentage of children of secondary school age attending secondary school or higher and percentage of children attending primary school, Swaziland, 2010



The secondary school net attendance ratio for all the regions, with the exception of Manzini is below 50 percent. Conversely, Lubombo has the highest percentage of children of secondary school-going age attending primary school (48 percent), with Manzini recording the lowest percentage (34 percent) for the same indicator. Children in urban areas are more likely to attend secondary school at the correct age compared with those in rural areas. There is a marked urban vs. rural disparity: 64 percent of children age 13–17 years are in secondary school compared with 23 percent children in rural areas. Also, 47 percent of children in rural areas who are expected to be in secondary school

[26] Secondary school age in Swaziland is age 13–17 years.
[27] The SACMEQ study conducted in 2007 found that 56 percent of grade six pupils in Swaziland had repeated grade at least once.

are in primary school compared with only 23 percent in urban areas. Of children age 13–17 years who are expected to be in secondary school at the beginning of the 2010 school year, 14 percent of those age 17 years are still primary school. About two in five children and one in four children age 15 and 16 years, respectively, are still attending primary school.

The educational level of the mother and the socio-economic status of the household are strongly related to the secondary school net attendance ratio and the percentage of children still attending primary school. The net attendance ratio declines sharply from 76 percent among children whose mothers have tertiary education to 27 percent among those from mothers who have no education. In contrast, the percentage of secondary school age children attending primary school declines from 63 percent among children with mothers who have tertiary education to 24 percent among those from mothers with no education.

Table ED.6 presents the survival rates to the last grade of primary school. The survival rate in primary school is defined as the percentage of children who enter the first grade who eventually reach the last grade. This number includes children that repeat grades and eventually move up to the last grade. In Swaziland the last grade of primary school is grade 7.

The percentage of pupils that reach grade 7 of those that entered grade 1 is 93 percent nationally (92 percent for males and 93 percent for females). This high survival rate for primary school is due to the high repetition rate already alluded to above. Ninety-five percent of children in Lubombo who enter grade 1 reach grade 7 compared with 90 percent of children in Hhohho.

The survival rate is higher among children from households where the head of household or the mother has a higher level of education. A similar pattern is also observed for household wealth; children in households from the highest wealth quintile have higher survival rates compared with those in the poorest quintile.

Table ED.5: Secondary school attendance

Percentage of children of secondary school age attending secondary school or higher (adjusted net attendance ratio), and percentage of children attending primary school, Swaziland, 2010

	Male			Female			Total		
	Net attendance ratio (adjusted)	Percent attending primary school	Number of children	Net attendance ratio (adjusted)	Percent attending primary school	Number of children	Net attendance ratio (adjusted) [1]	Percent attending primary school	Number of children
Region									
Hhohho	42.1	49.3	328	52.7	39.0	327	47.4	44.1	655
Manzini	47.2	41.5	334	56.9	26.9	353	52.2	34.0	687
Shiselweni	41.0	53.2	368	53.3	36.2	360	47.1	44.8	728
Lubombo	37.4	53.2	292	44.9	43.2	264	41.0	48.4	555
Area									
Urban	63.2	27.2	206	64.8	18.4	235	64.1	22.5	441
Rural	38.1	53.3	1116	49.7	39.6	1069	43.8	46.6	2,185
Age at beginning of school year									
13	16.9	78.8	320	33.5	64.9	274	24.5	72.4	594
14	34.1	59.8	259	45.2	49.4	289	39.9	54.3	547
15	42.4	50.0	259	57.5	28.9	257	49.9	39.4	515
16	60.9	28.8	235	61.4	20.5	262	61.1	24.5	497
17	64.4	19.0	250	68.8	8.2	223	66.5	13.9	472
Mother's education									
None	17.8	70.5	142	34.5	56.6	158	26.6	63.2	300
Primary	26.3	69.2	270	44.7	49.4	243	35.0	59.8	512
Secondary	40.0	55.7	185	58.7	35.8	177	49.1	46.0	362
High	59.6	39.4	101	57.3	36.9	99	58.5	38.2	201
Tertiary	67.4	32.6	46	83.3	14.9	49	75.6	23.5	95
Mother not in household	45.1	43.8	392	50.4	33.0	409	47.8	38.3	801
Missing/ DK	*	*	1	*	*	2	*	*	3
Wealth index quintiles									
Poorest	24.0	65.9	253	33.4	51.1	278	28.9	58.2	531
Second	33.3	53.3	302	45.4	44.3	275	39.1	49.0	577
Middle	40.6	53.2	276	51.1	36.1	259	45.7	44.9	534
Fourth	51.8	40.0	301	61.3	28.0	255	56.2	34.5	556
Richest	66.4	29.5	190	74.9	16.0	237	71.1	22.0	427
Total	**42.0**	**49.3**	**1322**	**52.4**	**35.8**	**1304**	**47.2**	**42.6**	**2,625**

[1] MICS indicator 7.5

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

Table ED.6: Children reaching the last grade of primary school

Percentage of children entering the first grade of primary school who eventually reach the last grade of primary school (survival rate to the last grade of primary school), Swaziland, 2010

	Percent attending grade 1 last year who are in grade 2 this year	Percent attending grade 2 last year who are attending grade 3 this year	Percent attending grade 3 last year who are attending grade 4 this year	Percent attending grade 4 last year who are attending grade 5 this year	Percent attending grade 5 last year who are attending grade 6 this year	Percent attending grade 6 last year who are attending grade 7 this year	Percent who reach grade 7 of those who enter grade 1 [1]
Sex							
Male	99.4	99.7	99.0	97.1	99.3	96.7	91.6
Female	99.7	100.0	100.0	98.0	98.5	96.3	92.7
Region							
Hhohho	100.0	100.0	99.7	94.9	98.9	96.0	89.8
Manzini	99.4	100.0	98.4	98.0	99.1	97.9	93.0
Shiselweni	98.9	99.5	100.0	98.9	98.4	95.7	91.6
Lubombo	100.0	100.0	100.0	98.5	99.4	96.6	94.6
Area							
Urban	99.0	100.0	99.5	96.9	100.0	99.4	94.8
Rural	99.7	99.8	99.5	97.6	98.7	95.9	91.5
Mother's education							
None	100.0	99.3	100.0	95.9	97.5	92.8	86.1
Primary	99.6	100.0	99.4	98.9	100.0	96.9	95.0
Secondary	98.8	100.0	99.6	98.7	100.0	100.0	97.1
High	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Tertiary	100.0	100.0	98.0	93.7	99.2	94.4	86.0
Education of household head							
None	99.4	99.5	100.0	97.0	97.9	93.8	88.1
Primary	100.0	100.0	98.9	97.3	99.0	95.5	91.0
Secondary	98.4	100.0	99.6	97.4	100.0	98.0	93.5
High	100.0	100.0	100.0	98.2	98.7	100.0	97.0
Tertiary	100.0	100.0	100.0	100.0	100.0	98.2	98.2
Wealth index quintiles							
Poorest	98.9	100.0	98.2	98.2	97.9	96.4	90.0
Second	100.0	99.4	100.0	98.7	100.0	92.1	90.3
Middle	100.0	100.0	99.6	97.3	99.3	98.4	94.7
Fourth	100.0	100.0	100.0	95.9	97.7	97.6	91.4
Richest	98.9	100.0	100.0	97.3	100.0	99.1	95.4
Total	**99.6**	**99.9**	**99.6**	**96.9**	**98.5**	**96.7**	**92.7**

[1] MICS indicator 7.6; MDG indicator 2.2

The net primary school completion rate and transition rate to secondary education are presented in Table ED.7. The primary completion rate is the ratio of the total number of students, regardless of age, entering the last grade of primary school for the first time, to the number of children of primary graduation age at the beginning of the current (or most recent) school year. This is why some rates are above 100, meaning that more students are entering grade 7 than the number of children at the appropriate age. The primary school completion rate is 91 percent. The high completion ratio might be due to the high proportion of secondary school-aged children attending primary school as discussed above.

There are significant differences across groups with an expected pattern observed for mother's education and household wealth. However, for females, children in Hhohho and those whose mothers have tertiary education, completion rates above 100 are found. Again, this reflects the high repetition rates previously mentioned.

The transition rate to secondary school is defined as the proportion of children attending the last grade of primary school during the previous school year who are in the first grade of secondary school during the current school year to the total number of children who are attending the first grade of secondary school. The transition rate to secondary for Swaziland is 84 percent.

There are no marked differentials among the regions. Nevertheless, the proportion of children in urban areas who were in primary school the previous year who move to the first grade of secondary school is greater than that of their rural counterparts. Again, but to a much lesser extent, the expected pattern is witnessed on distribution across the wealth index and slightly across the mother's education.

One of the MDG targets is the attainment of gender parity. The GPI is defined as the ratio of the net school attendance of girls to the net attendance of boys at a particular level. Gross attendance ratio is not used in the calculation of GPI since; in most cases the majority of over-aged children attending primary education tend to be boys, which provides an erroneous description of GPI. GPI for primary and secondary schools is shown in Table ED.8.

Gender parity has been achieved both at primary and secondary school level. The secondary school GPI is higher than that of the primary school. GPI for secondary education is 1.24, which means that there is close to a quarter more girls in secondary schools than boys. The high GPI for secondary school also indicates that males are at a disadvantage to their female counterparts. At the primary level, all the regions have achieved gender parity, with the exception of Lubombo.

Table ED.8A shows the percentage of household members age five to 24 years attending school by residence and age. The percentage of household members attending school decreases with age. Patterns of urban vs. rural differentials depend on the age of the child: for both boys and girls, urban areas have children in the youngest age group (age five and six for boy and age five for girls) attending school compared with rural areas. For boys age 16 and over, rural children are more likely than urban children to be attending school and this may indicate that there are more over-aged children in rural than urban areas. For girls, the same pattern appears for age 13–19 years but disappears after age 19 years.

Table ED.7: Primary school completion and transition to secondary school

Primary school net completion rates and transition rate to secondary school, Swaziland, 2010

	Primary school completion rate [1]	Number of children of primary school completion age	Transition rate to secondary school [2]	Number of children who were in the last grade of primary school the previous year
Sex				
Male	80.7	291	84.9	233
Female	102.2	281	83.2	250
Region				
Hhohho	109.6	141	85.4	112
Manzini	82.8	150	82.6	124
Shiselweni	86.0	164	84.3	148
Lubombo	87.3	118	83.7	99
Area				
Urban	99.4	86	90.9	95
Rural	89.8	487	82.3	388
Mother's education				
None	50.5	113	83.5	54
Primary	54.7	222	94.7	86
Secondary	70.7	132	85.7	75
High	111.2	67	86.2	49
Tertiary	(106.7)	38	(94.8)	28
Mother not in household	Na	0	78.1	109
Missing/ DK	*	1	Na	0
Wealth index quintiles				
Poorest	77.8	130	87.7	76
Second	94.5	126	78.7	105
Middle	85.2	117	78.1	106
Fourth	87.8	118	84.9	110
Richest	120.9	83	93.5	86
Total	**91.3**	**573**	**84.0**	**483**

[1] MICS indicator 7.7
[2] MICS indicator 7.8

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

Table ED.8: Education gender parity

Ratio of adjusted net attendance ratios of girls to boys, in primary and secondary school, Swaziland, 2010

	Primary school adjusted net attendance ratio, girls	Primary school adjusted net attendance ratio, boys	GPI for primary school adjusted net attendance ratio[1]	Secondary school adjusted net attendance ratio, girls	Secondary school adjusted net attendance ratio, boys	GPI for secondary school adjusted net attendance ratio [2]
Region						
Hhohho	97.7	96.5	1.01	52.3	41.2	1.27
Manzini	97.3	96.8	1.01	55.7	46.8	1.19
Shiselweni	97.8	95.0	1.03	53.3	41.0	1.30
Lubombo	95.0	95.5	.99	44.3	37.4	1.19
Area						
Urban	97.3	96.4	1.01	62.6	62.6	1.00
Rural	97.0	95.9	1.01	49.5	37.9	1.31
Mother's education						
None	95.4	94.3	1.01	34.5	17.8	1.94
Primary	97.2	95.3	1.02	44.1	25.8	1.71
Secondary	97.5	96.4	1.01	58.7	40.0	1.47
High	98.4	98.9	1.00	56.3	59.6	.94
Tertiary	97.9	99.6	.98	83.3	67.4	1.24
Mother not in household	.	.	.	50.1	45.1	1.11
Missing/ DK	66.1	69.9	.95	39.8	100.0	.40
Wealth index quintiles						
Poorest	96.1	94.5	1.02	32.9	24.0	1.37
Second	97.3	96.0	1.01	45.4	32.4	1.40
Middle	95.0	95.7	.99	51.1	40.4	1.27
Fourth	98.8	96.4	1.03	60.1	51.8	1.16
Richest	98.6	98.5	1.00	73.6	66.1	1.11
Total	**97.0**	**96.0**	**1.01**	**51.9**	**41.7**	**1.24**

[1] MICS indicator 7.9; MDG indicator 3.1
[2] MICS indicator 7.10; MDG indicator 3.1

* Table utilizes grade 2 of high school (Form 5) as the highest secondary grade. Children attending a third grade available in some high schools (mainly private) are excluded

Table ED.8A: School attendance

Percentage of household members age 5–24 years attending school, by residence and sex, Swaziland, 2010

	Urban						Rural					
	Male		Female		Total		Male		Female		Total	
	Percentage attending	Number of household members	Percentage attending	Number of household members	Percentage attending	Number of household members	Percentage attending	Number of household members	Percentage attending	Number of household members	Percentage attending	Number of household members
Age at beginning of school year												
5	87.3	41	88.6	45	88.0	86	77.6	280	80.6	225	78.9	505
6	100.0	39	97.6	45	98.7	84	95.4	262	95.9	257	95.7	519
7	92.9	45	98.1	55	95.8	100	98.0	255	100.0	247	99.0	502
8	100.0	46	100.0	41	100.0	88	98.3	207	98.3	212	98.3	418
9	97.8	48	100.0	58	99.0	105	99.7	270	97.1	278	98.4	548
10	100.0	42	(97.1)	36	98.7	78	97.7	249	99.1	214	98.3	463
11	96.1	54	97.6	44	96.8	99	97.2	252	98.8	256	98.0	508
12	97.6	44	100.0	41	98.8	86	96.6	247	98.8	240	97.7	487
13	95.6	50	94.3	47	95.0	97	95.7	270	99.6	227	97.5	496
14	93.7	46	91.1	51	92.3	97	94.3	213	95.3	238	94.9	450
15	(85.4)	33	(81.0)	36	83.1	69	93.3	225	87.2	221	90.3	446
16	94.3	39	74.8	44	83.9	83	88.8	196	83.4	218	86.0	414
17	74.7	38	54.3	56	62.5	94	81.6	212	74.8	166	78.7	378
18	(61.5)	33	43.2	46	50.9	80	59.8	164	46.9	170	53.2	335
19	35.3	53	19.9	56	27.4	109	59.7	180	38.1	149	49.9	328
20	31.9	58	21.1	59	26.5	117	43.2	137	17.1	131	30.5	268
21	21.8	50	12.8	52	17.2	102	29.5	116	12.6	145	20.2	261
22	14.8	45	4.4	62	8.7	107	20.1	106	7.9	127	13.4	233
23	10.5	64	7.8	62	9.2	126	20.6	114	4.1	134	11.7	248
24	0.0	60	0.0	66	0.0	125	1.5	93	2.5	134	2.1	227

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

11. Child Protection

Birth registration

The CRC states that every child has the right to a name and a nationality and the right to protection from being deprived of his or her identity. Birth registration is a fundamental means of securing these rights for children. WFFC states the goal to develop systems to ensure the registration of every child at or shortly after birth, and fulfill his or her right to acquire a name and a nationality, in accordance with national laws and relevant international instruments. The Birth, Marriage and Death Registration Act mandates the compulsory registration of births in Swaziland. The target in 2011 is to increase the registration of births to 80 percent by year 2015. The indicator is the percentage of children under five years of age whose birth is registered. Table CP.1 shows the percentage distribution of birth registration of children under five by whether the birth is registered or not, and children not registered whose mothers/caretakers know how to register birth.

Overall, 50 percent of children under five years in Swaziland have been officially registered and 30 percent have birth certificates. There are no significant variations in birth registration according to sex. Differentials by region show that Manzini has the highest proportion of registered births (55 percent) and Shiselweni has the lowest proportion of registered births (42 percent). Children in urban areas (62 percent) are more likely to have their births registered compared with children in rural areas (47 percent).

Birth registration increases with age and a child is more likely to be registered at age 48–59 months. Coverage of birth registration is positively but non-linearly associated with the mother's education: the percentage is stable at 44–45 percent for mothers with up to secondary education, but then increases to 59 percent for high school education and 80 percent for tertiary education. A total of 71 percent of mothers/caretakers know how to register births and their level of knowledge increases with the level of the mother's education and household wealth.

Table CP.1A shows the reasons for non-registration of children age 0–59 months. The leading reason for non-registration is "father/mother does not have a PIN/ID" where 41 percent of the unregistered children under five are not registered for this reason. Twenty-seven percent of unregistered births were not registered because the mother/caretaker does not know how to register the birth. Ten percent of unregistered births are not registered because they feel it costs too much to register while four percent must travel too far in order register. The results also reveal that two percent of non-registration of births is due to partner refusal. Unfortunately, 14 percent of respondents indicated other reasons for not registering, largely from the wealthier and more educated groups, which somewhat disturbs the data. In future surveys, the response categories should include a wider range of reasons for not registering.

Table CP.1: Birth registration

Percentage of children under age five by whether birth is registered and percentage of children not registered whose mothers/caretakers know how to register birth, Swaziland, 2010

	Children under age five whose birth is registered with civil authorities					Children under age five whose birth is not registered	
	Has birth certificate		No birth certificate	Total registered [1]	Number of children	Percent of children whose mother/caretaker knows how to register birth	Number of children without birth registration
	Seen	Not seen					
Sex							
Male	15.4	15.1	19.7	50.2	1,265	70.3	630
Female	15.2	13.8	19.7	48.8	1,382	71.7	708
Region							
Hhohho	21.6	11.3	18.3	51.2	655	71.8	319
Manzini	13.2	18.9	22.8	54.9	787	70.8	355
Shiselweni	10.2	16.7	15.1	42.0	683	73.1	396
Lubombo	17.3	8.7	22.8	48.8	523	67.2	268
Area							
Urban	20.9	18.9	21.7	61.5	527	74.2	203
Rural	13.9	13.3	19.2	46.5	2,120	70.5	1,135
Age							
0–11 months	7.5	8.4	25.0	41.0	524	68.6	309
12–23 months	12.7	10.5	20.6	43.9	521	76.9	293
24–35 months	15.5	13.7	19.7	48.9	534	69.5	273
36–47 months	18.0	17.5	16.6	52.1	533	67.8	255
48–59 months	22.6	21.8	16.7	61.1	536	72.2	208
Mother's education							
None	10.4	10.3	23.1	43.8	303	62.4	171
Primary	11.8	11.3	20.6	43.7	891	69.7	502
Secondary	12.7	13.5	18.7	44.9	757	71.8	417
High	22.6	17.3	19.6	59.4	523	78.5	212
Tertiary	31.9	33.8	14.4	80.1	171	83.4	34
Missing/DK	*	*	*	*	3	*	3
Wealth index quintiles							
Poorest	8.3	10.6	19.8	38.7	646	65.7	396
Second	12.1	9.0	21.2	42.3	557	74.9	321
Middle	15.2	12.8	18.1	46.2	544	69.4	293
Fourth	16.9	15.8	22.8	55.5	489	74.4	218
Richest	28.9	28.2	16.1	73.2	411	76.5	110
Total	**15.3**	**14.4**	**19.7**	**49.5**	**2,647**	**71.0**	**1,338**

[1] MICS indicator 8.1

Note: Figures in parentheses indicate fewer than 25 unweighted cases

Table CP.1A: Reasons for not registering the birth

Percent distribution of children age 0–59 months by whether birth is registered and reasons for non-registration, Swaziland, 2010

	Total registered	Don't know if birth is registered	Total not registered	Number of children	Birth is not registered because:									Total	Number of children not registered
					Costs too much	Must travel too far	Didn't know child should be registered	Partner refuses	No need to register child's birth	Father/ Mother does not have a PIN/ID	Don't know how to register	Other	Don't know/ Missing		
Sex															
Male	50.2	1.9	47.9	1,265	10.4	3.4	0.2	1.1	0.2	39.4	27.9	16.2	1.2	100.0	606
Female	48.8	1.7	49.6	1,382	8.7	5.4	0.7	1.9	0.4	41.6	26.8	12.3	2.2	100.0	685
Region															
Hhohho	51.2	2.6	46.2	655	8.6	3.6	0.5	0.7	0.5	34.9	26.2	23.0	2.0	100.0	302
Manzini	54.9	0.8	44.3	787	3.8	8.7	0.0	1.9	0.6	40.9	27.8	14.4	1.9	100.0	348
Shiselweni	42.0	1.7	56.3	683	9.5	2.8	1.1	1.8	0.0	50.5	25.6	7.1	1.7	100.0	384
Lubombo	48.8	2.2	49.0	523	18.3	2.0	0.3	1.6	0.0	31.9	30.7	13.9	1.3	100.0	256
Area															
Urban	61.5	0.3	38.2	527	4.1	4.2	0.2	0.9	1.0	41.9	25.3	22.4	0.0	100.0	201
Rural	46.5	2.1	51.4	2,120	10.5	4.5	0.6	1.6	0.1	40.3	27.7	12.6	2.1	100.0	1,090
Age															
0–11months	41.0	0.3	58.7	524	6.4	6.2	0.4	0.2	0.0	40.1	30.5	15.7	0.5	100.0	308
12–23 months	43.9	0.7	55.5	521	13.2	5.3	0.9	1.5	0.4	42.4	22.4	12.7	1.3	100.0	289
24–35 months	48.9	2.5	48.6	534	8.1	4.3	0.3	1.3	0.0	36.8	30.2	17.6	1.3	100.0	260
36–47 months	52.1	2.0	45.9	533	8.2	2.5	0.4	3.2	0.6	45.4	28.4	9.9	1.3	100.0	244
48–59 months	61.1	3.4	35.5	536	12.3	2.9	0.5	1.8	0.5	37.2	24.7	14.7	5.4	100.0	190
Mother's education															
None	43.8	3.9	52.3	303	10.6	3.6	0.0	1.1	0.0	37.6	33.5	11.3	2.2	100.0	159
Primary	43.7	2.9	53.5	891	10.0	4.5	0.7	1.1	0.5	40.4	29.6	10.9	2.3	100.0	476
Secondary	44.9	0.9	54.1	757	10.8	4.2	0.6	1.7	0.3	42.4	26.9	12.6	0.4	100.0	410
High	59.4	0.0	40.6	523	5.9	4.5	0.2	2.0	0.0	42.8	20.2	22.8	1.8	100.0	212
Tertiary	80.1	0.4	19.5	171	(2.5)	(10.6)	(0.0)	(4.4)	(0.0)	(21.0)	(14.7)	(39.0)	(7.8)	(100.0)	33
Missing/DK	*	*	*	3	*	*	*	*	*	*	*	*	*	*	1
Wealth index quintiles															
Poorest	38.7	2.6	58.7	646	13.9	3.4	0.2	0.8	0.0	40.8	31.6	7.6	1.7	100.0	380
Second	42.3	2.1	55.6	557	11.3	5.5	1.1	3.8	0.5	36.7	24.7	16.1	.3	100.0	310
Middle	46.2	2.2	51.6	544	6.3	2.5	0.3	0.2	0.0	47.1	28.8	12.0	2.8	100.0	281
Fourth	55.5	1.2	43.2	489	6.1	6.4	0.0	1.1	0.5	39.8	24.8	18.7	2.7	100.0	211
Richest	73.2	0.2	26.6	411	3.5	6.1	1.2	1.9	0.9	35.1	21.5	28.3	1.4	100.0	110
Total	**49.5**	**1.8**	**48.8**	**2,647**	**9.5**	**4.4**	**0.5**	**1.5**	**0.3**	**40.5**	**27.4**	**14.2**	**1.7**	**100.0**	**1,291**

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases. Figures in parentheses are based on 25–49 unweighted cases

Child labour

Article 32 of the CRC states: "States Parties recognize the right of the child to be protected from economic exploitation and from performing any work that is likely to be hazardous or to interfere with the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral or social development." WFFC mentions nine strategies to combat child labour and the MDGs call for the protection of children against exploitation. In Swaziland, just as in many developing countries around the world, children help their parents on a day-to-day basis to carry out household chores and family businesses. The typical kinds of work that children do in Swaziland include herding livestock, fetching water and firewood, ploughing, planting, weeding, cooking, cleaning, washing clothes and selling in kiosks. Children also collect water and firewood for other families in return for pay in cash or in kind. They sometimes spend many hours performing such activities as the distance to the sources of water and firewood can be far. With many children not staying with their own parents, they are then brought up by relatives or by families not related to them. In such cases, children often assist these households on a daily basis, performing domestic work and economic activities with payment in kind, which affords them school fees, clothes, food and other basic needs. In other instances, children are forced to go and work for other families in order to buy food, clothes and other basic needs for their siblings and even sick parents. Child labour is a subject of interest to many researchers because it has an important bearing on children's physical, mental and cognitive development.

In the 2010 Swaziland MICS questionnaire, a number of questions addressed the issue of child labour, that is, children 5–14 years of age involved in labour activities. A child is considered to be involved in child labour activities at the moment of the survey if during the week preceding the survey the child performed:

- Age 5–11 years: at least one hour of economic work or 28 hours of domestic work per week.
- Age 12–14 years: at least 14 hours of economic work or 28 hours of domestic work per week.

This definition allows differentiation between child labour and child work to identify the type of work that should be eliminated. As such, the estimate provided here is a minimum of the prevalence of child labour since some children may be involved in hazardous labour activities for a number of hours that could be less than the numbers specified in the criteria explained above.

Table CP.2 presents the results of child labour by the type of work. Percentages do not add up to the total child labour as children may be involved in more than one type of work. The results show that 59 percent of children age 5–11 years engage in at least one hour of economic work, mainly in family business. The majority of children age 5–11 years perform household chores (58 percent), but there are very few that spend more than 28 hours per week doing chores. When combined, the percentage of children age 5–11 years engaging in child labour is 59 percent.

The prevalence of child labour is slightly higher for girls than for boys, and this largely reflects the fact that more girls engage in household chores than boys. The gender disparity is most pronounced for household chores for less than 28 hours, with a difference of 13 percentage points. Lubombo has the highest percentage of children involved in child labour at 69 percent, followed by Shiselweni at 65 percent. There is significant urban vs. rural disparity in child labour, with rural children more than

twice as likely as urban children to engage in more than one hour of economic activity or more than 28 hours of household chores. It is interesting to note that child labour is higher among children who are attending school than those who are not (61 percent vs. 43 percent). The percentage of children age 5–11 years engaging in child labour decreases with the level of mothers' education: 70 percent of children whose mother has no education engage in more than one hour of economic activity, while 26 percent of children whose mother has tertiary education engage in such activity. Household wealth also has a negative association with the prevalence of child labour, from 74 percent among children from the poorest households declining to 18 percent among those from the richest households.

For children age 12–14 years, only two percent engage in more than 14 hours of economic activity and nearly none in more than 28 hours of household chores, which means that the prevalence of child labour is two percent. As is the case for children age 5–11 years, the percentage of children age 12–14 years who perform household chores of less than 28 hours a week is higher for girls, at 89 percent, compared with boys, at 83 percent. The proportion of children who engage in paid work outside the household is marginally higher for boys than for girls (five percent vs. three percent) and the difference is likely statistically insignificant. Among the four regions, the Lubombo region had the highest prevalence of child labour with four percent. The percentage of children age 12–14 years engaging in family business or in less than 14 hours of economic activity is also much higher in rural areas compared with urban areas. The prevalence of child labour is much higher among children who are not attending school compared with those who are in school, which is opposite to the results for children age 5–11 years. In terms of socio-economic background, the prevalence of child labour is higher among children whose mother has no education and lowest among those whose mother has tertiary education. The prevalence of child labour also has a similar negative association with household wealth.

When the two age groups are combined, the total prevalence of child labour is 42 percent, with an only marginally higher prevalence for girls compared with boys (44 percent vs. 41 percent). Lubombo has the highest prevalence of child labour (49 percent), followed by Shiselweni (45 percent). Child labour is more than twice as high in rural areas as in urban areas (46 percent vs. 20 percent). Child labour is also negatively related to the mother's education and household wealth.

Table CP.3 presents the percentage of children classified as student labourers or as labourer students. Student labourers are the children attending school that were involved in child labour activities at the moment of the surveys. More specifically, of the 93 percent of the children 5–14 years of age attending school, 43 percent are also involved in child labour activities.

On the other hand, out of the 42 percent of the children classified as child labourers, the overwhelming majority is also attending school (93 percent). The percentage of child labourers attending school is higher in urban areas than in rural areas and among age 5–11 years than age 12–14 years. School attendance among child labourers is positively associated with the mother's education and household wealth. Among the four regions, Lubombo has the highest percentage of children attending school who engage in child labour (49 percent), followed by Shiselweni (46 percent). Rural areas have a substantially higher percentage of student labourers compared with urban areas (47 percent vs. 20 percent). Similarly to earlier results, the percentage of children attending school who engage in child labour is negatively associated with the mother's education and household wealth.

Table CP.2: Child labour

Percentage of children by involvement in economic activity and household chores during the past week, according to age groups, and percentage of children age 5–14 years involved in child labour, Swaziland, 2010

	Percentage of children age 5–11 years involved in								Percentage of children age 12–14 years involved in										
	Economic activity								Economic activity										
	Working outside household		Working for family business	Economic activity for at least one hour	House-hold chores less than 28 hours	House-hold chores for 28 hours or more	Child labour	Number of children age 5-11	Working outside household		Working for family business	Economic activity less than 14 hours	Economic activity for 14 hours or more	House-hold chores less than 28 hours	House-hold chores for 28 hours or more	Child labour	Number of children age 12–14	Total child labour [1]	Number of children age 5–14 years
	Paid work	Unpaid work							Paid work	Unpaid work									
Sex																			
Male	1.7	3.8	56.3	57.1	51.0	0.0	57.1	2,121	5.3	3.0	73.6	72.0	2.4	82.9	0.0	2.4	911	40.6	3,032
Female	1.2	2.9	60.9	61.5	64.4	0.1	61.5	2,007	2.9	3.6	76.6	75.3	1.9	89.4	0.3	2.2	845	43.9	2,853
Region																			
Hhohho	1.0	4.1	51.2	51.8	51.4	0.1	51.8	1,089	1.9	3.5	68.3	66.7	2.3	77.0	0.0	2.3	451	37.3	1,540
Manzini	1.2	3.9	52.6	53.6	54.1	0.1	53.6	1,109	4.0	2.4	73.1	72.3	1.5	86.5	0.5	1.9	445	38.8	1,554
Shiselweni	1.6	3.1	64.0	64.6	61.7	0.0	64.6	1,076	5.5	4.5	81.2	80.6	1.6	91.1	0.0	1.6	474	45.3	1,550
Lubombo	2.0	2.2	68.6	69.2	64.5	0.0	69.2	855	5.3	2.6	77.5	74.5	3.7	89.7	0.0	3.7	387	48.8	1,241
Area																			
Urban	1.0	3.1	26.9	28.1	50.0	0.2	28.1	645	3.7	1.3	41.6	41.2	1.4	81.8	0.7	2.1	287	20.1	932
Rural	1.5	3.4	64.4	65.0	58.9	0.0	65.0	3,483	4.3	3.7	81.6	79.9	2.4	86.8	0.0	2.4	1469	46.4	4,953
School participation																			
Yes	1.5	3.5	60.1	60.9	60.0	0.1	60.9	3,740	3.9	3.4	75.3	74.0	2.0	86.3	0.1	2.1	1707	42.5	5,447
No	0.7	2.1	42.9	43.2	33.7	0.0	43.2	388	12.1	0.0	65.1	59.1	10.7	75.1	0.0	10.7	50	39.5	438
Mother's education																			
None	2.2	3.4	69.7	70.0	62.2	0.0	70.0	776	6.0	2.8	84.2	81.5	3.0	86.9	0.0	3.0	390	47.6	1,167
Primary	1.4	3.0	67.3	67.7	61.0	0.1	67.7	1,561	3.1	3.3	83.3	81.8	2.0	86.9	0.0	2.0	606	49.3	2,166
Secondary	1.7	4.1	54.4	55.4	52.1	0.1	55.4	985	4.6	4.0	73.3	72.0	2.4	86.3	0.0	2.4	405	40.0	1,390
High	0.2	3.2	40.6	42.0	52.9	0.0	42.0	533	4.2	2.8	61.3	61.4	1.8	84.5	0.9	2.7	229	30.2	762
Tertiary	0.6	3.1	25.3	26.2	53.3	0.0	26.2	262	2.1	2.7	36.9	35.8	1.1	79.9	0.0	1.1	123	18.2	384
Missing/ DK	0.0	0.0	52.8	52.8	*	*	*	12	*	*	*	*	*	*	*	*	3	*	15
Wealth index quintiles																			
Poorest	2.3	3.7	74.0	74.4	61.2	0.2	74.4	1,001	6.3	3.7	89.6	87.1	3.0	84.9	0.0	3.0	402	53.9	1,403
Second	1.3	3.4	68.4	68.8	58.6	0.0	68.8	953	5.0	1.7	86.7	84.8	2.4	85.9	0.0	2.4	379	49.9	1,332
Middle	1.4	4.4	63.3	64.1	58.9	0.0	64.1	847	5.2	4.2	81.6	79.2	3.1	89.3	0.0	3.1	345	46.5	1,192
Fourth	0.6	3.4	51.4	52.2	57.2	0.0	52.2	762	1.4	4.9	76.2	75.5	1.5	87.8	0.6	2.1	351	36.4	1,113
Richest	1.2	1.1	17.0	18.2	47.3	0.2	18.2	565	2.1	1.6	28.8	29.5	0.5	81.4	0.0	0.5	279	12.3	845
Total	**1.4**	**3.4**	**58.5**	**59.2**	**57.5**	**0.1**	**59.2**	**4,128**	**4.2**	**3.3**	**75.0**	**73.6**	**2.2**	**86.0**	**0.1**	**2.3**	**1,756**	**42.2**	**5,885**

[1] MICS indicator 8.2

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases.

Table CP.3: Child labour and school attendance

Percentage of children age 5–14 years involved in child labour who are attending school, and percentage of children age 5–14 years attending school who are involved in child labour, Swaziland, 2010

	Percentage of children involved in child labour	Percentage of children attending school	Number of children age 5–14 years	Percentage of child labourers who are attending school [1]	Number of children age 5–14 years involved in child labour	Percentage of children attending school who are involved in child labour [2]	Number of children age 5–14 years attending school
Sex							
Male	40.6	91.4	3,032	92.5	1,232	41.2	2,770
Female	43.9	93.8	2,853	93.5	1,253	43.8	2,677
Region							
Hhohho	37.3	94.2	1,540	94.2	574	37.3	1,450
Manzini	38.8	92.7	1,554	93.2	603	39.0	1,440
Shiselweni	45.3	90.9	1,550	92.3	703	46.0	1,409
Lubombo	48.8	92.4	1,241	92.7	605	48.9	1,147
Area							
Urban	20.1	94.4	932	95.6	188	20.4	880
Rural	46.4	92.2	4,953	92.8	2,298	46.7	4,566
Age							
5–11 years	59.2	90.6	4,128	93.1	2,445	60.9	3,740
12–14 years	2.3	97.2	1,756	86.9	41	2.1	1,707
Mother's education							
None	47.6	90.1	1,167	90.3	555	47.7	1,051
Primary	49.3	91.1	2,166	92.9	1068	50.3	1,974
Secondary	40.0	93.0	1,390	94.0	555	40.4	1,292
High	30.2	97.0	762	97.8	230	30.4	739
Tertiary	18.2	98.6	384	98.1	70	18.1	379
Missing/ DK	*	*	15	*	6	*	11
Wealth index quintiles							
Poorest	53.9	88.7	1,403	90.3	757	55.0	1,244
Second	49.9	91.1	1,332	92.9	665	50.9	1,213
Middle	46.5	91.9	1,192	93.4	554	47.2	1,096
Fourth	36.4	95.5	1,113	96.2	406	36.7	1,063
Richest	12.3	98.3	845	99.2	104	12.5	831
Total	42.2	92.6	5,885	93.0	2486	42.5	5,447

[1] MICS indicator 8.3
[2] MICS indicator 8.4

Note: Figures in asterisks indicates that they figures are less than 25 unweighted cases

Child Discipline

As stated in WFFC, "children must be protected against any acts of violence," and the Millennium Declaration calls for the protection of children against abuse, exploitation and violence. In the 2010 Swaziland MICS survey, mothers/caretakers of children age 2–14 years were asked a series of questions on the ways parents discipline their children when they misbehave. For the child discipline module, one child age 2–14 years per household was selected randomly during fieldwork. Out of these questions, the two indicators used to describe aspects of child discipline are: 1) the number of children 2–14 years that experience psychological aggression as punishment ***or*** minor physical punishment ***or*** severe physical punishment; and 2) the number of parents/caretakers of children age 2–14 years who believe that they need to physically punish their children to raise them properly.

In Swaziland, 89 percent of children age 2–14 years experience at least one form of psychological aggression or physical punishment by their caretakers or other household members. More importantly, 12 percent of children are subjected to severe physical punishment. Male children are more likely to receive physical discipline than female children (68 percent vs. 63 percent). Severe physical punishment is more prevalent in rural areas than in urban areas (12 percent vs. nine percent). It is worthwhile to note that differentials with respect to other background variables are relatively small. The only exception is the prevalence of severe physical punishment, where children whose parents or caretakers have tertiary education are much less likely to experience severe physical punishment compared with other children. The prevalence of severe physical punishment is highest among the middle wealth quintile and lowest among the highest wealth quintile.

The results also show that 82 percent of respondents believe that children should be physically punished. There are regional differentials in terms of how parents or guardians view punishment of children. The three regions of Lubombo, Shiselweni and Manzini have a higher percentage of caretakers who have a positive view about physical discipline compared with Hhohho (84-86 percent vs. 75 percent). Again, there are only small differentials with respect to the educational background of parents/caretakers or household wealth.

Table CP.4: Child discipline

Percentage of children age 2–14 years according to method of disciplining the child, Swaziland, 2010

	Percentage of children age 2–14 years who experienced:					Number of children age 2–14 years	Respondent believes that the child needs to be physically punished	Respondents to the child discipline module
	Only non-violent discipline	Psychological aggression	Physical punishment		Any violent discipline method [1]			
			Any	Severe				
Sex								
Male	6.7	82.9	68.4	12.5	89.7	3,916	82.1	1,523
Female	8.4	81.4	63.4	10.9	88.1	3,715	82.1	1,435
Region								
Hhohho	3.7	83.6	67.4	13.6	87.9	1,969	75.4	781
Manzini	7.1	83.4	71.4	9.7	91.1	2,057	84.1	859
Shiselweni	10.5	78.3	64.6	10.6	86.6	2,006	83.9	714
Lubombo	8.9	83.6	58.9	13.6	90.4	1,598	85.8	604
Area								
Urban	6.3	82.8	70.4	8.8	90.2	1,263	80.3	649
Rural	7.8	82.0	65.1	12.3	88.7	6,367	82.6	2,309
Age								
2–4 years	5.4	80.9	73.0	11.2	89.5	1,674	83.5	702
5–9 years	6.0	85.1	69.2	11.2	91.6	2,939	81.8	1,092
10–14 years	10.1	79.9	58.9	12.6	86.1	3,017	81.5	1,164
Education of household head								
None	7.2	82.0	64.6	12.1	88.1	1,975	na	na
Primary	9.4	80.5	64.9	12.7	87.9	2,797	na	na
Secondary	5.3	83.8	69.7	11.6	91.4	1,410	na	na
High	6.1	85.1	66.5	12.0	90.3	835	na	na
Tertiary	7.2	81.4	64.7	3.8	88.6	592	na	na
Missing/DK	*	*	*	*	*	21	na	na
Respondent's education								
None	na	na	na	na	na	na	83.5	463
Primary	na	na	na	na	na	na	83.9	1,028
Secondary	na	na	na	na	na	na	80.0	693
High	na	na	na	na	na	na	79.1	516
Tertiary	na	na	na	na	na	na	84.1	257
Wealth index quintiles								
Poorest	8.8	79.7	66.7	11.6	86.8	1,857	83.6	652
Second	6.5	86.3	68.1	12.4	91.7	1,711	84.2	594
Middle	5.4	84.8	68.3	17.3	91.3	1,535	79.5	548
Fourth	9.5	78.4	61.6	9.9	86.6	1,417	83.5	561
Richest	7.5	81.0	63.8	5.6	88.1	1,111	79.4	604
Total	**7.5**	**82.1**	**66.0**	**11.7**	**88.9**	**7,631**	**82.1**	**2,958**

[1] MICS indicator 8.5

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases.

Early marriage

According to UNICEF's worldwide estimates, more than 60 million women age 20–24 years were married/in union before 18 years of age. Factors that influence child marriage rates include: the state of the country's civil registration system, which provides proof of age for children; the existence of an adequate legislative framework, with an accompanying enforcement mechanism to address cases of child marriage; and the existence of customary or religious laws that condone the practice.

Child marriage is a violation of human rights, compromising the development of girls and often resulting in early pregnancy and social isolation, with little education and poor vocational training reinforcing the gendered nature of poverty. The right to 'free and full' consent to a marriage is recognized in the Universal Declaration of Human Rights – with the recognition that consent cannot be 'free and full' when one of the parties involved is not sufficiently mature to make an informed decision about a life partner. The CEDAW mentions the right to protection from child marriage in article 16, which states: "The betrothal and the marriage of a child shall have no legal effect, and all necessary action, including legislation, shall be taken to specify a minimum age for marriage." While marriage is not considered directly in the CRC, child marriage is linked to other rights – such as the right to express views freely, the right to protection from all forms of abuse, and the right to be protected from harmful traditional practices – and is frequently addressed by the Committee on the Rights of the Child. Other international agreements related to child marriage are the Convention on Consent to Marriage, Minimum Age for Marriage and Registration of Marriages and the African Charter on the Rights and Welfare of the Child and the Protocol to the African Charter on Human and People's Rights on the Rights of Women in Africa. Child marriage is also identified by the Pan-African Forum Against the Sexual Exploitation of Children as a type of commercial sexual exploitation of children.

Closely related to the issue of child marriage is the age at which girls become sexually active. Women who are married before age 18 tend to have more children than those who marry later in life. Pregnancy-related deaths are known to be a leading cause of mortality for both married and unmarried girls between the ages of 15 and 19, particularly among the youngest of this cohort. In general marriage occurs late in Swaziland and the onset of fertility is not restricted to marriage.

The percentages of women age 15–49 years and men age 15–59 years that first married or entered in union at various ages are provided in Tables CP.5 and CP.5M. The 2010 Swaziland MICS asked, *"How old were you when you started living with your first husband/partner?*" Two of the indicators are used to ascertain early marriage in a given population: the percentage of women married before 15 years of age and the percentage married before 18 years of age.

The results show that two percent of women married before age 15. For men, marriage generally does not occur before age 15. A total of 11 percent of women first married before age 18 compared with only two percent for men. A total of four percent of women are currently married or in union in the 15-19 age group while none of the men are currently married or in union in this age category. Differentials by region reveal that the Lubombo region has the highest proportion of women who are married before age 15 (three percent) and Manzini region has the lowest (one percent). The urban/rural comparison reveals that women in urban areas are less likely to be married before age

15 and 18. Early marriage decreases with both the level of education and household wealth. The percentage married before age 15 ranges from 12 percent among women with no education to 0.4 percent for those with tertiary education. The corresponding figures for men are one percent and zero percent, respectively.

Tables CP.6 and CP.6M present the proportion of women who were first married or entered into a marital union before age 15 and 18 by residence and age groups. Examining the percentages married before age 15 and 18 by different age groups allow us to see the trends in early marriage over time. For women, the percentage of those who married before age 18 declines almost steadily, from 17 percent among the 45-49 age group to 7 percent among the 20-24 age groups. This trend is more pronounced for women from rural areas compared with those from urban areas. For men, percentage of those who married before age 18 also appears to show a downward trend, albeit with some fluctuations. Again, this trend is more apparent among rural men compared with urban men. All in all, the results indicate a decline in early marriage over time, especially among women.

Table CP.5: Early marriage and polygamy: women

Percentage of women age 15–49 years who first married or entered a marital union before their 15th birthday, percentages of women age 20–49 years who first married or entered a marital union before their 15th and 18th birthdays, percentage of women age 15–19 years currently married or in union, and the percentage of women currently married or in union who are in a polygynous marriage or union, Swaziland, 2010

	Percentage married before age 15 [1]	Number of women age 15–49 years	Percent-age married before age 15	Percentage married before age 18 [2]	Number of women age 20–49 years	Percentage of women 15–19 years currently married/in union [3]	Number of women age 15–19 years	Percentage of women age 15–49 years in polygynous marriage/ union [4]	Number of women age 15–49 years currently married/in union
Region									
Hhohho	2.0	1,286	2.5	12.0	1,018	4.7	267	10.7	530
Manzini	1.1	1,515	1.1	8.0	1,216	6.6	299	10.8	641
Shiselweni	1.5	1,033	2.1	9.2	719	2.2	314	13.3	341
Lubombo	3.3	854	4.3	16.6	636	3.6	218	20.5	369
Area									
Urban	1.0	1,353	1.2	6.3	1,141	5.7	211	8.2	556
Rural	2.2	3,335	2.8	13.0	2,448	3.9	887	15.2	1,326
Age of woman									
15–19	0.4	1,098	na	na	na	4.3	1,098	4.9	47
20–24	0.7	904	.7	6.5	904	na	na	7.1	279
25–29	1.8	847	1.8	7.8	847	na	na	5.9	414
30–34	2.8	595	2.8	9.4	595	na	na	12.0	348
35–39	2.7	456	2.7	14.7	456	na	na	18.2	304
40–44	5.0	433	5.0	19.7	433	na	na	21.8	270
45–49	2.8	355	2.8	16.5	355	na	na	20.2	220
Education									
None	12.1	242	12.0	33.0	233	*	9	21.1	150
Primary	2.9	1,269	3.7	20.0	923	5.6	346	16.9	565
Secondary	1.0	1,592	1.4	9.4	1091	3.8	501	13.7	577
High	0.2	1,202	0.3	2.4	962	1.0	240	8.1	385
Tertiary	0.4	382	0.4	0.9	380	*	3	4.9	205
Wealth index quintiles									
Poorest	3.4	737	4.2	17.4	541	6.6	196	15.2	313
Second	2.8	802	3.8	14.6	587	1.8	215	17.5	294
Middle	1.5	930	1.9	13.9	699	5.0	231	15.5	360
Fourth	1.3	1,041	1.5	8.9	798	4.9	243	12.1	417
Richest	1.1	1,179	1.2	4.5	966	3.1	213	8.4	498
Total	**1.8**	**4,688**	**2.3**	**10.9**	**3,590**	**4.3**	**1,098**	**13.1**	**1,882**

[1] MICS indicator 8.6
[2] MICS indicator 8.7
[3] MICS indicator 8.8
[4] MICS indicator 8.9

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases.

Table CP.5M: Early marriage and polygamy: men

Percentage of men age 15–59 years who first married or entered a marital union before their 15th birthday, percentages of men age 20–49 years who first married or entered a marital union before their 15th and 18th birthdays, percentage of men age 15–19 years currently married or in union, and the percentage of men currently married or in union who are in a polygynous marriage or union, Swaziland, 2010

	Percentage married before age 15 [1]	Number of men age 15–59 years	Percentage married before age 15	Percentage married before age 18 [2]	Number of men age 20–59 years	Percentage of men 15–19 years currently married/in union [3]	Number of men age 15–19 years	Percentage of men age 15–59 years in polygynous marriage/ union [4]	Number of men age 15–59 years currently married/in union
Region									
Hhohho	0.2	1,143	0.3	1.3	881	0.0	263	6.2	422
Manzini	0.4	1,406	0.5	1.5	1,114	0.0	293	5.6	552
Shiselweni	0.1	847	0.1	1.7	544	0.0	303	8.0	194
Lubombo	0.3	782	0.4	3.0	565	0.0	217	7.5	291
Area									
Urban	0.3	1,347	0.4	1.2	1,182	0.0	165	4.5	616
Rural	0.2	2,832	0.3	2.0	1,922	0.0	910	7.9	843
Age of man									
15–19	0.0	1,075	na	na	na	0.0	1,075	na	na
20–24	0.0	783	0.0	0.4	783	na	na	.0	52
25–29	0.0	629	0.0	1.0	629	na	na	0.8	185
30–34	0.3	484	0.3	0.6	484	na	na	2.2	262
35–39	0.4	354	0.4	2.3	354	na	na	2.6	250
40–44	0.7	292	0.7	3.6	292	na	na	9.1	227
45–49	0.6	221	0.6	1.2	221	na	na	8.6	192
50–54	2.6	183	2.6	8.6	183	na	na	16.4	158
55–59	0.0	159	0.0	2.8	159	na	na	13.6	132
Education									
None	1.4	280	1.5	5.8	265	*	15	12.2	163
Primary	0.2	1,240	0.3	2.7	822	0.0	418	8.1	410
Secondary	0.4	1,195	0.6	1.4	738	0.0	457	6.8	341
High	0.1	1,067	0.1	0.5	886	0.0	182	4.0	320
Tertiary	0.0	397	0.0	0.4	393	*	4	2.4	225
Wealth index quintiles									
Poorest	0.5	570	0.8	3.7	388	0.0	182	6.7	170
Second	0.0	740	0.0	1.8	475	0.0	265	8.1	195
Middle	0.0	821	0.0	1.2	597	0.0	224	8.6	260
Fourth	0.3	940	0.3	1.3	697	0.0	243	5.1	324
Richest	0.5	1,107	0.6	1.5	946	0.0	160	5.6	510
Total	**0.3**	**4,179**	**0.4**	**1.7**	**3,104**	**0.0**	**1,075**	**6.5**	**1,459**

[1] MICS indicator 8.6M
[2] MICS indicator 8.7M
[3] MICS indicator 8.8M
[4] MICS indicator 8.9M

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases.

Table CP.6: Trends in early marriage: women

Percentage of women who were first married or entered into a marital union before age 15 and 18, by residence and age groups, Swaziland, 2010

	Urban				Rural				All			
	Percentage of women married before age 15	Number of women	Percentage of women married before age 18	Number of women	Percentage of women married before age 15	Number of women	Percentage of women married before age 18	Number of women	Percentage of women married before age 15	Number of women	Percentage of women married before age 18	Number of women
Age of woman												
15–19	0.0	211	na	na	0.5	887	na	na	0.4	1,098	na	na
20–24	1.5	272	6.9	272	0.4	631	6.3	631	0.7	904	6.5	904
25–29	1.0	295	5.3	295	2.1	551	9.1	551	1.8	847	7.8	847
30–34	0.5	220	4.6	220	4.3	375	12.2	375	2.8	595	9.4	595
35–39	2.2	140	7.7	140	2.9	316	17.8	316	2.7	456	14.7	456
40–44	0.7	130	6.6	130	6.8	304	25.2	304	5.0	433	19.7	433
45–49	1.2	84	10.0	84	3.2	272	18.6	272	2.8	355	16.5	355
Total	**1.0**	**1,353**	**6.3**	**1,141**	**2.2**	**3,335**	**13.0**	**2,448**	**1.8**	**4,688**	**10.9**	**3,590**

Table CP.6M: Trends in early marriage: men

Percentage of men who were first married or entered into a marital union before age 15 and 18, by residence and age groups, Swaziland, 2010

	Urban				Rural				All			
	Percentage of men married before age 15	Number of men	Percentage of men married before age 18	Number of men	Percentage of men married before age 15	Number of men	Percentage of men married before age 18	Number of men	Percentage of men married before age 15	Number of men	Percentage of men married before age 18	Number of men
Age of man												
15–19	0.0	165	na	na	0.0	910	na	na	0.0	1075	na	na
20–24	0.0	245	0.4	245	0.0	538	0.4	538	0.0	783	0.4	783
25–29	0.0	253	0.2	253	0.0	376	1.5	376	0.0	629	1.0	629
30–34	0.0	211	0.0	211	0.6	273	1.1	273	0.3	484	0.6	484
35–39	0.7	168	1.7	168	0.0	185	2.9	185	0.4	354	2.3	354
40–44	1.8	120	3.9	120	0.0	172	3.3	172	0.7	292	3.6	292
45–49	0.0	83	0.7	83	0.9	139	1.6	139	0.6	221	1.2	221
50–54	2.0	67	3.1	67	3.0	116	11.9	116	2.6	183	8.6	183
55–59	(0.0)	35	(8.1)	35	0.0	124	1.3	124	0.0	159	2.8	159
Total	**0.3**	**1,347**	**1.2**	**1,182**	**0.2**	**2,832**	**2.0**	**1,922**	**0.3**	**4179**	**1.7**	**3,104**

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

Median age at marriage

Marriage generally occurs late in Swaziland. Overall the median age at marriage is 23.1 years for females and 28.2 years for males (Tables CP.6B). On average women marry earlier compared with men. Women in urban areas tend to delay marriage by about two years on average as the median age at first marriage is 24.9 years for urban women and 22.3 years for rural women. The median age is 28.9 years for men in urban areas and 27.8 years for women in rural areas. In general rural residents marry earlier than their urban counterparts. Education has a delaying effect on marriage as the median age increases as the level of education increases for both women and men. The median age at marriage for women with no education is 19.4 years and 26 years for women with tertiary education while the median age at marriage for men with no education is 25.3 years and 30.8 years for men with tertiary education. Differentials by wealth quintiles reveal that the median age at first marriage increases with household wealth, especially among women. The median age for women in the poor quintile is 21.2 years and 25.3 years for women in the richest quintile while the median age for men in the poor quintile is 27.3 years and 30.1 years for men in the richest quintile.

Polygamy

Polygamy (men having more than one wife) is a common phenomenon in many parts of the world. Polygamy is legal in Swaziland. The Swazi customary type of marriage provides for a legal polygamous union. In the 2010 Swaziland MICS, women 15–49 who responded that they are 'currently married' or 'living with a man' were asked, "*Besides yourself, does your husband/partner have any other wives or partners or does he live with other women as if married?"* For men age 15–59, those who responded that they were "currently married" or "co-habiting with a woman" were asked, "*Are there any other women with whom you are living with as if married?"*

Tables CP.6C and CP.6CM also show the percentage of women age 15–49 and men age 15–59 currently married or in union who are in a polygamous marriage or union. More women are in polygamous marriage/unions compared with men (13 percent vs. seven percent). Polygamy is more prevalent in rural areas: 15 percent of women are in polygamous marriage/union in rural areas compared with eight percent of women in urban areas, and eight percent of men in rural areas are in polygamous marriage/union compared with five percent of men in urban areas. Older women are more likely to be in polygamous marriage/union compared with their younger counterparts (six percent for women age 25–29 years and 22 percent for women age 40–44 years). Women with no education are more likely to be in a polygamous union, the range is from 21 percent for women with no education to five percent for women with tertiary education. The corresponding figures for men are 12 percent and two percent, respectively. For women, the prevalence of polygamy has a slightly negative relationship with household wealth. For men, there is not clear linear relationship between polygamy and household wealth.

Table CP.6B: Marriage status and median age at marriage

Percentage of women age 15–49 years and men age 15–59 years who have ever been married or in union and the median age at first marriage/union, Swaziland, 2010

	Women				Men			
	Percentage of women ever married	Number of women age 15–49	Median age at first marriage *	Number of women ever married *	Percentage of men ever married	Number of men age 15–59	Median age at first marriage *	Number of men ever married *
Region								
Hhohho	50.7	1,286	22.4	542	41.7	1,143	28.2	346
Manzini	53.0	1,515	23.8	648	45.8	1,406	28.8	427
Shiselweni	41.8	1,033	23.2	393	28.4	847	27.8	196
Lubombo	51.4	854	22.1	409	41.3	782	27.3	285
Area								
Urban	51.9	1,353	24.9	592	51.3	1,347	28.9	528
Rural	48.7	3,335	22.3	1,398	35.1	2,832	27.8	725
Education								
None	84.0	242	19.4	149	72.8	280	25.3	122
Primary	56.4	1,269	21.6	579	40.1	1,240	26.8	358
Secondary	44.5	1,592	22.8	632	32.4	1,195	27.3	288
High	38.2	1,202	24.8	416	33.4	1,067	29.5	295
Tertiary	62.4	382	25.8	214	60.3	397	30.8	190
Wealth index quintiles								
Poorest	52.8	737	21.1	333	38.9	570	27.3	155
Second	47.2	802	21.9	320	32.5	740	26.3	180
Middle	49.6	930	22.3	382	37.6	821	27.1	218
Fourth	47.8	1,041	23.3	431	38.1	940	27.9	273
Richest	50.9	1,179	25.3	524	50.1	1,107	30.1	427
Total	**49.6**	**4,688**	**23.1**	**1,991**	**40.3**	**4,179**	**28.2**	**1,253**

* Includes only women and men for which complete date of birth and date of marriage were collected

Table CP.6C: Age at first marriage and polygamy: women

Percentage of women age 15–49 years who first married or entered a marital union before their 15th and 18th birthdays, percentage of women age 15–19 years currently married or in union, and the percentage of women currently married or in union who are in a polygamous marriage or union, Swaziland, 2010

	Percentage married before age 15 [1]	Percentage married before age 18 [2]	Percentage married before age 20	Percentage married before age 22	Percentage married before age 25	Number of women age 15–49 years	Percentage of women 15–19 years currently married/in union [3]	Number of women age 15–19 years	Percentage of women age 15–49 years in polygamous marriage/ union [4]	Number of women age 15–49 years currently married/in union
Region										
Hhohho	2.0	12.0	21.6	30.8	43.1	1,286	4.7	267	10.7	530
Manzini	1.1	8.0	16.5	27.3	42.1	1,515	6.6	299	10.8	641
Shiselweni	1.5	9.2	17.4	27.5	39.8	1,033	2.2	314	13.3	341
Lubombo	3.3	16.6	22.7	34.2	47.0	854	3.6	218	20.5	369
Area										
Urban	1.0	6.3	12.1	20.1	35.2	1,353	5.7	211	8.2	556
Rural	2.2	13.0	22.5	34.0	46.3	3,335	3.9	887	15.2	1,326
Age of woman										
15–19	0.4	na	na	na	na	1,098	4.3	1098	(4.9)	47
20–24	0.7	6.5	16.2	25.7	32.6	904	na	na	7.1	279
25–29	1.8	7.8	15.9	24.8	42.5	847	na	na	5.9	414
30–34	2.8	9.4	15.2	24.6	40.6	595	na	na	12.0	348
35–39	2.7	14.7	22.9	33.7	46.8	456	na	na	18.2	304
40–44	5.0	19.7	28.4	40.6	54.1	433	na	na	21.8	270
45–49	2.8	16.5	25.5	40.2	54.1	355	na	na	20.2	220
Education										
None	12.1	33.0	36.7	48.4	59.0	242	*	9	21.1	150
Primary	2.9	20.0	31.6	42.0	53.8	1,269	5.6	346	16.9	565
Secondary	1.0	9.4	21.2	32.2	45.2	1,592	3.8	501	13.7	577
High	0.2	2.4	6.5	16.4	29.6	1,202	1.0	240	8.1	385
Tertiary	0.4	0.9	4.9	13.5	32.3	382	*	3	4.9	205
Wealth index quintiles										
Poorest	3.4	17.4	29.5	39.3	51.4	737	6.6	196	15.2	313
Second	2.8	14.6	23.5	37.5	48.8	802	1.8	215	17.5	294
Middle	1.5	13.9	23.6	34.5	45.9	930	5.0	231	15.5	360
Fourth	1.3	8.9	16.3	27.1	41.0	1,041	4.9	243	12.1	417
Richest	1.1	4.5	10.0	17.7	33.6	1,179	3.1	213	8.4	498
Total	**1.8**	**10.9**	**19.2**	**29.6**	**42.8**	**4,688**	**4.3**	**1,098**	**13.1**	**1,882**

[1] MICS indicator 8.6
[2] MICS indicator 8.7
[3] MICS indicator 8.8
[4] MICS indicator 8.9

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases. Figures in parentheses are based on 25–49 unweighted cases.

Table CP.6CM: Age at first marriage and polygamy: men

Percentage of men age 15–49 years who first married or entered a marital union before their 15th and 18th birthdays, percentage of men age 15–19 years currently married or in union, and the percentage of men currently married or in union who are in a polygamous marriage or union, Swaziland, 2010

	Percentage married before age 15 [1]	Percentage married before age 18 [2]	Percentage married before age 20	Percentage married before age 22	Percentage married before age 25	Number of men age 15-49 years	Percentage of men 15–19 years currently married/in union [3]	Number of men age 15–19 years	Percentage of men age 15–49 years in polygamous marriage/ union [4]	Number of men age 15–49 years currently married/in union
Region										
Hhohho	0.2	1.3	2.8	7.7	19.7	1,143	0.0	263	6.2	422
Manzini	0.4	1.5	4.4	9.7	20.7	1,406	0.0	293	5.6	552
Shiselweni	0.1	1.7	3.1	7.6	16.6	847	0.0	303	8.0	194
Lubombo	0.3	3.0	6.4	12.3	24.0	782	0.0	217	7.5	291
Area										
Urban	0.3	1.2	4.0	9.0	20.5	1,347	0.0	165	4.5	616
Rural	0.2	2.0	4.1	9.4	20.1	2,832	0.0	910	7.9	843
Age of man										
15–19	0.0	na	na	na	na	1,075	0.0	1,075	na	na
20–24	0.0	0.4	1.7	3.6	7.9	783	na	na	0.0	52
25–29	0.0	1.0	3.4	7.5	19.0	629	na	na	0.8	185
30–34	0.3	0.6	3.5	7.6	19.0	484	na.	na	2.2	262
35–39	0.4	2.3	3.6	9.5	22.2	354	na	na	2.6	250
40–44	0.7	3.6	7.3	15.5	27.6	292	na	na	9.1	227
45–49	0.6	1.2	4.5	17.4	33.0	221	na	na	8.6	192
50–54	2.6	8.6	9.6	18.0	37.6	183	na	na	16.4	158
55–59	0.0	2.8	8.5	15.8	34.5	159	na	na	13.6	132
Education										
None	1.4	5.8	9.5	20.6	34.9	280	0.0	15	12.2	163
Primary	0.2	2.7	6.7	15.4	29.9	1,240	0.0	418	8.1	410
Secondary	0.4	1.4	3.7	8.9	23.1	1,195	0.0	457	6.8	341
High	0.1	0.5	1.5	3.4	9.8	1,067	0.0	182	4.0	320
Tertiary	0.0	0.4	1.4	2.6	8.7	397	*	4	2.4	225
Wealth index quintiles										
Poorest	0.5	3.7	5.9	12.8	25.3	570	0.0	182	6.7	170
Second	0.0	1.8	4.2	10.6	23.7	740	0.0	265	8.1	195
Middle	0.0	1.2	4.6	10.2	22.9	821	0.0	224	8.6	260
Fourth	0.3	1.3	4.7	9.5	18.9	940	0.0	243	5.1	324
Richest	0.5	1.5	2.5	6.4	15.8	1,107	0.0	160	5.6	510
Total	**0.3**	**1.7**	**4.1**	**9.3**	**20.3**	**4,179**	**0.0**	**1,075**	**6.5**	**1,459**

[1] MICS indicator 8.6M
[2] MICS indicator 8.7M
[3] MICS indicator 8.8M
[4] MICS indicator 8.9M

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases.

Spousal age difference

Research has shown that girls who marry at young ages are more likely to marry older men, which puts them at increased risk of HIV infection. One of the drivers of the HIV epidemic in Swaziland is intergenerational sex, coupled with low and inconsistent levels of condom use among others. The age gap between partners is thought to also contribute to abusive power dynamics and to increase the risk of untimely widowhood. The power imbalance resulting from the age difference leads to very low condom use among such couples. The indicator for spousal age difference is the percentage of married/in union women with a difference of 10 or more years younger than their current spouse. Table CP.7 presents the results of spousal age differences for women.

The 2010 Swaziland MICS shows that for women age 20–24 years who are in marriage or in union, the most frequent spousal age difference is 5–9 years (39 percent), followed by 0–4 years (37 percent). Twenty-two percent of women age 20–24 years are married or in union with spouses who are 10 years older or more. The percentages of those who are married or in union with spouses who are 10 years older or more have no clear relationship with the woman's education level. For household wealth, the percentages of women age 20–24 years with a spousal age difference of 10 years older or more are higher among women from richer households compared with those from poorer households. Because of the small number of cases, the data on spousal age differences for men are not presented.

For women age 15–19, the most frequent spousal age difference is 5–9 years older (44 percent), followed by 10+ years older (31 percent) and 0–4 years older (23 percent). Disaggregation by socio-economic variables was not possible due to a small number of currently married women or those in union in this age group (47 cases).

Table CP.7: Spousal age difference: women

Percent distribution of women currently married/in union age 15–19 and 20–24 years according to the age difference with their husband or partner, Swaziland, 2010

	Percentage of currently married/in union women age 20-24 years whose husband or partner is:						Number of women age 20–24 years currently married/in union
	Younger	0–4 years older	5–9 years older	10+ years older [2]	Husband/partner's age unknown	Total	
Region							
Hhohho	1.4	40.4	38.4	19.2	0.7	100.0	82
Manzini	2.3	38.6	37.5	21.6	0.0	100.0	101
Shiselweni	0.0	28.9	46.4	24.7	0.0	100.0	47
Lubombo	4.5	36.3	37.0	22.3	0.0	100.0	50
Area							
Urban	2.8	42.1	34.5	20.0	0.6	100.0	94
Rural	1.7	34.5	41.5	22.3	0.0	100.0	185
Age of woman							
15-19	na	na	na	na	na	na	na
20-24	2.0	37.1	39.2	21.5	0.2	100.0	279
Education							
None	*	*	*	*	*	*	16
Primary	3.0	44.6	34.2	17.6	0.6	100.0	92
Secondary	.5	39.7	36.1	23.6	0.0	100.0	107
High	3.6	23.3	53.2	19.9	0.0	100.0	52
Tertiary	*	*	*	*	*	*	13
Wealth index quintiles							
Poorest	(3.2)	(33.1)	(39.5)	(24.2)	(0.0)	(100.0)	44
Second	2.6	37.7	44.7	15.1	0.0	100.0	52
Middle	4.1	46.8	37.1	12.1	0.0	100.0	71
Fourth	0.0	36.8	30.4	32.8	0.0	100.0	58
Richest	0.0	27.2	45.7	26.0	1.0	100.0	54
Total	**2.0**	**37.1**	**39.2**	**21.5**	**0.2**	**100.0**	**279**

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases. Figures in parentheses are based on 25–49 unweighted cases.

Attitudes towards domestic violence

Available evidence suggests that there is high prevalence of domestic violence in Swaziland.[28] In the 2010 Swaziland MICS, all women age 15–49 years and men age 15–59 years were asked a question that sought to assess their attitudes towards domestic violence. Specifically, the following question was asked, "*Sometimes a husband/wife is annoyed or angered by things that his wife/husband does. In your opinion, is a husband justified in hitting or beating his wife/husband in the following situations:*

A) If she is going out without telling him/her;
B) If she/he neglects the children;
C) If she/he argues with him;
D) If she refuses to have sex with him/her;
E) If she/he burns food;
F) If she/he refuses to accept step children;
G) If she sleeps with another man;
H) If she initiates sex; and
I) If she/he refuses to give food."

The responses to this question can be found in Tables CP.11 and CP.11M. Overall, a higher proportion of women (39 percent for women) than men (33 percent for men) responded that they believed that there are circumstances under which hitting their partner could be justified. Patterns of reasons for spouse/partner beating were similar for women and men. For both women and men, the most frequently cited reason was when spouses or partners "sleep with another man or woman" (34 percent for women and 25 percent for men). Again for both women and men, the second most frequently cited reasons was when spouses or partners "argue with them" (20 percent for women and 15 percent for men).

Disaggregation of the results by region shows that the percentage of respondents who believe that spouse/partner beating is justified is highest in Shiselweni (49 percent for women and 39 percent for men) and lowest in Manzini (29 percent for both women and men). Rural women are substantially more likely than urban women to respond that spouse/partner beating is justifiable under some circumstances (46 percent vs. 23 percent). Accepting attitudes towards spouse/partner beating are most common among rural men compared to urban men (38 percent vs. 24 percent).

The percentage of respondents who responded that spouses/partners could be justified was higher in the youngest age groups (age 15–19 and 20–24 years for women and age 15–19 years for men). For both women and men, accepting attitudes towards domestic violence was higher among those who had never been married or in union compared with those who are in other marital or union status. For women accepting attitudes towards spouse/partner beating was negatively and linearly correlated with the level of education. For men similar albeit weaker associations can be observed.

[28] CDC and UNICEF. 2008, A National Study on Violence against Children and Young Women in Swaziland.

Table CP.11: Attitudes toward domestic violence: women

Percentage of women age 15–49 years who believe a husband is justified in beating his wife/partner in various circumstances, Swaziland, 2010

	Percentage of women age 15–49 years who believe a husband is justified in beating his wife/partner:											Number of women age 15–49 years
	If goes out without telling him	If she neglects the children	If she argues with him	If she refuses sex with him	If she burns the food	For any of these five reasons [1]	If she refuses step children	If she sleeps with another man	If she initiates sex	If she refuses to give food	For any of all these reasons *	
Region												
Hhohho	16.8	19.2	23.4	7.8	6.8	30.1	12.7	34.5	2.6	18.0	39.4	1,286
Manzini	7.4	8.6	12.4	2.5	1.8	18.3	3.3	24.6	0.7	7.5	28.8	1,515
Shiselweni	15.1	19.4	23.6	4.3	5.5	33.9	7.7	42.8	1.8	18.7	48.7	1,033
Lubombo	13.8	16.2	26.4	4.5	4.9	32.9	6.4	36.9	1.8	13.2	45.2	854
Area												
Urban	6.2	7.1	9.9	1.9	1.8	13.8	3.5	20.1	0.6	6.5	22.6	1,353
Rural	15.5	18.5	24.7	5.8	5.6	33.2	9.0	39.1	2.1	16.9	45.8	3,335
Age of woman												
15–19	22.0	25.3	30.2	5.9	8.3	42.2	11.6	51.1	3.9	24.0	56.5	1,098
20–24	13.0	16.8	22.9	3.6	4.2	30.4	9.1	35.8	1.5	15.8	42.0	904
25–29	9.0	10.7	16.8	3.1	2.8	22.3	4.5	28.3	0.9	11.0	33.6	847
30–34	6.8	9.0	15.7	4.7	3.7	19.2	6.4	24.1	0.5	8.9	28.5	595
35–39	9.8	10.2	13.8	3.5	1.8	20.8	4.1	22.4	0.6	6.6	30.2	456
40–44	10.5	12.1	14.9	6.0	3.9	19.9	4.8	24.8	0.7	7.4	28.8	433
45–49	10.5	11.7	16.1	7.7	3.9	20.5	6.5	27.2	1.6	10.2	32.8	355
Marital/ Union status												
Currently married/in union	10.3	11.7	17.6	4.5	3.0	23.1	5.5	27.7	1.1	9.5	33.9	1,882
Formerly married/in union	11.4	12.0	18.3	7.6	5.8	23.7	6.9	29.3	1.5	11.6	34.3	444
Never married/ in union	15.1	18.6	23.1	4.3	5.6	32.0	9.0	39.1	2.2	17.8	44.1	2,362
Education												
None	22.2	18.8	31.0	11.6	7.3	40.1	11.1	39.3	3.4	15.3	49.0	242
Primary	21.0	22.3	28.7	7.3	8.0	38.4	11.6	44.1	3.3	19.9	50.9	1,269
Secondary	11.3	15.9	21.1	4.4	4.4	28.4	6.6	35.6	1.0	15.9	41.8	1,592
High	7.6	9.9	14.1	2.3	1.8	19.9	5.1	25.9	0.9	8.2	29.8	1,202
Tertiary	2.5	3.4	3.5	0.6	0.3	5.1	1.9	10.6	0.6	2.7	11.5	382
Wealth index quintile												
Poorest	20.0	22.9	33.0	7.6	7.4	41.8	10.7	45.8	2.7	19.3	53.8	737
Second	20.5	23.1	28.5	6.1	8.0	39.5	12.8	45.6	2.7	21.8	54.0	802
Middle	14.0	16.6	22.8	5.6	5.6	30.4	8.0	37.5	2.2	16.9	43.0	930
Fourth	9.6	12.3	17.3	3.3	2.4	23.6	4.9	30.0	.9	10.7	34.6	1,041
Richest	5.1	6.6	8.0	2.5	1.5	12.0	3.4	17.8	.7	5.7	20.6	1,179
Total	**12.8**	**15.2**	**20.4**	**4.7**	**4.6**	**27.6**	**7.4**	**33.6**	**1.7**	**13.9**	**39.1**	**4,688**

[1] MICS indicator 8.14

* This is a country specific indicator

Table CP.11M: Attitudes toward domestic violence: men

Percentage of men age 15–59 years who believe a husband is justified in beating his wife/partner in various circumstances, Swaziland, 2010

	Percentage of men age 15-59 years who believe a husband is justified in beating his wife/partner:											Number of men age 15–59 years
	If goes out without telling him	If she neglects the children	If she argues with him	If she refuses sex with him	If she burns the food	For any of these five reasons [1]	If she refuses step children	If she sleeps with another man	If she initiates sex	If she refuses to give food	For any of all these reasons *	
Region												
Hhohho	11.7	10.7	15.4	5.3	3.8	22.9	6.1	27.7	1.5	9.5	34.4	1,143
Manzini	8.2	7.4	12.6	2.3	1.4	19.0	3.5	21.9	0.8	5.2	28.4	1,406
Shiselweni	12.7	13.0	17.0	2.8	3.6	27.9	4.9	28.7	1.4	12.3	39.2	847
Lubombo	12.1	11.2	17.7	2.7	3.0	25.3	5.9	23.5	2.2	8.3	34.6	782
Area												
Urban	7.8	6.4	11.3	1.9	1.7	16.3	3.0	17.8	1.0	3.9	24.3	1,347
Rural	12.2	11.9	17.1	4.0	3.3	26.3	5.9	28.7	1.6	10.6	37.7	2,832
Age of man												
15–19	13.5	16.9	21.5	5.8	5.2	34.3	8.0	40.1	2.5	17.4	48.5	1,075
20–24	11.4	9.2	14.1	2.5	3.4	22.5	5.6	23.5	1.3	9.0	32.6	783
25–29	9.4	8.7	14.9	2.8	2.3	21.4	3.3	22.8	0.8	5.4	32.4	629
30–34	9.5	6.7	11.9	2.3	1.1	17.0	2.8	15.4	0.0	2.3	22.8	484
35–39	8.0	7.0	10.4	1.6	1.4	14.8	2.6	17.8	1.5	4.4	24.5	354
40–44	10.2	7.0	11.6	1.6	.7	16.6	3.7	18.3	0.8	3.1	24.7	292
45–49	9.5	5.9	11.1	1.6	1.1	14.9	3.5	19.4	0.7	2.8	25.0	221
50–54	9.0	7.3	13.3	1.1	1.4	19.3	5.2	21.1	0.5	5.6	27.4	183
55–59	11.0	7.3	15.1	6.6	2.0	21.1	3.2	13.7	3.4	4.7	25.8	159
Marital/ Union status												
Currently married/ in union	9.4	7.3	12.6	2.0	1.4	17.6	3.4	17.7	0.8	3.4	25.9	1,459
Formerly married/ in union	11.9	6.4	14.7	2.4	2.3	19.8	2.6	20.0	1.2	4.6	27.6	226
Never married/ in union	11.5	12.2	16.8	4.1	3.7	26.6	6.1	30.0	1.7	11.7	38.3	2,495
Education												
None	11.5	7.9	16.6	4.3	2.9	23.9	4.3	19.4	1.8	6.8	30.6	280
Primary	14.8	15.5	20.0	5.0	4.5	31.0	8.0	31.1	2.3	12.3	40.9	1,240
Secondary	10.8	11.4	15.3	3.2	3.0	23.7	4.9	28.5	1.3	9.3	35.9	1,195
High	7.7	5.8	12.4	1.9	1.5	17.5	2.9	20.9	0.5	5.6	28.7	1,067
Tertiary	6.1	2.8	6.6	1.3	0.4	10.8	1.2	12.4	0.7	2.0	16.7	397
Wealth index quintiles												
Poorest	13.2	15.4	19.4	4.6	3.3	28.9	6.8	30.5	1.5	13.2	40.7	570
Second	13.4	12.7	17.1	4.5	5.0	27.7	7.2	30.2	2.4	11.6	39.3	740
Middle	12.5	11.8	18.6	4.4	2.7	26.9	6.5	27.1	1.4	9.8	36.8	821
Fourth	10.3	8.9	14.8	2.2	2.6	22.4	3.2	25.6	1.3	6.6	34.0	940
Richest	7.0	5.5	9.6	1.9	1.4	14.7	2.7	17.3	0.8	4.3	22.6	1107
Total	**10.8**	**10.1**	**15.2**	**3.3**	**2.8**	**23.1**	**4.9**	**25.2**	**1.4**	**8.4**	**33.4**	**4,179**

[1] MICS indicator 8.14M

* This is a country specific indicator

Occurrence of domestic violence

In the 2010 Swaziland MICS women age 15–49 years and men age 15–59 years who are in marriage or union for at least one year were asked a series of questions to ascertain the level of occurrence of domestic violence in Swaziland. Specifically, they were first asked the following questions: *''Has (one of) your husband/wife(s)/partner(s) ever been annoyed or angered by things you have done?* Those who responded in the affirmative were then further asked, "*In such occasions, has (one of) your husband/wife(s)/partner(s) ever hit or beaten you?"* And those who responded in the affirmative were further asked, "*Has this happened in the last 12 months?*"

The data are presented in Tables CP.12 and CP.12M and Figure CP.1. The results show that the percentage whose husband/wife/partner has been angered/annoyed by things done by them is similar for both men and women (74 percent for women and 77 for men); however, more women have been beaten for things done (21 percent) compared with men (six percent). Eight percent of women and two percent of men have been beaten in the last 12 months.

For women, the occurrence of domestic violence is highest among women from Lubombo (27 percent), followed by Manzini and Shiselweni (24 percent and 18 percent, respectively). Women from Hhohho reported the least occurrence of domestic violence (15 percent). Rural and urban women were almost equally likely to be exposed to domestic violence in their life time. The occurrence of domestic violence tends to decline with a woman's education and household wealth.

For men, the occurrence of domestic violence tends to be slightly higher in Manzini compared with other regions. Unlike the case of women, there was no clear linear relationship between the occurrence of domestic violence and men's education or household wealth. However, the occurrence tends to be higher among men with secondary education compared with other education levels and among those from the second household quintile compared with other household quintiles levels.

Figure CP.1: Percentage of women age 15–49 years and men 15–59 years who have ever been hit or beaten by husband/partner on such occasions, and whether it has happened during the year before the survey, Swaziland, 2010

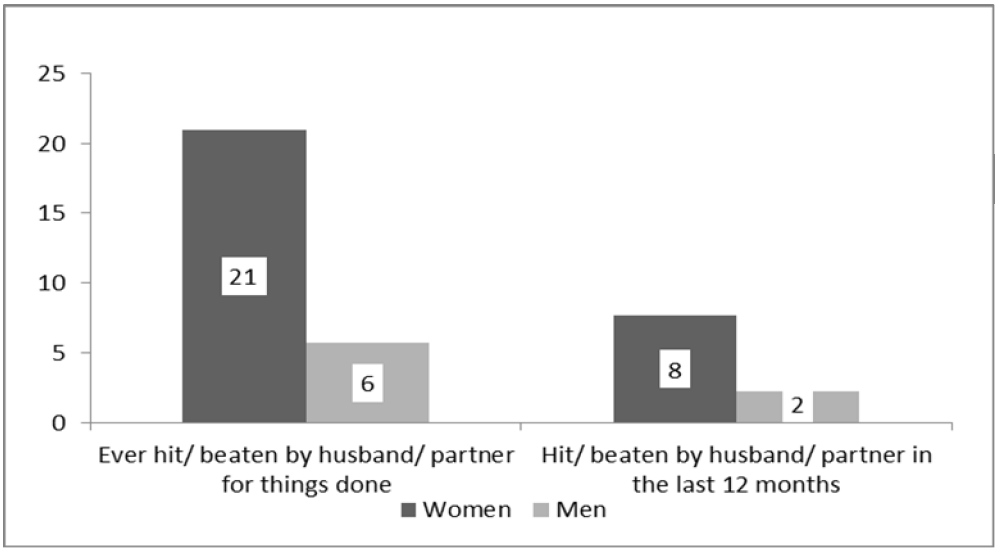


Table CP.12: Occurrences of domestic violence: women

Percentage of women age 15–49 years, in marriage/union for at least one year, who annoyed or angered husband/partner, who have ever been hit or beaten by husband/partner on such occasions, and whether it has happened during the year before the survey, Swaziland, 2010

	Percentage whose husband/ partner has been angered/ annoyed by things done by them	Hit/ beaten by husband/ partner for things done	Hit/ beaten by husband/ partner in the last 12 months	Number of women
Region				
Hhohho	56.4	15.4	6.9	419
Manzini	89.1	23.7	8.3	473
Shiselweni	62.8	17.7	6.7	252
Lubombo	83.3	27.3	8.6	290
Area				
Urban	85.2	20.1	6.7	385
Rural	69.5	21.2	8.0	1,048
Age				
15–24	60.2	19.2	8.9	157
25–29	72.2	22.3	12.0	294
30–39	76.0	19.5	6.4	547
40–49	76.9	22.4	5.8	435
Years of marriage/ union				
Less than 5	69.3	15.1	8.0	357
5 to 10	73.5	23.9	9.6	329
10 or more	76.0	22.4	6.6	747
Education				
None	56.2	25.5	8.9	101
Primary	68.8	28.5	11.6	408
Secondary	73.7	21.2	8.9	432
High	80.7	14.9	3.9	305
Tertiary	82.9	11.0	1.6	187
Wealth index quintiles				
Poorest	67.5	29.4	12.2	215
Second	66.4	21.2	9.0	229
Middle	67.5	24.2	9.5	262
Fourth	74.9	20.8	7.3	328
Richest	84.5	14.1	3.5	399
Total	**73.8**	**20.9**	**7.7**	**1,433**

Table CP.12M: Occurrences of domestic violence: men

Percentage of men age 15–59 years, in marriage/union for at least one year, who annoyed or angered wife/partner, who have ever been hit or beaten by wife/partner on such occasions, and whether it has happened during the year before the survey, Swaziland, 2010

	Percentage whose wife/partner has been angered/annoyed by things done by them	Hit/ beaten by wife/partner for things done	Hit/ beaten by wife/ partner in the last 12 months	Number of men
Region				
Hhohho	69.8	6.2	1.5	324
Manzini	82.7	7.2	3.5	346
Shiselweni	67.3	5.7	1.9	159
Lubombo	82.9	4.5	1.4	287
Area				
Urban	85.9	6.6	2.0	562
Rural	67.5	5.4	2.3	554
Age				
15–24	*	*	*	9
25–29	69.6	7.8	4.9	102
30–39	80.4	6.6	2.8	393
40–49	74.6	5.8	1.4	362
50–59	78.8	4.8	1.2	250
Years of				
Less than 5	77.8	7.1	4.4	252
5 to 10	78.6	7.1	2.1	238
10 or more	75.7	5.1	1.3	626
Education				
None	71.5	4.9	1.6	123
Primary	69.8	6.7	2.1	285
Secondary	76.4	8.1	3.9	258
High	82.2	3.9	1.6	258
Tertiary	83.9	5.7	1.0	192
Wealth index				
Poorest	59.2	2.9	0.0	103
Second	66.4	9.0	4.1	122
Middle	74.3	7.3	1.7	179
Fourth	77.2	5.8	3.1	259
Richest	84.3	5.5	1.8	453
Total	**76.8**	**6.0**	**2.2**	**1,116**

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases.

12. HIV/AIDS and Sexual Behaviour

Swaziland is one of the countries with the highest HIV prevalence. According to the 2006/07 SDHS,[29] the HIV prevalence among the adult population is 26 percent. Recent projections have shown that three out of every 100 HIV negative persons in Swaziland will become infected with HIV every year.[30] This means that the country needs to strengthen HIV prevention strategies encompassing improving knowledge and skills of young people to protect themselves from HIV.[31] In order to increase knowledge of HIV in the general population, a Behaviour Change Communication strategy was developed in 2008. Swaziland focuses on two ways to prevent HIV infection among its population – consistent condom use and having only one sexual partner.

Promoting safer sexual behaviour is critical for reducing HIV prevalence. In most countries over half of new HIV infections are among young people age 15–24 years. A change in behaviour among this age group will be especially important to reduce new infections. Controlling the spread of HIV remains a top priority for Swaziland.[32] Information on sexual behaviour guides programme development and policy direction in the prevention of HIV.

One of the most fundamental requirements for reducing the rate of HIV infection is that the general population should have accurate knowledge of HIV and how it is transmitted. Giving people correct information is a key step towards raising awareness. Other steps include equipping people with the correct tools to protect themselves from HIV infections. Misconceptions or incorrect beliefs about HIV are common and most often confuse people and hinder the national prevention response.

Knowledge about HIV transmission and misconception about HIV/AIDS

In the 2010 Swaziland MICS, an HIV/AIDS module was administered to women age 15–49 years and men age 15–59 years. The HIV/AIDS module sought to establish the level of knowledge and misconceptions people have about HIV/AIDS.

Tables HA.1 and HA.1M present results on knowledge about HIV transmission and misconceptions about HIV/AIDS for women and men. Overall, 99 percent of women and men have heard about AIDS. In as much as the knowledge of AIDS is universal among women and men, there is varying knowledge of ways of preventing HIV. The percentage of women and men who know at least two ways of preventing HIV is 92 percent and 89 percent, respectively.

Ninety-six percent of women and 95 percent of men know that HIV can be prevented by having only one uninfected sexual partner. Ninety-four percent of women and 92 percent of men know that HIV can be prevented by the consistent use of a condom. Table HA.1M further shows slight urban vs. rural differences in the proportion of men who know both ways of preventing HIV transmission (92 percent vs. 88 percent). There is no marked urban vs. rural difference among women.

[29] CSO, 2008, SDHS 2006/07.
[30] NERCHA, Swaziland HIV estimates and Projections, 2010.
[31] NERCHA, National Multi-Sectoral Strategic Framework for HIV/AIDS, 2009–2014.
[32] MoH, National Health Sector Strategic Plan, 2008–2013.

Comprehensive knowledge about HIV transmission increases with the level of education for both men and women as depicted in Figures HA.1 and HA.1A, with percentages ranging from 36 percent for women with no education to 83 percent with tertiary education, and from 27 percent for men with no education to 89 percent for males with tertiary level of education.

Figure HA.1: Percentage of women who have comprehensive knowledge of HIV/AIDS transmission, Swaziland, 2010

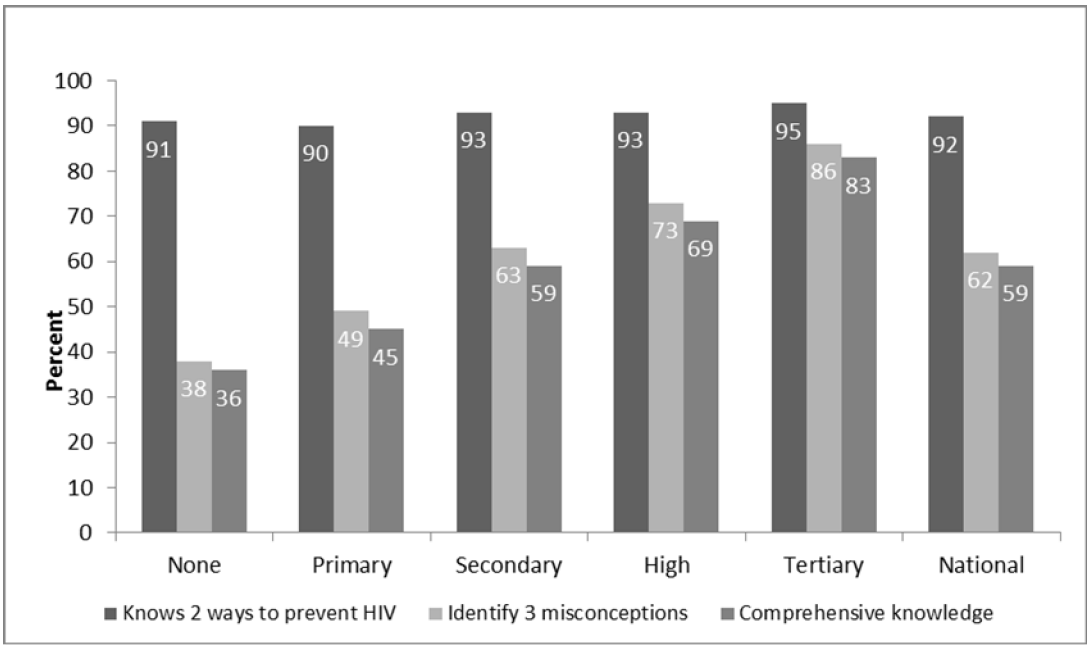


Figure HA.1A: Percentage of men who have comprehensive knowledge of HIV/AIDS transmission, Swaziland, 2010

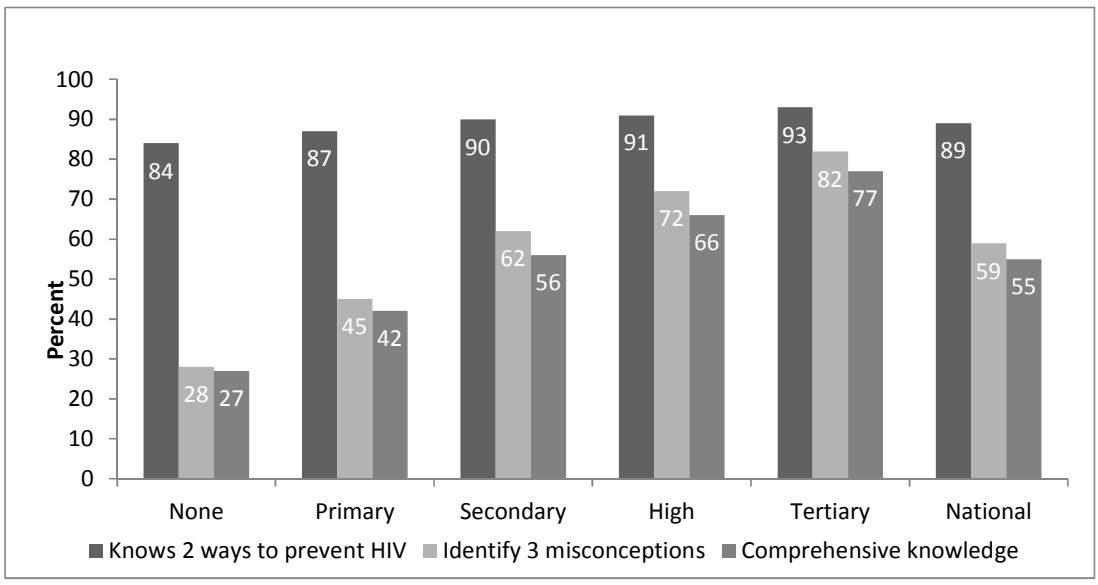


Table HA.1: Knowledge about HIV transmission, misconceptions about HIV/AIDS, and comprehensive knowledge about HIV transmission: women

Percentage of women age 15–49 years who know the main ways of preventing HIV transmission, percentage who know that a healthy looking person can have HIV, percentage who reject common misconceptions, and percentage who have comprehensive knowledge about HIV transmission Swaziland, 2010

	Percentage who have heard of AIDS	Percentage who know transmission can be prevented by:		Percentage of women who know both ways	Percentage who know that a healthy looking person can have the AIDS virus	Percentage who know that HIV cannot be transmitted by:			Percentage who reject the two most common misconceptions and know that a healthy looking person can have the AIDS virus	Percentage with comprehensive knowledge [1]	Percentage who know that HIV/AIDS can be transmitted through oral sex	Percentage who know that HIV/AIDS can be transmitted through anal sex	Percentage who know that HIV/AIDS cannot be cured	Number of women
		Having only one faithful uninfected sex partner	Using a condom every time			Mosquito bites	Supernatural means	Sharing food with someone with AIDS?						
Region														
Hhohho	99.2	97.6	95.5	94.5	91.5	73.1	96.4	87.8	62.9	60.4	65.3	78.9	85.0	1,286
Manzini	99.5	97.7	95.6	94.0	96.8	73.2	97.6	89.5	66.8	64.0	73.9	83.5	78.2	1,515
Shiselweni	99.5	94.2	92.8	89.3	94.4	67.4	95.6	89.1	60.6	54.8	66.8	64.2	78.5	1,033
Lubombo	99.2	95.3	92.8	90.0	81.5	72.5	96.1	85.8	55.4	51.7	69.0	67.1	82.0	854
Area														
Urban	99.7	97.8	95.1	93.6	95.4	80.5	98.0	92.6	73.6	70.2	75.2	82.9	82.9	1,353
Rural	99.2	95.9	94.2	91.9	90.7	68.2	96.0	86.5	57.7	54.1	66.6	71.8	80.0	3,335
Age														
15–24	99.0	95.9	93.0	90.7	91.9	71.4	96.0	90.6	62.5	58.2	64.8	68.7	80.3	2,002
25–29	99.7	96.5	96.3	93.9	93.1	72.5	97.5	89.6	64.2	61.4	71.9	79.3	80.7	847
30–39	99.5	97.4	95.6	94.1	92.1	71.5	97.1	86.6	61.7	59.2	73.9	81.5	81.7	1,051
40–49	99.6	96.5	94.7	92.7	91.3	72.2	96.1	83.1	60.3	56.8	70.4	77.6	81.2	789
Marital status														
Ever married/in union	99.6	97.0	95.4	93.6	92.6	71.2	96.8	85.9	61.2	58.1	70.4	78.6	81.2	2,326
Never married/in union	99.2	95.9	93.5	91.2	91.5	72.3	96.4	90.6	63.3	59.4	67.8	71.4	80.4	2,362
Education														
None	97.8	95.3	92.1	90.7	82.6	50.5	92.5	70.2	38.4	36.0	59.2	66.2	80.5	242
Primary	98.6	94.0	93.3	90.0	88.4	61.4	94.3	81.0	48.7	45.4	66.7	68.0	77.1	1,269
Secondary	99.9	96.7	95.4	92.9	94.0	71.1	97.7	90.7	62.8	59.1	69.1	73.2	81.7	1,592
High	99.8	98.2	94.3	93.5	94.2	81.0	98.0	94.3	73.1	69.2	70.9	80.3	82.7	1,202
Tertiary	99.4	98.4	96.5	95.4	95.0	93.4	97.4	94.6	86.0	83.3	77.2	94.0	84.0	382
Wealth index quintiles														
Poorest	99.1	95.0	93.6	90.6	89.2	61.3	95.1	80.9	49.4	45.9	65.5	66.9	79.2	737
Second	98.8	94.9	94.2	91.6	87.7	64.1	94.7	84.2	52.6	49.6	64.4	69.1	80.5	802

Middle	99.4	96.3	94.8	92.6	92.6	70.3	96.6	88.5	60.5	57.4	70.7	74.0	79.3	930
Fourth	99.6	96.5	94.4	92.4	93.2	74.1	97.1	90.7	64.7	60.6	69.6	75.2	82.1	1,041
Richest	99.7	98.4	94.9	93.8	95.4	82.6	98.2	93.4	76.2	72.4	72.7	84.6	82.0	1,179
Total	**99.4**	**96.4**	**94.4**	**92.4**	**92.0**	**71.8**	**96.6**	**88.3**	**62.3**	**58.7**	**69.1**	**75.0**	**80.8**	**4,688**

[1] MICS indicator 9.1

* Comprehensive knowledge means knowing the consistent use of condom during sexual intercourse and having just one uninfected faithful partner can reduce the chances of getting the AIDS virus, knowing that a healthy looking person can have the AIDS virus and rejects the two most common local misconceptions

** Two most common misconceptions: AIDS can be transmitted by mosquito bites and by sharing food with a person who has AIDS

Table HA.1M: Knowledge about HIV transmission, misconceptions about HIV/AIDS, and comprehensive knowledge about HIV transmission: men

Percentage of men age 15–59 years who know the main ways of preventing HIV transmission, percentage who know that a healthy looking person can have the AIDS virus, percentage who reject common misconceptions, and percentage who have comprehensive knowledge about HIV transmission Swaziland, 2010

	Percentage who have heard of AIDS	Percentage who know transmission can be prevented by:		Percentage of women who know both ways	Percentage who know that a healthy looking person can have the AIDS virus	Percentage who know that HIV cannot be transmitted by:			Percentage who reject the two most common misconceptions and know that a healthy looking person can have the AIDS virus	Percentage with comprehensive knowledge [1]	Percentage who know that HIV/ AIDS can be transmitted through oral sex	Percentage who know that HIV/ AIDS can be transmitted through anal sex	Percentage who know that HIV/ AIDS cannot be cured	Number of men
		Having only one faithful uninfected sex partner	Using a condom every time			Mosquito bites	Supernatural means	Sharing food with someone with AIDS						
Region														
Hhohho	98.9	95.8	92.9	90.8	88.4	70.2	94.8	85.8	57.8	54.3	67.8	74.9	84.5	1,143
Manzini	99.1	94.8	93.1	90.3	95.7	72.7	95.2	86.8	65.4	60.8	70.4	79.6	77.1	1,406
Shiselweni	99.4	92.4	88.9	85.0	91.1	66.8	94.2	85.2	57.2	50.1	65.7	63.6	80.1	847
Lubombo	99.0	94.3	93.3	89.4	77.5	71.5	93.0	80.4	51.7	48.8	68.9	69.4	79.4	782
Area														
Urban	99.2	95.8	94.4	91.9	93.0	78.4	94.8	87.8	68.6	64.3	71.9	82.0	79.2	1,347
Rural	99.1	93.9	91.2	87.9	87.6	66.9	94.3	83.7	54.6	50.0	66.8	69.0	80.7	2,832
Age														
15–24	98.4	94.1	91.4	88.6	87.0	70.3	94.9	87.2	58.9	53.6	63.1	67.8	80.0	1,858
25–29	99.7	94.2	93.7	90.0	92.7	71.8	94.7	87.0	62.0	57.9	71.8	80.3	79.4	629
30–39	99.9	95.6	93.2	90.5	93.0	75.0	95.7	85.7	64.1	60.4	74.7	78.8	80.2	838
40–49	99.5	93.9	91.8	88.0	90.4	70.0	92.6	82.5	58.7	54.4	72.6	75.5	81.9	513
50–59	99.3	95.5	92.4	89.1	85.8	60.3	92.0	71.7	43.1	40.4	70.1	72.1	80.2	342
Marital status														
Ever married/in union	99.6	95.3	92.8	89.8	90.6	71.0	94.5	82.0	58.2	54.6	73.0	76.5	80.9	1,684
Never married/in union	98.7	94.0	91.9	88.7	88.5	70.3	94.4	87.0	59.7	54.6	65.4	71.0	79.7	2,495
Education														
None	98.2	89.8	90.6	84.4	83.8	40.3	88.0	64.6	28.4	27.3	66.2	55.9	80.2	280
Primary	97.8	92.2	90.3	87.0	84.7	59.4	91.4	76.6	45.2	41.9	67.2	64.1	76.5	1,240
Secondary	99.8	95.5	92.7	89.7	90.9	72.6	96.1	88.5	61.5	56.3	64.7	71.2	82.7	1,195
High	99.7	96.5	93.1	90.8	92.6	81.9	96.9	93.1	71.9	66.3	72.6	83.4	81.3	1,067
Tertiary	100.0	96.8	95.9	93.5	94.5	90.6	97.4	93.6	82.3	76.9	74.3	92.0	81.2	397
Wealth index quintiles														
Poorest	98.5	93.1	90.0	86.0	82.6	56.2	92.1	77.5	43.6	38.9	67.8	60.7	81.1	570
Second	98.7	93.4	90.2	86.7	86.6	65.8	93.9	83.2	52.0	47.2	62.7	64.6	81.8	740

Middle	98.8	94.0	91.5	88.6	90.7	65.6	93.3	84.7	55.1	50.9	67.8	71.4	78.2	821
Fourth	99.3	94.6	93.0	90.2	90.5	73.6	95.8	84.7	61.7	57.7	67.2	73.7	79.4	940
Richest	99.7	96.2	94.7	92.0	92.8	82.4	95.8	90.6	72.6	67.8	74.2	86.2	80.8	1,107
Total	**99.1**	**94.5**	**92.2**	**89.2**	**89.4**	**70.6**	**94.5**	**85.0**	**59.1**	**54.6**	**68.5**	**73.2**	**80.2**	**4,179**

[1] MICS indicator 9.1 M

* Comprehensive knowledge means knowing the consistent use of condom during sexual intercourse and having just one uninfected faithful partner can reduce the chances of getting the AIDS virus, knowing that a healthy looking person can have the AIDS virus and rejects the two most common local misconceptions

** Two most common misconceptions: AIDS can be transmitted by mosquito bites and by sharing food with a person who has AIDS

Misconceptions about HIV/AIDS among young people

Tables HA.2 and HA.2M present the percentages of women and men who can correctly identify misconceptions concerning HIV. The indicator is based on the two most common and relevant misconceptions in Swaziland, i.e., HIV can be transmitted by supernatural means or witchcraft or by mosquito or any other insect bites. The tables also provide information on whether women and men know that HIV cannot be transmitted by sharing food with someone who has AIDS. Of the respondents interviewed, 63 percent of women and 59 percent of men reject the two most common misconceptions and know that a healthy-looking person can be infected. Ninety-six percent of women and 95 percent of men know that HIV cannot be transmitted through supernatural powers, whereas 91 percent of women and 87 percent of men know that HIV cannot be transmitted by sharing food with a person who has AIDS. Ninety-two percent of women and 87 percent of men know that a healthy looking person can be HIV infected. While 91 percent of women know about the two most common ways of preventing HIV in Swaziland, only 58 percent have comprehensive knowledge about HIV. Similarly for men, while 89 percent know about the two most common ways of preventing HIV, only 54 percent have comprehensive knowledge about HIV.

Respondents were also asked if they know that HIV/AIDS cannot be cured. Eighty percent of both men and women know that HIV/AIDS cannot be cured. The tables further show that 65 percent of women and 63 percent of men know that HIV can be transmitted through oral sex. There are observed regional variations. Women and men in Manzini are more likely than those from other regions to know that HIV can be transmitted through oral sex (71 percent and 69 percent, respectively). Sixty-nine percent of women and 68 percent of men know that HIV can be transmitted through anal sex, again Manzini having the highest proportion of respondents knowing about this mode of HIV transmission. There are also notable urban/rural variations amongst both sexes. In general urban respondents are most likely to know about these two modes of HIV transmission compared with rural counterparts.

In summary, almost everyone in Swaziland within the sexually active group has heard about HIV/AIDS; however, less than six in 10 people have comprehensive knowledge about HIV prevention and transmission. The more educated people are the more they know about HIV, and urban residents have better knowledge of HIV than their rural counterparts. Lastly, women know more about HIV than men.

Table HA.2: Knowledge about HIV transmission, misconceptions about HIV/AIDS, and comprehensive knowledge about HIV transmission among young people: women

Percentage of young women age 15–24 years who know the main ways of preventing HIV transmission, percentage who know that a healthy looking person can have the AIDS virus, percentage who reject common misconceptions, and percentage who have comprehensive knowledge about HIV transmission, Swaziland, 2010

	Percentage who have heard of AIDS	Percentage who know transmission can be prevented by:		Percentage of women who know both ways	Percent-age who know that a healthy looking person can have the AIDS virus	Percentage who know that HIV cannot be transmitted by:			Percentage who reject the two most common misconceptions and know that a healthy looking person can have the AIDS virus	Percentage with compre-hensive knowledge [1]	Percent-age who know that HIV/ AIDS can be transmitte d through oral sex	Percentage who know that HIV/ AIDS can be transmitted through anal sex	Percentage who know that HIV/ AIDS cannot be cured	Number of women age 15–24
		Having only one faithful uninfected sex partner	Using a condom every time			Mos-quito bites	Super-natural means	Sharing food with someone with AIDS						
Region														
Hhohho	98.8	97.5	94.9	93.8	91.8	73.1	95.4	91.2	63.6	60.6	60.2	71.9	84.1	512
Manzini	99.3	97.6	94.9	93.1	97.2	72.9	97.6	90.9	67.2	64.1	71.2	79.0	78.1	603
Shiselweni	99.2	92.8	89.7	85.9	93.1	66.2	95.5	91.3	59.8	51.8	62.2	60.2	79.3	512
Lubombo	98.6	95.0	91.7	89.2	81.6	73.9	95.2	88.5	57.2	53.9	64.4	59.5	79.8	375
Area														
Urban	99.8	98.2	94.5	93.0	96.0	79.0	97.6	93.3	73.5	69.7	71.6	77.7	82.6	484
Rural	98.8	95.1	92.5	90.0	90.5	69.0	95.5	89.8	59.0	54.5	62.7	65.8	79.5	1,518
Age														
15–19	98.8	94.3	91.5	88.4	90.3	70.8	96.2	91.3	61.7	56.4	62.7	64.2	79.7	1,098
20–24	99.4	97.8	94.8	93.6	93.8	72.2	95.8	89.8	63.6	60.2	67.4	74.1	80.9	904
Marital status														
Ever married/in union	99.0	97.0	93.2	91.8	95.5	67.0	95.4	86.7	59.6	55.2	64.1	70.8	81.4	350
Never married/in union	99.1	95.6	92.9	90.5	91.1	72.4	96.2	91.5	63.1	58.8	65.0	68.3	80.0	1,652
Education														
None	(92.2)	(92.2)	(89.2)	(89.2)	(83.0)	(30.1)	(84.8)	(54.4)	(22.3)	(19.3)	(70.6)	(62.8)	(73.4)	32
Primary	97.1	91.3	90.3	85.9	85.9	61.2	92.0	83.0	48.4	44.1	61.8	60.6	76.4	546
Secondary	99.9	96.8	93.7	91.5	93.7	71.6	97.7	93.5	63.6	58.7	65.4	68.4	81.4	809
High	100.0	98.8	94.2	93.8	94.9	81.7	97.8	95.3	74.7	70.7	65.1	75.4	83.1	561
Tertiary	100.0	98.3	98.2	96.5	99.1	90.5	100.0	98.2	87.8	86.2	82.0	89.9	76.8	53
Wealth index quintiles														
Poorest	98.0	94.9	90.9	89.0	88.3	63.3	94.3	86.8	53.0	49.1	61.3	60.6	79.6	340
Second	98.4	93.9	93.4	90.2	87.3	63.9	94.7	87.2	52.0	48.4	59.0	61.8	83.2	375
Middle	99.1	95.0	93.3	90.1	91.5	72.3	96.4	91.1	62.7	57.9	68.8	72.1	75.5	422
Fourth	99.7	96.6	92.2	90.5	94.6	75.2	96.5	91.6	66.1	60.8	66.2	70.2	82.1	454
Richest	99.8	98.4	94.7	93.5	96.3	80.1	97.8	95.3	75.9	71.9	67.4	76.6	81.0	410
Total	99.0	95.9	93.0	90.7	91.9	71.4	96.0	90.6	62.5	58.2	64.8	68.7	80.3	2,002

[1] MICS indicator 9.2; MDG indicator 6.3

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

Table HA.2M: Knowledge about HIV transmission, misconceptions about HIV/AIDS and comprehensive knowledge about HIV transmission among young people: men

Percentage of young men age 15–24 years who know the main ways of preventing HIV transmission, percentage who know that a healthy looking person can have the AIDS virus, percentage who reject common misconceptions, and percentage who have comprehensive knowledge about HIV transmission, Swaziland, 2010

	Percentage who have heard of AIDS	Percentage who know transmission can be prevented by:		Percentage of men who know both ways	Percentage who know that a healthy looking person can have the AIDS virus	Percentage who know that HIV cannot be transmitted by:			Percentage who reject the two most common misconceptions and know that a healthy looking person can have the AIDS virus	Percentage with comprehensive knowledge [1]	Percentage who know that HIV/ AIDS can be transmitted through oral sex	Percentage who know that HIV/ AIDS can be transmitted through anal sex	Percentage who know that HIV/ AIDS cannot be cured	Number of men age 15–24
		Having only one faithful uninfected sex partner	Using a condom every time			Mosquito bites	Supernatural means	Sharing food with someone with AIDS						
Region														
Hhohho	98.5	96.6	91.4	89.9	86.4	70.3	95.8	88.1	57.8	54.0	58.4	70.3	82.6	474
Manzini	98.1	94.3	92.6	90.1	93.6	71.3	95.4	88.2	65.0	60.0	68.5	73.0	77.9	554
Shiselweni	99.0	92.1	88.0	84.3	88.9	66.9	93.8	87.3	56.8	47.8	63.8	62.8	79.5	483
Lubombo	97.8	93.3	94.1	90.4	74.4	73.2	94.3	84.2	53.8	50.8	59.7	63.1	80.3	347
Area														
Urban	98.0	95.0	92.9	90.7	91.0	79.0	94.3	89.4	70.4	65.4	63.6	75.6	78.8	410
Rural	98.5	93.8	91.0	88.0	85.8	67.8	95.0	86.6	55.6	50.2	62.9	65.6	80.3	1,447
Age of man														
15–19	98.1	93.5	91.2	88.1	85.7	69.5	94.6	87.7	57.9	52.1	59.5	63.8	81.3	1,075
20–24	98.7	94.9	91.7	89.3	88.7	71.3	95.2	86.5	60.3	55.6	67.9	73.2	78.2	783
Marital status														
Ever married/in union	96.6	93.8	88.4	86.9	86.4	67.7	94.7	78.0	53.9	52.3	56.8	66.1	76.4	62
Never married/in union	98.4	94.1	91.5	88.7	87.0	70.4	94.9	87.5	59.1	53.6	63.3	67.9	80.1	1,796
Education														
None	(85.4)	(77.2)	(81.3)	(73.1)	(76.2)	(23.8)	(71.1)	(54.9)	(23.8)	(23.8)	(65.6)	(46.1)	(65.6)	34
Primary	96.5	90.9	89.9	86.7	81.2	59.0	91.4	77.0	44.1	39.7	61.2	57.3	75.3	631
Secondary	99.9	95.6	92.9	90.0	90.0	74.4	97.9	93.0	64.7	58.2	61.5	69.1	84.8	650
High	99.5	97.2	91.7	90.1	90.6	80.8	96.6	94.2	70.5	65.4	65.6	78.3	80.5	488
Tertiary	100.0	95.7	94.2	89.8	92.4	86.3	98.1	94.3	78.7	70.4	78.8	93.1	81.0	54
Wealth index quintiles														
Poorest	97.6	94.5	92.5	89.8	79.5	62.5	94.9	82.9	49.2	43.7	63.1	61.2	80.2	282
Second	98.0	92.6	88.0	84.2	87.2	67.5	94.1	87.0	55.0	48.6	59.7	62.0	81.1	416
Middle	98.1	93.9	92.5	89.8	87.4	65.7	93.9	88.3	56.0	51.1	63.3	66.8	78.0	395
Fourth	98.6	94.2	91.8	89.7	88.0	74.5	96.3	87.6	62.6	58.9	63.3	69.7	80.0	440
Richest	99.4	95.8	92.9	90.4	91.3	80.3	95.1	89.5	70.9	64.3	66.6	79.6	80.7	325
Total	98.4	94.1	91.4	88.6	87.0	70.3	94.9	87.2	58.9	53.6	63.1	67.8	80.0	1,858

[1] MICS indicator 9.2; MDG indicator 6.3M

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

Knowledge of mother-to-child transmission of HIV

Knowledge of MTCT is also an important step for women to avoid infecting their babies. The level of knowledge among women age 15-49 years and men age 15–59 years concerning MTCT is presented in Tables HA.3 and HA.3M. Overall, 95 percent of women and 94 percent of men know that HIV can be transmitted from mother to child. There are regional variations with regards to knowledge of MTCT. Men and women residing in Manzini are most likely to know that HIV can be transmitted from mother to child compared with other regions (96 percent and 95 percent, respectively). Sixty-one percent of women and 50 percent of men know all three ways of MTCT while five percent of women and six percent of men did not know of any specific way. Seventy-three percent of women and 66 percent of men know that HIV can be transmitted during pregnancy, while 88 percent of women and 83 percent of men know that HIV can be transmitted during delivery. Eighty percent of women and 76 percent of men know that HIV can be transmitted by breastfeeding.

There are no remarkable differences in terms of MTCT knowledge according to wealth status of respondents. However, the education level of a man has a positive influence on the knowledge of MTCT. Men with tertiary education are most likely to have knowledge of MTCT than men with no education (96 percent and 88 percent, respectively).

Fewer younger women and men age 15–24 years (85 percent and 81 percent, respectively) know that HIV can be transmitted during delivery compared with older men and women age 25 years and older of which 85 percent and 91 percent, respectively, know that HIV can be transmitted during delivery.

In summary, both men and women in Manzini have better knowledge of MTCT and Shiselweni is the worst in terms of MTCT knowledge. The urban population also has better knowledge of MTCT than their rural counterpart. Older women and men (25 years and older) know more about MTCT compared with their younger counterparts (15–24 years). Knowledge of MTCT improves with the level of education.

Table HA.3: Knowledge of mother-to-child HIV transmission: women

Percentage of women age 15–49 years who correctly identify means of HIV transmission from mother to child, Swaziland, 2010

	Percentage who know HIV can be transmitted from mother to child	Percent who know HIV can be transmitted:				Does not know any of the specific means	Number of women
		During pregnancy	During delivery	By breastfeeding	All three means [1]		
Region							
Hhohho	94.6	70.3	87.2	82.4	57.5	4.6	1,286
Manzini	96.2	71.5	90.4	79.7	59.5	3.3	1,515
Shiselweni	91.5	74.0	85.2	78.4	62.3	8.0	1,033
Lubombo	94.9	77.0	90.0	81.2	65.9	4.3	854
Area							
Urban	95.0	70.4	89.8	79.9	60.1	4.7	1,353
Rural	94.3	73.7	87.7	80.6	61.0	4.9	3,335
Age group							
15-24	93.8	73.1	85.0	80.7	60.0	5.3	2,002
25+	95.0	72.4	90.8	80.2	61.3	4.6	2,686
Age group							
15–19	93.3	70.9	82.3	81.4	57.4	5.5	1,098
20–24	94.3	75.8	88.1	79.9	63.2	5.0	904
25–29	93.8	71.6	88.7	80.1	60.7	5.9	847
30–39	96.2	74.2	93.7	83.4	65.5	3.3	1,051
40–49	94.8	70.9	89.2	76.1	56.3	4.8	789
Marital status							
Ever married/in union	95.7	74.2	91.6	80.7	62.5	3.9	2,326
Never married/in union	93.3	71.3	85.1	80.2	59.0	5.9	2,362
Education							
None	93.0	74.0	85.5	79.2	60.2	4.8	242
Primary	93.4	73.5	85.6	78.2	59.8	5.2	1,269
Secondary	95.1	75.3	88.4	81.8	62.8	4.8	1,592
High	94.7	70.5	90.0	80.8	60.3	5.1	1,202
Tertiary	96.2	65.7	93.4	81.6	57.0	3.2	382
Wealth index quintiles							
Poorest	92.6	77.0	86.9	79.9	64.2	6.5	737
Second	95.1	77.2	88.2	83.0	65.4	3.8	802
Middle	94.7	72.1	88.4	79.2	59.6	4.7	930
Fourth	95.0	72.3	88.9	80.4	59.6	4.6	1,041
Richest	94.6	67.9	88.7	79.9	57.2	5.1	1,179
Total	94.5	72.7	88.3	80.4	60.7	4.9	4,688

[1] MICS indicator 9.3

Table HA.3M: Knowledge of mother-to-child HIV transmission: men

Percentage of men age 15–59 years who correctly identify means of HIV transmission from mother to child, Swaziland, 2010

	Percentage who know HIV can be transmitted from mother to child	Percent who know HIV can be transmitted:				Does not know any of the specific means	Number of men
		During pregnancy	During delivery	By breastfeeding	All three means [1]		
Region							
Hhohho	93.5	64.5	84.4	78.2	50.5	5.5	1,143
Manzini	95.1	63.1	83.6	72.2	45.0	4.0	1,406
Shiselweni	91.7	68.4	81.2	78.0	54.9	7.8	847
Lubombo	93.0	69.1	82.3	75.2	53.6	6.0	782
Area							
Urban	94.5	62.9	85.0	74.6	48.1	4.7	1,347
Rural	93.1	67.0	82.2	76.1	51.1	5.9	2,832
Age group							
15-24	93.2	66.9	80.8	77.4	51.0	5.2	1,858
25+	93.9	64.6	85.0	74.1	49.5	5.8	2,321
Age group							
15–19	92.8	70.3	79.5	77.5	53.1	5.3	1,075
20–24	93.7	62.3	82.7	77.2	47.9	5.0	783
25–29	94.8	62.4	86.9	74.2	48.2	4.9	629
30–39	94.1	65.3	86.4	75.9	50.9	5.7	838
40–49	93.8	63.5	86.6	74.7	50.6	5.7	513
50–59	91.8	68.8	75.3	68.6	47.0	7.6	342
Marital status							
Ever married/in union	93.8	65.7	84.5	74.6	50.0	5.8	1,684
Never married/in union	93.4	65.7	82.2	76.2	50.2	5.3	2,495
Education							
None	88.2	65.7	70.6	69.8	47.4	10.1	280
Primary	91.9	70.6	77.8	74.9	52.0	5.9	1,240
Secondary	94.6	67.7	84.2	76.9	52.6	5.2	1,195
High	94.9	60.4	88.5	75.1	46.5	4.9	1,067
Tertiary	96.3	58.4	90.6	79.3	48.9	3.7	397
Wealth index quintiles							
Poorest	92.7	70.1	81.2	76.8	54.9	5.9	570
Second	93.2	69.8	81.2	76.3	52.7	5.6	740
Middle	92.9	66.7	81.6	75.1	50.5	5.9	821
Fourth	92.8	64.2	82.8	73.7	48.1	6.5	940
Richest	95.5	61.1	86.8	76.4	47.5	4.2	1,107
Total	93.6	65.7	83.1	75.6	50.1	5.5	4,179

[1] MICS indicator 9.3 M

Accepting attitudes towards people living with HIV/AIDS

Indicators on attitudes toward people living with HIV measure stigma and discrimination in the population. Stigma and discrimination are low if respondents report an accepting attitude on the following questions: 1) "would care for family member sick with AIDS"; 2) "would buy fresh vegetables from a vendor who is HIV positive"; 3) "believe that a female teacher who is HIV positive should be allowed to teach in school"; and 4) "would not want to keep secret that a family member got infected with HIV."

Tables HA.4 and HA.4M present the attitudes of women and men towards people living with HIV/AIDS. In general, a high proportion of women and men are willing to care for a family member with AIDS in their own home, at 97 percent for women and 95 percent for men. Eighty-seven percent of women and 85 percent of men said they would buy fresh vegetables from a shopkeeper or a vendor who has HIV. The table also indicates that 94 percent of women and 90 percent of men believe that a female teacher with HIV and is not sick should be allowed to continue teaching. Lastly, the tables show that the proportions of women and men who would not want to keep secret that a family member got infected with HIV (57 percent both for women and men). However, this result may need to be interpreted carefully, as it may indicate respondents' concern for privacy/confidentiality rather that stigma and discrimination against people living with HIV/AIDS.

Figure HA.2 shows that the proportion of both women and men who have heard of AIDS who express an accepting attitude towards people living with HIV/AIDS is 47 percent for women and 46 percent for men. The higher the level of education, the higher the proportion of those who express an accepting attitude towards people living with HIV/AIDS in both men and women as shown in Figure HA.2.

Figure HA.2A: Percent of men and women who have heard of AIDS and who expressed an accepting attitude towards people living with HIV/AIDS, Swaziland, 2010

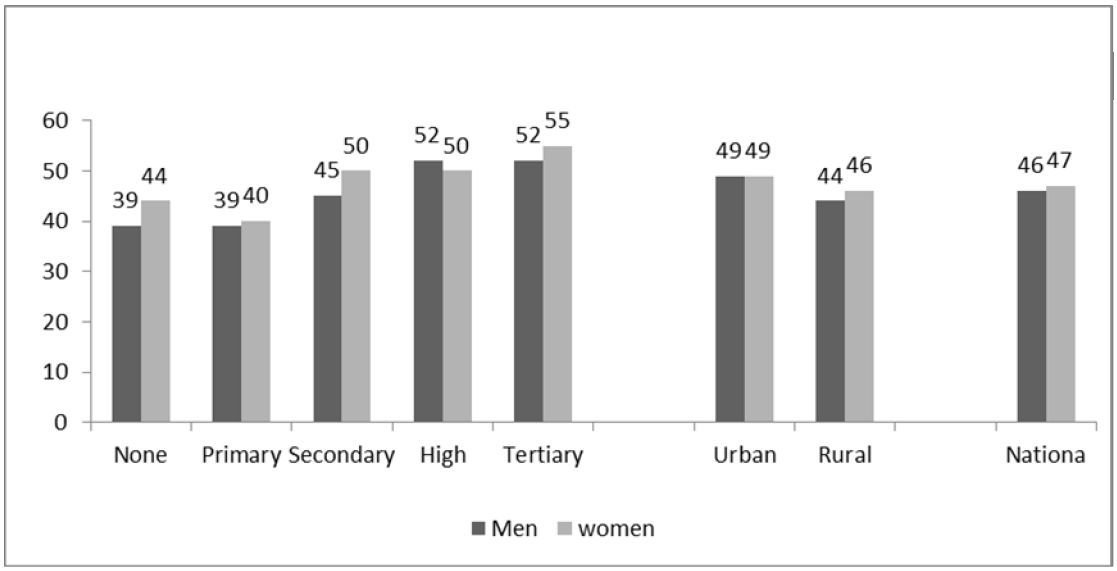


Table HA.4: Accepting attitudes toward people living with HIV/AIDS: women

Percentage of women age 15–49 years who have heard of AIDS who express an accepting attitude towards people living with HIV/AIDS, Swaziland, 2010

	Percent of women who:						
	Are willing to care for a family member with the AIDS virus in own home	Would buy fresh vegetables from a shopkeeper or vendor who has the AIDS virus	Believe that a female teacher with the AIDS virus and is not sick should be allowed to continue teaching	Would not want to keep secret that a family member got infected with the AIDS virus	Agree with at least one accepting attitude	Express accepting attitudes on all four indicators [1]	Number of women who have heard of AIDS
Region							
Hhohho	97.3	89.0	93.7	55.5	100.0	46.8	1,276
Manzini	95.7	88.2	96.1	61.8	99.8	53.0	1,508
Shiselweni	97.0	84.6	92.2	58.7	99.9	46.2	1,028
Lubombo	97.3	85.0	91.1	48.0	99.7	38.1	847
Area							
Urban	96.9	91.3	97.2	55.4	99.9	49.1	1,349
Rural	96.6	85.3	92.2	57.5	99.9	46.3	3,310
Age group							
15-24	95.4	83.4	92.3	57.5	99.9	44.7	1,983
25+	97.7	89.7	94.6	56.4	99.8	48.9	2,676
Age group							
15–19	94.2	80.8	89.7	57.6	99.8	42.2	1,085
20–24	96.8	86.7	95.5	57.4	100.0	47.7	898
25–29	97.3	89.9	96.1	55.1	99.9	47.5	844
30–39	98.0	91.2	95.6	54.5	99.8	49.2	1,046
40–49	97.7	87.5	91.7	60.3	99.9	49.8	786
Marital status							
Ever married /in union	97.8	88.8	93.9	56.1	99.9	47.7	2,316
Never married/in union	95.6	85.3	93.4	57.6	99.8	46.5	2,343
Education							
None	97.9	80.2	84.1	58.2	100.0	43.7	237
Primary	96.1	79.4	86.6	56.1	99.8	39.8	1,251
Secondary	97.2	88.3	95.8	58.1	99.9	49.6	1,591
High	96.5	92.0	98.1	55.3	99.9	49.6	1,199
Tertiary	96.8	95.3	99.5	58.4	100.0	54.6	380
Wealth index quintiles							
Poorest	96.3	77.0	87.0	58.2	99.9	41.2	730
Second	96.3	82.2	91.9	59.1	99.9	46.1	792
Middle	96.8	86.3	93.4	55.0	99.9	44.6	925
Fourth	97.7	91.5	95.0	57.9	99.9	50.8	1,036
Richest	96.3	93.1	98.0	55.1	99.8	50.2	1,175
Total	96.7	87.0	93.7	56.9	99.9	47.1	4,659

[1] MICS indicator 9.4

Table HA.4M: Accepting attitudes toward people living with HIV/AIDS: men

Percentage of men age 15–49 years who have heard of AIDS who express an accepting attitude towards people living with HIV/AIDS, Swaziland, 2010

	Percent of men who:						
	Are willing to care for a family member with the AIDS virus in own home	Would buy fresh vegetables from a shopkeeper or vendor who has the AIDS virus	Believe that a female teacher with the AIDS virus and is not sick should be allowed to continue teaching	Would not want to keep secret that a family member got infected with the AIDS virus	Agree with at least one accepting attitude	Express accepting attitudes on all four indicators [1]	Number of women who have heard of AIDS
Region							
Hhohho	95.4	87.2	91.9	53.0	100.0	42.7	1,131
Manzini	95.2	86.5	92.2	65.1	99.5	53.4	1,393
Shiselweni	94.4	80.6	86.2	55.0	99.5	39.8	843
Lubombo	96.6	85.2	89.0	52.5	99.3	42.6	774
Area							
Urban	95.6	90.0	95.1	57.2	99.6	48.9	1,336
Rural	95.2	83.0	88.0	57.5	99.6	44.1	2,805
Age group							
15-24	93.8	83.1	88.6	56.4	99.7	42.4	1,827
25+	96.5	86.9	91.6	58.2	99.5	48.3	2,314
Age group							
15-19	92.8	79.8	87.3	56.5	99.6	40.1	1,055
20-24	95.2	87.5	90.3	56.2	99.7	45.5	773
25-29	96.3	90.1	94.0	58.5	99.4	49.7	627
30-39	96.1	89.7	93.4	58.3	99.3	50.7	837
40-49	97.4	85.6	91.5	55.0	99.7	46.1	511
50-59	96.6	76.3	83.2	62.2	99.7	42.9	339
Marital status							
Ever married/in union	97.4	85.6	91.0	58.5	99.6	48.4	1,678
Never married/in union	93.9	85.0	89.8	56.6	99.5	43.8	2,463
Education							
None	96.2	69.8	74.0	62.2	98.8	39.1	275
Primary	94.5	75.5	81.5	57.8	99.2	39.4	1,213
Secondary	94.7	87.6	93.8	56.5	99.6	45.4	1,192
High	96.1	93.5	97.5	57.1	100.0	52.3	1,065
Tertiary	97.1	96.4	98.9	56.1	100.0	52.2	397
Wealth index quintiles							
Poorest	93.4	74.3	81.3	58.4	99.8	38.5	562
Second	95.2	82.9	84.9	58.3	99.2	43.7	731
Middle	94.8	83.4	89.9	55.4	99.1	43.3	812
Fourth	95.9	86.9	91.7	59.3	99.7	48.5	934
Richest	96.4	92.3	97.6	56.1	99.9	50.0	1,103
Total	95.3	85.2	90.3	57.4	99.6	45.7	4,141

[1] MICS indicator 9.4M

Knowledge of a place for HIV testing and testing for HIV

Another important indicator is the knowledge of where to be tested for HIV and the use of such services. Tables HA.5 and HA.5M tabulate questions related to knowledge among men and women on HIV testing and whether they have ever been tested. Ninety-four percent of women know where to get tested for HIV compared with 90 percent of men. Manzini has the highest proportions (96 percent for women and 93 percent for men) and Shiselweni has the lowest proportions (93 percent for women and 88 percent for men). Urban areas have the highest proportions of both women and men who know where to get an HIV test (97 percent for women and 96 percent for men) compared with their rural counterparts (87 percent for men and 93 percent of women). The knowledge of a place for HIV testing is high across all age groups, although it dips somewhat for the youngest age groups (age 15–19 years for women and age 15–19 and 20–24 years for men). For both women and men, the knowledge of a place for HIV testing generally increases with the level of education. The only exception is that women and men with no education appear to do better than those with primary education; however, this may due to the confounding of age and the level of education.

The proportions of persons who have ever been tested for HIV are 73 percent for women and 47 percent for men. The proportion of persons who have been tested within the last 12 months and have been told their results are 47 percent for women and 32 percent for men. When the results are disaggregated by socio-demographic variables, women in the 15–19 and 40–49 age groups and those who have never been married or in union are less likely to have been tested and have been told the result compared with other groups. For men, those from the Hhohho region, from rural areas and in the younger age groups (age 15–19 and 20–24 years) are less likely to have been tested and have been told the results compared with other groups.

In terms of women vs. men comparisons, women are more knowledgeable about where to get an HIV test than men. Both men and women in urban areas have more knowledge about where to get an HIV test compared with their rural counterparts.

Table HA.5: Knowledge of a place for HIV testing: women

Percentage of women age 15–49 years who know where to get an HIV test, percentage of women who have ever been tested, percentage of women who have been tested in the last 12 months, and percentage of women who have been tested and have been told the result, Swaziland, 2010

	Percentage of women who:				
	Know a place to get tested[1]	Have ever been tested	Have been tested in the last 12 months	Have been tested in the last 12 months and have been told result[2]	Number of women
Region					
Hhohho	93.9	71.5	46.2	44.8	1,286
Manzini	96.1	74.2	49.4	47.9	1,515
Shiselweni	92.5	73.1	50.1	48.0	1,033
Lubombo	94.5	74.4	51.0	49.2	854
Area					
Urban	97.2	76.9	49.6	48.3	1,353
Rural	93.3	71.8	48.7	46.9	3,335
Age of woman					
15–19	82.2	33.7	24.1	22.8	1,098
20–24	97.5	83.1	56.4	54.4	904
25–29	98.8	91.7	60.7	59.6	847
30–34	98.3	87.7	59.1	56.6	595
35–39	98.3	87.9	56.0	54.5	456
40–44	98.3	82.4	53.3	52.3	433
45–49	97.6	72.9	47.9	44.7	355
Marital status					
Ever married/in union	98.5	87.9	58.6	56.5	2,326
Never married/in union	90.4	58.9	39.5	38.3	2,362
Education					
None	97.1	84.4	54.8	51.6	242
Primary	89.8	72.2	50.3	48.4	1,269
Secondary	93.9	69.6	47.3	45.5	1,592
High	98.0	73.3	46.6	45.2	1,202
Tertiary	98.7	84.9	55.8	55.0	382
Wealth index quintiles					
Poorest	92.7	75.2	54.3	51.4	737
Second	92.6	71.6	47.2	45.3	802
Middle	93.6	71.8	48.9	47.5	930
Fourth	95.7	73.1	46.8	45.6	1,041
Richest	96.2	74.6	48.8	47.4	1,179
Total	94.4	73.3	49.0	47.3	4,688

[1] MICS indicator 9.5
[2] MICS indicator 9.6

Table HA.5M: Knowledge of a place for HIV testing: men

Percentage of men age 15–59 years who know where to get an HIV test, percentage of men who have ever been tested, percentage of men who have been tested in the last 12 months, and percentage of men who have been tested and have been told the result, Swaziland, 2010

	Percentage of men who:				
	Know a place to get tested[1]	Have ever been tested	Have been tested in the last 12 months	Have been tested in the last 12 months and have been told result[2]	Number of men
Region					
Hhohho	89.0	44.0	30.4	29.1	1,143
Manzini	92.4	49.5	34.6	33.2	1,406
Shiselweni	87.9	45.6	34.4	32.7	847
Lubombo	89.7	49.0	35.6	34.2	782
Area					
Urban	96.2	55.3	38.0	37.0	1,347
Rural	87.1	43.2	31.5	29.9	2,832
Age of man					
15–19	75.5	21.9	18.9	18.4	1,075
20–24	90.2	42.4	31.9	30.4	783
25–29	97.1	57.0	39.0	38.3	629
30–34	96.3	56.9	39.5	37.0	484
35–39	98.1	61.7	39.8	37.9	354
40–44	96.6	67.4	44.2	42.4	292
45–49	95.8	62.6	41.5	39.7	221
50–54	95.5	66.3	45.0	43.6	183
55–59	95.6	58.4	43.6	40.3	159
Marital status					
Ever married/in union	96.8	62.4	42.7	40.7	1,684
Never married/in union	85.4	36.8	27.4	26.4	2,495
Education					
None	89.5	52.5	38.8	35.7	280
Primary	80.0	36.8	27.3	25.2	1,240
Secondary	90.9	43.6	31.9	31.0	1,195
High	97.4	53.7	37.6	36.7	1,067
Tertiary	99.4	68.6	43.5	43.1	397
Wealth index quintiles					
Poorest	83.4	40.4	31.0	29.1	570
Second	85.2	40.6	30.1	28.2	740
Middle	88.6	43.3	32.1	30.6	821
Fourth	91.8	47.3	33.2	37.7	940
Richest	96.2	57.6	38.6	38.1	1,107
Total	90.0	**47.1**	33.6	32.2	4,179

[1]MICS indicator 9.5M
[2]MICS indicator 9.6M

Knowledge of a place for HIV testing and testing for HIV among sexually active youth

In the 2010 Swaziland MICS, all sexually active young women and men were asked whether or not they knew a place for HIV testing and whether or not they had been tested for HIV. The proportion of young women and men who have been tested and have been told the result provides a measure of the effectiveness of interventions that promote HIV counseling and testing among young people. This is important to know because young people may feel sensitive about accessing services related to sexual health.

Tables HA.6 and HA.6M present the percentages of women and men age 15–24 years who have had sex in the last 12 months who know where to get an HIV test and who have been tested for HIV. When compared with the older cohort, sexually active young women are more likely to know a place for HIV testing and have been tested for HIV (both in their lifetime and in the last 12 months). Compared with the general population, young women are also more likely to get tested for HIV and have been told the result (59 percent for sexually active women age 15–24 years vs. 47 percent for all women age 15–49 years). For men, there is no difference in the knowledge and take up of HIV testing between sexually active young men and the older cohort.

Disaggregation of the results by sex shows that the knowledge of a place to get tested is higher for women than for men (96 percent vs. 90 percent). Eighty-six percent of women have ever been tested, whereas only 43 percent of men reported to have ever been tested. Sixty-one percent of women have been tested within the past 12 months and 59 percent have received test results, whereas only 34 percent of men have been tested in the past 12 months and 32 percent received their test results. Figure HA.3 highlights the differences in the results between women and men.

Figure HA3: Women and men who knows where to be tested for HIV, have been tested and have received results, Swaziland, 2010

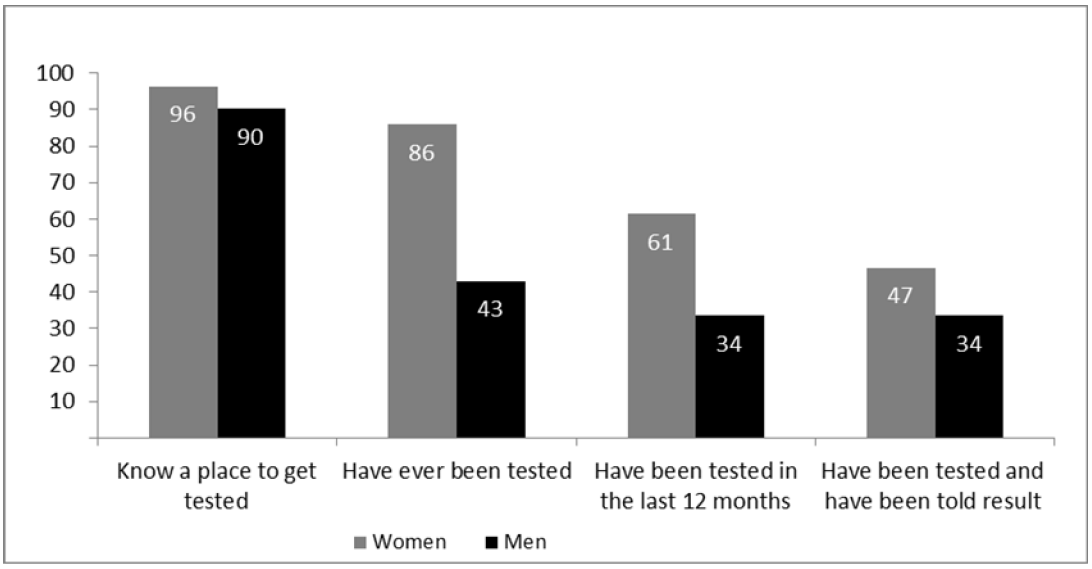


Table HA.6: Knowledge of a place for HIV testing among sexually active young women

Percentage of women age 15–24 years who have had sex in the last 12 months, and among women who have had sex in the last 12 months, the percentage who know where to get an HIV test, percentage of women who have ever been tested, percentage of women who have been tested in the last 12 months, and percentage of women who have been tested and have been told the result, Swaziland, 2010

	Percentage who have had sex in the last 12 months	Number of women age 15–24 years	Percentage of women who:				Number of women age 15–24 years who have had sex in the last 12 months
			Know a place to get tested	Have ever been tested	Have been tested in the last 12 months	Have been tested in the last 12 months and have been told result[1]	
Region							
Hhohho	46.3	512	95.6	84.5	55.7	54.7	237
Manzini	54.5	603	97.1	87.0	62.7	60.6	329
Shiselweni	45.8	512	94.0	86.0	64.1	61.4	234
Lubombo	47.4	375	98.5	85.5	62.4	58.7	178
Area							
Urban	56.0	484	97.9	87.5	62.1	60.2	271
Rural	46.6	1,518	95.6	85.2	61.0	58.6	707
Age of woman							
15–19	24.1	1,098	91.0	76.7	59.6	57.2	265
20–24	78.9	904	98.2	89.3	61.9	59.7	713
Marital status							
Ever married/ in union	99.0	350	98.2	96.3	67.6	64.7	346
Never married/ in union	38.2	1,652	95.2	80.1	57.8	55.9	632
Education							
None	(91.8)	32	(91.5)	(91.5)	(60.7)	(55.6)	29
Primary	50.6	546	94.3	84.6	60.0	58.0	277
Secondary	46.6	809	95.8	86.7	66.3	63.9	377
High	45.4	561	99.0	84.9	55.0	52.7	255
Tertiary	75.5	53	100.0	88.9	63.3	63.3	40
Wealth index quintiles							
Poorest	52.7	340	95.8	86.5	60.9	57.5	179
Second	45.9	375	95.1	85.9	61.7	59.0	172
Middle	51.0	422	97.4	87.1	64.4	63.1	215
Fourth	49.5	454	96.1	84.8	58.6	56.2	225
Richest	45.4	410	96.6	85.0	61.0	59.3	186
Total	48.8	2,002	96.3	85.9	61.3	59.0	978

[1]MICS indicator 9.7

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

Table HA.6M: Knowledge of a place for HIV testing among sexually active young men

Percentage of men age 15–24 years who have had sex in the last 12 months, and among men who have had sex in the last 12 months, the percentage who know where to get an HIV test, percentage of men who have ever been tested, percentage of men who have been tested in the last 12 months, and percentage of men who have been tested and have been told the result, Swaziland, 2010

	Percentage who have had sex in the last 12 months	Number of men age 15–24 years	Percentage of men who:				Number of men age 15–24 years who have had sex in the last 12 months
			Know a place to get tested	Have ever been tested	Have been tested in the last 12 months	Have been tested in the last 12 months and have been told result[1]	
Region							
Hhohho	31.4	474	85.0	37.8	27.7	26.6	149
Manzini	36.5	554	93.5	43.0	34.5	31.7	202
Shiselweni	27.4	483	93.8	48.9	38.6	36.4	132
Lubombo	28.2	347	86.4	42.5	33.5	32.2	98
Area							
Urban	45.9	410	90.0	45.7	35.6	33.7	188
Rural	27.1	1,447	90.3	41.6	32.6	30.5	393
Age of man							
15–19	12.4	1075	87.4	36.7	31.6	29.7	133
20–24	57.3	783	91.0	44.8	34.1	32.1	448
Marital status							
Ever married/ in union	98.4	62	88.7	53.6	38.0	32.4	61
Never married/ in union	29.0	1,796	90.4	41.7	33.0	31.5	520
Education							
None	(51.5)	34	*	*	*	*	17
Primary	27.3	631	83.3	37.9	30.6	27.1	172
Secondary	24.8	650	89.4	40.5	28.9	27.7	161
High	41.5	488	95.3	46.3	36.9	35.9	203
Tertiary	51.3	54	100.0	62.0	52.7	52.7	28
Wealth index quintiles							
Poorest	22.8	282	90.9	40.3	30.5	29.0	64
Second	27.6	416	85.7	43.3	30.9	27.1	115
Middle	37.2	395	90.9	34.9	31.6	29.3	147
Fourth	29.7	440	89.9	46.4	36.4	34.9	131
Richest	38.3	325	93.4	49.7	37.0	36.1	124
Total	31.3	1,858	90.2	42.9	33.6	31.6	581

[1] MICS indicator 9.7M

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

HIV testing during antenatal care

It is estimated that Swaziland has about 35,000 pregnant women annually and of those an estimated 11,500 delivered children would be infected with HIV. ANC services give an opportunity for HIV counselling and testing among pregnant women. This is especially critical for Swaziland as there is high take up of ANC services among pregnant women. According to the 2010 Swaziland MICS, 97 percent of pregnant women access ANC services during their pregnancy.

In the 201 Swaziland MICS, all women who had given birth within the two years preceding the survey were asked about take up in ANC services, as well as counselling and HIV testing during ANC services. As HIV testing is the only way to know ones HIV status, it is therefore critical that the test results be given to all tested clients. This section of the HIV/AIDS module also looked into whether pregnant women also received their test results. Table HA.7 presents the results nationally as well as by socio-economic characteristics.

Among all pregnant women age 15–49 years who attended ANC services during their pregnancy, 82 percent received HIV counselling, 89 percent were offered an HIV test and were tested for HIV during ANC, 88 percent were offered an HIV test and were tested for HIV during ANC and receive the result, and 77 percent received HIV counselling, were offered an HIV test, accepted and received the result. It is interesting to note the proportion of women who received an HIV test is above the proportion that received counselling (89 percent vs. 82 percent). This was more convoluted among women in rural areas, where more women were tested for HIV compared women who received counselling.

In terms of demographic and socio-economic disparities, there are not many statistically significant differences but a few observations can be highlighted. The percentage of pregnant women who received all three components (counselling, HIV testing and the test result) tended to be highest in Shiselweni (81 percent) and lowest in Hhohho and Manzini (75 percent and 76 percent, respectively). The percentage of those who received all three components was lowest among the youngest age group (age 15–19 years) at 69 percent and those with no education at 62 percent.

Table HA.7: HIV counseling and testing during antenatal care: women

Among women age 15–49 who gave birth in the last two years, percentage of women who received antenatal care from a health professional during the last pregnancy, percentage who received HIV counseling, percentage who were offered and accepted an HIV test and received the results, Swaziland, 2010

	Percent of women who:					
	Received antenatal care from a healthcare professional for last pregnancy	Received HIV counseling during antenatal care [1]	Were offered an HIV test and were tested for HIV during antenatal care	Were offered an HIV test and were tested for HIV during antenatal care, and received the results [2]	Received HIV counseling, were offered an HIV test, accepted and received the results	Number of women who gave birth in the two years preceding the survey
Region						
Hhohho	94.1	78.3	87.5	85.7	75.0	253
Manzini	98.5	80.6	87.9	86.1	75.7	329
Shiselweni	97.1	86.6	90.1	88.5	81.1	253
Lubombo	96.9	80.6	92.0	90.7	78.4	195
Area						
Urban	94.8	82.0	86.8	84.2	77.0	255
Rural	97.4	81.4	89.9	88.6	77.5	776
Young women						
15–24	97.6	79.8	90.4	88.9	76.9	489
Age						
15–19	98.1	73.5	90.8	88.4	68.8	136
20–24	97.4	82.2	90.3	89.1	80.1	353
25–29	95.6	80.3	88.0	86.7	76.6	264
30–34	96.4	88.0	88.9	86.6	81.4	141
35–49	96.6	83.3	86.7	84.9	76.2	138
Marital status						
Ever married/in union	96.6	82.4	88.6	87.2	77.9	595
Never married/in union	97.0	80.3	89.8	87.9	76.7	435
Education						
None	93.5	68.7	78.0	76.2	62.1	57
Primary	96.9	79.4	90.6	88.9	75.6	291
Secondary	96.7	84.3	89.6	86.8	78.9	363
High	97.7	83.3	89.0	88.8	80.4	257
Tertiary	96.0	79.7	89.7	89.7	78.1	63
Wealth index quintiles						
Poorest	98.4	82.8	89.1	87.4	76.6	210
Second	96.1	80.4	87.6	85.1	75.4	204
Middle	97.6	79.8	89.2	87.5	77.3	222
Fourth	96.0	81.3	90.4	89.4	78.4	211
Richest	95.6	83.7	89.3	88.0	79.4	183
Total	96.8	81.5	89.1	87.5	77.4	1,031

[1] MICS indicator 9.8
[2] MICS indicator 9.9

Sexual behaviour related to HIV transmission

HIV transmission in Swaziland occurs mainly through heterosexual intercourse, thus early sexual debut marks early exposure to risk of HIV infection, especially in the absence of protection (SDHS 2006/2007). Promoting safer sexual behaviour is critical for reducing HIV prevalence. The use of condoms during sex, especially with non–regular partners, is especially important for reducing the spread of HIV. In most countries over half of new HIV infections are among young people 15–24 years. A change in behaviour among this age group will thus be especially important to reduce new infections.

In the 2010 Swaziland MICS, a module of questions was administered to young women and men 15–24 years of age to assess their risk of HIV infection. Risk factors for HIV include sex at an early age, sex with older men, sex with a non-marital non-cohabitating partner, and failure to use a condom.

Tables HA.8 and HA.8M present the frequency of sexual behaviours that increase the spread of HIV among women and men. The tables show that nationally, 55 percent and 64 percent of never married women and men age 15–24 years, respectively, have never had sex. Only a small proportion (four percent of women age 15–24 years and three percent of men age 15–24 years) had sex before age 15. For both women and men, there are no marked disparities across regions except for women from Lubombo who are only slightly more likely to engage in early sexual intercourse. For urban vs. rural differences, there is no significant difference for women; but for men, urban men tend to have sex slightly earlier than their rural counterparts (four percent vs. two percent).

Fourteen percent of women age 15–24 years had sex with a man 10 or more years older. The practice of intergenerational sex is mainly driven by the local practice whereby young women are married away to older men or engage in sexual relationships with older and richer men in exchange for financial and material support. What is interesting is that women from the highest and second highest wealth quintile are somewhat more likely to engage in intergenerational sex (18 percent and 15 percent, respectively, compared with 12–13 percent for lower wealth quintiles). The practice of intergenerational sex is negligible for men age 15–24 years.

Table HA.8: Sexual behaviour that increases the risk of HIV infection: women

Percentage of never-married young women age 15–24 years who have never had sex, percentage of young women age 15–24 years who have had sex before age 15, and percentage of young women age 15-24 years who had sex with a man 10 or more years older during the last 12 months, Swaziland, 2010

	Percentage of never-married women age 15–24 years who have never had sex [1]	Number of never-married women age 15–24 years	Percentage of women age 15–24 years who had sex before age 15 [2]	Number of women age 15–24 years	Percentage of women age 15–24 years who had sex in the last 12 months with a man 10 or more years older [3]	Number of women age 15–24 years who had sex in the 12 months preceding the survey
Region						
Hhohho	60.6	409	3.1	512	15.5	237
Manzini	52.2	474	3.9	603	14.1	329
Shiselweni	54.0	453	3.3	512	13.2	234
Lubombo	53.4	315	5.1	375	13.6	178
Area						
Urban	50.9	369	4.3	484	15.1	271
Rural	56.2	1,283	3.6	1,518	13.7	707
Age of woman						
15–19	75.7	1,050	3.2	1,098	11.6	265
20–24	19.0	603	4.5	904	15.0	713
Marital status						
Ever married/in union	na	na	8.5	350	25.0	346
Never married/in union	55.0	1,652	2.8	1,652	8.1	632
Education						
None	*	9	(17.2)	32	(15.6)	29
Primary	56.1	428	8.0	546	14.9	277
Secondary	59.0	672	2.4	809	14.4	377
High	51.8	504	1.2	561	11.5	255
Tertiary	(26.8)	39	0.0	53	(21.1)	40
Wealth index quintiles						
Poorest	51.9	278	5.9	340	12.9	179
Second	56.1	318	2.4	375	12.2	172
Middle	57.7	329	4.5	422	11.8	215
Fourth	52.2	382	4.0	454	15.1	225
Richest	57.1	345	2.2	410	18.4	186
Total	55.0	1,652	3.8	2,002	14.1	978

[1] MICS indicator 9.10
[2] MICS indicator 9.11
[3] MICS indicator 9.12

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases. Figures in parentheses are based on 25–49 unweighted cases.

Table HA.8M: Sexual behaviour that increases the risk of HIV infection: men

Percentage of never-married young men age 15–24 years who have never had sex, percentage of young men age 15–24 years who have had sex before age 15, and percentage of young men age 15–24 years who had sex with a man 10 or more years older during the last 12 months, Swaziland, 2010

	Percentage of never-married men age 15–24 years who have never had sex [1]	Number of never-married men age 15–24 years	Percentage of men age 15–24 years who had sex before age 15[2]	Number of men age 15–24 years	Percentage of men age 15–24 years who had sex in the last 12 months with a man 10 or more years older [3]	Number of men age 15–24 years who had sex in the 12 months preceding the survey
Region						
Hhohho	64.6	456	2.5	474	0.0	149
Manzini	58.9	527	1.9	554	1.0	202
Shiselweni	67.0	475	3.1	483	0.7	132
Lubombo	66.8	338	3.3	347	0.0	98
Area						
Urban	50.9	378	3.8	410	1.1	188
Rural	67.4	1,417	2.3	1,447	0.2	393
Age of woman						
15–19	83.8	1,075	2.3	1,075	0.0	133
20–24	34.4	721	3.1	783	0.7	448
Marital status						
Ever married/in union	na	na	2.9	62	3.3	61
Never married/in union	64.0	1,796	2.6	1,796	0.2	520
Education						
None	(50.1)	31	(4.8)	34	*	17
Primary	69.9	598	2.4	631	1.2	172
Secondary	71.7	637	3.0	650	0.0	161
High	50.5	475	2.5	488	0.5	203
Tertiary	32.9	54	1.4	54	(0.0)	28
Wealth index quintiles						
Poorest	72.9	273	2.4	282	1.5	64
Second	67.5	402	2.8	416	0.0	115
Middle	58.7	374	2.4	395	0.0	147
Fourth	66.6	430	1.5	440	0.0	131
Richest	54.4	316	4.4	325	1.7	124
Total	64.0	1,796	2.6	1,858	0.5	581

[1] MICS indicator 9.10M
[2] MICS indicator 9.11M
[3] MICS indicator 9.12M

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases. Figures in parentheses are based on 25–49 unweighted cases.

Sex with multiple partners and condom use

In Swaziland, identified risk factors and drivers of the epidemic are: multiple concurrent partners, low and inconsistent condom use and inter-generational sex among others.[34]

Table HA.9 and HA.9M show the percentages of women age 15–49 years and men age 15–59 years who had sex with more than one partner in the last 12 months and those who had sex with more than one partner who also used a condom at last sex. The tables show that nationally, 67 percent of women age 15–49 years and 63 percent of men age 15–59 years had sex in the last 12 months. The tables further reveal that sex with multiple partners is more common among men than among women; 15 percent of men age 15–59 years had sex with more than one partner in the last 12 months, whereas only three percent of women age 15–49 years engaged in such an activity in the last 12 months. Of those that had sex with more than one partner, 69 percent of men and 73 percent of women reported using a condom during last sex.

When the results are disaggregated by region, Manzini had the highest percentage of men who engaged in sex with multiple partners across all regions (19 percent vs. 13–16 percent). Urban areas had a higher percentage of men engaging in sex with multiple partners compared with rural areas (21 percent vs. 13 percent). Other groups of men with higher propensity for engaging in sex with multiple partners include: men age 25–29 years, those who have ever been married or in union, those who have high school education and those from the richest households. Condom use among men age 15–59 years that engage in sex with multiple partners was highest among those from Shiselweni, those in the 15–24 age group, those who have never been married or in union, those with high school or tertiary education and those from the poorest and richest households.

For women, disaggregation by background characteristics is not possible because of small number of cases. The only exception is the urban vs. rural difference that indicates that urban and rural women are more or less equally likely to engage in sex with multiple partners (four percent vs. two percent). Condom use for those who engage in sex with multiple partners was somewhat higher among urban women compared with rural women (76 percent vs. 71 percent).

Figure HA.4 shows that men are significantly more likely than women to have multiple partners; across all age groups men have a high rate of multiple sexual partners compared with their female counterparts. In the 25-29 age group, 29 percent of men had more than one sexual partner in the last 12 months preceding the survey compared with four percent among females.

[34] NERCHA, NSF 2009-2014.

Table HA.9: Sex with multiple partners: women

Percentage of women age 15–49 years who ever had sex, percentage who had sex in the last 12 months, percentage who have had sex with more than one partner in the last 12 months and among those who had sex with multiple partners, the percentage who used a condom at last sex, Swaziland, 2010

	Percentage of women who:			Number of women age 15–49 years	Percent of women age 15–49 years who had more than one sexual partner in the last 12 months, who also reported that a condom was used the last time they had sex [2]	Number of women age 15–49 years who had more than one sexual partner in the last 12 months
	Ever had sex	Had sex in the last 12 months	Had sex with more than one partner in last 12 months [1]			
Region						
Hhohho	80.0	67.7	3.2	1,286	(73.0)	41
Manzini	82.2	70.0	2.8	1,515	(77.3)	43
Shiselweni	76.1	62.8	1.9	1,033	(61.0)	20
Lubombo	79.9	67.9	2.5	854	(76.4)	22
Area						
Urban	84.9	71.7	4.0	1,353	75.5	54
Rural	77.8	65.6	2.1	3,335	71.4	71
Age of woman						
15–24	54.6	48.8	2.7	2,002	68.6	53
25–29	97.0	87.3	4.1	847	70.1	35
30–39	99.1	86.1	2.5	1,051	(82.6)	27
40–49	99.9	68.2	1.3	789	*	10
Marital status						
Ever married/in union	100.0	88.3	2.0	2,326	(65.7)	47
Never married/in union	60.0	46.8	3.3	2,362	77.7	78
Education						
None	99.0	78.5	1.0	242	*	2
Primary	80.8	67.8	2.4	1,269	58.2)	31
Secondary	74.9	65.2	2.8	1,592	78.3)	45
High	77.2	63.5	2.3	1,202	81.1)	28
Tertiary	93.5	80.2	4.7	382	*	18
Wealth index quintiles						
Poorest	80.3	69.0	1.5	737	*	11
Second	77.1	64.7	1.7	802	*	14
Middle	79.4	65.5	3.2	930	(69.1)	30
Fourth	80.0	69.2	2.6	1041	(74.0)	27
Richest	81.7	68.1	3.7	1,179	(82.1)	44
Total	**79.8**	**67.4**	**2.7**	**4,688**	**73.1**	**125**

[1] MICS indicator 9.13
[2] MICS indicator 9.14

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases. Figures in parentheses are based on 25–49 unweighted cases.

Table HA.9M: Sex with multiple partners: men

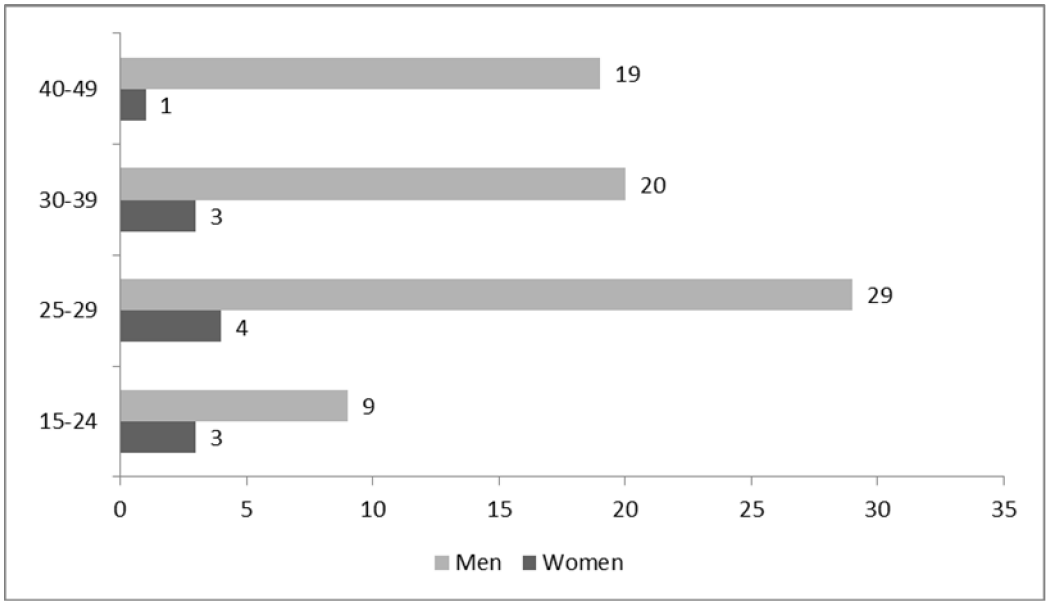
Percentage of men age 15–59 years who ever had sex, percentage who had sex in the last 12 months, percentage who have had sex with more than one partner in the last 12 months and among those who had sex with multiple partners, the percentage who used a condom at last sex, Swaziland, 2010

	Percentage of men who:			Number of men age 15–59 years	Percent of men age 15–59 years who had more than one sexual partner in the last 12 months, who also reported that a condom was used the last time they had sex [2]	Number of men age 15–59 years who had more than one sexual partner in the last 12 months
	Ever had sex	Had sex in the last 12 months	Had sex with more than one partner in last 12 months [1]			
Region						
Hhohho	71.9	64.0	12.7	1,143	69.4	145
Manzini	76.4	68.6	18.9	1,406	65.7	265
Shiselweni	61.1	51.1	12.7	847	76.9	108
Lubombo	70.3	63.7	15.9	782	69.6	125
Area						
Urban	83.8	77.6	20.9	1,347	68.9	282
Rural	64.8	55.9	12.8	2,832	69.3	361
Age of man						
15–24	38.2	31.3	8.6	1,858	84.5	160
25–29	92.3	82.5	28.5	629	75.1	179
30–39	98.4	90.2	19.9	838	60.6	166
40–49	99.5	91.9	18.9	513	59.2	97
50–59	99.5	87.8	11.9	342	(41.5)	41
Marital status						
Ever married/in union	99.9	94.5	17.9	1,684	52.4	301
Never married/in union	51.4	41.5	13.7	2,495	83.9	342
Education						
None	93.7	81.5	14.5	280	(62.5)	41
Primary	64.9	57.1	14.1	1,240	64.9	174
Secondary	60.5	53.0	13.0	1,195	66.8	155
High	75.9	67.8	19.3	1,067	73.6	206
Tertiary	91.9	84.4	16.7	397	76.3	66
Wealth index quintiles						
Poorest	63.6	52.7	10.1	570	76.3	58
Second	62.2	53.1	12.4	740	69.9	91
Middle	72.0	63.7	15.6	821	64.7	128
Fourth	68.0	61.7	15.6	940	63.5	146
Richest	82.2	75.0	19.8	1,107	73.4	219
Total	**70.9**	**62.9**	**15.4**	**4,179**	**69.2**	**643**

[1] MICS indicator 9.13M
[2] MICS indicator 9.14M

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

Figure HA.4: percentage of women and men who had sex with more than one partner in the last 12 months by sex, Swaziland, 2010



Sex with multiple partners among young women and men

Tables HA.10 and HA.10M present the results for the same set of questions for young women and men, i.e., age 15–24 years. Compared with the entire cohort of women and men, this age group has a smaller proportion that has ever had sex or has had sex in the last 12 months.

More women than men reported to have ever had sex or have had sex in the last 12 months preceding the survey. This finding is seen across all regions, urban vs. rural residence, age groups, marital status, education groups and wealth quintiles. More men than women tend to engage in sex with multiple partners (nine percent vs. three percent), and of those more men than women use condoms (85 percent vs. 69 percent).

Table HA.10: Sex with multiple partners: women

Percentage of women age 15–24 years who ever had sex, percentage who had sex in the last 12 months, percentage who have had sex with more than one partner in the last 12 months and among those who had sex with multiple partners, the percentage who used a condom at last sex, Swaziland, 2010

	Percentage of women who:			Number of women age 15–24 years	Percent of women age 15–24 years who had more than one sexual partner in the last 12 months, who also reported that a condom was used the last time they had sex [2]	Number of women age 15–24 years who had more than one sexual partner in the last 12 months
	Ever had sex	Had sex in the last 12 months	Had sex with more than one partner in last 12 months [1]			
Region						
Hhohho	51.6	46.3	2.9	512	*	15
Manzini	59.0	54.5	3.1	603	*	18
Shiselweni	52.1	45.8	2.1	512	*	11
Lubombo	55.1	47.4	2.4	375	*	9
Area						
Urban	61.2	56.0	4.8	484	(79.1)	23
Rural	52.5	46.6	2.0	1,518	(60.4)	30
Age of woman						
15–19	27.7	24.1	1.1	1,098	*	12
20–24	87.3	78.9	4.5	904	(72.7)	41
Marital status						
Ever married/in union	100.0	99.0	3.9	350	*	14
Never married/in union	45.0	38.2	2.4	1,652	(73.6)	39
Education						
None	(96.8)	(91.8)	(1.8)	32	*	1
Primary	56.1	50.6	2.3	546	*	12
Secondary	51.0	46.6	3.0	809	(77.1)	24
High	53.5	45.4	2.0	561	*	11
Tertiary	80.1	75.5	8.9	53	*	5
Wealth index quintiles						
Poorest	57.6	52.7	1.3	340	*	5
Second	52.5	45.9	2.4	375	*	9
Middle	55.0	51.0	2.9	422	*	12
Fourth	56.2	49.5	1.7	454	*	8
Richest	51.9	45.4	4.9	410	*	20
Total	54.6	48.8	2.7	2,002	68.6	53

[1] MICS indicator 9.15
[2] MICS indicator 9.16; MDG indicator 6.2

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases. Figures in parentheses are based on 25–49 unweighted cases.

Table HA.10M: Sex with multiple partners: men

Percentage of men age 15–24 years who ever had sex, percentage who had sex in the last 12 months, percentage who have had sex with more than one partner in the last 12 months and among those who had sex with multiple partners, the percentage who used a condom at last sex, Swaziland, 2010

	Percentage of men who:			Number of men age 15–24 years	Percent of men age 15–24 years who had more than one sexual partner in the last 12 months, who also reported that a condom was used the last time they had sex [2]	Number of men age 15–24 years who had more than 1 sexual partner in the last 12 months
	Ever had sex	Had sex in the last 12 months	Had sex with more than 1 partner in last 12 months [1]			
Region						
Hhohho	37.9	31.4	6.9	474	(76.4)	33
Manzini	43.9	36.5	12.0	554	84.9	66
Shiselweni	34.1	27.4	7.9	483	(85.9)	38
Lubombo	35.0	28.2	6.5	347	(92.8)	23
Area						
Urban	53.0	45.9	14.1	410	80.4	58
Rural	34.0	27.1	7.0	1,447	86.9	102
Age of woman						
15–19	16.2	12.4	2.7	1,075	(92.4)	29
20–24	68.3	57.3	16.7	783	82.7	130
Marital status						
Ever married/in union	100.0	98.4	22.6	62	*	14
Never married/in union	36.0	29.0	8.1	1,796	86.9	146
Education						
None	54.1	51.5	7.7	34	*	3
Primary	33.7	27.3	8.0	631	78.6	50
Secondary	29.7	24.8	5.1	650	(84.3)	33
High	50.8	41.5	14.1	488	88.8	69
Tertiary	67.1	51.3	8.5	54	*	5
Wealth index quintiles						
Poorest	29.6	22.8	5.8	282	*	16
Second	34.7	27.6	8.0	416	(92.9)	33
Middle	44.3	37.2	8.1	395	(75.0)	32
Fourth	34.8	29.7	7.7	440	(89.7)	34
Richest	47.1	38.3	13.7	325	(81.9)	44
Total	38.2	31.3	8.6	1,858	84.5	160

[1] MICS indicator 9.15M
[2] MICS indicator 9.16; MDG indicator 6.2M

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases. Figures in parentheses are based on 25–49 unweighted cases.

Sex with non-marital, non-cohabiting partner and condom use

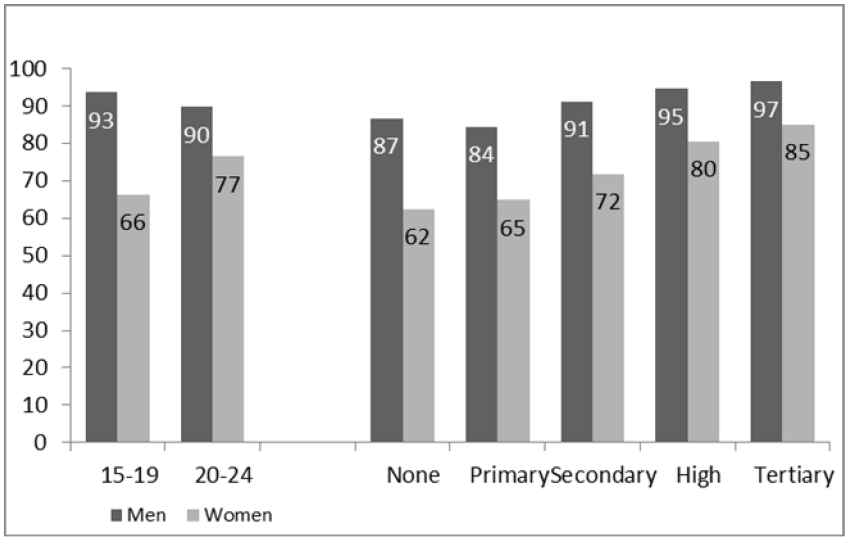
The use of condoms during sex, especially with non-regular partners, is critical for reducing the spread of HIV. The male condom is 98 percent effective if used correctly and consistently and the female condom 85 percent.[35] The country's target is to increase the use of condoms among the 15-49 age group at the last higher-risk sexual intercourse to 60 percent in 2011 and 65 percent in 2014.[36]

The 2010 Swaziland MICS assessed condom use in women and men age 15–24 years who had sex with a non-marital, non-cohabiting partner in the last 12 months. Tables HA.11 and HA.11M show that 67 percent of women and 93 percent of men had sex with a non-marital, non-cohabiting partner in the last 12 months. Out of those, 73 percent of women and 91 percent of men reported that a condom was used the last time they had sex with such a partner.

For women, condom use during last sexual encounter with a non-marital, non-cohabiting partner was highest in Hhohho (78 percent) and lowest in Shiselweni (67 percent). Condom use is also higher in urban than rural areas (81 percent vs. 71 percent) and among women age 20–24 years compared with those age 15–19 years (77 percent vs. 66 percent). For men, condom use during last sexual encounter with a non-marital, non-cohabiting partner is high across all regions, both urban and rural areas and all age groups.

Figure HA.5 shows associations between age, education and condom use during last sexual encounter with a non-marital, non-cohabiting partner. Women age 15–19 years were less likely to report condom use compared with those age 24–24 years during sex with a non-marital, non-cohabiting partner, while men younger men are slightly more likely to report condom use. For both women and men, condom use with such a partner increases with the level of education.

Figure HA.5: Percentage of men and women age 15–24 years who had sex with a non-marital, non-cohabiting partner in the last 12 months, who also reported that a condom was used the last time they had sex with such a partner, Swaziland, 2010



[35] MoH, 2008, Swaziland National Family Planning Guidelines.
[36] NERCHA, NSF 2009-2014.

Table HA.11: Sex with non-regular partners: women

Percentage of women age 15–24 years who ever had sex, percentage who had sex in the last 12 months, percentage who have had sex with a non-marital, non-cohabiting partner in the last 12 months and among those who had sex with a non-marital, non-cohabiting partner, the percentage who used a condom the last time they had sex with such a partner, Swaziland, 2010

	Percentage of women 15–24 who:		Number of women age 15–24 years	Percentage who had sex with a non-marital, non-cohabiting partner in the last 12 months [1]	Number of women age 15–24 years who had sex in the last 12 months	Percentage of women age 15–24 years who had sex with a non-marital, non-cohabiting partner in the last 12 months, who also reported that a condom was used the last time they had sex with such a partner [2]	Number of women age 15–49 years who had more than one sexual partner in the last 12 months
	Ever had sex	Had sex in the last 12 months					
Region							
Hhohho	51.6	46.3	512	60.8	237	78.0	144
Manzini	59.0	54.5	603	63.2	329	75.9	208
Shiselweni	52.1	45.8	512	77.1	234	66.6	181
Lubombo	55.1	47.4	375	69.1	178	71.9	123
Area							
Urban	61.2	56.0	484	61.2	271	80.5	166
Rural	52.5	46.6	1,518	69.2	707	70.5	490
Age of woman							
15–19	27.7	24.1	1,098	82.9	265	66.3	220
20–24	87.3	78.9	904	61.1	713	76.5	436
Marital status							
Ever married/in union	100.0	99.0	350	8.5	346	77.7	30
Never married/in union	45.0	38.2	1,652	99.1	632	72.8	626
Education							
None	(96.8)	(91.8)	32	(28.5)	29	*	8
Primary	56.1	50.6	546	59.5	277	64.8	165
Secondary	51.0	46.6	809	67.7	377	71.7	255
High	53.5	45.4	561	78.8	255	80.4	201
Tertiary	80.1	75.5	53	(65.5)	40	(85.0)	26
Wealth index quintiles							
Poorest	57.6	52.7	340	69.5	179	64.4	125
Second	52.5	45.9	375	68.2	172	67.6	118
Middle	55.0	51.0	422	61.1	215	78.4	131
Fourth	56.2	49.5	454	70.2	225	73.4	158
Richest	51.9	45.4	410	66.4	186	80.8	124
Total	54.6	48.8	2,002	67.0	978	73.1	655

[1] MICS indicator 9.15
[2] MICS indicator 9.16; MDG indicator 6.2

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases. Figures in parentheses are based on 25–49 unweighted cases.

Table HA.11M: Sex with non-regular partners: men

Percentage of men age 15–24 years who ever had sex, percentage who had sex in the last 12 months, percentage who have had sex with a non-marital, non-cohabiting partner in the last 12 months and among those who had sex with a non-marital, non-cohabiting partner, the percentage who used a condom the last time they had sex with such a partner, Swaziland, 2010

	Percentage of men 15–24 who:		Number of men age 15–24 years	Percentage who had sex with a non-marital, non-cohabiting partner in the last 12 months [1]	Number of men age 15–24 years who had sex in the last 12 months	Percentage of men age 15–24 years who had sex with a non-marital, non-cohabiting partner in the last 12 months, who also reported that a condom was used the last time they had sex with such a partner [2]	Number of men age 15–49 years who had more than 1 sexual partner in the last 12 months
	Ever had sex	Had sex in the last 12 months					
Region							
Hhohho	37.9	31.4	474	90.3	149	92.9	134
Manzini	43.9	36.5	554	93.0	202	89.9	188
Shiselweni	34.1	27.4	483	97.8	132	89.9	129
Lubombo	35.0	28.2	347	91.0	98	89.5	89
Area							
Urban	53.0	45.9	410	90.2	188	87.4	170
Rural	34.0	27.1	1,447	94.4	393	92.1	371
Age of man							
15–19	16.2	12.4	1,075	99.3	133	93.6	132
20–24	68.3	57.3	783	91.2	448	89.6	409
Marital status							
Ever married/in union	100.0	98.4	62	35.4	61	70.8	22
Never married/in union	36.0	29.0	1,796	99.8	520	91.4	519
Education							
None	(54.1)	(51.5)	34	*	17	*	16
Primary	33.7	27.3	631	88.4	172	84.4	152
Secondary	29.7	24.8	650	93.6	161	91.2	151
High	50.8	41.5	488	95.9	203	94.5	194
Tertiary	67.1	51.3	54	(100.0)	28	(96.5)	28
Wealth index quintiles							
Poorest	29.6	22.8	282	89.3	64	86.2	57
Second	34.7	27.6	416	92.3	115	90.1	106
Middle	44.3	37.2	395	92.6	147	91.4	136
Fourth	34.8	29.7	440	95.1	131	92.1	124
Richest	47.1	38.3	325	94.1	124	90.6	117
Total	**38.2**	**31.3**	**1,858**	**93.1**	**581**	**90.6**	**541**

[1] MICS indicator 9.15M
[2] MICS indicator 9.16; MDG indicator 6.2M

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases. Figures in parentheses are based on 25–49 unweighted cases.

13. Sexually Transmitted Infections

STIs are a global public health problem. Worldwide more than 340 million new cases occur each year, 80 percent of which happen in developing countries.[37] STIs cause a high burden of morbidity in populations. In Swaziland, the prevalence of STIs continues to be a national epidemic; data from the Health Management and Information System (HMIS) indicate that they are amongst the top five conditions reported in the country's out-patient departments and clinics.[38]

Effective management of STI is the cornerstone of STI control, as it prevents the development of complications and breaks the chain of transmission in the population. Moreover, STI management offers a unique opportunity for targeted education about HIV prevention, treatment, care and support, as well as appropriate treatment of STIs at first contact with the patient.

Knowledge of STIs and symptoms of STIs

In the 2010 Swaziland MICS, women age 15–49 years and men age 15–59 years were asked if they have heard of STIs and those who have heard of STIs were further asked about symptoms of STIs. Table ST.1 and Table ST.1M show that the percentage of respondents who have heard of STIs is quite high for both women and men (87 percent and 86 percent, respectively). Among women who have heard of STIs, the most frequently mentioned STI symptoms are genital ulcers (45 percent), foul smelling discharge (38 percent), genital itching (25 percent), and genital discharge or dripping and burning pain on urination (23 percent). For men, the most mentioned STI symptoms are genital ulcers (42 percent), genital discharge/dripping and burning pain on urination (29 percent), foul smelling discharge (21 percent) and genital itching (20 percent).

For both women men, the percentage of respondents who have heard of STIs is high in Manzini, at 92 percent for women and 90 percent for men, and lowest in Lubombo at 78 percent for women and 76 percent for men. Similarly the knowledge level varies by urban/rural residency, with respondents from urban areas exhibiting higher knowledge than their rural counterparts (93 percent vs. 84 percent for women and 93 percent vs. 82 percent for men).

There are variations with regard to education level and wealth status of women and men. The higher the educational level the higher the knowledge of STIs; 98 percent of women and men with tertiary education have heard of STIs, compared with 74 percent of women and 77 percent of men with no education. The same is true for the wealth status of the household; 93 percent of women and 94 percent of men in the richest wealth quintile have heard of STIs compared with 77 percent of women and 75 percent of men in the poorest wealth quintile.

[37] World Bank, Health at a Glance: STI Information.
[38] MoH, Health Sector Response to HIV/AIDS Plan 2009–2014.

Table ST.1: Knowledge of Sexually Transmitted Infections: women

Percentage of women age 15–49 years who have heard of STIs and their knowledge of signs/symptoms for women, Swaziland, 2010

	Percentage who have heard of STIs	Number of women age 15–49 years	Percentage of women who have heard of STIs who mentioned these signs/symptoms of STIs in women:														Number of women who have heard of STIs
			Abdominal pains	Genital discharge/ dripping	Foul smelling discharge	Burning pain on urination	Redness/ inflammation in genital area	Swelling in genital area	Genital sores/ ulcers	Genital warts	Genital itching	Blood in urine	Loss of weight	Hard to get pregnant/ have a child	Other symptoms	No symptoms/ Don't know any symptoms	
Region																	
Hhohho	87.2	1,286	10.3	22.3	42.2	24.0	3.1	4.5	45.8	8.6	22.1	4.6	5.1	0.6	4.8	10.2	1,122
Manzini	91.5	1,515	9.8	27.0	46.0	27.8	2.8	4.9	47.9	18.7	31.4	3.9	3.1	1.1	3.1	6.3	1,387
Shiselweni	78.0	1,033	4.5	17.8	27.0	17.0	1.8	4.1	41.0	12.9	20.9	2.5	4.5	0.7	9.0	5.4	806
Lubombo	89.1	854	5.2	25.0	30.5	21.0	1.9	5.9	41.6	12.3	20.4	3.4	2.3	0.7	6.9	10.9	761
Area																	
Urban	93.2	1,353	10.6	30.1	50.4	30.8	3.3	6.1	45.0	14.6	31.6	3.5	4.4	1.1	4.8	5.6	1,261
Rural	84.4	3,335	6.8	20.6	32.9	20.0	2.2	4.3	44.5	13.0	21.6	3.8	3.6	0.7	5.8	9.0	2,814
Age																	
15–24	82.0	2,002	6.5	18.4	32.9	20.7	1.5	3.3	41.1	11.7	19.5	4.1	4.4	0.7	5.6	8.9	1,642
25–29	90.8	847	7.8	24.1	43.0	25.5	3.6	4.4	47.1	15.2	26.7	3.8	3.3	.6	4.8	8.9	768
30–39	92.6	1,051	8.4	28.7	43.3	25.2	3.9	6.4	46.1	15.1	29.4	3.7	2.6	1.0	6.0	7.5	973
40–49	87.7	789	11.1	27.5	38.2	24.1	2.2	6.9	48.9	13.8	28.4	2.7	4.3	0.9	5.5	5.3	692
Marital status																	
Ever married/in union	90.1	2,326	9.4	26.7	39.8	24.3	2.8	6.1	47.6	14.4	27.3	3.4	2.8	0.8	5.2	8.0	2,095
Never married/in nion	83.8	2,362	6.5	20.0	36.2	22.1	2.2	3.5	41.8	12.6	21.8	4.0	4.8	0.8	5.8	8.0	1,981
Education																	
None	73.6	242	5.8	19.9	22.2	14.0	1.1	7.3	39.2	6.9	16.9	3.3	1.5	0.7	5.8	8.3	178
Primary	77.0	1,269	7.1	17.4	25.5	16.3	2.6	4.6	37.0	11.3	18.8	2.7	3.8	0.3	4.1	10.6	977
Secondary	88.2	1,592	6.8	23.5	35.6	23.4	2.3	4.3	46.0	13.8	23.4	3.5	4.5	0.8	5.9	7.6	1,405
High	95.0	1,202	9.3	26.7	48.9	28.8	2.6	4.6	48.8	14.6	30.6	4.2	3.3	1.0	6.2	7.7	1,142
Tertiary	97.5	382	12.5	33.2	64.9	32.9	3.8	6.7	54.8	19.7	33.7	6.4	3.9	2.0	6.2	2.1	373
Wealth index quintiles																	
Poorest	77.0	737	6.0	17.2	21.7	14.1	2.7	5.2	39.4	12.1	16.5	3.1	3.1	0.6	6.3	10.9	567
Second	82.0	802	6.2	19.1	29.0	18.4	2.2	4.6	42.3	12.1	20.7	3.1	4.6	0.4	3.7	9.9	657
Middle	86.5	930	7.1	20.3	36.6	22.5	1.7	4.4	46.2	13.8	23.0	3.4	4.1	0.9	5.1	7.9	804
Fourth	91.0	1,041	8.2	24.8	42.0	24.1	2.0	4.2	45.8	11.9	26.7	2.8	4.1	0.7	6.4	7.5	947
Richest	93.3	1,179	10.8	31.0	51.7	31.7	3.6	5.6	47.3	16.3	31.4	5.5	3.3	1.3	5.9	5.4	1,099
Total	86.9	4,688	7.9	23.3	38.0	23.1	2.5	4.8	44.6	13.5	24.5	3.7	3.8	0.8	5.5	8.0	4,075

Table ST.1M: Knowledge of Sexually Transmitted Infections: men

Percentage of men age 15–59 years who have heard of STIs and their knowledge of signs/symptoms for men, Swaziland, 2010

	Percent-age who have heard of STIs	Number of men age 15–59 years	Percentage of men who have heard of STIs who mentioned these signs/symptoms of STIs in men:														Number of men who have heard of STIs
			Abdo-minal pains	Genital discharge/ dripping	Foul smelling discharge	Burning pain on urination	Redness/ inflame-mation in genital area	Swelling in genital area	Genital sores/ ulcers	Genital warts	Genital itching	Blood in urine	Loss of weight	Impo-tence	Other symp-toms	No symptoms/ Don't know any symptoms	
Region																	
Hhohho	86.6	1,143	10.6	26.8	26.8	29.8	2.5	11.3	42.6	12.5	18.9	4.6	8.1	.9	10.5	10.4	990
Manzini	89.7	1,406	9.8	34.3	22.4	31.6	4.7	11.4	49.3	21.4	24.9	4.1	6.1	3.1	5.4	5.1	1,262
Shiselweni	76.2	847	6.0	23.9	11.7	23.7	3.9	7.5	31.8	14.0	18.1	3.7	6.9	1.6	10.8	7.2	645
Lubombo	88.9	782	8.4	29.7	19.2	28.9	3.6	7.0	37.2	12.4	16.1	4.7	6.6	1.2	10.2	9.9	695
Area																	
Urban	93.4	1,347	12.0	39.6	30.7	34.6	4.9	10.1	47.6	19.4	26.5	3.9	5.6	1.6	6.7	4.4	1,259
Rural	82.4	2,832	7.6	24.4	16.1	26.3	3.2	9.6	38.8	14.0	17.2	4.5	7.5	2.0	9.8	9.5	2,333
Age																	
15–24	77.9	1858	6.5	19.7	14.9	25.4	2.7	7.5	34.5	11.0	16.0	4.9	6.8	1.3	8.4	9.6	1,448
25–29	92.9	629	11.8	33.3	25.5	33.6	5.6	10.8	43.4	18.2	22.2	4.3	7.6	1.5	11.4	6.2	584
30–39	94.2	838	9.9	36.2	27.4	35.8	3.4	10.2	47.2	20.9	26.6	3.6	6.9	3.1	8.8	6.8	789
40–49	92.6	513	12.7	42.7	23.5	26.6	4.0	13.4	49.1	19.4	24.5	3.0	7.2	2.1	8.7	7.7	475
50–59	86.5	342	9.3	36.9	24.1	26.7	6.2	13.6	52.5	18.9	17.2	4.5	5.8	2.0	6.2	4.4	295
Marital status																	
Ever married/in union	92.6	1,684	11.6	38.9	25.6	31.2	4.1	12.1	49.2	19.6	23.8	3.8	6.3	2.4	8.1	6.2	1,559
Never married/in union	81.5	2,495	7.3	22.7	17.6	27.5	3.5	8.1	36.6	13.2	17.8	4.6	7.3	1.5	9.2	9.0	2,033
Education																	
None	77.0	280	7.5	24.5	16.8	19.7	3.2	9.5	31.9	10.7	18.8	2.6	5.9	2.9	8.8	9.4	216
Primary	70.6	1,240	7.3	22.4	14.5	18.3	3.2	7.8	31.1	11.7	15.1	2.6	7.5	1.6	7.2	8.5	875
Secondary	90.9	1,195	7.6	29.6	19.8	31.1	3.5	9.6	43.5	14.6	19.6	5.4	7.8	1.6	9.6	8.6	1,086
High	96.3	1067	10.5	35.0	26.4	37.4	4.2	9.7	47.2	20.1	24.6	4.9	5.6	1.4	9.1	7.4	1,028
Tertiary	97.6	397	15.3	37.8	31.6	40.0	5.2	16.6	60.7	23.8	27.2	5.8	6.5	3.3	10.4	3.9	388
Wealth index quintiles																	
Poorest	74.7	570	7.3	24.2	14.2	20.3	3.5	8.7	33.0	10.8	14.8	4.3	8.3	2.0	9.3	7.3	426
Second	81.6	740	6.6	23.3	13.1	22.9	3.3	11.8	33.8	11.9	16.5	3.7	9.6	2.7	9.1	10.3	604
Middle	85.6	821	7.5	26.4	20.2	30.0	3.2	11.2	43.4	14.9	21.8	5.6	5.6	1.7	8.6	8.4	703
Fourth	87.6	940	9.4	28.0	21.7	31.6	4.2	6.4	41.0	14.8	19.7	4.3	6.0	1.0	9.3	8.5	824
Richest	93.5	1,107	12.2	39.1	29.1	34.5	4.1	10.6	50.7	22.3	24.8	3.7	6.1	1.9	8.0	5.6	1,035
Total	85.9	4,179	9.0	29.3	20.8	29.0	3.7	9.8	41.6	15.8	20.2	4.3	6.9	1.8	8.8	7.9	3,592

Knowledge of STIs for partners

In the 2010 Swaziland MICS, all women age 15–49 years and men age 15–59 years who have heard of STIs were asked about knowledge of STI for partners, i.e., women were asked about symptoms of STIs for men and men were asked about symptoms of STIs for women.

Tables ST 2 and ST.2M show that of female respondents with knowledge of the signs of STIs, they predominantly identify genital sores (38 percent), burning pain on urination (24 percent), genital discharge/dripping (21 percent), foul smelling discharge (20 percent), and genital itching (16 percent) as the top five commonly mentioned symptoms.

For men, the most frequently mentioned STI symptoms are genital sores/ulcers (31 percent), foul smelling discharge (24 percent), burning pain on urination (18 percent), genital discharge/dripping (18 percent) and genital itching (15 percent).

Self-reporting

Respondents who ever had sex were asked if they had symptoms of an STI (*abnormal bad smelling, abnormal discharge from the vagina or penis or a genital sore or ulcer*) in the past 12 months preceding the study.

Table ST.3 and ST.3M show the self-reported prevalence of STIs and STI symptoms among men age 15–59 years and women wage 15–49 years who have had sexual intercourse in the last 12 months. Overall, six percent of women and men reported having a STI in the past 12 month. The proportion reporting an STI or STI symptoms is 11 percent for women and 10 percent for men. Women from Hhohho were least likely to report having an STI or Symptoms of STI compared with those from other regions. The same pattern applies for men. For both women and men, the self-reported prevalence of STIs or STI symptoms is negatively associated with age. The self-reported prevalence of STIs or STI symptoms tends to be lower among women and men with higher levels of education. The self-reported STI or STI symptoms tends to be lower among women and men with higher household wealth.

Table ST.2: Knowledge of Sexually Transmitted Infections: women

Percentage of women age 15–49 years who have heard of STIs and their knowledge of signs/symptoms for men, Swaziland, 2010

	Percent-age who have heard of STIs	Number of women age 15–49 years	Percentage of women who have heard of STIs who mentioned these signs/symptoms of STIs in men:														Number of women who have heard of STIs
			Abdominal pains	Genital discharge/ dripping	Foul smelling discharge	Burning pain on urination	Redness/ inflamm-ation in genital area	Swelling in genital area	Genital sores /ulcers	Genital warts	Genital itching	Blood in urine	Loss of weight	Impot-ence	Other symp-toms	No symptoms/ Don't know any symptoms	
Region																	
Hhohho	87.2	1,286	5.2	23.0	26.6	21.4	3.0	9.4	42.6	7.4	17.5	2.9	5.2	0.8	3.1	17.9	1,122
Manzini	91.5	1,515	6.7	27.7	23.5	30.9	2.8	8.4	46.1	12.1	21.7	3.1	2.6	1.7	2.0	14.6	1,387
Shiselweni	78.0	1,033	3.3	12.4	10.2	20.0	2.2	4.7	25.9	9.6	12.0	2.4	3.6	0.7	4.7	23.3	806
Lubombo	89.1	854	5.1	17.5	16.0	19.4	1.8	5.2	31.8	8.9	10.9	2.4	2.0	0.3	5.0	28.4	761
Area																	
Urban	93.2	1,353	9.3	28.7	31.6	32.4	3.1	7.8	44.7	11.8	24.4	3.2	4.0	1.0	3.1	14.1	1,261
Rural	84.4	3,335	3.6	18.2	15.4	20.3	2.4	7.0	35.4	8.8	13.2	2.6	3.2	1.0	3.6	22.3	2,814
Age																	
15–24	82.0	2,002	3.9	16.4	16.5	21.1	1.6	5.5	33.0	8.4	13.9	2.9	4.2	0.7	3.2	21.6	1,642
25–29	90.8	847	5.6	22.8	22.2	28.4	3.9	6.9	37.0	11.7	16.9	3.1	2.3	0.7	2.4	21.1	768
30–39	92.6	1,051	7.2	25.0	24.3	25.8	3.4	8.8	43.5	10.2	18.4	2.3	2.9	1.5	4.8	19.2	973
40–49	87.7	789	5.8	26.5	21.0	23.2	2.5	10.0	45.0	10.1	19.6	2.6	3.5	1.4	3.3	15.3	692
Marital status																	
Ever married/ in union	90.1	2,326	6.2	24.6	21.1	24.2	2.7	8.6	42.6	10.2	17.8	2.6	2.8	1.4	3.3	19.6	2,095
Never married/ in union	83.8	2,362	4.4	17.9	19.0	23.4	2.4	5.9	33.6	9.2	15.1	2.9	4.1	0.6	3.6	20.3	1,981
Education																	
None	73.6	242	2.4	13.7	10.7	13.6	0.8	8.9	28.8	4.6	11.8	2.4	2.0	1.8	4.6	24.3	178
Primary	77.0	1,269	4.5	15.6	12.9	13.7	1.8	5.8	28.5	6.8	11.2	2.0	3.1	.6	2.6	25.4	977
Secondary	88.2	1,592	4.2	21.0	19.4	22.6	2.4	7.0	38.4	10.5	15.5	2.8	3.7	0.8	3.8	20.0	1,405
High	95.0	1,202	7.1	25.8	24.8	32.8	3.5	7.9	44.3	10.8	21.7	2.7	3.6	1.0	3.6	16.9	1,142
Tertiary	97.5	382	8.2	30.8	37.6	40.6	4.1	9.8	55.1	16.0	24.3	5.5	3.8	2.7	3.4	8.3	373
Wealth index quintiles																	
Poorest	77.0	737	2.1	14.2	8.8	13.9	1.9	6.0	28.6	7.5	11.5	2.8	2.5	0.7	3.9	26.7	567
Second	82.0	802	3.8	15.3	14.7	18.3	2.3	7.1	31.3	9.3	11.6	2.3	3.9	0.4	2.1	23.3	657
Middle	86.5	930	4.5	19.4	18.8	20.5	1.2	8.8	38.8	8.1	14.4	2.5	3.7	0.7	3.2	21.2	804
Fourth	91.0	1,041	5.8	23.0	20.5	25.5	2.7	6.1	38.6	10.0	17.6	2.3	3.7	1.3	4.4	19.0	947
Richest	93.3	1,179	8.4	29.4	31.4	34.8	4.1	7.9	47.7	12.2	23.4	3.6	3.2	1.5	3.4	13.2	1,099
Total	**86.9**	**4,688**	**5.3**	**21.2**	**20.0**	**23.8**	**2.6**	**7.2**	**38.1**	**9.7**	**16.4**	**2.8**	**3.4**	**1.0**	**3.4**	**19.9**	**4,075**

Table ST.2M: Knowledge of Sexually Transmitted Infections: men

Percentage of men age 15–59 years who have heard of STIs and their knowledge of signs/symptoms for women, Swaziland, 2010

	Percentage who have heard of STIs	Number of men age 15-59 years	Percentage of men who have heard of STIs who mentioned these signs/symptoms of STIs in women:														Number of men who have heard of STIs
			Abdominal pains	Genital discharge/ dripping	Foul smelling discharge	Burning pain on urination	Redness/ inflamma-tion in genital area	Swelling in genital area	Genital sores/ ulcers	Genital warts	Genital itching	Blood in urine	Loss of weight	Hard to get pregnant/ have a child	Other symptoms	No symp-toms/ Don't know any symptoms	
Region																	
Hhohho	86.6	1,143	12.7	16.7	30.6	23.0	1.6	4.3	34.4	9.3	15.1	4.0	5.7	0.9	5.2	23.3	990
Manzini	89.7	1,406	7.9	23.2	29.2	20.4	2.6	5.0	37.9	14.8	21.7	3.8	5.1	1.7	3.1	21.0	1,262
Shiselweni	76.2	847	3.4	10.3	16.8	12.5	1.4	3.2	21.8	8.8	12.1	2.1	4.5	1.1	5.7	26.3	645
Lubombo	88.9	782	5.1	19.1	14.3	14.0	1.5	3.2	22.6	8.0	8.7	2.8	3.7	0.4	6.3	37.0	695
Area																	
Urban	93.4	1,347	9.7	28.4	35.4	25.2	3.3	4.8	37.3	12.4	23.0	3.7	4.8	0.9	3.7	20.5	1,259
Rural	82.4	2,832	6.9	13.2	19.0	15.1	1.2	3.8	27.8	10.1	12.0	3.1	4.9	1.2	5.3	28.2	2,333
Age																	
15–24	77.9	1,858	6.1	12.4	18.2	16.1	1.4	3.0	26.6	7.8	12.5	3.1	5.0	1.0	4.5	24.5	1,448
25–29	92.9	629	9.4	19.9	30.4	18.5	2.4	5.5	32.6	10.3	18.2	3.0	5.9	1.7	5.1	29.1	584
30–39	94.2	838	8.7	23.1	31.5	21.6	2.3	3.8	33.7	15.0	19.5	3.0	4.9	1.1	5.2	25.9	789
40–49	92.6	513	8.9	25.5	26.8	19.3	1.6	5.7	34.2	13.9	19.5	4.4	4.1	1.3	5.3	26.8	475
50–59	86.5	342	9.8	21.6	24.9	20.2	3.0	5.9	38.5	13.5	11.0	4.2	3.4	0.6	4.1	23.8	295
Marital status																	
Ever married/ in union	92.6	1,684	9.5	23.7	29.2	20.3	2.0	5.1	35.1	13.6	17.7	3.6	4.4	1.1	4.9	26.3	1,559
Never married/in union	81.5	2,495	6.6	14.3	21.0	17.0	1.8	3.4	27.9	9.0	14.1	3.1	5.2	1.2	4.7	25.3	2,033
Education																	
None	77.0	280	3.3	9.6	12.2	13.0	1.8	3.6	21.5	7.6	10.8	3.9	3.9	0.9	5.5	32.4	216
Primary	70.6	1,240	5.8	13.2	15.8	10.4	1.4	2.8	22.4	7.8	11.7	2.2	5.0	1.1	3.4	25.1	875
Secondary	90.9	1,195	7.5	17.1	23.5	20.3	1.3	3.8	33.4	10.3	14.4	4.1	5.5	1.3	5.7	27.4	1,086
High	96.3	1,067	9.7	24.3	30.2	23.8	2.4	4.9	35.1	13.2	19.3	3.3	4.5	1.0	4.6	25.1	1,028
Tertiary	97.6	397	13.1	25.6	45.9	26.1	4.1	7.6	44.3	17.7	23.7	4.2	4.1	1.2	6.4	19.1	388
Wealth index quintiles																	
Poorest	74.7	570	7.1	10.7	13.9	11.1	1.7	3.3	21.5	8.7	7.0	3.5	5.4	1.1	5.2	28.1	426
Second	81.6	740	5.5	12.1	16.9	12.8	1.0	4.6	27.3	7.6	11.5	2.7	6.1	1.3	4.3	27.2	604
Middle	85.6	821	7.2	15.9	23.0	18.4	1.5	3.9	31.9	10.7	17.8	3.9	4.6	1.9	3.9	25.4	703
Fourth	87.6	940	6.6	18.2	21.3	20.0	2.1	3.1	29.7	9.7	15.5	3.0	4.3	1.0	4.7	29.7	824
Richest	93.5	1,107	11.2	27.3	38.0	24.3	2.8	5.3	38.1	15.2	20.9	3.4	4.6	0.7	5.6	20.3	1,035
Total	**85.9**	**4,179**	**7.8**	**18.1**	**24.3**	**18.3**	**1.9**	**4.1**	**30.8**	**10.8**	**15.5**	**3.3**	**4.9**	**1.1**	**4.8**	**25.7**	**3,592**

Table ST.3: Self-reported prevalence of STIs and STI symptoms: women

The percentage of women age 15–49 who reported having a STI among those who ever had sexual intercourse and have heard of STIs, percentage of women reporting symptoms of a STI, and percentage of women who reported either a STI or STI symptoms among those who ever had sexual intercourse in the last 12 months, by background characteristics, Swaziland, 2010

	Percentage reporting a STI in the past 12 months	Number of women age 15–49 years who ever had sexual intercourse and have not heard of STIs	Percentage reporting these symptoms of a STI in the past 12 months:		Percentage reporting STI or symptoms of STI in the past 12 months	Number of women age 15–49 who have ever had sexual intercourse
			Bad smelling or abnormal genital discharge	Genital sore or ulcer		
Region						
Hhohho	4.2	914	5.0	4.2	8.6	1,029
Manzini	6.1	1,173	6.9	5.8	11.6	1,246
Shiselweni	8.0	631	8.9	5.7	12.7	786
Lubombo	6.2	618	8.7	8.3	13.6	682
Area						
Urban	5.2	1,089	6.5	4.9	10.1	1,148
Rural	6.3	2,247	7.4	6.2	11.9	2,595
Age						
15–24	6.6	935	8.2	5.8	12.8	1,093
25–29	7.7	745	9.4	5.8	12.9	821
30–39	5.2	965	5.6	5.8	10.7	1,041
40–49	4.2	691	5.3	5.7	8.7	788
Marital status						
Ever married/in union	7.1	2,094	7.6	6.6	12.7	2,325
Never married/in union	4.1	1,243	6.4	4.4	9.2	1,418
Education						
None	5.0	178	8.8	9.4	14.0	240
Primary	6.8	842	8.2	8.3	13.6	1,026
Secondary	6.7	1,074	7.9	5.5	12.4	1,192
High	5.1	892	5.7	3.6	8.5	927
Tertiary	4.3	350	3.8	2.9	7.3	358
Wealth index quintiles						
Poorest	6.6	466	8.8	8.4	13.5	591
Second	8.2	526	9.2	7.2	13.6	618
Middle	7.6	662	7.7	6.1	12.7	739
Fourth	4.8	770	4.9	3.9	9.2	833
Richest	4.1	913	6.2	4.6	9.5	962
Total	**5.9**	**3,336**	**7.1**	**5.8**	**11.4**	**3,743**

Table ST.3M: Self-reported prevalence of STIs and STI symptoms: men

The percentage of men age 15–59 years who reported having a STI among those who ever had sexual intercourse and have heard of STIs, percentage of men reporting symptoms of a STI, and percentage of men who reported either a STI or STI symptoms among those who ever had sexual intercourse in the last 12 months, by background characteristics, Swaziland, 2010

	Percentage reporting a STI in the past 12 months	Number of men age 15–59 years who ever had sexual intercourse and have not heard of STIs	Percentage reporting these symptoms of a STI in the past 12 months:		Percentage reporting STI or symptoms of STI in the past 12 months	Number of men age 15–59 who have ever had sexual intercourse
			Bad smelling or abnormal discharge from penis	Genital sore or ulcer near penis		
Region						
Hhohho	3.6	749	2.6	3.2	5.7	822
Manzini	8.3	1,014	6.6	8.5	14.0	1,075
Shiselweni	8.1	428	5.1	5.5	10.1	518
Lubombo	5.1	512	3.6	5.3	9.1	550
Area						
Urban	7.3	1,079	5.6	6.7	12.0	1,129
Rural	5.7	1,625	4.1	5.4	8.9	1,835
Age						
15–24	8.6	614	7.1	5.3	12.3	709
25–29	8.4	544	4.7	7.0	11.8	581
30–39	5.9	779	4.6	7.4	10.7	824
40–49	4.1	473	3.9	4.1	7.6	510
50–59	2.7	294	.9	4.6	4.9	340
Marital status						
Ever married/in union	6.1	1,557	3.9	6.7	10.1	1,682
Never married/in union	6.7	1,146	5.6	4.9	10.1	1,282
Education						
None	4.7	207	4.4	4.7	8.8	262
Primary	8.4	667	7.1	7.4	12.9	805
Secondary	6.9	686	4.5	8.2	12.2	723
High	6.6	788	4.2	4.5	9.1	810
Tertiary	1.8	355	.9	2.1	3.1	365
Wealth index quintiles						
Poorest	7.8	300	4.9	7.2	11.5	363
Second	8.2	407	5.7	5.4	10.1	461
Middle	8.0	532	6.0	6.3	11.8	591
Fourth	5.3	593	4.5	6.5	9.9	639
Richest	4.7	871	3.3	5.0	8.6	910
Total	**6.4**	**2,703**	**4.7**	**5.9**	**10.1**	**2,964**

Actions taken for a STI or symptoms of a STI

In the 2010 Swaziland MICS, respondents who reported having a STI in the past 12 months were asked about the action after knowing that they had a STI or symptoms of an STI (Tables ST.4 and ST.4M). The results show that a large proportion of women (82 percent) than men (64 percent) reported to their partners with whom they had sex. The rate of disclosure to sex partners is high among women age 25–29 years (95 percent) compared with women age 15–24 and 40–49 years (74 percent and 79 percent, respectively). The same applies for men (60 percent for age 25–29 years compared with 38 percent for age 15–24 years and 42 percent for age 30–39 years). For men, regional differences are also marked: the rate of disclosure ranges from 52 percent in Lubombo and to 36 percent in Shiselweni. No clear relationships emerge between the rate of disclosure and the level of education or household wealth.

Untreated STIs cause serious complications ranging from infertility, tubal pregnancy, maternal morbidity, infant blindness and prenatal deaths**.** Syphilis is among the STIs that cause adverse pregnancy outcomes. MICS respondents who reported to have had STIs in the past 12 months were asked if they sought any treatment or advice for their symptoms and where such advice or treatment was sought.

Tables ST.4 and ST.4M further show that overall, 86 percent of women and 80 percent of men sought advice or treatment. Women and men are most likely to seek advice or treatment for STIs in the public sector than in the private sector. Public sector facilities are a government hospital, a health centre and a clinic/primary health unit. More than one in 10 men reported that they had sought advice from traditional practitioners compared with only one percent of women. Older men and those residing in Shiselweni are most likely to have sought advice or treatment from traditional healers.

Figure ST.1: Percentage of women and men with STI or symptoms of STI who sought advice from various health facilities, Swaziland, 2010

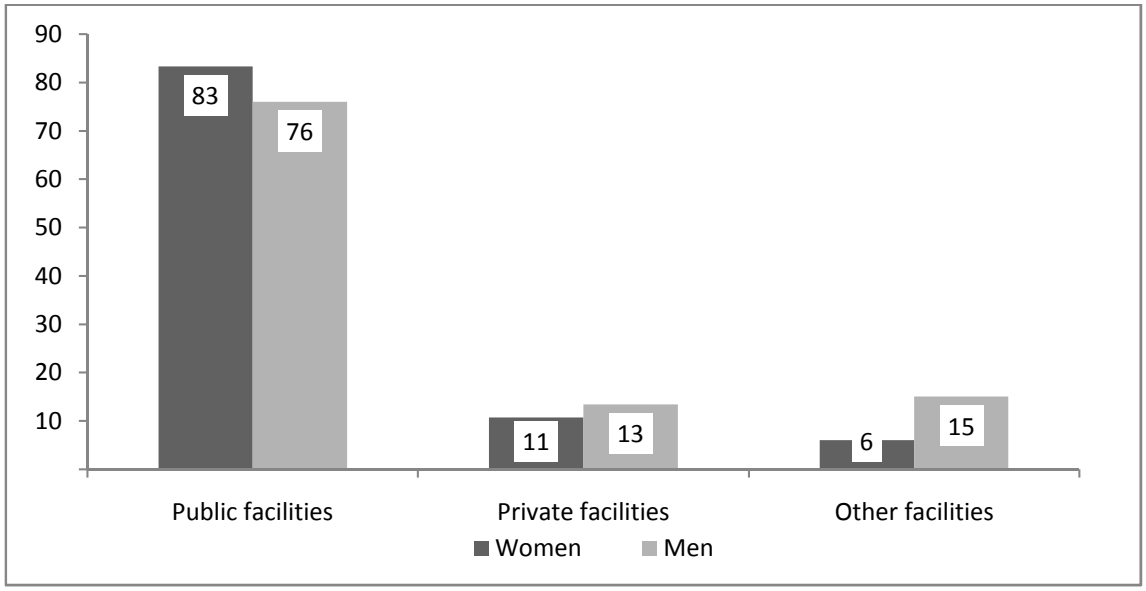


Table ST.4: Actions taken when STI or STI symptoms: women

Percentage of women age 15–49 years reporting a STI or symptoms of a STI in the past 12 months who took specific actions, by background characteristics, Swaziland, 2010

	Had STI or symptom of STI	Number of women age 15-49 years who ever had sexual inter-course	Percent who informed partner(s) with whom they were having sex or who did not have a partner	Percent who sought advice or treat-ment	Number of women who had STI or symptom of STI	Percentage of women with STI or symptoms of STI who sought advice from:														Total number of women with STI or symptoms of STI who sought advice
						Public sector:					Private sector:					Other source:			Other/ Miss-ing	
						Gov't hospital	Gov't health center	Gov't clinic/ PHU	Out-reach site	Other public	Private hos-pital	Private clinic	Private physic-cian	Private phar-macy	Other priv-ate medic al	FLAS	Relative/ Friend	Trad-itional practit-ioner		
Region																				
Hhohho	8.6	1,029	83.9	85.2	89	43.9	1.5	33.6	0.0	0.0	2.9	6.6	0.0	2.9	0.0	7.2	0.0	0.0	2.1	76
Manzini	11.6	1,246	81.8	83.9	145	33.0	4.9	40.5	0.0	1.7	0.8	9.1	1.9	.8	0.8	6.1	0.8	2.2	3.0	121
Shiselweni	12.7	786	81.1	85.0	100	24.6	20.0	48.6	0.0	0.0	0.0	1.1	0.0	2.3	0.0	0.0	0.0	1.1	3.4	85
Lubombo	13.6	682	81.1	89.7	93	19.4	7.9	52.9	2.0	0.0	0.9	10.7	0.0	1.0	0.0	4.2	0.0	1.0	1.0	83
Area																				
Urban	10.1	1,148	81.1	87.9	116	33.7	6.9	30.1	0.7	2.0	2.3	14.8	1.0	1.6	1.0	6.5	1.0	1.0	1.0	102
Rural	11.9	2,595	82.2	84.8	310	28.8	9.0	49.1	0.3	0.0	0.6	4.1	0.5	1.7	0.0	3.7	0.0	1.3	3.1	263
Age																				
15–24	12.8	1,093	74.0	80.0	140	27.7	8.3	43.3	0.0	0.0	3.0	6.3	1.2	2.3	0.0	2.7	0.0	2.4	5.2	112
25–29	12.9	821	95.3	87.2	106	33.6	7.3	36.1	0.8	2.2	0.0	8.6	0.0	1.7	1.1	7.6	0.0	2.0	1.4	92
30–39	10.7	1,041	81.2	89.8	112	38.1	8.1	44.7	0.0	0.0	0.6	2.8	1.0	.9	0.0	3.0	1.0	0.0	1.8	100
40–49	8.7	788	78.6	88.3	68	16.3	10.7	54.9	1.4	0.0	0.0	13.7	0.0	1.6	0.0	5.3	0.0	0.0	0.0	60
Marital status																				
Ever married/ in union	12.7	2,325	86.4	87.9	296	30.9	7.9	44.1	0.6	0.4	0.5	7.9	0.9	1.5	0.4	4.6	0.4	1.7	1.6	260
Never married/in union	9.2	1,418	71.7	80.7	130	28.5	9.5	43.0	0.0	1.0	2.5	5.2	0.0	2.1	0.0	4.1	0.0	0.0	4.6	105
Education																				
None	14.0	240	(81.4)	(94.8)	34	(16.9)	(3.0)	(69.8)	(2.7)	(0.0)	(0.0)	(4.8)	(0.0)	(0.0)	(0.0)	2.7	(0.0)	(0.0)	(0.0)	32
Primary	13.6	1,026	79.4	82.4	139	29.3	10.6	46.1	0.0	0.0	0.7	3.3	0.0	3.1	0.9	0.8	0.0	2.7	3.4	115
Secondary	12.4	1,192	84.0	85.4	148	35.4	8.5	41.8	0.0	0.0	1.3	7.9	1.8	0.7	0.0	4.3	0.8	1.0	2.3	127
High	8.5	927	81.0	88.2	78	31.8	7.6	39.3	1.1	1.5	1.5	7.4	0.0	2.3	0.0	5.7	0.0	0.0	1.9	69
Tertiary	7.3	358	(86.9)	(85.8)	26	*	*	*	*	*	*	*	*	*	*	*	*	*	*	22
Wealth index quintiles																				
Poorest	13.5	591	80.7	79.6	80	30.4	6.8	57.3	0.0	0.0	0.0	4.3	0.0	1.4	0.0	4.1	0.0	0.0	1.5	64
Second	13.6	618	85.9	85.4	84	21.4	7.1	58.3	1.2	0.0	0.0	3.5	0.0	3.6	0.0	0.0	0.0	1.4	3.6	72
Middle	12.7	739	81.8	89.1	94	33.4	10.0	41.1	0.0	0.0	0.0	4.5	1.6	1.2	1.2	1.9	0.0	1.0	5.5	83
Fourth	9.2	833	83.4	88.5	77	32.6	13.7	33.8	1.1	0.0	1.5	7.8	1.5	0.8	0.0	6.7	0.0	3.9	0.0	68
Richest	9.5	962	78.2	85.3	91	32.5	4.5	30.9	0.0	2.6	3.8	14.9	0.0	1.3	0.0	9.7	1.3	0.0	1.1	78
Total	**11.4**	**3,743**	**81.9**	**85.7**	**426**	**30.2**	**8.4**	**43.8**	**0.4**	**0.6**	**1.1**	**7.1**	**0.6**	**1.6**	**0.3**	**4.5**	**0.3**	**1.2**	**2.5**	**365**

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases. Figures in parentheses are based on 25–49 unweighted cases.

Table ST.4M: Actions taken when STI or STI symptoms: men

Percentage of men age 15–59 years reporting a STI or symptoms of a STI in the past 12 months who took specific actions, by background characteristics, Swaziland, 2010

	Had STI or symptom of STI	Number of men age 15–59 years who ever had sexual intercourse	Percent who informed partner(s) with whom they were having sex or who did not have a partner	Percent who sought advice or treatment	Number of men who had STI or symptom of STI	Percentage of men with STI or symptoms of STI who sought advice from:												Total number of men with STI or symptoms of STI who sought advice
						Public sector:			**Private sector:**					**Other source:**			Other/ Missing	
						Gov't hospital	Gov't health center	Gov't clinic/ PHU	Private hospital	Private clinic	Private physician	Private pharmacy	Other private medical	FLAS	Relative/ Friend	Traditional practitioner		
Region																		
Hhohho	5.7	822	45.3	62.0	47	32.8	17.3	30.7	0.0	1.9	0.0	0.0	5.8	3.7	.0	5.8	3.9	29
Manzini	14.0	1075	38.8	53.5	151	32.7	3.9	36.7	5.8	6.8	1.3	3.9	0.0	2.6	1.6	10.1	1.3	81
Shiselweni	10.1	518	35.5	64.5	52	33.4	8.7	28.9	0.0	1.5	0.0	2.9	0.0	0.0	1.5	20.3	8.7	34
Lubombo	9.1	550	51.5	55.2	50	23.1	11.8	39.2	0.0	14.1	0.0	0.0	3.1	2.7	0.0	9.0	0.0	28
Area																		
Urban	12.0	1129	41.7	60.3	136	34.5	5.7	28.5	4.1	11.7	1.3	3.9	0.0	4.8	0.6	10.9	2.7	82
Rural	8.9	1835	41.2	54.2	163	28.4	10.9	40.2	1.5	1.0	0.0	1.1	2.9	0.0	1.5	11.5	3.3	89
Age																		
15-24	12.3	709	37.5	63.2	87	36.0	11.4	25.6	1.9	5.3	0.0	1.9	0.0	2.8	3.3	10.9	4.6	55
25-29	11.8	581	49.6	68.2	69	19.3	9.9	51.6	0.0	3.9	0.0	4.5	1.9	2.8	0.0	7.1	(1.2)	47
30-39	10.7	824	41.7	49.3	88	36.6	7.8	30.8	0.0	9.4	0.0	0.0	3.8	2.4	0.0	12.6	(2.4)	44
40-49	7.6	510	*	*	39	*	*	*	*	*	*	*	*	*	*	*	*	19
50-59	4.9	340	*	*	17	*	*	*	*	*	*	*	*	*	*	*	*	6
Marital status																		
Ever married/in union	10.1	1,682	46.2	55.6	170	33.8	2.9	33.7	5.0	8.3	1.1	3.3	1.8	3.0	0.0	12.4	2.1	95
Never married/in union	10.1	1,282	35.1	58.8	129	28.2	15.2	35.6	0.0	3.5	0.0	1.4	1.1	1.4	2.4	9.7	4.1	76
Education																		
None	8.8	262	58.0	*	23	*	*	*	*	*	*	*	*	*	*	*	*	14
Primary	12.9	805	43.9	53.9	104	36.0	7.8	31.7	6.5	1.3	0.0	0.0	0.0	3.2	3.2	12.8	3.5	56
Secondary	12.2	723	36.6	52.7	88	(30.6)	(7.9)	(39.6)	(0.0)	(5.1)	(0.0)	(2.1)	(5.5)	(3.5)	(0.0)	(11.4)	(0.0)	46
High	9.1	810	36.4	*	74	(34.3)	(7.8)	(32.8)	(2.2)	(8.9)	(0.0)	(4.4)	(0.0)	(1.1)	(0.0)	(6.3)	(6.6)	48
Tertiary	3.1	365	54.2	*	11	*	*	*	*	*	*	*	*	*	*	*	*	7
Wealth index quintiles																		
Poorest	11.5	363	50.4	(57.0)	42	26.2	21.3	36.5	0.0	0.0	0.0	0.0	3.7	0.0	0.0	15.9	4.1	24
Second	10.1	461	44.1	(72.2)	46	32.8	7.9	31.5	0.0	0.0	0.0	6.1	5.0	0.0	1.5	16.8	3.2	33
Middle	11.8	591	42.7	55.6	70	28.3	7.4	38.0	9.4	3.3	0.0	0.0	0.0	7.4	0.0	10.4	3.9	39
Fourth	9.9	639	33.9	52.9	63	34.7	5.8	33.8	3.2	13.5	0.0	0.0	0.0	0.0	3.9	8.3	0.0	33
Richest	8.6	910	40.0	52.5	79	33.1	4.4	33.3	0.0	11.3	2.6	5.1	0.0	2.6	0.0	7.0	3.7	41
Total	**10.1**	**2,964**	**41.4**	**57.0**	**299**	**31.3**	**8.4**	**34.6**	**2.8**	**6.1**	**0.6**	**2.4**	**1.5**	**2.3**	**1.1**	**11.2**	**3.0**	**171**

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases. Figures in parentheses are based on 25–49 unweighted cases.

Informing partners of STI or STI symptoms

The treatment of partners, also known as contact tracing and treatment, is an essential component in the control of STIs. It ensures total eradication of infections from both partners. Untreated partners act as reservoirs for STI infections. Treatment of all contacts breaks the cycle of transmission and prevents the development of antimicrobial resistance and potential STI complications. Therefore effective management cannot be achieved without partner notification and treatment.

There are two approaches to partner notification: passive and active notification. The mostly commonly used approach in Swaziland is passive contact tracing or 'patient referral'. In this approach the patient takes responsibility for contacting and notifying partners with whom they had sex about their possible infection without the active involvement of the healthcare professional

Contact tracing is important in the management of STIs, as such, women and men reported to have had STIs in the past 12 months were asked if they had informed their partner or partners. Looking closer at the patterns of partner notification, 80 percent of women and 61 percent of men reported that they informed all their partners, while 0.5 percent of women and 4 percent of men informed some of their partners (Tables ST.5 and ST.5M). Women who reported that they had ever been married or in unions and those that are in the 25–29 age group were more likely than their counterparts to have informed their partner of an episode of STI. For men, those residing in Lubombo and who were ever married or in union were more likely to inform their partners compared with their counterparts.

Reasons for not seeking treatment

Effective STI treatment requires prompt and accurate diagnosis. The longer the patient takes to seek appropriate STI treatment the more likely they are to transmit the infection to their sex partners and the higher the risk of developing complications. According to the National STI Guidelines of 2009, privacy and confidentiality are central in the management of STIs. The fact that most STIs are acquired through sexual activity may make the client very uncomfortable to discuss STI issues freely, even with a healthcare practitioner. This calls for healthcare providers to display non-judgmental attitudes towards STI clients.

The survey sought to obtain insight into the reasons for not seeking STI services. The results show that among women age 15–49 and men age 15–49 who ever had sexual intercourse and reported a STI or symptoms of a STI in the past 12 months, 14 percent of women and 16 percent of men did not seek advice or treatment. When asked about the main reason for not seeking advice or treatment for STIs, the most frequently cited reasons for women were: "not necessary" (63 percent), "other" (19 percent), "fear of being ridiculed or stigmatized" (11 percent), and "expensive" (seven percent). For men, the most frequently cited reasons were: "not necessary" (36 percent), "expensive" (16 percent), "other" (14 percent), and "fear of being ridiculed or stigmatized" (11 percent.

Table ST.5: Informing partners of STI or STI symptoms: women

Percentage of women age 15–49 years reporting a STI or symptoms of a STI in the past 12 months, and their actions on informing partner(s), Swaziland, 2010

	Had STI or symptom of STI	Number of women age 15–49 years who ever had sexual intercourse	Percentage of women with STI or symptoms of STI who:						Percent who informed partner(s) with whom they were having sex or who did not have a partner	Number of women who had STI or symptom of STI
			Informed (all) partner(s)	Did not inform any partner	Did not inform all partner	Did not have a partner	Missing	Total		
Region										
Hhohho	8.6	1,029	83.9	16.1	0.0	0.0	0.0	100.0	83.9	89
Manzini	11.6	1,246	76.4	16.8	0.7	5.3	0.7	100.0	81.8	145
Shiselweni	12.7	786	79.1	14.6	1.0	1.9	3.4	100.0	81.1	100
Lubombo	13.6	682	81.1	17.2	0.0	0.0	1.8	100.0	81.1	93
Area										
Urban	10.1	1,148	76.7	16.1	0.9	4.4	2.0	100.0	81.1	116
Rural	11.9	2,595	80.8	16.2	0.3	1.5	1.2	100.0	82.2	310
Age										
15–24	12.8	1,093	74.0	24.1	0.7	0.0	1.2	100.0	74.0	140
25–29	12.9	821	92.2	2.3	1.0	3.2	1.4	100.0	95.3	106
30–39	10.7	1,041	78.3	18.8	0.0	3.0	0.0	100.0	81.2	112
40–49	8.7	788	74.2	17.3	0.0	4.4	4.1	100.0	78.6	68
Marital status										
Ever married/in union	12.7	2,325	84.3	12.2	0.3	2.1	1.1	100.0	86.4	296
Never married/in union	9.2	1,418	69.2	25.4	0.7	2.6	2.1	100.0	71.7	130
Education										
None	14.0	240	(78.3)	(16.0)	(0.0)	(3.0)	(2.6)	(100.0)	(81.4)	34
Primary	13.6	1026	76.3	20.6	0.0	3.1	0.0	100.0	79.4	139
Secondary	12.4	1192	83.3	12.8	0.7	0.7	2.5	100.0	84.0	148
High	8.5	927	76.7	15.8	1.3	4.3	1.9	100.0	81.0	78
Tertiary	7.3	358	86.9	13.1	0.0	0.0	0.0	100.0	86.9	26
Wealth index quintiles										
Poorest	13.5	591	75.0	19.3	0.0	5.7	0.0	100.0	80.7	80
Second	13.6	618	84.7	11.8	1.2	1.2	1.0	100.0	85.9	84
Middle	12.7	739	80.7	16.2	0.0	1.1	2.1	100.0	81.8	94
Fourth	9.2	833	82.0	13.1	1.3	1.3	2.2	100.0	83.4	77
Richest	9.5	962	75.9	20.2	0.0	2.2	1.6	100.0	78.2	91
Total	11.4	3,743	79.6	16.2	0.5	2.3	1.4	100.0	81.9	426

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

Table ST.5M: Informing partners of STI or STI symptoms: men

Percentage of men age 15–59 years reporting a STI or symptoms of a STI in the past 12 months, and their actions on informing partner(s), Swaziland, 2010

	Had STI or symptom of STI	Number of men age 15–59 years who ever had sexual intercourse	Percentage of men with STI or symptoms of STI who:						Percent who informed partner(s) with whom they were having sex or who did not have a partner	Number of men who had STI or symptom of STI
			Informed (all) partner(s)	Did not inform any partner	Did not inform all partner	Did not have a partner	Missing	Total		
Region										
Hhohho	5.7	822	58.4	32.0	4.8	3.6	1.2	100.0	62.0	47
Manzini	14.0	1,075	61.3	26.5	5.4	5.4	1.4	100.0	66.7	151
Shiselweni	10.1	518	50.5	42.0	0.0	0.0	7.5	100.0	50.5	52
Lubombo	9.1	550	71.2	19.7	5.8	0.0	3.2	100.0	71.2	50
Area										
Urban	12.0	1,129	61.8	26.3	5.3	4.0	2.5	100.0	65.8	136
Rural	8.9	1,835	59.7	31.1	3.7	2.6	2.9	100.0	62.3	163
Age										
15–24	12.3	709	47.6	41.8	2.9	2.7	5.0	100.0	50.3	87
25–29	11.8	581	62.0	24.0	10.2	2.4	1.4	100.0	64.4	69
30–39	10.7	824	69.6	23.4	0.9	3.9	2.3	100.0	73.4	88
40–49	7.6	510	(65.3)	(23.7)	(5.0)	(6.0)	(0.0)	100.0	(71.3)	39
50–59	4.9	340	*	*	*	*	*	100.0	*	17
Marital status										
Ever married/in union	10.1	1682	71.8	20.2	2.9	3.0	2.1	100.0	74.7	170
Never married/in union	10.1	1282	46.1	40.4	6.4	3.7	3.5	100.0	49.7	129
Education										
None	8.8	262	(58.6)	(30.4)	(0.0)	(7.2)	(3.8)	100.0	(65.8)	23
Primary	12.9	805	63.2	29.2	1.4	4.5	1.7	100.0	67.8	104
Secondary	12.2	723	65.2	25.2	6.1	0.0	3.4	100.0	65.2	88
High	9.1	810	46.9	36.3	8.7	4.6	3.5	100.0	51.5	74
Tertiary	3.1	365	*	*	*	*	*	100.0	*	11
Wealth index quintiles										
Poorest	10.5	474	(63.5)	(23.9)	(0.0)	(5.5)	(7.1)	100.0	(68.9)	50
Second	11.2	619	56.8	36.8	4.6	1.8	0.0	100.0	58.7	69
Middle	11.2	607	63.4	26.1	5.6	1.9	3.0	100.0	65.3	68
Fourth	9.7	671	58.5	26.7	8.0	3.6	3.1	100.0	62.2	65
Richest	7.9	593	62.2	29.9	2.2	4.5	1.2	100.0	66.7	47
Total	10.1	2,964	60.6	28.9	4.4	3.3	2.7	100.0	63.9	299

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases. Figures in parentheses are based on 25–49 unweighted cases.

14. Male Circumcision

Evidence has shown that male circumcision reduces the risk of heterosexually acquired HIV infection in men by approximately 60 percent[39] and is safe when performed by well-trained health professionals in properly equipped settings. In countries and regions with heterosexual epidemics and high HIV and low male circumcision prevalence, male circumcision is being included in comprehensive HIV prevention packages. Alone, male circumcision is only partially protective, however, when combined with HIV testing and counseling services, condoms, safer sexual practices and treatment of STIs it is highly effective.

Swaziland is at the epicenter of the global HIV pandemic. With support from many international and national partners, MoH is scaling up HIV prevention activities and has embraced male circumcision as part of its comprehensive HIV prevention package. With evidence from Kenya, South Africa and Uganda, Swaziland has undertaken massive education, awareness, and promotion campaigns to improve knowledge among the population of the benefits of male circumcision, thereby increasing demand for male circumcision. However, Swaziland is traditionally not a circumcising nation and as such tremendous work is needed. According to the SDHS 2006/07, only eight percent of men age 15–49 years reported that they had been circumcised.

The Government of Swaziland has set a goal of circumcising 80 percent of 15–49 year-old males by the end of 2011. Consequently, immense efforts are underway to meet the target, including building up of a skilled work force, high-quality service delivery sites, effective communication strategies and monitoring systems. In order to promote infant circumcision, neonatal male circumcision services were also introduced in 2011 at two public health facilities.

Prevalence of male circumcision and age at circumcision

In the 2010 Swaziland MICS, men age 15–59 were asked if they were circumcised. Those who reported to be circumcised were asked about age at circumcision and the main reason for getting circumcised. Those who reported that they were not circumcised were asked to provide the main reason for not getting circumcised. Then, all men were further asked whether or not they would want their son to be circumcised. Those who responded that they did not want their son to be circumcised were asked about the main reason why they would not want their son to be circumcised.

Table MC.1 shows the prevalence of male circumcision among men age 15–59 and the distribution of age at circumcision. Nationally, 19 percent of men age 15–59 years reported that they have been circumcised. Of those, 20 percent reported that they were circumcised below age one. The most frequently reported age of circumcision was 20 years and above (45 percent), followed by age 13–19 years (26 percent). The prevalence of male circumcision is fairly constant across all age groups, although it is slightly lower among the 50–59 age group (Figure MC.1).

[39] Bailey RC, Moses S, Parker CB, et al. Male circumcision for HIV prevention in young men in Kisumu, Kenya: a randomised controlled trial [see comment]. Lancet 2007; 369:643–56.

Stratification of the results by background characteristics yields several important observations. First, urban men are more likely to have been circumcised compared with rural men (26 percent vs. 16 percent). This finding is consistent with MoH data on male circumcision, which show that the majority of clientele are from urban areas. When the results are tabulated by region Manzini has the highest prevalence of male circumcision with 25 percent, followed by Hhohho and Lubombo (17 percent and 16 percent, respectively). The likelihood of being circumcised has a strong positive relationship with the level of education or household wealth.

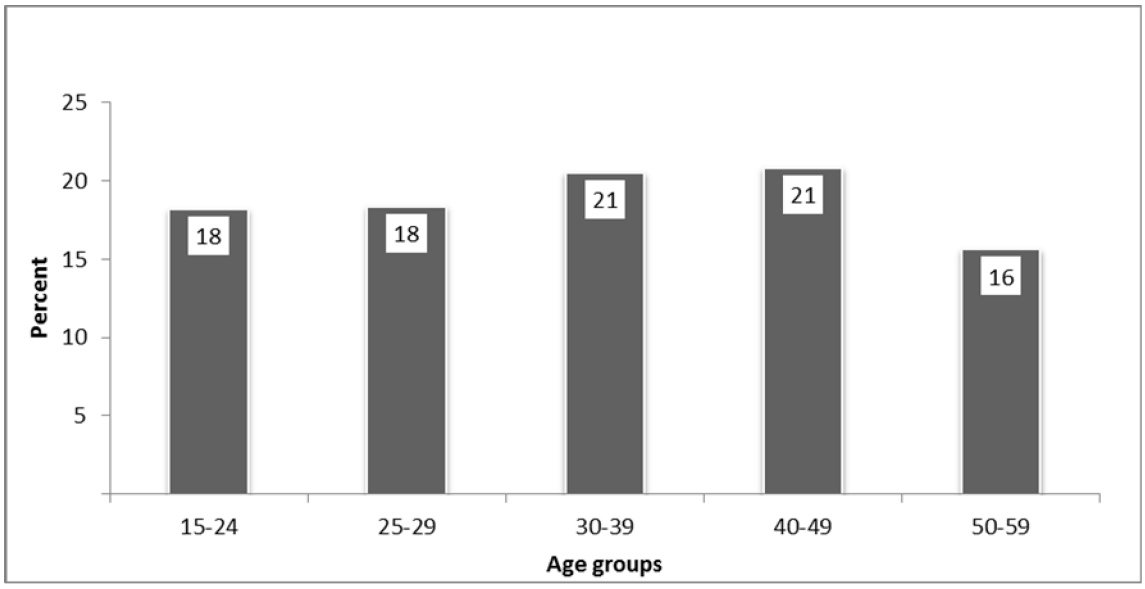
Table MC.1: Male Circumcision

Percentage of men age 15–59 years who have been circumcised, and age at circumcision Swaziland, 2010

	Percent circumcised	Number of men age 15–59 years	Age circumcised:					Number of men age 15–59 years circumcised
			Below age one	Age 1–12 years	Age 13–19 years	20 years and above	Total	
Region								
Hhohho	17.3	1,143	25.3	9.3	22.7	42.7	100.0	198
Manzini	24.5	1,406	17.0	14.3	22.5	46.2	100.0	344
Shiselweni	13.8	847	27.0	2.9	27.7	42.4	100.0	117
Lubombo	16.2	782	16.2	5.6	32.8	45.3	100.0	126
Area								
Urban	25.6	1,347	21.1	13.8	17.9	47.2	100.0	345
Rural	15.6	2,832	19.9	7.0	30.6	42.5	100.0	441
Age								
15–24	18.2	1,858	12.8	6.8	50.2	30.1	100.0	338
25–29	18.4	629	24.0	10.6	6.2	59.3	100.0	116
30–39	20.5	838	28.8	10.1	6.1	55.0	100.0	172
40–49	20.8	513	20.9	15.3	5.0	58.7	100.0	107
50–59	15.6	342	33.0	17.6	6.9	42.5	100.0	53
Marital status								
Ever married/in union	19.3	1,684	28.0	13.7	6.7	51.6	100.0	324
Never married/in union	18.5	2,495	15.2	7.3	37.9	39.6	100.0	462
Education								
None	14.2	280	(42.1)	(16.3)	(12.6)	(29.0)	(100.0)	40
Primary	13.4	1240	28.0	14.4	27.7	29.9	100.0	166
Secondary	17.8	1195	15.2	10.3	37.7	36.8	100.0	213
High	22.7	1067	14.8	7.9	21.8	55.6	100.0	243
Tertiary	31.5	397	23.4	5.7	9.9	61.1	100.0	125
Wealth index quintiles								
Poorest	12.3	570	30.6	10.1	18.9	40.4	100.0	70
Second	13.5	740	16.9	8.5	35.8	38.8	100.0	100
Middle	16.5	821	22.1	15.3	22.5	40.2	100.0	136
Fourth	18.1	940	15.8	11.0	31.0	42.3	100.0	170
Richest	28.0	1,107	21.1	7.6	20.7	50.6	100.0	310
Total	18.8	4,179	20.4	10.0	25.0	44.6	100.0	786
Total (age 15–49)	19.1	3,837	19.5	9.4	26.3	44.7	100.0	733

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

Figure MC.1: Percentage of men aged 15-59 who have been circumcised by age groups, Swaziland, 2010



Main reason for circumcision

In the 2010 Swaziland MICS, men age 15–59 years who reported to be circumcised were asked to provide the main reason for getting circumcised (Table MC.2). The most frequently reported reason was "health/hygiene" (52 percent), followed by "HIV/AIDS prevention" and "tradition/religion" (22 percent and 18 percent, respectively). When the results were tabulated by urban vs. rural residency, men from rural areas were more likely than those from urban areas to cite "HIV/AIDS prevention" as the main reason for getting circumcised (28 percent vs. 14 percent). Between men who are ever married or in union and those who are never married or in union, the former was more likely to report "tradition/region" as the main reason for getting circumcised whereas the latter was more likely to cite "HIV/AIDS prevention" as the main reason for undergoing the procedure. It is worthy to note, however, that irrespective of socio-economic background health and hygiene aspects of male circumcision were found to be the most important reason in men's decision to get circumcised.

Main reason for non-circumcision

Table MC.3 provides information sought from men reporting to not be circumcised on the main reason for not getting circumcised. Thirty-nine percent of respondents reported "fear/pain" as the main reason for not being circumcised, while 14 percent cited "tradition/religion" as the main reason. It is important to note that a significant 41 percent of respondents cited reasons other than those provided in the questionnaire, and this requires further investigation. Lastly, exploring the differences in the results by socio-economic characteristics did not provide any meaningful observations.

Attitudes towards male circumcision for sons

In the 2010 Swaziland MICS, all men age 15–59 years were asked whether or not they would circumcise their sons. And for those who reported that they would not want their sons to be circumcised, they were further asked to cite the main reason for not wanting their sons to be circumcised.

Nationally, a significant 81 percent of men reported that they want their sons to be circumcised. The percentages of men wanting their sons to be circumcised were marginally higher among men from urban areas and those who were ever married or in union. The percentages of men with positive attitudes towards circumcising their sons increase with household wealth.

Among those who reported that they would not want their sons to be circumcised, the most frequently cited reasons were “tradition/religion” (37 percent), followed by “fear/pain” and “other” (29 percent and 27 percent, respectively). The percentage of men citing ‘fear/pain’ as the main reason for not wanting their sons to be circumcised has a negative correlation with the level of education or household wealth. However, this observation is based on small number of cases and should therefore be treated carefully. Lastly, given that there was a 27 percent that cited “other” as the main reason for not wanting their sons to be circumcised, a further investigation is needed to look into other types of barriers to infant circumcision not considered in this survey.

Table MC.2: Reasons for male circumcision

Percentage of circumcised men age 15–59 years by reasons for having been circumcised, Swaziland, 2010

	Ever circum-cised	Number of men age 15–59 years	Main reasons for been circumcised:							Number of circum-cised men
			Tradition/ Religion	Health/ Hygiene	HIV/ AIDS prevention	Sexual satisfaction	Other	Missing/ DK	Total	
Region										
Hhohho	17.3	1,143	17.8	48.4	24.0	0.6	3.1	6.2	100.0	198
Manzini	24.5	1,406	23.7	52.4	16.7	3.0	2.5	1.7	100.0	344
Shiselweni	13.8	847	13.3	53.6	26.1	2.1	4.1	0.8	100.0	117
Lubombo	16.2	782	9.9	51.8	29.4	0.7	3.1	5.1	100.0	126
Area										
Urban	25.6	1,347	25.1	55.1	14.0	2.0	2.2	1.6	100.0	345
Rural	15.6	2,832	13.3	48.6	28.2	1.8	3.6	4.5	100.0	441
Age										
15–24	18.2	1,858	7.6	52.4	32.9	0.4	3.4	3.3	100.0	338
25–29	18.4	629	18.5	54.4	22.5	0.9	1.4	2.3	100.0	116
30–39	20.5	838	26.2	49.9	13.0	5.5	1.9	3.6	100.0	172
40–49	20.8	513	29.4	53.4	10.6	1.9	1.4	3.3	100.0	107
50–59	15.6	342	39.2	40.1	4.0	2.0	10.4	4.4	100.0	53
Marital status										
Ever married/in union	19.3	1,684	31.0	47.9	11.1	3.4	2.9	3.7	100.0	324
Never married/in union	18.5	2,495	9.6	53.9	29.6	0.8	3.1	3.0	100.0	462
Education										
None	14.2	280	(38.5)	(34.2)	(11.8)	(0.0)	(6.1)	(9.3)	(100.0)	40
Primary	13.4	1,240	29.1	41.9	19.4	0.6	1.8	7.2	100.0	166
Secondary	17.8	1,195	14.9	44.4	32.5	0.6	4.0	3.5	100.0	213
High	22.7	1,067	11.5	59.8	21.0	4.2	3.1	0.4	100.0	243
Tertiary	31.5	397	17.2	65.6	12.5	1.9	1.6	1.1	100.0	125
Wealth index quintiles										
Poorest	12.3	570	22.4	38.1	25.3	3.3	2.5	8.5	100.0	70
Second	13.5	740	14.1	40.4	31.1	1.3	3.3	9.8	100.0	100
Middle	16.5	821	23.2	52.0	19.2	0.6	4.3	0.6	100.0	136
Fourth	18.1	940	18.7	45.2	31.4	0.0	2.1	2.5	100.0	170
Richest	28.0	1,107	16.7	61.2	14.3	3.4	2.9	1.5	100.0	310
Total	**18.8**	**4179**	**18.4**	**51.5**	**22.0**	**1.9**	**3.0**	**3.3**	**100.0**	**786**

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

Table MC.3: Reasons for male circumcision

Percentage of uncircumcised men age 15–59 years by reason for not having been circumcised Swaziland, 2010

	Main reasons for not been circumcised:									Number of uncircumcised men
	Tradition/ religion	Embarra-ssment	To be different	Sexual satisfaction	Cost	Fear/ Pain	Other	Missing/ DK	Total	
Region										
Hhohho	10.5	0.6	0.8	0.5	2.2	37.5	47.1	0.8	100.0	945
Manzini	15.2	0.6	2.0	0.8	2.8	43.7	33.7	1.1	100.0	1,062
Shiselweni	19.5	0.6	1.1	0.5	3.1	43.8	30.6	0.8	100.0	730
Lubombo	8.4	0.8	1.3	0.5	3.8	28.5	55.4	1.4	100.0	655
Area										
Urban	12.8	0.6	2.4	0.4	1.1	44.0	37.4	1.3	100.0	1,002
Rural	13.8	0.6	0.9	0.7	3.6	37.0	42.4	0.9	100.0	2,391
Age										
15–24	11.1	0.6	0.8	0.4	3.9	48.3	34.1	0.8	100.0	1,519
25–29	11.9	0.8	3.0	0.8	3.7	36.7	41.8	1.2	100.0	513
30–39	16.4	0.6	1.4	0.7	1.6	34.9	43.3	1.2	100.0	666
40–49	15.7	0.6	0.8	0.7	1.1	28.0	51.6	1.4	100.0	406
50–59	19.1	0.2	2.0	1.2	1.8	19.8	55.0	1.1	100.0	288
Marital status										
Ever married/in union	16.0	0.5	1.3	1.0	2.1	29.4	48.4	1.3	100.0	1,360
Never married/in union	11.9	0.7	1.4	0.4	3.4	45.5	36.0	0.9	100.0	2,033
Education										
None	18.3	0.4	1.6	0.0	2.2	25.3	50.0	2.3	100.0	240
Primary	12.5	0.6	1.2	0.3	5.2	40.8	38.3	1.1	100.0	1,074
Secondary	12.4	0.7	1.2	0.8	2.2	43.6	38.2	0.9	100.0	982
High	14.7	0.5	1.8	0.9	1.5	37.7	41.7	1.1	100.0	825
Tertiary	13.6	0.9	1.0	1.0	0.6	31.7	51.1	0.0	100.0	272
Wealth index quintiles										
Poorest	14.5	1.1	1.0	0.2	5.3	36.9	39.7	1.3	100.0	500
Second	12.9	0.7	0.6	1.1	5.8	39.0	39.0	1.0	100.0	640
Middle	14.5	0.3	0.8	0.1	1.9	45.3	36.5	0.6	100.0	686
Fourth	13.1	0.4	1.8	0.4	1.6	36.7	45.0	1.1	100.0	771
Richest	13.0	0.8	2.2	1.2	1.1	37.3	43.2	1.2	100.0	796
Total	**13.5**	**0.6**	**1.3**	**0.6**	**2.9**	**39.0**	**41.0**	**1.0**	**100.0**	**3,393**

Table MC.4: Attitudes towards male circumcision

Percentage of circumcised men age 15–59 years reporting that they would like their sons to be circumcised, and main reasons for men age 15–59 years not wanting their sons to be circumcised, Swaziland, 2010

	Percentage of men who would circumcised their sons	Number of men age 15–59 years	Main reason why son would not be circumcised:									Number of fathers who would not want their sons to be circumcised
			Tradition/ religion	Health/ Hygiene	To be different	Sexual satisfaction	Cost	Fear/ Pain	Other	Missing/ DK	Total	
Region												
Hhohho	84.3	1,143	36.9	2.5	2.1	0.4	1.1	30.5	25.5	1.1	100.0	98
Manzini	82.3	1,406	41.2	4.2	2.5	0.0	0.0	27.1	22.9	2.0	100.0	131
Shiselweni	74.7	847	35.1	2.3	2.3	0.0	0.0	34.2	25.6	.6	100.0	110
Lubombo	82.6	782	33.0	0.0	4.1	0.0	0.0	20.9	38.9	3.1	100.0	67
Area												
Urban	84.4	1,347	40.1	3.3	4.9	0.3	0.0	25.0	23.5	2.9	100.0	111
Rural	79.9	2,832	36.2	2.4	1.7	0.0	0.4	30.4	28.0	1.0	100.0	294
Age												
15–24	78.3	1,858	33.4	2.2	0.8	0.0	0.5	36.2	26.4	0.5	100.0	234
25–29	83.1	629	36.9	1.9	8.6	0.0	0.0	21.0	30.4	1.2	100.0	55
30–39	82.7	838	48.0	2.7	2.3	0.0	0.0	20.8	23.9	2.3	100.0	64
40–49	85.6	513	(35.8)	(6.2)	(2.9)	(1.1)	(0.0)	(26.0)	(20.0)	(8.0)	(100.0)	32
50–59	85.1	342	*	*	*	*	*	*	*	*	*	20
Marital status												
Ever married/in union	84.3	1,684	37.9	4.3	2.8	0.3	0.0	23.3	27.6	3.7	100.0	126
Never married/in union	79.4	2,495	37.0	1.9	2.5	0.0	0.4	31.3	26.3	0.6	100.0	280
Education												
None	83.3	280	*	*	*	*	*	*	*	*	*	14
Primary	80.4	1,240	33.2	2.1	2.5	0.0	0.0	38.5	21.5	2.2	100.0	138
Secondary	80.8	1,195	35.1	2.3	0.5	0.0	0.0	30.9	29.1	2.0	100.0	127
High	81.9	1,067	40.8	4.0	4.5	0.3	1.0	18.9	30.4	0.0	100.0	96
Tertiary	83.7	397	(36.7)	(3.7)	(2.8)	(0.0)	(0.0)	(19.6)	(33.5)	(3.6)	(100.0)	32
Wealth index quintiles												
Poorest	76.5	570	36.4	0.8	1.7	0.0	0.0	42.9	17.4	0.8	100.0	73
Second	79.7	740	26.7	3.8	1.6	0.0	0.0	31.3	33.3	3.3	100.0	89
Middle	82.0	821	47.8	2.5	0.9	0.0	1.4	23.1	23.7	0.6	100.0	63
Fourth	80.6	940	37.2	0.0	3.2	0.0	0.0	25.0	33.4	1.2	100.0	96
Richest	85.1	1,107	38.2	6.2	5.0	0.4	0.0	24.2	23.8	2.1	100.0	85
Total	**81.4**	**4179**	**37.3**	**2.7**	**2.6**	**0.1**	**0.3**	**28.8**	**26.7**	**1.6**	**100.0**	**406**

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases. Figures in parentheses are based on 25–49 unweighted cases.

15. Orphaned and Vulnerable Children

For more than two decades, Swaziland has battled one of the most severe HIV/AIDS epidemics in the world, with more than one in five adults infected with the virus.[40] As the epidemic continues into the third decade, more and more children are losing their parents to AIDS or are living with parents who are affected by the illness. Children need a nurturing and supportive environment in which to grow up, and those who are orphaned or in vulnerable households may be at increased risk of abuse, neglect or exploitation if the parents are not available to care for them. Monitoring outcomes for orphans and vulnerable children and comparing them to their peers gives us a measure of how well governments, communities and other actors are responding to their needs.

This chapter presents the results from the 2010 Swaziland MICS on a number of selected outcomes for orphaned and vulnerable children (OVC) in Swaziland. In the MICS3, a measurable definition of OVC developed by the UNAIDS Monitoring and Evaluation Reference Group was used to capture many of the children affected by AIDS. This definition was created particularly for countries with high HIV prevalence. It classifies children as orphaned and vulnerable if they have experienced the death of either parent, if either parent is chronically ill, or if an adult (age 18–59 years) in the household either died (after being chronically ill), or was chronically ill in the year prior to the survey.[41]

Children's living arrangements, orphanhood and vulnerability status

In the 2010 Swaziland MICS, information about living arrangements and parents' survival status was collected for all children under age 18. Table HA.12 presents the percentages of children living with both parents, mother only, father only, and neither parent nationally, as well as by sex, region, urban vs. rural residence, age, and household wealth. Overall, 22 percent of all children in Swaziland are living with both parents and 33 percent are living with neither parent. Single parenthood is most common, with 36 percent of children living with only their mother and six percent with only their father.

Disaggregation of the results by a number of background variables uncovers significant variations in children's living arrangements. First, rural areas have a markedly higher percentage of children living without any parent compared with urban areas (36 percent vs. 20 percent). Among the four regions, Shiselweni has the smallest percentage of children (14 percent) living with both parents and the highest percentage of children living without any parent (41 percent). Lubombo also has a high percentage of children (34 percent) living without any parent. Manzini and Hhohho have twice as high proportions of children (27 percent and 28 percent, respectively) living with both parents as that of Shiselweni. The results also indicate that the likelihood of a child living with neither parent is positively associated with age and negatively associated with household wealth. Male and female children have comparable likelihood of living with both parents, either parent, or without any parent.

[40] CSO and Macro International, SDHS 2006/07
[41] UNICEF, 2005.

Table HA.12: Children's living arrangements and orphanhood

Percent distribution of children age 0–17 years according to living arrangements, percentage of children age 0–17 years in households not living with a biological parent and percentage of children who have one or both parents dead, Swaziland, 2010

	Living with both parents	Living with neither parent				Living with mother only		Living with father only		Impossible to determine	Total	Not living with a biological parent [1]	One or both parents dead [2]	Number of children age 0–17 years
		Only father alive	Only mother alive	Both are alive	Both are dead	Father alive	Father dead	Mother alive	Mother dead					
Sex														
Male	21.9	3.4	6.8	18.8	4.6	27.9	7.2	5.0	1.0	3.4	100.0	33.6	23.6	5129
Female	22.3	3.6	6.6	18.4	4.5	29.0	7.1	4.2	1.3	3.1	100.0	33.1	23.6	5106
Region														
Hhohho	26.9	3.1	6.7	15.2	4.7	28.0	6.9	4.3	1.5	2.7	100.0	29.6	23.2	2,597
Manzini	27.9	3.7	5.4	16.4	3.6	26.0	7.4	5.0	1.4	3.2	100.0	29.1	22.2	2,796
Shiselweni	14.0	3.6	7.3	24.2	5.7	29.2	8.2	3.4	.8	3.5	100.0	40.8	26.2	2,729
Lubombo	18.8	3.7	7.5	18.4	4.4	31.3	5.8	5.9	.7	3.6	100.0	33.9	22.6	2,112
Area														
Urban	35.4	2.6	3.7	10.6	3.0	26.6	7.7	6.6	1.1	2.8	100.0	19.9	18.5	1,743
Rural	19.4	3.7	7.3	20.2	4.9	28.8	7.0	4.2	1.2	3.3	100.0	36.1	24.7	8,492
Age														
0–4 years	27.4	1.5	2.0	16.6	.5	44.8	3.0	2.8	.1	1.3	100.0	20.7	7.2	2,860
5–9 years	21.7	3.2	5.7	24.1	2.2	26.7	6.0	5.9	1.1	3.3	100.0	35.2	18.8	2,899
10–14 years	19.8	4.7	9.9	16.9	7.9	20.1	10.1	5.1	1.9	3.6	100.0	39.4	35.4	2,986
15–17 years	17.3	5.5	10.8	15.0	10.4	17.2	11.2	4.4	1.9	6.2	100.0	41.8	40.8	1,490
Wealth index quintiles														
Poorest	19.0	3.6	7.1	20.6	4.8	28.3	8.4	3.7	.8	3.8	100.0	36.1	25.3	2,401
Second	18.1	4.2	7.8	20.1	5.5	28.4	8.0	3.3	1.1	3.6	100.0	37.5	27.3	2,281
Middle	19.6	3.5	6.6	18.2	4.1	30.9	7.3	4.8	1.1	3.9	100.0	32.4	23.3	2,063
Fourth	20.2	3.7	5.9	20.3	4.7	30.7	6.4	4.5	1.4	2.1	100.0	34.8	22.4	1,961
Richest	38.8	2.1	5.3	11.5	3.4	22.5	4.6	7.8	1.5	2.5	100.0	22.2	17.4	1,528
Total	22.1	3.5	6.7	18.6	4.6	28.4	7.1	4.6	1.1	3.3	100.0	33.3	23.6	10,234

[1] MICS indicator 9.17
[2] MICS indicator 9.18

Table OV.1 shows the prevalence of OVC nationally and by background characteristics. In Swaziland, 24 percent of children are single or double orphans, and 30 percent are identified as vulnerable. Combined, 45 percent of children in Swaziland are orphaned or vulnerable.

When disaggregated by background characteristics, the results show that a child's orphan and vulnerability status is strongly influenced by urban vs. rural residence, region, and household wealth. Rural areas have a significantly higher percentage of children who are orphaned or vulnerable compared with urban areas (48 percent vs. 32 percent). Shiselweni tends to have a slightly higher percentage of orphaned children (26 percent) compared with Hhohho, Manzini, and Lubombo, which have about 22–23 percent of children who have been orphaned. In terms of vulnerability status, Lubombo has the highest percentage of vulnerable children (37 percent), followed by Shiselweni and Manzini (33 percent and 30 percent, respectively). The results also show that the likelihood of being vulnerable decreases progressively with household wealth. The likelihood of being orphaned also shows a slight negative association with household wealth, but the association is less pronounced when compared with that for vulnerability status. The risk of orphanhood or vulnerability also increases drastically with the age of the child, which likely reflects the age trajectory of the HIV prevalence among their parents. Male and female children were more or less equally likely to be orphaned or vulnerable.

Figure OV.1: Percentage of children orphaned or vulnerable by region and area of residence, Swaziland, 2010

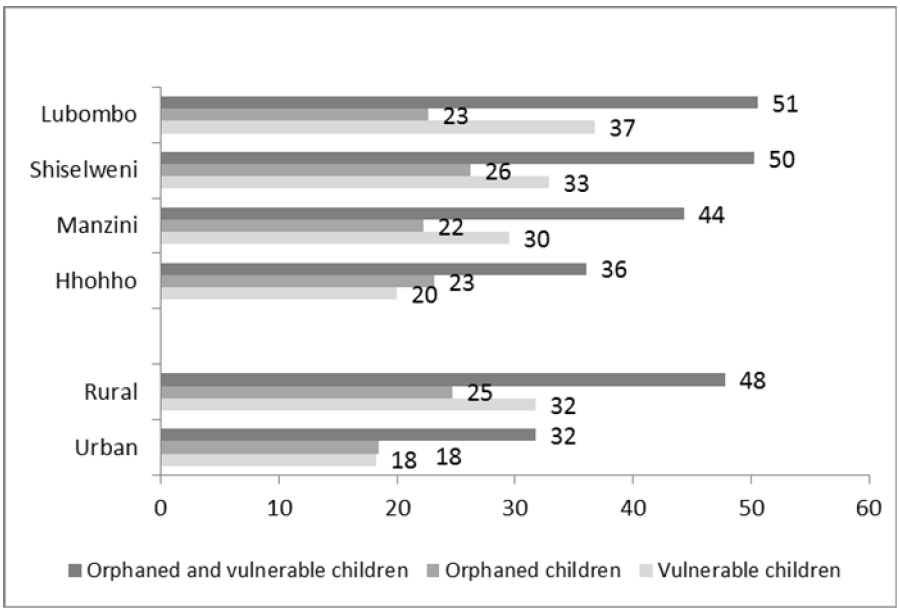


Figure OV2: Percentage of children orphaned or vulnerable by wealth, Swaziland, 2010

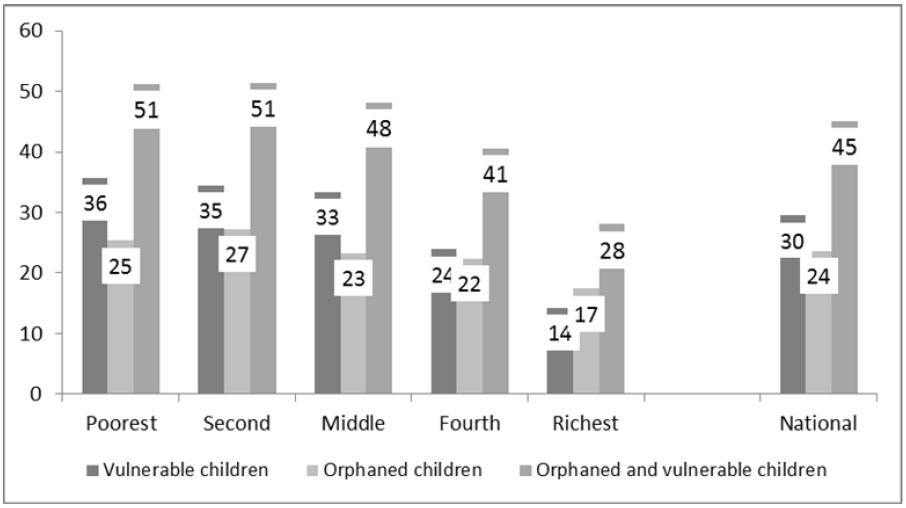


Table OV.1: Prevalence of orphanhood and vulnerability among children

Percentage of children age 0–17 years who are orphaned or vulnerable due to AIDS, Swaziland, 2010

	Chronically ill parent	Adult death in household	Chronically ill adult in household	Vulnerable children	One or both parents dead (orphan)	Orphans and vulnerable children	Number of children aged 0–17 years
Sex							
Male	6.4	6.9	20.9	29.4	23.6	45.0	5129
Female	6.9	6.4	20.6	29.6	23.6	45.2	5106
Region							
Hhohho	2.8	5.2	14.2	20.0	23.2	36.1	2,597
Manzini	5.9	7.3	20.4	29.5	22.2	44.4	2,796
Shiselweni	7.5	7.2	23.7	32.9	26.2	50.3	2,729
Lubombo	11.3	6.7	25.6	36.8	22.6	50.6	2,112
Area							
Urban	3.8	5.1	11.6	18.3	18.5	31.8	1,743
Rural	7.2	6.9	22.7	31.8	24.7	47.9	8,492
Age							
0–4 years	4.9	6.3	19.6	26.9	7.2	31.3	2,860
5–9 years	7.9	6.6	22.5	31.4	18.8	43.7	2,899
10–14 years	7.3	6.8	21.1	30.6	35.4	53.9	2,986
15–17 years	6.3	7.0	19.1	28.6	40.8	57.0	1,490
Wealth index quintiles							
Poorest	7.8	7.6	26.1	35.7	25.3	51.2	2,401
Second	8.3	6.8	25.1	34.5	27.3	51.4	2,281
Middle	7.0	9.2	23.8	33.4	23.3	48.1	2,063
Fourth	5.5	5.8	15.1	23.9	22.4	40.6	1,961
Richest	3.5	2.5	9.3	14.2	17.4	28.0	1,528
Total	6.7	6.6	20.8	29.5	23.6	45.1	10,234

Basic material needs among orphaned and vulnerable children

In the 2010 Swaziland MICS, information on children's basic materials needs was sought from all heads of households or their proxy respondents. Specifically, the questionnaire sought to determine whether or not children age 5–17 had at least one pair of shoes, two sets of clothing and one meal per day. Table OV.2 shows by orphan and vulnerability status the percentages of children whose basic material needs are met, i.e., those who responded that they possessed all three items. Overall, 71 percent of all children age 5–17 have their basic material needs met. Orphaned and vulnerable children are less likely than those not orphaned or vulnerable to have their basic material needs met, with an orphan to non-orphan ratio of 0.85 and an OVC to non-OVC ratio of 0.77. These ratios indicate that orphaned and vulnerable children are generally disadvantaged in terms of meeting their basic material needs, when compared with children not orphaned or vulnerable.

Exploring the variations by demographic and socioeconomic characteristics, the results show that urban residence is positively associated with the likelihood of having basic material needs met. Children from Hhohho have the highest likelihood of having basic needs are met, while those from the Lubombo region have the lowest likelihood of meeting basic material needs. Male children who are orphaned or vulnerable are slightly less likely than their female counterparts to have basic material needs met, although this is also observed for children who are not orphaned or vulnerable. Older children (ages 15–17 years) were more likely to have their basic material met compared with younger children (ages 5–14 years). For household wealth, a positive, linear relationship is observed for all three groups (all children, orphaned children and orphaned and vulnerable children). It is worthy to note that among children from the highest quintile, the likelihood of meeting basic material needs is not affected by orphan or vulnerability status.

Figure OV.3: Possession of basic material needs among children age 5–17 years, orphaned and vulnerable children, Swaziland, 2010

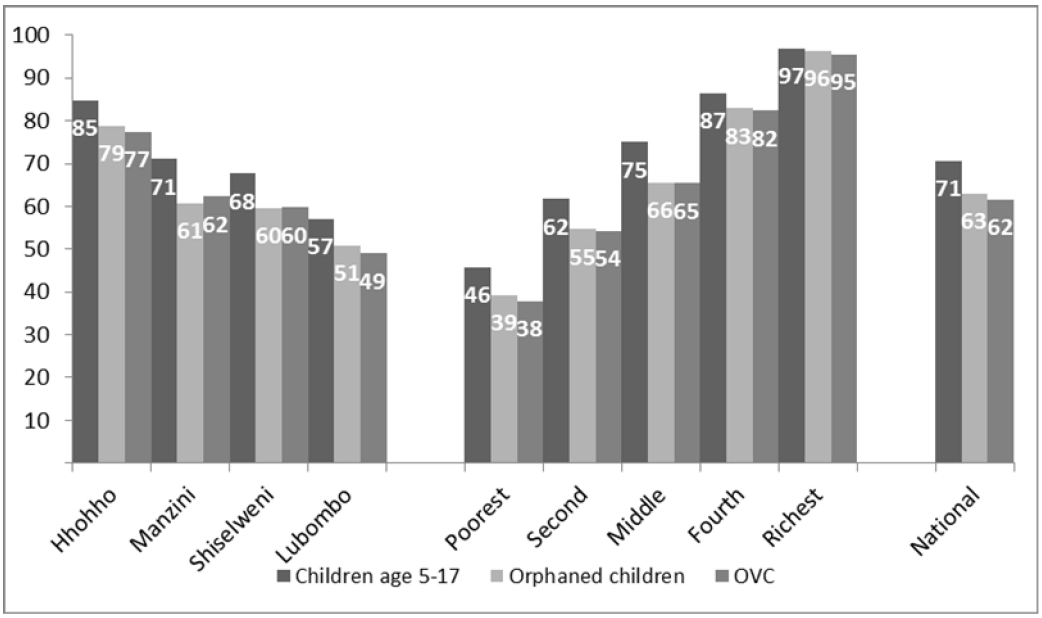


Table OV.2: Possession of basic material needs by orphans and vulnerable children

Percentage of children age 5–17 years possessing three minimum basic material needs, the percentage of orphans, non-orphans, OVCs, and non-OVC who possess all three basic material needs, and the ratio of the percentage for orphans to non-orphans and OVC to non-OVC, according to background characteristics, Swaziland, 2010

	Percentage of children 5–17 years possessing:				Number of children age 5–17 years	Percentage possessing all three basic needs, by OVC status:									
						Orphanhood status				Ratio orphan to non-orphan	OVC status				Ratio OVC to non-OVC
	Shoes	Two sets of clothes	At least one meal per day	All three basic needs		Orphaned	Number of orphans	Non-orphans	Number of non-orphans		OVC	Number of OVCs	Non-OVC	Number of non-OVCs	
Sex															
Male	75.4	81.2	95.9	69.8	3,759	61.6	1,122	73.3	2,638	0.84	60.8	1,881	78.9	1,878	0.77
Female	76.1	84.0	96.5	71.7	3,615	64.3	1,090	74.8	2,525	0.86	62.5	1,842	81.2	1,773	0.77
Region															
Hhohho	88.0	95.0	96.5	84.8	1,890	78.9	550	87.3	1,340	0.90	77.4	783	90.1	1,107	0.86
Manzini	75.9	83.5	96.5	71.1	1,946	60.7	570	75.3	1,377	0.81	62.3	985	80.1	962	0.78
Shiselweni	73.7	76.6	94.7	67.6	1,991	59.7	654	71.5	1,337	0.83	59.7	1,091	77.2	900	0.77
Lubombo	63.4	74.0	97.3	57.0	1,547	50.8	439	59.5	1,108	0.85	49.0	865	67.2	683	0.73
Area															
Urban	90.0	94.4	98.8	89.1	1,174	82.9	283	91.0	890	0.91	82.6	448	93.1	726	0.89
Rural	73.1	80.3	95.7	67.2	6,201	60.0	1,929	70.5	4,272	0.85	58.8	3,276	76.8	2,925	0.77
Age															
0–4 years	76.2	83.3	96.1	71.3	2,899	58.7	546	74.3	2,353	0.79	60.2	1,266	80.0	1,633	0.75
5–9 years	73.2	81.9	96.8	68.1	2,986	61.3	1,058	71.8	1,927	0.85	59.4	1,609	78.2	1,377	0.76
10–14 years	80.2	82.5	95.0	74.8	1,490	69.7	608	78.3	882	0.89	67.9	849	83.8	641	0.81
15–17 years															
Wealth index quintiles	55.5	65.1	93.4	45.8	1,705	39.3	547	48.9	1,158	0.80	37.8	954	56.0	751	0.68
Poorest	68.0	77.1	94.3	61.8	1,673	54.7	572	65.4	1,101	0.84	54.3	941	71.4	732	0.76
Second	79.5	86.6	97.8	75.0	1,480	65.6	433	78.9	1,048	0.83	65.4	780	85.7	700	0.76
Middle	88.9	93.5	97.6	86.5	1,433	82.9	412	88.0	1,021	0.94	82.4	675	90.2	758	0.91
Fourth	97.3	98.6	99.3	97.0	1,083	96.4	248	97.2	835	0.99	95.5	373	97.8	710	0.98
Total	75.8	82.6	96.2	70.7	7,375	63.0	2,212	74.0	5,163	0.85	61.6	3,723	80.0	3,651	0.77

School attendance among OVC

One of the measures developed for the assessment of the status of OVC relative to their peers looks at the school attendance of children age 10–14 years who have lost both parents (double orphans) versus that of those whose parents are alive (and who live with at least one of these parents). If children whose parents have died do not have the same access to school as their peers, then it implies that families and schools are not ensuring that these children's rights to education are being met.

Table OV.3 presents school attendance of children age 10–14 years by orphan and vulnerability status and by age, region, urban vs. rural residence and household wealth. In the 2010 Swaziland MICS, eight percent of children age 10–14 have lost both parents, and among those 97 percent are currently attending school. Among children ages 10–14 years who have not lost a parent and who live with at least one parent, 99 percent are attending school, which indicates an orphan to non-orphan school attendance ratio of 0.99. For both OVC and non-OVC children age 10–14 years, 98 percent are attending school, which indicates parity in school attendance among OVC and non-OVC. The estimated ratios of orphans to non-orphans as well as OVC to non-OVC suggest that OVC do almost as well as those not orphaned or vulnerable in terms of school attendance.

When stratified by region and urban vs. rural residency, the results reveal only minor differences in school attendance across the four regions, and between urban and rural areas. The only exception is orphaned children from Lubombo, who are less likely than other children to be attending school. The results also show only minor differences in school attendance between males and females, except for orphaned male children who had a slightly lower school attendance rate compared with their female counterparts. All in all, no apparent pattern can be observed between school attendance and household wealth.

Table OV.3A presents school attendance of children age 6–17 years by orphan and vulnerability status and by demographic and socio-economic characteristics. When all school-going age children are included in the sample, school attendance rates start to drop somewhat, and this is more so for OVC than for children not orphaned or vulnerable. Among orphaned children and orphaned or vulnerable children age 6–17 years, 93 percent and 94 percent, respectively, are attending school. In contrast, comparable figures for children who are not orphaned and those who are not orphaned or vulnerable are 97 percent and 96 percent, respectively, which indicates a double orphan to non-double orphan school attendance ratio of 0.96 and an OVC to non-OVC school attendance ratio of 0.98. These ratios of orphan to non-orphan and OVC to non-OVC suggest that OVC from this age group are somewhat disadvantaged in terms of school attendance.

The results also show that when the sample includes all school-going age children, a positive linear association begins to emerge between school attendance and household wealth. The only exception is orphaned children, for whom no linear association can be detected between school attendance and household wealth.

Table OV.03: School attendance of orphans and vulnerable children

School attendance of children age 10–14 years by orphanhood and vulnerability, Swaziland, 2010

	Percentage of children whose mother and father have died (orphans)	Percentage of children of whom both parents are alive and child is living with at least one parent (non-orphans)	Percentage of children who are orphaned or vulnerable (OVCs)	Number of children age 10–14 years	Percentage of children who are orphans and are attending school	Total number of orphan children age 10–14 years	Percentage of OVCs who are attending school	Total number of OVCs age 10–14 years	Percentage of children who are non-orphans and are attending school	Total number of non-orphan children age 10–14 years	Orphans to non-orphans school attendance ratio	Percentage of children who are not orphaned or vulnerable (non-OVCs) and are attending school	Total number of non-OVCs age 10–14 years	OVC to non-OVC school attendance ratio
Sex														
Male	7.1	44.6	35.1	1,532	95.8	108	96.4	538	97.8	683	0.98	97.2	994	0.99
Female	8.8	45.3	37.0	1,454	98.5	128	98.7	539	99.4	659	0.99	98.6	916	1.00
Region														
Hhohho	8.5	47.9	27.6	782	100.0	66	98.2	216	99.0	374	1.01	98.9	566	0.99
Manzini	6.4	51.0	36.3	770	(97.9)	50	97.9	279	98.5	393	0.99	96.6	491	1.01
Shiselweni	8.8	36.0	39.0	768	98.6	68	98.1	300	98.2	276	1.00	97.9	468	1.00
Lubombo	7.8	44.9	42.3	665	91.4	52	96.2	281	98.5	299	0.93	97.9	384	0.98
Area														
Urban	6.2	58.9	24.1	475	(96.4)	29	96.7	115	98.7	280	0.98	97.1	361	1.00
Rural	8.2	42.3	38.3	2,511	97.4	207	97.7	961	98.6	1062	0.99	98.1	1549	1.00
Wealth index quintiles														
Poorest	8.3	41.0	41.2	698	(100.0)	58	96.5	288	98.1	286	1.02	97.5	410	0.99
Second	8.0	38.2	39.3	673	95.0	54	97.7	264	98.7	257	0.96	98.1	408	1.00
Middle	7.7	46.3	39.1	579	(95.5)	45	96.8	226	97.9	268	0.97	97.5	353	0.99
Fourth	8.7	44.5	32.8	586	100.0	51	99.5	192	98.2	261	1.02	96.6	394	1.03
Richest	6.3	60.0	23.4	450	(93.7)	28	98.3	105	100.0	270	0.94	100.0	345	0.98
Total	7.9	45.0	36.0	2,986	97.2	236	97.6	1,076	98.6	1,342	0.99	97.9	1,910	1.00

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

Table OV.03A: School attendance of orphans and vulnerable children

School attendance of children age 6–17 years by orphanhood and vulnerability, Swaziland, 2010

	Percentage of children whose mother and father have died (orphans)	Percentage of children of whom both parents are alive and child is living with at least one parent (non-orphans)	Percentage of children who are orphaned or vulnerable (OVCs)	Number of children age 6–17 years	Percentage of children who are orphans and are attending school	Total number of orphan children age 6–17 years	Percentage of OVCs who are attending school	Total number of OVCs age 6–17 years	Percentage of children who are non-orphans and are attending school	Total number of non-orphan children age 6–17 years	Orphans to non-orphans school attendance ratio	Percentage of children who are not orphaned or vulnerable (non-OVCs) and are attending school	Total number of non-OVCs age 6–17 years	OVC to non-OVC school attendance ratio
Sex														
Male	6.6	47.1	35.0	3,426	91.9	227	93.4	1,200	96.5	1,614	0.95	95.9	2,226	0.97
Female	6.7	45.7	35.2	3,350	93.8	226	94.0	1,181	96.8	1,531	0.97	95.3	2,169	0.99
Region														
Hhohho	6.6	50.7	25.7	1,736	95.3	115	94.2	446	97.7	881	0.98	96.8	1,290	0.97
Manzini	5.6	49.5	34.9	1,792	92.7	100	93.4	625	97.0	886	0.96	94.5	1,168	0.99
Shiselweni	8.0	37.7	38.4	1,825	92.7	146	94.3	701	95.8	688	0.97	95.3	1,124	0.99
Lubombo	6.5	48.4	42.8	1,423	90.2	92	93.1	609	95.8	689	0.94	95.7	814	0.97
Area														
Urban	4.7	58.3	23.1	1,071	92.5	50	92.8	247	97.4	624	0.95	94.8	824	0.98
Rural	7.1	44.2	37.4	5,706	92.9	403	93.8	2,134	96.5	2,520	0.96	95.8	3,572	0.98
Wealth index quintiles														
Poorest	7.0	43.9	41.1	1,561	91.8	109	90.5	642	94.4	685	0.97	93.9	920	0.96
Second	7.9	39.9	39.8	1,543	92.6	122	94.1	613	96.4	616	0.96	94.3	929	1.00
Middle	6.2	46.3	38.4	1,342	95.2	83	94.3	515	96.0	621	0.99	96.0	827	0.98
Fourth	6.9	46.3	30.8	1,334	93.3	92	96.1	410	97.4	618	0.96	96.4	924	1.00
Richest	4.7	60.7	20.1	997	91.1	47	96.6	200	99.5	605	0.92	97.8	796	0.99
Total	6.7	46.4	35.1	6,777	92.9	453	93.7	2,381	96.7	3,144	0.96	95.6	4,396	0.98

Malnutrition among OVC

Table OV.04 presents the prevalence of malnutrition among OVC under five years of age. The results show that overall, malnutrition is more prevalent among OVC compared with children not orphaned or vulnerable. Nationally, 39 percent of OVC under five are stunted compared with 28 percent for children who are not orphaned or vulnerable. For underweight, the comparable figures are eight percent for OVC and five percent for children who are not orphaned or vulnerable.

Patterns of higher rates of malnutrition are consistent across different demographic and socio-economic characteristics. The only exception is under-five children from households within the highest quintile, for whom there is no evidence of higher prevalence of stunting among OVC when compared with non-orphaned or vulnerable counterparts (Figure OV.4). For underweight, the prevalence tends to be higher among OVC than among non-orphaned or vulnerable counterparts; however, for some socio-economic groups, including households in the highest wealth quintile, the differences may not be statistically significant.

Figure OV.4: Percentage of children under age five stunted by OVC status, Swaziland, 2010

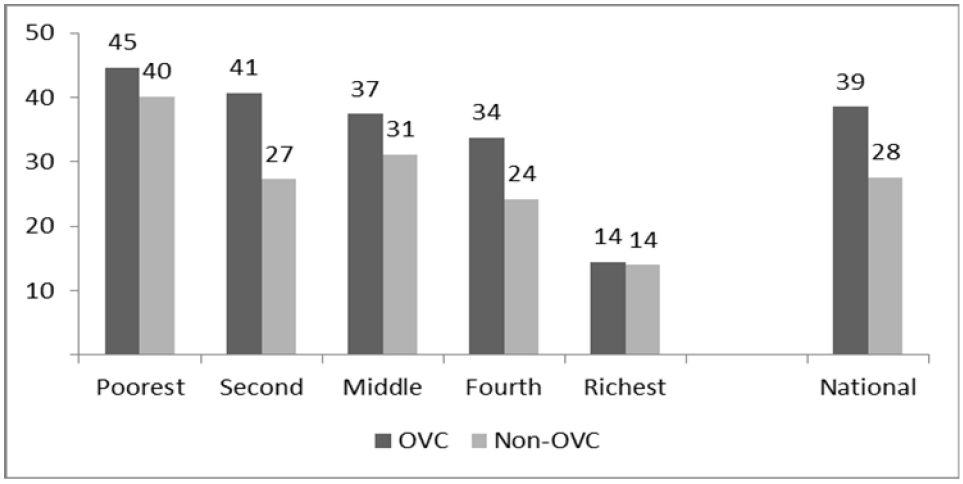


Figure OV.5: Percentage of children under age five underweight by OVC status, Swaziland, 2010

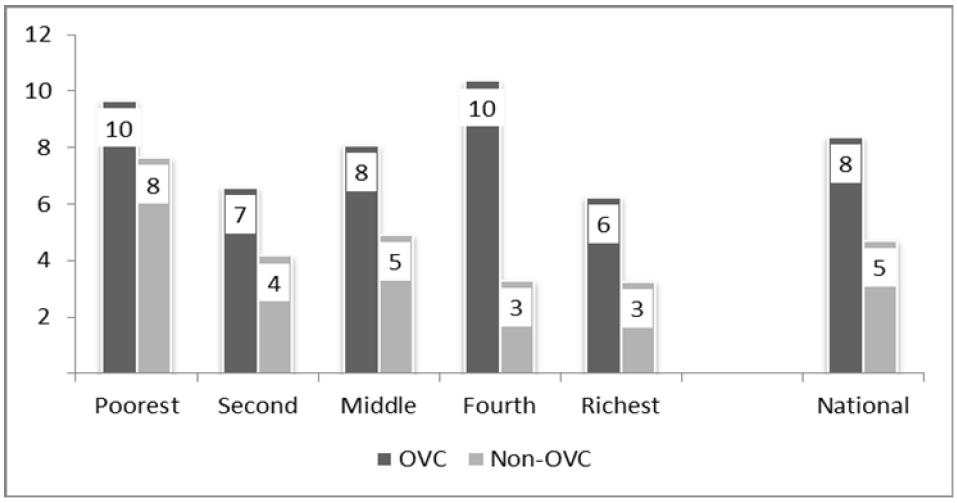


Table OV.04: Nutritional status of OVCs and non-OVCs

Percentage of children under age five by nutritional and OVC status according to two anthropometric indices: height-for-age (stunted) and weight-for-age (underweight) Swaziland, 2010

	Stunting by OVC status							Underweight by OVC status						
	OVC		Non-OVC		Ratio OVC to non-OVC	Percentage of children under age five who are stunted	Number of children under age five	OVC		Non-OVC		Ratio OVC to non-OVC	Percent-age of children under age five who are under-weight	Number of children under age five
	Percentage stunted	Number of OVCs	Percentage stunted	Number of non-OVCs				Percent-age under-weight	Number of OVCs	Percent-age underweig ht	Number of non-OVCs			
Sex														
Male	42.7	382	30.1	840	1.42	34.0	1,222	9.1	381	5.6	844	1.63	6.7	1,226
Female	34.7	411	25.2	929	1.37	28.1	1,340	7.7	415	3.9	931	1.98	5.0	1,346
Area														
Urban	28.6	89	21.9	419	1.31	23.1	508	6.7	88	3.7	418	1.79	4.2	506
Rural	39.8	704	29.3	1,350	1.36	32.9	2,054	8.6	709	5.0	1,357	1.72	6.2	2,066
Region														
Hhohho	43.1	137	24.1	499	1.79	28.2	636	11.5	140	5.0	502	2.29	6.4	641
Manzini	33.7	228	25.8	537	1.30	28.1	765	7.5	226	3.9	535	1.92	5.0	761
Shiselweni	43.8	248	33.9	399	1.29	37.7	647	9.1	249	5.3	404	1.73	6.8	653
Lubombo	33.9	181	28.0	333	1.21	30.1	514	6.0	181	4.8	335	1.26	5.2	516
Age														
0–5 months	29.2	52	16.5	212	1.76	19.0	264	4.5	53	4.4	213	1.04	4.4	266
6–11 months	25.8	66	20.7	177	1.24	22.1	243	10.3	66	8.7	178	1.18	9.1	244
12–23 months	44.7	144	29.6	365	1.51	33.8	509	10.5	147	3.5	367	3.01	5.5	513
24–35 months	44.2	165	36.4	358	1.21	38.8	523	6.8	165	5.5	360	1.24	5.9	525
36–47 months	41.4	177	29.7	333	1.40	33.8	511	8.7	178	3.8	333	2.29	5.5	511
48–59 months	33.2	189	24.3	324	1.37	27.6	513	8.3	188	4.2	324	1.97	5.7	512
Wealth index quintiles														
Poorest	44.6	244	40.2	383	1.11	41.9	627	9.6	245	7.6	386	1.26	8.4	631
Second	40.6	200	27.3	336	1.49	32.3	536	6.6	203	4.2	336	1.58	5.1	539
Middle	37.4	195	31.0	339	1.21	33.4	534	8.1	193	4.9	339	1.65	6.1	533
Fourth	33.7	104	24.2	365	1.39	26.3	470	10.4	105	3.3	367	3.15	4.9	473
Richest	14.4	49	13.9	346	1.04	14.0	395	6.2	49	3.3	347	1.92	3.6	397
Total	38.5	793	27.5	1,769	1.40	30.9	2562	8.4	797	4.7	1775	1.78	5.8	2,572

Sexual behaviour among OVC

Research from HIV/AIDS affected countries suggests that children who were orphaned are more likely to have worse sexual and reproductive health outcomes than other children.[42] Table OV.5 presents the percentages of early sexual intercourse for OVC age 15–17 years. In the 2010 Swaziland MICS, information on the age of first sexual intercourse was sought from all men age 15–59 years and women age 15–49 years. The results show that the percentage of children age 15–17 years who had sex before 15 years of age is only slightly higher among OVC compared with children not orphaned or vulnerable, as indicated by an OVC to non-OVC ratio of 1.3. This differential is driven primarily by female children: 4.3 percent of orphaned or vulnerable females age 15–17 years had sex before age 15 while 2.4 percent of females not orphaned or vulnerable had sex before age 15, which indicates an OVC to non-OVC ratio of 1.7. Looking at regional variations, OVC age 15–17 years from Manzini and Shiselweni are about twice more likely than their Hhohho and Lubombo counterparts to have had sex before 15. However, the results should be interpreted with caution as the differences may not be statistically significant.

[42] Gregson S, Terceira N, Mushati P, Nyamukapa C, Campbell, C, 2004; Edstrom J, Khan N, 2009.

Table OV.05: Sexual intercourse before age 15 by OVC status

Percentage of children age 15–17 who had sexual intercourse before exact age 15 by OVC status, Swaziland, 2010

	OVC status						
	OVC		Non-OVC		Ratio OVC to non-OVC	Percentage who had sexual intercourse before exact age 15	Number of young people age 15–17 years
	Percentage who had sexual intercourse before exact age 15	Number of OVCs	Percentage who had sexual intercourse before exact age 15	Number of non-OVCs			
Sex							
Male	1.9	365	2.5	280	0.77	2.2	645
Female	4.3	392	2.4	286	1.77	3.5	678
Area							
Urban	3.1	130	2.5	162	1.25	2.7	292
Rural	3.2	627	2.5	404	1.29	2.9	1,031
Region							
Hhohho	2.6	117	3.2	154	0.79	3.0	271
Manzini	3.0	165	1.5	132	2.00	2.4	297
Shiselweni	3.7	268	1.9	154	1.92	3.1	422
Lubombo	2.9	207	3.2	126	0.91	3.0	333
Age							
15	2.5	244	2.5	202	.99	2.5	446
16	4.2	286	2.8	178	1.49	3.7	464
17	2.6	227	2.2	186	1.23	2.4	413
Wealth index quintiles							
Poorest	4.2	167	3.3	91	1.27	3.9	258
Second	4.7	193	2.3	87	2.03	3.9	280
Middle	2.1	146	.9	112	2.30	1.6	258
Fourth	2.5	159	2.4	127	1.06	2.4	286
Richest	1.1	92	3.4	149	.32	2.5	241
Total	**3.2**	**757**	**2.5**	**566**	**1.28**	**2.9**	**1,323**

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Appendix A. Sample Design

The 2010 Swaziland Multiple Indicator Cluster Survey (MICS) is designed and implemented in line with the fourth round of the Global MICS programme. MICS is a multi-national household survey intended to collect information on maternal and child health indicators, and is technically and financially supported by UNICEF (with contributions from other United Nations and bi-lateral agencies). UNICEF globally recommends a standardized set of indicators in line with the Millennium Development Goals (MDGs) and World Fit For Children (WFFC) goals. However, in Swaziland the MICS tools were customized and adapted based on various technical consultations with the Government of Swaziland and other development counterparts, and in line with national priorities. The 2010 Swaziland MICS was implemented by the Central Statistics Office (CSO).

The major features of sample design are described in this appendix. Sample design features include target sample size, sample allocation, sample frame and listing, choice of domains, sampling stages, stratification, and the calculation of sample weights.

The primary objective of the sample design for the 2010 Swaziland MICS was to produce statistically reliable estimates of most indicators, at the national level, for urban and rural areas, and for the four regions of the country (Hhohho, Manzini, Shiselweni and Lubombo).

A multi-stage, stratified cluster sampling approach was used for the selection of the survey sample. The 2006/07 Swaziland Demographic Health Survey (SDHS) collected many of the indicators in the MICS. Therefore, the results of the 2006/07 SDHS and the sample design were used as a reference in finalizing the sample design for the 2010 Swaziland MICS. In the survey, most of the indicators will be tabulated at the national level, urban and rural domains, and for the four regions as in the case of the 2006/07 SDHS.

1. Sampling frame and stratification

The sampling frame for MICS comes from the recent Swaziland Census of Population and Housing data collected in 2007. The primary sampling units (PSUs) are the census enumeration areas (EAs). The EAs were created for the 2007 Census operations with well-defined boundaries identified on sketch maps. The number of households in an EA is based on the expected workload for one enumerator. The total number of EAs and number of households by rural-urban for each region from the 2007 Census are presented in Table 1. According to the 2007 Census, the average number of households per EA is 103 (274 for rural EAs and 34 for urban EAs).

The first level of stratification for the sampling frame of EAs corresponds to the regions (domain of analysis), the four regions, by urban and rural strata. The Company Towns and Estates are also included in the urban domain and are treated as separate strata within.

Table 1: Total number of 2007 Census EAs and households by region and rural/urban residence, Swaziland						
Regions	Total number of EAs			Total number of households		
	Total	Rural	Urban	Total	Rural	Urban
Hhohho	589	181	408	60,725	39,139	21,586
Manzini	598	221	377	72,108	35,538	36,570
Shiselweni	428	24	404	37,066	33,156	3,910
Lubombo	450	86	364	42,296	32,270	10,026
Swaziland	**2,065**	**512**	**1,553**	**212,195**	**140,103**	**72,092**
Note: 15, 21 and 76 Company Towns and Estate EA's from Hhohho, Manzini and Lubombo regions respectively are included in corresponding urban areas.						

2. Household listing in sample EAs

A recent household listing was carried out in all MICS sample EAs. The new household listing details was used in the computation of sample weights to adjust for the changes in the number of households since the 2007 Census. At the second sampling stage, households were selected from the household listing using circular systematic sampling using a random start. The units of analysis for the MICS are the individual households and persons, including specific sub-population groups such as women age 15–49, men age 15–59 and children below five years of age.

3. Sample size and allocation

The sample size for a good household survey, such as the 2010 Swaziland MICS, is determined by the accuracy required for the estimates for each domain, as well as by the resource and operational constraints. The accuracy of the survey estimates depends on both the sampling error, which can be measured through variance estimation, and the non-sampling error, which results from all other sources of error, including response and measurement errors as well as coding, keying and processing errors. In a perfect setting of simple random sampling, the sampling error is inversely proportional to the square root of the sample size. On the other hand, the non-sampling error may increase with the sample size, since it is more difficult to control the quality of a very large survey operation. It is therefore important that the overall sample size be manageable for quality and operational control purposes.

In determining the sample size for the 2010 Swaziland MICS, the information from the 2006/07 SDHS was used. The 2006/07 SDHS final report includes appendix tables with standard errors, confidence intervals and design effects for selected indicators. Some of these indicators, which are also covered by the MICS4, were reviewed to understand the level of precision. After reviewing the precision for different indicators based on the 2006/07 SDHS data, it was concluded that a more or less similar sample sizes as in the SDHS could be retained for the regions for the MICS4 (one of the key indicators used here in this case is the full immunization level among children age 12–23 months by region, which retains the maximum sample size required for the regions and is adequate for most of the other indicators in the 2010 Swaziland MICS4). However, to further reduce the clustering effect,

it was decided to reduce the number of households per EA to 15, from the average 20 households in SDHS 2006/2007. The formula used in estimating the minimum sample size required for a region is given below for reference:

$$n = \frac{[\,4\,(r)\,(1\text{-}r)\,(f)\,(1.1)\,]}{[\,(0.12r)^2\,(p)\,(n_h)\,]}$$

where:

n = the required sample size, expressed as number of households

4 = the factor to achieve the 95 percent level of confidence

r = the predicted or anticipated prevalence (coverage rate) of the indicator

1.1 = the factor necessary to raise the sample size by 10 per cent for non-response

$0.12r$ = the margin of error to be tolerated at the 95 percent level of confidence, defined as 12 percent of r (relative margin of error of r)

p = the proportion of the total population upon which the indicator, r, is based

n_h = the average household size

The allocation of the sample EAs in each region to the rural and urban strata will be proportional to the number of households. Based on these criteria, the proposed allocation of sample EAs and households by region and rural and urban stratum is presented in Table 2, resulting in a total sample of 365 EAs and 5,475 households.

Table 2: Allocation of sample EAs and number of households by region, urban and rural stratum, Swaziland MICS, 2010

Regions	Number of EAs			Number of households		
	Total	Rural	Urban	Total	Rural	Urban
Hhohho	97	39	58	1,455	585	870
Manzini	101	37	64	1,515	555	960
Shiselweni	78	65	13	1,170	975	195
Lubombo	89	58	31	1,335	870	465
Swaziland	**365**	**199**	**166**	**5,475**	**2,985**	**2,490**

The proposed allocation of sample EAs in Table 2 of the sample design report was compared with the number of EAs in the frame (Table 1) in order to examine the percentage of EAs in the frame that would be selected for the 2010 Swaziland MICS. At the national level, the sample of 365 EAs is 9.91 percent of the EAs in the frame (7.80 percent for rural and 12.44 percent for urban). At the regional level, the percentage of rural EAs in the sample varies from 6.22 percent (Shiselweni) to 10.46 percent (Hhohho), and the percentage of urban EAs in the sample varies from 9.34 percent (Manzini) to 32.92 percent (Shiselweni).

The proposed sample size and allocation for the 2010 Swaziland MICS was compared with the corresponding sample for the 2006/07 Swaziland DHS. Compared with the SDHS sample of 275 EAs

(164 rural and 111 urban), the number of sample EAs for the MICS is 32.73 percent higher (21.24 percent for rural and 49.55 percent for urban). One reason for this is that the proposed number of households to be selected per EA for the MICS is 15, compared with 20 for the SDHS.

4. Sample selection procedures

The sample EAs for the 2010 Swaziland MICS were selected from the complete list of the 2007 Census EAs. In the first stage, sample of EAs within each stratum was selected using the PPS (probability proportional to size) methodology, where the measure of size was based on the number of households in the 2007 Census frame for each EA.

5. Weighting procedures

To make the estimates from the 2010 Swaziland MICS sample to be representative of the population, it is necessary to multiply the data by a sampling weight, or expansion factor. The basic weight for each sample household is equal to the inverse of its probability of selection (calculated by multiplying the probabilities at each sampling stage).

As indicated in the previous section, the 365 EAs sampled for the 2010 Swaziland MICS were selected using the PPS methodology from the total 2,065 EAs in the Census 2007, separately for each stratum. At the second stage 15 sample households are selected with equal probability from the listing for each sampled EA. Therefore, the overall probability of selection of the 2010 Swaziland MICS4 sample households can be expressed as follows:

$$p_{hi} = \frac{n_h \times M_{hi}}{M_h} \times \frac{m_{hi}}{M'_{hi}},$$

where:

- p_{hi} = overall probability of selection for the MICS sample households in the i^{th} sample EA in stratum (region, urban/rural,) h
- n_h = number of sample EAs selected for the MICS4 in stratum h
- M_{hi} = total number of households from the Census 2007 frame in the i^{th} sample EA in stratum h
- M_h = total number of households in stratum h from the 2007 Census frame (cumulated measure of size for stratum h)
- m_{hi} = 15= number of households selected from the listing for the i^{th} sample EA in stratum h
- M'_{hi} = total number of households listed in the i^{th} sample EA in stratum h

The basic weight for the MICS sample households is the inverse of this probability of selection, expressed as follows:

$$W_{hi} = \frac{1}{p_{hi}} = \frac{M_h \times M'_{hi}}{n_h \times M_{hi} \times m_{hi}},$$

where:

W_{hi} = basic weight for the MICS sample households in the i^{th} sample EA in stratum h

Following the data collection for the MICS, it will be necessary to adjust the basic weights to account for non-responses, as follows:

$$W'_{hi} = W_{hi} \times \frac{m_{hi}}{m'_{hi}},$$

where:

W'_{hi} = adjusted weight for the MICS sample households in the i^{th} sample EA in stratum h

m'_{hi} = number of sample households with completed interviews in the i^{th} sample EA in stratum h

The woman weight is calculated as follows:

$$W'_{whi} = W'_{hi} \times \frac{m_{whi}}{m'_{whi}}$$

where:

W'_{whi} = adjusted weight for the MICS ample women in the i^{th} sample EA in stratum h

m_{whi} = number of eligible women in the MICS sample in the i^{th} sample EA in stratum h

m'_{whi} = number of eligible women with completed interviews in the i^{th} sample EA in stratum h

The man weight is calculated as follows:

$$W'_{mhi} = W_{hi} \times \frac{m_{mhi}}{m'_{mhi}},$$

where:

W'_{mhi} = adjusted weight for the MICS sample men in the i^{th} sample EA in stratum h

m_{mhi} = number of eligible men in the MICS sample in the i^{th} sample EA in stratum h

m'_{mhi} = number of eligible men with completed interviews in the i^{th} sample EA in stratum h

The child weight is calculated as follows:

$$W'_{mhi} = W'_{hi} \times \frac{m_{mhi}}{m'_{mhi}}$$

where:

W'_{chi} = adjusted weight for the MICS sample children in the i^{th} sample EA in stratum h

m_{chi} = number of eligible children in the MICS sample in the i^{th} sample EA in stratum h

m'_{chi} = number of eligible children with completed interviews in the i^{th} sample EA in stratum h

However, computation and implementation of sample weights for the 2010 Swaziland MICS were carried out at the stratum level. This has been done to have a smoothed weight at the stratum level catering for the non-response and variations in the number of households at that level, and also to avoid unusual inflation or deflation in the weights due to variations in small number of cases at the EA level.

6. Computational aspects of sample weights for the 2010 Swaziland MICS

- The sample weights were calculated as the stratum (11 sample domains) base, so each cluster within the same domain will take the same weights (of course different for household, women, men and children level). The weight variable was added to each data set. This was performed by using the statistical software SPSS with an add variables feature under the data/merge files, the data sets were sorted by domain variable and were taken as a key variable during the process.

- Although the weights were calculated by 11 domains, including three company towns/estates of Hhohho, Manzini and Lubombo, they are already the part of three of four main regions. These three 'company towns/estates' domains will be regarded as a part of the Hhohho, Manzini and Lubombo regions.

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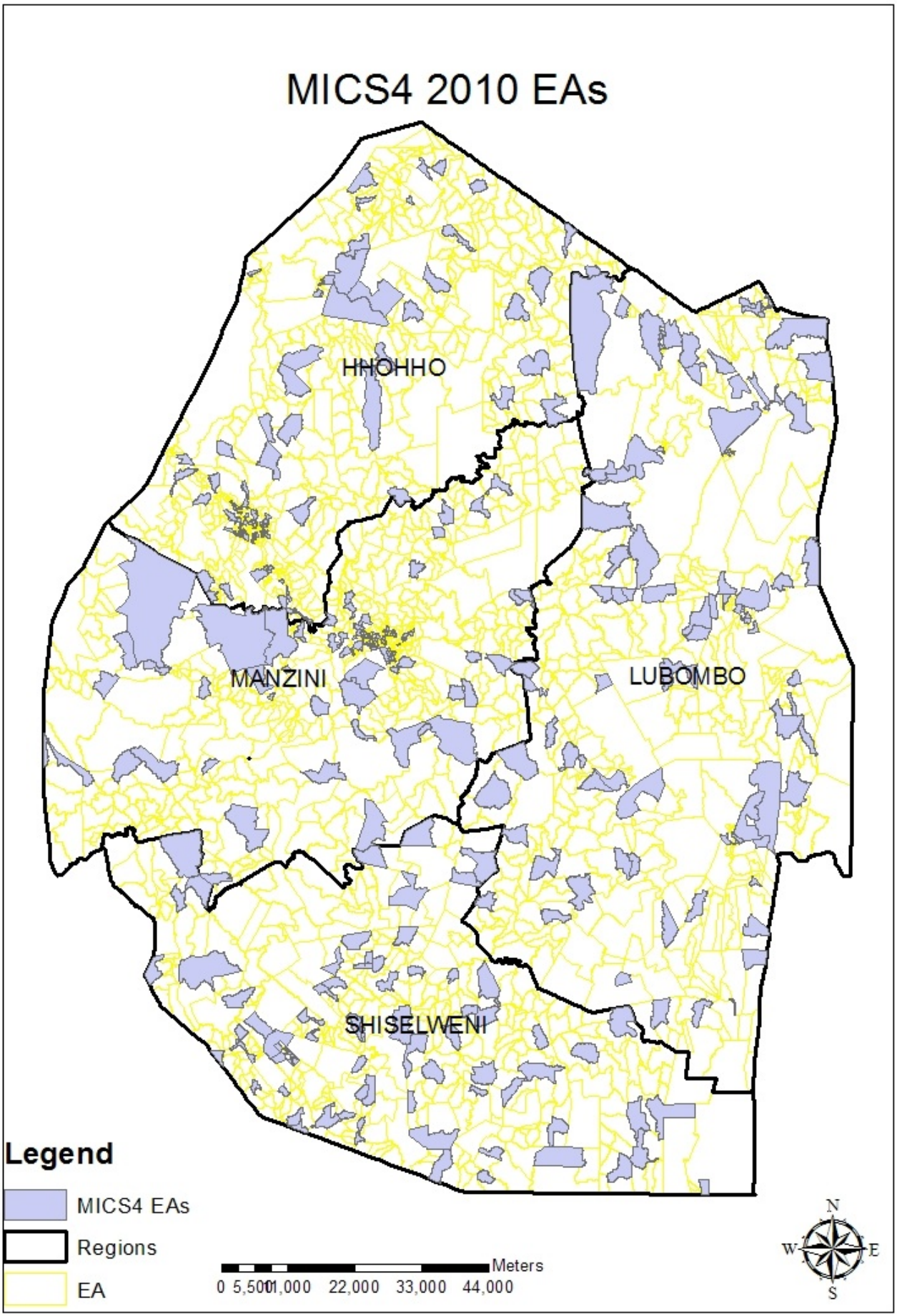
MICS4 2010 EAs
HHOHHO
MANZINI
LUBOMBO
SHISELWENI
Legend
MICS4 EAs
Regions
EA
0 5,500 11,000 22,000 33,000 44,000
Meters
N
W
E
S

Appendix B. List of personnel involved in the survey

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Central Statistics Office (CSO)
Ministry of Health (MoH)
Ministry of Education and Training (MoET)
Royal Swaziland Police (RSP)
Ministry of Natural Resources and Energy (MNRE)
National Emergency Response Council on HIV/AIDS (NERCHA)
Family Life Association of Swaziland (FLAS)
World Food Programme (WFP)
World Vision International
United States Agency for International Development (USAID)
US President's Emergency Plan for AIDS Relief (PEPFAR)
World Health Organization (WHO)
United Nations Joint Programme on AIDS (UNAIDS)
United Nations Population Fund (UNFPA)
United Nation Children Fund (UNICEF)

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CSO	MoH
MoET	MHA

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Save the Children	Swaziland Infant Nutrition Action Network
UNFPA	UNICEF

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Appendix C. Estimates of sampling errors

The sample of respondents selected in the 2010 Swaziland MICS is only one of the samples that could have been selected from the same population, using the same design and 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 between all possible samples. The extent of variability is not known exactly, but can be estimated statistically from the survey results.
The following sampling error measures are presented in this appendix for each of the selected indicators:

- Standard error (*se*): Sampling errors are usually measured in terms of standard errors for particular indicators (means, proportions etc). A standard error is the square root of the variance. The Taylor linearization method is used for the estimation of standard errors.
- Coefficient of variation (*se*/*r*) is the ratio of the standard error to the value of the indicator.
- Design effect (*deff*) is the ratio of the actual variance of an indicator, under the sampling method used in the survey, to the variance calculated under the assumption of simple random sampling. The square root of the design effect, called the design factor (*deft*) is used to show the efficiency of the sample design. A *deft* value of 1.0 indicates that the sample design is as efficient as a simple random sample, while a *deft* value above 1.0 indicates the increase in the standard error due to the use of a more complex sample design.
- Confidence limits are calculated to show the interval within which the true value for the population can be reasonably assumed to fall. For any given statistic calculated from the survey, the value of that statistics will fall within a range of plus or minus two times the standard error ($p + 2.se$ or $p - 2.se$) of the statistic in 95 percent of all possible samples of identical size and design.

For the calculation of sampling errors from the MICS data, the SPSS Complex Samples module has been used. The results are shown in the tables that follow. In addition to the sampling error measures described above, the tables also include weighted and unweighted counts of denominators for each indicator.

Sampling errors are calculated for indicators of primary interest, for the national total, for the regions, and for urban and rural areas. Two of the selected indicators are based on households, eight are based on household members, 21 are based on women, 19 are based on children under five and 12 are based on men. All indicators presented here are in the form of proportions. Table SE.1 shows the list of indicators for which sampling errors are calculated, including the base population (denominator) for each indicator. Tables SE.2 to SE.8 show the calculated sampling errors.

The standard error, or square root of the variance, is used to measure the sampling error, although it may also include a small variable part of the non-sampling error. The variance estimator should take into account the different aspects of the sample design, such as the stratification and clustering. A

software package such as SPSS provides additional modules for computing these statistics, and the standard SPSS syntaxes are part of the Global MICS package of resources, that can be customized for generating the standard errors of key indicators from the 2010 Swaziland MICS data set.

Table SE.1: Indicators selected for sampling error calculations

List of indicators selected for sampling error calculations, and base populations (denominators) for each indicator, Swaziland, 2010

MICS Indicator		Base Population
	HOUSEHOLDS	
2.16	Iodized salt consumption	All households
3.12	Household availability of insecticide-treated nets (ITNs)	All households
	HOUSEHOLD MEMBERS	
4.1	Use of improved drinking water sources	All households
4.3	Use of improved sanitation facilities	All households
7.5	Secondary school net attendance ratio (adjusted)	Children of secondary school age
8.2	Child labour	Children age 5–14 years
9.18	Prevalence of children with at least one parent dead	Children age 0–17 years
9.19	School attendance of orphans	Children age 10–14 years
9.20	School attendance of non–orphans	Children age 10–14 years
8.5	Violent discipline	Children age 2–14 years
	WOMEN	
-	Pregnant women	All pregnant women age 15–49 years
3.19	Pregnant women sleeping under insecticide-treated nets (ITNs)	All pregnant women age 15–49 years
3.2	Intermittent preventive treatment for malaria	Women age 15–49 years who have had a live birth in the two years
5.2	Early childbearing	Women age 20–24 years
5.3	Contraceptive prevalence	Women age 15–49 currently married/in union
5.4	Unmet need	Women age 15–49 years who are currently married or in union
5.5a	Antenatal care coverage – at least once by skilled personnel	Women age 15–49 years with a live birth in the last two years
5.5b	Antenatal care coverage – at least four times by any provider	Women age 15–49 years with a live birth in the last two years
5.7	Skilled attendant at delivery	Women age 15–49 years with a live birth in the two years
5.8	Institutional deliveries	Women age 15–49 years with a live birth in the two years
5.9	Caesarean section	Women age 15–49 years with last live births in the two years
7.1	Literacy rate among young women	Women age 15–24 years
8.7	Marriage before age 18	Women age 20–49 years
8.9	Polygamy	Women age 15–49 years who are currently married or in union
9.2	Comprehensive knowledge about HIV prevention among young people	Women age 15–24 years
9.3	Knowledge of mother- to-child transmission of HIV	Women age 15–49 years
9.4	Accepting attitudes towards people living with HIV	Women age 15–49 years who have heard of HIV
9.6	Women who have been tested for HIV and know the results	Women age 15–49 years

9.7	Sexually active young women who have been tested for HIV and know the results	Women age 15–24 years who have had sex in the 12 months
9.11	Sex before age 15 among young women	Women age 15–24 years
9.16	Condom use with non-regular partners	women age 15–24 years who had a non-marital, non-cohabiting partner in the 12 months
	UNDER-5s	
2.1a	Underweight prevalence	Children under age five
2.2a	Stunting prevalence	Children under age five
2.3a	Wasting prevalence	children under age five
2.6	Exclusive breastfeeding under 6 months	Infants under six months of age
2.14	Age-appropriate breastfeeding	children age 0–23 months
3.1	Tuberculosis immunization coverage (BCG)	Children age 12–23 months
3.2	Received polio immunization	Children age 12–23 months
3.2 **3.5**	Received DPT/HEPB/HIB immunization	Children age 12–23 months
3.4	Received measles immunization	Children age 12–23 months
-	Diarrhoea in the previous two weeks	Children age 12–23 months
-	Illness with a cough in the previous two weeks	Children under age five
-	Fever in last two weeks	Children under age five
3.8	Oral rehydration therapy with continued feeding	Children under age five with diarrhoea in the previous two weeks
3.10	Antibiotic treatment of suspected pneumonia	Children under age 5 with suspected pneumonia in the previous two weeks
3.15	Children under age five sleeping under insecticide-treated nets (ITNs)	Children under age five
3.18	Anti-malarial treatment of children under age five	Children under age 5 reported to have had fever in the previous two weeks
6.1	Support for learning	Children age 36–59 months
6.7	Attendance to early childhood education	Children age 36–59 months
8.1	Birth registration	Children under age five
	MEN	
5.3M	Contraceptive prevalence	Men age 15–49 currently married/in union
7.1M	Literacy rate among young men	Men age 15–24 years
8.7M	Marriage before age 18	Men age 20–49 years
8.9M	Polygamy	Men age 15–49 years who are currently married or in union
9.2M	Comprehensive knowledge about HIV prevention among young people	Men age 15–24 years
9.3M	Knowledge of mother- to-child transmission of HIV	Men age 15–49 years
9.4M	Accepting attitudes towards people living with HIV	Men age 15–49 years who have heard of HIV
9.6M	Men who have been tested for HIV and know the results	Men age 15–49 years
9.7M	Sexually active young men who have been tested for HIV and know the results	Men age 15–24 years who have had sex in the 12 months
9.11M	Sex before age 15 among young women	Men age 15–24 years
9.16M	Condom use with non-regular partners	Men age 15–24 years who had a non-marital, non-cohabiting partner in the 12 months
9.21	Men who have been circumcised	Men age 15–49 years

Table SE.2: Sampling errors: national

Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deft*) and confidence intervals for selected indicators, Swaziland, 2010

	MICS Indicator	Value (*r*)	Standard error (*se*)	Coefficient of variation (*se/r*)	Design effect (*deff*)	Square root of design effect (*deft*)	Weighted count	Unweighted count	Confidence limits	
									r - 2se	*r + 2se*
HOUSEHOLDS										
Iodized salt consumption	2.16	.5158	.00903	.018	1.539	1.241	4,720	4717	0.498	0.534
Household availability of insecticide-treated nets (ITNs)	3.12	.0991	.00819	.083	3.635	1.907	4,834	4834	0.083	0.115
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	4.1	0.6730	0.01630	0.024	5.836	2.416	20,600	4,834	0.640	0.706
Use of improved sanitation facilities	4.3	0.7810	0.01073	0.014	3.252	1.803	20,600	4,834	0.760	0.802
Secondary school net attendance ratio (adjusted)	7.5	0.4719	0.01223	0.026	1.500	1.225	2,625	2,499	0.447	0.496
Child labour	8.2	0.4224	0.00874	0.021	1.742	1.320	5,885	5,562	0.405	0.440
Prevalence of children with at least one parent dead	9.18	0.2361	0.00672	0.028	2.427	1.558	10,234	9,696	0.223	0.250
School attendance of orphans	9.19	0.9724	0.00396	0.004	.128	.358	236	221	0.964	0.980
School attendance of non-orphans	9.20	0.9858	0.00362	0.004	1.191	1.091	1,342	1,275	0.979	0.993
Violent discipline	8.5	0.8894	0.00700	0.008	1.418	1.191	7,631	2,846	0.875	0.903
WOMEN										
Pregnant women	-	0.0450	0.00383	0.085	1.599	1.265	4,688	4,688	0.037	0.053
Pregnant women sleeping under insecticide-treated nets (ITNs)	3.19	0.0168	0.00889	0.530	.953	.976	200	200	0.000	0.035
Intermittent preventive treatment for malaria	3.20	0.0139	0.00369	0.267	.979	.989	998	981	0.006	0.021
Early childbearing	5.2	0.2205	0.01317	0.060	.917	.957	904	909	0.194	0.247
Contraceptive prevalence	5.3	0.6519	0.01298	0.020	1.373	1.172	1,882	1,851	0.626	0.678
Unmet need	5.4	0.1303	0.00920	0.071	1.382	1.176	1,882	1,851	0.112	0.149
Antenatal care coverage - at least once by skilled personnel	5.5a	0.9678	0.00457	0.005	.683	.826	1,031	1,018	0.959	0.977
Antenatal care coverage – at least four times by any provider	5.5b	0.7663	0.01240	0.016	.873	.935	1,031	1,018	0.741	0.791
Skilled attendant at delivery	5.7	0.8198	0.01424	0.017	1.395	1.181	1,031	1,018	0.791	0.848
Institutional deliveries	5.8	0.8043	0.01422	0.018	1.307	1.143	1,031	1,018	0.776	0.833
Caesarean section	5.9	0.1234	0.01065	0.086	1.066	1.032	1,031	1,018	0.102	0.145
Literacy rate among young women	7.1	0.9416	0.00614	0.007	1.361	1.167	2,002	1,988	0.929	0.954
Marriage before age 18	8.7	0.1091	0.00643	0.059	1.533	1.238	3,590	3,609	0.096	0.122
Polygamy	8.9	0.1313	0.00928	0.071	1.397	1.182	1,882	1,851	0.113	0.150
Comprehensive knowledge about HIV prevention among young people	9.2	0.5815	0.01251	0.022	1.277	1.130	2,002	1,988	0.557	0.607

Knowledge of mother- to-child transmission of HIV	9.3	0.6072	0.00687	0.011	0.929	0.964	4,688	4,688	0.593	0.621
Accepting attitudes towards people living with HIV	9.4	0.4709	0.00936	0.020	1.638	1.280	4,659	4,660	0.452	0.490
Women who have been tested for HIV and know the results	9.6	0.4290	0.00745	0.017	1.062	1.031	4,688	4,688	0.414	0.444
Sexually active young women who have been tested for HIV and know the results	9.7	0.4664	0.01419	0.030	0.793	0.890	978	981	0.438	0.495
Sex before age 15 among young women	9.11	0.0378	0.00435	0.115	1.034	1.017	2,002	1,988	0.029	0.046
Condom use with non-regular partners	9.16	0.7306	0.01753	0.024	1.037	1.018	655	665	0.696	0.766
UNDER-5s										
Underweight prevalence	2.1a	0.0584	0.00597	0.102	1.664	1.290	2,572	2,570	0.046	0.070
Stunting prevalence	2.2a	0.3094	0.01170	0.038	1.639	1.280	2,562	2,559	0.286	0.333
Wasting prevalence	2.3a	0.0076	0.00198	0.260	1.328	1.152	2,560	2,558	0.004	0.012
Exclusive breastfeeding under 6 months	2.6	0.4411	0.02359	0.053	0.605	0.778	273	269	0.394	0.488
Age-appropriate breastfeeding	2.14	0.4033	0.01502	0.037	0.976	0.988	1,045	1,042	0.373	0.433
Tuberculosis immunization coverage	-	0.9819	0.00597	0.006	1.033	1.016	521	515	0.970	0.994
Received polio immunization	-	0.8501	0.01440	0.017	0.836	0.914	521	515	0.821	0.879
Received DPT/HEPB/HIB immunization	-	0.9062	0.01252	0.014	0.946	0.973	520	514	0.881	0.931
Received measles immunization	-	0.9780	0.00661	0.007	0.991	0.996	494	490	0.965	0.991
Diarrhoea in the previous two weeks	-	0.1591	0.00876	0.055	1.519	1.233	2,647	2,647	0.142	0.177
Illness with a cough in the previous two weeks	-	0.1299	0.00771	0.059	1.391	1.179	2,647	2,647	0.114	0.145
Fever in last two weeks	-	0.0976	0.00678	0.069	1.383	1.176	2,647	2,647	0.084	0.111
Oral rehydration therapy with continued feeding	3.8	0.4806	0.02051	0.043	0.706	0.840	421	420	0.440	0.522
Antibiotic treatment of suspected pneumonia	3.10	0.6054	0.02293	0.038	0.750	0.866	344	342	0.560	0.651
Children under age five sleeping under insecticide-treated nets (ITNs)	3.15	0.0147	0.00281	0.192	1.415	1.190	2,582	2,584	0.009	0.020
Anti-malarial treatment of children under age five	3.18	0.0100	0.00575	0.574	0.907	0.952	258	273	0.000	0.022
Support for learning	6.1	0.4998	0.01316	0.026	0.744	0.863	1,068	1,075	0.473	0.526
Attendance to early childhood education	6.7	0.3298	0.01757	0.053	1.500	1.225	1,068	1,075	0.295	0.365
Birth registration	8.1	0.4946	0.01195	0.024	1.511	1.229	2,647	2,647	0.471	0.518
MEN										
Contraceptive prevalence	5.3M	0.7027	0.01330	0.019	1.250	1.118	1,459	1,476	0.676	0.729
Literacy rate among young men	7.1M	0.9088	0.00698	0.008	1.066	1.033	1,858	1,817	0.895	0.923
Marriage before age 18	8.7M	0.0121	0.00233	0.191	1.264	1.124	2,763	2,806	0.007	0.017
Polygamy	8.9M	0.0648	0.00705	0.109	1.210	1.100	1,459	1,476	0.051	0.079
Comprehensive knowledge about HIV prevention among young people	9.2M	0.5357	0.01294	0.024	1.223	1.106	1,858	1,817	0.510	0.562
Knowledge of mother- to-child transmission of HIV	9.3M	0.5015	0.00932	0.019	1.451	1.205	4,179	4,179	0.483	0.520

Accepting attitudes towards people living with HIV	9.4M	0.4566	0.00804	0.018	1.080	1.039	4,141	4,142	0.441	0.473
Men who have been tested for HIV and know the results	9.6M	0.4652	0.00925	0.020	1.436	1.198	4,179	4,179	0.447	0.484
Sexually active young men who have been tested for HIV and know the results	9.7M	0.3356	0.01870	0.056	0.908	0.953	581	580	0.298	0.373
Sex before age 15 among young women	9.11M	0.0263	0.00355	0.135	0.896	0.947	1,858	1,817	0.019	0.033
Condom use with non-regular partners	9.16M	0.9059	0.01049	0.012	0.698	0.835	541	541	0.885	0.927
Men who have been circumcised	9.21	0.1881	0.00650	0.035	1.156	1.075	4,179	4,179	0.175	0.201

Table SE.3: Sampling errors: urban areas

Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deft*) and confidence intervals for selected indicators, Swaziland, 2010

	MICS Indicator	Value (*r*)	Standard error (*se*)	Coefficient of variation (*se/r*)	Design effect (*deff*)	Square root of design effect (*deft*)	Weighted count	Unweighted count	Confidence limits	
									r - 2*se*	*r* + 2*se*
HOUSEHOLDS										
Iodized salt consumption	2.16	0.5741	0.01266	0.022	1.331	1.154	1,636	2,033	0.549	0.599
Household availability of insecticide-treated nets (ITNs)	3.12	0.0538	0.00575	0.107	1.361	1.166	1,680	2,095	0.042	0.065
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	4.1	0.9108	0.01550	0.017	6.186	2.487	4,777	2,095	0.880	0.942
Use of improved sanitation facilities	4.3	0.9409	0.00856	0.009	2.759	1.661	4,777	2,095	0.924	0.958
Secondary school net attendance ratio (adjusted)	7.5	0.6406	0.02019	0.032	0.997	0.998	441	564	0.600	0.681
Child labour	8.2	0.2012	0.01871	0.093	2.636	1.624	932	1,211	0.164	0.239
Prevalence of children with at least one parent dead	9.18	0.1845	0.01164	0.063	1.999	1.414	1,743	2,221	0.161	0.208
School attendance of orphans[43]	9.19	*	*	*	*	*	29	38	*	*
School attendance of non-orphans	9.20	0.9866	0.00774	0.008	1.602	1.266	280	354	0.971	1.000
Violent discipline	8.5	0.9020	0.01242	0.014	1.435	1.198	1,263	823	0.877	0.927
WOMEN										
Pregnant women	-	0.0355	0.00486	0.137	1.211	1.100	1,353	1,757	0.026	0.045
Pregnant women sleeping under insecticide-treated nets (ITNs)	3.19	0.0000	0.00000	0.000	NA	NA	45	62	0.000	0.000
Intermittent preventive treatment for malaria	3.20	0.0086	0.00319	0.372	0.362	0.602	241	304	0.002	0.015
Early childbearing	5.2	0.2368	0.02218	0.094	0.967	0.983	272	356	0.192	0.281
Contraceptive prevalence	5.3	0.7161	0.01731	0.024	1.030	1.015	556	700	0.681	0.751
Unmet need	5.4	0.0942	0.01222	0.130	1.223	1.106	556	700	0.070	0.119
Antenatal care coverage - at least once by skilled personnel	5.5a	0.9475	0.01089	0.011	0.770	0.878	255	324	0.926	0.969
Antenatal care coverage – at least four times by any provider	5.5b	0.7974	0.02310	0.029	1.067	1.033	255	324	0.751	0.844
Skilled attendant at delivery	5.7	0.8934	0.01678	0.019	0.955	0.977	255	324	0.860	0.927
Institutional deliveries	5.8	0.8682	0.01662	0.019	0.780	0.883	255	324	0.835	0.901

[43] An asterisks indicate an indicator is based on less than 50 unweighted cases.

Caesarean section	5.9	0.1165	0.01704	0.146	0.912	0.955	255	324	0.082	0.151
Literacy rate among young women	7.1	0.9311	0.01138	0.012	1.278	1.131	484	634	0.908	0.954
Marriage before age 18	8.7	0.0634	0.00768	0.121	1.469	1.212	1,141	1,479	0.048	0.079
Polygamy	8.9	0.0820	0.01122	0.137	1.169	1.081	556	700	0.060	0.104
Comprehensive knowledge about HIV prevention among young people	9.2	0.6971	0.01801	0.026	0.972	0.986	484	634	0.661	0.733
Knowledge of mother- to-child transmission of HIV	9.3	0.6014	0.01297	0.022	1.232	1.110	1,353	1,757	0.575	0.627
Accepting attitudes towards people living with HIV	9.4	0.4908	0.01538	0.031	1.656	1.287	1,349	1,751	0.460	0.522
Women who have been tested for HIV and know the results	9.6	0.4449	0.01143	0.026	0.930	0.964	1,353	1,757	0.422	0.468
Sexually active young women who have been tested for HIV and know the results	9.7	0.4918	0.02349	0.048	0.775	0.880	271	352	0.445	0.539
Sex before age 15 among young women	9.11	0.0435	0.00792	0.182	0.955	0.977	484	634	0.028	0.059
Condom use with non-regular partners	9.16	0.8049	0.03228	0.040	1.459	1.208	166	221	0.740	0.869
UNDER-5s										
Underweight prevalence	2.1a	0.0423	0.00838	0.198	1.120	1.058	506	648	0.026	0.059
Stunting prevalence	2.2a	0.2307	0.01841	0.080	1.236	1.112	508	648	0.194	0.267
Wasting prevalence	2.3a	0.0122	0.00430	0.352	0.989	0.995	506	647	0.004	0.021
Exclusive breastfeeding under 6 months	2.6	0.3545	0.03224	0.091	0.404	0.636	73	90	0.290	0.419
Age-appropriate breastfeeding	2.14	0.3489	0.02565	0.074	0.817	0.904	225	283	0.298	0.400
Tuberculosis immunization coverage	-	0.9939	0.00615	0.006	0.699	0.836	91	114	0.982	1.000
Received polio immunization	-	0.7974	0.02650	0.033	0.491	0.701	91	114	0.744	0.850
Received DPT/HEPB/HIB immunization	-	0.8908	0.02938	0.033	1.003	1.001	91	114	0.832	0.950
Received measles immunization	-	0.9883	0.00831	0.008	0.657	0.811	88	111	0.972	1.000
Diarrhoea in the previous two weeks	-	0.1379	0.01487	0.108	1.248	1.117	527	672	0.108	0.168
Illness with a cough in the previous two weeks	-	0.1243	0.01210	0.097	0.903	0.950	527	672	0.100	0.149
Fever in last two weeks	-	0.0895	0.01230	0.137	1.245	1.116	527	672	0.065	0.114
Oral rehydration therapy with continued feeding	3.8	0.5732	0.02910	0.051	0.325	0.570	73	95	0.515	0.631
Antibiotic treatment of suspected pneumonia	3.10	0.6823	0.01211	0.018	0.051	0.227	65	77	0.658	0.707
Children under age five sleeping under insecticide-treated nets (ITNs)	3.15	0.0096	0.00431	0.449	1.263	1.124	507	647	0.001	0.018
Anti-malarial treatment of children under age five	3.18	0.0000	0.00000	0.000	NA	NA	47	61	0.000	0.000
Support for learning	6.1	0.5933	0.02686	0.045	.751	.866	190	252	0.540	0.647
Attendance to early childhood education	6.7	0.3585	0.03351	0.093	1.226	1.107	190	252	0.291	0.425

Birth registration	8.1	0.6151	0.02349	0.038	1.563	1.250	527	672	0.568	0.662
MEN										
Contraceptive prevalence	5.3M	0.7532	0.01887	0.025	1.477	1.215	616	772	0.715	0.791
Literacy rate among young men	7.1M	0.8959	0.01588	0.018	1.442	1.201	410	534	0.864	0.928
Marriage before age 18	8.7M	0.0090	0.00274	0.305	1.148	1.072	1,080	1,365	0.004	0.014
Polygamy	8.9M	0.0452	0.00833	0.184	1.240	1.114	616	772	0.028	0.062
Comprehensive knowledge about HIV prevention among young people	9.2M	0.6541	0.02251	0.034	1.193	1.092	410	534	0.609	0.699
Knowledge of mother- to-child transmission of HIV	9.3M	0.4809	0.01537	0.032	1.628	1.276	1,347	1,721	0.450	0.512
Accepting attitudes towards people living with HIV	9.4M	0.4893	0.01402	0.029	1.343	1.159	1,336	1,707	0.461	0.517
Men who have been tested for HIV and know the results	9.6M	0.5468	0.01405	0.026	1.371	1.171	1,347	1,721	0.519	0.575
Sexually active young men who have been tested for HIV and know the results	9.7M	0.3564	0.02522	0.071	0.651	0.807	188	236	0.306	0.407
Sex before age 15 among young women	9.11M	0.0375	0.00786	0.209	0.911	0.954	410	534	0.022	0.053
Condom use with non-regular partners	9.16M	0.8735	0.02171	0.025	0.913	0.956	170	215	0.830	0.917
Men who have been circumcised	9.21	0.2564	0.01168	0.046	1.230	1.109	1,347	1,721	0.233	0.280

Table SE.4: Sampling errors: rural areas

Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deft*) and confidence intervals for selected indicators, Swaziland, 2010

	MICS Indicator	Value (*r*)	Standard error (*se*)	Coefficient of variation (*se/r*)	Design effect (*deff*)	Square root of design effect (*deft*)	Weighted count	Unweighted count	Confidence limits	
									r - 2*se*	*r* + 2*se*
HOUSEHOLDS										
Iodized salt consumption	2.16	0.4848	0.01214	0.025	1.582	1.258	3,084	2,684	0.461	0.509
Household availability of insecticide-treated nets (ITNs)	3.12	0.1231	0.01217	0.099	3.756	1.938	3,154	2,739	0.099	0.147
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	4.1	0.6013	0.02062	0.034	4.857	2.204	15,823	2,739	0.560	0.643
Use of improved sanitation facilities	4.3	0.7327	0.01358	0.019	2.579	1.606	15,823	2,739	0.706	0.760
Secondary school net attendance ratio (adjusted)	7.5	0.4379	0.01404	0.032	1.548	1.244	2,185	1,935	0.410	0.466
Child labour	8.2	0.4640	0.00946	0.020	1.566	1.251	4,953	4,351	0.445	0.483
Prevalence of children with at least one parent dead	9.18	0.2467	0.00777	0.031	2.426	1.558	8,492	7,475	0.231	0.262
School attendance of orphans	9.19	0.9735	0.00451	0.005	.143	.379	207	183	0.965	0.983
School attendance of non-orphans	9.20	0.9856	0.00409	0.004	1.084	1.041	1,062	921	0.977	0.994
Violent discipline	8.5	0.8870	0.00802	0.009	1.296	1.139	6,367	2,023	0.871	0.903
WOMEN										
Pregnant women	-	0.0489	0.00501	0.103	1.585	1.259	3,335	2,931	0.039	0.059
Pregnant women sleeping under insecticide-treated nets (ITNs)	3.19	0.0217	0.01137	0.525	0.835	0.914	155	138	0.000	0.044
Intermittent preventive treatment for malaria	3.20	0.0155	0.00476	0.306	0.999	1.000	756	677	0.006	0.025
Early childbearing	5.2	0.2135	0.01627	0.076	0.870	0.933	631	553	0.181	0.246
Contraceptive prevalence	5.3	0.6250	0.01677	0.027	1.379	1.174	1,326	1,151	0.591	0.659
Unmet need	5.4	0.1455	0.01190	0.082	1.310	1.145	1,326	1,151	0.122	0.169
Antenatal care coverage - at least once by skilled personnel	5.5a	0.9745	0.00484	0.005	0.654	0.809	776	694	0.965	0.984
Antenatal care coverage – at least four times by any provider	5.5b	0.7561	0.01466	0.019	0.807	0.898	776	694	0.727	0.785
Skilled attendant at delivery	5.7	0.7956	0.01812	0.023	1.399	1.183	776	694	0.759	0.832
Institutional deliveries	5.8	0.7833	0.01814	0.023	1.344	1.159	776	694	0.747	0.820
Caesarean section	5.9	0.1257	0.01300	0.103	1.066	1.032	776	694	0.100	0.152
Literacy rate among young women	7.1	0.9450	0.00723	0.008	1.358	1.165	1,518	1,354	0.931	0.959

Marriage before age 18	8.7	0.1304	0.00867	0.066	1.412	1.188	2,448	2,130	0.113	0.148
Polygamy	8.9	0.1519	0.01225	0.081	1.339	1.157	1,326	1,151	0.127	0.176
Comprehensive knowledge about HIV prevention among young people	9.2	0.5447	0.01546	0.028	1.303	1.142	1,518	1,354	0.514	0.576
Knowledge of mother- to-child transmission of HIV	9.3	0.6096	0.00812	0.013	0.813	0.902	3,335	2,931	0.593	0.626
Accepting attitudes towards people living with HIV	9.4	0.4628	0.01157	0.025	1.565	1.251	3,310	2,909	0.440	0.486
Women who have been tested for HIV and know the results	9.6	0.4225	0.00939	0.022	1.059	1.029	3,335	2,931	0.404	0.441
Sexually active young women who have been tested for HIV and know the results	9.7	0.4566	0.01757	0.038	0.781	0.884	707	629	0.421	0.492
Sex before age 15 among young women	9.11	0.0360	0.00514	0.143	1.033	1.016	1,518	1,354	0.026	0.046
Condom use with non-regular partners	9.16	0.7055	0.02078	0.029	0.921	0.960	490	444	0.664	0.747
UNDER-5s										
Underweight prevalence	2.1a	0.0623	0.00715	0.115	1.680	1.296	2,066	1,922	0.048	0.077
Stunting prevalence	2.2a	0.3289	0.01380	0.042	1.649	1.284	2,054	1,911	0.301	0.357
Wasting prevalence	2.3a	0.0065	0.00223	0.344	1.473	1.214	2,054	1,911	0.002	0.011
Exclusive breastfeeding under 6 months	2.6	0.4727	0.03014	0.064	0.649	0.806	200	179	0.412	0.533
Age-appropriate breastfeeding	2.14	0.4183	0.01767	0.042	0.973	0.986	820	759	0.383	0.454
Tuberculosis immunization coverage	-	0.9794	0.00711	0.007	1.000	1.000	431	401	0.965	0.994
Received polio immunization	-	0.8612	0.01647	0.019	0.907	0.953	431	401	0.828	0.894
Received DPT/HEPB/HIB immunization	-	0.9094	0.01382	0.015	0.925	0.962	430	400	0.882	0.937
Received measles immunization	-	0.9758	0.00782	0.008	0.977	0.988	406	379	0.960	0.991
Diarrhoea in the previous two weeks	-	0.1644	0.01029	0.063	1.521	1.233	2,120	1,975	0.144	0.185
Illness with a cough in the previous two weeks	-	0.1313	0.00915	0.070	1.447	1.203	2,120	1,975	0.113	0.150
Fever in last two weeks	-	0.0997	0.00791	0.079	1.375	1.173	2,120	1,975	0.084	0.115
Oral rehydration therapy with continued feeding	3.8	0.4613	0.02395	0.052	0.748	0.865	349	325	0.413	0.509
Antibiotic treatment of suspected pneumonia	3.10	0.5873	0.02829	0.048	0.872	0.934	278	265	0.531	0.644
Children under age five sleeping under insecticide-treated nets (ITNs)	3.15	0.0159	0.00334	0.210	1.380	1.175	2,075	1,937	0.009	0.023
Anti-malarial treatment of children under age five	3.18	0.0123	0.00702	0.573	0.860	0.927	211	212	0.000	0.026
Support for learning	6.1	0.4795	0.01486	0.031	0.728	0.853	878	823	0.450	0.509
Attendance to early childhood education	6.7	0.3235	0.02004	0.062	1.508	1.228	878	823	0.283	0.364
Birth registration	8.1	0.4646	0.01364	0.029	1.476	1.215	2,120	1,975	0.437	0.492
MEN										

Contraceptive prevalence	5.3M	0.6659	0.01857	0.028	1.090	1.044	843	704	0.629	0.703
Literacy rate among young men	7.1M	0.9124	0.00769	0.008	.950	0.975	1,447	1,283	0.897	0.928
Marriage before age 18	8.7M	0.0142	0.00339	0.239	1.184	1.088	1,683	1,441	0.007	0.021
Polygamy	8.9M	0.0793	0.01058	0.134	1.079	1.039	843	704	0.058	0.100
Comprehensive knowledge about HIV prevention among young people	9.2M	0.5021	0.01482	0.030	1.127	1.061	1,447	1,283	0.472	0.532
Knowledge of mother- to-child transmission of HIV	9.3M	0.5113	0.01163	0.023	1.329	1.153	2,832	2,458	0.488	0.535
Accepting attitudes towards people living with HIV	9.4M	0.4410	0.00978	0.022	0.945	0.972	2,805	2,435	0.421	0.461
Men who have been tested for HIV and know the results	9.6M	0.4265	0.01174	0.028	1.385	1.177	2,832	2,458	0.403	0.450
Sexually active young men who have been tested for HIV and know the results	9.7M	0.3256	0.02478	0.076	0.960	0.980	393	344	0.276	0.375
Sex before age 15 among young women	9.11M	0.0231	0.00401	0.174	0.914	0.956	1,447	1,283	0.015	0.031
Condom use with non-regular partners	9.16M	0.9208	0.01173	0.013	0.614	0.783	371	326	0.897	0.944
Men who have been circumcised	9.21	0.1556	0.00782	0.050	1.143	1.069	2,832	2,458	0.140	0.171

Table SE.5: Sampling errors: Hhohho

Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deft*) and confidence intervals for selected indicators, Swaziland, 2010

	MICS Indicator	Value (*r*)	Standard error (*se*)	Coefficient of variation (*se/r*)	Design effect (*deff*)	Square root of design effect (*deft*)	Weighted count	Unweighted count	Confidence limits	
									r - 2*se*	*r* + 2*se*
HOUSEHOLDS										
Iodized salt consumption	2.16	0.6093	0.01903	0.031	1.791	1.338	1,205	1,178	0.571	0.647
Household availability of insecticide-treated nets (ITNs)	3.12	0.0539	0.01913	0.355	8.874	2.979	1,261	1,237	0.016	0.092
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	4.1	0.7929	0.02602	0.033	5.097	2.258	5,457	1,237	0.741	0.845
Use of improved sanitation facilities	4.3	0.8029	0.01718	0.021	2.305	1.518	5,457	1,237	0.769	0.837
Secondary school net attendance ratio (adjusted)	7.5	0.4736	0.02778	0.059	1.700	1.304	655	550	0.418	0.529
Child labour	8.2	0.3731	0.02144	0.057	2.519	1.587	1,540	1,283	0.330	0.416
Prevalence of children with at least one parent dead	9.18	0.2317	0.01701	0.073	3.531	1.879	2,597	2,174	0.198	0.266
School attendance of orphans	9.19	1.0000	0.00000	0.000	NA	NA	66	52	1.000	1.000
School attendance of non-orphans	9.20	0.9898	0.00455	0.005	0.661	0.813	374	322	0.981	0.999
Violent discipline	8.5	0.8795	0.01061	0.012	0.734	0.857	1,969	693	0.858	0.901
WOMEN										
Pregnant women	-	0.0497	0.00978	0.197	2.455	1.567	1,286	1,212	0.030	0.069
Pregnant women sleeping under insecticide-treated nets (ITNs)	3.19	0.0280	0.02645	0.944	1.310	1.145	58	52	0.000	0.081
Intermittent preventive treatment for malaria	3.20	0.0160	0.00984	0.615	1.311	1.145	238	214	0.000	0.036
Early childbearing	5.2	0.1938	0.02684	0.139	1.061	1.030	244	231	0.140	0.247
Contraceptive prevalence	5.3	0.6270	0.02950	0.047	1.764	1.328	530	475	0.568	0.686
Unmet need	5.4	0.1376	0.01899	0.138	1.440	1.200	530	475	0.100	0.176
Antenatal care coverage - at least once by skilled personnel	5.5a	0.9414	0.01360	0.014	0.764	0.874	253	229	0.914	0.969
Antenatal care coverage – at least four times by any provider	5.5b	0.7629	0.02736	0.036	0.944	0.971	253	229	0.708	0.818
Skilled attendant at delivery	5.7	0.8216	0.03535	0.043	1.943	1.394	253	229	0.751	0.892
Institutional deliveries	5.8	0.8107	0.03547	0.044	1.869	1.367	253	229	0.740	0.882
Caesarean section	5.9	0.2194	0.02896	0.132	1.116	1.056	253	229	0.162	0.277
Literacy rate among young women	7.1	0.9403	0.01399	0.015	1.626	1.275	512	467	0.912	0.968

Marriage before age 18	8.7	0.1199	0.01480	0.123	2.024	1.423	1,018	976	0.090	0.150
Polygamy	8.9	0.1068	0.02061	0.193	2.112	1.453	530	475	0.066	0.148
Comprehensive knowledge about HIV prevention among young people	9.2	0.6055	0.03047	0.050	1.811	1.346	512	467	0.545	0.666
Knowledge of mother- to-child transmission of HIV	9.3	0.5754	0.01388	0.024	0.955	0.977	1,286	1212	0.548	0.603
Accepting attitudes towards people living with HIV	9.4	0.4684	0.01993	0.043	1.917	1.384	1,276	1203	0.429	0.508
Women who have been tested for HIV and know the results	9.6	0.4107	0.01392	0.034	0.970	0.985	1,286	1212	0.383	0.439
Sexually active young women who have been tested for HIV and know the results	9.7	0.4368	0.02912	0.067	0.765	0.875	237	223	0.379	0.495
Sex before age 15 among young women	9.11	0.0309	0.00854	0.277	1.135	1.066	512	467	0.014	0.048
Condom use with non-regular partners	9.16	0.7801	0.03288	0.042	.882	.939	144	141	0.714	0.846
UNDER-5s										
Underweight prevalence	2.1a	0.0642	0.01558	0.243	2.246	1.499	641	557	0.033	0.095
Stunting prevalence	2.2a	0.2816	0.03219	0.114	2.828	1.682	636	553	0.217	0.346
Wasting prevalence	2.3a	0.0091	0.00534	0.589	1.752	1.323	636	553	0.000	0.020
Exclusive breastfeeding under six months	2.6	0.4729	0.03776	0.080	0.372	0.610	75	66	0.397	0.548
Age-appropriate breastfeeding	2.14	0.3957	0.03616	0.091	1.241	1.114	260	228	0.323	0.468
Tuberculosis immunization coverage	-	0.9725	0.01642	0.017	1.140	1.068	133	114	0.940	1.000
Received polio immunization	-	0.8140	0.02587	0.032	0.500	0.707	133	114	0.762	0.866
Received DPT/HEPB/HIB immunization	-	0.8783	0.02434	0.028	0.626	0.791	133	114	0.830	0.927
Received measles immunization	-	0.9714	0.01708	0.018	1.144	1.070	128	110	0.937	1.000
Diarrhoea in the previous two weeks	-	0.1618	0.02098	0.130	1.847	1.359	655	570	0.120	0.204
Illness with a cough in the previous two weeks	-	0.0997	0.01491	0.150	1.409	1.187	655	570	0.070	0.129
Fever in last two weeks	-	0.0329	0.00729	0.221	0.949	0.974	655	570	0.018	0.047
Oral rehydration therapy with continued feeding	3.8	0.5094	0.03851	0.076	0.552	0.743	106	94	0.432	0.586
Antibiotic treatment of suspected pneumonia	3.10	0.5688	0.06904	0.121	1.010	1.005	65	53	0.431	0.707
Children under age five sleeping under insecticide-treated nets (ITNs)	3.15	0.0074	0.00543	0.737	2.201	1.484	631	547	0.000	0.018
Anti-malarial treatment of children under age five[44]	3.18	*	*	*	*	*[45]	22	28	*	*
Support for learning	6.1	0.6897	0.02295	0.033	0.546	0.739	256	223	0.644	0.736

[44] An asterisks indicate an indicator is based on less than 50 unweighted cases.

Attendance to early childhood education	6.7	0.2631	0.03372	0.128	1.302	1.141	256	223	0.196	0.331
Birth registration	8.1	0.5120	0.02763	0.054	1.738	1.318	655	570	0.457	0.567
MEN										
Contraceptive prevalence	5.3M	0.7173	0.02295	0.032	1.065	1.032	422	411	0.671	0.763
Literacy rate among young men	7.1M	0.9177	0.01171	0.013	0.769	.877	474	425	0.894	0.941
Marriage before age 18	8.7M	0.0091	0.00390	0.426	1.322	1.150	787	790	0.001	0.017
Polygamy	8.9M	0.0620	0.01762	0.284	2.186	1.479	422	411	0.027	0.097
Comprehensive knowledge about HIV prevention among young people	9.2M	0.5400	0.03232	0.060	1.783	1.335	474	425	0.475	0.605
Knowledge of mother- to-child transmission of HIV	9.3M	0.5054	0.02071	0.041	1.880	1.371	1,143	1,097	0.464	0.547
Accepting attitudes towards people living with HIV	9.4M	0.4267	0.01766	0.041	1.382	1.175	1,131	1,085	0.391	0.462
Men who have been tested for HIV and know the results	9.6M	0.4339	0.02087	0.048	1.944	1.394	1,143	1,097	0.392	0.476
Sexually active young men who have been tested for HIV and know the results	9.7M	0.2773	0.04317	0.156	1.302	1.141	149	141	0.191	0.364
Sex before age 15 among young women	9.11M	0.0246	0.00550	0.223	0.534	0.731	474	425	0.014	0.036
Condom use with non-regular partners	9.16M	0.9293	0.02225	0.024	0.964	0.982	134	129	0.885	0.974
Men who have been circumcised	9.21	0.1734	0.01284	0.074	1.261	1.123	1,143	1,097	0.148	0.199

Table SE.6: Sampling errors: Manzini

Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deft*) and confidence intervals for selected indicators, Swaziland, 2010

	MICS Indicator	Value (*r*)	Standard error (*se*)	Coefficient of variation (*se/r*)	Design effect (*deff*)	Square root of design effect (*deft*)	Weighted count	Unweighted count	Confidence limits	
									r - 2*se*	*r* + 2*se*
HOUSEHOLDS										
Iodized salt consumption	2.16	0.5062	0.01811	0.036	1.764	1.328	1,597	1,345	0.470	0.542
Household availability of insecticide-treated nets (ITNs)	3.12	0.0436	0.00627	0.144	1.288	1.135	1,624	1,368	0.031	0.056
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	4.1	0.7462	0.03373	0.045	8.212	2.866	6,133	1,368	0.679	0.814
Use of improved sanitation facilities	4.3	0.8636	0.02379	0.028	6.569	2.563	6,133	1,368	0.816	0.911
Secondary school net attendance ratio (adjusted)	7.5	0.5220	0.02449	0.047	1.318	1.148	687	549	0.473	0.571
Child labour	8.2	0.3883	0.01375	0.035	0.979	0.989	1,554	1,231	0.361	0.416
Prevalence of children with at least one parent dead	9.18	0.2221	0.01197	0.054	1.852	1.361	2,796	2,234	0.198	0.246
School attendance of orphans[46]	9.19	*	*	*	*	*	50	39	*	*
School attendance of non-orphans	9.20	0.9850	0.00727	0.007	1.130	1.063	393	317	0.970	1.000
Violent discipline	8.5	0.9108	0.01526	0.017	1.999	1.414	2,057	698	0.880	0.941
WOMEN										
Pregnant women	-	0.0338	0.00590	0.174	1.393	1.180	1,515	1,309	0.022	0.046
Pregnant women sleeping under insecticide-treated nets (ITNs)[47]	3.19	*	*	*	*	*	50	42	*	*
Intermittent preventive treatment for malaria	3.20	0.0031	0.00015	0.048	0.002	0.045	324	277	0.003	0.003
Early childbearing	5.2	0.2315	0.02302	0.099	.780	.883	304	263	0.185	0.278
Contraceptive prevalence	5.3	0.6912	0.02133	0.031	1.183	1.088	641	556	0.649	0.734
Unmet need	5.4	0.1135	0.01650	0.145	1.502	1.225	641	556	0.081	0.147
Antenatal care coverage - at least once by skilled personnel	5.5a	0.9845	0.00677	0.007	0.845	0.919	329	282	0.971	0.998
Antenatal care coverage – at least four times by any provider	5.5b	0.8053	0.02439	0.030	1.066	1.032	329	282	0.756	0.854
Skilled attendant at delivery	5.7	0.9031	0.02007	0.022	1.293	1.137	329	282	0.863	0.943
Institutional deliveries	5.8	0.9000	0.01967	0.022	1.208	1.099	329	282	0.861	0.939

[46] An asterisks indicate an indicator is based on less than 50 unweighted cases.
[47] An asterisks indicate an indicator is based on less than 50 unweighted cases.

Caesarean section	5.9	0.0955	0.01651	0.173	.887	0.942	329	282	0.062	0.128
Literacy rate among young women	7.1	0.9386	0.01232	0.013	1.352	1.163	603	514	0.914	0.963
Marriage before age 18	8.7	0.0802	0.01135	0.141	1.846	1.359	1,216	1058	0.058	0.103
Polygamy	8.9	0.1080	0.01559	0.144	1.399	1.183	641	556	0.077	0.139
Comprehensive knowledge about HIV prevention among young people	9.2	0.6409	0.02315	0.036	1.195	1.093	603	514	0.595	0.687
Knowledge of mother- to-child transmission of HIV	9.3	0.5947	0.01183	0.020	0.760	0.872	1,515	1309	0.571	0.618
Accepting attitudes towards people living with HIV	9.4	0.5296	0.01741	0.033	1.584	1.259	1,508	1,303	0.495	0.564
Women who have been tested for HIV and know the results	9.6	0.4269	0.01354	0.032	0.981	0.990	1,515	1,309	0.400	0.454
Sexually active young women who have been tested for HIV and know the results	9.7	0.4664	0.02426	0.052	0.667	0.817	329	283	0.418	0.515
Sex before age 15 among young women	9.11	0.0393	0.00823	0.209	0.920	0.959	603	514	0.023	0.056
Condom use with non-regular partners	9.16	0.7593	0.03874	0.051	1.445	1.202	208	177	0.682	0.837
UNDER-5s										
Underweight prevalence	2.1a	0.0497	0.00929	0.187	1.175	1.084	761	644	0.031	0.068
Stunting prevalence	2.2a	0.2814	0.01864	0.066	1.110	1.053	765	647	0.244	0.319
Wasting prevalence	2.3a	0.0108	0.00410	0.378	1.009	1.005	763	645	0.003	0.019
Exclusive breastfeeding under 6 months	2.6	0.4255	0.04028	0.095	0.544	0.738	97	83	0.345	0.506
Age-appropriate breastfeeding	2.14	0.3858	0.02507	0.065	0.737	0.859	328	279	0.336	0.436
Tuberculosis immunization coverage	-	0.9915	0.00045	0.000	0.003	0.055	152	128	0.991	0.992
Received polio immunization	-	0.8305	0.03049	0.037	0.839	0.916	152	128	0.770	0.891
Received DPT/HEPB/HIB immunization	-	0.8659	0.02974	0.034	0.968	0.984	152	128	0.806	0.925
Received measles immunization	-	0.9908	0.00051	0.001	0.003	0.059	141	119	0.990	0.992
Diarrhoea in the previous two weeks	-	0.1592	0.01638	0.103	1.333	1.154	787	666	0.126	0.192
Illness with a cough in the previous two weeks	-	0.1417	0.01614	0.114	1.425	1.194	787	666	0.109	0.174
Fever in last two weeks	-	0.1182	0.01545	0.131	1.523	1.234	787	666	0.087	0.149
Oral rehydration therapy with continued feeding	3.8	0.5069	0.03476	0.069	0.503	0.709	125	105	0.437	0.576
Antibiotic treatment of suspected pneumonia	3.10	0.7452	0.02688	0.036	0.358	0.598	111	95	0.691	0.799
Children under age five sleeping under insecticide-treated nets (ITNs)	3.15	0.0071	0.00318	0.448	0.921	0.959	760	643	0.001	0.013
Anti-malarial treatment of children under age five	3.18	0.0000	0.00000	0.000	NA	NA	93	77	0.000	0.000
Support for learning	6.1	0.5630	0.01892	0.034	0.365	0.604	301	252	0.525	0.601
Attendance to early childhood education	6.7	0.2340	0.03398	0.145	1.617	1.271	301	252	0.166	0.302

Birth registration	8.1	0.5491	0.02223	0.040	1.327	1.152	787	666	0.505	0.594
MEN										
Contraceptive prevalence	5.3M	0.6823	0.02473	0.036	1.338	1.157	552	475	0.633	0.732
Literacy rate among young men	7.1M	0.8871	0.01680	0.019	1.296	1.139	554	461	0.853	0.921
Marriage before age 18	8.7M	0.0108	0.00409	0.380	1.347	1.161	997	860	0.003	0.019
Polygamy	8.9M	0.0562	0.00914	0.163	0.748	0.865	552	475	0.038	0.074
Comprehensive knowledge about HIV prevention among young people	9.2M	0.5997	0.02351	0.039	1.059	1.029	554	461	0.553	0.647
Knowledge of mother- to-child transmission of HIV	9.3M	0.4504	0.01661	0.037	1.331	1.154	1,406	1,195	0.417	0.484
Accepting attitudes towards people living with HIV	9.4M	0.5337	0.01418	0.027	0.956	0.978	1,393	1,184	0.505	0.562
Men who have been tested for HIV and know the results	9.6M	0.4905	0.01662	0.034	1.319	1.149	1,406	1,195	0.457	0.524
Sexually active young men who have been tested for HIV and know the results	9.7M	0.3455	0.02845	0.082	0.619	0.787	202	174	0.289	0.402
Sex before age 15 among young women	9.11M	0.0190	0.00717	0.377	1.268	1.126	554	461	0.005	0.033
Condom use with non-regular partners	9.16M	0.8994	0.01910	0.021	0.645	0.803	188	161	0.861	0.938
Men who have been circumcised	9.21	0.2447	0.01097	0.045	0.777	0.881	1,406	1,195	0.223	0.267

Table SE.7: Sampling errors: Shiselweni

Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deft*) and confidence intervals for selected indicators, Swaziland, 2010

	MICS Indicator	Value (*r*)	Standard error (*se*)	Coefficient of variation (*se*/*r*)	Design effect (*deff*)	Square root of design effect (*deft*)	Weighted count	Unweighted count	Confidence limits	
									r - 2*se*	*r* + 2*se*
HOUSEHOLDS										
Iodized salt consumption	2.16	0.5197	0.01548	0.030	1.014	1.007	949	1,057	0.489	0.551
Household availability of insecticide-treated nets (ITNs)	3.12	0.0101	0.00254	0.252	0.698	0.835	969	1,079	0.005	0.015
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	4.1	0.4914	0.03845	0.078	6.378	2.525	4,975	1,079	0.414	0.568
Use of improved sanitation facilities	4.3	0.7814	0.01905	0.024	2.289	1.513	4,975	1,079	0.743	0.819
Secondary school net attendance ratio (adjusted)	7.5	0.4707	0.02185	0.046	1.469	1.212	728	768	0.427	0.514
Child labour	8.2	0.4533	0.01755	0.039	2.024	1.423	1,550	1630	0.418	0.488
Prevalence of children with at least one parent dead	9.18	0.2625	0.01144	0.044	1.943	1.394	2,729	2,875	0.240	0.285
School attendance of orphans	9.19	0.9857	0.00071	0.001	0.002	0.049	68	70	0.984	0.987
School attendance of non-orphans	9.20	0.9824	0.00926	0.009	1.456	1.207	276	294	0.964	1.000
Violent discipline	8.5	0.8655	0.01381	0.016	1.245	1.116	2,006	761	0.838	0.893
WOMEN										
Pregnant women	-	0.0468	0.00670	0.143	1.150	1.072	1,033	1,143	0.033	0.060
Pregnant women sleeping under insecticide-treated nets (ITNs)	3.19	0.0000	0.00000	0.000	NA	NA	45	50	0.000	0.000
Intermittent preventive treatment for malaria	3.20	0.0295	0.01025	0.348	0.969	0.984	246	265	0.009	0.050
Early childbearing	5.2	0.2244	0.02758	0.123	0.979	.989	198	225	0.169	0.280
Contraceptive prevalence	5.3	0.6374	0.02673	0.042	1.159	1.077	341	376	0.584	0.691
Unmet need	5.4	0.1430	0.01793	0.125	0.984	0.992	341	376	0.107	0.179
Antenatal care coverage - at least once by skilled personnel	5.5a	0.9713	0.00671	0.007	0.443	0.666	253	275	0.958	0.985
Antenatal care coverage – at least four times by any provider	5.5b	0.7671	0.02004	0.026	0.616	0.785	253	275	0.727	0.807
Skilled attendant at delivery	5.7	0.7843	0.02948	0.038	1.408	1.186	253	275	0.725	0.843
Institutional deliveries	5.8	0.7805	0.02914	0.037	1.358	1.165	253	275	0.722	0.839
Caesarean section	5.9	0.0878	0.01793	0.204	1.100	1.049	253	275	0.052	0.124
Literacy rate among young women	7.1	0.9566	0.00982	0.010	1.297	1.139	512	560	0.937	0.976

Marriage before age 18	8.7	0.0921	0.00896	0.097	0.774	0.880	719	808	0.074	0.110
Polygamy	8.9	0.1331	0.01701	0.128	0.941	0.970	341	376	0.099	0.167
Comprehensive knowledge about HIV prevention among young people	9.2	0.5185	0.02033	0.039	0.925	0.962	512	560	0.478	0.559
Knowledge of mother- to-child transmission of HIV	9.3	0.6229	0.01567	0.025	1.193	1.092	1,033	1,143	0.592	0.654
Accepting attitudes towards people living with HIV	9.4	0.4621	0.01962	0.042	1.761	1.327	1,028	1,138	0.423	0.501
Women who have been tested for HIV and know the results	9.6	0.4286	0.01666	0.039	1.295	1.138	1,033	1,143	0.395	0.462
Sexually active young women who have been tested for HIV and know the results	9.7	0.4680	0.02990	0.064	0.937	0.968	234	262	0.408	0.528
Sex before age 15 among young women	9.11	0.0331	0.00847	0.256	1.256	1.121	512	560	0.016	0.050
Condom use with non-regular partners	9.16	0.6658	0.02966	0.045	0.790	0.889	181	201	0.607	0.725
UNDER-5s										
Underweight prevalence	2.1a	0.0676	0.01071	0.158	1.341	1.158	653	738	0.046	0.089
Stunting prevalence	2.2a	0.3769	0.02019	0.054	1.268	1.126	647	731	0.337	0.417
Wasting prevalence	2.3a	0.0028	0.00199	0.708	1.033	1.017	648	732	0.000	0.007
Exclusive breastfeeding under 6 months	2.6	0.3824	0.06177	0.162	1.066	1.033	58	67	0.259	0.506
Age-appropriate breastfeeding	2.14	0.4311	0.02665	0.062	0.863	0.929	264	299	0.378	0.484
Tuberculosis immunization coverage	-	0.9718	0.01538	0.016	1.237	1.112	129	144	0.941	1.000
Received polio immunization	-	0.8696	0.02802	0.032	0.991	0.995	129	144	0.814	0.926
Received DPT/HEPB/HIB immunization	-	0.9367	0.02101	0.022	1.063	1.031	129	144	0.895	0.979
Received measles immunization	-	0.9524	0.01897	0.020	1.096	1.047	125	139	0.914	0.990
Diarrhoea in the previous two weeks	-	0.1479	0.01621	0.110	1.606	1.267	683	772	0.116	0.180
Illness with a cough in the previous two weeks	-	0.1446	0.01551	0.107	1.499	1.224	683	772	0.114	0.176
Fever in last two weeks	-	0.1033	0.01236	0.120	1.271	1.127	683	772	0.079	0.128
Oral rehydration therapy with continued feeding	3.8	0.3922	0.03967	0.101	0.739	0.860	101	113	0.313	0.471
Antibiotic treatment of suspected pneumonia	3.10	0.5851	0.04427	0.076	0.880	0.938	99	110	0.497	0.674
Children under age five sleeping under insecticide-treated nets (ITNs)	3.15	0.0027	0.00193	0.713	1.047	1.023	673	761	0.000	0.007
Anti-malarial treatment of children under age five	3.18	0.0129	0.01242	0.963	0.957	0.978	71	80	0.000	0.038
Support for learning	6.1	0.3939	0.03244	0.082	1.437	1.199	288	327	0.329	0.459
Attendance to early childhood education	6.7	0.3639	0.03318	0.091	1.550	1.245	288	327	0.298	0.430
Birth registration	8.1	0.4202	0.02267	0.054	1.627	1.276	683	772	0.375	0.466
MEN										

Contraceptive prevalence	5.3M	0.7009	0.02904	0.041	0.889	0.943	194	222	0.643	0.759
Literacy rate among young men	7.1M	0.9375	0.01035	0.011	0.944	0.972	483	517	0.917	0.958
Marriage before age 18	8.7M	0.0131	0.00509	0.389	1.078	1.039	484	538	0.003	0.023
Polygamy	8.9M	0.0804	0.01516	0.188	0.686	0.828	194	222	0.050	0.111
Comprehensive knowledge about HIV prevention among young people	9.2M	0.4780	0.01882	0.039	0.733	0.856	483	517	0.440	0.516
Knowledge of mother- to-child transmission of HIV	9.3M	0.5494	0.01821	0.033	1.239	1.113	847	926	0.513	0.586
Accepting attitudes towards people living with HIV	9.4M	0.3978	0.01420	0.036	0.774	0.880	843	921	0.369	0.426
Men who have been tested for HIV and know the results	9.6M	0.4492	0.01655	0.037	1.024	1.012	847	926	0.416	0.482
Sexually active young men who have been tested for HIV and know the results	9.7M	0.3859	0.04113	0.107	1.035	1.017	132	146	0.304	0.468
Sex before age 15 among young women	9.11M	0.0312	0.00772	0.248	1.019	1.009	483	517	0.016	0.047
Condom use with non-regular partners	9.16M	0.8986	0.01545	0.017	.372	0.610	129	143	0.868	0.930
Men who have been circumcised	9.21	0.1385	0.01367	0.099	1.449	1.204	847	926	0.111	0.166

Table SE.8: Sampling errors: Lubombo

Standard errors, coe Swaziland, 2010

	MICS Indicator	Value (*r*)	Standard error (*se*)	Coefficient of variation (*se/r*)	Design effect (*deff*)	Square root of design effect (*deft*)	Weighted count	Unweighted count	Confidence limits	
									r - 2se	*r + 2se*
HOUSEHOLDS										
Iodized salt consumption	2.16	0.4114	0.01639	0.040	1.260	1.123	968	1,137	0.379	0.444
Household availability of insecticide-treated nets (ITNs)	3.12	0.3372	0.02961	0.088	4.509	2.123	979	1,150	0.278	0.396
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	4.1	0.6237	0.02929	0.047	4.199	2.049	4,035	1,150	0.565	0.682
Use of improved sanitation facilities	4.3	0.6251	0.02330	0.037	2.661	1.631	4,035	1,150	0.578	0.672
Secondary school net attendance ratio (adjusted)	7.5	0.4096	0.02044	0.050	1.091	1.044	555	632	0.369	0.450
Child labour	8.2	0.4876	0.01654	0.034	1.552	1.246	1,241	1,418	0.455	0.521
Prevalence of children with at least one parent dead	9.18	0.2261	0.01221	0.054	2.056	1.434	2,112	2,413	0.202	0.251
School attendance of orphans	9.19	0.9139	0.01840	0.020	0.254	0.504	52	60	0.877	0.951
School attendance of non-orphans	9.20	0.9849	0.00816	0.008	1.531	1.237	299	342	0.969	1.000
Violent discipline	8.5	0.9042	0.01553	00.017	1.930	1.389	1,598	694	0.873	0.935
WOMEN										
Pregnant women	-	0.0557	0.00690	0.124	0.925	0.962	854	1,024	0.042	0.069
Pregnant women sleeping under insecticide-treated nets (ITNs)	3.19	0.0373	0.01744	0.468	0.466	0.683	47	56	0.002	0.072
Intermittent preventive treatment for malaria	3.20	0.0092	0.00646	0.702	1.026	1.013	189	225	0.000	0.022
Early childbearing	5.2	0.2360	0.02962	0.125	0.919	0.959	157	190	0.177	0.295
Contraceptive prevalence	5.3	0.6328	0.02296	0.036	1.005	1.002	369	444	0.587	0.679
Unmet need	5.4	0.1373	0.01874	0.136	1.313	1.146	369	444	0.100	0.175
Antenatal care coverage - at least once by skilled personnel	5.5a	0.9693	0.00924	0.010	0.663	0.814	195	232	0.951	0.988
Antenatal care coverage – at least four times by any provider	5.5b	0.7040	0.02698	0.038	0.807	0.898	195	232	0.650	0.758
Skilled attendant at delivery	5.7	0.7230	0.03096	0.043	1.105	1.051	195	232	0.661	0.785
Institutional deliveries	5.8	0.6655	0.03235	0.049	1.086	1.042	195	232	0.601	0.730
Caesarean section	5.9	0.0923	0.02203	0.239	1.338	1.157	195	232	0.048	0.136
Literacy rate among young women	7.1	0.9279	0.01182	0.013	0.931	0.965	375	447	0.904	0.952

Marriage before age 18	8.7	0.1663	0.01189	0.072	0.781	0.884	636	767	0.143	0.190
Polygamy	8.9	0.2050	0.01928	0.094	1.011	1.005	369	444	0.166	0.244
Comprehensive knowledge about HIV prevention among young people	9.2	0.5395	0.02175	0.040	0.849	0.922	375	447	0.496	0.583
Knowledge of mother- to-child transmission of HIV	9.3	0.6586	0.01410	0.021	0.904	0.951	854	1,024	0.630	0.687
Accepting attitudes towards people living with HIV	9.4	0.3807	0.01402	0.037	0.846	0.920	847	1,016	0.353	0.409
Women who have been tested for HIV and know the results	9.6	0.4606	0.01570	0.034	1.015	1.007	854	1,024	0.429	0.492
Sexually active young women who have been tested for HIV and know the results	9.7	0.5035	0.03215	0.064	0.877	0.936	178	213	0.439	0.568
Sex before age 15 among young women	9.11	0.0512	0.00973	0.190	0.870	0.933	375	447	0.032	0.071
Condom use with non-regular partners	9.16	0.7194	0.03158	0.044	0.716	0.846	123	146	0.656	0.783
UNDER-5s										
Underweight prevalence	2.1a	0.0522	0.01167	0.223	1.733	1.316	516	631	0.029	0.076
Stunting prevalence	2.2a	0.3007	0.02037	0.068	1.237	1.112	514	628	0.260	0.341
Wasting prevalence	2.3a	0.0071	0.00314	0.440	0.871	0.933	514	628	0.001	0.013
Exclusive breastfeeding under 6 months	2.6	0.5001	0.05744	0.115	0.686	0.828	43	53	0.385	0.615
Age-appropriate breastfeeding	2.14	0.4052	0.03288	0.081	1.054	1.027	193	236	0.339	0.471
Tuberculosis immunization coverage	-	0.9921	0.00806	0.008	1.066	1.033	107	129	0.976	1.000
Received polio immunization	-	0.8991	0.03009	0.033	1.278	1.130	107	129	0.839	0.959
Received DPT/HEPB/HIB immunization	-	0.9618	0.01967	0.020	1.336	1.156	106	128	0.922	1.000
Received measles immunization	-	1.0000	0.00000	0.000	NA	NA	101	122	1.000	1.000
Diarrhoea in the previous two weeks	-	0.1703	0.01521	0.089	1.045	1.022	523	639	0.140	0.201
Illness with a cough in the previous two weeks	-	0.1309	0.01243	0.095	0.867	0.931	523	639	0.106	0.156
Fever in last two weeks	-	0.1402	0.01629	0.116	1.405	1.185	523	639	0.108	0.173
Oral rehydration therapy with continued feeding	3.8	0.5099	0.05352	0.105	1.226	1.107	89	108	0.403	0.617
Antibiotic treatment of suspected pneumonia	3.10	0.4419	0.04555	0.103	0.698	0.836	68	84	0.351	0.533
Children under age five sleeping under insecticide-treated nets (ITNs)	3.15	0.0502	0.01132	0.226	1.701	1.304	518	633	0.028	0.073
Anti-malarial treatment of children under age five	3.18	0.0229	0.01644	0.717	1.049	1.024	73	88	0.000	0.056
Support for learning	6.1	0.3326	0.02954	0.089	1.069	1.034	223	273	0.274	0.392
Attendance to early childhood education	6.7	0.4918	0.04171	0.085	1.893	1.376	223	273	0.408	0.575
Birth registration	8.1	0.4878	0.02303	0.047	1.355	1.164	523	639	0.442	0.534
MEN										

Contraceptive prevalence	5.3M	0.7217	0.02712	0.038	1.344	1.159	291	368	0.667	0.776
Literacy rate among young men	7.1M	0.8914	0.01395	0.016	0.830	0.911	347	414	0.863	0.919
Marriage before age 18	8.7M	0.0188	0.00610	0.325	1.246	1.116	495	618	0.007	0.031
Polygamy	8.9M	0.0750	0.01415	0.189	1.060	1.029	291	368	0.047	0.103
Comprehensive knowledge about HIV prevention among young people	9.2M	0.5079	0.02631	0.052	1.143	1.069	347	414	0.455	0.560
Knowledge of mother- to-child transmission of HIV	9.3M	0.5355	0.01621	0.030	1.014	1.007	782	961	0.503	0.568
Accepting attitudes towards people living with HIV	9.4M	0.4256	0.01765	0.041	1.212	1.101	774	952	0.390	0.461
Men who have been tested for HIV and know the results	9.6M	0.4831	0.01669	0.035	1.072	1.035	782	961	0.450	0.516
Sexually active young men who have been tested for HIV and know the results	9.7M	0.3355	0.04103	0.122	0.891	0.944	98	119	0.253	0.418
Sex before age 15 among young women	9.11M	0.0333	0.00739	0.222	0.700	0.836	347	414	0.019	0.048
Condom use with non-regular partners	9.16M	0.8953	0.02864	0.032	0.936	0.968	89	108	0.838	0.953
Men who have been circumcised	9.21	0.1617	0.01426	0.088	1.439	1.200	782	961	0.133	0.190

Appendix D. Data quality tables

Table DQ.1: Age distribution of household population

Single-year age distribution of household population by sex, Swaziland, 2010

	Male		Female			Male		Female	
Age	Number	Percent	Number	Percent	Age	Number	Percent	Number	Percent
0	246	2.5	311	2.9	45	54	0.6	82	0.8
1	304	3.1	253	2.3	46	47	0.5	86	0.8
2	264	2.7	325	3.0	47	54	0.6	79	0.7
3	267	2.7	307	2.8	48	49	0.5	89	0.8
4	290	3.0	294	2.7	49	48	0.5	46	0.4
5	333	3.4	265	2.4	50	54	0.6	96	0.9
6	336	3.5	290	2.7	51	43	0.4	89	0.8
7	291	3.0	289	2.7	52	42	0.4	74	0.7
8	281	2.9	297	2.7	53	34	0.4	62	0.6
9	260	2.7	258	2.4	54	32	0.3	60	0.5
10	324	3.3	320	2.9	55	47	0.5	62	0.6
11	297	3.1	289	2.7	56	36	0.4	46	0.4
12	298	3.1	276	2.5	57	33	0.3	48	0.4
13	288	3.0	269	2.5	58	31	0.3	70	0.6
14	325	3.3	301	2.8	59	28	0.3	27	0.2
15	244	2.5	255	2.3	60	70	0.7	58	0.5
16	249	2.6	284	2.6	61	32	0.3	39	0.4
17	234	2.4	224	2.1	62	42	0.4	53	0.5
18	247	2.5	228	2.1	63	36	0.4	60	0.5
19	211	2.2	209	1.9	64	26	0.3	55	0.5
20	228	2.4	220	2.0	65	46	0.5	62	0.6
21	171	1.8	201	1.8	66	24	0.3	33	0.3
22	165	1.7	172	1.6	67	28	0.3	39	0.4
23	161	1.7	196	1.8	68	29	0.3	39	0.4
24	162	1.7	199	1.8	69	21	0.2	21	0.2
25	161	1.7	206	1.9	70	46	0.5	67	0.6
26	145	1.5	209	1.9	71	19	0.2	19	0.2
27	152	1.6	182	1.7	72	25	0.3	22	0.2
28	170	1.7	177	1.6	73	17	0.2	16	0.1
29	101	1.0	133	1.2	74	13	0.1	26	0.2
30	125	1.3	144	1.3	75	11	0.1	26	0.2
31	112	1.2	146	1.3	76	11	0.1	18	0.2
32	119	1.2	123	1.1	77	10	0.1	19	0.2
33	95	1.0	117	1.1	78	14	0.1	14	0.1
34	92	0.9	117	1.1	79	5	0.1	9	0.1
35	95	1.0	98	0.9	80+	59	0.6	145	1.3
36	100	1.0	92	0.8					
37	65	0.7	106	1.0					
38	78	0.8	111	1.0	DK/missing	2	0.0	4	0.0
39	61	0.6	73	0.7	Total	9710	100.0	10891	100.0
40	77	0.8	93	0.9					
41	68	0.7	87	0.8					
42	93	1.0	106	1.0					
43	53	0.5	88	0.8					
44	57	0.6	90	0.8					

Table DQ.2: Age distribution of eligible and interviewed women

Household population of women age 10–54 years, interviewed women age 15–49 years, and percentage of eligible women who were interviewed, by five–year age groups, Swaziland, 2010

	Household population of women age 10–54 years	Interviewed women age 15–49 years		Percentage of eligible women interviewed (completion rate)
	Number	Number	Percent	
Age				
10–14	1,454	na	na	na
15–19	1,199	1,120	23.4	93.4
20–24	989	923	19.3	93.4
25–29	906	865	18.1	95.4
30–34	647	608	12.7	94.1
35–39	480	466	9.7	97.0
40–44	465	443	9.2	95.2
45–49	383	363	7.6	94.9
50–54	381	na	na	na
Total (15–49)	5,069	4,788	100.0	94.5
Ratio of 50–54 to 45–49				1.00

Table DQ.2M: Age distribution of eligible and interviewed men

Household population of men age 10–64 years, interviewed men age 15–59 years, and percentage of eligible men who were interviewed, by five-year age groups, Swaziland, 2010

	Household population of men age 10–64 years	Interviewed men age 15–59 years		Percentage of eligible men interviewed (completion rate)
	Number	Number	Percent	
Age				
10–14	1,532	na	na	na
15–19	1,186	1,088	25.7	91.7
20–24	888	791	18.7	89.1
25–29	729	636	15.0	87.3
30–34	542	490	11.6	90.4
35–39	399	358	8.5	89.8
40–44	348	296	7.0	85.1
55–59	252	224	5.3	89.1
60–64	204	185	4.4	90.7
55–59	175	161	3.8	91.9
60–64	205	na	na	na
Total (15–59)	4,722	4,230	100.0	89.6
Ratio of 60–64 to 55–59				1.00

Note: NA = Not Applicable

Table DQ.3: Age distribution of under-fives in household and under-5 questionnaires

Household population of children age 0–7 years, children age 0–4 years whose mothers/caretakers were interviewed, and percentage of under-five children whose mothers/caretakers were interviewed, by single ages, Swaziland, 2010

	Household population of children 0–7 years	Interviewed under–five children		Percentage of eligible under-fives interviewed (completion rate)
	Number	Number	Percent	
Age				
0	557	547	19.6	98.2
1	557	546	19.6	98.1
2	588	567	20.3	96.4
3	574	565	20.2	98.4
4	584	565	20.3	96.8
5	598	na	Na	na
6	626	na	Na	na
7	580	na	Na	na
Total (0–4)	2,860	2,790	100.0	97.6
Ratio of 5 to 4				1.02

Table DQ.4: Women's completion rates by socio-economic characteristics of households

Household population of women age 15–49 years, interviewed women age 15–49 years, and percentage of eligible women who were interviewed, by selected social and economic characteristics of the household, Swaziland, 2010

	Household population of women age 15–49 years		Interviewed women age 15–49 years		Percent of eligible women interviewed (completion rates)
	Number	Percent	Number	Percent	
Region					
Hhohho	1,390	27.4	1,289	26.9	92.7
Manzini	1,638	32.3	1,572	32.8	96.0
Shiselweni	1,117	22.0	1,041	21.7	93.2
Lubombo	923	18.2	885	18.5	95.9
Area					
Urban	1,463	28.9	1,401	29.3	95.7
Rural	3,606	71.1	3,387	70.7	93.9
Household size					
1–3	3,190	62.9	1,163	24.3	96.1
4–6	1,440	28.4	1,781	37.2	94.6
7+	439	8.7	1,844	38.5	93.3
Education of household head					
None	969	19.1	899	18.8	92.8
Primary	1,521	30.0	1,417	29.6	93.1
Secondary	1,103	21.8	1,058	22.1	95.9
High	805	15.9	771	16.1	95.7
Tertiary	662	13.1	635	13.3	95.9
Missing/DK	7	0.1	7	0.2	100.0
Wealth index quintiles					
Poorest	798	15.8	749	15.6	93.8
Second	881	17.4	815	17.0	92.5
Middle	1,010	19.9	949	19.8	93.9
Fourth	1,106	21.8	1,063	22.2	96.2
Richest	1,273	25.1	1,212	25.3	95.2
Total	5,069	100.0	4,788	100.0	94.5

Table DQ.4M: Men's completion rates by socio–economic characteristics of households

Household population of men age 15–59, interviewed men age 15–59, and percentage of eligible men who were interviewed, by selected social and economic characteristics of the household, Swaziland, 2010

	Household population of men age 15–59 years		Interviewed men age 15–59 years		Percent of eligible men interviewed (completion rates)
	Number	Percent	Number	Percent	
Region					
Hhohho	1,565	27.4	1,127	26.6	87.2
Manzini	1,811	31.8	1,435	33.9	90.3
Shiselweni	1,280	22.5	848	20.1	88.6
Lubombo	1,047	18.4	819	19.4	92.7
Area					
Urban	1,583	27.8	1,374	32.5	90.3
Rural	4,119	72.2	2,855	67.5	89.2
Household size					
1–3	3,610	63.3	1,476	34.9	94.0
4–6	1,609	28.2	1,302	30.8	89.3
7+	483	8.5	1,452	34.3	85.7
Education of household head					
None	1,139	20.0	831	19.6	88.5
Primary	1,764	30.9	1,274	30.1	88.7
Secondary	1,208	21.2	850	20.1	92.5
High	856	15.0	747	17.7	90.8
Tertiary	725	12.7	514	12.2	87.5
Missing/DK	10	0.2	13	0.3	75.5
Wealth index quintiles					
Poorest	941	16.5	577	13.6	87.6
Second	1,003	17.6	745	17.6	90.1
Middle	1,135	19.9	828	19.6	88.6
Fourth	1,222	21.4	954	22.6	92.7
Richest	1,402	24.6	1,125	26.6	88.5
Total	5,702	100.0	4,230	100.0	89.6

Table DQ.5: Completion rates for under-5 questionnaires by socio-economic characteristics of households

Household population of under-five children, under-five questionnaires completed, and percentage of under-five children for whom interviews were completed, by selected socio-economic characteristics of the household, Swaziland, 2010

	Household population of under-five children		Interviewed under-five children		Percent of eligible under-fives with completed under-five questionnaires (completion rates)
	Number	Percent	Number	Percent	
Region					
Hhohho	707	24.7	682	24.4	96.4
Manzini	850	29.7	821	29.4	96.6
Shiselweni	738	25.8	729	26.1	98.8
Lubombo	565	19.7	558	20.0	98.8
Area					
Urban	569	19.9	547	19.6	96.1
Rural	2291	80.1	2,243	80.4	97.9
Household size					
1–3	385	13.5	350	12.6	98.0
4–6	1,162	40.6	1,115	40.0	97.1
7+	1,312	45.9	1,325	47.5	97.8
Education of household head					
None	689	24.1	667	23.9	96.8
Primary	1,034	36.1	1,014	36.3	98.1
Secondary	540	18.9	527	18.9	97.5
High	359	12.6	351	12.6	97.7
Tertiary	229	8.0	223	8.0	97.3
Missing/DK	9	0.3	9	0.3	100.0
Wealth index quintiles					
Poorest	696	24.3	685	24.6	98.4
Second	607	21.2	588	21.1	96.8
Middle	583	20.4	573	20.6	98.4
Fourth	528	18.5	514	18.4	97.4
Richest	445	15.6	429	15.4	96.4
Total	2,860	100.0	2,790	100.0	97.6

Table DQ.6: Completeness of reporting

Percentage of observations that are missing information for selected questions and indicators, Swaziland, 2010

Questionnaire and type of missing information	Reference group	Percent with missing/incomplete information*	Number of cases
Household			
Age	All household members	0.0	19,843
Salt test result	All households interviewed that have salt	0.5	4,834
Starting time of interview	All households interviewed	0.0	4,834
Ending time of interview	All households interviewed	0.0	4,834
Women			
Woman's date of birth	All women age 15–49 years		
Only month		0.4	4,688
Both month and year		0.0	4,688
Date of first marriage/union	All ever married women age 15–49 years		
Only month		12.6	2,326
Both month and year		1.4	2,326
Age at first marriage/union	All ever married women age 15–49 years with year of first marriage not known	0.0	2,326
Age at first intercourse	All women age 15–24 years who have ever had sex	0.0	1,093
Time since last intercourse	All women age 15–24 years who have ever had sex	0.0	1,093
Starting time of interview	All women interviewed	0.0	4,688
Ending time of interview	All women interviewed	0.0	4,688
Men			
Man's date of birth	All men age 15–49 years		
Only month		0.9	4,179
Both month and year		0.0	4,179
Date of first marriage/union	All ever married men age 15–49 years		
Only month		22.1	1,684
Both month and year		3.2	1,684
Age at first marriage/union	All ever married men age 15–49 years with year of first marriage not known	0.0	1,684
Age at first intercourse	All men age 15–24 years who have ever had sex	0.2	709
Time since last intercourse	All men age 15–24 years who have ever had sex	0.0	709
Starting time of interview	All men interviewed	0.0	4,179
Ending time of interview	All men interviewed	0.0	4,179
Under-five			
Date of birth	All under-five children		
Only month		0.1	2,647
Both month and year		0.0	2,647
Anthropometric measurements	All under-five children		
Weight		2.6	2,647
Height		2.6	2,647
Both weight and height		2.5	2,647
Starting time of interview	All under-five children	0.0	2,647
Ending time of interview	All under-five children	0.0	2,647

Table DQ.7: Completeness of information for anthropometric indicators

Distribution of children under five by completeness of information for anthropometric indicators, Swaziland, 2010

Weight by age	Valid weight and date of birth	Reason for exclusion from analysis				Total	Percent of children excluded from analysis	Number of children under five
		Weight not measured	Incomplete date of birth	Weight not measured, incomplete date of birth	Flagged cases (outliers)			
<6 months	97.0	0.0	0.0	0.0	3.0	100.0	3.0	269
6–11 months	97.3	0.4	0.0	0.0	2.3	100.0	2.7	258
12–23 months	98.3	0.2	0.2	0.0	1.4	100.0	1.7	515
24–35 months	98.5	0.0	0.4	0.0	1.1	100.0	1.5	530
36–47 months	96.1	0.0	0.0	0.0	3.9	100.0	3.9	537
48–59 months	95.5	0.2	0.0	0.0	4.3	100.0	4.5	538
Total	97.1	0.1	0.1	0.0	2.7	100.0	2.9	2,647
Height by age	Valid height and date of birth	**Reason for exclusion from analysis**				Total	Percent of children excluded from analysis	Number of children under five
		Height not measured	Incomplete date of birth	Height not measured, incomplete date of birth	Flagged cases (outliers)			
<6 months	95.9	0.0	0.0	0.0	4.1	100.0	4.1	269
6–11 months	96.9	0.0	0.0	0.0	3.1	100.0	3.1	258
12–23 months	97.5	0.2	0.2	0.0	2.1	100.0	2.5	515
24–35 months	97.9	0.0	0.4	0.0	1.7	100.0	2.1	530
36–47 months	95.9	0.2	0.0	0.0	3.9	100.0	4.1	537
48–59 months	95.7	0.0	0.0	0.0	4.3	100.0	4.3	538
Total	96.7	0.1	0.1	0.0	3.1	100.0	3.3	2,647

Table DQ.7: Completeness of information for anthropometric indicators

Distribution of children under five by completeness of information for anthropometric indicators, Swaziland, 2010

Weight by height	Valid weight and height	Reason for exclusion from analysis					Total	Percent of children excluded from analysis	Number of children under five
		Weight not measured	Height not measured	Incomplete date of birth	Weight not measured, incomplete date of birth	Flagged cases (outliers)			
<6 months	94.8	0.0	0.0	0.0	0.0	5.2	100.0	5.2	269
6–11 months	97.3	0.4	0.0	0.0	0.0	2.3	100.0	2.7	258
12–23 months	97.7	0.2	0.2	0.2	0.0	1.7	100.0	2.3	515
24–35 months	98.1	0.0	0.0	0.4	0.0	1.5	100.0	1.9	530
36–47 months	95.7	0.0	0.2	0.0	0.0	4.1	100.0	4.3	537
48–59 months	95.2	0.2	0.0	0.0	0.0	4.6	100.0	4.8	538
Total	96.5	0.1	0.1	0.1	0.0	3.2	100.0	3.5	2,647

Table DQ.8: Heaping in anthropometric measurements

Distribution of weight and height/length measurements by digits reported for decimals, Swaziland, 2010

	Weight		Height	
	Number	Percent	Number	Percent
Digits				
0	248	9.6	262	10.2
1	265	10.3	264	10.2
2	263	10.2	285	11.1
3	242	9.4	315	12.2
4	254	9.9	257	10.0
5	268	10.4	312	12.1
6	255	9.9	232	9.0
7	238	9.2	223	8.7
8	279	10.8	227	8.8
9	263	10.2	201	7.8
0 or 5	516	20.0	574	22.3
Total	2,575	100.0	2,578	100.0

Table DQ.9: Observation of bednets and places for hand washing

Percentage of bednets in all households interviewed observed by the interviewer, and percentage of places for hand washing observed by the interviewer in all interviewed households, Swaziland, 2010

	Percentage of bednets observed by interviewer	Total number of bednets	Places for hand washing				Total	Number of households interviewed
			Observed	Not observed				
				Place for hand washing not in dwelling	No permission to see	Other		
Region								
Hhohho	95.7	128	71.4	24.7	1.6	2.3	100.0	1,237
Manzini	89.0	84	76.0	14.7	6.8	2.6	100.0	1,368
Shiselweni	90.9	13	82.1	10.9	4.3	2.6	100.0	1,079
Lubombo	95.2	815	68.3	28.7	0.6	2.3	100.0	1,150
Area								
Urban	91.9	148	78.6	16.1	3.0	2.2	100.0	2,095
Rural	95.1	892	71.1	22.5	3.8	2.6	100.0	2,739
Wealth index quintiles								
Poorest	98.3	278	61.0	32.6	3.1	3.4	100.0	776
Second	95.1	216	65.1	26.1	5.9	2.8	100.0	723
Middle	94.6	205	70.1	22.7	4.0	3.0	100.0	907
Fourth	94.1	191	74.8	20.1	2.5	2.5	100.0	1,026
Richest	89.0	150	88.9	7.1	2.6	1.3	100.0	1,402
Total	94.4	1040	74.3	19.7	3.4	2.4	100.0	4,834

Table DQ.10: Observation of women's health cards

Percent distribution of women with a live birth in the last two years by presence of a health card, and the percentage of health cards seen by the interviewers, Swaziland, 2010

	Woman does not have health card	Woman has health card		Missing/ DK	Total	Percent of health cards seen by the interviewer (1)/(1+2)*100	Number of women with a live birth in the last two years
		Seen by the interviewer (1)	Not seen by the interviewer (2)				
Region							
Hhohho	12.2	35.4	47.6	4.8	100.0	42.6	229
Manzini	10.6	36.9	51.1	1.4	100.0	41.9	282
Shiselweni	13.8	26.2	57.1	2.9	100.0	31.4	275
Lubombo	8.2	37.9	51.3	2.6	100.0	42.5	232
Area							
Urban	9.0	30.9	54.9	5.2	100.0	36.0	324
Rural	12.4	35.3	50.6	1.7	100.0	41.1	694
Wealth index quintiles							
Poorest	17.4	36.3	44.8	1.5	100.0	44.8	201
Second	13.7	33.2	50.5	2.6	100.0	39.6	190
Middle	9.6	33.8	53.4	3.2	100.0	38.7	219
Fourth	7.9	42.4	46.8	3.0	100.0	47.5	203
Richest	8.3	23.9	63.9	3.9	100.0	27.2	205
Total	11.3	33.9	52.0	2.8	100.0	39.5	1,018

Table DQ.10: Observation of women's health cards

Percent distribution of women with a live birth in the last two years by presence of a health card, and the percentage of health cards seen by the interviewers, Swaziland, 2010

	Woman does not have health card	Woman has health card		Missing/ DK	Total	Percent of health cards seen by the interviewer (1)/(1+2)*100	Number of women with a live birth in the last two years
		Seen by the interviewer (1)	Not seen by the interviewer (2)				
Region							
Hhohho	12.2	35.4	47.6	4.8	100.0	42.6	229
Manzini	10.6	36.9	51.1	1.4	100.0	41.9	282
Shiselweni	13.8	26.2	57.1	2.9	100.0	31.4	275
Lubombo	8.2	37.9	51.3	2.6	100.0	42.5	232
Area							
Urban	9.0	30.9	54.9	5.2	100.0	36.0	324
Rural	12.4	35.3	50.6	1.7	100.0	41.1	694
Wealth index quintiles							
Poorest	17.4	36.3	44.8	1.5	100.0	44.8	201
Second	13.7	33.2	50.5	2.6	100.0	39.6	190
Middle	9.6	33.8	53.4	3.2	100.0	38.7	219
Fourth	7.9	42.4	46.8	3.0	100.0	47.5	203
Richest	8.3	23.9	63.9	3.9	100.0	27.2	205
Total	11.3	33.9	52.0	2.8	100.0	39.5	1,018

Table DQ.12: Observation of vaccination cards

Percent distribution of children under five by presence of a vaccination card, and the percentage of vaccination cards seen by the interviewers, Swaziland, 2010

	Child does not have vaccination card		Child has vaccination card		Missing/ DK	Total	Percent of vaccination cards seen by the interviewer (1)/(1+2)*100	Number of children under age five
	Had vaccination card previously	Never had vaccination card	Seen by the interviewer (1)	Not seen by the interviewer (2)				
Region								
Hhohho	2.5	1.4	80.0	16.0	0.2	100.0	83.4	570
Manzini	1.4	0.6	82.6	15.5	0.0	100.0	84.2	666
Shiselweni	4.3	0.1	80.2	15.0	0.4	100.0	84.2	772
Lubombo	1.7	0.5	86.7	11.1	0.0	100.0	88.6	639
Area								
Urban	1.5	0.4	78.3	19.8	0.0	100.0	79.8	672
Rural	2.9	0.7	83.7	12.6	0.2	100.0	87.0	1,975
Child's age								
0	0.4	0.4	92.9	6.1	0.2	100.0	93.8	523
1	1.4	0.0	87.9	10.5	0.2	100.0	89.3	513
2	3.6	0.4	80.4	15.7	0.0	100.0	83.7	530
3	3.0	0.9	78.2	17.7	0.2	100.0	81.5	542
4	4.3	1.3	72.7	21.5	0.2	100.0	77.2	539
Total	2.5	0.6	82.3	14.4	0.2	100.0	85.1	2,647

Table DQ.13: Presence of mother in the household and the person interviewed for the under-five questionnaire

Distribution of children under five by whether the mother lives in the same household, and the person interviewed for the under-five questionnaire, Swaziland, 2010

	Mother in the household	Mother not in the household				Total	Number of children under five
	Mother interviewed	Father interviewed	Other adult female interviewed	Other adult male interviewed	Other person interviewed		
Age							
0	95.6	0.0	4.4	0.0	0.0	100.0	557
1	82.5	0.6	16.7	0.2	0.0	100.0	557
2	72.1	1.7	25.7	0.5	0.0	100.0	588
3	63.8	0.4	33.9	1.8	0.0	100.0	574
4	64.1	1.5	32.6	1.5	0.3	100.0	584
Total	75.4	0.9	22.8	0.8	0.1	100.0	2,860

Table DQ.14: Selection of children age 2–14 years for the child discipline module

Percent of households with at least two children age 2–14 years where correct selection of one child for the child discipline module was performed, Swaziland, 2010

	Percent of households where correct selection was performed	Number of households with two or more children age 2–14 years
Region		
Hhohho	93.6	455
Manzini	85.6	430
Shiselweni	93.8	583
Lubombo	92.8	499
Area		
Urban	90.7	454
Rural	92.0	1,513
Number of households by number of children 2–14		
2	93.6	807
3	90.4	551
4	90.5	609
Total	91.7	1,967

Table DQ.15: School attendance by single age

Distribution of household population age 5–24 years by educational level and educational level and grade attended in the current (or most recent) school year, Swaziland, 2010

	Not attending school	Pre-school	Primary							Secondary			High			Tertiary	DK	Total	Number of household members
			1	2	3	4	5	6	7	1	2	3	1	2	3				
Age at beginning of school year																			
5	19.4	38.0	40.5	1.9	.3	.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	591
6	3.8	5.4	61.2	27.3	2.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	100.0	603
7	1.6	2.7	25.2	49.5	19.6	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	602
8	1.4	0.4	9.4	26.5	44.1	17.4	0.5	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	100.0	506
9	1.5	0.6	4.2	15.1	35.3	32.6	9.2	1.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	653
10	1.6	0.0	2.5	7.6	19.5	30.9	24.2	12.6	1.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	541
11	2.2	0.0	1.3	2.5	12.8	23.1	25.1	23.0	9.5	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	607
12	2.2	0.0	0.6	2.3	6.5	13.4	23.4	23.4	20.3	7.4	0.5	0.0	0.0	0.0	0.0	0.0	0.2	100.0	573
13	2.9	0.0	0.4	0.6	3.7	8.4	15.9	24.1	19.2	16.3	7.7	0.4	0.1	0.1	0.0	0.0	0.2	100.0	594
14	5.6	0.0	0.3	1.3	1.9	2.9	14.2	14.9	18.9	19.4	14.9	5.3	0.3	0.0	0.0	0.0	0.2	100.0	547
15	10.7	0.0	0.5	0.3	0.9	2.5	6.6	14.3	14.4	11.2	18.9	12.6	6.6	0.6	0.0	0.0	0.0	100.0	515
16	14.4	0.0	0.7	0.2	0.4	1.6	4.0	7.1	10.5	11.8	20.8	13.6	10.1	4.6	0.0	0.2	0.0	100.0	497
17	24.6	0.0	0.0	0.5	0.2	0.5	2.2	5.4	5.1	11.9	15.3	13.9	10.9	8.9	0.7	0.0	0.0	100.0	472
18	47.2	0.0	0.0	0.3	0.0	0.2	0.3	0.5	4.4	4.4	9.0	8.9	17.0	6.9	0.0	1.0	0.0	100.0	415
19	55.7	0.0	0.0	0.0	0.2	0.3	0.2	1.9	1.6	4.2	7.1	5.0	11.0	10.2	0.0	2.5	0.0	100.0	437
20	70.7	0.0	0.0	0.0	0.0	0.4	0.0	1.0	0.0	0.6	4.7	4.7	8.7	5.7	0.0	3.4	0.0	100.0	385
21	80.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	2.8	1.9	5.4	3.9	0.2	4.1	0.0	100.0	362
22	88.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.7	3.1	3.5	0.0	3.2	0.0	100.0	340
23	89.1	0.0	0.4	0.0	0.0	0.0	0.0	0.3	0.0	0.2	0.4	0.0	2.0	3.4	0.0	4.2	0.2	100.0	374
24	96.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	2.3	0.0	100.0	352

Table DQ.16: Sex ratio at birth among children ever born and living

Sex ratio (number of males per 100 females) among children ever born (at birth), children living, and deceased children, by age of women, Swaziland, 2010

	Children Ever Born			Children Living			Children Deceased			
	Number of sons ever born	Number of daughters ever born	Sex ratio	Number of sons living	Number of daughters living	Sex ratio	Number of deceased sons	Number of deceased daughters	Sex ratio	Number of women
Age of woman										
15–19	80	92	0.87	74	87	0.85	6	5	1.20	1,079
20–24	461	492	.94	416	446	0.93	45	46	.98	909
25–29	819	784	1.04	742	705	1.05	77	79	.97	857
30–34	796	790	1.01	714	731	0.98	82	59	1.39	601
35–39	865	874	0.99	793	811	0.98	72	63	1.14	465
40–44	991	967	1.02	888	881	1.01	103	86	1.20	431
45–49	901	893	1.01	787	809	0.97	114	84	1.36	346
Total	4,913	4,892	0.98	4,414	4,470	0.97	499	422	1.18	4,688

Table DQ.17: 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, unimputed), Swaziland, 2010

	Number of births			Percent with complete birth date **			Sex ratio at birth ***			Calendar year ratio ****		
	Living	Dead	Total	Living	Dead	Total	Living	Dead	Total	Living	Dead	Total
Year of birth												
2010 *	412	23	435	100.0	100.0	100.0	79.8	133.6	82.1	na	na	na
2009	478	31	510	100.0	100.0	100.0	106.5	52.5	102.1	na	na	na
2008	502	46	547	100.0	100.0	100.0	91.8	113.8	93.5	114.1	117.8	114.4
2007	400	46	446	100.0	100.0	100.0	71.9	117.8	75.7	82.2	93.5	83.3
2006	473	53	525	100.0	100.0	100.0	95.0	95.4	95.1	114.0	94.6	111.7
2005	429	65	494	100.0	98.4	99.8	107.2	106.9	107.1	96.4	128.7	99.8
2004	416	49	466	100.0	100.0	100.0	119.6	149.0	122.4	101.4	87.6	99.7
2003	393	47	439	100.0	97.8	99.8	92.9	77.9	91.2	96.9	109.0	98.0
2002	394	36	431	100.0	98.6	99.9	98.3	187.5	103.6	105.7	82.6	103.2
2001	354	42	395	100.0	97.5	99.7	114.0	95.8	111.9	86.3	103.9	87.9
2000	425	44	469	100.0	100.0	100.0	81.9	188.2	88.3	117.8	116.3	117.7
1999	368	33	401	100.0	90.3	99.2	114.8	124.5	115.5	95.9	77.9	94.1
1998	342	42	384	100.0	100.0	100.0	88.9	109.1	90.9	97.0	146.9	100.7
1997	338	24	362	100.0	100.0	100.0	101.8	125.6	103.2	105.1	71.9	102.0
1996	300	24	325	100.0	100.0	100.0	110.0	143.4	112.2	93.7	81.5	92.7
1995	303	36	339	100.0	96.4	99.6	102.3	178.6	108.4	101.0	149.3	104.6
1994	300	24	324	100.0	100.0	100.0	97.8	328.1	105.9	105.6	82.5	103.4
1993	266	22	287	100.0	100.0	100.0	110.7	77.0	107.7	91.9	82.0	91.1
1992	278	29	307	100.0	100.0	100.0	97.4	89.0	96.6	107.9	137.9	110.2
1991	249	20	270	100.0	100.0	100.0	88.8	83.2	88.3	93.4	71.4	91.3
1990	256	28	284	100.0	100.0	100.0	122.3	153.9	125.1	109.3	122.2	110.5
1989	219	26	245	100.0	100.0	100.0	90.4	99.7	91.4	na	na	na
2006–2010	2,265	199	2,464	100.0	100.0	100.0	89.1	99.0	89.9	na	na	na
2001–2005	1,986	239	2,225	100.0	98.5	99.8	106.0	114.6	106.8	na	na	na
1996–2000	1,773	167	1,941	100.0	98.1	99.8	97.8	136.6	100.6	na	na	na
1991–1995	1,396	131	1,526	100.0	99.0	99.9	99.3	128.7	101.5	na	na	na
<1991	1,689	227	1,915	100.0	99.4	99.9	99.3	111.2	100.7	na	na	na
DK/missing	2	4	6	0.0	0.0	0.0	na.	56.8	56.8	na	na	na
Total	9,111	967	10,078	100.0	98.6	99.8	97.8	115.2	99.3	na	na	na

NA = Not Applicable

* Interviews were conducted from August to November 2010.

** Both month and year of birth given.

*** (Bm/Bf) x 100, where Bm and Bf are the numbers of male and female births, respectively.

**** (2 x Bt/(Bt-1 + Bt+1)) x 100, where Bt is the number of births in calendar year t.

Table DQ.18: Reporting of age at death in days

Distribution of reported deaths under one month of age by age at death in days and the percentage of neonatal deaths reported to occur at ages 0–6 days, by five-year periods preceding the survey (weighted, unimputed), Swaziland, 2010

	Number of years preceding the survey				Total 0–19
	0–4	5–9	10–14	15–19	
Age at death (days)					
0	9	9	4	9	31
1	11	17	18	11	57
2	6	6	2	3	16
3	3	4	7	2	16
4	0	1	0	0	1
5	0	1	1	3	5
6	3	0	0	1	4
7	6	4	3	3	16
14	3	0	2	1	6
21	5	0	1	1	7
23	0	0	0	1	1
25	2	0	0	0	2
Total 0–30	48	41	37	35	161
Percent early neonatal	68.1	89.1	83.7	82.7	80.2

Note: <7 days / <31 days

Table DQ.19: Reporting of age at death in months

Distribution of reported deaths under two years of age by age at death in months and the percentage of infant deaths reported to occur at age under one month, by five-year periods preceding the survey (weighted, unimputed), Swaziland, 2010

	Number of years preceding the survey				Total 0–19
	0–4	5–9	10–14	15–19	
Age at death (months)					
0	48	41	38	35	162
1	19	17	3	6	45
2	18	13	14	5	50
3	13	22	8	9	52
4	12	9	5	10	35
5	12	6	7	2	27
6	17	19	13	3	52
7	4	16	8	7	35
8	4	6	3	2	14
9	17	15	7	4	43
10	1	5	1	0	7
11	1	2	4	1	8
12	1	2	0	0	3
13	2	3	2	0	7
14	1	2	0	0	3
15	1	0	2	0	3
16	1	0	0	0	1
17	2	0	0	0	2
18	2	2	2	2	8
19	2	0	0	0	2
20	1	0	0	0	1
22	0	0	1	0	1
23	0	0	1	0	1
Total 0–11	166	171	109	85	531
Percent neonatal	29.0	24.1	34.9	40.8	30.5

Note <1 month / <1 year

Appendix E. MICS Indicators: Numerators and Denominators

MICS4 INDICATOR		Module[48]	Numerator	Denominator	MDG[49]
1. MORTALITY					
1.1	Under-five mortality rate	BH	Probability of dying by exact age 5 years		MDG 4.1
1.2	Infant mortality rate	BH	Probability of dying by exact age 1 year		MDG 4.2
1.3	Neonatal mortality rate	BH	Probability of dying within the first month of life, during the 5-year period preceding the survey		
1.4	Post-neonatal mortality rate	BH	Difference between infant and neonatal mortality rates, during the 5-year period preceding the survey		
1.5	Child mortality rate	BH	Probability of dying between exact ages one and five, during the 5-year period preceding the survey		
2. NUTRITION					
2.1a 2.1b	Underweight prevalence	AN	Number of children under age 5 who (a) fall below minus two standard deviations (moderate and severe) (b) fall below minus three standard deviations (severe) from the median weight for age of the WHO standard	Total number of children under age 5	MDG 1.8
2.2a 2.2b	Stunting prevalence	AN	Number of children under age 5 who (a) fall below minus two standard deviations (moderate and severe) (b) fall below minus three standard deviations (severe) from the median height for age of the WHO standard	Total number of children under age 5	
2.3a 2.3b	Wasting prevalence	AN	Number of children under age 5 who (a) fall below minus two standard deviations (moderate and severe) (b) fall below minus three standard deviations (severe) from the median weight for height of the WHO standard	Total number of children under age 5	
2.4	Children ever breastfed	MN	Number of women with a live birth in the 2 years preceding the survey who breastfed the child at any time	Total number of women with a live birth in the 2 years preceding the survey	
2.5	Early initiation of breastfeeding	MN	Number of women with a live birth in the 2 years preceding the survey who put the newborn infant to the breast within 1 hour of birth	Total number of women with a live birth in the 2 years preceding the survey	
2.6	Exclusive breastfeeding under 6 months	BF	Number of infants under 6 months of age who are exclusively breastfed[50]	Total number of infants under 6 months of age	
2.7	Continued breastfeeding at 1 year	BF	Number of children age 12–15 months who are currently breastfeeding	Total number of children age 12–15 months	
2.8	Continued breastfeeding at 2 years	BF	Number of children age 20–23 months who are currently breastfeeding	Total number of children age 20–23 months	

[48] Some indicators are constructed by using questions in several modules. In such cases, only the module(s) which contains most of the necessary information is indicated.
[49] MDG indicators as of February 2010
[50] Infants receiving breast milk, and not receiving any other fluids or foods, with the exception of oral rehydration solution, vitamins, mineral supplements and medicines

MICS4 INDICATOR		Module	Numerator	Denominator	MDG
2.9	Predominant breastfeeding under 6 months	BF	Number of infants under 6 months of age who received breast milk as the predominant source of nourishment[51] during the previous day	Total number of infants under 6 months of age	
2.10	Duration of breastfeeding	BF	The age in months when 50 percent of children age 0–35 months did not receive breast milk during the previous day		
2.11	Bottle feeding	BF	Number of children age 0–23 months who were fed with a bottle during the previous day	Total number of children age 0–23 months	
2.12	Introduction of solid, semi-solid or soft foods	BF	Number of infants age 6–8 months who received solid, semi-solid or soft foods during the previous day	Total number of infants age 6–8 months	
2.13	Minimum meal frequency	BF	Number of children age 6–23 months receiving solid, semi-solid and soft foods (plus milk feeds for non-breastfed children) the minimum times[52] or more, according to breastfeeding status, during the previous day	Total number of children age 6–23 months	
2.14	Age-appropriate breastfeeding	BF	Number of children age 0–23 months appropriately fed[53] during the previous day	Total number of children age 0–23 months	2.14
2.15	Milk feeding frequency for non-breastfed children	BF	Number of non-breastfed children age 6–23 months who received at least 2 milk feedings during the previous day	Total number of non-breastfed children age 6–23 months	2.15
2.16	Iodized salt consumption	SI	Number of households with salt testing 15 parts per million or more of iodide/iodate	Total number of households in which salt was tested or with no salt	2.16
2.17	Vitamin A supplementation (children under age 5)	IM	Number of children age 6–59 months who received at least one high-dose vitamin A supplement in the 6 months preceding the survey	Total number of children age 6–59 months	2.17
2.18	Low-birthweight infants	MN	Number of last live births in the 2 years preceding the survey weighing below 2,500 grams at birth	Total number of last live births in the 2 years preceding the survey	2.18
2.19	Infants weighed at birth	MN	Number of last live births in the 2 years preceding the survey who were weighed at birth	Total number of last live births in the 2 years preceding the survey	2.19
3. CHILD HEALTH					
3.1	Tuberculosis immunization coverage	IM	Number of children age 12–23 months who received BCG vaccine before their first birthday	Total number of children age 12–23 months	
3.2	Polio immunization coverage	IM	Number of children age 12–23 months who received OPV3 vaccine before their first birthday	Total number of children age 12–23 months	
3.3	Immunization coverage for diphtheria, pertussis and tetanus (DPT)	IM	Number of children age 12–23 months who received DPT3 vaccine before their first birthday	Total number of children age 12–23 months	
3.4	Measles immunization coverage	IM	Number of children age 12–23 months who received measles vaccine before their first birthday	Total number of children age 12–23 months	MDG 4.3
3.5	Hepatitis B immunization coverage	IM	Number of children age 12–23 months who received the third dose of Hepatitis B vaccine before their first birthday	Total number of children age 12–23 months	

[51] Infants who receive breast milk and certain fluids (water and water-based drinks, fruit juice, ritual fluids, oral rehydration solution, drops, vitamins, minerals, and medicines), but do not receive anything else (in particular, non-human milk and food-based fluids)
[52] Breastfeeding children: Solid, semi-solid, or soft foods, two times for infants age 6-8 months, 3 times for children 9-23 months; Non-breastfeeding children: Solid, semi-solid, or soft foods, or milk feeds, four times for children age 6-23 months
[53] Infants age 0-5 who are exclusively breastfed, and children age 6-23 months who are breastfed and ate solid, semi-solid or soft foods

MICS4 INDICATOR		Module	Numerator	Denominator	MDG
3.6	Yellow fever immunization coverage	IM	Number of children age 12–23 months who received yellow fever vaccine before their first birthday	Total number of children age 12–23 months	
3.7	Neonatal tetanus protection	MN	Number of women age 15–49 years with a live birth in the 2 years preceding the survey who were given at least two doses of tetanus toxoid vaccine within the appropriate interval[54] prior to giving birth	Total number of women age 15–49 years with a live birth in the 2 years preceding the survey	
3.8	Oral rehydration therapy with continued feeding	CA	Number of children under age 5 with diarrhoea in the previous 2 weeks who received ORT (ORS packet or recommended homemade fluid or increased fluids) and continued feeding during the episode of diarrhoea	Total number of children under age 5 with diarrhoea in the previous 2 weeks	3.8
3.9	Care-seeking for suspected pneumonia	CA	Number of children under age 5 with suspected pneumonia in the previous 2 weeks who were taken to an appropriate health provider	Total number of children under age 5 with suspected pneumonia in the previous 2 weeks	3.9
3.10	Antibiotic treatment of suspected pneumonia	CA	Number of children under age 5 with suspected pneumonia in the previous 2 weeks who received antibiotics	Total number of children under age 5 with suspected pneumonia in the previous 2 weeks	3.10
3.11	Solid fuels	HC	Number of household members in households that use solid fuels as the primary source of domestic energy to cook	Total number of household members	3.11
3.12	Household availability of insecticide-treated nets (ITNs)[55]	TN	Number of households with at least one insecticide treated net (ITN)	Total number of households	
3.13	Households protected by a vector control method	TN - IR	Number of households with at least one insecticide-treated net (ITN) and/or that received spraying through an IRS[56] campaign in the last 12 months preceding the survey	Total number of households	
3.14	Children under age 5 sleeping under any type of mosquito net	TN	Number of children under age 5 who slept under any type of mosquito net the previous night	Total number of children under age 5	
3.15	Children under age 5 sleeping under insecticide-treated nets (ITNs)	TN	Number of children under age 5 who slept under an insecticide-treated mosquito net (ITN) the previous night	Total number of children under age 5	MDG 6.7
3.16	Malaria diagnostics usage	ML	Number of children under age 5 reported to have had fever in the previous 2 weeks who had a finger or heel stick for malaria testing	Total number of children under age 5 reported to have had fever in the previous 2 weeks	
3.17	Anti-malarial treatment of children under age 5 the same or next day	ML	Number of children under age 5 reported to have had fever in the previous 2 weeks who were treated with any anti-malarial drug within the same or next day of onset of symptoms	Total number of children under age 5 reported to have had fever in the previous 2 weeks	
3.18	Anti-malarial treatment of children under age 5	ML	Number of children under age 5 reported to have had fever in the previous 2 weeks who received any antimalarial treatment	Total number of children under age 5 reported to have had fever in the previous 2 weeks	MDG 6.8
3.19	Pregnant women sleeping under insecticide-treated nets (ITNs)	TN	Number of pregnant women who slept under an insecticide-treated net (ITN) the previous night	Total number of pregnant women	
3.20	Intermittent preventive treatment for malaria	MN	Number of women age 15–49 years who received at least 2 doses of SP/Fansidar to prevent malaria during antenatal care visits for their last pregnancy leading to a live birth in the 2 years preceding the survey	Total number of women age 15–49 years who have had a live birth in the 2 years preceding the survey	

[54] See MICS4 manual for a detailed description.
[55] An ITN is (a) a factory treated net which does not require any treatment, (b) a pretreated net obtained within the past 12 months, or (c) a net that has been soaked with insecticide within the past 12 months
[56] Indoor residual spraying

MICS4 INDICATOR		Module	Numerator	Denominator	MDG
4. WATER AND SANITATION					
4.1	Use of improved drinking water sources	WS	Number of household members using improved sources of drinking water	Total number of household members	MDG 7.8
4.2	Water treatment	WS	Number of household members using unimproved drinking water who use an appropriate treatment method	Total number of household members in households using unimproved drinking water sources	
4.3	Use of improved sanitation	WS	Number of household members using improved sanitation facilities which are not shared	Total number of household members	MDG 7.9
4.4	Safe disposal of child's faeces	CA	Number of children age 0–2 years whose (last) stools were disposed of safely	Total number of children age 0–2 years	
4.5	Place for handwashing	HW	Number of households with a designated place for hand washing where water and soap are present	Total number of households	
4.6	Availability of soap	HW	Number of households with soap anywhere in the dwelling	Total number of households	
5.REPRODUCTIVE HEALTH					
5.1	Adolescent birth rate	CM –BH	Age-specific fertility rate for women age 15–19 years for the three year period preceding the survey		MDG 5.4
5.2	Early childbearing	CM	Number of women age 20–24 years who had at least one live birth before age 18	Total number of women age 20–24 years	
5.3	Contraceptive prevalence rate	CP	Number of women age 15–49 years currently married or in union who are using (or whose partner is using) a (modern or traditional) contraceptive method	Total number of women age 15–49 years who are currently married or in union	MDG 5.3
5.4	Unmet need[57]	UN	Number of women age 15–49 years who are currently married or in union who are fecund and want to space their births or limit the number of children they have and who are not currently using contraception	Total number of women age 15–49 years who are currently married or in union	MDG 5.6
5.5a 5.5b	Antenatal care coverage	MN	Number of women age 15–49 years who were attended during pregnancy in the 2 years preceding the survey (a) at least once by skilled personnel (b) at least four times by any provider	Total number of women age 15–49 years with a live birth in the 2 years preceding the survey	MDG 5.5
5.6	Content of antenatal care	MN	Number of women age 15–49 years with a live birth in the 2 years preceding the survey who had their blood pressure measured and gave urine and blood samples during the last pregnancy	Total number of women age 15–49 years with a live birth in the 2 years preceding the survey	
5.7	Skilled attendant at delivery	MN	Number of women age 15–49 years with a live birth in the 2 years preceding the survey who were attended during childbirth by skilled health personnel	Total number of women age 15–49 years with a live birth in the 2 years preceding the survey	MDG 5.2
5.8	Institutional deliveries	MN	Number of women age 15–49 years with a live birth in the 2 years preceding the survey who delivered in a health facility	Total number of women age 15–49 years with a live birth in the 2 years preceding the survey	
5.9	Caesarean section	MN	Number of last live births in the 2 years preceding the survey who were delivered by caesarean section	Total number of last live births in the 2 years preceding the survey	

[57] See MICS4 manual for a detailed description.

MICS4 INDICATOR		Module	Numerator	Denominator	MDG
6. CHILD DEVELOPMENT					
6.1	Support for learning	EC	Number of children age 36–59 months with whom an adult has engaged in four or more activities to promote learning and school readiness in the past 3 days	Total number of children age 36–59 months	
6.2	Father's support for learning	EC	Number of children age 36–59 months whose father has engaged in one or more activities to promote learning and school readiness in the past 3 days	Total number of children age 36–59 months	
6.3	Learning materials: children's books	EC	Number of children under age 5 who have three or more children's books	Total number of children under age 5	
6.4	Learning materials: playthings	EC	Number of children under age 5 with two or more playthings	Total number of children under age 5	
6.5	Inadequate care	EC	Number of children under age 5 left alone or in the care of another child younger than 10 years of age for more than one hour at least once in the past week	Total number of children under age 5	
6.6	Early child development Index	EC	Number of children age 36–59 months who are developmentally on track in literacy-numeracy, physical, social-emotional, and learning domains	Total number of children age 36–59 months	
6.7	Attendance to early childhood education	EC	Number of children age 36–59 months who are attending an early childhood education programme	Total number of children age 36–59 months	
5. LITERACY AND EDUCATION					
7.1	Literacy rate among young women [M]	WB	Number of women age 15–24 years who are able to read a short simple statement about everyday life or who attended secondary or higher education	Total number of women age 15–24 years	MDG 2.3
7.2	School readiness	ED	Number of children in first grade of primary school who attended pre-school during the previous school year	Total number of children attending the first grade of primary school	
7.3	Net intake rate in primary education	ED	Number of children of school-entry age who enter the first grade of primary school	Total number of children of school-entry age	
7.4	Primary school net attendance ratio (adjusted)	ED	Number of children of primary school age currently attending primary or secondary school	Total number of children of primary school age	MDG 2.1
7.5	Secondary school net attendance ratio (adjusted)	ED	Number of children of secondary school age currently attending secondary school or higher	Total number of children of secondary-school age	
7.6	Children reaching last grade of primary	ED	Proportion of children entering the first grade of primary school who eventually reach last grade		MDG 2.2
7.7	Primary completion rate	ED	Number of children (of any age) attending the last grade of primary school (excluding repeaters)	Total number of children of primary school completion age (age appropriate to final grade of primary school)	
7.8	Transition rate to secondary school	ED	Number of children attending the last grade of primary school during the previous school year who are in the first grade of secondary school during the current school year	Total number of children attending the last grade of primary school during the previous school year	
7.9	Gender parity index (primary school)	ED	Primary school net attendance ratio (adjusted) for girls	Primary school net attendance ratio (adjusted) for boys	MDG 3.1
7.10	Gender parity index (secondary school)	ED	Secondary school net attendance ratio (adjusted) for girls	Secondary school net attendance ratio (adjusted) for boys	MDG 3.1

MICS4 INDICATOR		Module	Numerator	Denominator	MDG
6. CHILD PROTECTION					
8.1	Birth registration	BR	Number of children under age 5 whose births are reported registered	Total number of children under age 5	
8.2	Child labour	CL	Number of children age 5–14 years who are involved in child labour	Total number of children age 5–14 years	
8.3	School attendance among child labourers	ED - CL	Number of children age 5–14 years who are involved in child labour and are currently attending school	Total number of children age 5–14 years involved in child labour	
8.4	Child labour among students	ED - CL	Number of children age 5–14 years who are involved in child labour and are currently attending school	Total number of children age 5–14 years attending school	
8.5	Violent discipline	CD	Number of children age 2–14 years who experienced psychological aggression or physical punishment during the past month	Total number of children age 2–14 years	
8.6	Marriage before age 15 [M]	MA	Number of women age 15–49 years who were first married or in union by the exact age of 15	Total number of women age 15–49 years	
8.7	Marriage before age 18 [M]	MA	Number of women age 20–49 years who were first married or in union by the exact age of 18	Total number of women age 20–49 years	
8.8	Young women age 15–19 years currently married or in union [M]	MA	Number of women age 15–19 years who are currently married or in union	Total number of women age 15–19 years	
8.9	Polygamy [M]	MA	Number of women age 15–49 years who are in a polygynous union	Total number of women age 15–49 years who are currently married or in union	
8.10a 8.10b	Spousal age difference	MA	Number of women currently married or in union whose spouse is 10 or more years older, (a) for women age 15–19 years, (b) for women age 20–24 years	Total number of women currently married or in union (a) age 15–19 years, (b) age 20–24 years	
8.14	Attitudes towards domestic violence [M]	DV	Number of women who state that a husband/partner is justified in hitting or beating his wife in at least one of the following circumstances: (1) she goes out without telling him, (2) she neglects the children, (3) she argues with him, (4) she refuses sex with him, (5) she burns the food	Total number of women age 15–49 years	
7. HIV/AIDS AND SEXUAL BEHAVIOUR					
9.1	Comprehensive knowledge about HIV prevention[M]	HA	Number of women age 15–49 years who correctly identify two ways of preventing HIV infection[58], know that a healthy looking person can have HIV, and reject the two most common misconceptions about HIV transmission	Total number of women age 15–49 years	
9.2	Comprehensive knowledge about HIV prevention among young people [M]	HA	Number of women age 15–24 years who correctly identify two ways of preventing HIV infection[12], know that a healthy looking person can have HIV, and reject the two most common misconceptions about HIV transmission	Total number of women age 15–24 years	MDG 6.3
9.3	Knowledge of mother-to-child transmission of HIV [M]	HA	Number of women age 15–49 years who correctly identify all three means[59] of mother-to-child transmission of HIV	Total number of women age 15–49 years	

[M] Designate the indicator is also for men age 15-59 years
[58] Using condoms and limiting sex to one faithful, uninfected partner
[59] Transmission during pregnancy, during delivery, and by breastfeeding

MICS4 INDICATOR		Module	Numerator	Denominator	MDG
9.4	Accepting attitudes towards people living with HIV [M]	HA	Number of women age 15–49 years expressing accepting attitudes on all four questions[60] toward people living with HIV	Total number of women age 15–49 years who have heard of HIV	
9.5	Women who know where to be tested for HIV [M]	HA	Number of women age 15–49 years who state knowledge of a place to be tested for HIV	Total number of women age 15–49 years	
9.6	Women who have been tested for HIV and know the results [M]	HA	Number of women age 15–49 years who have been tested for HIV in the 12 months preceding the survey and who know their results	Total number of women age 15–49 years	
9.7	Sexually active young women who have been tested for HIV and know the results [M]	HA	Number of women age 15–24 years who have had sex in the 12 months preceding the survey, who have been tested for HIV in the 12 months preceding the survey and who know their results	Total number of women age 15–24 years who have had sex in the 12 months preceding the survey	
9.8	HIV counselling during antenatal care	HA	Number of women age 15–49 years who gave birth in the 2 years preceding the survey and received antenatal care, reporting that they received counselling on HIV during antenatal care	Total number of women age 15–49 years who gave birth in the 2 years preceding the survey	
9.9	HIV testing during antenatal care	HA	Number of women age 15–49 years who gave birth in the 2 years preceding the survey and received antenatal care, reporting that they were offered and accepted an HIV test during antenatal care and received their results	Total number of women age 15–49 years who gave birth in the 2 years preceding the survey	
9.10	Young women who have never had sex [M]	SB	Number of never married women age 15–24 years who have never had sex	Total number of never married women age 15–24 years	
9.11	Sex before age 15 among young women [M]	SB	Number of women age 15–24 years who have had sexual intercourse before age 15	Total number of women age 15–24 years	
9.12	Age-mixing among sexual partners [M]	SB	Number of women age 15–24 years who had sex in the 12 months preceding the survey with a partner who was 10 or more years older than they were	Total number of women age 15–24 years who have had sex in the 12 months preceding the survey	
9.13	Sex with multiple partners [M]	SB	Number of women age 15–49 years who have had sexual intercourse with more than one partner in the 12 months preceding the survey	Total number of women age 15–49 years	
9.14	Condom use during sex with multiple partners [M]	SB	Number of women age 15–49 years who report having had more than one sexual partner in the 12 months preceding the survey who also reported that a condom was used the last time they had sex	Total number of women age 15–49 years who reported having had more than one sexual partner in the 12 months preceding the survey	
9.15	Sex with non-regular partners [M]	SB	Number of sexually active women age 15–24 years who have had sex with a non-marital, non-cohabitating partner in the 12 months preceding the survey	Total number of women age 15–24 years who have had sex in the 12 months preceding the survey	
9.16	Condom use with non-regular partners [M]	SB	Number of women age 15–24 years reporting the use of a condom during sexual intercourse with their last non-marital, non-cohabiting sex partner in the 12 months preceding the survey	Total number of women age 15–24 years who had a non-marital, non-cohabiting partner in the 12 months preceding the survey	MDG 6.2

[60] Women (1) who think that a female teacher with the AIDS virus should be allowed to teach in school, (2) who would buy fresh vegetables from a shopkeeper or vendor who has the AIDS virus, (3) who would not want to keep it as a secret if a family member became infected with the AIDS virus, and (4) who would be willing to care for a family member who became sick with the AIDS virus.

[M] Designate the indicator is also for men age 15-59 years

MICS4 INDICATOR		Module	Numerator	Denominator	MDG
9.21	Male circumcision	MMC	Number of males age 15–49 years who report having been circumcised	Total number of males age 15–59 years	
9.17	Children's living arrangements	HL	Number of children age 0–17 years not living with a biological parent	Total number of children age 0–17 years	
9.18	Prevalence of children with at least one parent dead	HL	Number of children age 0–17 years with at least one dead parent	Total number of children age 0–17 years	
9.19	School attendance of orphans	HL - ED	Number of children age 10–14 years who have lost both parents and are attending school	Total number of children age 10–14 years who have lost both parents	MDG 6.4
9.20	School attendance of non-orphans	HL - ED	Number of children age 10–14 years, whose parents are alive, who are living with at least one parent, and who are attending school	Total number of children age 10–14 years, whose parents are alive, and who are living with at least one parent	MDG 6.4

Appendix F. Questionnaires

Four questionnaires were used for the 2010 Swaziland MICS and they are presented in the pages below. They are presented in the following order:

Household questionnaire
Women questionnaire
Children under-five questionnaire
Men questionnaire

The SiSwati translations are not included in this report, but can be found in the Survey Archive (accessible via www.childinfo.org/mics4.html).

MICS

HOUSEHOLD QUESTIONNAIRE
Swaziland

HOUSEHOLD INFORMATION PANEL	HH
HH1. Cluster number: ☐☐☐	HH2. Household number: ☐☐
HH3. Interviewer name and number: Name: _____ ☐☐	HH4. Supervisor name and number: Name: _____ ☐☐
HH5. Day/Month/Year of interview: ☐☐ ☐☐ ☐☐☐☐	
HH6. AREA: Urban ..... 1 Rural 2	HH7. REGION: Hhohho ..... 1 Manzini ..... 2 Shiselweni ..... 3 Lubombo 4

WE ARE FROM THE **CENTRAL STATISTICAL OFFICE**. WE ARE WORKING ON A PROJECT CONCERNED WITH FAMILY HEALTH AND EDUCATION. I WOULD LIKE TO TALK TO YOU ABOUT THESE SUBJECTS. THE INTERVIEW WILL TAKE ABOUT 30 MINUTES. ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND YOUR ANSWERS WILL NEVER BE SHARED WITH ANYONE OTHER THAN OUR PROJECT TEAM.

MAY I START NOW?

☐ *Yes, permission is given⇨Begin the interview.*

☐ *No, permission is not given⇨Complete HH9. Discuss this result with your supervisor.*

After all questionnaires for the household have been completed, fill in the following information:

HH8. Name of head of household: _____

HH9. Result of household interview:	HH10. Respondent to household questionnaire:
Completed ..... 01 No household member or no competent respondent at home at time of visit ..... 02 Entire household absent for extended period of time ..... 03 Refused ..... 04 Dwelling vacant / Address not a dwelling ..... 05 Dwelling destroyed ..... 06 Dwelling not found ..... 07 Other (*specify*) _____ 96	Name: _____ Line Number: ☐☐ HH11. Total number of household members: ☐☐
HH12. Number of women age 15-49 years: ☐☐	HH13. Number of woman's Questionnaires completed: ☐☐
HH12A. Number of men age 15-59 years: ☐☐	HH13A. Number of man's Questionnaires completed: ☐☐
HH14. Number of children under age 5: ☐☐	HH15. Number of under-5 questionnaires completed: ☐☐
HH16. Field edited by (Name and number): Name: _____ ☐☐	HH17. Data entry clerk (Name and number): Name: _____ ☐☐

HH18.
Record the time:

Hour..... __ __

Minutes..... __ __

HOUSEHOLD LISTING FORM HL

FIRST, PLEASE TELL ME THE NAME OF EACH PERSON WHO USUALLY LIVES HERE, STARTING WITH THE HEAD OF THE HOUSEHOLD.
List the head of the household in line 01. List all household members (HL2), their relationship to the household head (HL3), and their sex (HL4)

Then ask: ARE THERE ANY OTHERS WHO LIVE HERE, EVEN IF THEY ARE NOT AT HOME NOW?
If yes, complete listing for questions HL2-HL4. Then, ask questions starting with HL5 for each person at a time.
Use an additional questionnaire if all rows in the household listing form have been used.

							For women age ***15-49***	*For men age* ***15-59***	*For children age* **5-14**	*For children under age* **5**	*If age* ***18-59*** *years*	*For* ***all*** *household members*	*For children age* **0-17** *years*						
HL1. *Line #*	HL2. *Name*	HL3. WHAT IS THE RELATIONSHIP OF (*name*) TO THE HEAD OF HOUSEHOLD?	HL4. IS (*name*) MALE OR FEMALE?	HL5. WHAT IS (*name's*) DATE OF BIRTH?		HL6. HOW OLD IS (*name*)?	HL7.	HL7A.	HL8. WHO IS THE MOTHER OR PRIMARY CARETAKER OF THIS CHILD?	HL9. WHO IS THE MOTHER OR PRIMARY CARETAKER OF THIS CHILD?	HL9A. HAS (*name*) BEEN VERY SICK FOR AT LEAST 3 MONTHS DURING THE PAST 12 MONTHS?	HL10. DID (*name*) STAY HERE LAST NIGHT?	HL11. IS (*name's*) NATURAL MOTHER ALIVE?	HL12. DOES (*name's*) NATURAL MOTHER LIVE IN THIS HOUSEHOLD?	HL12A. ***If mother does not live in household*** HAS (*name's*) MOTHER BEEN VERY SICK FOR AT LEAST 3 MONTHS IN THE PAST 12 MONTHS?	HL13. IS (*name's*) NATURAL FATHER ALIVE?	HL14. DOES (*name's*) NATURAL FATHER LIVE IN THIS HOUSEHOLD?	HL14A. ***If father does not live in household*** HAS (*name's*) FATHER BEEN VERY SICK FOR AT LEAST 3 MONTHS IN THE PAST 12 MONTHS?
			1 Male 2 Female	98 DK	9998 DK	*Record in completed years. If age is 95 or above, record '95'*	*Circle line number if woman is age* ***15-49***	*Circle Line number If man is age* ***15-59***	*Record line number of mother/ caretaker*	*Record line number of mother/ caretaker*		1 Yes 2 No 8 DK	1 Yes 2 No	1 Yes 2 No ⇨ HL13 8 DK ⇨ HL13	*Record line number of mother or 00 for "no"*		1 Yes 2 No ⇨ Next Line 8 DK ⇨ Next Line	*Record line number of father or 00 for "no"*	
Line	Name	Relation*	M F	Month	Year	Age	15-49	15-59	Mother	Mother	Y N DK	Y N	Y N DK	Mother	Y N DK	Y N DK	Father	Y N DK
01		**0 1**	1 2	__ __	__ __ __ __	__ __	01	01	__ __	__ __	1 2 8	1 2	1 2 8	__ __	1 2 8	1 2 8	__ __	1 2 8
02		__ __	1 2	__ __	__ __ __ __	__ __	02	02	__ __	__ __	1 2 8	1 2	1 2 8	__ __	1 2 8	1 2 8	__ __	1 2 8
03		__ __	1 2	__ __	__ __ __ __	__ __	03	03	__ __	__ __	1 2 8	1 2	1 2 8	__ __	1 2 8	1 2 8	__ __	1 2 8
04		__ __	1 2	__ __	__ __ __ __	__ __	04	04	__ __	__ __	1 2 8	1 2	1 2 8	__ __	1 2 8	1 2 8	__ __	1 2 8
05		__ __	1 2	__ __	__ __ __ __	__ __	05	05	__ __	__ __	1 2 8	1 2	1 2 8	__ __	1 2 8	1 2 8	__ __	1 2 8
06		__ __	1 2	__ __	__ __ __ __	__ __	06	06	__ __	__ __	1 2 8	1 2	1 2 8	__ __	1 2 8	1 2 8	__ __	1 2 8
07		__ __	1 2	__ __	__ __ __ __	__ __	07	07	__ __	__ __	1 2 8	1 2	1 2 8	__ __	1 2 8	1 2 8	__ __	1 2 8
08		__ __	1 2	__ __	__ __ __ __	__ __	08	08	__ __	__ __	1 2 8	1 2	1 2 8	__ __	1 2 8	1 2 8	__ __	1 2 8
09		__ __	1 2	__ __	__ __ __ __	__ __	09	09	__ __	__ __	1 2 8	1 2	1 2 8	__ __	1 2 8	1 2 8	__ __	1 2 8
10		__ __	1 2	__ __	__ __ __ __	__ __	10	10	__ __	__ __	1 2 8	1 2	1 2 8	__ __	1 2 8	1 2 8	__ __	1 2 8

HL1. *Line #*	HL2. *Name*	HL3. WHAT IS THE RELATION-SHIP OF (*name*) TO THE HEAD OF HOUSE-HOLD?	HL4. IS (*name*) MALE OR FEMALE? 1 Male 2 Female	HL5. WHAT IS (*name's*) DATE OF BIRTH? 98 DK 9998 DK		HL6. HOW OLD IS (*name*)? *Record in completed years. If age is 95 or above, record '95'*	HL7. *Circle line number if woman is age **15-49***	HL7A. *Circle Line number If man is age **15-59***	HL8. WHO IS THE MOTHER OR PRIMARY CARE-TAKER OF THIS CHILD? *Record line number of mother/ caretaker*	HL9. WHO IS THE MOTHER OR PRIMARY CARE-TAKER OF THIS CHILD? *Record line number of mother/ caretaker*	HL9A. HAS (*name*) BEEN VERY SICK FOR AT LEAST 3 MONTHS DURING THE PAST 12 MONTHS?	HL10. DID (*name*) STAY HERE LAST NIGHT? 1 Yes 2 No	HL11. IS (*name's*) NATURAL MOTHER ALIVE? 1 Yes 2 No↘ HL13 8 DK↘ HL13	HL12. DOES (*name's*) NATURAL MOTHER LIVE IN THIS HOUSE-HOLD? *Record line number of mother or 00 for "no"*	HL12A. ***If mother does not live in house-hold*** HAS (*name's*) MOTHER BEEN VERY SICK FOR AT LEAST 3 MONTHS IN THE PAST 12 MONTHS?	HL13. IS (*name's*) NATURAL FATHER ALIVE? 1 Yes 2 No↘ Next Line 8 DK↘ Next Line	HL14. DOES (*name's*) NATURAL FATHER LIVE IN THIS HOUSE-HOLD? *Record line number of father or 00 for "no"*	HL14A. ***If father does not live in house-hold*** HAS (*name's*) FATHER BEEN VERY SICK FOR AT LEAST 3 MONTHS IN THE PAST 12 MONTHS?
Line	Name	Relation*	M F	Month	Year	Age	15-49	15-59	Mother	Mother	Y N DK	Y N	Y N DK	Mother	Y N DK	Y N DK	Father	Y N DK
11		__ __	1 2	__ __	__ __ __ __	__ __	11	11	__ __	__ __	1 2 8	1 2	1 2 8	__ __	1 2 8	1 2 8	__ __	1 2 8
12		__ __	1 2	__ __	__ __ __ __	__ __	12	12	__ __	__ __	1 2 8	1 2	1 2 8	__ __	1 2 8	1 2 8	__ __	1 2 8
13		__ __	1 2	__ __	__ __ __ __	__ __	13	13	__ __	__ __	1 2 8	1 2	1 2 8	__ __	1 2 8	1 2 8	__ __	1 2 8
14		__ __	1 2	__ __	__ __ __ __	__ __	14	14	__ __	__ __	1 2 8	1 2	1 2 8	__ __	1 2 8	1 2 8	__ __	1 2 8
15		__ __	1 2	__ __	__ __ __ __	__ __	15	15	__ __	__ __	1 2 8	1 2	1 2 8	__ __	1 2 8	1 2 8	__ __	1 2 8

Tick here if additional questionnaire used ☐

Probe for additional household members.
Probe especially for any infants or small children not listed, and others who may not be members of the family (such as servants, friends) but who usually live in the household.
Insert names of additional members in the household list and complete form accordingly.

Now for each woman age 15-49 years, write her name and line number and other identifying information in the information panel of a separate Individual Women's Questionnaire.
For each child under age 5, write his/her name and line number AND the line number of his/her mother or caretaker in the information panel of a separate Under-5 Questionnaire.
Now for each man age 15-59 years, write his name and line number and other identifying information in the information panel of a separate Individual Men's Questionnaire.
You should now have a separate questionnaire for each eligible woman, each child under five and each eligible man in the household.

Codes for HL3: Relationship to head of household

01 Head	06 Parent	11 Niece/Nephew
02 Wife / Husband	07 Parent-In-Law	12 Other relative
03 Son / Daughter	08 Brother / Sister	13 Adopted/Foster/Stepchild
04 Son-In-Law / Daughter-In-Law	09 Brother-In-Law/Sister-In-Law	14 Not related
05 Grandchild	10 Uncle/Aunt	98 Don't know

CHILDREN ORPHANED & MADE VULNERABLE		OV
OV1. *Check HL6: any children 0-17?* ☐ *Yes ⇨ Continue to OV2* ☐ *No ⇨ Next Module*		
OV2. I WOULD LIKE YOU TO THINK BACK OVER THE PAST 12 MONTHS. HAS ANY USUAL MEMBER OF THIS HOUSEHOLD DIED IN THE LAST 12 MONTHS?	Yes .....1 No .....2 Other (*specify*) _____ 6	2⇨Next MODULE 6⇨Next MODULE
OV3. (OF THOSE WHO DIED IN THE PAST 12 MONTHS) WERE ANY OF THESE PEOPLE BETWEEN THE AGES OF 18 AND 59?	Yes .....1 No 2	2⇨ Next Module
OV4. (OF THOSE WHO DIED IN THE PAST 12 MONTHS AND WERE BETWEEN THE AGES OF 18 AND 59) WERE ANY OF THESE PEOPLE SERIOUSLY ILL FOR 3 OF THE 12 MONTHS BEFORE HE/SHE DIED?	Yes .....1 No 2	

EDUCATION & BASIC NEEDS

ED & BN

For household members age **5 and above**

For household members age **5-24** *years*

For household members age **5-17** *years*

ED1. *Line #*

ED2. *Name and age*

Copy all household members from Household Listing Form, HL2 and HL6

ED3. HAS (*name*) EVER ATTENDED SCHOOL OR PRE-SCHOOL?

1 YES
2 NO ⇘ BN1

ED4. WHAT IS THE HIGHEST LEVEL OF SCHOOL (*name*) **ATTENDED**?

WHAT IS THE HIGHEST GRADE (*name*) **COMPLETED** AT THIS LEVEL?

Level:
0 Preschool
1 Primary
2 Secondary
3 High
4 Tertiary
8 DK

If level=0, skip to ED5

Grade:
98 DK

If less than 1 grade, enter 00

ED5. DURING THIS (***2010***) SCHOOL YEAR, DID (*name*) ATTEND SCHOOL OR PRE-SCHOOL AT ANY TIME?

1 YES
2 NO ⇘ *ED7*

ED6. DURING THIS SCHOOL YEAR, WHICH LEVEL AND GRADE IS/WAS (*name*) ATTENDING?

Level:
0 Preschool
1 Primary
2 Secondary
3 High
4 Tertiary
8 DK

If level=0, go to ED7

Grade:
98 DK

ED7. DURING THE PREVIOUS SCHOOL YEAR, THAT IS (***2009***), DID (*name*) ATTEND SCHOOL OR PRESCHOOL AT ANY TIME?

1 YES
2 NO ⇘ BN1
8 DK ⇘ BN1

ED8. DURING THAT PREVIOUS SCHOOL YEAR, WHICH LEVEL AND GRADE DID (*name*) ATTEND?

Level:
0 Preschool
1 Primary
2 Secondary
3 HIGH
4 Tertiary
8 DK

If level=0, go to BN1

Grade:
98 DK

BN1. DOES (*name*) HAVE AT LEAST ONE MEAL PER DAY?

BN2. DOES (*name*) HAVE A PAIR OF SHOES?

BN3. DOES (*name*) HAVE AT LEAST TWO SETS OF CLOTHING?

Line	Name	Age	ED3 Yes	ED3 No	ED4 Level	ED4 Grade	ED5 Yes	ED5 No	ED6 Level	ED6 Grade	ED7 Y	ED7 N	ED7 DK	ED8 Level	ED8 Grade	BN1 Y	BN1 N	BN1 DK	BN2 Y	BN2 N	BN2 DK	BN3 Y	BN3 N	BN3 DK
01		__ __	1	2	0 1 2 3 4 8	__ __	1	2	0 1 2 3 4 8	__ __	1	2	8	0 1 2 3 4 8	__ __	1	2	8	1	2	8	1	2	8
02		__ __	1	2	0 1 2 3 4 8	__ __	1	2	0 1 2 3 4 8	__ __	1	2	8	0 1 2 3 4 8	__ __	1	2	8	1	2	8	1	2	8
03		__ __	1	2	0 1 2 3 4 8	__ __	1	2	0 1 2 3 4 8	__ __	1	2	8	0 1 2 3 4 8	__ __	1	2	8	1	2	8	1	2	8
04		__ __	1	2	0 1 2 3 4 8	__ __	1	2	0 1 2 3 4 8	__ __	1	2	8	0 1 2 3 4 8	__ __	1	2	8	1	2	8	1	2	8
05		__ __	1	2	0 1 2 3 4 8	__ __	1	2	0 1 2 3 4 8	__ __	1	2	8	0 1 2 3 4 8	__ __	1	2	8	1	2	8	1	2	8
06		__ __	1	2	0 1 2 3 4 8	__ __	1	2	0 1 2 3 4 8	__ __	1	2	8	0 1 2 3 4 8	__ __	1	2	8	1	2	8	1	2	8
07		__ __	1	2	0 1 2 3 4 8	__ __	1	2	0 1 2 3 4 8	__ __	1	2	8	0 1 2 3 4 8	__ __	1	2	8	1	2	8	1	2	8
08		__ __	1	2	0 1 2 3 4 8	__ __	1	2	0 1 2 3 4 8	__ __	1	2	8	0 1 2 3 4 8	__ __	1	2	8	1	2	8	1	2	8
09		__ __	1	2	0 1 2 3 4 8	__ __	1	2	0 1 2 3 4 8	__ __	1	2	8	0 1 2 3 4 8	__ __	1	2	8	1	2	8	1	2	8
10		__ __	1	2	0 1 2 3 4 8	__ __	1	2	0 1 2 3 4 8	__ __	1	2	8	0 1 2 3 4 8	__ __	1	2	8	1	2	8	1	2	8
11		__ __	1	2	0 1 2 3 4 8	__ __	1	2	0 1 2 3 4 8	__ __	1	2	8	0 1 2 3 4 8	__ __	1	2	8	1	2	8	1	2	8
12		__ __	1	2	0 1 2 3 4 8	__ __	1	2	0 1 2 3 4 8	__ __	1	2	8	0 1 2 3 4 8	__ __	1	2	8	1	2	8	1	2	8
13		__ __	1	2	0 1 2 3 4 8	__ __	1	2	0 1 2 3 4 8	__ __	1	2	8	0 1 2 3 4 8	__ __	1	2	8	1	2	8	1	2	8
14		__ __	1	2	0 1 2 3 4 8	__ __	1	2	0 1 2 3 4 8	__ __	1	2	8	0 1 2 3 4 8	__ __	1	2	8	1	2	8	1	2	8
15		__ __	1	2	0 1 2 3 4 8	__ __	1	2	0 1 2 3 4 8	__ __	1	2	8	0 1 2 3 4 8	__ __	1	2	8	1	2	8	1	2	8

WATER AND SANITATION		WS
WS1. WHAT IS THE **MAIN** SOURCE OF DRINKING WATER FOR MEMBERS OF YOUR HOUSEHOLD?	Piped water Piped into dwelling ..... 11 Piped into compound, yard or plot ..... 12 Piped to neighbour ..... 13 Public tap/standpipe ..... 14 Tube Well, Borehole ..... 21 Dug well Protected well ..... 31 Unprotected well ..... 32 Water from spring Protected spring ..... 41 Unprotected spring ..... 42 Rainwater collection ..... 51 Tanker-truck ..... 61 Cart with small tank/drum ..... 71 Surface water (river, stream, dam, lake, pond, canal, irrigation channel) ..... 81 Bottled water ..... 91 Other (*specify*)_____ 96	 11⇨WS6 12⇨WS6 13⇨WS6 14⇨WS3 21⇨WS3 31⇨WS3 32⇨WS3 41⇨WS3 42⇨WS3 51⇨WS3 61⇨WS3 71⇨WS3 81⇨WS3 96⇨WS3
WS2. WHAT IS THE **MAIN** SOURCE OF WATER USED BY YOUR HOUSEHOLD FOR OTHER PURPOSES SUCH AS COOKING AND HAND-WASHING?	Piped water Piped into dwelling ..... 11 Piped into compound, yard or plot ..... 12 Piped to neighbour ..... 13 Public tap/standpipe ..... 14 Tube Well, Borehole ..... 21 Dug well Protected well ..... 31 Unprotected well ..... 32 Water from spring Protected spring ..... 41 Unprotected spring ..... 42 Rainwater collection ..... 51 Tanker-truck ..... 61 Cart with small tank/drum ..... 71 Surface water (river, stream, dam, lake, pond, canal, irrigation channel) ..... 81 Other (*specify*)_____ 96	 11⇨WS6 12⇨WS6 13⇨WS6
WS3. WHERE IS THAT WATER SOURCE LOCATED?	In own dwelling ..... 1 In own yard / plot ..... 2 Elsewhere 3	1⇨WS6 2⇨WS6
WS4. HOW LONG DOES IT TAKE TO GO THERE, GET WATER, AND COME BACK?	Number of minutes ..... __ __ __ DK 998	

WS5. WHO **USUALLY** GOES TO THIS SOURCE TO COLLECT THE WATER FOR YOUR HOUSEHOLD? *Probe:* IS THIS PERSON UNDER AGE 15? WHAT SEX?	Adult woman (age 15+ years)..... 1 Adult man (age 15+ years) ..... 2 Female child (under 15)..... 3 Male child (under 15)..... 4 DK..... 8	
WS6. DO YOU DO ANYTHING TO THE WATER TO MAKE IT SAFER TO DRINK?	Yes..... 1 No ..... 2 DK..... 8	 2⇨WS8 8⇨WS8
WS7. WHAT DO YOU USUALLY DO TO MAKE THE WATER SAFER TO DRINK? *Probe:* ANYTHING ELSE? *Record all items mentioned.*	Boil ..... A Add bleach / chlorine/ Jik..... B Strain it through a cloth..... C Use water filter (ceramic, sand, composite, etc.)..... D Solar disinfection ..... E Let it stand and settle..... F Other (*specify*) _____ X DK..... Z	
WS8. WHAT KIND OF TOILET FACILITY DO MEMBERS OF YOUR HOUSEHOLD USUALLY USE? *If "flush" or "pour flush", probe:* WHERE DOES IT FLUSH TO? *If necessary, ask permission to observe the facility.*	Flush / Pour flush Flush to piped sewer system ..... 11 Flush to septic tank..... 12 Flush to pit (latrine) ..... 13 Flush to somewhere else..... 14 Flush to unknown place / Not sure / DK where ..... 15 Pit latrine Ventilated Improved Pit latrine (VIP) ... 21 Pit latrine with slab..... 22 Pit latrine without slab / Open pit ..... 23 Bucket..... 41 No facility, Bush, Field ..... 95 Other (*specify*) _____ 96	 95⇨Next Module
WS9. DO YOU SHARE THIS FACILITY WITH OTHERS WHO ARE NOT MEMBERS OF YOUR HOUSEHOLD?	Yes..... 1 No 2	 2⇨Next Module
WS10. DO YOU SHARE THIS FACILITY ONLY WITH MEMBERS OF OTHER HOUSEHOLDS THAT YOU KNOW, OR IS THE FACILITY OPEN TO THE USE OF THE GENERAL PUBLIC?	Other households only (not public)..... 1 Public facility..... 2	 2⇨Next Module
WS11. HOW MANY HOUSEHOLDS IN TOTAL USE THIS TOILET FACILITY, INCLUDING YOUR OWN HOUSEHOLD?	Number of households (if less than 10) 0 __ Ten or more households..... 10 DK..... 98	

HOUSEHOLD CHARACTERISTICS		HC
HC1A. WHAT IS THE RELIGION OF THE **HEAD** OF THIS HOUSEHOLD?	Christian .....1 Muslim .....2 Traditional .....3 Other religion (*specify*) _____ 6 No religion 7	
HC1B. WHAT IS THE MOTHER TONGUE/NATIVE LANGUAGE OF THE HEAD OF THIS HOUSEHOLD?	SiSwati .....1 English .....2 Other language (*specify*) _____ 6	
HC2. HOW MANY ROOMS IN THIS HOUSEHOLD ARE USED FOR SLEEPING?	Number of rooms .....__ __	
HC3. ***Main*** *material of the dwelling floor.* *Record observation.*	Natural floor Earth/ Sand .....11 Dung .....12 Rudimentary floor Wood planks .....21 Palm/Bamboo .....22 Finished floor Parquet or polished wood .....31 Vinyl or asphalt strips .....32 Ceramic tiles .....33 Cement .....34 Carpet .....35 Other (*specify*) _____ 96	
HC4. ***Main*** *material of the roof.* *Record observation.*	Natural roofing No Roof .....11 Thatch/Palm leaf/ Grass .....12 Sod .....13 Rudimentary Roofing Rustic mat .....21 Palm/Bamboo .....22 Wood planks .....23 Cardboard .....24 Finished roofing Corrugated iron .....31 Wood .....32 Calamine/Cement fibre .....33 Ceramic tiles .....34 Cement/ Concrete .....35 Asbestos .....36 Other (*specify*) _____ 96	

HC5. ***Main*** *material of the exterior walls.* *Record observation.*	Natural walls No walls .....11 Cane/Palm/Trunks .....12 Stick & mud .....13 Grass ..... 14 Rudimentary walls Bamboo with mud .....21 Stone with mud .....22 Uncovered adobe .....23 Plywood (Off cuts) .....24 Cardboard/ Carton .....25 Reused wood .....26 Finished walls Cement .....31 Stone with lime/cement .....32 Bricks .....33 Cement blocks .....34 Mud blocks .....35 Wood planks/shingles .....36 Other(*specify*) _____ 96	
HC6. WHAT TYPE OF FUEL DOES YOUR HOUSEHOLD **MAINLY** USE FOR COOKING?	Electricity .....01 Liquefied Petroleum Gas (LPG) .....02 Natural gas .....03 Biogas .....04 Kerosene .....05 Coal / Lignite .....06 Charcoal .....07 Wood .....08 Straw/Shrubs/Grass .....09 Animal dung (Bulongwe) .....10 Agricultural crop residue .....11 No food cooked in household .....95 Other (*specify*) _____ 96	01⇨HC8 02⇨HC8 03⇨HC8 04⇨HC8 05⇨HC8 95⇨HC8
HC7. IS THE COOKING **USUALLY** DONE IN THE HOUSE, IN A SEPARATE BUILDING, OR OUTDOORS? *If 'In the house', probe*: IS IT DONE IN A SEPARATE ROOM USED AS A KITCHEN?	In the house In a separate room used as kitchen .....1 Elsewhere in the house .....2 In a separate building (Lidladla) .....3 Outdoors .....4 Other (*specify*) _____ 6	

HC8. DOES YOUR HOUSEHOLD HAVE:		Yes	No	
[A] ELECTRICITY?	Electricity	1	2	
[B] A RADIO?	Radio	1	2	
[C] A TELEVISION?	Television	1	2	
[D] A NON-MOBILE TELEPHONE?	Non-mobile telephone	1	2	
[E] A REFRIGERATOR?	Refrigerator	1	2	

HC9. DOES ANY MEMBER OF YOUR HOUSEHOLD OWN:	Yes No	
[A] A WATCH?	Watch.....1 2	
[B] A MOBILE TELEPHONE?	Mobile telephone 1 2	
[C] A BICYCLE?	Bicycle 1 2	
[D] A MOTORCYCLE OR SCOOTER?	Motorcycle/Scooter 1 2	
[E] AN ANIMAL-DRAWN CART?	Animal drawn-cart.....1 2	
[F] A CAR OR TRUCK?	Car/Truck.....1 2	
[G] A BOAT WITH A MOTOR?	Boat with motor.....1 2	
[H] A POT	Pot 1 2	
[I] A HOE	Hoe 1 2	
[J] A SLEEPING MAT	Sleeping mat.....1 2	
HC10. DO YOU OR SOMEONE LIVING IN THIS HOUSEHOLD OWN THIS DWELLING? *If "No", then ask:* DO YOU RENT THIS DWELLING FROM SOMEONE NOT LIVING IN THIS HOUSEHOLD? *If "Rented from someone else", circle "2". For other responses, circle "6".*	Own .....1 Rent .....2 Other (Not owned or rented) 6	
HC11. DOES ANY MEMBER OF THIS HOUSEHOLD OWN ANY LAND THAT CAN BE USED FOR AGRICULTURE?	Yes.....1 No 2	2⇨HC13
HC12. HOW MANY HECTARES OF AGRICULTURAL LAND DO MEMBERS OF THIS HOUSEHOLD OWN? *If less than 1, record "00". If 95 or more, record '95'. .If unknown, record '98'.*	Hectares .....___ ___	
HC13. DOES THIS HOUSEHOLD OWN ANY LIVESTOCK, HERDS, OTHER FARM ANIMALS, OR POULTRY?	Yes.....1 No 2	2⇨HC15

HC14. HOW MANY OF THE FOLLOWING ANIMALS DOES THIS HOUSEHOLD HAVE? [A] CATTLE, MILK COWS, OR BULLS? [B] HORSES, DONKEYS, OR MULES? [C] GOATS? [D] SHEEP? [E] CHICKENS? [F] PIGS? [X] OTHER? *If none, record '00'.* *If 95 or more, record '95'.* *If unknown, record '98'.*	 Cattle, milk cows, or bulls.....___ ___ Horses, donkeys, or mules.....___ ___ Goats .....___ ___ Sheep .....___ ___ Chickens.....___ ___ Pigs.....___ ___ Other*(specify)*_____.....___ ___	
HC 15. DOES ANY MEMBER OF THIS HOUSEHOLD HAVE A BANK ACCOUNT?	Yes.....1 No 2	

INSECTICIDE TREATED NETS		TN
TN1. DOES YOUR HOUSEHOLD HAVE ANY MOSQUITO NETS THAT CAN BE USED WHILE SLEEPING?	Yes.....1 No 2	2⇨Next Module
TN2. HOW MANY MOSQUITO NETS DOES YOUR HOUSEHOLD HAVE?	Number of nets .....___ ___	
TN3. *Ask the respondent to show you the nets in the household. If more than 3 nets, use additional questionnaire(s).*		

	1st Net	2nd Net	3rd Net
TN4. *Mosquito net observed?*	Observed ..... 1 Not observed..... 2	Observed..... 1 Not observed 2	Observed ..... 1 Not observed 2
TN5. *Observe or ask the 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 treated nets Permanet ..... 11 Interceptor/BASF..... 12 BASF..... 13 Other (*specify*) _____ 16 DK brand ..... 18 Any pre-treated Nets (*specify*) _____ 26 Other net (*specify*) _____ 31 DK brand / type 98	Long-lasting treated nets Permanet ..... 11 Interceptor/BASF..... 12 BASF..... 13 Other (*specify*) _____ 16 DK brand..... 18 Any pre-treated Nets (*specify*) _____ 26 Other net (*specify*) _____ 31 DK brand / type 98	Long-lasting treated nets Permanet..... 11 Interceptor/BASF ..... 12 BASF ..... 13 Other (*specify*) _____ 16 DK brand ..... 18 Any pre-treated Nets (*specify*) _____ 26 Other net (*specify*) _____ 31 DK brand / type..... 98
TN6. HOW MANY MONTHS AGO DID YOUR HOUSEHOLD GET THE MOSQUITO NET? *If less than one month, record "00"*	Months ago ..... ___ ___ More than 36 mo. ago... 95 DK / Not sure 98	Months ago ..... ___ ___ More than 36 mo. ago ...95 DK / Not sure.....98	Months ago..... ___ ___ More than 36 mo. ago... 95 DK / Not sure 98
TN7. *Check TN5 for type of net*	☐ *Long-lasting (11-18) ⇨ TN11* ☐ *Pre-treated (26) ⇨ TN9* ☐ *Else ⇨ Continue*	☐ *Long-lasting (11-18) ⇨ TN11* ☐ *Pre-treated (26) ⇨ TN9* ☐ *Else ⇨ Continue*	☐ *Long-lasting (11-18) ⇨ TN11* ☐ *Pre-treated (26) ⇨ TN9* ☐ *Else ⇨ Continue*
TN8. WHEN YOU GOT THE NET, WAS IT ALREADY TREATED WITH ANTI-INSECTICIDE TO KILL OR REPEL MOSQUITOES?	Yes..... 1 No ..... 2 DK / Not sure 8	Yes..... 1 No..... 2 DK / Not sure..... 8	Yes ..... 1 No..... 2 DK / Not sure 8
TN9. SINCE YOU GOT THE NET, WAS IT EVER SOAKED OR DIPPED IN A LIQUID TO KILL OR REPEL MOSQUITOES?	Yes..... 1 No ..... 2 ⇨ TN11 DK / Not sure ..... 8 ⇨ TN11	Yes..... 1 No..... 2 ⇨ TN11 DK / Not sure..... 8 ⇨ TN11	Yes ..... 1 No..... 2 ⇨ TN11 DK / Not sure ..... 8 ⇨ TN11

TN10. HOW MANY MONTHS AGO WAS THE NET LAST SOAKED OR DIPPED? *If less than one month, record "00"*	Months ago ..... ___ ___ More than 24 mo. ago ... 95 DK / Not sure 98	Months ago ..... ___ ___ More than 24 mo. ago ... 95 DK / Not sure 98	Months ago ..... ___ ___ More than 24 mo. ago ... 95 DK / Not sure 98
TN11. DID ANYONE SLEEP UNDER THIS MOSQUITO NET LAST NIGHT?	Yes ..... 1 No ..... 2 ⇨TN13 DK / Not sure ..... 8 ⇨TN13	Yes ..... 1 No ..... 2 ⇨TN13 DK / Not sure ..... 8 ⇨TN13	Yes ..... 1 No ..... 2 ⇨TN13 DK / Not sure ..... 8 ⇨TN13
TN12. WHO SLEPT UNDER THIS MOSQUITO NET LAST NIGHT? *Record the person's line number from the household listing form* *If someone not in the household list slept under the mosquito net, record "00"*	Name _____ Line number ..... ___ ___ Name _____ Line number ..... ___ ___ Name _____ Line number ..... ___ ___ Name _____ Line number ..... ___ ___	Name _____ Line number ..... ___ ___ Name _____ Line number ..... ___ ___ Name _____ Line number ..... ___ ___ Name _____ Line number ..... ___ ___	Name _____ Line number ..... ___ ___ Name _____ Line number ..... ___ ___ Name _____ Line number ..... ___ ___ Name _____ Line number ..... ___ ___
TN13.	*Go back to TN4 for next net. If no more nets, go to next module*	*Go back to TN4 for next net. If no more nets, go to next module*	*Go back to TN4 in first column of a new questionnaire for next net. If no more nets, go to next module*
			Tick here if additional questionnaire used ☐

INDOOR RESIDUAL SPRAYING		IR
IR1. 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 DK.....8	 2⇨Next Module 8⇨Next Module
IR2. WHO SPRAYED THE DWELLING? *Circle all that apply.*	Government worker/program ..... A Private company..... B Non-governmental organization ..... C Other (*specify*) _____ X DK..... Z	

CHILD LABOUR — CL

To be administered for children age ***5-14 years*** *in the household. For household members below age 5 and above age 14, leave rows blank.* ***Note that the reference period here is the last 7 days.***

NOW I WOULD LIKE TO ASK ABOUT ANY WORK CHILDREN IN THIS HOUSEHOLD MAY DO.

CL1. *Line #*	CL2. *Name and Age* — ***Copy all household members from Household Listing Form, HL2 and HL6***		CL3. DURING THE PAST WEEK, DID (*name*) DO ANY KIND OF WORK FOR SOMEONE WHO IS NOT A MEMBER OF THIS HOUSEHOLD? *If yes*: FOR PAY IN CASH OR KIND? 1 Yes, for pay (cash or kind) 2 Yes, unpaid 3 No ⇨CL5			CL4. SINCE LAST (*day of the week*), ABOUT HOW MANY HOURS DID HE/SHE DO THIS WORK FOR SOMEONE WHO IS NOT A MEMBER OF THIS HOUSEHOLD? *If more than one job, include all hours at all jobs.*	CL5. DURING THE PAST WEEK, DID (*name*) FETCH WATER OR COLLECT FIREWOOD FOR HOUSEHOLD USE? 1 Yes 2 No ⇨ CL7		CL6. SINCE LAST (*day of the week*), ABOUT HOW MANY HOURS DID HE/SHE FETCH WATER OR COLLECT FIREWOOD FOR HOUSEHOLD USE?	CL7. DURING THE PAST WEEK, DID (*name*) DO ANY PAID OR UNPAID WORK ON A FAMILY FARM OR IN A FAMILY BUSINESS OR SELLING GOODS IN THE STREET? *Include work for a business run by the child, alone or with one or more partners.* 1 Yes 2 No ⇨ CL9		CL8. SINCE LAST (*day of the week*), ABOUT HOW MANY HOURS DID HE/SHE DO THIS WORK FOR HIS/HER FAMILY OR HIMSELF/ HERSELF?	CL9. DURING THE PAST WEEK, DID (*name*) HELP WITH HOUSEHOLD CHORES SUCH AS SHOPPING, CLEANING, WASHING CLOTHES, COOKING; OR CARING FOR CHILDREN, OLD OR SICK PEOPLE? 1 Yes 2 No ⇨Next Line		CL10. SINCE LAST (*day of the week*), ABOUT HOW MANY HOURS DID HE/SHE SPEND DOING THESE CHORES?
			Yes		No												
Line	Name	Age	Paid	Unpaid		Number of hours	Yes	No	Number of hours	Yes	No	Number of hours	Yes	No	Number of hours	Yes	No	Number of hours
01		__ __	1	2	3	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___
02		__ __	1	2	3	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___
03		__ __	1	2	3	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___
04		__ __	1	2	3	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___
05		__ __	1	2	3	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___
06		__ __	1	2	3	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___
07		__ __	1	2	3	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___
08		__ __	1	2	3	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___
09		__ __	1	2	3	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___
10		__ __	1	2	3	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___
11		__ __	1	2	3	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___
12		__ __	1	2	3	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___
13		__ __	1	2	3	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___
14		__ __	1	2	3	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___
15		__ __	1	2	3	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___

CHILD DISCIPLINE — CD

Table 1: Children Aged 2-14 Years Eligible for Child Discipline Questions

- *List each of the children aged 2-14 years below in the order they appear in the Household Listing Form. Do not include other household members outside of the age range 2-14 years.*
- *Record the line number, name, sex, and age for each child.*
- *Then record the total number of children aged 2-14 in the box provided (CD6).*

CD1. *Rank number*	CD2. *Line number from HL1*	CD3. *Name from HL2*	CD4. *Sex from HL4*	CD5. *Age from HL6*
Rank	Line	Name	M F	Age
1	__ __		1 2	___ ___
2	__ __		1 2	___ ___
3	__ __		1 2	___ ___
4	__ __		1 2	___ ___
5	__ __		1 2	___ ___
6	__ __		1 2	___ ___
7	__ __		1 2	___ ___
8	__ __		1 2	___ ___
CD6.	Total children age 2-14 years			___ ___

- *If there is only one child age **2-14 years** in the household, then skip table 2 and go to CD8; write down'1' and continue with CD9*

Table 2: Selection of Random Child for Child Discipline Questions

- *Use Table 2 to select one child between the ages of 2 and 14 years, if there is more than one child in that age range in the household.*
- *Check the last digit of the household number (HH2) from the cover page. This is the number of the row you should go to in the table below.*
- *Check the total number of eligible children (2-14) in CD6 above. This is the number of the column you should go to.*
- *Find the box where the row and the column meet and circle the number that appears in the box. This is the rank number of the child (CD1) about whom the questions will be asked.*

CD7.	**Total Number Of Eligible Children In The Household (CD6)**							
Last digit of household number (HH2)	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

CD8.*Record the rank number of the selected child* .....___

CD9.*Write name and line number of the child selected for the module from CD3 and CD2, based on the rank number in CD8.*	Name _____ Line number ..... __ __	
CD10. ADULTS USE CERTAIN WAYS TO TEACH CHILDREN THE RIGHT BEHAVIOUR OR TO ADDRESS A BEHAVIOUR PROBLEM. I WILL READ VARIOUS METHODS THAT ARE USED AND I WANT YOU TO TELL ME IF **YOU OR ANYONE ELSE IN YOUR HOUSEHOLD** HAS USED THIS METHOD WITH *(name)* **IN THE PAST MONTH**.		
CD11. TOOK AWAY PRIVILEGES, FORBADE SOMETHING *(name)* LIKED OR DID NOT ALLOW HIM/HER TO LEAVE HOUSE.	Yes..... 1 No 2	
CD12. EXPLAINED WHY (*name*)'S BEHAVIOUR WAS WRONG.	Yes..... 1 No 2	
CD13. SHOOK HIM/HER.	Yes..... 1 No 2	
CD14. SHOUTED, YELLED AT OR SCREAMED AT HIM/HER.	Yes..... 1 No 2	
CD15. GAVE HIM/HER SOMETHING ELSE TO DO.	Yes..... 1 No 2	
CD16. SPANKED, HIT OR SLAPPED HIM/HER ON THE BOTTOM WITH BARE HAND.	Yes..... 1 No 2	
CD17. HIT HIM/HER ON THE BOTTOM OR ELSEWHERE ON THE BODY WITH SOMETHING LIKE A BELT, HAIRBRUSH, STICK OR OTHER HARD OBJECT.	Yes..... 1 No 2	
CD18. CALLED HIM/HER DUMB, LAZY, OR ANOTHER NAME LIKE THAT.	Yes..... 1 No 2	
CD19. HIT OR SLAPPED HIM/HER ON THE FACE, HEAD OR EARS.	Yes..... 1 No 2	
CD20. HIT OR SLAPPED HIM/HER ON THE HAND, ARM, OR LEG.	Yes..... 1 No 2	
CD21. BEAT HIM/HER UP, THAT IS HIT HIM/HER OVER AND OVER AS HARD AS ONE COULD.	Yes..... 1 No 2	
CD22. DO YOU BELIEVE THAT IN ORDER TO BRING UP, RAISE, OR EDUCATE A CHILD PROPERLY, THE CHILD NEEDS TO BE PHYSICALLY PUNISHED?	Yes..... 1 No ..... 2 Don't know/No opinion..... 8	

HANDWASHING		HW
HW1. PLEASE SHOW ME WHERE MEMBERS OF YOUR HOUSEHOLD MOST OFTEN WASH THEIR HANDS.	Observed .....1 Not observed Not in dwelling / plot / yard .....2 No permission to see .....3 Other reason.....6	 2⇨HW4 3⇨HW4 6⇨HW4
HW2. *Observe presence of water at the specific place for hand washing* *Verify by checking the tap/pump, or basin, bucket, water container or similar objects for presence of water*	Water is available .....1 Water is not available 2	
HW3. *Record if washing agent is present at the specific place for hand washing.* *Circle all that apply.* *Skip to next module if any soap or detergent code (A, B, C or D) is circled. If "None" (Y) is circled, continue with HW4.*	Bar soap ..... A Detergent (Powder / Liquid / Paste) ..... B Liquid soap ..... C Ash / Mud / Sand ..... D None ..... Y	A⇨HH19 B⇨HH19 C⇨HH19 D⇨HH19
HW4. DO YOU HAVE ANY SOAP OR DETERGENT (SUCH AS BLUE SOAP (LUGONGOLO) OR SUNLIGHT) IN YOUR HOUSEHOLD FOR WASHING HANDS?	Yes.....1 No 2	 2⇨HH19
HW5. CAN YOU PLEASE SHOW IT TO ME? *Record observation. Circle all that apply*	Bar soap ..... A Detergent (Powder/ Liquid/ Paste) ..... B Liquid soap ..... C Ash / Mud / Sand ..... D Not able/Does not want to show..... Y	

HH19. *Record the time.*	Hour and minutes .....__ __ : __ __	

SALT IODIZATION		**SI**
SI1. WE 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? *Once you have tested the salt, circle number that corresponds to test outcome.*	Not iodized 0 PPM .....1 More than 0 PPM & less than 15 PPM.....2 15 PPM or more .....3 No salt in the house.....6 Salt not tested 7	

HH20. *Does any eligible woman age 15-49 reside in the household?*

Check household listing, column HL7 for any eligible woman.
You should have a questionnaire with the Information Panel filled in for each eligible woman.

- ☐ *Yes. ⇨ Go to QUESTIONNAIRE FOR INDIVIDUAL WOMEN to administer the questionnaire to the first eligible woman.*
- ☐ *No. ⇨ Continue.*

HH21. *Does any child under the age of 5 reside in the household?*

Check household listing, columnHL9 for any eligible child under age 5.
You should have a questionnaire with the Information Panel filled in for each eligible child.

- ☐ *Yes. ⇨ Go to QUESTIONNAIRE FOR CHILDREN UNDER FIVE to administer the questionnaire to mother or caretaker of the first eligible child.*
- ☐ *No. ⇨ Continue.*

HH22. *Does any eligible man age 15-59 reside in the household?*

Check household listing, column HL7A for any eligible men.

You should have a questionnaire with the Information Panel filled in for each eligible man.

- ☐ *Yes. ⇨ Go to QUESTIONNAIRE FOR INDIVIDUAL MEN to administer the questionnaire to the first eligible man.*
- ☐ *No. ⇨End the interview by thanking the respondent for his/her cooperation.*
  Gather together all questionnaires for this household and complete the relevant information (HH8 – HH15 on the cover page.

Interviewer's Observations

Field Editor's Observations

Supervisor's Observations

MICS

QUESTIONNAIRE FOR INDIVIDUAL WOMEN

Swaziland

WOMAN'S INFORMATION PANEL	**WM**
This questionnaire is to be administered to all women age 15 through 49 (see column HL7 of Household Listing Form). Fill in a separate questionnaire for each eligible woman	
WM1. Cluster number: ☐☐☐	WM2. Household number: ☐☐
WM3. Woman's name: Name_____	WM4. Woman's line number: ☐☐
WM5. Interviewer name and number: Name: _____ ☐☐	WM6. Day/Month/Year of interview: ☐☐ ☐☐ ☐☐☐☐

Repeat greeting if not already read to this woman:

WE ARE FROM THE **CENTRAL STATISTICAL OFFICE**. WE ARE WORKING ON A PROJECT CONCERNED WITH FAMILY HEALTH AND EDUCATION. I WOULD LIKE TO TALK TO YOU ABOUT THESE SUBJECTS. THE INTERVIEW WILL TAKE ABOUT **40 MINUTES**. ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND YOUR ANSWERS WILL NEVER BE SHARED WITH ANYONE OTHER THAN OUR PROJECT TEAM.

If greeting at the beginning of the household questionnaire has already been read to this woman, then read the following:

NOW I WOULD LIKE TO TALK TO YOU MORE ABOUT YOUR HEALTH AND OTHER TOPICS. THIS INTERVIEW WILL TAKE ABOUT 40 MINUTES. AGAIN, ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND YOUR ANSWERS WILL NEVER BE SHARED WITH ANYONE OTHER THAN OUR PROJECT TEAM.

MAY I START NOW?

☐ *Yes, permission is given ⇨Begin the interview.*

☐ *No, permission is not given ⇨Complete WM7. Discuss this result with your supervisor.*

WM7. Result of woman's interview	Completed .....01 Not at home .....02 Refused .....03 Partly completed .....04 Incapacitated .....05 **Other (*specify*) _____ 96**

WM8. Field edited by (Name and number):	WM9. Data entry clerk (Name and number):
Name: _____ ☐☐	Name: _____ ☐☐

WM10. *Record the time.*	Hour and minutes.....__ __ : __ __	

WOMAN'S BACKGROUND		WB
WB1. IN WHAT MONTH AND YEAR WERE YOU BORN?	Date of birth Month.....__ __ DK month.....98 Year .....__ __ __ __ DK year.....9998	
WB2. HOW OLD ARE YOU? *Probe:* HOW OLD WERE YOU AT YOUR LAST BIRTHDAY? *Compare and correct WB1 and/or WB2 if inconsistent*	Age (in completed years) .....__ __	
WB3. HAVE YOU EVER ATTENDED SCHOOL OR PRESCHOOL?	Yes .....1 No 2	2⇨WB7
WB4. WHAT IS THE HIGHEST LEVEL OF SCHOOL YOU ATTENDED?	Preschool .....0 Primary .....1 Secondary .....2 High .....3 Tertiary 4	0⇨WB7
WB5. WHAT IS THE HIGHEST GRADE YOU COMPLETED AT THAT LEVEL? *If less than 1 grade, enter "00"*	Grade .....__ __	
WB6. *Check WB4:* ☐ *Secondary or high or tertiary ⇨ Go to Next Module* ☐ *Primary ⇨ Continue with WB7*		
WB7. NOW I WOULD LIKE YOU TO READ THIS SENTENCE TO ME. *Show sentence on the card to the respondent. If respondent cannot read whole sentence, probe:* CAN YOU READ PART OF THE SENTENCE TO ME?	Cannot read at all .....1 Able to read only parts of sentence.....2 Able to read whole sentence .....3 **No sentence in required language _____ 4** *(specify language)* Blind/mute, visually/speech impaired 5	

CHILD MORTALITY		CM
This module is to be administered to all women age 15-49.		
CM0. NOW I WOULD LIKE TO ASK ABOUT ALL THE PREGNANCIES YOU HAVE HAD DURING YOUR LIFE. HAVE YOU EVER BEEN PREGNANT? *If "No" probe by asking:* I MEAN, EVER BEEN PREGNANT EVEN IF THE PREGNANCY ENDED WITH A MISCARRIAGE OR STILL BIRTH?	Yes .....1 No 2	2⇨ ILLNESS SYMPTOMS Module
CM1. 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	2⇨CM8
CM4. DO YOU HAVE ANY SONS OR DAUGHTERS TO WHOM YOU HAVE GIVEN BIRTH WHO ARE NOW LIVING WITH YOU?	Yes .....1 No 2	2⇨CM6
CM5. HOW MANY SONS LIVE WITH YOU? HOW MANY DAUGHTERS LIVE WITH YOU?	Sons at home .....__ __ Daughters at home .....__ __	
CM6. 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	2⇨CM8
CM7. HOW MANY SONS ARE ALIVE BUT DO NOT LIVE WITH YOU? HOW MANY DAUGHTERS ARE ALIVE BUT DO NOT LIVE WITH YOU?	Sons elsewhere .....__ __ Daughters elsewhere .....__ __	
CM8. HAVE YOU EVER GIVEN BIRTH TO A BOY OR GIRL WHO WAS BORN ALIVE BUT LATER DIED? *If "No" probe by asking:* I MEAN, TO A CHILD WHO EVER BREATHED OR CRIED OR SHOWED OTHER SIGNS OF LIFE – EVEN IF HE OR SHE LIVED ONLY A FEW MINUTES OR HOURS?	Yes .....1 No 2	2⇨CM10
CM9. HOW MANY BOYS HAVE DIED? HOW MANY GIRLS HAVE DIED?	Boys dead.....__ __ Girls dead .....__ __	
CM10. Sum answers to CM5, CM7, and CM9.	Sum .....__ __	

CM11. JUST TO MAKE SURE THAT I HAVE THIS RIGHT, YOU HAVE HAD IN TOTAL (*total number in CM10*) LIVE BIRTHS DURING YOUR LIFE. IS THIS CORRECT?

☐ *Yes. Check below:*

☐ *No live births ⇨ Go to BH13*
☐ *One or more live births ⇨ Continue with the BIRTH HISTORY module*

☐ *No ⇨ Check responses to CM1-CM10 and make corrections as necessary before proceeding to the BIRTH HISTORY Module or BH13*

BIRTH HISTORY **BH**

NOW I WOULD LIKE TO RECORD THE NAMES OF ALL OF YOUR BIRTHS, WHETHER STILL ALIVE OR NOT, STARTING WITH THE FIRST ONE YOU HAD.
Record names of all of the births in BH1. Record twins and triplets on separate lines. If there are more than 14 live births, use an additional questionnaire.

BH Line No.	BH1. WHAT NAME WAS GIVEN TO YOUR (*first/next*) BABY?	BH2. WERE ANY OF THESE BIRTHS TWINS? 1 Single 2 Multiple	BH3. IS (*name*) A BOY OR A GIRL? 1 Boy 2 Girl	BH4. IN WHAT MONTH AND YEAR WAS (*name*) BORN? *Probe*: WHAT IS HIS/HER BIRTHDAY?		BH5. IS (*name*) STILL ALIVE? 1 Yes 2 No	BH6. HOW OLD WAS (*name*) AT HIS/HER LAST BIRTHDAY? *Record age in completed years.*	BH7. IS (*name*) LIVING WITH YOU? 1 Yes 2 No	BH8. *Record household line number of child (from HL1)* *Record "00" if child is not listed.*	BH9. ***If dead:*** HOW OLD WAS (*name*) WHEN HE/SHE DIED? ***If "1 year", probe:*** HOW MANY MONTHS OLD WAS (*name*)? *Record days if less than 1 month; record months if less than 2 years; or years*		BH10. WERE THERE ANY OTHER LIVE BIRTHS BETWEEN (*name of previous birth*) AND (*name*), INCLUDING ANY CHILDREN WHO DIED AFTER BIRTH? 1 Yes 2 No
Line	Name	S M	B G	Month	Year	Y N	Age	Y N	Line No.	Unit	Number	Y N
01		1 2	1 2	__ __	__ __ __ __	1 2 ⇨ BH9	__ __	1 2	__ __ ⇨ Next Line	Days ..... 1 Months..... 2 Years 3	__ __	
02		1 2	1 2	__ __	__ __ __ __	1 2 ⇨ BH9	__ __	1 2	__ __ ⇨ BH10	Days ..... 1 Months..... 2 Years 3	__ __	1 Add Birth 2 Next Birth
03		1 2	1 2	__ __	__ __ __ __	1 2 ⇨ BH9	__ __	1 2	__ __ ⇨ BH10	Days ..... 1 Months..... 2 Years 3	__ __	1 Add Birth 2 Next Birth
04		1 2	1 2	__ __	__ __ __ __	1 2 ⇨ BH9	__ __	1 2	__ __ ⇨ BH10	Days ..... 1 Months..... 2 Years 3	__ __	1 Add Birth 2 Next Birth
05		1 2	1 2	__ __	__ __ __ __	1 2 ⇨ BH9	__ __	1 2	__ __ ⇨ BH10	Days ..... 1 Months..... 2 Years 3	__ __	1 Add Birth 2 Next Birth
06		1 2	1 2	__ __	__ __ __ __	1 2 ⇨ BH9	__ __	1 2	__ __ ⇨ BH10	Days ..... 1 Months..... 2 Years 3	__ __	1 Add Birth 2 Next Birth
07		1 2	1 2	__ __	__ __ __ __	1 2 ⇨ BH9	__ __	1 2	__ __ ⇨ BH10	Days ..... 1 Months..... 2 Years 3	__ __	1 Add Birth 2 Next Birth

BH Line No.	BH1. WHAT NAME WAS GIVEN TO YOUR (*first/next*) BABY?	BH2. WERE ANY OF THESE BIRTHS TWINS? 1 Single 2 Multiple		BH3. IS (*name*) A BOY OR A GIRL? 1 Boy 2 Girl		BH4. IN WHAT MONTH AND YEAR WAS (*name*) BORN? *Probe*: WHAT IS HIS/HER BIRTHDAY?		BH5. IS (*name*) STILL ALIVE? 1 Yes 2 No	BH6. HOW OLD WAS (*name*) AT HIS/HER LAST BIRTHDAY? *Record age in completed years.*	BH7. IS (*name*) LIVING WITH YOU? 1 Yes 2 No	BH8. *Record household line number of child (from HL1)* *Record "00" if child is not listed.*	BH9. ***If dead:*** HOW OLD WAS (*name*) WHEN HE/SHE DIED? **If "1 year", probe:** HOW MANY MONTHS OLD WAS (*name*)? *Record days if less than 1 month; record months if less than 2 years; or years*		BH10. WERE THERE ANY OTHER LIVE BIRTHS BETWEEN (*name of previous birth*) AND (*name*), INCLUDING ANY CHILDREN WHO DIED AFTER BIRTH? 1 Yes 2 No
Line	Name	S	M	B	G	Month	Year	Y N	Age	Y N	Line No	Unit	Number	Y N
08		1	2	1	2	___ ___	___ ___ ___ ___	1 2 ⇨ BH9	___ ___	1 2	___ ___ ⇨ BH10	Days.....1 Months .....2 Years.....3	___ ___	1 Add Birth 2 Next Birth
09		1	2	1	2	___ ___	___ ___ ___ ___	1 2 ⇨ BH9	___ ___	1 2	___ ___ ⇨ BH10	Days.....1 Months .....2 Years.....3	___ ___	1 Add Birth 2 Next Birth
10		1	2	1	2	___ ___	___ ___ ___ ___	1 2 ⇨ BH9	___ ___	1 2	___ ___ ⇨ BH10	Days.....1 Months .....2 Years.....3	___ ___	1 Add Birth 2 Next Birth
11		1	2	1	2	___ ___	___ ___ ___ ___	1 2 ⇨ BH9	___ ___	1 2	___ ___ ⇨ BH10	Days.....1 Months .....2 Years.....3	___ ___	1 Add Birth 2 Next Birth
12		1	2	1	2	___ ___	___ ___ ___ ___	1 2 ⇨ BH9	___ ___	1 2	___ ___ ⇨ BH10	Days.....1 Months .....2 Years.....3	___ ___	1 Add Birth 2 Next Birth
13		1	2	1	2	___ ___	___ ___ ___ ___	1 2 ⇨ BH9	___ ___	1 2	___ ___ ⇨ BH10	Days.....1 Months .....2 Years.....3	___ ___	1 Add Birth 2 Next Birth
14		1	2	1	2	___ ___	___ ___ ___ ___	1 2 ⇨ BH9	___ ___	1 2	___ ___ ⇨ BH10	Days.....1 Months .....2 Years.....3	___ ___	1 Add Birth 2 Next Birth

BH11. HAVE YOU HAD ANY LIVE BIRTHS SINCE THE BIRTH OF (*name of last birth in Birth History*)?	Yes..... 1 No 2	1⇨Record Birth(s) in Birth History

CM12. *Compare number in CM10 with number of births in the Birth History above and check:* ☐ *Numbers are same ⇨ Continue with BH13* ☐ *Numbers are different ⇨ Probe and reconcile*		
BH13. SOME PREGNANCIES END BEFORE FULL TERM. THE EXPULSION OF A FETUS (BABY) FROM THE WOMB HAPPENS AS A RESULT OF AN ACCIDENT OR DELIBERATELY BEFORE IT IS ABLE TO SURVIVE INDEPENDENTLY. HAVE YOU EVER HAD SUCH A PREGNANCY THAT MISCARRIED OR ABORTED?	Yes .....1 No 2	 2⇨ BH16
BH14. HOW MANY PREGNANCIES DID YOU HAVE THAT ENDED IN MISCARRIAGE OR ABORTION?	Number of miscarriages/abortions .....__ __ None ..... 00 DK.....98	 00⇨ BH16 98⇨ BH16
BH15. WHEN DID THE LAST MISCARRIAGE OR ABORTION HAPPEN?	Month..... __ __ DK month.....98 Year .....__ __ __ __ DK year.....9998	
BH16. SOMETIMES A BABY IS BORN WITHOUT SHOWING SIGNS OF LIFE. HAVE YOU EVER HAD A PREGNANCY THAT ENDED IN A STILLBIRTH?	Yes .....1 No 2	 2⇨BH19
BH17. HOW MANY PREGNANCIES HAVE YOU HAD THAT ENDED IN A STILLBIRTH?	Number of still births.....__ __ DK.....98	 98⇨BH19
BH18. WHEN DID YOUR LAST STILLBIRTH HAPPEN?	Month..... __ __ DK month.....98 Year .....__ __ __ __ DK year.....9998	
BH19. SOMETIMES, AFTER A DIFFICULT CHILD BIRTH, A WOMAN CAN EXPERIENCE A CONSTANT LEAKAGE OF URINE OR STOOL FROM HER VAGINA DURING THE DAY OR NIGHT. HAVE YOU EVER HEARD ABOUT THIS CONDITION/ PROBLEM?	Yes .....1 No 2	 2⇨CM13
BH20. I HAVE NO INTEREST IN A NAME, BUT DO YOU KNOW OF SOMEONE WHO HAS SUFFERED FROM THIS CONDITION?	Yes .....1 No 2	
BH21. HAVE YOU EVER SUFFERED FROM OR ARE YOU SUFFERING FROM THIS CONDITION?	Yes .....1 No 2	 2⇨CM13
BH22. WOULD YOU LIKE TO BE REFERRED FOR MEDICAL CONDITION? *If yes, use the referral card.*	Yes .....1 No 2	

CM13. *Check BH4 in BIRTH HISTORY: Last birth occurred within the last 2 years, that is, since (day and month of interview) in* ***2008***

☐ *No live birth in last 2 years. ⇨ Go to ILLNESS SYMPTOMS Module.*

☐ *One or more live births in last 2 years. ⇨ Record name of last born child and continue with next module*

*Name of child*_____

If child has died, take special care when referring to this child by name in the following modules.

DESIRE FOR LAST BIRTH		**DB**
*This module is to be administered to all women with a live birth in the **2 years preceding date of interview**.* ***Check child mortality/birth history module CM13** and record name of last-born child here_____.* *Use this child's name in the following questions, where indicated.*		
DB1. WHEN YOU GOT PREGNANT WITH (*name*), DID YOU WANT TO GET PREGNANT AT THAT TIME?	Yes .....1 No.....2	1⇨Next Module
DB2. DID YOU WANT TO HAVE A BABY LATER ON, OR DID YOU NOT WANT ANY (MORE) CHILDREN?	Later .....1 No more.....2	2⇨Next Module
DB3. HOW MUCH LONGER DID YOU WANT TO WAIT?	Months.....1 __ __ Years .....2 __ __ DK.....998	

MATERNAL AND NEWBORN HEALTH		MN
*This module is to be administered to all women with a live birth in the **2 years preceding date of interview**.* ***Check child mortality/birth history module CM13*** *and record name of last-born child here _____. Use this child's name in the following questions, where indicated.*		
MN1. DID YOU SEE ANYONE FOR ANTENATAL CARE DURING YOUR PREGNANCY WITH (*name*)?	Yes ..... 1 No 2	2⇨MN5
MN2. WHOM DID YOU SEE? *Probe:* ANYONE ELSE? *Probe for the type of person seen and circle all answers given.*	Health professional: Doctor ..... A Nurse/Midwife ..... B Other person Traditional birth attendant ..... F Community Health Worker/RHM ..... G Other (*specify*)_____ X	
MN3. HOW MANY TIMES DID YOU RECEIVE ANTENATAL CARE DURING THIS PREGNANCY?	Number of times ..... __ __ DK 98	
MN4. AS PART OF YOUR ANTENATAL CARE DURING THIS PREGNANCY, WERE ANY OF THE FOLLOWING DONE AT LEAST ONCE: [A] WAS YOUR BLOOD PRESSURE MEASURED? [B] DID YOU GIVE A URINE SAMPLE? [C] DID YOU GIVE A BLOOD SAMPLE?	Yes No Blood pressure ..... 1 2 Urine sample ..... 1 2 Blood sample 1 2	
MN5. DO YOU HAVE A CARD OR OTHER DOCUMENT WITH YOUR OWN IMMUNIZATIONS LISTED? MAY I SEE IT PLEASE? *If a card is presented, use it to assist with answers to the following questions.*	Yes (card seen) ..... 1 Yes (card not seen) ..... 2 No ..... 3 DK 8	
MN6. WHEN YOU WERE PREGNANT WITH (*name*), DID YOU RECEIVE ANY INJECTION IN THE ARM OR SHOULDER TO PREVENT THE BABY FROM GETTING TETANUS, THAT IS CONVULSIONS AFTER BIRTH?	Yes ..... 1 No ..... 2 DK 8	 2⇨MN9 8⇨MN9
MN7. HOW MANY TIMES DID YOU RECEIVE THIS TETANUS INJECTION DURING YOUR PREGNANCY WITH (*name*)? *If 7 or more times, record '7'.*	Number of times ..... __ DK 8	 8⇨MN9
MN8. *How many tetanus injections during last pregnancy were reported in MN7?* ☐ *At least two tetanus injections during last pregnancy. ⇨ Go to MN12* ☐ *Fewer than two tetanus injections during last pregnancy. ⇨ Continue with MN9*		

MN9. DID YOU RECEIVE ANY TETANUS INJECTION AT ANY TIME BEFORE YOUR PREGNANCY WITH (*name*), EITHER TO PROTECT YOURSELF OR ANOTHER BABY?	Yes.....1 No .....2 DK.....8	 2⇨MN12 8⇨MN12
MN10. HOW MANY TIMES DID YOU RECEIVE A TETANUS INJECTION BEFORE YOUR PREGNANCY WITH (*name*)? *If 7 or more times, record '7'.*	Number of times ..... __ DK.....8	 8⇨MN12
MN11. HOW MANY YEARS AGO DID YOU RECEIVE THE LAST TETANUS INJECTION BEFORE YOUR PREGNANCY WITH (*name*)?	Years ago ..... __ __	
MN12. *Check MN1 for presence of antenatal care during this pregnancy:* ☐ *Yes, antenatal care received.⇨ Continue with MN13* ☐ *No antenatal care received⇨Go to MN17*		
MN13. DURING ANY OF THESE ANTENATAL VISITS FOR THE PREGNANCY, DID YOU TAKE ANY MEDICINE IN ORDER TO **PREVENT** YOU FROM GETTING MALARIA?	Yes..... 1 No ..... 2 DK..... 8	 2⇨MN17 8⇨MN17
MN14. WHICH MEDICINES DID YOU TAKE TO PREVENT MALARIA? *Circle all medicines taken. If type of medicine is not determined, show typical anti-malarial to respondent.*	SP/Fansidar ..... A Chloroquine..... B **Other (*specify*) _____X** DK ..... Z	
MN15. *Check MN14 for medicine taken:* ☐ *SP/Fansidar taken.⇨ Continue with MN16* ☐ *SP/Fansidar not taken.⇨ Go to MN17*		
MN16. DURING THIS PREGNANCY, HOW MANY TIMES DID YOU TAKE SP/ FANSIDAR?	Number of times ..... __ __ DK 98	
MN17. WHO ASSISTED WITH THE DELIVERY OF (*name*)? *Probe:* ANYONE ELSE? *Probe for the type of person assisting and circle all answers given.* *If respondent says no one assisted, probe to determine whether any adults were present at the delivery.*	Health professional: Doctor ..... A Nurse/ Midwife ..... B Other person Traditional birth attendant ..... F Community health worker/RHM.....G Relative/Friend.....H **Other (*specify*) _____X** No one ..... Y	

MN18. WHERE DID YOU GIVE BIRTH TO (*name*)? *Probe to identify the type of source.* *If unable to determine whether public or private, write the name of the place.* _____ *(Name of place)*	Home Your home .....11 Other home .....12 Public sector Govt. hospital .....21 Govt. health centre .....22 Govt. Clinic/PHU .....23 Govt. outreach site .....24 **Other public (*specify*)_____26** Private Medical Sector Private hospital .....31 Private clinic .....32 Other private **medical (*specify*) _____36** On the way .....41 **Other (*specify*) _____96**	11⇨MN19A 12⇨MN19A 96⇨MN19A
MN19. WAS (*name*) DELIVERED BY CAESAREAN SECTION? THAT IS, DID THEY CUT YOUR BELLY OPEN TO TAKE THE BABY OUT?	Yes .....1 No 2	
MN19A. IN THE FIRST TWO MONTHS AFTER YOUR LAST BIRTH TO (*name*) DID YOU RECEIVE A VITAMIN A DOSE LIKE THIS? *Check the respondent's card and show Vit. A capsule to the woman*	Yes .....1 No .....2 DK 8	
MN20. 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 DK 8	
MN21. WAS (*name*) WEIGHED AT BIRTH?	Yes .....1 No .....2 DK 8	 2⇨MN23 8⇨MN23
MN22. HOW MUCH DID (*name*) WEIGH? *Record weight from health card, if available.*	From card ..... 1 (kg) __ . __ __ __ From recall..... 2 (kg) __ . __ __ __ DK 99998	
MN23. HAS YOUR MENSTRUAL PERIOD RETURNED SINCE THE BIRTH OF (*name*)?	Yes .....1 No 2	
MN24. DID YOU EVER BREASTFEED (*name*)?	Yes .....1 No 2	 2⇨Next Module

MN25. 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 __ __ Don't know/remember 998	
MN26. IN THE FIRST THREE DAYS AFTER DELIVERY, WAS (*name*) GIVEN ANYTHING TO DRINK OTHER THAN BREAST MILK?	Yes..... 1 No 2	2⇨Next Module
MN27. WHAT WAS (*name*) GIVEN TO DRINK? *Probe:* ANYTHING ELSE?	Milk (other than breast milk) .....A Plain water .....B Sugar or glucose water.....C Gripe water .....D Sugar-salt-water solution .....E Fruit juice ..... F Infant formula.....G Tea / Infusions .....H Honey..... I Medicine ..... J Other (*specify*) _____ X	

ILLNESS SYMPTOMS		IS
IS1. *Check Household Listing, column HL9* Is the respondent the mother or caretaker of any child under age 5? ☐ Yes. ⇨ Continue with IS2. ☐ No. ⇨ Go to Next Module.		
IS2. SOMETIMES CHILDREN HAVE SEVERE ILLNESSES AND SHOULD BE TAKEN IMMEDIATELY TO A HEALTH FACILITY. WHAT TYPES OF SYMPTOMS WOULD CAUSE YOU TO TAKE YOUR CHILD TO A HEALTH FACILITY RIGHT AWAY? *Probe:* ANY OTHER SYMPTOMS? Keep asking for more signs or symptoms until the mother/caretaker cannot recall any additional symptoms. Circle all symptoms mentioned, but do NOT prompt with any suggestions	Child not able to drink or breastfeed..... A Child becomes sicker..... B Child develops a fever ..... C Child has fast breathing ..... D Child has difficulty breathing..... E Child has blood in stool..... F Child is drinking poorly..... G Child has diarrhoea..... H **Other (*specify*) _____ X** **Other (*specify*) _____ Y** **Other (*specify*) _____ Z**	

CONTRACEPTION		CP
CP1. I WOULD LIKE TO TALK WITH YOU ABOUT ANOTHER SUBJECT – FAMILY PLANNING. Check CM0. *If yes in CM0, ask:* ARE YOU PREGNANT NOW? *If no in CM0, circle '2' in CP1 and continue with CP2*	Yes, currently pregnant .....1 No .....2 Unsure or DK 8	1⇨Next Module
CP2. COUPLES USE VARIOUS WAYS OR METHODS TO DELAY OR AVOID A PREGNANCY. ARE YOU CURRENTLY DOING SOMETHING OR USING ANY METHOD TO DELAY OR AVOID GETTING PREGNANT?	Yes .....1 No 2	1⇨CP3
CP2A WHAT IS THE **MAIN** REASON THAT YOU ARE NOT USING ANY METHOD TO DELAY OR AVOID PREGNANCY	Religious beliefs .....01 Partner refuses .....02 Can't afford/expensive .....03 Side effects .....04 Not sexually active .....05 Do not wish to avoid pregnancy .....06 Other (*specify*) 96	1⇨Next Module 2⇨Next Module 3⇨Next Module 4⇨Next Module 5⇨Next Module 6⇨Next Module 96⇨Next Module
CP3. WHAT ARE YOU DOING TO DELAY OR AVOID A PREGNANCY? Do not prompt. If more than one method is mentioned, circle each one.	Female sterilization .....A Male sterilization/Vasectomy .....B IUCD .....C Injectables .....D Implants .....E Pill .....F Male condom .....G Female condom .....H Diaphragm .....I Foam/ Jelly .....J Lactational amenorrhoea method (LAM) .....K Periodic abstinence/Rhythm .....L Withdrawal .....M Other (*specify*) _____ X	

UNMET NEED		UN
UN1. *Check CP1. Currently pregnant?* ☐ Yes, currently pregnant ⇨ Continue with UN2 ☐ No, unsure or DK ⇨ Go to UN5		
UN2. NOW I WOULD LIKE TO TALK TO YOU ABOUT YOUR CURRENT PREGNANCY. WHEN YOU GOT PREGNANT, DID YOU WANT TO GET PREGNANT AT THAT TIME?	Yes ..... 1 No 2	1⇨UN4
UN3. DID YOU WANT TO HAVE A BABY LATER ON OR DID YOU NOT WANT ANY (MORE) CHILDREN?	Later ..... 1 No more 2	
UN4. NOW I WOULD LIKE TO ASK SOME QUESTIONS ABOUT THE FUTURE. AFTER THE CHILD YOU ARE NOW EXPECTING, WOULD YOU LIKE TO HAVE ANOTHER CHILD, OR WOULD YOU PREFER NOT TO HAVE ANY MORE CHILDREN?	Have another child ..... 1 No more / None ..... 2 Undecided / Don't know 8	1⇨UN7 2⇨UN13 8⇨UN13
UN5. *Check CP3. Currently using "Female sterilization"?* ☐ Yes. ⇨ Go to UN13 ☐ No. ⇨ Continue with UN6		
UN6. NOW I WOULD LIKE TO ASK YOU 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 cannot get pregnant ..... 3 Undecided / Don't know 8	 2⇨UN9 3⇨UN11 8⇨UN9
UN7. HOW LONG WOULD YOU LIKE TO WAIT BEFORE THE BIRTH OF (A/ANOTHER) CHILD?	Months ..... 1 __ __ Years ..... 2 __ __ Soon / Now ..... 993 Says she cannot get pregnant ..... 994 After marriage ..... 995 Other ..... 996 Don't know 998	 994⇨UN11
UN8. *Check CP1. Currently pregnant?* ☐ Yes, currently pregnant⇨ Go to UN13 ☐ No, unsure or DK⇨ Continue with UN9		

UN9. *Check CP2. Currently using a method?*

☐ Yes. ⇨ Go to UN13

☐ No ⇨ Continue with UN10

UN10. DO YOU THINK YOU ARE PHYSICALLY ABLE TO GET PREGNANT AT THIS TIME?	Yes ..... 1 No ..... 2 DK 8	1 ⇨UN13 8 ⇨UN13
UN11. WHY DO YOU THINK YOU ARE NOT PHYSICALLY ABLE TO GET PREGNANT? Do not prompt. If more than one method is mentioned, circle each one.	Infrequent sex / No sex ..... A Menopausal ..... B Never menstruated ..... C Hysterectomy (surgical removal of uterus) ..... D Has been trying to get pregnant for 2 years or more without result ..... E Postpartum amenorrhea ..... F Breastfeeding ..... G Too old ..... H Fatalistic ..... I Tubal ligation ..... J Other (*specify*) _____ X Don't know ..... Z	

UN12. *Check UN11. "Never menstruated" mentioned?*

☐ Yes. ⇨ Go to Next Module

☐ No ⇨ Continue with UN13

UN13. WHEN DID YOUR LAST MENSTRUAL PERIOD START?	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	

MARRIAGE/UNION		MA
MA1. 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	 3⇨MA5
MA2. HOW OLD IS YOUR HUSBAND/PARTNER? *Probe*: HOW OLD WAS YOUR HUSBAND/PARTNER ON HIS LAST BIRTHDAY?	Age in years ..... __ __ DK 98	
MA2A IS YOUR PARTNER/HUSBAND LIVING WITH YOU IN THIS HOUSEHOLD OR IS HE STAYING ELSEWHERE? *If yes, record the line number of partner/husband from HL1.*	Line number of partner/husband..... __ __ Staying elsewhere..... 00	
MA3. BESIDES YOURSELF, DOES YOUR HUSBAND/PARTNER HAVE ANY OTHER WIVES OR PARTNERS OR DOES HE LIVE WITH OTHER WOMEN AS IF MARRIED?	Yes ..... 1 No 2	 2⇨MA7
MA4. HOW MANY OTHER WIVES OR PARTNERS DOES HE HAVE?	Number ..... __ __ DK 98	⇨MA7 98⇨MA7
MA5. HAVE YOU EVER BEEN MARRIED OR LIVED TOGETHER WITH A MAN AS IF MARRIED?	Yes, formerly married ..... 1 Yes, formerly lived with a man ..... 2 No 3	 3 ⇨Next Module
MA6. WHAT IS YOUR MARITAL STATUS NOW: ARE YOU WIDOWED, DIVORCED OR SEPARATED?	Widowed ..... 1 Divorced ..... 2 Separated 3	
MA7. HAVE YOU BEEN MARRIED OR LIVED WITH A MAN ONLY ONCE OR MORE THAN ONCE?	Only once ..... 1 More than once 2	
MA8. IN WHAT MONTH AND YEAR DID YOU **FIRST** MARRY OR START LIVING WITH A MAN AS IF MARRIED?	Date of first marriage/ living together Month ..... __ __ DK month ..... 98 Year ..... __ __ __ __ DK year 9998	 ⇨MA10
MA9. HOW OLD WERE YOU WHEN YOU STARTED LIVING WITH YOUR FIRST HUSBAND/PARTNER?	Age in years ..... __ __	
MA10. *Check MA1. "Currently married (MA1 = 1)?* ☐ Yes. ⇨ Go to MA11 ☐ Else ⇨ Go to Next Module		
MA11. WHAT TYPE OF MARRIAGE? *If both*, WHAT TYPE OF MARRIAGE CERTIFICATE DO YOU HAVE?	Swazi ..... 1 Civil ..... 2 Other (*specify*) _____ 6	

SEXUAL BEHAVIOUR		SB
Check for the presence of others. Before continuing, ensure privacy.		
SB1. NOW I WOULD LIKE TO ASK YOU SOME QUESTIONS ABOUT SEXUAL ACTIVITY IN ORDER TO GAIN A BETTER UNDERSTANDING OF SOME IMPORTANT LIFE ISSUES. THE INFORMATION YOU SUPPLY WILL REMAIN STRICTLY CONFIDENTIAL. HOW OLD WERE YOU WHEN YOU HAD SEXUAL INTERCOURSE FOR THE VERY FIRST TIME?	Never had intercourse ..... 00 Age in years ..... __ __ First time when started living with (first) husband/partner 95	00⇨Next Module
SB2. THE FIRST TIME YOU HAD SEXUAL INTERCOURSE, WAS A CONDOM USED?	Yes ..... 1 No ..... 2 DK / Don't remember 8	
SB3. WHEN WAS THE LAST TIME YOU HAD SEXUAL INTERCOURSE? *Record 'years ago' only if last intercourse was one or more years ago. If 12 months or more the answer must be recorded in years.*	Days ago ..... 1 __ __ Weeks ago ..... 2 __ __ Months ago ..... 3 __ __ Years ago ..... 4 __ __	 4⇨SB15
SB4. THE LAST TIME YOU HAD SEXUAL INTERCOURSE, WAS A CONDOM USED?	Yes ..... 1 No 2	
SB5. WHAT WAS YOUR RELATIONSHIP TO THIS PERSON WITH WHOM YOU LAST HAD SEXUAL INTERCOURSE? *Probe to ensure that the response refers to the relationship at the time of sexual intercourse* *If 'boyfriend', then ask:* WERE YOU LIVING TOGETHER AS IF MARRIED? *If 'yes', circle '2'. If 'no', circle'3'.*	Husband ..... 1 Cohabiting partner ..... 2 Boyfriend ..... 3 Casual acquaintance ..... 4 **Other (*specify*) _____ 6**	 3⇨SB7 4⇨SB7 6⇨SB7
SB6. *Check MA1:* ☐ *Currently married or living with a man (MA1 = 1 or 2) ⇨ Go to SB8* ☐ *Not married / Not in union (MA1 = 3) ⇨ Continue with SB7*		
SB7. HOW OLD IS THIS PERSON? *If response is DK, probe:* ABOUT HOW OLD IS THIS PERSON?	Age of sexual partner ..... __ __ DK 98	
SB8. HAVE YOU HAD SEXUAL INTERCOURSE WITH ANY OTHER PERSON IN THE LAST 12 MONTHS?	Yes ..... 1 No 2	 2⇨SB15
SB9. THE LAST TIME YOU HAD SEXUAL INTERCOURSE WITH THIS OTHER PERSON, WAS A CONDOM USED?	Yes ..... 1 No 2	

SB10. WHAT WAS YOUR RELATIONSHIP TO THIS PERSON? *Probe to ensure that the response refers to the relationship at the time of sexual intercourse* *If 'boyfriend' then ask:* WERE YOU LIVING TOGETHER AS IF MARRIED? *If 'yes', circle '2'. If 'no', circle' 3'.*	Husband ..... 1 Cohabiting partner ..... 2 Boyfriend ..... 3 Casual acquaintance ..... 4 **Other (*specify*) _____ 6**	 3⇨SB12 4⇨SB12 6⇨SB12
SB11. *Check MA1 and MA7:* ☐ *Currently married or living with a man (MA1 = 1 or 2)* *AND* *Married only once or lived with a man only once (MA7 = 1) ⇨ Go to SB13* ☐ *Else ⇨ Continue with SB12*		
SB12. HOW OLD IS THIS PERSON? *If response is DK, probe:* ABOUT HOW OLD IS THIS PERSON?	Age of sexual partner ..... __ __ DK 98	
SB13. OTHER THAN THESE TWO PERSONS, HAVE YOU HAD SEXUAL INTERCOURSE WITH ANY OTHER PERSON IN THE LAST 12 MONTHS?	Yes ..... 1 No 2	 2⇨SB15
SB14. IN TOTAL, WITH HOW MANY DIFFERENT PEOPLE HAVE YOU HAD SEXUAL INTERCOURSE IN THE LAST 12 MONTHS?	Number of partners ..... __ __	
SB15. IN TOTAL, WITH HOW MANY DIFFERENT PEOPLE HAVE YOU HAD SEXUAL INTERCOURSE IN YOUR LIFETIME? *If a non-numeric answer is given, probe to get an estimate.* *If number of partners is 95 or more, write '95'.*	Number of lifetime partners ..... __ __ DK 98	

ATTITUDES TOWARD DOMESTIC ISSUES (VIOLENCE)		DV
DV1. SOMETIMES A HUSBAND IS ANNOYED OR ANGERED BY THINGS THAT HIS WIFE DOES. IN YOUR OPINION, IS A HUSBAND JUSTIFIED IN HITTING OR BEATING HIS WIFE IN THE FOLLOWING SITUATIONS: [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 REFUSES TO ACCEPT STEP CHILDREN? [G] IF SHE SLEEPS WITH ANOTHER MAN? [H] IF SHE INITIATES SEX? [I] IF SHE REFUSES TO GIVE FOOD?	Yes No DK Goes out without telling .....1 2 8 Neglects children .....1 2 8 Argues .....1 2 8 Refuses sex .....1 2 8 Burns food .....1 2 8 Refuses step children .....1 2 8 Sleeps with another man .....1 2 8 Initiates sex .....1 2 8 Refuses to give food 1 2 8	
DV2. *Check MA1:* ☐ *Married or living with a man as if married. ⇨ Continue with DV3* ☐ *Not married and not living with a man as if married ⇨ Go to Next Module*		
DV3. HAS YOUR HUSBAND)/PARTNER EVER BEEN ANNOYED OR ANGERED BY THINGS YOU HAVE DONE?	Yes .....1 No 2	2⇨ Next Module
DV4. IN SUCH OCCASIONS, HAS YOUR HUSBAND/PARTNER **EVER** HIT OR BEATEN YOU?	Yes .....1 No 2	2⇨ Next Module
DV5. HAS THIS HAPPENED IN THE LAST 12 MONTHS?	Yes .....1 No .....2 Not sure 8	
DV6. FOR WHAT REASON(S) WERE YOU EVER HIT OR BEATEN BY YOUR HUSBAND/PARTNER? ANY OTHER REASON? *RECORD ALL REASONS MENTIONED.*	Goes out without telling him .....A Argued with him .....B Refuses to have sex with him .....C Insulted him .....D Did not give him (enough) money .....E Beat the child .....F Husband/ partner was drunk .....G Involvement with another man .....H Other (*specify*) _____X	

HIV/AIDS		HA
HA1. NOW I WOULD LIKE TO TALK WITH YOU ABOUT SOMETHING ELSE. HAVE YOU EVER HEARD OF AN ILLNESS CALLED AIDS?	Yes ..... 1 No 2	 2⇨Next Module
HA2. CAN PEOPLE REDUCE THEIR CHANCE OF GETTING THE AIDS VIRUS BY HAVING JUST ONE UNINFECTED SEX PARTNER WHO HAS NO OTHER SEX PARTNERS?	Yes ..... 1 No ..... 2 DK 8	
HA3. CAN PEOPLE GET THE AIDS VIRUS BECAUSE OF WITCHCRAFT OR OTHER SUPERNATURAL MEANS?	Yes ..... 1 No ..... 2 DK 8	
HA4. CAN PEOPLE REDUCE THEIR CHANCE OF GETTING THE AIDS VIRUS BY USING A CONDOM EVERY TIME THEY HAVE SEX?	Yes ..... 1 No ..... 2 DK 8	
HA5. CAN PEOPLE GET THE AIDS VIRUS FROM MOSQUITO BITES?	Yes ..... 1 No ..... 2 DK 8	
HA6. CAN PEOPLE GET THE AIDS VIRUS BY SHARING FOOD WITH A PERSON WHO HAS AIDS?	Yes ..... 1 No ..... 2 DK 8	
HA7. IS IT POSSIBLE FOR A HEALTHY-LOOKING PERSON TO HAVE THE AIDS VIRUS?	Yes ..... 1 No ..... 2 DK 8	
HA8. CAN THE VIRUS THAT CAUSES AIDS BE TRANSMITTED FROM A MOTHER TO HER BABY: [A] DURING PREGNANCY? [B] DURING DELIVERY? [C] BY BREASTFEEDING?	Yes No DK During pregnancy ..... 1 2 8 During delivery ..... 1 2 8 By breastfeeding 1 2 8	
HA9. IN YOUR OPINION, IF A FEMALE TEACHER HAS THE AIDS VIRUS BUT IS NOT SICK, SHOULD SHE BE ALLOWED TO CONTINUE TEACHING IN SCHOOL?	Yes ..... 1 No ..... 2 DK/Not sure/Depends 8	
HA10. WOULD YOU BUY FRESH VEGETABLES FROM A SHOPKEEPER OR VENDOR IF YOU KNEW THAT THIS PERSON HAD THE AIDS VIRUS?	Yes ..... 1 No ..... 2 DK/Not sure/Depends 8	
HA11. IF A MEMBER OF YOUR FAMILY GOT INFECTED WITH THE AIDS VIRUS, WOULD YOU WANT IT TO REMAIN A SECRET?	Yes ..... 1 No ..... 2 DK/Not sure/Depends 8	
HA12. IF A MEMBER OF YOUR FAMILY BECAME SICK WITH AIDS, WOULD YOU BE WILLING TO CARE FOR HER OR HIM IN YOUR OWN HOUSEHOLD?	Yes ..... 1 No ..... 2 DK / Not sure / Depends 8	

HA12A. DO YOU THINK THE AIDS VIRUS CAN BE TRANSMITTED THROUGH ORAL SEX	Yes ..... 1 No ..... 2 DK / Not sure / Depends 8	
HA12B. DO YOU THINK THE AIDS VIRUS CAN BE TRANSMITTED THROUGH ANAL SEX	Yes ..... 1 No ..... 2 DK / Not sure / Depends 8	
HA12C. IN YOUR OPINION CAN HIV AIDS BE CURED?	Yes ..... 1 No ..... 2 DK / Not sure / Depends 8	2⇨HA13
HA12D. IN YOUR OPINION CAN A MAN INFECTED WITH THE AIDS VIRUS BE CURED THROUGH HAVING SEX WITH A VIRGIN?	Yes ..... 1 No ..... 2 DK / Not sure / Depends 8	
HA13. *Check CM13: Any live birth in last 2 years?* ☐ *No live birth in last 2 years ⇨ Go to HA24* ☐ *One or more live births in last 2 years ⇨ Continue with HA14*		
HA14. *Check MN1: Received antenatal care?* ☐ *Received antenatal care ⇨ Continue with HA15* ☐ *Did not receive antenatal care ⇨ Go to HA24*		
HA15. DURING ANY OF THE ANTENATAL VISITS FOR YOUR PREGNANCY WITH (*name*), WERE YOU GIVEN ANY INFORMATION ABOUT AIDS OR THE AIDS VIRUS? WERE YOU GIVEN ANY INFORMATION ABOUT: [A] BABIES GETTING THE AIDS VIRUS FROM THEIR MOTHER? [B] THINGS THAT YOU CAN DO TO PREVENT GETTING THE AIDS VIRUS? [C] GETTING TESTED FOR THE AIDS VIRUS? WERE YOU: [D] OFFERED A TEST FOR THE AIDS VIRUS?	Y N DK AIDS from mother ..... 1 2 8 Things to do ..... 1 2 8 Tested for AIDS ..... 1 2 8 Offered a test 1 2 8	
HA16. I DON'T WANT TO KNOW THE RESULTS, BUT WERE YOU TESTED FOR THE AIDS VIRUS AS PART OF YOUR ANTENATAL CARE?	Yes ..... 1 No ..... 2 DK 8	2⇨HA19 8⇨HA19
HA17. I DON'T WANT TO KNOW THE RESULTS, BUT DID YOU GET THE RESULTS OF THE TEST?	Yes ..... 1 No ..... 2 DK 8	2⇨HA22 8⇨HA22

HA18. REGARDLESS OF THE RESULT, ALL WOMEN WHO ARE TESTED ARE SUPPOSED TO RECEIVE COUNSELLING AFTER GETTING THE RESULT. AFTER YOU WERE TESTED, DID YOU RECEIVE COUNSELLING?	Yes ..... 1 No ..... 2 DK 8	1⇨HA22 2⇨HA22 8⇨HA22
HA19. *Check MN17: Birth delivered by health professional (A or B)?* ☐ *Yes, birth delivered by health professional⇨ Continue with HA20* ☐ *No, birth not delivered by health professional⇨ Go to HA24*		
HA20. I DON'T WANT TO KNOW THE RESULTS, BUT WERE YOU TESTED FOR THE AIDS VIRUS BETWEEN THE TIME YOU WENT FOR DELIVERY BUT BEFORE THE BABY WAS BORN?	Yes ..... 1 No 2	2⇨HA24
HA21. I DON'T WANT TO KNOW THE RESULTS, BUT DID YOU GET THE RESULTS OF THE TEST?	Yes ..... 1 No 2	
HA22. HAVE YOU BEEN TESTED FOR THE AIDS VIRUS SINCE THAT TIME YOU WERE TESTED DURING YOUR PREGNANCY?	Yes ..... 1 No 2	1⇨HA25
HA23. WHEN WAS THE MOST RECENT TIME YOU WERE TESTED FOR THE AIDS VIRUS?	Less than 12 months ago ..... 1 12-23 months ago ..... 2 2 or more years ago 3	1⇨Next Module 2⇨ Next Module 3⇨ Next Module
HA24. I DON'T WANT TO KNOW THE RESULTS, BUT HAVE YOU EVER BEEN TESTED TO SEE IF YOU HAVE THE AIDS VIRUS?	Yes ..... 1 No 2	 2⇨HA27

HA25. WHEN WAS THE MOST RECENT TIME YOU WERE TESTED?	Less than 12 months ago ..... 1 12-23 months ago ..... 2 2 or more years ago 3	
HA25A. DID YOU, YOURSELF, ASK FOR THE TEST, WAS IT OFFERED AND YOU ACCEPTED, OR WAS IT REQUIRED?	Asked for the test ..... 1 Offered and accepted ..... 2 Required 3	
HA25B. WHERE DID YOU GO FOR THE TEST? *Probe to identify the type of source.* *If unable to determine whether public or private, write the name of the place.* _____ *(Name of place)*	Public sector Govt. hospital ..... 11 Govt. health centre ..... 12 Govt. clinic/PHU ..... 13 Govt. VCT Centre ..... 14 **Other public (*specify*) _____ 16** Private Medical Sector Private hospital ..... 21 Private clinic ..... 22 **Other private medical (*specify*) _____ 26** Other sources NGO VCT Centre ..... 31 Mission hospital ..... 32 **Other (*specify*) _____ 96** DK 98	
HA26. I DON'T WANT TO KNOW THE RESULTS, BUT DID YOU GET THE RESULTS OF THE TEST?	Yes ..... 1 No ..... 2 DK 8	1⇨ Next Module 2⇨ Next Module 8⇨ Next Module
HA27. DO YOU KNOW OF A PLACE WHERE PEOPLE CAN GO TO GET TESTED FOR THE AIDS VIRUS?	Yes ..... 1 No 2	

OTHER SEXUALLY TRANSMITTED INFECTIONS		SW
SW1. (APART FROM AIDS,) HAVE YOU HEARD ABOUT (OTHER) INFECTIONS THAT CAN BE TRANSMITTED THROUGH SEXUAL CONTACT?	Yes.....1 No 2	2⇨ SW4
SW2. IF A WOMAN HAS A SEXUALLY TRANSMITTED INFECTION/DISEASE, WHAT SIGNS OR SYMPTOMS MIGHT SHE HAVE? ANY OTHER SYMPTOMS? *Record all symptoms mentioned.*	Abdominal pain.....A Genital discharge/dripping.....B Foul smelling discharge.....C Burning pain on urination.....D Redness/inflammation in genital area .....E Swelling in genital area.....F Genital sores/ulcers.....G Genital warts.....H Genital itching .....I Blood in urine.....J Loss of weight.....K Hard to get pregnant/have a child .....L Other (specify) _____ W Other (specify) _____X No symptoms.....Y Don't know.....Z	
SW3. IF A MAN HAS A SEXUALLY TRANSMITTED INFECTION/DISEASE, WHAT SIGNS OR SYMPTOMS MIGHT HE HAVE? ANY OTHER SYMPTOMS? *Record all symptoms mentioned.*	Abdominal pain.....A Genital discharge/dripping.....B Foul smelling discharge.....C Burning pain on urination.....D Redness/inflammation in genital area .....E Swelling in genital area.....F Genital sores/ulcers.....G Genital warts.....H Genital itching .....I Blood in urine.....J Loss of weight.....K Impotence .....L Other (specify) _____ W Other (specify) _____X No symptoms.....Y Don't know.....Z	

SW4. *Check SB1: Ever had sex?* ☐ *Yes. ⇨ Go to SW5.* ☐ *No. ⇨ WM11*		
SW5. *Check SW1: Has heard about infection transmitted through sexual contact?* ☐ *Yes. ⇨ Go to SW6.* ☐ *No. ⇨ Go to SW7.* CHECK FOR THE PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY		
SW6. 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 DK.....8	
SW7. 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 DK.....8	
SW8. 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 DK.....8	
SW9. *Check SW6/SW7/SW8: Has had an infection or a symptom of sexually transmitted disease? (that is a yes in SW6 or SW7 or SW8)* ☐ *Yes.⇨Go to SW10.* ☐ *No.⇨Go to WM11*		
SW10. THE LAST TIME YOU HAD PROBLEM(S) FROM (*SW6 or SW7or SW8*), DID YOU SEEK ANY KIND OF ADVICE OR TREATMENT?	Yes.....1 No 2	1⇨SW12
SW11. WHAT WAS THE MAIN REASON FOR NOT SEEKING ADVICE OR TREATMENT?	Not necessary.....1 Expensive .....2 Religious prohibition .....3 Fear of being ridiculed/ stigmatized ……... 4 **Other (*specify*) _____ 6**	1⇨SW13 2⇨SW13

SW12. WHERE DID YOU GO? ANY OTHER PLACE? *Record all sources mentioned.* *Probe to identify each type of source and circle the appropriate code(s).* *If unable to determine whether public or private, write the name of the place.* _____ *(Name of place)*	Public sector Govt. hospital ..... A Govt. health centre ..... B Govt. clinic/PHU ..... C Rural Health Motivator ..... D Govt. outreach site ..... E **Other public (*specify*) _____ F** Private medical sector Private hospital ..... G Private clinic ..... H Private physician ..... I Private pharmacy ..... J **Other private medical (*specify*) _____ K** Other source FLAS ..... L TASC ..... M Relative or friend ..... N Shop ..... O Traditional practitioner ..... P Street vendor ..... Q **Other (*specify*) _____ X**	
SW13. WHEN YOU HAD PROBLEM(S) FROM (*SW6 or SW7or SW8*) DID YOU INFORM THE PERSON(S) WITH WHOM YOU WERE HAVING SEX?	Yes ..... 1 No ..... 2 Some/ not all ..... 3 Did not have a partner 4	

WM11. *Record the time.*	Hour and minutes ..... __ __ : __ __	

WM12. *Is the respondent the mother or caretaker of any child age 0-4 living in this household? Check household listing, column HL9.*

☐ *Yes.* ⇨ *Go to QUESTIONNAIRE FOR CHILDREN UNDER FIVE for that child and start the interview with this respondent.*

☐ *No.* ⇨ *End the interview with this respondent by thanking her for her cooperation. Check for the presence of any other eligible woman or children under-5 in the household.*

Interviewer's Observations

Field Editor's Observations

Supervisor's Observations

MICS

QUESTIONNAIRE FOR CHILDREN UNDER FIVE

Swaziland

UNDER-FIVE CHILD INFORMATION PANEL	**UF**
This questionnaire is to be administered to all mothers or caretakers (see Household Listing Form, column HL9) who care for a child that lives with them and is under the age of 5 years (see Household Listing Form, column HL6). A separate questionnaire should be used for each eligible child.	
UF1. Cluster number:	UF2. Household number:
UF3. Child's name: Name_____	UF4. Child's line number:
UF5. Mother's/Caretaker's name: Name_____	UF6. Mother's/Caretaker's line number:
UF7. Interviewer name and number: Name: _____	UF8. Day/Month/Year of interview:

Repeat greeting if not already read to this respondent:

WE ARE FROM THE **CENTRAL STATISTICAL OFFICE**. WE ARE WORKING ON A PROJECT CONCERNED WITH FAMILY HEALTH AND EDUCATION. I WOULD LIKE TO TALK TO YOU ABOUT (*name*)'S HEALTH AND WELL-BEING. THE INTERVIEW WILL TAKE ABOUT **30** MINUTES. ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND YOUR ANSWERS WILL NEVER BE SHARED WITH ANYONE OTHER THAN OUR PROJECT TEAM.

If greeting at the beginning of the household questionnaire has already been read to this woman, then read the following:

NOW I WOULD LIKE TO TALK TO YOU MORE ABOUT (***child's name from UF3***)'S HEALTH AND OTHER TOPICS. THIS INTERVIEW WILL TAKE ABOUT **30** MINUTES. AGAIN, ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND YOUR ANSWERS WILL NEVER BE SHARED WITH ANYONE OTHER THAN OUR PROJECT TEAM.

MAY I START NOW?

☐ *Yes, permission is given ⇨Begin the interview.*

☐ *No, permission is not given ⇨Complete UF9. Discuss this result with your supervisor*

UF9. Result of interview for children under 5 Codes refer to mother/caretaker.	Completed ..... 01 Not at home ..... 02 Refused ..... 03 Partly completed ..... 04 Incapacitated ..... 05 **Other (*specify*) _____ 96**

UF10. Field edited by (Name and number): Name _____	UF11. Data entry clerk (Name and number): Name _____

UF12. *Record the time.*	Hour and minutes ..... __ __ : __ __	

AGE		**AG**
AG1. NOW I WOULD LIKE TO ASK YOU SOME QUESTIONS ABOUT THE HEALTH OF (*name*). IN WHAT MONTH AND YEAR WAS (*name*) BORN? *Probe:* WHAT IS HIS/HER BIRTHDAY? If the mother/caretaker knows the exact birth date, also enter the day; otherwise, circle 98 for day Month and year **must** be recorded.	Date of birth Day ..... __ __ DK day ..... 98 Month ..... __ __ Year ..... __ __ __ __	
AG2. HOW OLD IS (*name*)? *Probe*: HOW OLD WAS (*name*) AT HIS/HER LAST BIRTHDAY? Record age in completed years. Record '0' if less than 1 year. Compare and correct AG1 and/or AG2 if inconsistent.	Age (in completed years)..... __	

BIRTH REGISTRATION		BR
BR1. DOES (*name*) HAVE A BIRTH CERTIFICATE? *If yes, ask:* MAY I SEE IT?	Yes, seen ..... 1 Yes, not seen ..... 2 No ..... 3 DK 8	1⇨Next Module 2⇨ Next Module
BR2. HAS (*name*)'S BIRTH BEEN REGISTERED WITH THE CIVIL AUTHORITIES?	Yes ..... 1 No ..... 2 DK 8	1⇨Next Module
BR3. DO YOU KNOW HOW TO REGISTER YOUR CHILD'S BIRTH?	Yes ..... 1 No 2	2⇨Next Module
BR3A. WHAT IS THE **MAIN** REASON THAT (*name*)'S BIRTH IS NOT REGISTERED?	Costs too much ..... 01 Must travel too far ..... 02 Did not know it should be registered ..... 03 Did not want to pay fine ..... 04 Does not know where to register ..... 05 Partner refuses ..... 06 No need to register child's birth ..... 07 Father/ Mother does not have a PIN/ID .... 08 Other (*specify*) _____ 96 DK 98	

EARLY CHILDHOOD DEVELOPMENT		EC
EC1. HOW MANY CHILDREN'S BOOKS OR PICTURE BOOKS DO YOU HAVE FOR (*name*)?	None ..... 00 Number of children's books ..... 0 __ Ten or more books 10	
EC2. I AM INTERESTED IN LEARNING ABOUT THE THINGS THAT (*name*) PLAYS WITH WHEN HE/SHE IS AT HOME. DOES HE/SHE PLAY WITH: [A] HOMEMADE TOYS (SUCH AS DOLLS, CARS, OR OTHER TOYS MADE AT HOME)? [B] TOYS FROM A SHOP OR MANUFACTURED TOYS? [C] HOUSEHOLD OBJECTS (SUCH AS BOWLS OR POTS) OR OBJECTS FOUND OUTSIDE (SUCH AS STICKS, ROCKS, ANIMAL SHELLS OR LEAVES)? If the respondent says "YES" to the categories above, then probe to learn specifically what the child plays with to ascertain the response	Y N DK Homemade toys ..... 1 2 8 Toys from a shop ..... 1 2 8 Household objects or outside objects 1 2 8	
EC3. SOMETIMES ADULTS TAKING CARE OF CHILDREN HAVE TO LEAVE THE HOUSE TO GO SHOPPING, WASH CLOTHES, OR FOR OTHER REASONS AND HAVE TO LEAVE YOUNG CHILDREN. ON HOW MANY DAYS IN THE PAST WEEK WAS (*name*): [A] LEFT ALONE FOR MORE THAN AN HOUR? [B] LEFT IN THE CARE OF ANOTHER CHILD (THAT IS, SOMEONE LESS THAN 10 YEARS OLD) FOR MORE THAN AN HOUR? If 'none' enter' 0'. If 'don't know' enter'8'	Number of days left alone for more than an hour..... __ Number of days left with other child for more than an hour..... __	
EC4. *Check AG2: Age of child* ☐ *Child age 3 or 4 ⇨ Continue with EC5* ☐ *Child age 0, 1 or 2 ⇨ Go to Next Module*		
EC5. Does (*name*) ATTEND ANY ORGANIZED LEARNING OR EARLY CHILDHOOD EDUCATION PROGRAMME, SUCH AS A PRIVATE OR GOVERNMENT FACILITY, INCLUDING KINDERGARTEN OR COMMUNITY CHILD CARE?	Yes ..... 1 No ..... 2 DK 8	1⇨EC6 8⇨EC7

EC5A. WHAT IS THE **MAIN** REASON (*name*) NOT ATTENDING ANY ORGANIZED LEARNING OR EARLY CHILDHOOD EDUCATION PROGRAMME, SUCH AS A PRIVATE OR GOVERNMENT FACILITY, INCLUDING KINDERGARTEN OR COMMUNITY CHILD CARE?	Too far ..... 1 Too costly ..... 2 Disability ..... 3 Religion ..... 4 Other (specify)_____ 6 DK 8	1⇨EC7 2⇨EC7 3⇨EC7 4⇨EC7 6⇨EC7 8⇨EC7
EC6. WITHIN THE LAST SEVEN DAYS, ABOUT HOW MANY HOURS DID (*name*) ATTEND?	Number of hours ..... __ __	
EC7. IN THE PAST 3 DAYS, DID YOU OR ANY HOUSEHOLD MEMBER OVER 15 YEARS OF AGE ENGAGE IN ANY OF THE FOLLOWING ACTIVITIES WITH (*name*): *If yes, ask:* WHO ENGAGED IN THIS ACTIVITY WITH (*name*)? *Circle all that apply.*		
[A] READ BOOKS TO OR LOOKED AT PICTURE BOOKS WITH (*name*)?	Read books — Mother: A; Father: B; Other: X; No One: Y	
[B] TOLD STORIES TO (*name*)?	Told stories — Mother: A; Father: B; Other: X; No One: Y	
[C] SANG SONGS TO (*name*) OR WITH (*name*), INCLUDING LULLABIES?	Sang songs — Mother: A; Father: B; Other: X; No One: Y	
[D] TOOK (*name*) OUTSIDE THE HOME, COMPOUND, YARD OR ENCLOSURE?	Took outside — Mother: A; Father: B; Other: X; No One: Y	
[E] PLAYED WITH (*name*)?	Played with — Mother: A; Father: B; Other: X; No One: Y	
[F] NAMED, COUNTED, OR DREW THINGS TO OR WITH (*name*)?	Named/counted — Mother: A; Father: B; Other: X; No One: Y	
EC8. I WOULD LIKE TO ASK YOU SOME QUESTIONS ABOUT THE HEALTH AND DEVELOPMENT OF YOUR CHILD. CHILDREN DO NOT ALL DEVELOP AND LEARN AT THE SAME RATE. FOR EXAMPLE, SOME WALK EARLIER THAN OTHERS. THESE QUESTIONS ARE RELATED TO SEVERAL ASPECTS OF YOUR CHILD'S DEVELOPMENT. CAN (*name*) IDENTIFY OR NAME AT LEAST TEN LETTERS OF THE ALPHABET?	Yes ..... 1 No ..... 2 DK 8	
EC9. CAN (*name*) READ AT LEAST FOUR SIMPLE, POPULAR WORDS?	Yes ..... 1 No ..... 2 DK 8	

EC10. DOES (*name*) KNOW THE NAME AND RECOGNIZE THE SYMBOL OF ALL NUMBERS FROM 1 TO 10?	Yes ..... 1 No ..... 2 DK 8	
EC11. CAN (*name*) PICK UP A SMALL OBJECT WITH TWO FINGERS, LIKE A STICK OR A ROCK FROM THE GROUND?	Yes ..... 1 No ..... 2 DK 8	
EC12. IS (*name*) SOMETIMES TOO SICK TO PLAY?	Yes ..... 1 No ..... 2 DK 8	
EC13. DOES (*name*) FOLLOW SIMPLE DIRECTIONS ON HOW TO DO SOMETHING CORRECTLY?	Yes ..... 1 No ..... 2 DK 8	
EC14. WHEN GIVEN SOMETHING TO DO, IS (*name*) ABLE TO DO IT INDEPENDENTLY?	Yes ..... 1 No ..... 2 DK 8	
EC15. DOES *(name)* GET ALONG WELL WITH OTHER CHILDREN?	Yes ..... 1 No ..... 2 DK 8	
EC16. DOES (*name*) KICK, BITE, OR HIT OTHER CHILDREN OR ADULTS?	Yes ..... 1 No ..... 2 DK 8	
EC17. DOES (*name*) GET DISTRACTED EASILY?	Yes ..... 1 No ..... 2 DK 8	

BREASTFEEDING		BF
BF1. HAS (*name*) EVER BEEN BREASTFED?	Yes ..... 1 No ..... 2 DK 8	1⇨BF2 8⇨BF3
BF1A. WHY HAS (NAME) NEVER BEEN BREASTFED?	No milk ..... 1 Child did not take breast ..... 2 Illness (child/mother) ..... 3 Death (mother) ..... 4 Fear of infection ..... 5 Other (*specify*)_____6	1⇨BF3 2⇨BF3 3⇨BF3 4⇨BF3 5⇨BF3 6⇨BF3
BF2. IS HE/SHE STILL BEING BREASTFED?	Yes ..... 1 No ..... 2 DK 8	
BF3. I WOULD LIKE TO ASK YOU ABOUT LIQUIDS THAT (*name*) MAY HAVE HAD YESTERDAY DURING THE DAY OR NIGHT. I AM INTERESTED IN WHETHER (*name*) HAD THE ITEM EVEN IF IT WAS COMBINED WITH OTHER FOODS. DID (*name*) **DRINK PLAIN WATER** YESTERDAY, DURING THE DAY OR NIGHT?	Yes ..... 1 No ..... 2 DK 8	
BF4. DID (*name*) **DRINK INFANT FORMULA** YESTERDAY, DURING THE DAY OR NIGHT?	Yes ..... 1 No ..... 2 DK 8	 2⇨BF6 8⇨BF6
BF5. HOW MANY TIMES DID (*name*) DRINK INFANT FORMULA?	Number of times ..... __ __	
BF6. DID (*name*) **DRINK MILK, SUCH AS TINNED, POWDERED OR FRESH ANIMAL MILK** YESTERDAY, DURING THE DAY OR NIGHT?	Yes ..... 1 No ..... 2 DK 8	 2⇨BF8 8⇨BF8
BF7. HOW MANY TIMES DID (*name*) DRINK TINNED, POWDERED OR FRESH ANIMAL MILK?	Number of times ..... __ __	
BF8. DID (*name*) **DRINK JUICE OR JUICE DRINKS** YESTERDAY, DURING THE DAY OR NIGHT?	Yes ..... 1 No ..... 2 DK 8	
BF9. DID (*name*) **DRINK UMSOBHO** YESTERDAY, DURING THE DAY OR NIGHT?	Yes ..... 1 No ..... 2 DK 8	

BF10. DID (*name*) **DRINK OR EAT VITAMIN OR MINERAL SUPPLEMENTS OR ANY MEDICINES** YESTERDAY, DURING THE DAY OR NIGHT?	Yes ..... 1 No ..... 2 DK 8	
BF11. DID (*name*) **DRINK ORS (ORAL REHYDRATION SOLUTION)** YESTERDAY, DURING THE DAY OR NIGHT?	Yes ..... 1 No ..... 2 DK 8	
BF11A. DID (*name*) **DRINK EMAHEWU** YESTERDAY, DURING THE DAY OR NIGHT?	Yes ..... 1 No ..... 2 DK 8	
BF11B. DID (*name*) **DRINK TEA** YESTERDAY, DURING THE DAY OR NIGHT?	Yes ..... 1 No ..... 2 DK 8	
BF12. DID (*name*) **DRINK ANY OTHER LIQUIDS** YESTERDAY, DURING THE DAY OR NIGHT?	Yes ..... 1 No ..... 2 DK 8	
BF13. DID (*name*) **DRINK OR EAT YOGURT** YESTERDAY, DURING THE DAY OR NIGHT?	Yes ..... 1 No ..... 2 DK 8	2⇨BF15 8⇨BF15
BF14. HOW MANY TIMES DID (*name*) DRINK OR EAT YOGURT YESTERDAY, DURING THE DAY OR NIGHT?	Number of times ..... __ __	
BF15. DID (NAME) **EAT THIN PORRIDGE** YESTERDAY, DURING THE DAY OR NIGHT?	Yes ..... 1 No ..... 2 DK 8	
BF16. DID (*name*) **EAT SOLID OR SEMI-SOLID (SOFT, MUSHY) FOOD** YESTERDAY, DURING THE DAY OR NIGHT?	Yes ..... 1 No ..... 2 DK 8	2⇨BF18 8⇨BF18
BF17. HOW MANY TIMES DID (*name*) EAT SOLID OR SEMI-SOLID (SOFT, MUSHY) FOOD YESTERDAY, DURING THE DAY OR NIGHT?	Number of times ..... __ __	
BF18. YESTERDAY, DURING THE DAY OR NIGHT, DID (*name*) **DRINK ANYTHING FROM A BOTTLE WITH TIT/ NIPPLE**?	Yes ..... 1 No ..... 2 DK 8	

CARE OF ILLNESS		CA
CA1. IN THE LAST TWO WEEKS, HAS (*name*) HAD DIARRHOEA?	Yes ..... 1 No ..... 2 DK 8	 2⇨CA7 8⇨CA7
CA2. I WOULD LIKE TO KNOW HOW MUCH (*name*) WAS GIVEN TO DRINK DURING THE DIARRHOEA (INCLUDING BREAST MILK). DURING THE TIME (*name*) HAD DIARRHOEA, WAS HE/SHE GIVEN LESS THAN USUAL TO DRINK, ABOUT THE SAME AMOUNT, OR MORE THAN USUAL? *If less, probe*: WAS HE/SHE 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 DK 8	
CA3. DURING THE TIME (*name*) HAD DIARRHOEA, WAS HE/SHE GIVEN LESS THAN USUAL TO EAT, ABOUT THE SAME AMOUNT, MORE THAN USUAL, OR NOTHING TO EAT? If "less", probe: WAS HE/SHE 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 DK 8	
CA4. DURING THE EPISODE OF DIARRHOEA, WAS (*name*) GIVEN TO DRINK ANY OF THE FOLLOWING: Read each item aloud and record response before proceeding to the next item. [A] A FLUID MADE FROM A SPECIAL PACKET CALLED (*local name for ORS packet solution*)? [B] A PRE-PACKAGED ORS FLUID FOR DIARRHOEA? [C] SUGAR SALT SOLUTION	Y N DK Fluid from ORS packet ..... 1 2 8 Pre-packaged ORS for diarrhoea ..... 1 2 8 Sugar salt solution 1 2 8	
CA4H. Check CA4C: Sugar Salt Solution given? ☐ Yes ⇨ Continue with CA4I ☐ *No ⇨ Go to CA5*		
CA4I. HOW DID YOU PREPARE THE SUGAR SALT SOLUTION?	8 level caps of sugar and 1 cap salt ..... 1 8 level caps of salt and 1 cap sugar ..... 2 Other ..... 6 DK 8	
CA5. WAS ANYTHING (ELSE) GIVEN TO TREAT THE DIARRHOEA?	Yes ..... 1 No ..... 2 DK 8	 2⇨CA7 8⇨CA7

CA6. WHAT (ELSE) WAS GIVEN TO TREAT THE DIARRHOEA? *Probe*: ANYTHING ELSE? *Record all treatments given. Write brand name(s) of all medicines mentioned.* _____ (Name)	Pill or Syrup Antibiotic.....A Antimotility.....B Zinc .....C Other (Not antibiotic, antimotility or zinc) .....G Unknown pill or syrup.....H Injection Antibiotic..... L Non-antibiotic ..... M Unknown injection.....N Intravenous .....O Home remedy/Herbal medicine .....Q **Other (*specify*) _____X**	
CA7. AT ANY TIME IN THE LAST TWO WEEKS, HAS (*name*) HAD AN ILLNESS WITH A COUGH?	Yes..... 1 No ..... 2 DK 8	 2⇨CA14 8⇨CA14
CA8. WHEN (*name*) HAD AN ILLNESS WITH A COUGH, DID HE/SHE BREATHE FASTER THAN USUAL WITH SHORT, RAPID BREATHS OR HAVE DIFFICULTY BREATHING?	Yes..... 1 No ..... 2 DK 8	 2⇨CA14 8⇨CA14
CA9. WAS THE FAST OR DIFFICULT BREATHING DUE TO A PROBLEM IN THE CHEST OR A BLOCKED OR RUNNY NOSE?	Problem in chest only ..... 1 Blocked or runny nose only ..... 2 Both..... 3 **Other (*specify*) _____ 6** DK 8	 2⇨CA14 6⇨CA14
CA10. DID YOU SEEK ANY ADVICE OR TREATMENT FOR THE ILLNESS FROM ANY SOURCE?	Yes..... 1 No ..... 2 DK 8	 2⇨CA12 8⇨CA12
CA11. FROM WHERE DID YOU SEEK ADVICE OR TREATMENT? *Probe:* ANYWHERE ELSE? Circle all providers mentioned, but do NOT prompt with any suggestions. Probe to identify each type of source. If unable to determine if public or private sector, write the name of the place. _____ (Name of place)	Public sector Govt. hospital .....A Govt. health centre.....B Govt. clinic/PHU.....C Outreach site.....D Rural Health Motivator .....E **Other public (*specify*) _____H** Private medical sector Private hospital ..... I Private physician.....J Private pharmacy .....K Private clinic ..... L **Other private medical (*specify*) _____O** Other source Relative / Friend.....P Shop .....Q Traditional practitioner .....R Spiritual healer .....S **Other (*specify*) _____X**	

CA12. WAS (*name*) GIVEN ANY MEDICINE TO TREAT THIS ILLNESS?	Yes ..... 1 No ..... 2 DK 8	 2⇨CA14 8⇨CA14
CA13. WHAT MEDICINE WAS (*name*) GIVEN? *Probe:* ANY OTHER MEDICINE? Circle all medicines given. Write brand name(s) of all medicines mentioned. _____ (Names of medicines)	Antibiotic Pill / Syrup ..... A Injection ..... B Anti-malarials ..... M Paracetamol/Panadol/Acetaminophen ..... P Aspirin ..... Q Ibuprofen ..... R **Other (*specify*) _____ X** DK ..... Z	
CA14. Check AG2: Child aged under 3? ☐ Yes ⇨ Continue with CA15 ☐ *No ⇨ Go to Next Module*		
CA15. THE LAST TIME *(name)* PASSED STOOLS, WHAT WAS DONE TO DISPOSE OF THE STOOLS?	Child used toilet/latrine ..... 01 Put/Rinsed into toilet or latrine ..... 02 Put/Rinsed into drain or ditch ..... 03 Thrown into garbage (solid waste) ..... 04 Buried ..... 05 Left in the open ..... 06 **Other (*specify*) _____ 96** DK 98	

MALARIA		ML
ML1. IN THE LAST TWO WEEKS, HAS (*name*) BEEN ILL WITH A FEVER AT ANY TIME?	Yes ..... 1 No ..... 2 DK 8	 2⇨Next Module 8⇨Next Module
ML2. AT ANY TIME DURING THE ILLNESS, DID (*name*) HAVE BLOOD TAKEN FROM HIS/HER FINGER OR HEEL FOR TESTING?	Yes ..... 1 No ..... 2 DK 8	
ML3. DID YOU SEEK ANY ADVICE OR TREATMENT FOR THE ILLNESS FROM ANY SOURCE?	Yes ..... 1 No ..... 2 DK 8	 2⇨ML8 8⇨ML8
ML4. WAS (NAME) TAKEN TO A HEALTH FACILITY DURING THIS ILLNESS?	Yes ..... 1 No ..... 2 DK 8	 2⇨ML8 8⇨ML8
ML5. WAS (*name*) GIVEN ANY MEDICINE FOR FEVER OR MALARIA AT THE HEALTH FACILITY?	Yes ..... 1 No ..... 2 DK 8	 2⇨ML7 8⇨ML7
ML6. WHAT MEDICINE WAS (*name*) GIVEN? *Probe:* ANY OTHER MEDICINE? *Circle all medicines mentioned. Write brand name(s) of all medicines, if given.* _____ (Name)	Anti-malarials: SP/Fansidar ..... A Chloroquine ..... B Quinine ..... D Combination with Artemisinin (Coartem) ..... E Mefloquine ..... F Other anti-malarial (*specify*) _____ **H** Antibiotic drugs Pill / Syrup ..... I Injection ..... J Doxycyclene ..... K Other medications: Paracetamol/Panadol/Acetaminophen ... P Aspirin ..... Q Ibuprofen ..... R Phenergan ..... S **Other (*specify*)** _____ **X** DK ..... Z	
ML7. WAS (*name*) GIVEN ANY MEDICINE FOR THE FEVER OR MALARIA BEFORE BEING TAKEN TO THE HEALTH FACILITY?	Yes ..... 1 No ..... 2 DK 8	1⇨ML9 2⇨ML10 8⇨ML10
ML8. WAS (*name*) GIVEN ANY MEDICINE FOR FEVER OR MALARIA DURING THIS ILLNESS?	Yes ..... 1 No ..... 2 DK 8	 2⇨ML10 8⇨ML10

ML9. WHAT MEDICINE WAS (*name*) GIVEN? *Probe:* ANY OTHER MEDICINE? *Circle all medicines mentioned. Write brand name(s) of all medicines, if given.* _____ (Name) .	Anti-malarials: SP/Fansidar ..... A Chloroquine..... B Quinine ..... D Combination with Artemisinin (Coartem)..... E Mefloquine ..... F Other anti-malarial **(*specify*) _____ H** Antibiotic drugs Pill / Syrup..... I Injection.....J Doxycyclene .....K Other medications: Paracetamol/Panadol/Acetaminophen ... P Aspirin .....Q Ibuprofen.....R Phenergan ..... S **Other (*specify*) _____ X** DK..... Z	
ML10. *Check ML6 and ML9: Anti-malarial mentioned (codes A - H)?* ☐ *Yes ⇨ Continue with ML11* ☐ *No ⇨ Go to Next Module*		
ML11. HOW LONG AFTER THE FEVER STARTED DID (*name*) FIRST TAKE (*name of anti-malarial from ML6 or ML9*)? *If multiple anti-malarials mentioned in ML6 or ML9, name all anti-malarial medicines mentioned.* *Record how long after the fever started the first anti-malarial was given.*	Same day ..... 0 Next day ..... 1 2 days after the fever..... 2 3 days after the fever..... 3 4 or more days after the fever ..... 4 DK..... 8	

IMMUNIZATION **IM**

If an immunization card is available, copy the dates in IM3 for each type of immunization recorded on the card. IM6-IM17 are for registering vaccinations that are not recorded on the card. IM6-IM17 will only be asked when a card is not available.

IM1. DO YOU HAVE A CARD WHERE (*name*)'S VACCINATIONS ARE WRITTEN DOWN? (*If yes*) MAY I SEE IT PLEASE?	Yes, seen .....1 Yes, not seen .....2 No card 3	1⇨IM3 2⇨IM6
IM2. DID YOU EVER HAVE A VACCINATION CARD FOR (*name*)?	Yes .....1 No 2	1⇨IM6 2⇨IM6

IM3.
(a) Copy dates for each vaccination from the card.
(b) Write '44' in day column if card shows that vaccination was given but no date recorded.

		Date of Immunization								
		Day		Month		Year				
BCG	BCG									
POLIO AT BIRTH	OPV0									
POLIO 1	OPV1									
POLIO 2	OPV2									
POLIO 3	OPV3									
DPT1/HEP B1/HIB1	DPT/HEPB1/HIB1									
DPT2/HEP B2/HIB2	DPT/HEPB2/HIB2									
DPT/HEPB3/HIB3	DPT/HEBP3/HIB3									
MEASLES	MEASLES 1									
MEASLES (BOOSTER)	MEASLES 2									
VITAMIN A (MOST RECENT)	VIT. A									

IM4. *Check IM3. Are all vaccines (BCG to Vitamin A) recorded?*

☐*Yes⇨ Go to IM18*

☐*No ⇨Continue with IM5*

IM5. IN ADDITION TO WHAT IS RECORDED ON THIS CARD, DID (*name*) RECEIVE ANY OTHER VACCINATIONS – INCLUDING VACCINATIONS RECEIVED IN CAMPAIGNS OR IMMUNIZATION DAYS? Record 'Yes' only if respondent mentions vaccines shown in the table above.	Yes .....1 (Probe for vaccinations and write '66' in the corresponding day column for each vaccine mentioned. Then skip to IM18) No .....2 DK.....8	 2⇨IM18 8⇨IM18
IM6. HAS (*name*) EVER RECEIVED ANY VACCINATIONS TO PREVENT HIM/HER FROM GETTING DISEASES, INCLUDING VACCINATIONS RECEIVED IN A CAMPAIGN OR IMMUNIZATION DAY?	Yes .....1 No .....2 DK.....8	 2⇨IM18 8⇨IM18
IM7. 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 DK.....8	
IM8. HAS (*name*) EVER RECEIVED ANY "VACCINATION DROPS IN THE MOUTH" TO PROTECT HIM/HER FROM GETTING DISEASES – THAT IS, POLIO?	Yes .....1 No .....2 DK.....8	 2⇨IM11 8⇨IM11
IM9. WAS THE FIRST POLIO VACCINE RECEIVED IN THE FIRST TWO WEEKS AFTER BIRTH OR LATER?	First two weeks.....1 Later 2	
IM10. HOW MANY TIMES WAS THE POLIO VACCINE RECEIVED?	Number of times .....__	
IM11. HAS (*name*) EVER RECEIVED A DPT/HEPB/HIB VACCINATION – THAT IS, AN INJECTION IN THE THIGH OR BUTTOCKS – TO PREVENT HIM/HER FROM GETTING TETANUS, WHOOPING COUGH, OR DIPHTHERIA? *Probe by indicating that DPT/HepB/Hib vaccination is sometimes given at the same time as Polio*	Yes .....1 No .....2 DK.....8	 2⇨IM16 8⇨IM16
IM12. HOW MANY TIMES WAS A DPT/HEPB/HIB VACCINE RECEIVED?	Number of times .....__	
IM16. HAS (*name*) EVER RECEIVED A MEASLES INJECTION – THAT IS, A SHOT IN THE ARM AT THE AGE OF **9** MONTHS OR OLDER - TO PREVENT HIM/HER FROM GETTING MEASLES?	Yes .....1 No .....2 DK.....8	
IM18. HAS (*name*) RECEIVED A VITAMIN A DOSE LIKE (THIS/ANY OF THESE) WITHIN THE LAST 6 MONTHS? *Show Vitamin A capsules*	Yes .....1 No .....2 DK.....8	

IM19. Please tell me if (*name*) has participated in any of the following campaigns, national immunization days and/or vitamin A or child health days: [A] ***2006 July Integrated Measles Campaign (after the drought in 2006)*** [B] ***2009 July Integrated Measles Campaign***	Y N DK *Integrated Measles Campaign*..... 1 2 8 *Integrated Measles Campaign*..... 1 2 8	

UF13. *Record the time.*	Hour and minutes ..... __ __ : __ __	

UF14.*Is the respondent the mother or caretaker of another child age 0-4 living in this household?*

☐ *Yes.* ⇨*Indicate to the respondent that you will need to measure the weight and height of the child later. Go to the next QUESTIONNAIRE FOR CHILDREN UNDER FIVE to be administered to the same respondent*

☐ *No.* ⇨ *End the interview with this respondent by thanking him/her for his/her cooperation and tell her/him that you will need to measure the weight and height of the child..*

Check to see if there are other woman's or under-5 questionnaires to be administered in this household.

Move to another woman's or under-5 questionnaire, or start making arrangements for anthropometric measurements of all eligible children in the household.

ANTHROPOMETRY		AN
After questionnaires for all children are complete, the measurer weighs and measures each child. Record weight and length/height below, taking care to record the measurements on the correct questionnaire for each child. Check the child's name and line number on the household listing before recording measurements.		
AN1. Measurer's name and number:	Name_____ ___ ___	
AN2. Result of height/length and weight measurement	Either or both measured ..... 1 Child not present..... 2 Child or caretaker refused ..... 3 **Other (*specify*)_____ 6**	 2⇨AN6 3⇨AN6 6⇨AN6
AN3.Child's weight AN4.Child's length or height Check age of child in AG2: ☐ Child under 2 years old. ⇨ Measure length (lying down). ☐ Child age 2 or more years. ⇨ Measure height (standing up).	Kilograms (kg)..... __ __ . __ Weight not measured..... 99.9 Length (cm) Lying down..... 1 __ __ __ . __ Height (cm) Standing up..... 2 __ __ __ . __ Length/Height not measured 9999.9	
AN5. Oedema Observe and record	Checked Oedema present ..... 1 Oedema not present ..... 2 Unsure ..... 3 Not checked (*specify reason*)_____ 7	

AN6. Is there another child in the household who is eligible for measurement?

☐ Yes ⇨ Record measurements for next child.

☐ No ⇨ End the interview with this household by thanking all participants for their cooperation.

Gather together all questionnaires for this household and check that all identification numbers are inserted on each page. Tally on the Household Information Panel the number of interviews completed.

Interviewer's Observations

Field Editor's Observations

Supervisor's Observations

MICS

QUESTIONNAIRE FOR INDIVIDUAL MEN

Swaziland

MAN'S INFORMATION PANEL	**MM**
This questionnaire is to be administered to all men age 15 through 59 (see column HL7A of Household Listing Form).Fill in one form for each eligible man.	
MM1. Cluster number: ☐☐☐	MM2. Household number: ☐☐
MM3. Man's name: Name_____	MM4. Man's line number: ☐☐
MM5.Interviewer name and number: Name: _____ ☐☐	MM6. Day/Month/Year of interview: ☐☐ ☐☐ ☐☐☐☐

Repeat greeting if not already read to this man:

WE ARE FROM THE **CENTRAL STATISTICAL OFFICE**. WE ARE WORKING ON A PROJECT CONCERNED WITH FAMILY HEALTH AND EDUCATION. I WOULD LIKE TO TALK TO YOU ABOUT THESE SUBJECTS. THE INTERVIEW WILL TAKE ABOUT **20**MINUTES. ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND YOUR ANSWERS WILL NEVER BE SHARED WITH ANYONE OTHER THAN OUR PROJECT TEAM.

If greeting at the beginning of the household questionnaire has already been read to this man, then read the following:

NOW I WOULD LIKE TO TALK TO YOU MORE ABOUT YOUR HEALTH AND OTHER TOPICS. THIS INTERVIEW WILL TAKE ABOUT **20**MINUTES. AGAIN, ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND YOUR ANSWERS WILL NEVER BE SHARED WITH ANYONE OTHER THAN OUR PROJECT TEAM.

MAY I START NOW?

☐ *Yes, permission is given ⇨Begin the interview.*

☐ *No, permission is not given ⇨Complete MM7.Discuss this result with your supervisor.*

MM7. Result of man's interview	
	Completed ..... 01 Not at home ..... 02 Refused ..... 03 Partly completed ..... 04 Incapacitated ..... 05 **Other (*specify*) _____ 96**

MM8. Field edited by (Name and number):	MM9. Data entry clerk (Name and number):
Name: _____ ☐☐	Name: _____ ☐☐

MM10. *Record the time.*	Hour and minutes ..... __ __ : __ __	

MAN'S BACKGROUND		**MB**
MB1. IN WHAT MONTH AND YEAR WERE YOU BORN?	Date of birth Month ..... __ __ DK month ..... 98 Year ..... __ __ __ __ DK year 9998	
MB2. HOW OLD ARE YOU? *Probe:* HOW OLD WERE YOU AT YOUR LAST BIRTHDAY? *Compare and correct MB1 and/or MB2 if inconsistent*	Age (in completed years)..... __ __	
MB3. HAVE YOU EVER ATTENDED SCHOOL OR PRESCHOOL?	Yes..... 1 No 2	2⇨MB7
MB4. WHAT IS THE HIGHEST LEVEL OF SCHOOL YOU ATTENDED?	Preschool..... 0 Primary..... 1 Secondary..... 2 High..... 3 Tertiary..... 4	0⇨MB7
MB5. WHAT IS THE HIGHEST GRADE YOU COMPLETED AT THAT LEVEL? *If less than 1 grade, enter "00"*	Grade..... __ __	
MB6. *Check MB4:* ☐ *Secondary or higher. ⇨ Go to Next Module* ☐ *Primary ⇨ Continue with MB7*		
MB7. NOW I WOULD LIKE YOU TO READ THIS SENTENCE TO ME. *Show sentence on the card to the respondent. If respondent cannot read whole sentence, probe:* CAN YOU READ PART OF THE SENTENCE TO ME?	Cannot read at all ..... 1 Able to read only parts of sentence ..... 2 Able to read whole sentence ..... 3 **No sentence in required language _____ 4** *(specify language)* Blind/mute, visually/speech impaired 5	

MARRIAGE/UNION		MU
MU1. ARE YOU CURRENTLY MARRIED OR LIVING TOGETHER WITH A WOMAN/ PARTNER AS IF MARRIED?	Yes, currently married ..... 1 Yes, cohabiting with a woman ..... 2 No, not in union 3	3⇨MU5
MU2. HOW OLD IS YOUR WIFE/PARTNER? *Probe*: *If more than one wife/ partner, ask;* HOW OLD WAS YOUR **FIRST** WIFE/PARTNER ON HER LAST BIRTHDAY?	Age in years ..... __ __ DK 98	
MU2A IS YOUR PARTNER/WIFE LIVING WITH YOU IN THIS HOUSEHOLD OR IS SHE STAYING ELSEWHERE? *If yes, record the line number of partner/wife from HL1.*	Line number of partner/wife ..... __ __ Staying elsewhere 00	
MU3. ARE THERE ANY OTHER WOMEN WITH WHOM YOU ARE LIVING WITH AS IF MARRIED?	Yes ..... 1 No 2	2⇨MU7
MU4. HOW MANY WOMEN/ PARTNERS ARE YOU LIVING WITH AS IF MARRIED? *If one live-inpartner, enter '01'.* *If more than one, ask*: HOW MANY WOMEN ARE YOU LIVING WITH AS IF YOU WERE MARRIED?	Number of live-in partners ..... ☐☐	⇨MU7
MU5. HAVE YOU EVER BEEN MARRIED OR LIVED TOGETHER WITH A WOMAN AS IF MARRIED?	Yes, formerly married ..... 1 Yes, formerly lived with a woman ..... 2 No 3	3⇨Next Module
MU6. WHAT IS YOUR MARITAL STATUS NOW: ARE YOU WIDOWED, DIVORCED, OR SEPARATED?	Widowed ..... 1 Divorced ..... 2 Separated 3	
MU7. HAVE YOU BEEN MARRIED OR LIVED WITH A WOMAN ONLY ONCE OR MORE THAN ONCE?	Only once ..... 1 More than once 2	
MU8. IN WHAT MONTH AND YEAR DID YOU **FIRST** MARRY OR START LIVING WITH A WOMAN AS IF MARRIED?	Date of first marriage Month ..... __ __ DK month ..... 98 Year ..... __ __ __ __ DK year 9998	⇨MU10
MU9. HOW OLD WERE YOU WHEN YOU STARTED LIVING WITH YOUR FIRST WIFE/PARTNER OR START LIVING WITH A WOMAN AS IF MARRIED?	Age in years ..... __ __	
MU10. *Check MU1. "Currently married (MU1 = 1)?* ☐ Yes. ⇨ Go to MU11 ☐ Else⇨Go to Next Module		
MU11. WHAT TYPE OF MARRIAGE? *If both*, WHAT TYPE OF MARRIAGE CERTIFICATE DO YOU HAVE?	Swazi ..... 1 Civil ..... 2 Other *(specify)* _____ 6	

ATTITUDES TOWARDS CONTRACEPTION		MR
MR1. COUPLES USE VARIOUS WAYS OR METHODS TO DELAY OR AVOID A PREGNANCY. ARE YOU OR (ANY OF) YOUR WIFE(S)/PARTNER(S) CURRENTLY DOING SOMETHING OR USING ANY METHOD TO DELAY OR AVOID HER GETTING PREGNANT?	Yes ..... 1 No ..... 2 DK 8	1⇨Next Module
MR2. WOULD YOU YOURSELF USE OR WOULD YOU ALLOW (ANY OF) YOUR WIFE(S)/PARTNER(S) TO USE ANY SUCH METHODS?	Yes ..... 1 No ..... 2 DK / not sure / depends 8	1⇨Next Module 8⇨Next Module
MR3. WHY ARE YOU OR YOUR WIFE(S)/ PARTNER(S) NOT USING ANY METHOD TO DELAY OR AVOID PREGNANCY? ANY OTHER REASON? *Record all reasons mentioned.*	Religious beliefs ..... A Partner refuses ..... B Can't afford / expensive ..... C Side effects ..... D Not sexually active ..... E Do not wish to avoid pregnancy ..... F Encourages promiscuity ..... G Other (*specify*) _____ X	

SEXUAL BEHAVIOUR		MS
Check for the presence of others. Before continuing, ensure privacy.		
MS1. NOW I WOULD LIKE TO ASK YOU SOME QUESTIONS ABOUT SEXUAL ACTIVITY IN ORDER TO GAIN A BETTER UNDERSTANDING OF SOME IMPORTANT LIFE ISSUES. THE INFORMATION YOU SUPPLY WILL REMAIN STRICTLY CONFIDENTIAL. HOW OLD WERE YOU WHEN YOU HAD SEXUAL INTERCOURSE FOR THE VERY FIRST TIME?	Never had intercourse ..... 00 Age in years ..... __ __ First time when started living with (first) wife/partner 95	00⇨Next Module
MS2. THE FIRST TIME YOU HAD SEXUAL INTERCOURSE, WAS A CONDOM USED?	Yes ..... 1 No ..... 2 DK / Don't remember 8	
MS3. WHEN WAS THE LAST TIME YOU HAD SEXUAL INTERCOURSE? *Record 'years ago' only if last intercourse was one or more years ago. If 12 months or more the answer must be recorded in years.*	Days ago ..... 1 __ __ Weeks ago ..... 2 __ __ Months ago ..... 3 __ __ Years ago ..... 4 __ __	 4⇨MS15
MS4. THE LAST TIME YOU HAD SEXUAL INTERCOURSE, WAS A CONDOM USED?	Yes ..... 1 No 2	
MS5. WHAT WAS YOUR RELATIONSHIP TO THIS PERSON WITH WHOM YOU LAST HAD SEXUAL INTERCOURSE? *Probe to ensure that the response refers to the relationship at the time of sexual intercourse* *If 'girlfriend', then ask:* WERE YOU LIVING TOGETHER AS IF MARRIED? *If 'yes', circle '2'.If 'no', circle'3'.*	Spouse ..... 1 Cohabiting partner/concubine ..... 2 Girlfriend/fiancée ..... 3 Casual acquaintance ..... 4 Commercial sex worker ..... 5 **Other (*specify*) _____ 6**	 3⇨MS7 4⇨MS7 5⇨MS7 6⇨MS7
MS6. *Check MU1:* ☐ *Currently married or living with a woman (MU1 = 1 or 2) ⇨ Go to MS8* ☐ *Not married / Not in union (MU1 = 3) ⇨ Continue with MS7*		
MS7. HOW OLD IS THIS PERSON? *If response is DK, probe:* ABOUT HOW OLD IS THIS PERSON?	Age of sexual partner ..... __ __ DK 98	
MS8. HAVE YOU HAD SEXUAL INTERCOURSE WITH ANY OTHER PERSON IN THE LAST 12 MONTHS?	Yes ..... 1 No 2	 2⇨MS15
MS9. THE LAST TIME YOU HAD SEXUAL INTERCOURSE WITH THIS OTHER PERSON, WAS A CONDOM USED?	Yes ..... 1 No 2	

MS10. WHAT WAS YOUR RELATIONSHIP TO THIS PERSON? *If person is 'girlfriend' or 'fiancée', ask:* WERE YOU LIVING TOGETHER AS IF MARRIED? *If 'yes', circle '2'. If 'no', circle '3'.*	Spouse ..... 1 Cohabiting partner/concubine ..... 2 Girlfriend/fiancée ..... 3 Casual acquaintance ..... 4 Commercial sex worker ..... 5 **Other (*specify*) _____ 6**	 3⇨MS12 4⇨MS12 5⇨MS12 6⇨MS12
MS11. *Check MU1 and MU7:* ☐ *Currently married or living with a woman (MU1 = 1 or 2)* *AND* *Married only once or lived with a woman only once (MU7= 1) ⇨ Go to MS13* ☐ *Else ⇨ Continue with MS12*		
MS12. HOW OLD IS THIS PERSON? *If response is DK, probe:* ABOUT HOW OLD IS THIS PERSON?	Age of sexual partner ..... __ __ DK 98	
MS13. OTHER THAN THESE TWO PERSONS, HAVE YOU HAD SEXUAL INTERCOURSE WITH ANY OTHER PERSON IN THE LAST 12 MONTHS?	Yes ..... 1 No 2	 2⇨MS15
MS14. IN TOTAL, WITH HOW MANY DIFFERENT PEOPLE HAVE YOU HAD SEXUAL INTERCOURSE IN THE LAST 12 MONTHS?	Number of partners ..... __ __	
MS15. IN TOTAL, WITH HOW MANY DIFFERENT PEOPLE HAVE YOU HAD SEXUAL INTERCOURSE IN YOUR LIFETIME? *If a non-numeric answer is given, probe to get an estimate.* *If number of partners is 95 or more, write '95'.*	Number of lifetime partners ..... __ __ DK 98	

ATTITUDES TOWARDS DOMESTIC ISSUES (VIOLENCE)		MD
MD1. SOMETIMES A HUSBAND IS ANNOYED OR ANGERED BY THINGS THAT HIS WIFE DOES. IN YOUR OPINION, IS A HUSBAND JUSTIFIED IN HITTING OR BEATING HIS WIFE IN THE FOLLOWING SITUATIONS: [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 REFUSES TO ACCEPT STEP CHILDREN? [G] IF SHE SLEEPS WITH ANOTHER MAN? [H] IF SHE INITIATES SEX? [I] IF SHE REFUSES TO GIVE FOOD?	Yes No DK Goes out without telling ..... 1 2 8 Neglects children ..... 1 2 8 Argues..... 1 2 8 Refuses sex ..... 1 2 8 Burns food ..... 1 2 8 Refuses step children ..... 1 2 8 Involved with another man..... 1 2 8 Initiates sex..... 1 2 8 Refuses to give food 1 2 8	
MD2. *Check MU1:* ☐*Married or living with a woman as if married. ⇨ Continue with MD3* ☐*Not married and not living with a woman as if married⇨ Go to Next Module*		
MD3. HAS (ONE OF) YOUR WIFE(S)/PARTNER(S) EVER BEEN ANNOYED OR ANGERED BY THINGS YOU HAVE DONE?	Yes..... 1 No 2	2⇨ Next Module
MD4. IN SUCH OCCASIONS, HAS (ONE OF) YOUR WIFE(S)/PARTNER(S) **EVER** HIT OR BEATEN YOU?	Yes..... 1 No 2	2⇨ Next Module
MD5. HAS THIS HAPPENED IN THE LAST 12 MONTHS?	Yes..... 1 No ..... 2 Not sure 8	2⇨Next Module 8⇨Next Module
MD6. FOR WHAT REASON(S) WERE YOU EVER HIT OR BEATEN BY YOUR WIFE/PARTNER? ANY OTHER REASON? *Record all reasons mentioned*	Goes out without telling him..... A Argued with him ..... B Refuses to have sex with him..... C Insulted him ..... D Did not give him (enough) money..... E Beat the child ..... F Husband/ partner was drunk ..... G Involvement with another man..... H Other (*specify*) _____ X	

HIV/AIDS		MH
MH1. NOW I WOULD LIKE TO TALK WITH YOU ABOUT SOMETHING ELSE. HAVE YOU EVER HEARD OF AN ILLNESS CALLED AIDS?	Yes ..... 1 No 2	 2⇨ Next Module
MH2. CAN PEOPLE REDUCE THEIR CHANCE OF GETTING THE AIDS VIRUS BY HAVING JUST ONE UNINFECTED SEX PARTNER WHO HAS NO OTHER SEX PARTNERS?	Yes ..... 1 No ..... 2 DK 8	
MH3. CAN PEOPLE GET THE AIDS VIRUS BECAUSE OF WITCHCRAFT OR OTHER SUPERNATURAL MEANS?	Yes ..... 1 No ..... 2 DK 8	
MH4. CAN PEOPLE REDUCE THEIR CHANCE OF GETTING THE AIDS VIRUS BY USING A CONDOM EVERY TIME THEY HAVE SEX?	Yes ..... 1 No ..... 2 DK 8	
MH5. CAN PEOPLE GET THE AIDS VIRUS FROM MOSQUITO BITES?	Yes ..... 1 No ..... 2 DK 8	
MH6. CAN PEOPLE GET THE AIDS VIRUS BY SHARING FOOD WITH A PERSON WHO HAS AIDS?	Yes ..... 1 No ..... 2 DK 8	
MH7. IS IT POSSIBLE FOR A HEALTHY-LOOKING PERSON TO HAVE THE AIDS VIRUS?	Yes ..... 1 No ..... 2 DK 8	
MH8. CAN THE VIRUS THAT CAUSES AIDS BE TRANSMITTED FROM A MOTHER TO HER BABY: [A] DURING PREGNANCY? [B] DURING DELIVERY? [C] BY BREASTFEEDING?	Yes No DK During pregnancy ..... 1 2 8 During delivery ..... 1 2 8 By breastfeeding 1 2 8	
MH9. IN YOUR OPINION, IF A FEMALE TEACHER HAS THE AIDS VIRUS BUT IS NOT SICK, SHOULD SHE BE ALLOWED TO CONTINUE TEACHING IN SCHOOL?	Yes ..... 1 No ..... 2 DK/Not sure/Depends 8	
MH10. WOULD YOU BUY FRESH VEGETABLES FROM A SHOPKEEPER OR VENDOR IF YOU KNEW THAT THIS PERSON HAD THE AIDS VIRUS?	Yes ..... 1 No ..... 2 DK/Not sure/Depends 8	
MH11. IF A MEMBER OF YOUR FAMILY GOT INFECTED WITH THE AIDS VIRUS, WOULD YOU WANT IT TO REMAIN A SECRET?	Yes ..... 1 No ..... 2 DK/Not sure/Depends 8	
MH12. IF A MEMBER OF YOUR FAMILY BECAME SICK WITH AIDS, WOULD YOU BE WILLING TO CARE FOR HER OR HIM IN YOUR OWN HOUSEHOLD?	Yes ..... 1 No ..... 2 DK/Not sure/Depends 8	
MH12A. IN YOUR OPINION, CAN THE HIV VIRUS BE TRANSMITTED THROUGH ORAL SEX?	Yes ..... 1 No ..... 2 DK/Not sure/Depends 8	

MH12B. IN YOUR OPINION, CAN THE HIV VIRUS BE TRANSMITTED THROUGH ANAL SEX?	Yes ..... 1 No ..... 2 DK/Not sure/Depends 8	
MH12C. IN YOUR OPINION, CAN HIV/AIDS BE CURED?	Yes ..... 1 No ..... 2 DK 8	 2⇨MH13 8⇨MH13
MH12D. IN YOUR OPINION, CAN A MAN BE INFECTED WITH HIV/AIDS BE CURED BY HAVING SEX WITH A VIRGIN WOMAN?	Yes ..... 1 No ..... 2 DK 8	
MH13. I DON'T WANT TO KNOW THE RESULTS, BUT HAVE YOU EVER BEEN TESTED TO SEE IF YOU HAVE THE AIDS VIRUS?	Yes ..... 1 No 2	 2⇨MH18
MH14. I DON'T WANT TO KNOW THE RESULTS BUT, WHEN WAS THE MOST RECENT TIME YOU WERE TESTED?	Less than 12 months ago ..... 1 12-23 months ago ..... 2 2 or more years ago 3	
MH15. DID YOU, YOURSELF, ASK FOR THE TEST, WAS IT OFFERED AND YOU ACCEPTED, OR WAS IT REQUIRED?	Asked for the test ..... 1 Offered and accepted ..... 2 Required 3	
MH16. WHERE DID YOU GO FOR THE TEST? *Probe to identify the type of source.* *If unable to determine whether public or private, write the name of the place.* _____ *(Name of place)*	Public sector Govt. hospital ..... 11 Govt. health centre ..... 12 Govt. clinic/PHU ..... 13 Govt. VCT Centre ..... 14 **Other public (*specify*) _____ 16** Private Medical Sector Private hospital ..... 21 Private clinic ..... 22 **Other private medical (*specify*) _____ 26** Other sources NGO VCT Centre ..... 31 Mission hospital ..... 32 **Other (*specify*) _____ 96** DK 98	
MH17. I DON'T WANT TO KNOW THE RESULTS, BUT DID YOU GET THE RESULTS OF THE TEST?	Yes ..... 1 No ..... 2 DK 8	1⇨ Next Module 2⇨ Next Module 8⇨ Next Module
MH18. DO YOU KNOW OF A PLACE WHERE PEOPLE CAN GO TO GET TESTED FOR THE AIDS VIRUS?	Yes ..... 1 No 2	

OTHER SEXUALLY TRANSMITTED INFECTIONS		ST
ST1. (APART FROM AIDS,) HAVE YOU HEARD ABOUT (OTHER) INFECTIONS THAT CAN BE TRANSMITTED THROUGH SEXUAL CONTACT?	Yes.....1 No 2	2⇨ ST4
ST2. IF A MAN HAS A SEXUALLY TRANSMITTED INFECTION/DISEASE, WHAT SIGNS OR SYMPTOMS MIGHT HE HAVE? ANY OTHER SYMPTOMS? *Record all symptoms mentioned.*	Abdominal pain.....A Genital discharge/dripping.....B Foul smelling discharge.....C Burning pain on urination.....D Redness/inflammation ingenital area .....E Swelling in genital area.....F Genital sores/ulcers.....G Genital warts.....H Genital itching.....I Blood in urine.....J Loss of weight.....K Impotence.....L Other (specify) _____ W Other (specify) _____X No symptoms.....Y Don't know.....Z	
ST3. IF A WOMAN HAS A SEXUALLY TRANSMITTED INFECTION/DISEASE, WHAT SIGNS OR SYMPTOMS MIGHT SHE HAVE? ANY OTHER SYMPTOMS? *Record all symptoms mentioned.*	Abdominal pain.....A Genital discharge/dripping.....B Foul smelling discharge.....C Burning pain on urination.....D Redness/inflammation ingenital area .....E Swelling in genital area.....F Genital sores/ulcers.....G Genital warts.....H Genital itching.....I Blood in urine.....J Loss of weight.....K Hard to get pregnant/have a child .....L Other (specify) _____ W Other (specify) _____X No symptoms.....Y Don't know.....Z	

ST4. *Check MS1: Ever had sex?* ☐*Yes. ⇨ Go to ST5.* ☐*No⇨Next module*		
ST5. *Check ST1: Has heard about infection transmitted through sexual contact?* ☐*Yes. ⇨ Go to ST6.* ☐*No. ⇨ Go to ST7.* ***Check for the presence of others. Before continuing, make every effort to ensure privacy***		
ST6. 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 DK.....8	
ST7. 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 DK.....8	
ST8. SOMETIMES MEN HAVE A SORE OR ULCER ON OR NEAR THEIR PENIS. DURING THE LAST 12 MONTHS, HAVE YOU HAD A SORE OR ULCER ON OR NEAR YOUR PENIS?	Yes.....1 No .....2 DK.....8	
ST9. *Check ST6/ST7/ST8: Has had an infection or a symptom of sexually transmitted disease? (that is a yes in ST6 or ST7 or ST8)* ☐*Yes.⇨Go to ST10.* ☐*No.⇨Go to Next Module*		
ST10. THE LAST TIME YOU HAD PROBLEM(S) FROM (*ST6 or ST7or ST8*), DID YOU SEEK ANY KIND OF ADVICE OR TREATMENT?	Yes.....1 No 2	1⇨ST12
ST11. WHAT WAS THE MAIN REASON FOR NOT SEEKING ADVICE OR TREATMENT?	Not necessary.....1 Expensive .....2 Religious prohibition .....3 Fear of being ridiculed/ stigmatized.....4 **Other (*specify*) _____ 6**	1⇨ST13 2⇨ST13 3⇨ST13 4⇨ST13 6⇨ST13

ST12. WHERE DID YOU GO? ANY OTHER PLACE? *Record all sources mentioned.* *Probe to identify each type of source and circle the appropriate code(s).* *If unable to determine whether public or private, write the name of the place.* _____ *(Name of place)*	Public sector Govt. hospital ..... A Govt. health centre ..... B Govt. clinic/PHU ..... C Rural Health Motivator ..... D Govt. outreach site ..... E **Other public (*specify*) _____ F** Private medical sector Private hospital ..... G Private clinic ..... H Private physician ..... I Private pharmacy ..... J **Other private medical (*specify*) _____ K** Other source FLAS ..... L TASC ..... M Relative or friend ..... N Shop ..... O Traditional practitioner ..... P Street vendor ..... Q **Other (*specify*) _____ X**	
ST13. WHEN YOU HAD PROBLEM(S) FROM (*ST6 or ST7or ST8*) DID YOU INFORM THE PERSON(S) WITH WHOM YOU WERE HAVING SEX?	Yes ..... 1 No ..... 2 Some/ not all ..... 3 Did not have a partner 4	

OTHER HEALTH ISSUES (MALE CIRCUMCISION)		MC
Check for the presence of others. Before continuing, ensure privacy.		
MC1. SOME MEN ARE CIRCUMCISED. ARE YOU CIRCUMCISED?	Yes ..... 1 No 2	2⇨MC4
MC2. AT WHAT AGE WERE YOU CIRCUMCISED?	Infant/baby ..... 00 Age in years ..... __ __	
MC3. WHAT IS THE MAIN REASON YOU WERE CIRCUMCISED?	Tradition / Religion ..... 1 Health / Hygiene ..... 2 HIV/AIDS prevention ..... 3 Sexual satisfaction ..... 4 Ease of putting on a condom ..... 5 Other (*specify*) _____ 6 DK 8	1⇨MC5 2⇨MC5 3⇨MC5 4⇨MC5 5⇨MC5 6⇨MC5 8⇨MC5
MC3A. *Check MC1:* ☐ *Circumcised⇨Go to MC5* ☐ *Not circumcised⇨Continue with MC4*		
MC4. WHAT IS THE MAIN REASON WHY YOU ARE NOT CIRCUMCISED?	Tradition / Religion ..... 01 Embarrassment ..... 02 To be different ..... 03 Sexual satisfaction ..... 04 Cost ..... 05 Fears / Pain ..... 06 Other (*specify*) _____ 96 DK 98	
MC5. WOULD YOU WANT YOUR SON TO BE CIRCUMCISED?	Yes ..... 1 No ..... 2 DK 8	1⇨MM11 8⇨MM11
MC6. WHAT IS THE MAIN REASON WHY YOU WOULD NOT WANT HIM TO BE CIRCUMCISED?	Tradition / Religion ..... 01 Health / Hygiene ..... 02 To be different ..... 03 Sexual satisfaction ..... 04 Cost ..... 05 Fears/Pain ..... 06 Other (*specify*) _____ 96 DK 98	

MM11. *Record the time.*	Hour and minutes ..... __ __ : __ __	

MM12. *End the interview with this respondent by thanking him for his cooperation.*
Check for the presence of any other eligible man in the household.

Interviewer's Observations

Field Editor's Observations

Supervisor's Observations

Appendix G. Referral Forms

Referral Form for Oedema Cases

Kukhona lusito longalutfola uma umntfwana anesifo sekuvuvuka emtimbeni noma etinyaweni. Ungatsandza yini sikuchumanise nelihhovisi lelibukene netekondleka? Sidzinga kwati kutsi singachumana njani nawe lokufaka ekhatsi: libito nendzawo lapho umeluleki angakutfola khona. Loko lositjela kona angeke kuhlanganiswe nalenkhulume lesibenayo. Labo labenta lolucwango angeke bagcine imininingwane yakho.

There are services available at the Swaziland National Nutrition Council if you want medical and professional assistance for the condition of the child. Would you like to be referred to the Swaziland National Nutrition Council for assistance? We will need to get your contact information including your name and place where the service provider can find you. However, there is no way for you to be connected with this interview. We will only share the information you feel comfortable giving us permission to pass on. The research team will not be keeping your contact information.

CONTACT INFORMATION

Name:……
Location
Region: ……
Inkhundla:……
Major Area:……
Sub-Area:……
Nearby Landmark (e.g., church, school, clinic):…….
What is the best and safest way for counselor to find you:
……
……
……

Information to be shared:
……
……
……
……
……

TO BE COMPLETED BY INTERVIEWER

I CERTIFY THAT I HAVE READ THE ABOVE PROCEDURE FOR THE OFFERING THE SERVICE TO THE PARTICIPANT AND THE PARTICIPANT HAS GIVEN ME PERMISSION TO SHARE THE ABOVE CONTACT INFORMATION WITH A SERVICE PROVIDER

Name of interviewer: ……

Interviewer's Code: ……

Referral Form for Obstetric Fistula Cases

Kukhona lusito longalutfola emtfolamphilo ngalesimo sakho. Ungatsandza yini kutsi sikuchumanise mayelana nalolusito? Angeke sitjele muntfu loku lesikukhulumile nawe. Sidzinga kwati kutsi singachumana njani nawe, lokufaka ekhatsi: libito nendzawo lapho umeluleki angakutfola khona. Loku lositjela kona angeke kuhlanganiswe nalenkhulumo lesibenayo. Sitawukhuluma kuphela ngaloku lotasivumela kutsi sikhulume ngako. Labo labenta lolucwaningo angeke bagcine imininingwane yakho.

There are services available if you want to talk to someone more about your medical condition. Would you like for us to help put you in touch with a doctor/medical professional that will provide assistance? We will need to get your contact information, including your name and a place where the service provider can find you. However, we would not give any of the information you have shared with us during the interview. There is no way for you to be connected with this interview. We will only share the information you feel comfortable giving us permission to pass on. The research team will not be keeping your contact information.

CONTACT INFORMATION

Name:……
Location
Region:……
Inkhundla:……
Major Area:……
Sub-Area:……
Nearby Landmark (e.g., church, school, clinic):……..
What is the best and safest way for counselor to find you:
……
……
……

Information to be shared:
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……
……

TO BE COMPLETED BY INTERVIEWER
I CERTIFY THAT I HAVE READ THE ABOVE PROCEDURE FOR THE OFFERING THE SERVICE TO THE PARTICIPANT AND THE PARTICIPANT HAS GIVEN ME PERMISSION TO SHARE THE ABOVE CONTACT INFORMATION WITH A SERVICE PROVIDER

Name of interviewer: ……

Interviewer's Code: ……

Referral Form for Counseling Services for Domestic Violence

Kukhona lusito longalutfola nawufuna kukhulumisana nemuntfu ngebudlova. Uma utiva uhlukubetekile emoyeni nobe utiva ungakaphephi, ungatsandza yini kutsi sikuchumanise nalongakweluleka. Angeke sitjele muntfu loku lesikukhulume nawe. Sidzinga kwati kutsi singachumana njani nawe lokufaka ekhatsi : libito ne ndzawo lapho umeluleki angakutfola khona. Loku lositjela kona ngeke kuhlanganiswe nalenkhulumo besinayo. Sitawukhuluma kuphela ngaloku lotasivumela kutsi sikhulume ngako. Labo labenta lolucwaningo angeke bagcine imininingwane yakho.

There are services available if you want to talk to someone more about violence. If you are feeling upset about the things we have talked about or you currently don't feel safe, would you like for us to help put you in touch with a counseling service? We will need to get your contact information, including your name and a place where a counselor can find you. However, we would not give any of the information you have shared with us during the interview. There is no way for you to be connected with this interview. We will share only the information you feel comfortable giving us permission to pass on. The research team will not be keeping your contact information.

CONTACT INFORMATION

Name:_____

Location

Region:_____

Inkhundla:_____

Major Area:_____

Sub-Area:_____

Nearby Landmark (e.g., church, school, clinic):_____

What is the best and safest way for counselor to find you:_____

_____

Information to be shared:_____

_____

_____

_____

TO BE COMPLETED BY INTERVIEWER

I CERTIFY THAT I HAVE READ THE ABOVE PROCEDURE FOR OFFERING DIRECT COUNSELING SERVICE TO THE PARTICIPANT AND THE PARTICIPANT HAS GIVEN ME PERMISSION TO SHARE THE ABOVE CONTACT INFORMATION WITH A SERVICE PROVIDER

Name of interviewer:_____

Interviewer's Code: ___ ___

Swaziland

Multiple Indicator Cluster Survey

2010