VIET NAM

Monitoring the situation of children and women

Multiple Indicator Cluster Survey 2011

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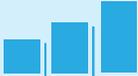
MICS

Viet Nam
Multiple Indicator Cluster Survey
2011

Final Report

December, 2011

Viet Nam
Multiple Indicator Cluster Survey
2011

GSO

General Statistics Office

UNICEF

United Nations Children's Fund

UNFPA

United Nations Population Fund

December, 2011

SUMMARY TABLE OF FINDINGS

Multiple Indicator Cluster Surveys (MICS) and Millennium Development Goals (MDG) Indicators, Viet Nam, 2011

Topic	MICS 2011 Indicator Number	MDG Indicator Number	Indicator	Value	
CHILD MORTALITY					
Child mortality	1.1	*4.1*	Under-five mortality rate	16	per thousand
	1.2	*4.2*	Infant mortality rate	14	per thousand
NUTRITION					
Nutritional status			Underweight prevalence		
	2.1a	*1.8*	Moderate and Severe (- 2 SD)	11.7	per cent
	2.1b		Severe (- 3 SD)	1.8	per cent
			Stunting prevalence		
	2.2a		Moderate and Severe (- 2 SD)	22.7	per cent
	2.2b		Severe (- 3 SD)	6	per cent
			Wasting prevalence		
	2.3a		Moderate and Severe (- 2 SD)	4.1	per cent
	2.3b		Severe (- 3 SD)	1.2	per cent
Breastfeeding and infant feeding	2.4		Children ever breastfed	98	per cent
	2.5		Early initiation of breastfeeding	39.7	per cent
	2.6		Exclusive breastfeeding under 6 months	17	per cent
	2.7		Continued breastfeeding at 1 year	73.9	per cent
	2.8		Continued breastfeeding at 2 years	19.4	per cent
	2.9		Predominant breastfeeding under 6 months	43.3	per cent
	2.10		Duration of breastfeeding	16.7	median months
	2.11		Bottle feeding	38.7	per cent
	2.12		Introduction of solid, semi-solid or soft foods	50.4	per cent
	2.13		Minimum meal frequency	58.5	per cent
	2.14		Age-appropriate breastfeeding	33.5	per cent
	2.15		Milk feeding frequency for non-breastfed children	82.2	per cent
Salt iodisation	2.16		Iodised salt consumption	45.1	per cent
Vitamin A	2.17		Vitamin A supplementation (children under age 5)	83.4	per cent
Low birth weight	2.18		Low-birthweight infants	5.1	per cent
	2.19		Infants weighed at birth	93.2	per cent
CHILD HEALTH					
Vaccinations	3.1		BCG immunization coverage	95	per cent
	3.2		Polio immunization coverage	68.1	per cent
	3.3		Diphtheria, Pertussis, Tetanus (DPT) immunization coverage	73	per cent
	3.4	*4.3*	Measles immunization coverage	84.2	per cent
	3.5		Hepatitis B immunization coverage	53.3	per cent
Tetanus toxoid	3.7		Neonatal tetanus protection	77.5	per cent
Care of illness	3.8		Oral rehydration therapy with continued feeding	56.7	per cent
	3.9		Care seeking for suspected pneumonia	73	per cent
	3.10		Antibiotic treatment of suspected pneumonia	68.3	per cent
Solid fuel use	3.11		Solid fuels	46.4	per cent

Topic	MICS 2011 Indicator Number	MDG Indicator Number	Indicator	Value	
Malaria	3.12		Household availability of insecticide-treated nets (ITNs)	9.5	per cent
	3.13		Households protected by a vector control method	25	per cent
	3.14		Children under age 5 sleeping under any mosquito net	94.4	per cent
	3.15	6.7	Children under age 5 sleeping under insecticide-treated nets (ITNs)	9.4	per cent
	3.16		Malaria diagnostics usage	10.7	per cent
	3.17		Antimalarial treatment of children under age 5 the same or next day	0.9	per cent
	3.18	6.8	Antimalarial treatment of children under age 5	1.2	per cent
	3.19		Pregnant women sleeping under insecticide-treated nets (ITNs)	11.3	per cent
WATER, SANITATION AND HYGIENE					
Water and sanitation	4.1	7.8	Use of improved drinking water sources	92	per cent
	4.2		Water treatment	89.6	per cent
	4.3	7.9	Use of improved sanitation facilities	73.8	per cent
	4.4		Safe disposal of child's faeces	61.1	per cent
Hygiene	4.5		Place for handwashing with water and soap	86.6	per cent
	4.6		Availability of soap	95.1	per cent
REPRODUCTIVE HEALTH					
Contraception and unmet need	5.1	5.4	Adolescent birth rate	46	per thousand
	5.2		Early childbearing	3.0	per cent
	5.3	5.3	Contraceptive prevalence rate	77.8	per cent
	5.4	5.6	Unmet need for contraception	4.3	per cent
Maternal and newborn health	5.5a	5.5	Antenatal care coverage At least once by skilled personnel	93.7	per cent
	5.5b		At least four times by any provider	59.6	per cent
	5.6		Pregnant women received blood pressure check, urine test and blood test before delivery	42.5	per cent
	5.7	5.2	Skilled attendant at delivery	92.9	per cent
	5.8		Institutional deliveries	92.4	per cent
	5.9		Caesarean section	20	per cent
CHILD DEVELOPMENT					
Child development	6.1		Support for learning	76.8	per cent
	6.2		Father's support for learning	61.3	per cent
	6.3		Learning materials: children's books	19.6	per cent
	6.4		Learning materials: playthings	49.3	per cent
	6.5		Inadequate care	9.4	per cent
	6.6		Early child development index	82.8	per cent
	6.7		Attendance in early childhood education	71.9	per cent
EDUCATION					
Literacy and education	7.1	2.3	Literacy rate among young women	96.4	per cent
	7.2		School readiness	92.6	per cent
	7.3		Net intake rate in primary education	94.9	per cent
	7.4		Primary school net attendance ratio (adjusted)	97.9	per cent
	7.5		Secondary school net attendance ratio (adjusted)	81.0	per cent
	7.6	2.2	Children reaching last grade of primary	99.4	per cent
	7.7		Primary completion rate	99.6	per cent
	7.8		Transition rate to secondary school	98.8	per cent
	7.9	3.1	Gender parity index (primary school)	1.00	ratio
	7.10	3.1	Gender parity index (secondary school)	1.07	ratio
CHILD PROTECTION					
Birth registration	8.1		Birth registration	95	per cent
Child labour	8.2		Child labour	9.5	per cent
	8.3		School attendance among child labourers	83.4	per cent
	8.4		Child labour among students	8.3	per cent
Child discipline	8.5		Violent discipline	73.9	per cent

Topic	MICS 2011 Indicator Number	MDG Indicator Number	Indicator	Value	
Early marriage and polygyny	8.6		Marriage before age 15	0.7	per cent
	8.7		Marriage before age 18	12.3	per cent
	8.8		Young women age 15-19 currently married or in union	8.4	per cent
	8.9		Polygyny	2.5	per cent
			Spousal age difference (10 or more years)		
	8.10a		Women age 15-19	7.4	per cent
	8.10b		Women age 20-24	4.8	per cent
Domestic violence	8.14		Attitudes towards domestic violence	35.8	per cent
Orphaned children	8.15		Children's living arrangements	5.3	per cent
	8.16		Prevalence of children with at least one parent dead	3.9	per cent
HIV/AIDS AND SEXUAL BEHAVIOUR					
HIV/AIDS knowledge and attitudes	9.1		Comprehensive knowledge about HIV prevention	45.1	per cent
	9.2	*6.3*	Comprehensive knowledge about HIV prevention among young people	51.1	per cent
	9.3		Knowledge of mother-to-child transmission of HIV	49.6	per cent
	9.4		Accepting attitude towards people living with HIV	28.9	per cent
	9.5		Women who know where to be tested for HIV	61.1	per cent
	9.6		Women who have been tested for HIV and know the results	6.6	per cent
	9.7		Sexually active young women who have been tested for HIV and know the results	7.9	per cent
	9.8		HIV counselling during antenatal care	20.9	per cent
	9.9		HIV testing during antenatal care	28.6	per cent
Sexual behaviour	9.10		Young women who have never had sex	98.5	per cent
	9.11		Sex before age 15 among young women	0.5	per cent
	9.12		Age-mixing among sexual partners	6.3	per cent
	9.13		Sex with multiple partners	0.1	per cent
	9.15		Sex with non-regular partners	0.8	per cent

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LIST OF ABBREVIATIONS

AIDS	Acquired Immune Deficiency Syndrome
BCG	Bacillus-Calmette-Guerin (Tuberculosis)
CSPro	Census and Survey Processing System
DPT	Diphtheria Pertussis Tetanus
EA	Enumeration Area
ECDI	Early Child Development Index
EPI	Expanded Programme on Immunization
GPI	Gender Parity Index
GSO	General Statistics Office
HIV	Human Immunodeficiency Virus
IDD	Iodine Deficiency Disorders
ILO	International Labour Organization
IRS	Indoor Residual Spraying
ITN	Insecticide Treated Net
IUD	Intrauterine Device
LAM	Lactational Amenorrhea Method
MDG	Millennium Development Goals
MICS	Multiple Indicator Cluster Survey
MOH	Ministry of Health
NAR	Net Attendance Rate
ORT	Oral Rehydration Treatment
ppm	Parts Per Million
SESD	Social and Environmental Statistics Department
SPSS	Statistical Package for Social Sciences
UNAIDS	United Nations Programme on HIV/AIDS
UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
UNGASS	United Nations General Assembly Special Session on HIV/AIDS
UNICEF	United Nations Children's Fund
WFFC	World Fit For Children
WHO	World Health Organization

ACKNOWLEDGEMENTS

The Viet Nam Multiple Indicator Cluster Survey 2011 was conducted by the General Statistics Office (GSO) in collaboration with the Ministry of Health (MOH) and the Ministry of Labour, Invalids and Social Affairs (MOLISA), with financial and technical support from UNICEF and financial support from UNFPA. The Viet Nam Multiple Indicator Cluster Survey 2011 is the fourth round of Multiple Indicator Cluster Surveys in Viet Nam. The three previous MICS surveys were conducted in 1996 (MICS1), 2000 (MICS2), and 2006 (MICS3).

The current survey was designed to collect information on a large number of indicators that cover a broad range of issues affecting the health, development and living conditions of Vietnamese women and children. This information is essential to monitor the goals and targets of the Millennium Declaration, the World Fit for Children Declaration and Action Plan, as well as the National Programme of Action for Children 2011–2020. The survey will serve as an up-to-date source of information on the situation of children and women and will be of substantial use for reporting on Viet Nam's international commitments on children, such as the World Fit for Children End-decade Assessment and the 5th National Report on the implementation of the Convention on the Rights of the Child.

Under the leadership of the MICS 2011 Steering Committee, including GSO, UNICEF and UNFPA, the organisation of the survey, data collection, processing and report writing was carried out by GSO staff, in close collaboration with professionals and staff from relevant government ministries/agencies and UNICEF. We would like to acknowledge the technical and financial support provided by UNICEF Viet Nam, Headquarters and the Asia Pacific Shared Service Centre, in particular the provision of training, guidance and template for data collection and analysis tools.

We would like to express our sincere gratitude to specialists and experts from relevant government ministries and agencies, including GSO, Ministry of Education and Training, Ministry of Health, Ministry of Labour, Invalids and Social Affairs; UNICEF, UNFPA, UNDP, UNESCO, ILO and WHO; and some non-governmental organisations (NGOs) for their valuable advice and comments during the organisation of the survey, questionnaire development and report writing. We would also like to thank all the local authorities involved, particularly the People's Committees of the selected communes.

A special note of thanks goes to all the interviewers, supervisors and other participants in the survey for their hard work and long working hours committed to completing all the steps of the survey from its initial design to the dissemination of its findings. This includes the 30 fieldwork teams traveling nation-wide for almost two months to complete the data collection in a timely and professional manner.

We would like to express our genuine thankfulness to all households who participated in the survey and their willingness to give their time to provide valuable information about their private lives. Without their collaboration this survey would not have been possible.

We are grateful for the continuous active cooperation from all national as well as international agencies, organisations and individuals for the benefit of Viet Nam's children.

LottaSylwander
Representative, UNICEF Viet Nam

Do Thuc
Director General, General Statistics Office

MAP OF DISTRICTS WITH MICS 2011 DATA COLLECTION SITES

Districts with MICS 2011 Enumeration Areas, by region

- Red River Delta
- Northern Midlands and Mountain areas
- North Central area and Central Coastal area
- Central Highlands
- South East
- Mekong River Delta
- Districts with no Enumeration Areas
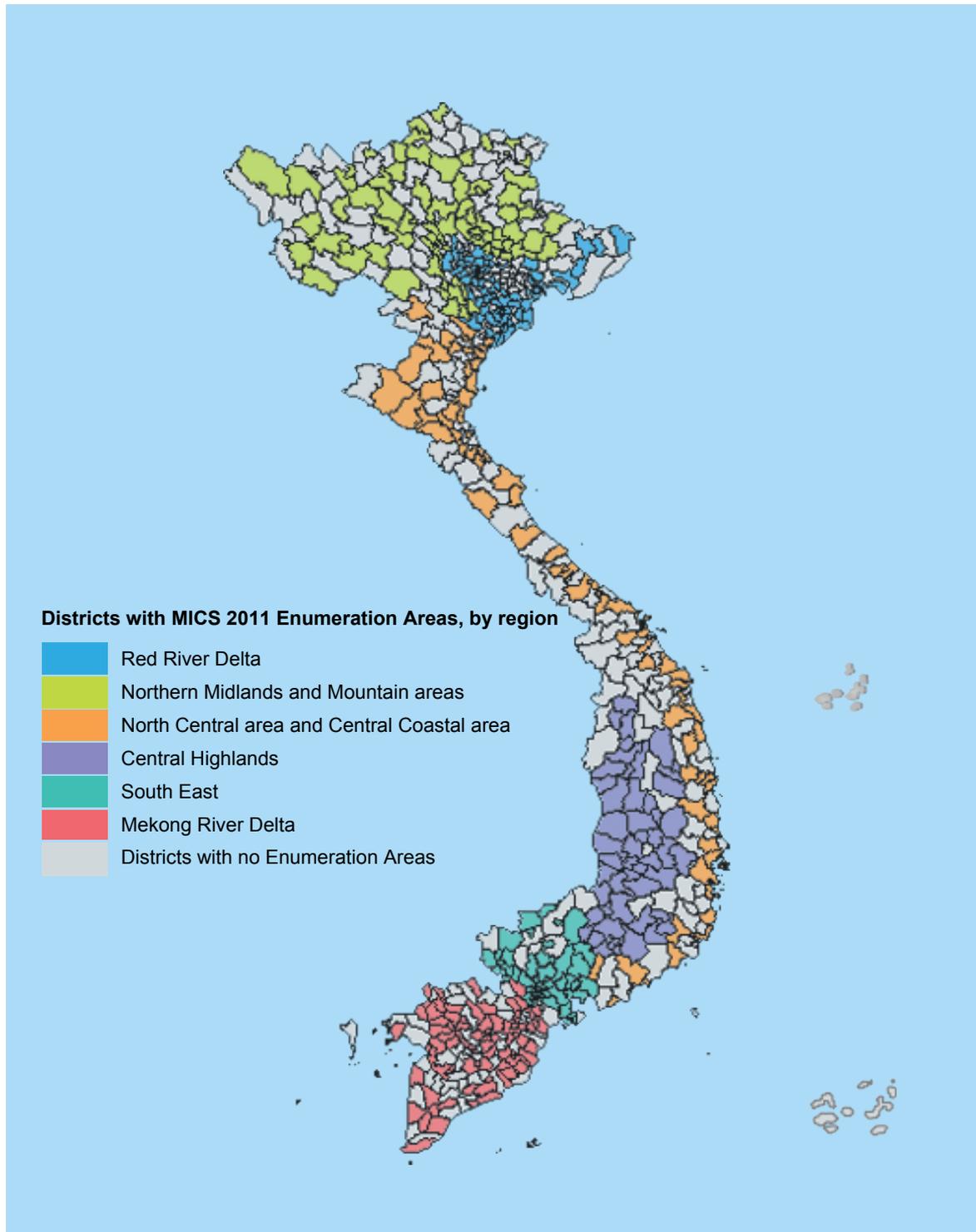
Note: The boundaries and the names shown the designations used on these maps do not imply official endorsement or acceptance by the United Nations.

EXECUTIVE SUMMARY

The **Viet Nam Multiple Indicator Cluster Survey** (MICS 2011) was conducted from December 2010 to January 2011 by the General Statistics Office of Viet Nam, in collaboration with the Ministry of Health (MOH) and the Ministry of Labour, Invalids and Social Affairs (MOLISA). Financial and technical support for the survey was provided by the United Nations Children's Fund (UNICEF) and financial support was provided by the United Nations Population Fund (UNFPA) in Viet Nam.

MICS 2011 provides valuable information and the latest evidence on the situation of children and women in Viet Nam, updating information from the previous 2006 Viet Nam MICS survey as well as earlier data collected in the first two MICS rounds carried out in 1996 and 2000.

The survey presents data from an equity perspective by indicating disparities by sex, region, area, ethnicity, living standards and other characteristics. MICS 2011 is based on a sample of 11,614 households interviewed and provides a comprehensive picture of children and women in Viet Nam's six regions.

Child Mortality

In the Viet Nam MICS 2011 survey, child mortality rates are calculated based on an indirect estimation technique known as the Brass method. According to the survey results, the under-five mortality rate in Viet Nam is 16 per 1,000 live births and the infant mortality rate is 14 per 1,000 live births. Substantial disparities exist along the dimensions of ethnicity and living standards: ethnic minority children are three times as likely as Kinh/Hoa[1] children to die before their first and fifth birthdays; and children in the poorest households are twice as likely to die before reaching 1 and 5 years of age compared to children living in better off families.

Nutritional Status and Breastfeeding

During MICS 2011 data collection, the weights and heights of all children under 5 years of age in the sample households were measured using anthropometric equipment recommended by UNICEF (see www.childinfo.org). These measurements show that 11.7 per cent of Vietnamese children are underweight (weight-for-age malnourished), 22.7 per cent are stunted (height-for-age malnourished), and 4.1 per cent are wasted (weight-for-height malnourished). There are large disparities between urban and rural areas, between Kinh/Hoa and ethnic minority children, between different wealth quintiles and by mother's education level. At the same time, 4.4 per cent of children in Viet Nam are overweight.

Only two in five children in Viet Nam (39.7 per cent) start breastfeeding at the correct time (i.e. within one hour of birth) and less than one in five children (17 per cent) are exclusively breastfed until 6 months of age. Exclusive breastfeeding is highest in the Northern Midlands and Mountain areas at 37.6 per cent.

More than four in five children (83.4 per cent) aged 6 to 59 months received a high dose of vitamin A supplementation within the six months prior to the MICS 2011 survey.

Roughly 93 per cent of children below two years of age were weighed at birth and only 5.1 per cent were born with low weight.

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[1]   In MICS 2011, the Chinese (Hoa) ethnic minority is grouped together with the Kinh majority under the label Kinh/Hoa, mainly because Kinh and Hoa have similar living standards. All other ethnicities are grouped together under the label Ethnic Minorities.

Adequately iodised salt, defined as containing 15 or more particles per million (15+ ppm), is used in less than half of all households (45.1 per cent) with the consumption pattern showing considerable regional differences. This is far below global standards: The World Health Organization (WHO) and UNICEF recommend Universal Salt Iodisation as a safe, cost-effective and sustainable strategy to ensure sufficient intake of iodine, meaning that at least 90 per cent of households must consume adequately iodised salt.

Immunization

Two out of five children (40.1 per cent) between 1 and 2 years of age have received all recommended vaccinations – notably BCG, three doses of polio, measles, three doses of DPT (or Pentavalent), and three doses of hepatitis B (or Pentavalent). However, an immunization card could be presented for only half of sampled children. The immunization coverage for DPT and polio drops considerably between the first and the third doses: by 20 percentage points for DPT, and by 23 percentage points for polio. The lowest coverage was observed for the hepatitis B birth dose (it is not included in the full immunization indicator). In particular, only 18.2 per cent of ethnic minority children have received the hepatitis B birth dose, and only 18.5 per cent of children of mothers with no education have received it.

Almost four of five mothers who gave birth within two years prior to the survey were adequately protected against neonatal tetanus (77.5 per cent). Yet among ethnic minority women, only three in five mothers had received this protection (59.2 per cent).

Care of Illness

Reported prevalence of diarrhoea among children under 5 during the two weeks preceding the survey stood at 7.4 per cent. Among these children, 46.5 per cent had received oral rehydration salt (ORS) solution, 42.8 per cent had reported home management of diarrhoea with recommended fluids, and 65.6 per cent had received either ORS or another recommended homemade fluid.

Approximately 3.3 per cent of children under 5 years of age showed symptoms of pneumonia in the two weeks preceding the survey. Of these, 73 per cent were taken to an appropriate provider and 68.3 per cent were treated with antibiotics. Only one in twenty mothers and caregivers (5 per cent) are aware of the danger signs of pneumonia.

The use of solid fuels as a main source of energy for domestic cooking stands at 46.4 per cent. Ethnic minority households are twice as likely as Kinh/Hoa households to use these health-damaging fuels for cooking purposes (89.5 versus 40.5 per cent).

Malaria Prevention

Viet Nam is considered a low malaria prevalence country. Almost all households in Viet Nam (95.5 per cent) have at least one mosquito net, yet almost none have long-lasting insecticide-treated nets (0.4 per cent). The percentage of children under age 5 and the percentage of pregnant women who slept under a mosquito net during the night prior to the survey was 94.4 and 94.1 per cent, respectively.

Water and Sanitation

According to the survey, 92 per cent of the population in Viet Nam use improved drinking water sources, though only 68.4 per cent of the ethnic minority population use such sources. Some 12.4 per cent of the population that do not use improved drinking water sources do not use any form of water treatment. Among those who use water treatment, boiling the water is the most common treatment method, used in 84 per cent of the population with unimproved drinking water sources. Some 89.5 per cent of the population using improved drinking water sources and 5.1 per cent of the population using unimproved drinking water sources have a water source directly on their premises.

Overall, less than three in four Vietnamese use improved sanitation facilities (73.8 per cent), though among ethnic minorities only half use such facilities (44.2 per cent). Open defecation is not widespread in Viet Nam: only 6.4 per cent of the population practice it. However, this percentage increases to 27.7 per cent among ethnic minorities, meaning that one in every four Vietnamese living in ethnic minority households defecate in the open. In addition, the faeces of two in five children under the age of 2 are disposed of in an unsafe manner (39.9 per cent); among ethnic minorities this is common practice for four in five children (78.5 per cent).

The survey results indicate that 86.6 per cent of Vietnamese households have a place for hand washing that includes water and soap. This percentage is higher in urban (93.4 per cent) than in rural areas (83.7 per cent), and higher among house hold with heads as Kinh/Hoa households (88.7per cent) than ethnic minority households (67.1 per cent).

Reproductive Health

The Total Fertility Rate (TFR) in Viet Nam is 2, meaning that a Vietnamese woman, by the end of her reproductive years, will have given birth to an average of two children. Early childbearing is relatively rare, with 7.5 per cent of women aged 15-19 having begun childbearing. About three in four women aged 15-49 who are currently married or in a union use any form of contraception (77.8 per cent). Of these, 59.8 per cent use modern methods and 17.9 per cent use traditional methods. The use of contraceptives – modern or traditional – among young women aged 15–19 who are married or in union is low, at 21 per cent. The unmet need for contraception is low among women aged 15-49 (4.3 per cent), but increases to 15.6 per cent among young women aged 15-19.

The survey results show that 93.7 per cent of women aged 15–49 who gave birth in the two years preceding the survey received antenatal care from skilled personnel at least once, and 59.6 per cent had the recommended four antenatal care visits. A total of 92.4 per cent of all deliveries took place in health facilities. Considerable disparities emerge by ethnicity: virtually all women in Kinh/Hoa households delivered in a health facility (98.3 per cent) compared to three in five women (61.7 per cent) from ethnic minority households.

Early Childhood Development

Almost three in four children aged 3-5 years receive early childhood education (71.9 per cent), and an even higher proportion (76.8 per cent) of children aged 3-5 years had adults engage with them in four or more activities that promote learning and school readiness during the three days prior to the survey. However, only one in five children under 5 have three or more children's books at home (19.6 per cent).

One in ten children under 5 were left under inadequate care sometime during the week preceding the survey (9.4 per cent), meaning that they were either left alone or in the care of another child under the age of 10.

The child development index score is 82.8 in Viet Nam. The score is calculated based on the percentage of children aged 3-5 years who are developmentally on track in at least three of the following four domains: literacy/numeracy, physical, social/emotional and learning.

Education

Overall literacy among Vietnamese women aged 15–24 years is high, at 96.4 per cent. However, the literacy rate drops to 82.3 per cent among ethnic minority women, meaning that almost one in every five women living in an ethnic minority household is not identified as literate.

Primary school attendance is high, and there is virtually no difference between boys and girls or between Kinh/Hoa and ethnic minority children. Secondary school attendance, meanwhile, reveals both gender and ethnic disparities: the attendance rate is 78.3 per cent for boys and 83.9 per cent for girls, and 66.3 per cent for ethnic minority boys and 65 per cent for ethnic minority girls. Overall, one in every three ethnic minority children do not receive secondary education, compared with one in every five Kinh/Hoa children (34.4 versus 16.3 per cent).

Child Protection

Birth registration in Viet Nam is almost universal, with 95 per cent of children under the age of 5 reported to have had their births registered. Yet only 66.1 per cent of birth certificates were seen by survey workers.

The survey indicates that 9.5 per cent of children aged 5-14 years are engaged in child labour[2] activities. The majority of child labourers also attend school (83.4 per cent).

More than half of all children aged 2-14 years in Viet Nam have experienced some form of physical discipline (55 per cent). This contrasts with the relatively limited belief, held by 17.2 per cent of mothers and caregivers, that children need to be physically punished. Approximately 5.3 per cent of children aged 0-17 years are not living with either biological parent, and for 3.9 per cent of children one or both parents have died.

Approximately one in three Vietnamese women (35.8 per cent) agree that it is acceptable for husbands to physically punish their wife for various reasons. Large disparities emerge by living standards and ethnicity: women living in the poorest households are twice as likely as those in the richest households to accept wife beating (48.8 versus 20.1 per cent), and almost every second ethnic minority woman shows an accepting attitude, compared to one in three Kinh/Hoa women (47.2 versus 34.3 per cent). More than one in every ten women (12.3 per cent) aged 20–49 got married before the age of 18.

HIV and AIDS

Nearly all young women aged 15-24 have heard of HIV (96.5 per cent), yet only one in two women of the same age group (51.1 per cent) have a comprehensive knowledge of HIV, meaning they can correctly identify two ways of preventing HIV infection; know that a healthy looking person can have HIV; and reject the two most common misconceptions about HIV transmission. Almost all women aged 15-49 know that HIV can be transmitted from mother to child (92.4 per cent).

More than three in five young women aged 15-24 know a place where they can be tested for HIV (60.7 per cent), and around one in three women have been tested (32.1 per cent).

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[2]   Please refer to the Child Protection Chapter (Chapter XI.) for the definition of child labour used in this report.

The percentage of young women aged 15-24 who have been tested for HIV in the last 12 months is 16.2 per cent and the percentage of women who have been told the result is 7.9 per cent.

About one third of women aged 15-49 who received antenatal care during their last pregnancy were tested for HIV (36.1 per cent). Important disparities emerge by area of residence: women living in urban areas are twice as likely to have been tested compared to women living in rural areas (56.4 versus 27.7 per cent).

Sexual behaviour that increases risk of HIV transmission (such as sex with multiple partners, sex with non-regular partners, sex before marriage, and sex before age 15) is very limited among women in Viet Nam.

Background

This report is based on the Viet Nam Multiple Indicator Cluster Survey, conducted from December 2010 to January 2011 by the General Statistics Office of Viet Nam in collaboration with the Ministry of Health (MOH) and the Ministry of Labour, Invalids and Social Affairs (MOLISA). Financial and technical support was provided by the United Nations Children's Fund (UNICEF) and financial support was provided by the United Nations Population Fund (UNFPA). The survey provides valuable information on the situation of children and women in Viet Nam, and was based, in large part, on the needs to monitor 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 Declaration and Plan of Action of A World Fit For Children, adopted by 189 Member States at the United Nations Special Session on Children in May 2002. 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 their children and to monitoring progress towards that end. UNICEF was assigned a supporting role in this task (see table below).

A Commitment to Action: National and International Reporting Responsibilities

The governments that signed the Millennium Declaration and the World Fit for Children 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, analyse 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." (A World Fit for Children, 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.…" (A World Fit for Children, 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, the United Nations Children's Fund is requested to continue to prepare and disseminate, in close collaboration with Governments, relevant funds, programmes and the specialized agencies of the United Nations 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."

MICS 2011 updates the Viet Nam MICS 2006 data and comes at an important time for evaluating the National Programme of Action for Children 2001–2010 and for preparing and monitoring the next Programme for 2011–2020. Based on an actual sample of 11,614 households, the survey provides a comprehensive picture of children and women in Viet Nam across the six regions, and from an equity approach. It indicates disparities by sex, area, ethnicity, education, living standards and other characteristics.

The results of the Viet Nam MICS 2011 are presented in this final report.

MICS 2011 Objectives

The primary objectives of the Viet Nam Multiple Indicator Cluster Survey 2011 are:

- To provide up-to-date information for assessing the situation of children and women in Viet Nam;

- To furnish data needed for monitoring progress towards goals established in the Viet Nam National Programme of Action (NPA) for Children for the period 2001–2010, the Millennium Declaration (MD), the Convention on the Rights of the Child (CRC), and other national and international commitments as well as to provide information for developing the National Programme of Action for Children for the period 2011–2020;

- To generate data for the identification of vulnerable groups, inequities and disparities, as a basis for informing policies and interventions;

- To contribute to the improvement of data and monitoring systems in Viet Nam and to strengthen technical expertise in survey design, implementation and analysis.

Sample Design

The sample for the Viet Nam Multiple Indicator Cluster Survey (MICS) was designed to provide estimates for a large number of indicators on the situation of children and women at the national level, for urban and rural areas, and for Viet Nam's six regions: Red River Delta, Northern Midland and Mountain areas, North Central area and Central Coastal area, Central Highlands, South East and Mekong River Delta. The urban and rural areas within each region were identified as the main sampling strata and the sample was selected in two stages. Within each stratum, a specified number of census enumeration areas were selected with probability proportional to size. After the updating of household lists was carried out within the selected enumeration areas, a systematic sample of 20 households was drawn in each sample enumeration area. Two of the selected enumeration areas were not included in the survey as they no longer existed at the time of the survey fieldwork. The sample was stratified by region, urban and rural areas, and is not self-weighting. For reporting national level results, sample weights are used. A more detailed description of the sample design can be found in Appendix A.

Questionnaires

Three sets of questionnaires were used in the survey: 1) a household questionnaire which was used to collect information on all *de jure* household members (usual residents), the household, and the dwelling; 2) a woman questionnaire administered in each household to all women aged 15–49 years; and 3) a children questionnaire, administered to mothers or caregivers of all children under 5 years of age living in the household. The questionnaires included the following contents:

The household questionnaire, administered to a knowledgeable adult living in the household, included the following modules:

- Household Listing Form
- Education
- Water and Sanitation
- Household Characteristics
- Insecticide Treated Bednets
- Indoor Residual Spraying
- Child Labour
- Child Discipline
- Handwashing
- Salt Iodisation

The questionnaire for women was administered to all women aged 15–49 years living in the households, and included the following modules:

- Woman's Background
- Child Mortality
- Desire for Last Birth

- Maternal and Newborn Health

- Illness Symptoms

- Contraception

- Unmet Need

- Attitudes Towards Domestic Violence

- Marriage/Union

- Sexual Behaviour

- HIV/AIDS

The questionnaire for children under 5 years of age was administered to mothers or caregivers of all children under 5 years of age[3] living in the households. Normally, the questionnaire was administered to mothers of these children. In cases when the mother was not listed in the household roster, a primary caregiver for the child was identified and interviewed. The questionnaire included the following modules:

- Age

- Birth Registration

- Early Childhood Development

- Breastfeeding

- Care of Illness

- Malaria

- Immunization

- Anthropometry

The questionnaires are based on the global MICS 4 model questionnaire.[4] From the English version of the MICS 4 model, the questionnaires were translated into Vietnamese and were pre-tested in Hoa Binh province (in the Northern Midland and Mountain areas) and Binh Dinh province (in the North Central area and Central Coastal area) from 26 September to 6 October 2010. Based on the results of the pre-test, modifications were made to the wording and translation of the questionnaires. The questionnaires were revised and printed after the first training for the southern provinces in Can Tho city. A copy of the Viet Nam MICS 2011 questionnaires is provided in Appendix F.

In addition to the administration of questionnaires, the fieldwork teams tested the iodine content of salt used for cooking in the households, observed the place for hand washing and measured the weights and heights of children under 5 years of age. Details and findings of these measurements are provided in the respective sections of the report.

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[3] The terms "children under age 5", "children aged 0–4 years", and "children aged 0–59 months" are used interchangeably in this report.

[4] The model MICS 4 questionnaires can be found at www.childinfo.org

Training and Fieldwork

GSO conducted two training courses for interviewers, measurers, field data editors, team leaders and supervisors. About 250 field workers participated. One training was conducted in Can Tho city for the participants from the Southern provinces, and another in Ha Noi for those from the Northern provinces. Each training course lasted 14 days: the Can Tho training was conducted from 25 October to 7 November 2010 and the Ha Noi training from 8 November to 21 November 2010. The training included sessions on interviewing techniques and the contents of the questionnaires, and mock interviews between trainees to gain practice in asking questions. Towards the end of the training period, trainees spent two days in practice, interviewing, taking anthropometric measurements, editing and supervising. Before the field practice (pilot-test) the trainees spent one day practicing anthropometric measurements in a kindergarten.

Some 180 persons were selected for the fieldwork. They were grouped into 30 survey teams, each comprised of three interviewers, one measurer, one field data editor and one team leader acting as a supervisor. Fieldwork began on 29 November 2010 and was concluded on 26 January 2011. Fieldwork monitoring was conducted at three levels to ensure quality and allow timely corrective action as necessary, notably: supervision by GSO, UNICEF and UNFPA, technical supervision from the National Steering Committee, and supervision by the team leaders. Supervisors are experts with technical knowledge who are able to take corrective action and resolve emerging issues that arise during the fieldwork.

Data Processing

Data were entered using CSPro software on eight small computers. Ten operators working in shifts performed data entry under supervision of two data entry supervisors. In order to ensure quality control, all questionnaires were double entered and internal consistency checks were performed. Procedures and standard programs developed under the global MICS 4 programme and adapted to the Viet Nam questionnaire were used throughout. Data processing began on 27 December 2010 and was completed on 21 March 2011. Data were analysed using the Statistical Package for Social Sciences (SPSS) software program, Version 19. The model syntax and tabulation plans developed by UNICEF were used for this purpose.

III. SAMPLE COVERAGE AND THE CHARACTERISTICS OF HOUSEHOLDS AND RESPONDENTS

Sample Coverage

Of the 12,000 households selected for the sample, 11,642 were present at the time of the survey. Of these, 11,614 successfully completed the interview, resulting in a household response rate of 99.8 per cent. In the interviewed households, 12,115 women (aged 15–49 years) were identified. Of these, 11,663 completed the interview, yielding a response rate of 96.3 per cent compared to eligible respondents in interviewed households. In addition, 3,729 children under 5 years were listed in the household questionnaire. Questionnaires were completed for 3,678 of these children, which corresponds to a response rate of 98.6 per cent within interviewed households. The overall response rates (household response rate times the woman and child response rates within households) were 96 and 98.4 per cent for the survey of women and of children under 5 years of age, respectively (Table HH.1).

Table HH.1: Interview results for households, women and children under 5 years of age								
Interview outcomes and response rates for households, women, and children under 5 years of age by area and region, Viet Nam, 2011								
	Area		Region					
	Urban	Rural	Red River Delta	Northern Midlands and Mountain areas	North Central area and Central Coastal area	Central Highlands	South East	Mekong River Delta	Total
Households									
Sampled	5200	6800	2000	2000	2000	2000	2000	2000	12000
Present	5016	6626	1912	1961	1947	1960	1930	1932	11642
Interviewed	5001	6613	1907	1955	1943	1956	1928	1925	11614
Response rate	99.7	99.8	99.7	99.7	99.8	99.8	99.9	99.6	99.8
Women									
Eligible	5364	6751	1739	2053	1942	2176	2168	2037	12115
Interviewed	5183	6480	1682	1970	1868	2078	2116	1949	11663
Response rate	96.6	96	96.7	96	96.2	95.5	97.6	95.7	96.3
Overall response rate	96.3	95.8	96.5	95.7	96	95.3	97.5	95.3	96
Children under five									
Eligible	1438	2291	555	722	552	734	585	581	3729
Mothers/caregivers interviewed	1409	2269	543	712	548	727	581	567	3678
Response rate	98	99	97.8	98.6	99.3	99	99.3	97.6	98.6
Overall response rate	97.7	98.8	97.6	98.3	99.1	98.8	99.2	97.2	98.4

Table HH.1 shows that there were no large differences in response rates across regions and urban/rural areas. This is the result of the collective effort of all survey teams, who overcame difficulties in the field and used every opportunity to visit household members at all times, whether day or night.

Household Characteristics

The weighted age and sex distribution of the survey sample is provided in Table HH.2. The distribution is also used to produce the population pyramid in Figure HH.1. The 11,614 households that completed interviews in the survey yielded a list of 43,998 household members. Of these, 21,559 were male (49 per cent) and 22,439 were female (51 per cent). According to the 2009 Viet Nam Population and Housing Census the sex distribution of the overall population was 49.5 per cent male and 50.5 per cent female.

Table HH.2: Sample age distribution by sex						
Frequency and percentage of the population by sex and five-year age group, dependent age groups, and by child (aged 0–17 years) and adult populations (aged 18 or older), Viet Nam, 2011						
	Males		**Females**		**Total**	
	Number	Percentage	Number	Percentage	Number	Percentage
Age (years)						
0-4	1867	8.7	1802	8	3668	8.3
5-9	1928	8.9	1778	7.9	3706	8.4
10-14	1984	9.2	1821	8.1	3805	8.6
15-19	1881	8.7	1776	7.9	3657	8.3
20-24	1582	7.3	1663	7.4	3245	7.4
25-29	1746	8.1	1814	8.1	3560	8.1
30-34	1648	7.6	1786	8	3435	7.8
35-39	1753	8.1	1646	7.3	3398	7.7
40-44	1545	7.2	1603	7.1	3148	7.2
45-49	1518	7	1447	6.4	2965	6.7
50-54	1244	5.8	1522	6.8	2767	6.3
55-59	877	4.1	1030	4.6	1907	4.3
60-64	663	3.1	794	3.5	1457	3.3
65-69	406	1.9	488	2.2	893	2
70-74	376	1.7	530	2.4	906	2.1
75-79	222	1	362	1.6	584	1.3
80-84	184	0.9	317	1.4	501	1.1
85+	136	0.6	259	1.2	395	0.9
Dependency age groups						
0-14	5778	26.8	5401	24.1	11180	25.4
15-64	14457	67.1	15081	67.2	29539	67.1
65+	1324	6.1	1956	8.7	3280	7.5
Child and adult population						
Children aged 0-17 years	7002	32.5	6593	29.4	13594	30.9
Adults aged 18+ years	14558	67.5	15846	70.6	30404	69.1
Total	21559	100	22439	100	43998	100

Table HH.2 shows the age-sex structure of the household population. The proportions in child, working and old-age age groups (0–14, 15–64 and 65 years and over) in the household population of the sample are 25.4, 67.1 and 7.5 per cent, respectively. The corresponding proportions in the Census are 25.0, 68.4 and 6.6 per cent, respectively.[5] Census data indicate that the proportion of the male population in the five-year age groups from 0–4 to 15–19 years is higher than of the female population, but a reverse pattern is observed in the age group 50–54 years and above, where the share of the male population is lower. MICS 2011 data indicate a similar age-sex pattern, with males accounting for a higher proportion of the population in the younger age groups (0–17 years) and a smaller share among adults (18 years old and above). The proportion of women in the 50-54 year age group is slightly higher than expected. This might be explained by some interviewers' tendency of transferring women from one age group (reproductive age) to the next age group (non-reproductive), in order to make women ineligible for the interview. This possibility is confirmed by the data quality

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[5]   Central Population and Housing Census Steering Committee, The 2009 Viet Nam Population and Housing Census, Major Findings, Hanoi, June 2010.

Table 1 (see Appendix D), which more precisely indicates the transfer of women from age 49-50. A similar drop is observed in age group 20–24, both for men and for women.

Figure HH.1: Age and sex distribution of household population, Viet Nam, 2011
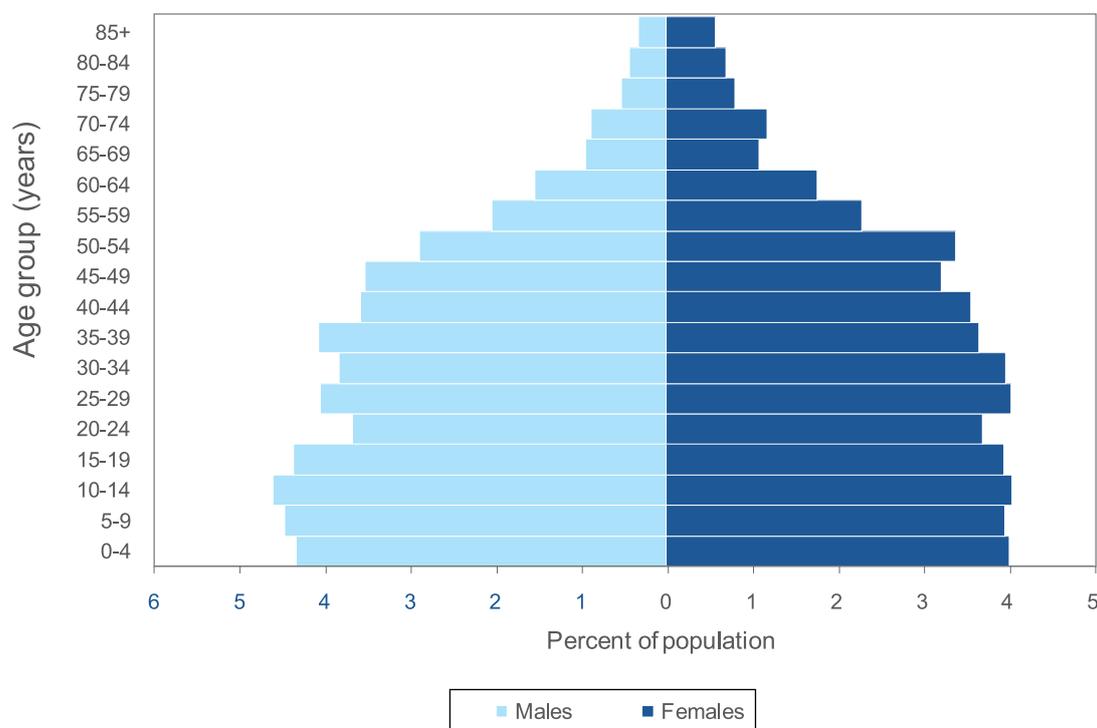
Tables HH.3 to HH.5 provide basic information on households, female respondents aged 15–49, and children under 5 years of age by presenting the unweighted, as well as the weighted results. Information on the basic characteristics of households, women and children under 5 years of age interviewed in the survey is essential for the interpretation of findings presented later in the report and also provides an indication of the representativeness of the survey. Besides these three tables, all other tables in this report are presented only with weighted numbers. See Appendix A for more details about weighting.

Table HH.3 provides basic background information on interviewed households, including sex of the household head, region, urban/rural area of residence, number of household members, educational attainment and ethnicity[6] of the household head. In MICS 2011, the Chinese (Hoa) ethnic minority is grouped together with the Kinh majority under the label Kinh/Hoa, because Kinh and Hoa have similar living standards. All other ethnicities are grouped together under the label Ethnic Minorities. These background characteristics are used in subsequent tables in this report. The figures in the table also include the numbers of observations by major categories of analysis in the report.

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[6] This was determined by asking the question: "To what ethnic group does the head of this household belong?" Households were divided into two groups: 1) Kinh/Hoa (including the Kinh [Vietnamese] majority and the Hoa [ethnic Chinese] minority); and 2) Ethnic Minorities (including all ethnicities other than Kinh and Hoa). Please refer to the questionnaire in Appendix F for detailed questions.

Table HH.3: Household characteristics

Percentage and frequency distribution of households by selected characteristics, Viet Nam, 2011

	Weighted percentage	Number of households	
		Weighted	Unweighted
Sex of household head			
Male	73.8	8569	8421
Female	26.2	3045	3193
Region			
Red River Delta	22.4	2601	1907
Northern Midland and Mountain areas	15.8	1836	1955
North Central area and Central Coastal area	21.7	2522	1943
Central Highlands	5.2	604	1956
South East	16.1	1873	1928
Mekong River Delta	18.8	2178	1925
Area			
Urban	29.7	3454	5001
Rural	70.3	8160	6613
Number of household members			
1	6.3	733	680
2	15.9	1850	1732
3	20.7	2407	2436
4	29.2	3396	3381
5	15	1739	1793
6	7.4	864	882
7	3.2	368	397
8	1.2	138	161
9	0.5	59	74
10+	0.5	60	78
Education of household head			
None	5.9	691	775
Primary	25.1	2919	2839
Lower Secondary	39.3	4568	4322
Upper Secondary	16.4	1904	1980
Tertiary	12.9	1504	1670
Missing/DK	(0.3)	30	28
Ethnicity of household head			
Kinh/Hoa	89.9	10436	10068
Ethnic Minorities	10.1	1178	1546
Households with at least			
One child aged 0-4 years	27.1	11614	11614
One child aged 0-17 years	67.1	11614	11614
One woman aged 15-49 years	77.1	11614	11614
Mean household size	3.8	11614	11614

Note:
Figures shown in parenthesis are based on denominators of 25-49 un-weighted cases

The weighted and unweighted numbers for total households are equal, since sample weights were normalized (See Appendix A). The table also shows the proportions of households with at least one child under the age of 18, at least one child under the age of 5, and at least one eligible woman aged 15–49 years. The weighted average household size estimated by the survey is also presented.

According to Table HH.3, most households are headed by a male (73.8 per cent), more than 70 per cent of the population is living in rural areas, and about 10.1 per cent of the population belongs to ethnic groups other than Kinh (Vietnamese) and ethnic Chinese (Hoa). The weighted number of households in some regions such as the Central Highlands is considerably lower than the unweighted number due to over-sampling in this region. Some 6.3 per cent of the household population is living in single households and about 80.8 per cent were living in households containing 2–5 persons. The average household size is 3.8 members, which corresponds to the results of the 2009 Population Census.

Figure HH.2 shows that for every 100 households interviewed, there are 27 households with at least one child aged 0–4 years, 67 households with at least one child aged 0–17 years and 77 households with at least one woman aged 15–49 years.

Figure HH.2 Household composition, Viet Nam, 2011
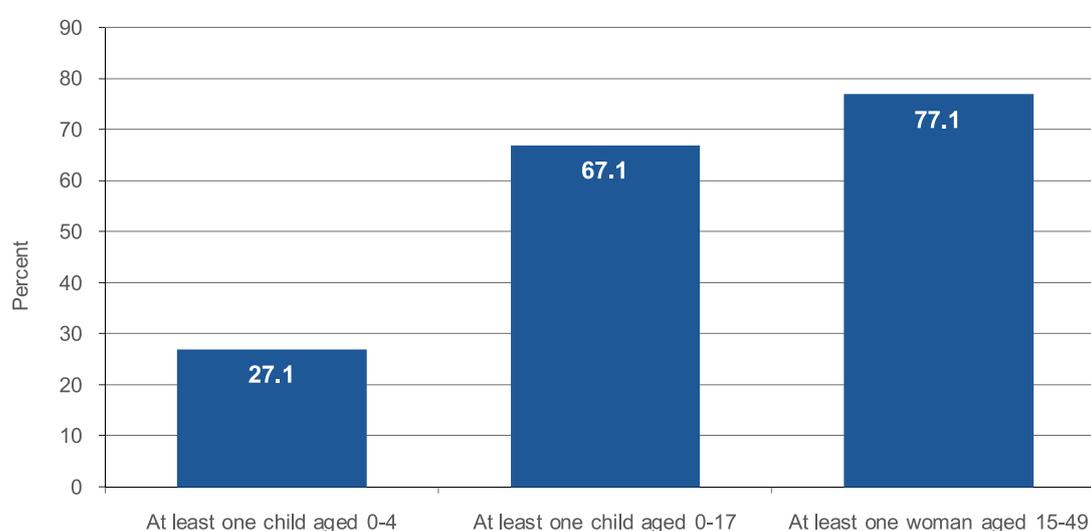
Characteristics of Female Respondents 15–49 Years of Age and Children Under 5 Years of Age

Information on the background characteristics of female respondents 15–49 years of age and of children under 5 years of age is provided in Tables HH.4 and HH.5. In both tables, the totals of weighted and unweighted observations are equal, since sample weights have been normalized (See Appendix A). In addition to providing useful information on the background characteristics of women and children, the tables also show the number of observations in each background category. These categories are used in the subsequent tabulations of the report.

Table HH.4: Women's background characteristics

Percentage and frequency distribution of women aged 15–49 years by selected background characteristics, Viet Nam, 2011

		Number of women	
	Weighted percent	Weighted	Unweighted
Region			
Red River Delta	20.3	2368	1682
Northern Midland and Mountain areas	16.3	1896	1970
North Central area and Central Coastal area	20.8	2429	1868
Central Highlands	5.8	671	2078
South East	17.8	2080	2116
Mekong River Delta	19	2220	1949
Area			
Urban	31.5	3676	5183
Rural	68.5	7987	6480
Age (years)			
15-19	14.6	1707	1769
20-24	13.8	1608	1629
25-29	15.5	1806	1789
30-34	15.6	1817	1741
35-39	14.2	1657	1638
40-44	13.9	1621	1654
45-49	12.4	1448	1443
Marital/Union status			
Currently married/in union	71.5	8341	8194
Widowed	1.9	223	231
Divorced	1.3	148	174
Separated	0.9	101	105
Never married/in union	24.4	2849	2959
Motherhood status			
Ever gave birth	71.2	8304	8179
Never gave birth	28.8	3359	3484
Births in last two years			
Had a birth in last two years	11.9	1383	1363
Had no birth in last two years	88.1	10280	10300
Education			
None	4.1	479	612
Primary	16.3	1900	1883
Lower Secondary	38.7	4517	4244
Upper Secondary	24.3	2836	2830
Tertiary	16.6	1931	2094
Wealth index quintile			
Poorest	17.7	2062	2152
Second	18.9	2200	1924
Middle	20.8	2429	2222
Fourth	21.3	2479	2529
Richest	21.4	2493	2836
Ethnicity of household head			
Kinh/Hoa	87.9	10247	9836
Ethnic Minorities	12.1	1416	1827
Total	100	11663	11663

Table HH.4 provides the background characteristics of the female respondents aged 15–49 years. More specifically, the table includes information on the distribution of women

according to region, area of residence, age, marital status, motherhood status, births given in last two years, highest educational attendance[7], wealth index quintiles[8], and ethnicity of household head.

The regions with the largest share of women in the sample were the Red River Delta (20.3 per cent) and the North Central area and Central Coast area (20.8 per cent). The Central Highlands accounted for only 5.8 per cent of all females in survey the population. In the sample, 68.5 per cent of women live in rural areas and 87.9 per cent of women live in Kinh/Hoa headed households. At the time of the interviews, 71.5 per cent of women were married or in union, 4 per cent were divorced, widowed or separated, and 24.4 per cent had never previously been married or lived in a union. Out of every five women interviewed, four had attained secondary education level or higher and only one had primary school education (16.3 per cent) or had never been to school (4.1 per cent).

The background characteristics of children under 5 years of age covered in the survey are presented in Table HH.5. This table covers the distribution of children across several attributes, notably sex, region and area of residence, age, mother's or caregiver's highest education level, wealth index quintiles, and ethnicity.

Table HH.5 shows that the proportion of boys exceeded the proportion of girls by 1.6 per cent. This is consistent with the Census 2009 results and other surveys implemented by GSO, and reflects the increasing trend towards an unbalanced sex ratio at birth in Viet Nam. The Northern Midland and Mountain areas comprise only 15.8 per cent of the population, but up to 19.2 per cent of the children under 5 years of age. The same pattern is observed for the Central Highlands, accounting for 5.2 per cent of the population but 6.3 per cent of all children under 5 years of age. Most of the children under 5 years in the survey had mothers or caregivers with secondary or higher education (76.5 per cent), with just 17.9 per cent having mothers or caregivers with primary education, and 5.6 per cent with no education. Some 14.5 per cent of children under 5 years of age live in ethnic minority households, exceeding both the proportion of women aged 15–49 living in ethnic minority households (12.1 per cent) and the proportion of households with an ethnic minority head (10.1 per cent).

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[7] Throughout this report, unless otherwise stated, "education" refers to the highest educational level attended by the respondent when it is used as a background variable.

[8] 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, and was finally divided into 5 equal parts (quintiles) from lowest (poorest) to highest (richest). The assets and other characteristics related to wealth used in these calculations were as follows: water sources, toilet facility, housing, fuel types for cooking, electricity, bank account, durable goods (such as radio, TV, refrigerator, fixed telephone, watch, mobile phone, bicycle, motorcycle, boat with motor, car), animals (such as buffalo, cattle, horse, donkey, goat, sheep, chicken, pig). The wealth index is assumed to capture the underlying long-term wealth through information on the household assets, and is intended to produce a ranking of households by wealth, from poorest to richest. The wealth index does not provide information on absolute poverty, current income or expenditure levels. The wealth scores calculated are applicable for only the particular data set they are based on. Further information on the construction of the wealth index can be found in Rutstein and Johnson, 2004, Filmer and Pritchett, 2001, and Gwatkinet. al., 2000.

Table HH.5: Background characteristics of children under 5 years of age

Percentage and frequency distribution of children under 5 years of age by selected characteristics, Viet Nam, 2011

	Weighted percentage	Number of children under 5 years	
		Weighted	Unweighted
Sex			
Male	50.8	1869	1871
Female	49.2	1809	1807
Region			
Red River Delta	21.7	798	543
Northern Midland and Mountain areas	19.2	707	712
North Central area and Central Coastal area	19.5	719	548
Central Highlands	6.3	233	727
South East	15.5	572	581
Mekong River Delta	17.7	650	567
Area			
Urban	27.5	1013	1409
Rural	72.5	2665	2269
Age (months)			
0-5	8.9	327	319
6-11	9.3	341	350
12-23	20.6	759	760
24-35	21.5	792	786
36-47	20.8	764	770
48-59	18.9	695	693
Mother's education			
None	5.6	207	291
Primary	17.9	658	672
Lower Secondary	40.2	1479	1380
Upper Secondary	18.2	670	661
Tertiary	18.1	664	674
Wealth index quintile			
Poorest	22.6	831	922
Second	18.3	673	595
Middle	19	700	649
Fourth	20.4	749	737
Richest	19.7	725	775
Ethnicity of household head			
Kinh/Hoa	85.5	3143	2964
Ethnic Minorities	14.5	535	714
Total	100	3678	3678

One of the overarching goals of the Millennium Development Goals (MDGs) is the reduction of infant and under-five mortality. Specifically, MDG 4 calls 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 minimise the pitfalls of memory lapses, inexact or misinterpreted definitions, and poor interviewing techniques.

The Infant Mortality Rate (IMR) is the probability of dying before the first birthday. The Under-five Mortality Rate (U5MR) is the probability of dying before the fifth birthday. In the Viet Nam MICS 2011 survey, infant and under five mortality rates are calculated based on an indirect estimation technique known as the Brass method[9]. The data used in the estimation are: the mean number of children ever born for the five-year age groups of women aged 15-49 years, and the proportion of these children who are dead also for the five-year age groups of women (Table CM.1). The technique converts the proportions dead among children of women in each age group into probabilities of dying by taking into account the approximate length of exposure of children to the risk of dying, assuming a particular model age pattern of mortality. Based on previous information on mortality in Viet Nam, the North model life table was selected as most appropriate[10]. The North model has been used in this and in all the previous Viet Nam MICS rounds, based on a comparison of the population structure with the model life tables.

Table CM.1: Children ever born, children surviving and proportion dead						
Mean and total numbers of children ever born, children surviving and proportion dead by mother's age, Viet Nam, 2011						
	Children ever born		Children surviving		Proportion dead	Number of women
	Mean	Total	Mean	Total		
Mother's age						
15-19	0.048	82	0.047	81	0.018	1707
20-24	0.511	823	0.504	810	0.015	1608
25-29	1.229	2220	1.208	2182	0.017	1806
30-34	1.833	3330	1.805	3280	0.015	1817
35-39	2.195	3636	2.118	3509	0.035	1657
40-44	2.44	3954	2.329	3774	0.046	1621
45-49	2.783	4029	2.619	3792	0.059	1448
Total	1.55	18075	1.494	17427	0.036	11663

Table CM.2 provides the estimates of child mortality. The IMR is estimated at 14 per thousand live births, while the probability of dying under age 5 (U5MR) is around 16 per thousand live births. These estimates have been calculated by averaging mortality estimates obtained from women aged 25–29 and 30–34, and refer to mid-2009. Child mortality does not indicate large differences by gender. Regional estimates cannot be shown due to the low number of observations of deceased children.

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[9]   United Nations (1983). Indirect Techniques for Demographic Estimation. Population Studies No. 81; United Nations (1990) Step-by-step guide to the estimation of Child Mortality; United Nations (1990) United Nations programme for child mortality estimation: a microcomputer programme to accompany the step-by-step guide to the estimation of child mortality. Population Studies No. 107.

[10] Ministry of Planning and Investment and General Statistics Office, Population projection for Viet Nam 2009-2049, February 2011.

The largest differentials in mortality exist in relation to the mother's education level, household living standards (based on a wealth index), and ethnicity of the household head. As expected, the higher the mother's education level, the lower the child mortality. It is interesting to observe that the U5MR for the mothers with no education was 29 per thousand live births, which declined to 21 per thousand live births for mothers with primary school, and further decreased to 14 per thousand live births for mothers with secondary or higher education levels. Similar differences by mother's education level are observed for IMR. The U5MR of the 20 per cent poorest households was 28 per thousand live births, more than twice the U5MR of the rest of the population. Child mortality in ethnic minority households was quite high (39 per thousand live births for U5MR and 30 per thousand live births for IMR). This is equivalent to the mortality rates of the country ten years ago and more than three times higher than the mortality rate of children in Kinh/Hoa households (12 per thousand live births for U5MR and 10 per thousand live births for IMR).

Differentials in under-five mortality rates by selected background characteristics are shown in Figure CM.1.

Table CM.2: Child mortality		
Infant and Under-five Mortality rates (per thousand live births), North Model, Viet Nam, 2011		
	Infant mortality rate[1]	Under-five mortality rate[2]
Sex		
Male	14	17
Female	14	16
Area		
Urban	13	15
Rural	14	17
Mother's education		
None	23	29
Primary	17	21
Secondary and higher	12	14
Wealth index quintile		
20% Poorest	23	28
80% Better off	11	12
Ethnicity of household head		
Kinh/Hoa	10	12
Ethnic Minorities	30	39
Total	14	16
1 MICS indicator 1.2; MDG indicator 4.2 **2 MICS indicator 1.1; MDG indicator 4.1**		

Figure CM1. Under five mortality rate by background characteristics, Viet Nam, 2011
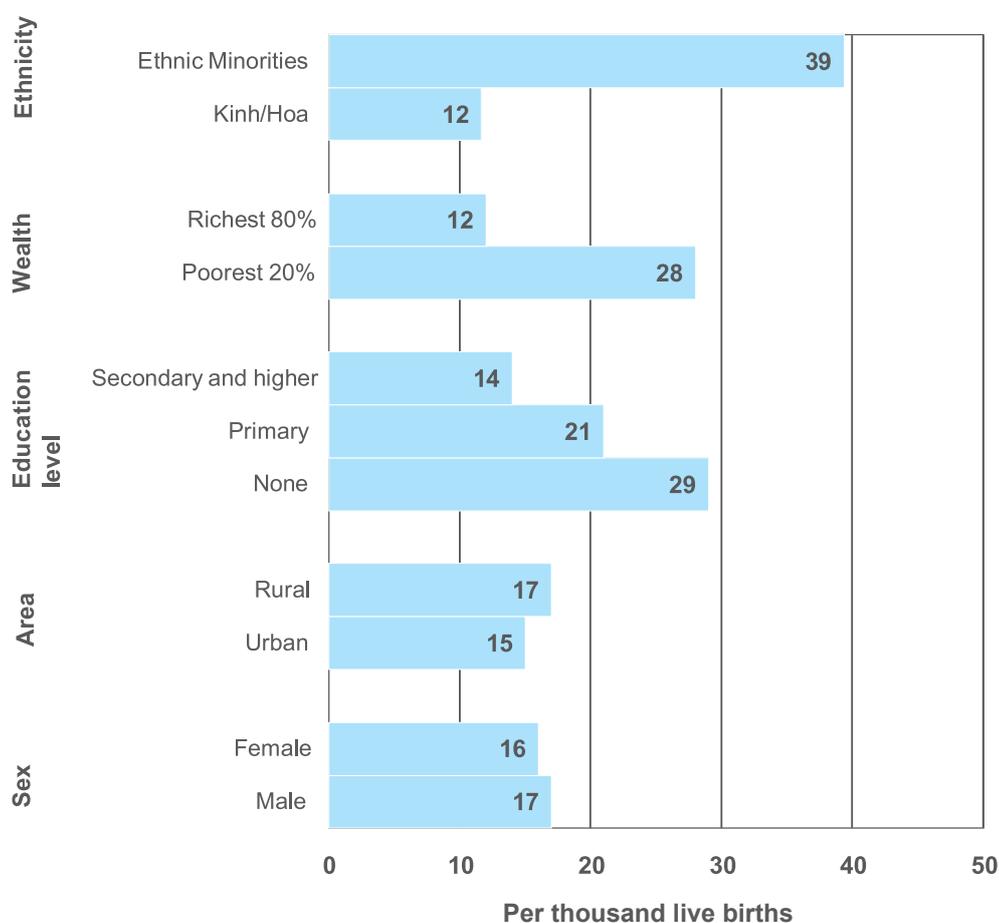
Figure CM.2 shows various series of U5MR estimates from different surveys, based on responses of women in different age groups, and referring to various points in time, thus showing the estimated trend in U5MR. The MICS estimates indicate a decline in mortality over the last 10 years. The most recent U5MR estimate from the Population Census 2009[11] is 24.4 per thousand live births, which is higher than the 16 per thousand live births estimate from MICS 2011 for the year 2009.

While the trend indicated by the MICS 2011 results are in broad agreement with the results of MICS 2006, the Population Change Survey 2010, and the Population Census 2009, Figure CM.2 does show that the MICS 2011 estimates of mortality levels are higher than the MICS 2006 estimates, and lower than the estimates from the Population Change Survey and Census. It should be mentioned here that the Census and the Population Change Survey had larger sample sizes than the MICS 2011 survey[12]. Further explanation of these apparent declines and differences, as well as analysis of determinants, should be taken up in more detail in a separate analysis.

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[11] The Population Census contains a sub-sample survey with a sampling rate of 15 per cent of all Enumeration Areas (EAs) selected from the total EAs of the Census 2009. Two questionnaires were used for simultaneous interviews in the Census, one was the short form covering all households in Viet Nam and the other (long form) covering 15 per cent of selected EAs.

[12] The Population Change Survey is conducted annually. The sample rate for this survey is 1.5 per cent of all households in the country. The sample contained about 400,000 households in the 2010 round of the Population Change Survey, which is 33 times greater than the survey.

**Figure CM.2: Trend in under five mortality rates,
Viet Nam, 2011**
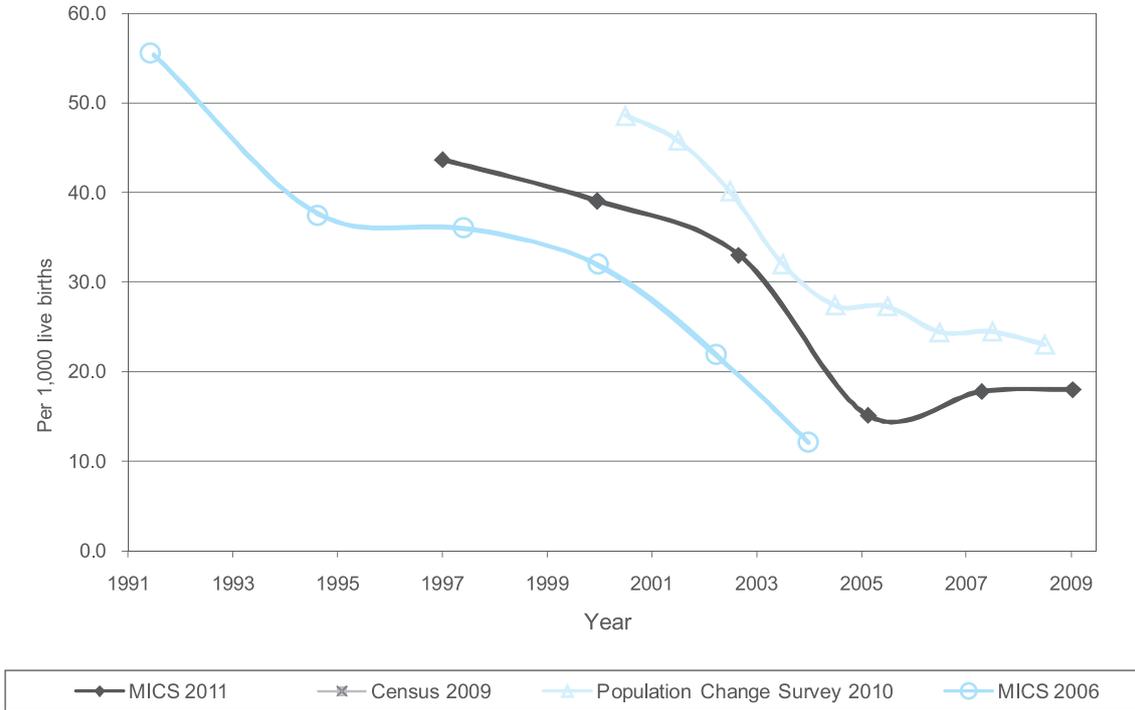
V. NUTRITION

Nutritional Status

Children's nutritional status is a reflection of their overall health. When children have access to an adequate 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 with more than half of all child deaths worldwide. Undernourished children are more likely to die from common childhood ailments, and for those who survive, to have recurring sicknesses and faltering growth. Three-quarters of the children who die from causes related to malnutrition were only mildly or moderately malnourished – showing no outward sign of their vulnerability. The Millennium Development Goal 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 also assist in the goal to reduce child mortality.

There is a reference distribution of height and weight for children under age 5 based on a well-nourished population. Undernourishment in a population can be gauged by comparing children to this reference population. The reference population used in this report is based on new WHO growth standards.[13] 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 is a measure of both acute and chronic malnutrition. 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 is a measure of linear growth. 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.* Stunting is a reflection of chronic malnutrition as a result of failure to receive adequate nutrition over a long period and recurrent or chronic illness.

Finally, 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 classified as *severely wasted.* 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.

In the MICS 2011, weights and heights of all children under 5 years of age were measured using anthropometric equipment recommended by UNICEF (www.childinfo.org)**.** 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 that were 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 2 standard deviations from the median of the reference population, and mean z-scores for all three anthropometric indicators.

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[13] WHO, 2007. WHO Child Growth Standards – Methods and Development, Geneva: WHO accessed at http://www.who.int/childgrowth/standards/second_set/technical_report_2.pdf

Table NU.1: Nutritional status of children[14]

Percentage of children under age 5 by nutritional status according to three anthropometric indices: weight-for-age, height-for-age, and weight-for-height, Viet Nam, 2011

| | Weight-for-age | | | | Height-for-age | | | | Weight-for-height | | | | |
| | Underweight | | Mean Z-Score (SD) | Number of children under age 5 | Stunted | | Mean Z-Score (SD) | Number of children under age 5 | Wasted | | Overweight | Mean Z-Score (SD) | Number of children under age 5 |
	Percentage below -2 SD[1]	-3 SD[2]			Percentage below -2 SD[3]	-3 SD[4]			Percentage below -2 SD[5]	-3 SD[6]	Percentage above +2 SD		
Sex													
Male	12.1	1.8	-0.7	1837	23.7	6.7	-1.1	1821	4.3	1.2	5.5	-0.1	1821
Female	11.4	1.9	-0.7	1769	21.6	5.3	-1	1751	3.9	1.2	3.4	-0.1	1747
Region													
Red River Delta	7.4	1.7	-0.6	766	18.3	3.3	-1.0	758	3.6	1.4	2.5	-0.1	755
Northern Midland and Mountain areas	15.4	1.8	-0.9	692	31.4	9.3	-1.4	680	4.3	0.9	3.4	-0.2	683
North Central area and Central Coastal area	14.3	1.8	-0.8	712	28.4	8.3	-1.2	709	4.3	1.5	4.3	-0.1	710
Central Highlands	17.6	2.5	-0.9	229	30.6	9.9	-1.4	227	4.1	1.2	4.2	-0.2	227
South East	4.5	1.1	-0.1	563	9.7	2.2	-0.5	558	3.7	1.3	10.6	0.2	555
Mekong River Delta	14.3	2.3	-0.8	645	20.7	5.0	-1.1	641	4.8	0.9	2.9	-0.3	639
Area													
Urban	6.0	0.7	-0.2	990	11.8	2.7	-0.6	983	3.9	1	8	0.2	978
Rural	13.9	2.3	-0.9	2617	26.8	7.3	-1.3	2589	4.2	1.3	3.1	-0.2	2590
Age (months)													
0-5	6.7	1.3	-0.4	316	9.9	2.9	-0.2	306	9.2	2.6	4.4	-0.2	304
6-11	6.5	0.8	-0.4	334	6.9	1.7	-0.4	327	4.3	1.5	2.3	-0.2	331
12-23	9.2	1.2	-0.5	747	22.5	5.9	-1.1	742	3.8	0.9	6.3	0	739
24-35	12.3	1.5	-0.7	781	28.5	7.2	-1.3	774	2.2	0.6	4.7	0	773
36-47	15.5	2.5	-0.9	752	26.8	7.6	-1.3	749	3.5	1	3.4	-0.1	747
48-59	14.6	3	-0.9	677	25	6.4	-1.3	675	5	1.7	4.3	-0.2	675
Mother's education													
None	22.4	5.5	-1.3	202	40.8	20.4	-1.7	196	7.7	1.9	0.7	-0.4	200
Primary	13.9	2.2	-0.9	650	28.7	8	-1.3	644	5.7	0.9	2.7	-0.3	641
Lower Secondary	12.7	2	-0.8	1462	24.9	5.9	-1.2	1453	4	1.4	3.7	-0.2	1451
Upper Secondary	10.3	1.4	-0.5	649	19.5	4.2	-0.9	646	3.7	1.8	6.8	0	642
Tertiary	5.5	0.3	-0.1	644	9.1	1.5	-0.5	633	2.1	0.2	6.7	0.3	634
Wealth index quintile													

Table NU.1: Nutritional status of children[14]

Percentage of children under age 5 by nutritional status according to three anthropometric indices: weight-for-age, height-for-age, and weight-for-height, Viet Nam, 2011

| | Weight-for-age | | | | Height-for-age | | | | Weight-for-height | | | | |
| | Underweight | | | | Stunted | | | | Wasted | | Overweight | | |
	Percentage below -2 SD[1]	-3 SD[2]	Mean Z-Score (SD)	Number of children under age 5	Percentage below -2 SD[3]	-3 SD[4]	Mean Z-Score (SD)	Number of children under age 5	Percentage below -2 SD[5]	-3 SD[6]	Percentage above +2 SD	Mean Z-Score (SD)	Number of children under age 5
Poorest	20.6	3.7	-1.2	818	40.9	14.3	-1.7	803	5.4	1.2	1.6	-0.3	806
Second	11.3	1.5	-0.9	670	24.2	4.3	-1.2	666	4.1	1	2.8	-0.3	666
Middle	13.9	2	-0.8	683	24.2	4.8	-1.2	681	4.5	1.5	2.9	-0.2	679
Fourth	8.5	1.1	-0.5	726	15.6	3.6	-0.8	721	4.4	2	6.3	0	719
Richest	3.1	0.6	0.1	710	6.1	1.7	-0.4	702	2.1	0.2	8.9	0.4	698
Ethnicity of household head													
Kinh/Hoa	10	1.6	-0.6	3081	19.6	4.7	-1	3054	3.8	1.1	4.9		3047
Ethnic Minorities	22	3.5	-1.2	526	40.9	13.8	-1.6	518	5.7	1.6	1.7	-0.4	521
Total	11.7	1.8	-0.7	3607	22.7	6	-1.1	3572	4.1	1.2	4.4	-0.1	3568

[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**

[14] According to the National Institute of Nutrition, the percentage of children under 5 who are underweight is 17.5 per cent, the percentage of children under 5 who are stunted is 29.3 per cent and the per centage of children under 5 who are wasted is 7.1 per cent. National Institute of Nutrition (2011). *A Review of the Nutrition Situation in Viet Nam 2009–2010*. Hanoi: Statistical Publishing House.

Children whose full birth date (month and year) were not obtained, and children whose measurements are outside a plausible range are excluded from Table NU.1. Children are excluded from one or more of the anthropometric indicators when their weights or heights have not been measured, whichever applicable. For example if a child has been weighed but his/her height has not been measured, the child is included in the underweight calculations, but not in the calculations for stunting and wasting. Percentages of children by age and reasons for exclusion are shown in the data quality tables DQ.5(a,b,c) and DQ.6. Overall 98.2 per cent of children had both their weights and heights measured (Table DQ.5), 1.9 per cent of children are missing information on weight and 2.5 per cent are missing information on height. Table DQ.6 shows that due to incomplete dates of birth, implausible measurements, and missing weight and/or height, 2.1 per cent of children have been excluded from calculations of the weight-for-age indicator, while the figures are 3.1 for the height-for-age indicator, and 2.4 per cent for the weight-for-height indicator.

Almost one in nine children under age 5 in Viet Nam are considered moderately or serevely underweight (11.7 per cent) and 1.8 per cent are classified as severely underweight (Table NU.1). What is striking is that twice as many children living in ethnic minority households are underweight compared to their peers in Kinh/Hoa households. Almost a quarter of children (22.7 per cent) are stunted or short for their age. Again, twice as many children from ethnic minority households are suffering from stunting compared to children in Kinh/Hoa households. Some 4.1 per cent of children are wasted or thin for their height and 1.2 per cent are severely wasted.

Figure NU.1: Percentage of children under 5 years of age who are undernourished by age in months, Viet Nam, 2011
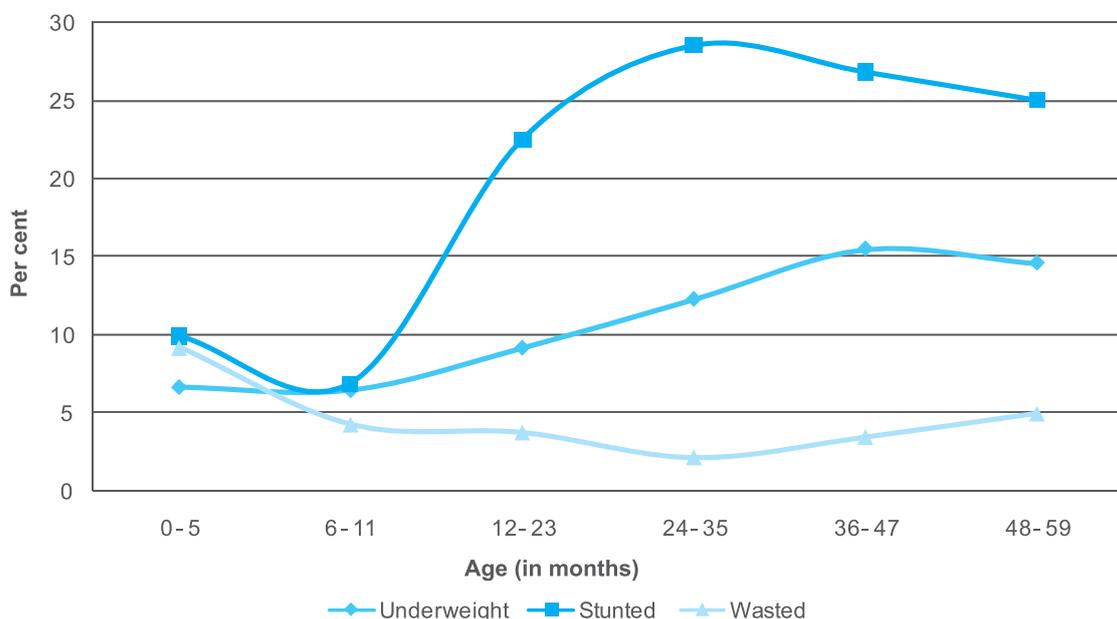
Children in the Northern Midland and Mountain areas and the Central Highlands are more likely to be underweight and stunted than other children. The prevalence rate for wasting among children does not differ much among regions, ranging from around 3.6 to 4.8 per cent. Children whose mothers have secondary or higher education are the least likely to be underweight and stunted compared to children of mothers with no education. Boys appear to be slightly more likely to be underweight, stunted, and wasted than girls. The age pattern shows that a lower percentage of children aged 0–11 months are undernourished according to all three indices in comparison to older children (Figure NU.1). This pattern is

expected and is related to the age at which many children are weaned from breastfeeding and are exposed to contamination in water, food, and environment.

Overweight is one of the concerns of Viet Nam's Strategy against Malnutrition. Overweight is rapidly increasing in developing countries due to inappropriate diet for children. In MICS 2011, the overweight prevalence is 4.4 per cent. The overweight prevalence is highest among children living in the South East (10.6 per cent) and lowest among children living in the Red River Delta (2.5 per cent). The prevalence rate in urban areas is almost three times greater than in rural areas (8 per cent versus 3.1 per cent); and progressively increases with household living standards, with 1.6 per cent of children in the poorest households being overweight, compared to 8.9 per cent in the richest households. The overweight prevalence is highest among children aged 12–23 months (6.3 per cent) in comparison with other age groups.

Breastfeeding and 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 and is unsafe if clean water is not readily available.

WHO and UNICEF have the following feeding recommendations:

- Exclusive breastfeeding for the first six months;

- Continued breastfeeding for two years or more;

- Safe, appropriate and adequate complementary foods beginning at 6 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.

Indicators related to recommended child feeding practices are as follows:

- Early initiation of breastfeeding (within one hour of birth);

- Exclusive breastfeeding rate (< 6 months);

- Predominant breastfeeding rate (< 6 months);

- Continued breastfeeding rate (at 1 year and at 2 years);

- Duration of breastfeeding;

- Age-appropriate breastfeeding (0–23 months);

- Introduction of solid, semi-solid and soft foods (6–8 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: 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 one day of birth, and percentage who received a prelacteal feed, Viet Nam, 2011

		Percentage who were first breastfed:		Percentage who received a prelacteal feed	Number of last-born children in the two years preceding the survey
	Percentage ever breastfed[1]	Within one hour of birth[2]	Within one day of birth		
Region					
Red River Delta	97.3	33.1	80.6	76	294
Northern Midland and Mountain areas	99.4	57	88.7	44	285
North Central area and Central Coastal area	99	42.7	81.6	49.8	287
Central Highlands	98.5	37	81.2	51.5	92
South East	95.9	28.9	67.5	72	214
Mekong River Delta	97.7	33.3	77.3	74.5	210
Area					
Urban	97.9	30.3	72.2	73.7	402
Rural	98.1	43.5	83.2	56.4	980
Months since birth					
0-11	98.2	35.4	78.0	64.0	636
12-23	97.9	43.3	81.7	59.3	747
Assistance at delivery[§]					
Skilled attendant	98.2	37.9	79.6	64.4	1284
Traditional birth attendant	(100)	(67.7)	(92.5)	(25.7)	28
Others	(100)	(70.6)	(92.5)	(23.0)	42
Place of delivery[§§]					
Public sector health facility	98.4	37.8	79.7	65	1220
Private sector health facility	92.7	37.8	75.7	56.5	57
Home	100	64.2	88.6	23.8	102
Mother's education					
None	97.7	55.9	89.8	33.9	64
Primary	98	38.5	77.8	58	203
Lower Secondary	98.8	41.4	82.7	56.1	523
Upper Secondary	97.1	36.6	79.7	63.2	296
Tertiary	97.7	36.8	74.7	77.7	295
Wealth index quintile					
Poorest	98.8	51.9	86.5	39.8	300
Second	99	46	86.3	49.8	263
Middle	98.8	35.8	79.5	63.7	251
Fourth	97.4	31.4	76.6	75.4	270
Richest	96.3	32.5	71.3	79.1	299
Ethnicity of household head					
Kinh/Hoa	97.8	36.7	78.7	65.7	1158
Ethnic Minorities	99.2	54.7	86.9	39.6	225
Total	98	39.7	80	61.5	1383

[1] **MICS indicator 2.4**

[2] **MICS indicator 2.5**

[§] This excludes 28 missing cases of assistance at delivery

[§§] This excludes 4 missing cases of place of delivery

Note:
Figures shown in parenthesis are based on denominators of 25-49 un-weighted cases

Table NU.2 presents the proportion of children born in the last two years who were ever breastfed, those who were first breastfed within one hour and one day of birth, and those

who received a prelacteal feed. Breastfeeding is a very important step in the management of lactation and the establishment of a physical and emotional relationship between the baby and the mother. However, only 39.7 per cent of babies are breastfed for the first time within one hour of birth, although 80 per cent of newborns in Viet Nam start breastfeeding within one day of birth. The percentage of children ever breastfed is quite high, at 98 per cent. Some 61.5 per cent of children received a prelacteal feed in the first three days of life. With an overall high percentage of children ever breastfed, virtually no disparities are noticed across any background variable. Meanwhile, place of delivery, attendance at delivery, mother's education and wealth quintile are the strongest determinants for whether a child receives prelacteal feeding or not. It is interesting to observe that approximately 24 per cent of children born at home received a prelacteal feeding compared to 65 per cent of children born in a government health facility.

Surprising results by background characteristics are observed for early initiation of breastfeeding (within one hour of birth). Children born at home are almost twice as likely to be breastfed within one hour of birth compared to those delivered in a public or private health facility (64.2 versus 37.8 per cent). Also, the higher the mother's education and the wealthier the household the less likely the child will be breastfed within one hour of birth. Regional differences are also observed, with the Northern Midland and Mountain area indicating the highest percentage of breastfeeding within one hour of birth (57 per cent) and the South East indicating the lowest (28.9 per cent). The percentage is also higher in rural areas compared to urban areas, at 43.5 and 30.3 per cent, respectively.

In Table NU.3, the breastfeeding status is based on the mother's/caregiver's report 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 possibly 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.

Table NU.3: Breastfeeding

Percentage of living children according to breastfeeding status at selected age groups, Viet Nam, 2011

	Children aged 0-5 months			Children aged 12-15 months		Children aged 20-23 months	
	Percentage exclusively breastfed[1]	Percentage predominantly breastfed[2]	Number of children	Percentage breastfed (Continued breastfeeding at 1 year)[3]	Number of children	Percentage breastfed (Continued breastfeeding at 2 years)[4]	Number of children
Sex							
Male	15.1	43.3	160	74.5	145	20.9	117
Female	18.8	43.3	167	73.3	128	18	122
Region							
Red River Delta	15.3	35.8	83	72.2	51	(10.5)	48
Northern Midland and Mountain areas	37.6	54.9	74	84.5	66	(34.6)	43
North Central area and Central Coastal area	14	49.5	66	78.9	59	(21.5)	47
Central Highlands	*	*	18	*	18	*	18
South East	(7.3)	(33.3)	41	(59.8)	40	(7.4)	47
Mekong River Delta	(1.7)	(35.5)	45	(57.1)	39	(19.9)	35
Area							
Urban	12.8	33.1	83	62.6	95	16.8	81
Rural	18.4	46.8	244	79.9	178	20.8	158
Mother's education							
None	*	*	14	*	12	*	13
Primary	15.3	48	57	(76.1)	38	(15.5)	28
Lower Secondary	16.2	42.2	101	71	101	22	96
Upper Secondary	18.1	49.2	81	77.8	62	(26.4)	40
Tertiary	14.3	31.5	75	72.4	60	10.9	61
Wealth index quintile							
Poorest	28	59.8	79	72	60	(38.6)	44
Second	17.3	54.6	61	82.7	46	(21.7)	39
Middle	18.4	37.4	65	82.8	56	(16.9)	40
Fourth	6.8	40.4	60	(72.4)	48	21.7	52
Richest	11.2	20.5	63	62.4	62	4.3	63
Ethnicity of household head							
Kinh/Hoa	14	39.1	273	71.5	233	13.4	203
Ethnic Minorities	31.9	64.6	54	(87.8)	40	(54)	35
Total	17	43.3	327	73.9	273	19.4	238

[1] MICS indicator 2.6; [2] MICS indicator 2.9

[3] MICS indicator 2.7; [4] MICS indicator 2.8

Note:
Figures denoted by an asterisk are based on denominators of 24 un-weighted cases and less
Figures shown in parenthesis are based on denominators of 25-49 un-weighted cases

Only 17 per cent of children in Viet Nam aged less than six months are exclusively breastfed. This represents a low percentage. By the age of 12–15 months, 73.9 per cent of children are breastfed and by the age of 20–23 months, 19.4 per cent. Almost one in every two children aged 0–5 months (43.3 per cent) is predominantly breastfed.[15] Differences in exclusive breastfeeding between girls and boys are minimal, however, considerable variations are observed by living standards, ethnicity of the household

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[15] Received breast milk and certain fluids (water and water-based drinks like sugar water, fruit juice, gripe water, oral rehydration solution, tea or herbal infusions), but did not receive anything else (in particular, non-human milk and food-based fluids)

head and region. For example, children aged 0-5 months in ethnic minority households are twice as likely to be exclusively breastfed compared to their peers in Kinh/Hoa households (31.9 per cent versus 14 per cent). A child living in the Northern Midland and Mountain areas is twice as likely to be exclusively breastfed (37.6 per cent) than a child living in the North Central area and Central Coastal area (14 per cent) or the Red River Delta (15.3 per cent). Similarly, 28 per cent of children in the poorest households are exclusively breastfed, compared to 11.2 per cent in the richest households.

Table NU.3a. Feeding patterns by age								
Percent distribution of children aged 0-23 months by feeding pattern, Viet Nam, 2011								
	Feeding pattern							
		Predominant breastfeeding						
	Exclusively breastfed	Breastfed and plain water only	Breastfed and non-milk liquids	Breastfed and other milk / formula	Breastfed and other foods	Not breastfed	Total	Number of children
Age (months)								
0-1	27.2	23.8	3.3	44.3	0	1.4	100	95
2-3	21.6	25.7	6.6	39.1	3.5	3.5	100	119
4-5	3.7	17.7	16.8	39.9	19.0	2.9	100	113
6-7	1.9	7.0	17.1	27.3	38.3	8.3	100	85
8-9	0.3	0.5	17.6	17.5	48.9	15.3	100	140
10-11	0	3.0	13.2	21.0	50.6	12.2	100	116
12-13	0	0.7	5.3	14.6	59.0	20.3	100	125
14-15	0	0.7	6.1	16.8	45.4	31.0	100	147
16-17	0	0	1.7	7.0	42.4	49.0	100	142
18-19	0	0.9	2.3	3.9	20.3	72.5	100	106
20-21	0	0	1.9	0.4	18.0	79.8	100	108
22-23	0	2.4	0	0	16.4	81.2	100	130

Figure NU.2 shows the detailed pattern of breastfeeding by the child's age in months, up to the age of 2. Even at the earliest ages, the majority of children receive liquids or foods other than breast milk. Only about 20 per cent of children receive breast milk through the end of the second year of life. By the end of the first six months, the percentage of children exclusively breastfed is already below 3 per cent.

Figure NU. 2. Percentage distribution of children under age 2 across feeding patterns by age group, Viet Nam, 2011
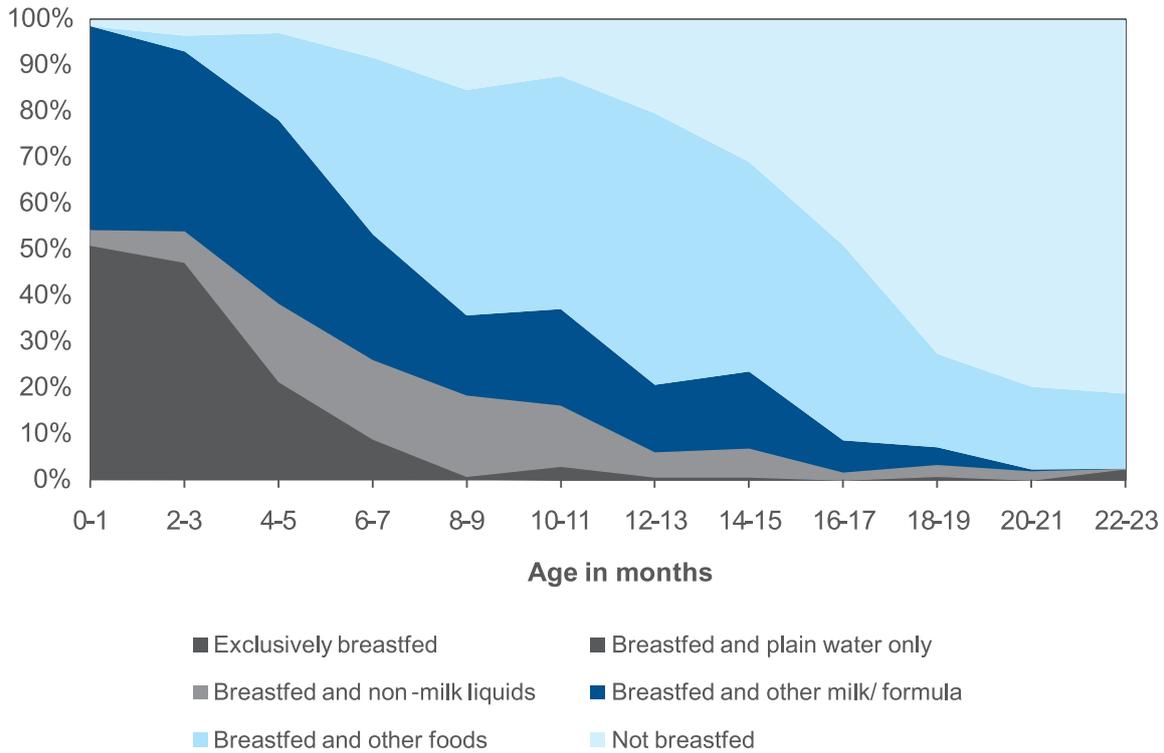
Table NU.4 shows the median duration of breastfeeding by selected background characteristics. Among children under age 3, the median duration is 16.7 months for any breastfeeding, 0.5 months for exclusive breastfeeding, and 1.4 months for predominant breastfeeding.

The differences in median duration of any breastfeeding and exclusive breastfeeding are not large across gender or area. More notable differences are observed according to the ethnicity of the household heads, especially for the median duration of exclusive breastfeeding. The children in ethnic minority households are likely to be breastfed three times longer, on average about 1.8 months, compared to 0.5 months median duration of exclusive breastfeeding of children who live in households headed by a Kinh/Hoa. The median duration of predominantly breastfed children indicates some, yet no substantial, differences by all background variables.

Table NU.4: Duration of breastfeeding

Median duration of any breastfeeding, exclusive breastfeeding, and predominant breastfeeding among children aged 0-35 months, Viet Nam, 2011

	Median duration (in months) of			
	Any breastfeeding[1]	Exclusive breastfeeding	Predominant breastfeeding	Number of children aged 0-35 months
Sex				
Male	16.6	0.5	1.8	1143
Female	16.8	0.5	0.7	1076
Region				
Red River Delta	17.1	0.5	0.7	496
Northern Midland and Mountain areas	17	1.3	3	440
North Central area and Central Coastal area	17.8	0.4	2.3	423
Central Highlands	19.5	0.5	2.4	144
South East	14.8	0.4	1.1	339
Mekong River Delta	14.4	0	0.4	376
Area				
Urban	16.3	0.5	0.6	626
Rural	16.8	0.5	2.1	1594
Mother's education				
None	18.2	0.5	4.5	110
Primary	16.3	0.5	1	367
Lower Secondary	16.6	0.6	0.7	873
Upper Secondary	17.4	0.5	2.4	428
Tertiary	15.8	0.5	0.7	442
Wealth index quintile				
Poorest	16.9	1.6	4	495
Second	17	0.4	3.3	402
Middle	16.6	0.4	0.7	427
Fourth	17.3	0.5	1.8	434
Richest	15.6	0.5	0.5	462
Ethnicity of household head				
Kinh/Hoa	16.5	0.5	0.7	1869
Ethnic Minorities	20.7	1.8	4.3	351
Median	16.7	0.5	1.4	2219
Mean for all children (0-35 months)	16.7	1	2.9	2219

[1] **MICS indicator 2.10**

Information about the adequacy of infant feeding of children under 24 months is provided in Table NU.5. Different criteria for adequate feeding are used depending on the age of the child. For infants aged 0–5 months, exclusive breastfeeding is considered as adequate feeding, while infants aged 6–23 months are considered to be adequately fed if they are receiving breast milk and solid, semi-solid or soft food. Age appropriate feeding shows disparities by area, living standards and ethnicity of the household head for both 0–5 and 6–23 month old children. Taking the ethnicity of the household head as an example, 31.9 per cent of 0–5 month old children in ethnic minority households are appropriately fed for their age compared to 14.0 per cent of children in Kinh/Hoa households. Regional differences are also observed, with the South East indicating a comparatively low percentage of adequate feeding for both 0–5 month old and 6–23 month old children, at 7.3 and 24.2 per cent respectively. As a result of these feeding patterns, overall only 38.5 per cent of children aged 6–23 months are being adequately fed. Taking the two age groups together, age appropriate feeding of children below 24 months is 33.5 per cent in Viet Nam. The widest range is observed across regions, with the Northern Midland and Mountain areas indicating the highest percentage of under 24 month children appropriately fed (42.5 per cent) and the South East the lowest (21 per cent).

Table NU.5: Age-appropriate breastfeeding

Percentage of children age 0-23 months who were appropriately breastfed during the previous day, Viet Nam, 2011

	Children age 0-5 months		Children age 6-23 months		Children age 0-23 months	
	Percentage exclusively breastfed[1]	0Number of children	Percentage currently breastfeeding and receiving solid, semi-solid or soft foods	Number of children	Percentage appropriately breastfed[2]	Number of children
Sex						
Male	15.1	160	38	539	32.8	699
Female	18.8	167	38.9	561	34.3	728
Region						
Red River Delta	15.3	83	42.3	221	34.9	304
Northern Midland and Mountain areas	37.6	74	44.1	219	42.5	293
North Central area and Central Coastal area	14	66	38.4	224	32.9	290
Central Highlands	*	18	37	76	32.2	93
South East	(7.3)	41	24.2	176	21	218
Mekong River Delta	(1.7)	45	41.5	184	33.6	229
Area						
Urban	12.8	83	32.5	325	28.5	408
Rural	18.4	244	41	775	35.6	1019
Mother's education						
None	*	14	37.3	53	37.3	67
Primary	15.3	57	36.7	167	31.3	224
Lower Secondary	16.2	101	37.5	445	33.6	545
Upper Secondary	18.1	81	45	218	37.7	299
Tertiary	14.3	75	35.6	217	30.1	291
Wealth index quintile						
Poorest	28	79	43.5	234	39.6	313
Second	17.3	61	40.9	210	35.6	271
Middle	18.4	65	36.5	199	32.1	264
Fourth	6.8	60	40.4	212	33	272
Richest	11.2	63	31.5	244	27.3	307
Ethnicity of household head						
Kinh/Hoa	14	273	37	929	31.8	1202
Ethnic Minorities	31.9	54	46.4	171	42.9	225
Total	17	327	38.5	1100	33.5	1427

[1] **MICS indicator 2.6**

[2] **MICS indicator 2.14**

Note:
Figures denoted by an asterisk are based on denominators of 24 un-weighted cases and less
Figures shown in parenthesis are based on denominators of 25-49 un-weighted cases

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. Continued breastfeeding beyond six months should be accompanied by consumption of nutritionally adequate, safe and appropriate complementary foods that help meet nutritional requirements when breast milk is no longer sufficient. This requires that for breastfed children, two or more meals of solid, semi-solid or soft foods are needed if they are 6–8 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.

Overall, 50.4 per cent of infants aged 6–8 months received solid, semi-solid, or soft foods (Table NU.6). Among currently breastfeeding infants the percentage is 46. There are no noteworthy disparities by sex.

Table NU.6: Introduction of solid, semi-solid or soft foods				
Percentage of infants age 6-8 months who received solid, semi-solid or soft foods during the previous day, Viet Nam, 2011				
	All		**Currently breastfeeding**	
	Percent receiving solid, semi-solid or soft foods[1]	Number of children age 6-8 months	Percent receiving solid, semi-solid or soft foods	Number of children age 6-8 months
Sex				
Male	52	72	47	63
Female	49	79	45	68
Area				
Urban	(52.3)	37	(39.1)	25
Rural	49.8	114	47.6	106
Total	50.4	151	46	131

[1] **MICS indicator 2.12**

Note:
Figures shown in parenthesis are based on denominators of 25-49 un-weighted cases

Table NU.7 presents the proportion of children aged 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. The note at the bottom of Table NU.7 provides the definition of minimum number of times for different age groups.

Table NU.7: Minimum meal frequency

Percentage of children aged 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, Viet Nam, 2011

	Currently breastfeeding		Currently not breastfeeding			All	
	Percentage receiving solid, semi-solid and soft foods the minimum number of times§	Number of children aged 6-23 months	Percentage receiving at least 2 milk feeds[1]	Percentage receiving solid, semi-solid and soft foods or milk feeds 4 times or more	Number of children aged 6-23 months	Percentage with minimum meal frequency[2]	Number of children aged 6-23 months
Sex							
Male	46	316	82.9	82.8	223	61.2	539
Female	35.5	332	81.6	85.5	229	55.9	561
Age (months)							
6-8	41.1	131	*	*	20	47.9	151
9-11	33.1	167	*	*	23	39.7	190
12-17	39.3	274	85.7	85.8	141	55.1	415
18-23	61.1	75	77.9	82.4	269	77.7	344
Region							
Red River Delta	54.5	123	93.4	88.4	98	69.5	221
Northern Midland and Mountain areas	37.3	150	62.3	80.6	68	50.8	219
North Central area and Central Coastal area	37.9	147	69.1	77.9	77	51.7	224
Central Highlands	24.3	54	*	*	22	36.7	76
South East	37.5	75	98.6	94.3	101	70.1	176
Mekong River Delta	43.7	98	79	80.1	85	60.6	184
Area							
Urban	33.3	169	95.1	90.9	156	61	325
Rural	43.2	479	75.4	80.6	296	57.5	775
Mother's education							
None	(39.5)	36	*	*	17	42.1	53
Primary	43.1	95	64.9	73.4	72	56.2	167
Lower Secondary	36.2	272	83.3	83.7	172	54.6	445
Upper Secondary	49.8	138	89.6	88.1	81	63.9	218
Tertiary	38.3	107	95.7	94.7	110	66.9	217
Wealth index quintile							
Poorest	42.5	155	51.9	70.6	79	52	234
Second	44.8	137	72.1	74.8	73	55.2	210
Middle	33.5	118	84.5	81.9	81	53.2	199
Fourth	42.3	126	92.7	89.1	86	61.2	212
Richest	38.5	111	97.7	95.6	133	69.6	244
Ethnicity of household head							
Kinh/Hoa	40.9	523	85	85.5	407	60.4	929
Ethnic Minorities	39.3	125	(57.6)	(72.3)	45	48.1	171
Total	40.6	648	82.2	84.2	452	58.5	1100

[1] MICS indicator 2.15

[2] MICS indicator 2.13

§Among currently breastfeeding children aged 6-8 months, minimum meal frequency is defined as children who also received solid, semi-solid or soft foods 2 times or more. Among currently breastfeeding children aged 9-23 months, receipt of solid, semi-solid or soft foods at least 3 times constitutes minimum meal frequency. For non-breastfeeding children aged 6-23 months, minimum meal frequency is defined as children receiving solid, semi-solid or soft foods, and milk feeds, at least 4 times during the previous day.

Note:
Figures denoted by an asterisk are based on denominators of 24 un-weighted cases and less
Figures shown in parenthesis are based on denominators of 25-49 un-weighted cases

Among currently breastfeeding children aged 6–23 months, 40.6 per cent were receiving solid, semi-solid and soft foods the minimum number of times. This proportion was 10 per cent higher among males compared to females. In the age group 6–23 months the older children (18–23 months) who are currently breastfeeding are more likely to receive solid, semi-solid and soft foods the minimum number of times, compared to their younger peers. Among non-breastfeeding children, 84 per cent of the children were receiving solid, semi-solid and soft foods or milk feeds 4 times or more, and 82 per cent were receiving at least two milk feeds. Both indicators for non-breastfeeding children reveal disparities by mother's education and household living standards. For example, only one in two non-breastfeeding children are likely to receive at least two milk feeds if living in the poorest households, compared with virtually all children in the richest households. Among all children 6–23 months of age, 58.5 per cent received the minimum meal frequency. Differences are observed by all background characteristics, with the widest variations across regions. At 36.7 per cent, children from the Central Highlands are less likely to receive the minimum meal frequency compared to other regions, with the South East ranking highest, at 70.1 per cent.

The continued practice of bottle-feeding is a concern because of the possible contamination due to unsafe water and lack of hygiene in preparation. Table NU.8 shows that bottle-feeding is still prevalent in Viet Nam. Some 38.7 per cent of children aged 0–23 months are fed using a bottle with a nipple. Bottle feeding is more common among children living in urban areas, in richer households, and among children whose mother has higher education. Regional disparities are striking, with the percentage of children below 24 months fed with a bottle with a nipple being highest in the South East (68.2 per cent) and lowest in the Northern Midland and Mountain areas (18.6 per cent). It is also higher among children living in Kinh/Hoa households as opposed to ethnic minority households (43.4 and 13.4 per cent, respectively).

Table NU.8: Bottle feeding		
Percentage of children aged 0-23 months who were fed with a bottle with a nipple during the previous day, Viet Nam, 2011		
	Percentage of children aged 0-23 months fed with a bottle with a nipple[1]	Number of children aged 0-23 months
Sex		
Male	36.1	699
Female	41.2	728
Age (months)		
0-5	41.5	327
6-11	44.5	341
12-23	34.8	759
Region		
Red River Delta	33.8	304
Northern Midland and Mountain areas	18.6	293
North Central area and Central Coastal area	30.8	290
Central Highlands	30	93
South East	68.2	218
Mekong River Delta	56.2	229
Area		
Urban	53.3	408
Rural	32.8	1019
Mother's education		
None	15.8	67
Primary	32.9	224

Table NU.8: Bottle feeding

Percentage of children aged 0-23 months who were fed with a bottle with a nipple during the previous day, Viet Nam, 2011

	Percentage of children aged 0-23 months fed with a bottle with a nipple[1]	Number of children aged 0-23 months
Lower Secondary	35.4	545
Upper Secondary	42.4	299
Tertiary	50.8	291
Wealth index quintile		
Poorest	18	313
Second	28.4	271
Middle	42.5	264
Fourth	48.3	272
Richest	57.2	307
Ethnicity of household head		
Kinh/Hoa	43.4	1202
Ethnic Minorities	13.4	225
Total	38.7	1427

[1] **MICS indicator 2.11**

Salt Iodisation

Iodine Deficiency Disorders (IDD) are 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 impaired work performance.

The international goal is to achieve sustainable elimination of iodine deficiency by 2005. The monitoring indicator is the percentage of households consuming adequately iodised salt (>15 parts per million).

In Viet Nam, the Endocrinology Hospital (MOH) was established to carry out goitre control activities. Since the 1970s, Viet Nam has implemented programmes to provide iodised salt to mountainous residents. Results from the 1993 Census on Goitre Status conducted by the Endocrinology Hospital in cooperation with UNICEF and CEMUBAC (Belgium) revealed that 94 per cent of the Vietnamese population was at risk of iodine deficiency. Goitre prevalence among children was 22.4 per cent and the median urinary iodine level was 32 mcg/L. Because of these findings, at the end of 1994, the government of Viet Nam decided to provide iodised salt instead of normal salt throughout the country in order to fight against IDD. Based on criteria to assess IDD elimination (including the three indicators: prevalence of goitre among children under age 5; coverage of adequately iodised salt and median urinary iodine level), MoH announced that Viet Nam achieved the goal of eliminating IDD in 2005.

Table NU.9: Iodised salt consumption								
Percentage distribution of households by consumption of iodised salt, Viet Nam, 2011								
	Percentage of households in which salt was tested	Number of households	Percentage of households with					Number of households in which salt was tested or with no salt
			Salt test result				Total	
			No salt	Not iodised 0 ppm	>0 and <15 ppm	15+ ppm[1]		
Region								
Red River Delta	97.8	2601	1.7	57	13.4	27.8	100	2587
Northern Midland and Mountain areas	98.9	1836	0.9	38	21.1	40	100	1832
North Central area and Central Coastal area	97.5	2522	2.2	30.6	17	50.2	100	2515
Central Highlands	98.8	604	0.9	3.3	7.8	88.1	100	602
South East	95	1873	4.1	15.9	23.4	56.5	100	1855
Mekong River Delta	95.2	2178	3.7	45.6	8.3	42.4	100	2154
Area								
Urban	96.2	3454	3.2	34.8	17.6	44.4	100	3431
Rural	97.4	8160	2.1	37.5	15	45.4	100	8114
Wealth index quintile								
Poorest	97.5	2329	2	33.6	16.8	47.6	100	2316
Second	97.6	2368	1.7	41.6	16.3	40.5	100	2350
Middle	96.7	2406	3	38.7	14.4	44	100	2398
Fourth	96	2326	3.4	34.6	14.7	47.4	100	2310
Richest	97.4	2186	2	34.9	16.8	46.3	100	2171
Total	97	11614	2.4	36.7	15.8	45.1	100	11545
[1] MICS indicator 2.16								

In about 97 per cent of households, salt used for cooking was tested for iodine content by using salt test kits and testing for the presence of potassium iodide content. Table NU.9 shows that in a very small proportion of households (2.4 per cent), there was no salt available. In 45.1 per cent of households, salt was found to contain 15 or more parts per million (ppm) of iodine; and in 15.8 per cent of households salt was found to have iodine content below 15 ppm. Some 36.7 per cent of households were found to use salt with no iodine. Use of iodised salt is lowest in the Red River Delta (41.2 per cent any iodine, 27.8 per cent with 15 or more ppm) and highest in the Central Highlands (95.9 per cent any iodine, 88.1 per cent with 15 or more ppm). Use of iodised salt and use of adequately iodised salt do not differ substantially between urban and rural areas, standing at 44.4 per cent (15 or more ppm) and 17.6 per cent (positive amounts but <15ppm) for urban areas and 45.4 per cent (15 or more ppm) and 15 per cent (positive amounts but <15ppm) for rural areas, respectively (Figure NU.3).

Figure NU.3 Percentage of households consuming adequately iodised salt by region, Viet Nam, 2011
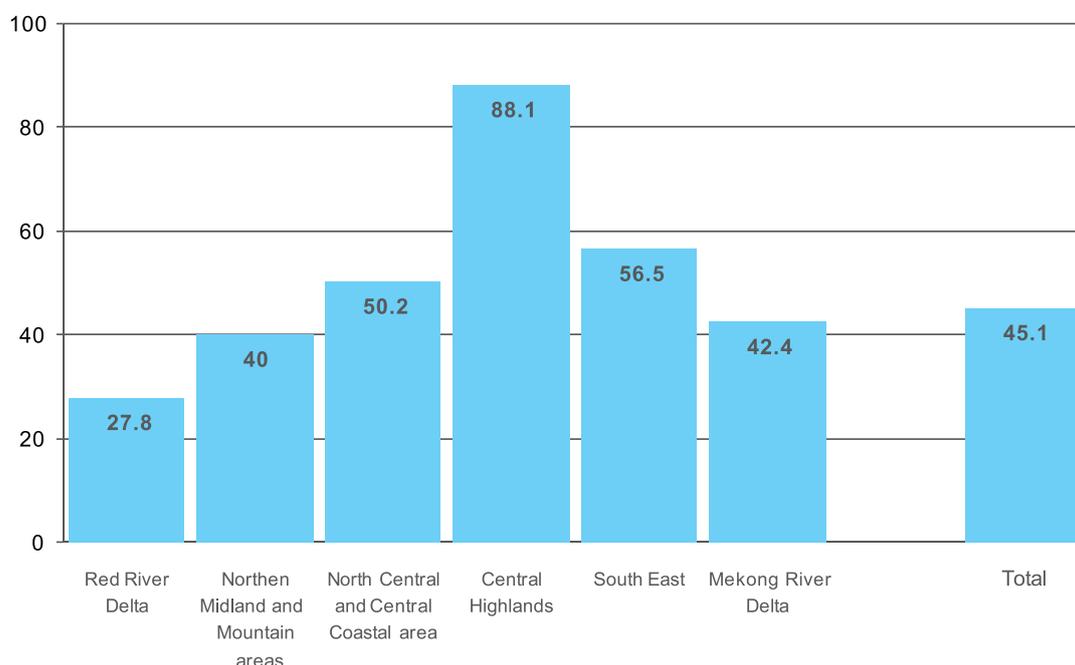
Children's Vitamin A Supplementation

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, red palm oil 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 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 Millennium Development Goal: 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 to all children between the ages of 6–59 months living in affected areas. Providing young children with two high-dose vitamin A capsules a year is a safe, cost-effective, 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 vitamin A, 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.

In 1987, the Government of Viet Nam approved the National Programme for Prevention and Control of Vitamin A Deficiency. This programme was piloted in some districts and was then expanded to the entire country in 1993. Based on UNICEF/WHO guidelines, the Viet Nam Ministry of Health recommends that children aged 6–11 months be given one high dose Vitamin A capsule per year and children aged 12–59 months be given a vitamin A capsule every 6 months. Vitamin A is integrated with immunization services and is given when the child has contact with these services after six months of age. The Vitamin A supplementation campaigns in Viet Nam are organised twice per year in June and December. It is also recommended that mothers take a vitamin A supplement within eight weeks of giving birth due to increased Vitamin A requirements during pregnancy and lactation It is noted that the Vietnamese Vitamin A Supplementation Programme targets children aged 6–36 (and not 6–59) months nation-wide, and that children up to 59 months are only targeted in selected provinces.

Within the six months prior to MICS 2011 data collection, 83.4 per cent of children aged 6–59 months received a high dose Vitamin A supplement (Table NU.10). Vitamin A supplementation coverage is lower in the South East (77.6 per cent) than in other regions (for example 88.2 per cent in the Red River Delta).This percentage is quite low when the mother has no education, at only 60.9 per cent. There are no large differences by sex, area and ethnicity.

Table NU.10: Children's vitamin A supplementation

Percentage distribution of children aged 6-59 months by receipt of a high dose vitamin A supplement in the last 6 months, Viet Nam, 2011

	Percentage who received Vitamin A according to:		Percentage of children who received Vitamin A during the last 6 months[1]	Number of children aged 6-59 months
	Child health book/card/ vaccination card	Mother's report		
Sex				
Male	3.3	82.9	82.9	1709
Female	5.1	83.8	83.9	1642
Region				
Red River Delta	6.5	88.2	88.2	715
Northern Midland and Mountain areas	2.4	84.9	84.9	633
North Central area and Central Coastal area	1.2	84	84	653
Central Highlands	5.7	85.8	85.8	216
South East	4.4	77.6	77.6	530
Mekong River Delta	5.5	79.5	79.6	605
Area				
Urban	7.2	84.4	84.4	930
Rural	3	83	83	2421
Age (months)				
6-11	5.9	72.5	72.5	341
12-23	7.4	90.9	91	759
24-35	5.5	88.9	88.9	792
36-47	1.6	83.4	83.4	764
48-59	1	74.2	74.2	695
Mother's education				
None	2	60.9	60.9	193
Primary	1.7	76.9	76.9	601
Lower Secondary	2.5	85.6	85.7	1378
Upper Secondary	6.1	85.8	85.8	589
Tertiary	9.4	89.7	89.7	589
Wealth index quintile				
Poorest	2	76	76	752
Second	3.1	81.6	81.6	613
Middle	3.1	86.3	86.4	636
Fourth	3.9	88.3	88.3	689
Richest	8.8	85.4	85.4	662
Ethnicity of household head				
Kinh/Hoa	4.6	84.5	84.5	2870
Ethnic Minorities	1.5	76.4	76.4	481
Total	4.1	83.4	83.4	3351

[1] **MICS indicator 2.17**

The age pattern of Vitamin A supplementation shows that the highest proportion of children are missing the first high dose of supplementation at the age 6–11 months, and the last dose at the age of 48–59 months, with the doses in between showing a higher percentage. Only 72.5 per cent of children receive the first dose and 74.2 per cent the last dose, with percentages in between ranging from 83.4 per cent for children aged 36–47 months to 91 per cent for those aged 12–23 months.

The mother's level of education is also positively correlated with the likelihood of a child receiving Vitamin A supplementation, increasing from 60.9 per cent among children whose mothers have no education to 76.9 per cent of children whose mothers have primary

education and 85.7 per cent of children whose mothers have lower secondary education. Disparities are also observed by household living standards, with 76 per cent of children in the poorest households receiving Vitamin A during the 6 months preceding the survey, compared with 85.4 per cent in the richest households.

Low Birth Weight

Weight at birth is a good indicator reflecting a mother's health and nutritional status but also a good indicator of the newborn's chances for survival, growth, long-term health and psychosocial development. Low birth weight (less than 2500 grams) carries with it 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 the 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 substantially 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.

One of the major challenges in measuring the incidence of low birth weight is the fact that more than half of infants in the developing world are not weighed. In the past, most estimates of low birth weight for developing countries were based on data compiled from health facilities. However, these estimates are biased for most developing countries because the majority of newborns are not delivered in facilities, and those who are represent only a selected sample of all births.

Because many infants are not weighed at birth and those who are weighed may be a biased sample of all births, the reported birth weights usually cannot be used to estimate the prevalence of low birth weight among all children. Therefore, the percentage of births weighing below 2500 grams is estimated from two items in the questionnaire: the mother's assessment of the child's **size** at birth (i.e., very small, smaller than average, average, larger than average, very large) and the mother's recall of the child's **weight** or the weight as recorded on a health card if the child was weighed at birth[16].

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[16] For a detailed description of the methodology, see JT Boerma, KI Weinstein, SO Rutstein and AE Sommerfelt, 1996. "Data on birth weight in developing countries: can surveys help?" in *Bulletin of the World Health Organization.* 74(2): 209–216.

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 2500 grams at birth and percentage of live births weighed at birth, Viet Nam, 2011

	Percent of live births:		
	Below 2500 grams[1]	Weighed at birth[2]	Number of live births in the last 2 years
Region			
Red River Delta	4.4	99.2	294
Northern Midland and Mountain areas	5.9	78.1	285
North Central area and Central Coastal area	4.3	96.6	287
Central Highlands	6.5	79.6	92
South East	5.5	100	214
Mekong River Delta	5.3	100	210
Area			
Urban	5.2	98.4	402
Rural	5.1	91.1	980
Mother's education			
None	8.4	46.5	64
Primary	6.5	87.5	203
Lower Secondary	4.9	95.9	523
Upper Secondary	5.4	97.1	296
Tertiary	3.6	98.9	295
Wealth index quintile			
Poorest	5.4	75.1	300
Second	5.5	97	263
Middle	5.1	97.9	251
Fourth	5.3	98.8	270
Richest	4.4	99.2	299
Ethnicity of household head			
Kinh/Hoa	5	98.6	1158
Ethnic Minorities	6	65.8	225
Total	5.1	93.2	1383

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

Overall, 93.2 per cent of children are weighed at birth and approximately 5.1 per cent are estimated to weigh less than 2500 grams at birth (Table NU.11). There was some variation by region and mother's education (Figure NU.4). The percentage of low birth weight does not vary much by urban and rural areas.

Figure NU.4 Percentage of infants weighing less than 2500 grams at birth by region, Viet Nam, 2011
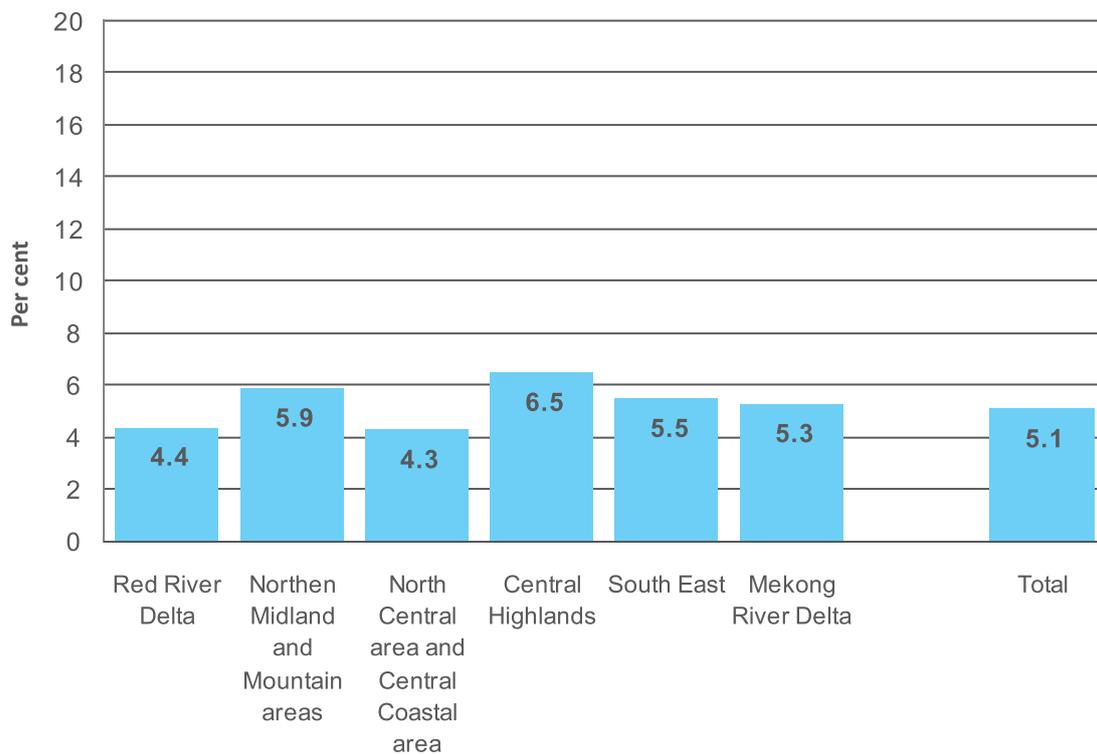
Immunization

The Millennium Development Goal (MDG) 4 is to reduce child mortality by two thirds between 1990 and 2015. Immunization plays a key part in this goal. It has 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. One of the World Fit for Children goals is to ensure full immunization of children under 1 year of age at 90 per cent nationally, with at least 80 per cent coverage in every district or equivalent administrative unit.

According to the Viet Nam Ministry of Health (MoH) guidelines, a child should receive a BCG vaccination to protect against tuberculosis; a birth dose of hepatitis B vaccine, three doses of DPT to protect against diphtheria, pertussis, and tetanus; three doses of Hepatitis B vaccine; three doses of polio vaccine, and a measles vaccination by the age of 12 months. In June 2010 the new Pentavalent vaccine was introduced in Viet Nam, which combines DPT, Hepatitis B and Hib (Haemophilusinfluenza type B) antigens. Administered in three doses, the Pentavalent vaccine replaced the previously separate DPT and Hepatitis B vaccines. To accommodate the registration of the Pentavalent vaccine a new immunization handbook was issued.

In Viet Nam, a child is considered to be fully immunized if he/she received seven antigens, notably BCG, DPT (1–3), Polio (1–3), measles and Hepatitis B (1–3). Hepatitis B at birth is not included in the full immunization indicator.

In the Viet Nam MICS 2011, mothers were asked to provide vaccination cards for children under the age of 5 years, from which interviewers copied vaccination information onto the MICS questionnaire. The questionnaire was customised to allow the registration of immunizations for children who received single as well as those who received combined vaccines.

Table CH.1: Vaccinations in the first year of life				
Percentage of children aged 12–23 months immunized against childhood diseases at any time before the survey and before the first birthday, Viet Nam, 2011				
	Vaccinated at any time before the survey according to			Vaccinated by 12 months of age
	Immunization card	Mother's report	Either	
BCG[1]	50.5	45	95.5	95.0
Polio 1	47.3	44.3	91.7	91.2
Polio 2	45.9	38.2	84.1	83.7
Polio 3[2]	44.9	23.8	68.7	68.1
DPT 1	49.6	44.4	94.1	93.5
DPT 2	48.6	38.2	86.7	86.2
DPT 3[3]	47	27.3	74.3	73.0
Measles[4]	46.9	45.3	92.2	84.2
Hep B at birth	20.3	27.9	48.2	48.2
Hep B 1	49.5	41.1	90.6	89.6
Hep B 2	48.8	30.1	78.9	77.9
Hep B 3[5]	39.8	16	55.8	53.3
All vaccinations[§]	30.9	9.2	40.1	31.3
No vaccinations	0.3	1.9	2.2	2.2
Number of children aged 12-23 months	759	759	759	759
[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** [§]This excludes Hepatitis B at birth				

Overall, 51.6 per cent of children had immunization cards (Table CH.2). If the child did not have a card, the mother was asked to recall whether or not the child had received each of the vaccinations and, for DPT, Hepatitis B and Polio, how many times. The percentage of children aged 12–23 months who received each of the vaccinations is shown in Table CH.1. The denominator for the table is comprised of children aged 12–23 months so that only children who are old enough to be fully vaccinated are counted. In the top panel, the numerator includes all children who were vaccinated at any time before the survey according to the immunization card, the mother's report and either source. In the last column, only those who were vaccinated before their first birthday, are included. For children without immunization cards, the proportion of vaccinations given before the first birthday is assumed to be the same as for children with immunization cards.

Some 95 per cent of children aged 12–23 months received a BCG vaccination by the age of 12 months and the first dose of DPT was given to 93.5 per cent. The percentage declines for subsequent doses of DPT to 86.2 per cent for the second dose, and 73 per cent for the third dose (Figure CH.1). Similarly, 91.2 per cent of children received the first dose of the Polio vaccine by the age of 12 months and this declines to 68.1 per cent for the third dose. The decline from the first dose to the third is steeper for the Hepatitis B vaccine, from almost 90 per cent to about 53 per cent. The measles vaccine coverage by 12 months is lower than for BCG, DPT1, DPT2, Hepatitis B1 and Polio1, at 84.2 per cent.

Figure CH.1: Percentage of children aged 12-23 months who received basic vaccinations by 12 months, Viet Nam, 2011
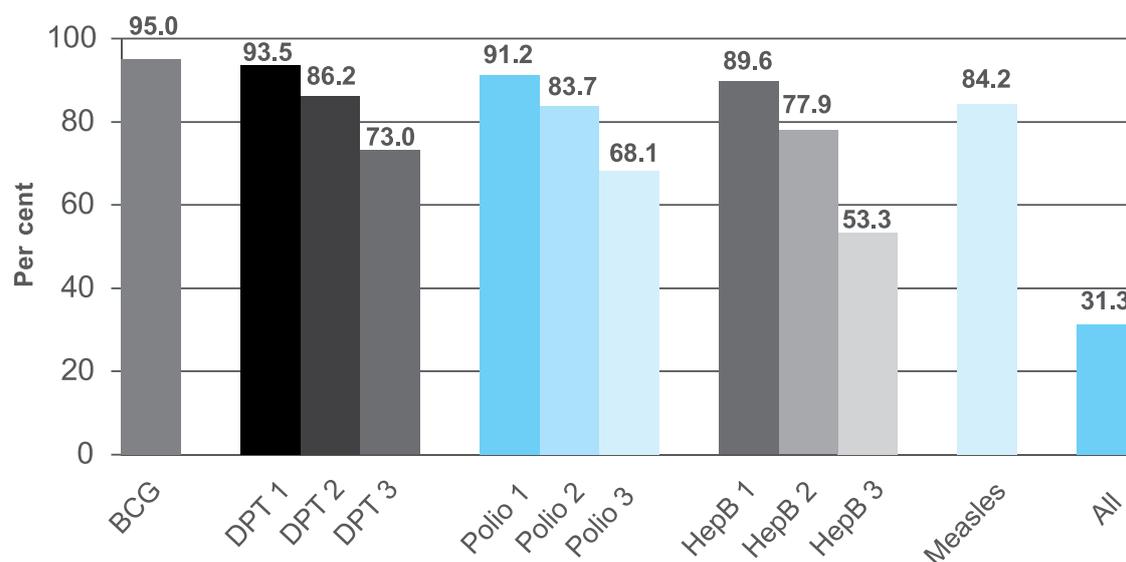
Table CH.2 shows the vaccination coverage rates among children aged 12–23 months by background characteristics. The figures indicate children receiving the vaccinations at any time up to the date of the survey, and are based on information from both the immunization cards and mothers'/caregivers' reports. Differentials are observed by all background characteristics, but the widest ranges are noticed by mother's education and ethnicity of the household head. For example, the vaccine with the highest national coverage, BCG, shows an almost 15 percentage point difference between children living in Kinh/ Hoa households and children living in ethnic minority households. Children whose mother has a higher education level are more likely to be vaccinated than those whose mother has lower or no education. In fact, the majority of children who received no vaccination (23.5 per cent) have uneducated mothers. Only 18.5 per cent of children whose mothers are uneducated received a Hepatitis B vaccination at birth compared to 62.5 per cent of children whose mothers have tertiary education. Household living standards also seem to be a factor. Some 30.4 per cent of children living in the poorest households received all recommended vaccinations, which is 20 percentage points lower than among their peers in the richest households. The North Central area and Central Coastal area is the region with the lowest percentage of children who received all vaccinations, only 28.2 per cent. This region indicates comparatively lower levels of immunization for the third dose of Hepatitis B, DPT and especially Polio, and compares to 53.6 per cent in the South East. As expected, higher immunization rates are observed in urban areas.

The percentage of children whose immunization cards were seen by the interviewers declines as mothers' education level and wealth quintile decline, and is higher in urban areas than in rural areas. The details in the data quality table DQ.10 (see Appendix D) show a notably lower percentage of immunization cards seen for older children. This may indicate poor vaccination record keeping in households.

Table CH.2: Vaccinations by background characteristics

Percentage of children aged 12-23 months currently vaccinated against childhood diseases, Viet Nam, 2011

	Percentage of children who received:														Percentage with vaccination card seen	Number of children age 12-23 months
	BCG	Polio 1	Polio 2	Polio 3	DPT 1	DPT 2	DPT 3	Measles	HepB at birth	HepB1	HepB2	HepB3	None	All§		
Sex																
Male	95.1	91.1	82.7	65.7	94.5	86.2	72.5	92.8	46.7	91.3	77.9	54.7	2.2	38.4	51	391
Female	95.9	92.2	85.6	72	93.5	87.2	76.2	91.6	49.7	89.9	80	57	2.2	41.9	52.3	368
Region																
Red River Delta	98.4	95.5	89.3	72.6	100	95.9	82.3	95.8	64.9	98.3	84	60.7	0	50.3	43.3	156
Northern Midland and Mountain areas	92	88.2	77.7	63.5	91	80	67.9	90.6	26.7	91.4	78.4	53.1	3.8	37.9	47.1	154
North Central area and Central Coastal area	96.1	93.2	83	61.9	91.9	79.4	65.1	94.1	51.3	82.1	66.9	46.1	1.2	28.2	50.4	160
Central Highlands	91.3	90.8	82	63.2	89.3	81.8	63.4	87.9	39.6	84.1	77.1	44.1	5.4	36.2	42.4	54
South East	98.8	88.3	84.4	78.7	99.5	97	89	96.2	49.1	96.7	93.6	67.9	0.5	53.6	71	121
Mekong River Delta	93.7	92.7	87.8	72.1	89.2	84.6	73.8	84.6	52.4	87.9	74.9	59.2	4.8	33.3	54.6	114
Area																
Urban	97.5	93.6	87.1	77	97.8	93.1	82.3	95.2	58.3	93.9	88.4	65	0.6	52	63.3	232
Rural	94.6	90.8	82.8	65.1	92.4	83.9	70.7	90.9	43.7	89.2	74.7	51.7	2.9	34.8	46.5	527
Mother's education																
None	(70.9)	(61.9)	(50.9)	(27.9)	(62.8)	(50.3)	(35.3)	(64.8)	(18.5)	(59.6)	(48.)	(31.6)	(23.5)	(14.2)	(17.3)	33
Primary	92.2	89	76.8	60	89.4	78.5	66.2	85.4	35.6	87.3	76.4	53.5	5.2	37.2	47.8	113
Lower Secondary	96.5	93.8	87.2	70.4	95.1	87.7	75.5	95.2	46.2	90.3	78.9	54.6	0.9	37.9	50.3	300
Upper Secondary	98.5	91.7	86.3	73	97.5	91	79.2	96.8	51.7	92.1	81.4	56.6	0.4	44.5	56.1	144
Tertiary	97.9	95.1	87.8	75.5	98.3	93.7	80.5	92.6	62.5	97.7	84	63.3	0	47	59.6	168
Wealth index quintile																
Poorest	88.4	86.3	69.2	55.6	86.7	71.5	60.4	85.4	28.1	85.4	62.9	44.7	6	30.4	37.9	165
Second	97.4	98.3	94.3	72	92.8	85.2	72.4	94.4	47.8	85.9	79.7	53.8	1.7	37.8	57.6	131
Middle	97.3	92.9	88	66.1	95.6	88.7	74.1	95.2	50.4	91.3	81	55.2	0.4	37.4	42.5	144
Fourth	96.9	87.8	84.1	71	95.1	91.9	78.1	91.1	55.8	90.7	80.4	61.2	2.7	43.6	52.4	145
Richest	98	93.9	87.3	78.9	99.7	96	85.5	95.4	59	98.5	90.2	63.6	0	50.3	67.2	174
Ethnicity of household head																
Kinh/Hoa	97.7	93.6	87.6	71.6	96.5	90.6	78.2	93.9	53.3	92	81.1	57.6	1.1	40.9	53.2	646
Ethnic Minorities	82.5	80.1	64.3	52.8	79.8	63.7	51.2	82.4	18.2	82.8	63.6	45.5	8.5	35.1	42.6	113
Total	95.5	91.7	84.1	68.7	94.1	86.7	74.3	92.2	48.2	90.6	78.9	55.8	2.2	40.1	51.6	759

§ This indicator excludes Hepatitis B at birth. In Viet Nam, the new Pentavalent vaccine (combining the following 5 antigens: DPT, Hepatitis B and Hib) was introduced in June 2010. Therefore, a child is considered to have received all vaccination if he/she (1) received BCG, Polio 1-3, DPT 1-3, Hepatitis B 1-3 and Measles or (2) received Pentavalent 1-3, Polio 1-3, BCG and Measles

Note:
Figures shown in parenthesis are based on denominators of 25-49 un-weighted cases

Neonatal Tetanus Protection

MDG 5 is to reduce by three quarters the maternal mortality ratio, with one strategy being to eliminate maternal tetanus. Another goal is to reduce the incidence of neonatal tetanus to less than 1 case per 1,000 live births. One of the A World Fit for Children goals is to eliminate maternal and neonatal tetanus by 2005.

Prevention of maternal and neonatal tetanus requires assuring that all pregnant women receive at least two doses of tetanus toxoid 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 past three years;

- Received at least three doses, the last within the past five years;

- Received at least four doses, the last within the past ten years;

- Received at least five doses during lifetime.

Table CH.3 shows the tetanus protection status of women who have had a live birth within the last two years. Figure CH.2 shows the protection of women against neonatal tetanus by major background characteristics.

Table CH.3: Neonatal tetanus protection						
Percentage of women aged 15-49 years with a live birth in the last two years protected against neonatal tetanus, Viet Nam, 2011						
		Percentage of women who did not receive two or more doses during their last pregnancy but received:				
	Percentage of women who received at least two doses during last pregnancy	two doses, the last within the past three years	three doses, the last within the past five years	four doses, the last within the past ten years	Protected against tetanus[1]	Number of women with a live birth in the last two years
Region						
Red River Delta	64.6	20.5	0	0	85.1	294
Northern Midland and Mountain areas	60.6	14	0	0.4	74.9	285
North Central area and Central Coastal area	63.6	15	0	0	78.6	287
Central Highlands	55	16.7	0.7	0.2	72.6	92
South East	60.7	17.1	0.3	0.5	78.7	214
Mekong River Delta	56.6	13.2	0	0	69.8	210
Area						
Urban	61.9	17.9	0.1	0	80	402
Rural	60.8	15.4	0.1	0.2	76.5	980
Women's education						
None	22.5	8.2	0	0	30.6	64
Primary	49.9	18.1	0.3	0	68.3	203
Lower Secondary	61.5	16.5	0.1	0	78.1	523
Upper Secondary	68.1	17.3	0	0	85.4	296
Tertiary	69.6	14.6	0.1	0.8	85.1	295
Wealth index quintile						
Poorest	49.7	10.8	0	0	60.5	300
Second	65.5	15.8	0.3	0.4	81.9	263
Middle	64.8	19	0	0	83.8	251
Fourth	64.6	15	0.3	0.4	80.3	270
Richest	62.5	20.2	0	0.1	82.8	299
Ethnicity of household head						
Kinh/Hoa	63.6	17.2	0.1	0.1	81	1158
Ethnic Minorities	48.3	10.4	0	0.5	59.2	225
Total	61.1	16.1	0.1	0.2	77.5	1383

[1] **MICS indicator 3.7**

Table CH.3 shows that 77.5 per cent of women aged 15–49 years with a live birth in the last two years are protected against tetanus.There is a considerable differential in tetanus protection by ethnicity groups. About 81 per cent of women living in Kinh/Hoa households are protected against tetanus while only 59.2 per cent among women living in ethnic minority households are protected. The widest gap, however, is observed across women's education levels. There is a 54 percentage point difference between women with tertiary and those with no education. The likelihood of being protected against tetanus doubles between women with no education and those with at least primary education. Regional differentials show that in the Red River Delta 85.1 per cent of women of reproductive age who had a live birth in the last two years are protected against tetanus, while the percentage is about 69.8 among women living in the Mekong River Delta. Living standards also influence the prevalence of tetanus protection. About 80 per cent of women in the second, third, fourth, and fifth wealth index quintiles are protected against tetanus. A large disparity is observed for women in the poorest households, with only 60.5 per cent of women protected against neonatal tetanus.

Figure CH.2: Percentage of women with a live birth in the last two years protected against neonatal tetanus, Viet Nam, 2011
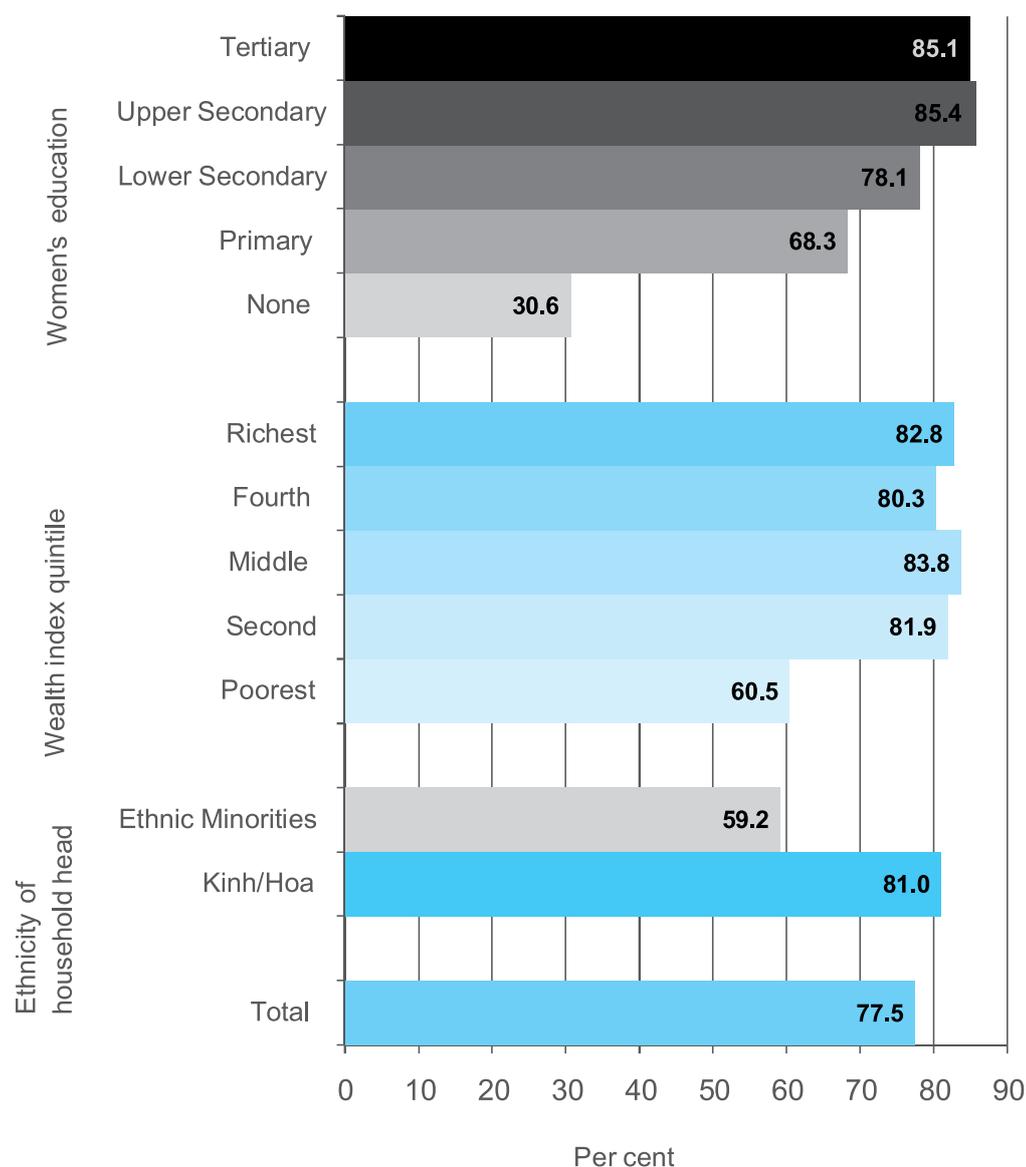
Oral Rehydration Treatment

Diarrhoea is the second leading cause of death among children under age 5 worldwide. 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 (RHF) – 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 the deaths due to diarrhoea among children under age 5 by 2010 compared to 2000 (A World Fit for Children); and 2) reduce by two thirds the mortality rate among children under age 5 by 2015 compared to 1990 (MDG). In addition, A World Fit for Children calls for a reduction in the incidence of diarrhoea by 25 per cent.

The indicators are:

- Prevalence of diarrhoea

- Oral rehydration therapy (ORT)

- Home management of diarrhoea

- ORT with continued feeding

In the Viet Nam MICS 2011 questionnaire, mothers (or caregivers) were asked to report whether their child had diarrhoea in the two weeks prior to the survey. If so, the mother was asked a series of questions about what and how much the child was given to drink and eat during the episode and whether this was more or less than usual.

Overall, 7.4 per cent of children under age 5 had diarrhoea in the two weeks preceding the survey (Table CH.4). The peak of diarrhoea prevalence occurs in the infancy period, among children aged 0–11 months. Diarrhoea prevalence varies across regions. More than 10 per cent of children under age 5 had diarrhoea in the Northern Midland and Mountain areas, compared to the lowest level at 5 per cent in the South East. This indicates that a child in the Northern Midland and Mountain areas is twice as likely to have diarrhoea than a child in the South East. Ethnic differentials indicate that 11.6 per cent of children living in ethnic minority households had diarrhoea in the last two weeks compared with 6.6 per cent of children in Kinh/Hoa households. It can also be observed that the younger the child, the more likely it is to suffer from diarrhoea. Indeed, the incidence of diarrhoea decreases substantially as age increases, from 13 per cent among children aged 0–11 months to 2.8 per cent for children aged 48–59 months.

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

Percentage of children aged 0-59 months with diarrhoea in the last two weeks, and treatment with oral rehydration solutions and recommended homemade fluids, Viet Nam, 2011

	Had diarrhoea in last two weeks	Number of children age 0-59 months	Children with diarrhoea who received:						Number of children aged 0-59 months with diarrhoea in last two weeks
			ORS (Fluid from ORS packet or pre-packaged ORS fluid)	Recommended homemade fluids				ORS or any recommended homemade fluid	
				Rice porridge/ rice soup	Lemon/orange/ coconut drink	Soup water from boiled vegetables	Any recommended homemade fluid		
Sex									
Male	7.4	1869	55	10.6	8.8	33.5	42.1	70.3	138
Female	7.3	1809	37.7	7.7	14.4	34.2	43.6	60.7	132
Region									
Red River Delta	8	798	49.3	0.9	15.7	42.9	45.2	69.5	64
Northern Midland and Mountain areas	10.4	707	34.8	11.4	7.5	35.4	44.3	63.8	74
North Central area and Central Coastal area	6.9	719	60.8	23.2	3.8	27	41.6	66.8	49
Central Highlands	6.3	233	*	*	*	*	*	*	15
South East	5	572	(60.8)	(7.7)	(19.4)	(28.7)	(36.6)	(69.4)	28
Mekong River Delta	6.2	650	(33.3)	(2.7)	(17.7)	(33.)	(45.9)	(56.6)	40
Area									
Urban	5.3	1013	47.3	8.4	17	33.4	43.6	64.6	54
Rural	8.1	2665	46.3	9.4	10.1	33.9	42.6	65.9	216
Age (months)									
0-11	13	668	51.2	8.2	2.3	15.5	24	61.4	87
12-23	10.4	759	48.6	16.4	17.8	41.3	52.2	65.4	79
24-35	6.9	792	45.1	4.8	15.6	41.9	48	71.8	55
36-47	4	764	(32.4)	(6.7)	(13.7)	(40.6)	(51.8)	(59.5)	30
48-59	2.8	695	*	*	*	*	*	*	19

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, Viet Nam, 2011

| | Had diarrhoea in last two weeks | Number of children age 0-59 months | ORS (Fluid from ORS packet or pre-packaged ORS fluid) | Children with diarrhoea who received: Recommended homemade fluids | | | Any recommended homemade fluid | ORS or any recommended homemade fluid | Number of children age 0-59 months with diarrhoea in last two weeks |
				Rice porridge/ rice soup	Lemon/orange/ coconut drink	Soup water from boiled vegetables			
Mother's education									
None	10	207	*	*	*	*	*	*	21
Primary	7.5	658	(22.5)	(4.9)	(4.1)	(23.6)	(30.6)	(47.5)	49
Lower Secondary	7.4	1479	47.4	13.3	13.6	35.9	48.6	70.2	110
Upper Secondary	6.7	670	(58.7)	(10.3)	(15.8)	(42.6)	(46.6)	(75.)	45
Tertiary	6.9	664	(57.2)	(3.8)	(14.3)	(35.6)	(42.6)	(64.7)	46
Wealth index quintile									
Poorest	9.4	831	34.9	10.4	8	33.7	42.1	63.5	78
Second	7.3	673	(43.4)	(9.8)	(2.9)	(27.2)	(36.2)	(61.5)	49
Middle	7.4	700	61.4	6.8	18.8	44.2	53.6	81.4	52
Fourth	6.3	749	(46.8)	(12.8)	(11.1)	(25.7)	(35.)	(47.9)	47
Richest	6.1	725	(52.7)	(5.1)	(19.1)	(38.)	(47.2)	(74.5)	44
Ethnicity of household head									
Kinh/Hoa	6.6	3143	49	9.6	14.4	34.4	44.8	66.2	208
Ethnic Minorities	11.6	535	38.1	7.8	2	32.1	43.8	67.4	62
Total	7.4	3678	46.5	9.2	11.5	33.8	42.8	65.6	270

Note:
Figures denoted by an asterisk are based on denominators of 24 un-weighted cases and less
Figures shown in parenthesis are based on denominators of 25-49 un-weighted cases

Table CH.4 also shows the percentage of children receiving various types of recommended liquids during the episode of diarrhoea. Since mothers were allowed to name more than one type of liquid, the percentages do not necessarily add to 100. About 46.5 per cent received fluids from ORS packets or pre-packaged ORS fluids. ORS is the rehydration treatment of choice for children with diarrhoea in the North Central area and Central Coast area and the South East. Recommended homemade fluids were given to 42.8 per cent of children who experienced diarrhoea in the last two weeks preceding the survey. Among the fluids, soup water from boiled vegetables was the most prevalent, given in 33.8 per cent of cases. It is interesting to note that ORS packets are the rehydration treatment of choice given to boys (55 per cent for boys versus 37.7 per cent for girls), whereas homemade fluids are the treatment of choice for girls (43.6 per cent versus 42.1 per cent).

Some 65.6 per cent of children with diarrhoea received ORS or any recommended homemade fluid. About 70.3 per cent of boys with diarrhoea received ORS or any recommended homemade fluid compared to 60.7 per cent of girls. No notable disparities for ORS or any recommended homemade fluid preference are observed between urban and rural areas, and between Kinh/Hoa and ethnic minority households.

Less than one third (28.6 per cent) of children under age 5 with diarrhoea were given more than the usual amount to drink while 45.4 per cent were given the same amount (Table CH.5). Giving the child more to drink during diarrhoea is similar in the Red River Delta and Northern Midland and Mountain areas, with 36.6 and 35.6 per cent, respectively, while it is less practised in the other regions.

About one in three children (36.4 per cent) with diarrhoea were given somewhat less to eat than normal. 42.8 per cent of children were given the same amount to eat or more (continued feeding) and 16.9 per cent were given much less to eat during the episode of diarrhoea. There are considerable differences in continued eating practices by ethnicity, with as many as 20 per cent of children aged 0–59 months in Kinh/Hoa households being given much less to eat, compared with only 6.5 per cent of children in ethnic minority households.

Table CH.5: Feeding practices during diarrhoea

Percentage distribution of children aged 0–59 months with diarrhoea in the last two weeks by amount of liquids and food given during episode of diarrhoea, Viet Nam, 2011

	Had diarrhoea in last two weeks	Number of children aged 0–59 months	Drinking practices during diarrhoea:						Eating practices during diarrhoea:							Number of children aged 0–59 months with diarrhoea in last two weeks
			Given much less to drink	Given somewhat less to drink	Given about the same to drink	Given more to drink	Given nothing to drink	Total	Given much less to eat	Given somewhat less to eat	Given about the same to eat	Given more to eat	Stopped food	Never been given food before	Total	
Sex																
Male	7.4	1869	5.3	19	42.7	33	0	100	13.5	39.4	40	3.5	1.7	1.9	100	138
Female	7.3	1809	5.6	20.6	48.3	24.1	1	100	20.4	33.4	38.6	3.5	0	4.2	100	132
Region																
Red River Delta	8	798	0	8.3	55.1	36.6	0	100	11.1	29	52.6	3.7	0	3.6	100	64
Northern Midland and Mountain areas	10.4	707	3.6	16	44.7	35.6	0.1	100	9.6	46.3	35.9	7.4	0.5	0.3	100	74
North Central area and Central Coastal area	6.9	719	(6.3)	(32.1)	(36.7)	(23.6)	(0)	100	(22.9)	(40.8)	(31.3)	(0)	(0)	(5)	100	49
Central Highlands	6.3	233	*	*	*	*	*	100	*	*	*	*	*	*	100	15
South East	5	572	(11.1)	(26.1)	(46.4)	(16.4)	(0)	100	(18.3)	(34.9)	(34.3)	(1.9)	(2.1)	(8.5)	100	28
Mekong River Delta	6.2	650	(9.7)	(22.5)	(41)	(24.9)	(1.9)	100	(27.1)	(27.8)	(39.5)	(2.7)	(2.9)	(0)	100	40
Area																
Urban	5.3	1013	7.1	27.2	32.6	31.6	1.5	100	19.2	30.4	44.8	2.6	0	2.9	100	54
Rural	8.1	2665	5	18	48.6	27.9	0.2	100	16.3	37.9	37.9	3.7	1.1	3.1	100	216
Age (months)																
0–11	13	668	4.2	15.1	60.2	20	0.5	100	14	26.8	44	5.7	1.8	7.8	100	87
12–23	10.4	759	4.9	25.2	39.4	30.4	0	100	21	38.2	35.9	2.8	0.2	1.9	100	79
24–35	6.9	792	6.6	18.6	47.4	27.2	0.2	100	7	42.4	49.1	0.5	1.1	0	100	55
36–47	4	764	(3.1)	(22.2)	(35.8)	(36.4)	(2.5)	100	(25.2)	(40.1)	(31.1)	(3.6)	(0)	(0)	100	30
48–59	2.8	695	(13.7)	(18.5)	(12.4)	(52)	(0)	100	(28.3)	(49.8)	(16.9)	(5)	(0)	(0)	100	19
Mother's education																
None	10	207	*	*	*	*	*	100	*	*	*	*	*	*	100	21
Primary	7.5	658	(10.3)	(19.9)	(47.9)	(19.2)	(1.5)	100	(23.1)	(43.1)	(32.2)	(0)	(.3)	(1.3)	100	49
Lower Secondary	7.4	1479	5	17.4	47.6	29.9	0.1	100	15	39.5	41.8	2	1.6	0	100	110
Upper Secondary	6.7	670	(0)	(19.8)	(49.3)	(29.9)	(1)	100	(13.2)	(33.1)	(45.7)	(4.7)	(.9)	(2.5)	100	45
Tertiary	6.9	664	(9)	(22.8)	(34.6)	(33.6)	(0)	100	(14.7)	(26.6)	(35.7)	(8.9)	(0)	(14.1)	100	46

Table CH.5: Feeding practices during diarrhoea

Percentage distribution of children aged 0–59 months with diarrhoea in the last two weeks by amount of liquids and food given during episode of diarrhoea, Viet Nam, 2011

	Had diarrhoea in last two weeks	Number of children aged 0–59 months	Drinking practices during diarrhoea:						Eating practices during diarrhoea:							Number of children aged 0–59 months with diarrhoea in last two weeks
			Given much less to drink	Given somewhat less to drink	Given about the same to drink	Given more to drink	Given nothing to drink	Total	Given much less to eat	Given somewhat less to eat	Given about the same to eat	Given more to eat	Stopped food	Never been given food before	Total	
Wealth index quintile																
Poorest	9.4	831	4.5	20.8	42.1	31.6	0.1	100	11.6	50.1	34.4	2.3	1.5	0	100	78
Second	7.3	673	(3.7)	(15.2)	(58.3)	(22.8)	(0)	100	(13.3)	(29.2)	(49.9)	(5.7)	(1.1)	(0.9)	100	49
Middle	7.4	700	9.1	23	40.6	26.4	0.9	100	28.7	26.3	29.9	5.7	1.2	8.1	100	52
Fourth	6.3	749	(6.3)	(15.6)	(49.1)	(27.4)	(1.6)	100	21	(28.5)	(41.6)	(1.1)	(0)	(7.7)	100	47
Richest	6.1	725	(3.8)	(23.8)	(38.7)	(33.7)	(0)	100	11.8	(40.4)	(44.6)	(3.2)	(0)	(0)	100	44
Ethnicity of household head																
Kinh/Hoa	6.6	3143	6	20.7	43.8	29.1	0.4	100	20	33.3	38.3	3.8	1.1	3.6	100	208
Ethnic Minorities	11.6	535	3.4	16.8	50.8	27.1	0.9	100	6.5	47	42.6	2.7	0	1.2	100	62
Total	7.4	3678	5.4	19.8	45.4	28.6	0.5	100	16.9	36.4	39.3	3.5	0.9	3.1	100	270

Note:
Figures denoted by an asterisk are based on denominators of 24 un-weighted cases and less
Figures shown in parenthesis are based on denominators of 25-49 un-weighted cases

Table CH.6 presents the proportion of children aged 0–59 months with diarrhoea in the last two weeks who received oral rehydration therapy with continued feeding, and the percentage of children with diarrhoea who received other treatments. Overall, more than half of all the children (58.2 per cent) with diarrhoea received ORS or increased fluids and 70.5 per cent received oral rehydration therapy (ORS or recommended homemade fluids or increased fluids). Most background characteristics indicate unclear patterns. However, it is clear that ORT use is higher among older children, boys and those living in ethnic minority households. For example, about 75.9 per cent of boys receive ORT compared with 64.8 per cent of girls. Combining the indicators in Table CH.5 and Table CH.4 on oral rehydration therapy, it is observed that 56.7 per cent of children received both oral rehydration therapy (ORT) and continued feeding, as is recommended. The same background characteristics, child age, sex and ethnicity of the household head, show differentials for the indicator ORT with continued feeding. The Northern Midland and Mountain areas show the highest percentage of children receiving ORT with continued feeding at 64.1 per cent. About a quarter of children with diarrhoea in the last two weeks were given antibiotics (pill, syrup or injection), which is the highest percentage among all treatments given. Still, 5.6 per cent of children with diarrhoea did not receive any treatment or drug.

Gender disparities are observed in the use of antibiotics for diarrhoea treatment, with as many as 30.1 per cent of girls aged 0-59 months with diarrhoea receiving antibiotics, compared to 18 per cent of boys.

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

Percentage of children aged 0–59 months with diarrhoea in the last two weeks who received oral rehydration therapy with continued feeding, and percentage of children with diarrhoea who received other treatments, Viet Nam, 2011

| | Children with diarrhoea who received: | | | Other treatments: | | | | | | | | | | | Number of children aged 0–59 months with diarrhoea in last two weeks |
| | | | | Pill or syrup | | | | | Injection | | Intra-venous therapy | Home remedy, herbal medicine | Other | Not given any treatment or drug | |
	ORS or increased fluids	ORT (ORS or recom-mended homemade fluids or increased fluids)	ORT with continued feeding[1]	Anti-biotic	Anti-motility drug	Zinc	Other	Un-known	Anti-biotic	Un-known					
Sex															
Male	66.4	75.9	64.4	18	5.3	0.9	10.9	20.1	1.7	2	3.3	6.7	28.1	5.9	138
Female	49.7	64.8	48.8	30.1	7.4	1	6.2	18.9	1.3	6.3	1.3	9.9	28.1	5.3	132
Region															
Red River Delta	54.4	69.5	57	23.7	6.2	3.6	11.2	19.1	6.3	5.4	5	0	46.1	4.7	64
Northern Midland and Mountain areas	58.9	74.2	64.1	26	3.3	0	9.5	11	0	5.3	0	22.5	19.4	8	74
North Central area and Central Coastal area	(65.4)	(70.1)	(52.9)	(32.4)	(12.6)	(0)	(8.2)	(19.7)	(0)	(0)	(6.3)	(5)	(19.5)	(9.6)	49
Central Highlands	*	*	*	*	*	*	*	*	*	*	*	*	*	*	15
South East	(63.3)	(71.9)	(59.7)	(7.9)	(9.5)	(0)	(4)	(32.1)	(0)	(3.6)	(0)	(0)	(29.8)	(0)	28
Mekong River Delta	(50.8)	(63.1)	(44.7)	(24.4)	(2.5)	(0)	(4.7)	(27.5)	(0)	(5.8)	(0)	(7)	(31.6)	(0)	40
Area															
Urban	58.5	71	56.8	25.6	7.7	3.1	10.7	18.5	0	2.8	0	1.5	30.9	1.5	54
Rural	58.2	70.3	56.7	23.5	6	0.4	8.1	19.8	1.9	4.4	2.9	9.9	27.4	6.6	216
Age (months)															
0–11	54.8	62.8	49.1	20	3.3	1.6	4.8	11	0	2.7	0	10.3	32	9.5	87
12–23	61.2	69.8	53.8	35.4	9.3	0.4	15.5	29.1	2.2	4.9	6.1	5.4	33.4	1.7	79
24–35	55.4	76.2	68.8	19	12.5	0	7.2	18.4	4.2	7.1	2.6	9.4	13.8	5.4	55
36–47	(53.9)	(71)	(56.9)	(8.8)	(0)	(3.1)	(9)	(17.5)	(0)	(3.3)	(0)	(7.7)	(32.1)	(6)	30
48–59	*	*	*	*	*	*	*	*	*	*	*	*	*	*	19

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

Percentage of children aged 0–59 months with diarrhoea in the last two weeks who received oral rehydration therapy with continued feeding, and percentage of children with diarrhoea who received other treatments, Viet Nam, 2011

| | Children with diarrhoea who received: | | | Other treatments: | | | | | | | | | | | Number of children aged 0–59 months with diarrhoea in last two weeks |
| | | | | Pill or syrup | | | | | Injection | | Intra-venous therapy | Home remedy, herbal medicine | Other | Not given any treatment or drug | |
	ORS or increased fluids	ORT (ORS or recom-mended homemade fluids or increased fluids)	ORT with continued feeding[1]	Anti-biotic	Anti-motility drug	Zinc	Other	Un-known	Anti-biotic	Un-known					
Mother's education															
None	*	*	*	*	*	*	*	*	*	*	*	*	*	*	21
Primary	37.3	56.1	46	9.9	3.6	0	8.1	15	0	3	0	21	7.5	17.6	49
Lower Secondary	61.5	74	61.6	26.7	6.2	0	6.8	27	1.6	4.3	2.8	5.4	35.3	2.1	110
Upper Secondary	(70.4)	(79.8)	(67.3)	(25.3)	(3)	(5.8)	(6.2)	(21.5)	(5.1)	(8.2)	(3.9)	(1.8)	(19.5)	(5.5)	45
Tertiary	(60.7)	(68.2)	(48)	(32.9)	(15.5)	(0)	(19.8)	(6.2)	(0)	(0)	(3.1)	(5.3)	(46.5)	(2)	46
Wealth index quintile															
Poorest	51.9	70.2	57.8	23	2.3	0	6.6	12.3	0	7.3	3.9	17.9	15.7	10.3	78
Second	59.4	67.2	62.1	18.4	6.3	0	2.5	10.5	4.7	4.4	3.6	11.5	32.8	6.1	49
Middle	68.8	81.4	56.4	18.7	0	0	11.7	43.4	3.4	3.3	0	0.4	36.7	3.8	52
Fourth	(53.8)	(55)	(40.7)	(29.4)	(15)	(2)	(7.5)	(21)	(0)	(1.1)	(0)	(5.2)	(31.3)	(4.2)	47
Richest	(60.5)	(78.1)	(66.3)	(31.7)	(11.7)	(3.8)	(16.5)	(12.9)	(0)	(2.3)	(3.2)	(0)	(31.2)	(0)	44
Ethnicity of household head															
Kinh/Hoa	58.5	68.5	53.4	25.5	8	1.2	9.4	22.4	1.9	3.3	3	4.1	33.9	3.8	208
Ethnic Minorities	57.4	77.1	70.1	18.5	0.7	0	6.1	10.1	0	6.9	0	22.1	8.6	11.5	62
Total	58.2	70.5	56.7	23.9	6.3	1	8.6	19.5	1.5	4.1	2.3	8.2	28.1	5.6	270

Note:
Figures denoted by an asterisk are based on denominators of 24 un-weighted cases and less
Figures shown in parenthesis are based on denominators of 25-49 un-weighted cases

Care Seeking and Antibiotic Treatment of Pneumonia

Pneumonia is the leading cause of death of children globally and the use of antibiotics for children under age 5 with presumed pneumonia is a key intervention. One of the A World Fit for Children goals 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 blocked nose.

The indicators are:

- Prevalence of suspected pneumonia

- Care seeking for suspected pneumonia

- Antibiotic treatment for suspected pneumonia

- Knowledge of the danger signs of pneumonia

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

Percentage of children aged 0-59 months with suspected pneumonia in the last two weeks who were taken to a health care provider and percentage of children who were given antibiotics, Viet Nam, 2011

	Had suspected pneumonia in the last two weeks	Number of children aged 0-59 months	Children with suspected pneumonia who were taken to:									Any appropriate provider[1][§]	Percentage of children with suspected pneumonia who received antibiotics in the last two weeks[2]	Number of children aged 0-59 months with suspected pneumonia in the last two weeks
			Public sources			Private sources								
			Gov. hospital	Commune health centre	Village health worker	Private hospital/ clinic	Private physician	Private pharmacy	Other private facility	Relative/ Friend	Traditional practitioner			
Sex														
Male	3.4	1869	22.5	28	1.8	16.2	13.3	17.7	0.8	0.6	0	69.6	69.7	64
Female	3.1	1809	17.4	31.8	2.4	10.1	18.6	12.5	0	1.7	0.6	76.9	66.8	56
Region														
Red River Delta	3.9	798	(9.7)	(25.3)	(3.8)	(15.)	(8.6)	(11.2)	(0)	(0)	(0)	(58.6)	(81.4)	31
Northern Midland and Mountain areas	1.2	707	*	*	*	*	*	*	*	*	*	*	*	9
North Central area and Central Coastal area	5.4	719	(18.9)	(30.9)	(0)	(10.4)	(4.9)	(22.2)	(0)	(2.5)	(0)	(58.5)	(55.2)	39
Central Highlands	3.8	233	*	*	*	*	*	*	*	*	*	*	*	9
South East	3.5	572	*	*	*	*	*	*	*	*	*	*	*	20
Mekong River Delta	1.9	650	*	*	*	*	*	*	*	*	*	*	*	13
Area														
Urban	2.3	1013	*	*	*	*	*	*	*	*	*	*	*	23
Rural	3.6	2665	19.4	33.5	2.6	9.6	16.8	14.3	0	1.4	0.4	73.1	66.7	97
Age (months)														
0-11	2.4	668	*	*	*	*	*	*	*	*	*	*	*	16
12-23	3	759	*	*	*	*	*	*	*	*	*	*	*	23
24-35	3.8	792	(13.4)	(20.8)	(3.9)	(13.4)	(15.3)	(18.9)	(0)	(3.2)	(0)	(62.8)	(76.2)	30
36-47	3.4	764	(27.3)	(24.2)	(0)	(5.)	(15.)	(5.4)	(0)	(1.6)	(0)	(64.4)	(55.4)	26
48-59	3.7	695	(12.2)	(34.8)	(0)	(9.9)	(20.1)	(20.5)	(0)	(0)	(0)	(68.5)	(72.1)	26

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

Percentage of children aged 0-59 months with suspected suspected in the last two weeks who were taken to a health provider and percentage of children who were taken to a health provider and percentage of children who were given antibiotics, Viet Nam, 2011

| | Had suspected pneumonia in the last two weeks | Number of children aged 0-59 months | Children with suspected pneumonia who were taken to: | | | | | | | | | Any appropriate provider[1]§ | Percentage of children with suspected pneumonia who received antibiotics in the last two weeks[2] | Number of children aged 0-59 months with suspected pneumonia in the last two weeks |
| | | | Public sources | | | Private sources | | | | | | | | |
			Gov. hospital	Commune health centre	Village health worker	Private hospital/ clinic	Private physician	Private pharmacy	Other private facility	Relative/ Friend	Traditional practitioner			
Mother's education														
None	2.6	207	*	*	*	*	*	*	*	*	*	*	*	5
Primary	3.4	658	*	*	*	*	*	*	*	*	*	*	*	23
Lower Secondary	3.9	1479	18.2	34.1	0	14	13.7	10	0	0	0.6	72.6	63.1	57
Upper Secondary	2.9	670	*	*	*	*	*	*	*	*	*	*	*	19
Tertiary	2.4	664	*	*	*	*	*	*	*	*	*	*	*	16
Wealth index quintile														
Poorest	4	831	(2.3)	(52.7)	(0)	(5.3)	(7.7)	(16.5)	(0)	(0)	(0)	(67.9)	(43.7)	33
Second	3.7	673	(24.9)	(32.7)	(0)	(3.6)	(21.4)	(21.7)	(2.)	(5.6)	(0)	(67.4)	(53.7)	25
Middle	3	700	*	*	*	*	*	*	*	*	*	*	*	21
Fourth	3.9	749	(17.6)	(10.9)	(0)	(22.7)	(24.6)	(14.8)	(0)	(0)	(1.2)	(68.4)	(90.2)	29
Richest	1.7	725	*	*	*	*	*	*	*	*	*	*	*	12
Ethnicity of household head														
Kinh/Hoa	3.4	3143	18.3	26.5	2.4	14.5	17.2	14.4	0.5	0.9	0.3	72.1	67	108
Ethnic Minorities	2.3	535	*	*	*	*	*	*	*	*	*	*	*	12
Total	3.3	3678	20.1	29.8	2.1	13.3	15.8	15.2	0.4	1.1	0.3	73	68.3	120

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

§ This indicator includes the following: Government hospital, Commune health centre, Village health worker, private hospital/clinic, private pharmacy, and other private facilities

Note:
Figures denoted by an asterisk are based on denominators of 24 un-weighted cases and less
Figures shown in parenthesis are based on denominators of 25-49 un-weighted cases

Table CH.7 presents results on prevalence of presumed pneumonia, whether care was sought outside the home, and the site of care. Some 3.3 per cent of children aged 0–59 months were reported to have had symptoms of pneumonia during the two weeks preceding the survey. Of these children, 73 per cent were taken to an appropriate health care provider, and 68.3 per cent received antibiotics for presumed pneumonia. The number of observations is small and makes it difficult to further conclude about the differences by background characteristics.

Details about the mother's/caregiver's knowledge of the danger signs of pneumonia are presented in Table CH.8. The mother's/caregiver's knowledge is an important determinant for care-seeking behaviour. Overall, only 5 per cent of mothers/caregivers recognised the two danger signs of pneumonia – fast and difficult breathing. The most commonly identified symptom for taking a child to a health facility is when the child develops a fever (87.1 per cent). Only 10.6 per cent of mothers/caregivers identified fast breathing and 29.1 per cent of mothers/caregivers identified difficult breathing as symptoms for taking children immediately to a health care provider. Although knowledge about the two danger signs of pneumonia is generally low in Viet Nam, there is some indication that the mother's/caregiver's education is a factor. In addition, more mothers/caregivers in the Red River Delta know about the two danger signs (8.9 per cent), compared to 0.1 per cent in the Mekong River Delta and 2.8 per cent in the Central Highlands.

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

Percentage of mothers and caregivers of children aged 0-59 months by symptoms that would cause them to take the child immediately to a health facility, and percentage of mothers who recognise fast and difficult breathing as signs for seeking care immediately, Viet Nam, 2011

	Percentage of mothers/caregivers of children aged 0-59 months who think that a child should be taken immediately to a health facility if the child:								Mothers/ caregivers who recognise the two danger signs of pneumonia	Number of mothers/ caregivers of children aged 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 other symptoms		
Region										
Red River Delta	14.8	38.3	90.4	13.8	38.8	14	8.4	41.7	8.9	654
Northern Midland and Mountain areas	10.7	43.1	84.2	11.1	25.3	10.4	5.4	25.4	4.7	589
North Central area and Central Coastal area	14.9	38.5	90.4	12.1	36.1	8.7	5.3	22.2	7.4	614
Central Highlands	10.1	36.6	79.5	10.1	22.2	6.7	9.7	23.4	2.8	195
South East	10.1	23.5	86.1	9	22.1	5.4	7.2	41	3.7	513
Mekong River Delta	6.4	21.9	86.2	6.6	22.6	1.5	2.4	30.8	0.1	552
Area										
Urban	12.1	29.8	88.7	11	30.7	9.2	7.6	35.1	5.9	886
Rural	11.3	35.4	86.4	10.5	28.4	7.8	5.4	30.2	4.6	2232
Mother's education										
None	12.2	38.6	75.1	5.4	27.4	8.2	4.8	16.2	1	146
Primary	7.3	31.5	83.2	9.1	24	4.1	4.4	28.1	2.1	524
Lower Secondary	10.4	35.4	87.1	8.9	27.8	7.3	5	31.1	4	1252
Upper Secondary	16.8	35.1	90.5	16	32.7	10.1	8.1	35.4	9.9	601
Tertiary	12	29.9	90.1	11.6	33	11.7	7.8	35.5	5.7	594
Wealth index quintile										
Poorest	12.3	38.8	83.4	9.8	28	7.5	3.4	20.7	2.9	645
Second	9.8	31.4	86.6	9.3	28.5	4.2	4.5	32.3	5.2	579
Middle	9.4	33.7	88.8	11.4	28.1	7.1	7.7	32.1	5.2	610
Fourth	12.9	36.8	88.1	12.3	28.9	10.8	7.2	36.5	6.6	649
Richest	12.9	27.9	88.6	10.4	31.9	10.8	7.3	36.4	5.2	633
Ethnicity of household head										
Kinh/Hoa	11.2	32.4	88.1	10.3	29.9	8.1	6.6	32.8	5.3	2743
Ethnic Minorities	13.3	42.2	80.7	12.5	24.2	8.7	2.7	24.2	3.4	375
Total	11.5	33.8	87.1	10.6	29.1	8.2	6	31.6	5	3118

Solid Fuel Use

More than 3 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, sulphur dioxide (SO_2) and other toxic elements. Use of solid fuels increases the risks of acute respiratory illness, pneumonia, chronic obstructive pulmonary disease, cancer, and possibly tuberculosis, low birth weight, cataracts and asthma. The primary monitoring indicator is the proportion of the household population using solid fuels as the primary source of domestic energy for cooking. Results presented here are calculated for the population living in households, and therefore represent the percentage of the population exposed to various types of fuels, not percentage of households.

Table CH.9: Solid fuel use

Percentage distribution of household population according to type of cooking fuel used by the household, and percentage of household population living in households using solid fuels for cooking, Viet Nam, 2011

| | | | | | | Percentage of household population in households using: | | | | | | | | | |
| | | | | | | | | Solid fuels | | | | | | | |
	Electricity	Liquefied Petroleum Gas (LPG)	Natural Gas	Biogas	Kerosene	Coal, lignite	Char-coal	Wood	Straw, shrubs, grass	Agricultural crop residue	Other fuel	No food cooked in the household	Total	Solid fuels for cooking[1]	Number of household members
Region															
Red River Delta	0.7	59.9	0.3	1.3	0	9.3	1.4	9.6	16.7	0.6	0.1	0.1	100	37.6	9261
Northern Midland and Mountain areas	0.7	27.5	0.1	1.6	0	1	0.4	66.8	1.5	0	0.1	0.1	100	69.8	7242
North Central area and Central Coastal area	0.3	45.2	0.1	1.1	0.4	0.7	4.1	44.4	3.2	0.1	0	0	100	52.5	9443
Central Highlands	1	49.1	0.2	0.4	0	0.1	1.4	47.6	0	0	0.1	0.1	100	49.1	2551
South East	0.4	81.2	0.2	0.4	1.6	0.1	0.7	13.9	0	0	1.2	1.2	100	14.6	7066
Mekong River Delta	0.5	42	0.1	0.5	0.7	0.1	2.5	51.7	0.2	0.7	0.4	0.4	100	55.2	8434
Area															
Urban	0.6	80.7	0	0.2	0.9	3.7	1.1	11.5	0.6	0	0.6	0.6	100	16.9	13003
Rural	0.5	38.2	0.2	1.3	0.3	1.7	2.2	48.4	6.1	0.4	0.2	0.2	100	58.9	30995
Education of household head															
None	0.5	21.9	0.1	0	0.8	1.3	4.4	67.6	2.9	0	0.5	0.5	100	76.3	2651
Primary	0.5	35.2	0.1	0.5	0.7	0.8	2.9	53.4	4.7	0.4	0.3	0.3	100	62.3	11331
Lower Secondary	0.5	49	0.3	1.4	0.3	3	1.6	37.1	6	0.3	0.3	0.3	100	47.8	17452
Upper Secondary	0.6	65.5	0	1.6	0.5	3.6	1.4	22.1	3.8	0.3	0.3	0.3	100	31.1	7222
Tertiary	0.7	85	0.1	0.3	0.2	2.1	0.1	10	0.7	0.3	0.5	0.5	100	13.2	5190
Wealth index quintiles															
Poorest	0.1	1.5	0	0.3	0.2	0.1	2.2	89.5	5.4	0.2	0.2	0.2	100	97.4	8803
Second	0.9	16.4	0.1	1.1	0.4	1.5	3.7	64.2	10.5	0.5	0.3	0.3	100	80.3	8796
Middle	0.8	52.7	0.5	2.1	1.1	3.8	2.2	29.2	5.8	0.8	0.5	0.5	100	41.7	8798
Fourth	0.8	85.9	0.1	1.4	0.4	4.5	1.1	4.4	0.8	0	0.6	0.6	100	10.8	8797
Richest	0.2	97.4	0	0	0.3	1.7	0.3	0	0	0	0.1	0.1	100	2	8803
Ethnicity of household head															
Kinh/Hoa	0.6	56.5	0.2	1	0.5	2.6	2.1	30.5	5.1	0.3	0.4	0.3	100	40.5	38675
Ethnic Minorities	0.4	9.2	0	0.6	0.1	0.3	0.7	88.3	0.3	0	0	0.1	100	89.5	5323
Total	0.6	50.8	0.2	1	0.5	2.3	1.9	37.5	4.5	0.3	0.3	0.3	100	46.4	43998

[1] MICS indicator 3.11

Overall, close to half (46.4 per cent) of all households in Viet Nam use solid fuels for cooking. Use of solid fuels is lower in urban areas (16.9 per cent) than in rural areas where 58.9 per cent of the household population uses solid fuels. The most important differentials are with respect to household living standards and the educational level of the household head. About 76.3 per cent of the population in households with uneducated household heads rely on solid fuels compared to only 13.2 per cent among the population in which household heads have tertiary education. The findings show that the use of solid fuels is rare among the richest households (2 per cent) and very common among the poorest (97.4 per cent). The reverse is found in relation to the use of liquefied petroleum gas, used by 97.4 per cent of the richest, but only 1.5 per cent of the poorest households .Table CH.9 clearly shows that the overall percentage of the population relying on solid fuels is high due to the high use of wood for cooking purposes. Clear disparities are also revealed by ethnicity, with ethnic minority households being twice as likely to use solid fuels for cooking than Kinh/Hoa households.

Solid fuel use alone is a poor proxy indicator for indoor air pollution, since the concentration of the pollutants varies when the same fuel is burnt in different stoves or ovens. Use of closed stoves with chimneys minimises indoor pollution, while open stoves or fires with no chimney or hood mean that there is no protection from the harmful effects of solid fuels. Solid fuel use by place of cooking is depicted in Table CH.10. Among the population in households using solid fuels about 63 per cent use a separate building as place for cooking, and 15.9 per cent use a separate room as kitchen. Some 18.9 per cent cook elsewhere in the house and only 1.9 per cent cook outdoors. Cooking elsewhere in the house among households using solid fuels is negatively correlated with the education level of the household head and household living standards. For example, 33.6 per cent of the population in households where the head is uneducated cook elsewhere in the house compared to 8.4 per cent in households where the head has tertiary education. A higher prevalence of outdoor cooking is observed among richest households (23.8 per cent) and in the South East (10.3 per cent), compared to 1.9 per cent overall.

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

Percentage distribution of household members in households using solid fuels by place of cooking, Viet Nam, 2011

	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	Outdoors	At another place	Total	
Region							
Red River Delta	6.8	1.7	87.7	3.4	0.4	100	3480
Northern Midland and Mountain areas	12.9	21.8	64.8	0.3	0.1	100	5056
North Central area and Central Coastal area	21	11.8	65.5	1.6	0	100	4953
Central Highlands	20.2	29.5	48.5	1.5	0	100	1253
South East	20.6	14.4	53.7	10.3	0	100	1035
Mekong River Delta	18.6	34.3	45.8	1.2	0.1	100	4659
Area							
Urban	19.2	18.3	54.9	7.3	0.3	100	2192
Rural	15.5	19	63.9	1.3	0.1	100	18244
Education of household head							
None	20.8	33.6	42.7	2.5	0	100	2023
Primary	18.2	24.5	54.9	2.2	0.1	100	7059
Lower Secondary	13.6	14.2	70.6	1.3	0.2	100	8342
Upper Secondary	14.4	9	73.7	2.3	0	100	2250
Tertiary	9.3	8.4	78.6	3.4	0.3	100	684
Wealth index quintiles							
Poorest	15.4	27.8	55	1.5	0.2	100	8571
Second	15	14.4	69	1.5	0	100	7067
Middle	18.1	10	69.5	2.1	0	100	3671
Fourth	17.3	9.6	67.1	5.2	0.8	100	954
Richest	23	1.8	51.4	23.8	0	100	173
Ethnicity of household head							
Kinh/Hoa	15.6	14.6	67.2	2.4	0.1	100	15671
Ethnic Minorities	17.2	33.2	49.1	0.4	0.1	100	4764
Total	15.9	18.9	63	1.9	0.1	100	20435

Malaria

Malaria contributes to anaemia in children and is a common cause of school absenteeism. Preventive measures, especially the use of insecticide treated mosquito nets (ITNs), can dramatically reduce malaria mortality rates among children. In areas where malaria is common, international recommendations suggest treating any fever in children as if it were malaria and immediately giving the child a full course of recommended anti-malarial tablets. Children with severe malaria symptoms, such as fever or convulsions, should be taken to a health facility. Also, children recovering from malaria should be given extra liquids and food and, for younger children, should continue to be breastfed.

Viet Nam is considered a low malaria prevalence country with considerable achievements in malaria prevention. The National Malaria Control Programme aims to reduce mortality and morbidity caused by malaria.

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

Percentage of households with at least one mosquito net, percentage of households with at least one long-lasting treated net, percentage of households with at least one insecticide treated net (ITN) and percentage of households which either have at least one ITN or have received spraying through an indoor residual spraying (IRS) campaign in the last 12 months, Viet Nam, 2011

	Percentage of households with at least one mosquito net	Percentage of households with at least one long-lasting treated net	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
Region					
Red River Delta	98.5	0.1	6.1	24	2601
Northern Midland and Mountain areas	98.9	0.9	16.7	28.5	1836
North Central area and Central Coastal area	98.5	0.2	10.5	25.4	2522
Central Highlands	97.9	1.1	22.8	28.8	604
South East	79.8	0.7	5	22	1873
Mekong River Delta	98.6	0.1	6.4	24.4	2178
Area					
Urban	88	0.1	4.4	27.4	3454
Rural	98.7	0.5	11.6	24	8160
Education of household head					
None	94.3	1.2	13.5	28	691
Primary	97	0.7	10.5	24.6	2919
Lower Secondary	96.4	0.3	9.6	23.6	4568
Upper Secondary	94	0.2	7.7	25.5	1904
Tertiary	92.4	0.3	7.4	28.3	1504
Wealth index quintiles					
Poorest	98.5	1.3	16.8	26.2	2329
Second	99.7	0.2	9.2	20.7	2368
Middle	97.9	0.1	8.7	22.6	2406
Fourth	94.3	0.4	7.1	23.6	2326
Richest	86.6	0.1	5.3	32.7	2186
Ethnicity of household head					
Kinh/Hoa	95.3	0.2	7.4	23.7	10436
Ethnic Minorities	97.4	1.9	27.7	36.7	1178
Total	95.5	0.4	9.5	25	11614

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

The Viet Nam MICS 2011 questionnaire incorporates questions on the availability and use of bed nets, both at the household level, among children under 5 years of age, and among pregnant women. It also includes anti-malarial treatment, intermittent preventive therapy for malaria, and indoor residual spraying of households. The survey results indicate that almost all households in Viet Nam have at least one mosquito net (Table CH.11). On the other hand, long-lasting treated nets are almost non-existent (0.4 per cent). Insecticide treated nets (ITN) include long-lasting treated nets, pre-treated nets obtained within the past 12 months and other nets treated in the previous 12 months. Other types of mosquito nets are considered untreated. Some 9.5 per cent of households have at least one ITN. The percentage is higher in malaria prone regions, such as the Northern Midland and Mountain areas (16.7 per cent) and the Central Highlands (22.8 per cent). Prevalence of households with at least one ITN is higher among those headed by ethnic minorities (27.7 per cent), which is evidence of the Government's policy to distribute ITNs among ethnic minority people. Mosquito net and ITN use is higher in rural compared to urban areas, and

in poorer compared to richer households. This is attributable to the fact that households in urban areas and better off households have other methods to prevent mosquito-borne malaria transmission, such as good sanitation facilities and use of air-conditioners. About 25 per cent of all households are protected by a vector control method, with at least one ITN or indoor residual spraying in the 12 months preceding the survey.

Table CH.12: Children sleeping under mosquito nets

Percentage of children aged 0-59 months who slept under a mosquito net during the previous night, by type of net, Viet Nam, 2011

	Percentage of children aged 0-59 who stayed in the household the previous night	Number of children aged 0-59 months	Percentage of children who:		Number of children aged 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 aged 0-59 living in households with at least one ITN
			Slept under any mosquito net[1]	Slept under ITN[2]			
Sex							
Male	97.5	1869	94.2	10.2	1821	86.9	214
Female	96.5	1809	94.6	8.6	1747	88.4	170
Region							
Red River Delta	96.2	798	97.9	5.5	768	(100)	42
Northen Midland and Mountain areas	96.8	707	96.5	16.8	684	79	146
North Central area and Central Coastal area	98.1	719	97.6	9	705	91.6	69
Central Highlands	98	233	95.6	21	228	85.8	56
South East	97.7	572	78.6	5.2	559	(94.5)	30
Mekong River Delta	96	650	97.8	6.3	624	(95.9)	41
Area							
Urban	97.6	1013	86.6	4.1	988	(91.9)	44
Rural	96.8	2665	97.4	11.5	2580	87	340
Age (months)							
0-11	97.5	668	94.9	10	651	87	75
12-23	96.4	759	94.9	9.5	732	82.5	85
24-35	97.4	792	94.9	9.9	771	92.5	82
36-47	97.1	764	94.1	10.1	742	89.2	84
48-59	96.7	695	93	7.6	672	86.4	59
Mother's education							
None	95.8	207	87.6	16.4	198	(70.2)	46
Primary	97.3	658	95.4	10.3	640	88.2	75
Lower Secondary	97.3	1479	96.2	9.4	1438	88.9	152
Upper Secondary	97.7	670	94.1	9.1	654	95.5	63
Tertiary	95.9	664	91.7	6.8	637	(88.7)	49
Wealth index quintiles							
Poorest	96.9	831	95.6	15.9	805	79.3	162
Second	97.5	673	99.2	8.1	656	89.5	59
Middle	96.5	700	97.7	10.4	676	97.2	73
Fourth	96.9	749	96	6.6	726	(97.7)	49
Richest	97.2	725	83.8	5.1	705	(88.2)	41
Ethnicity of household head							
Kinh/Hoa	97	3143	94.6	6.9	3048	93.7	226
Ethnic Minorities	97.3	535	93.5	24	520	78.8	158
Total	97	3678	94.4	9.4	3568	87.6	384

[1] **MICS indicator 3.14**

[2] **MICS indicator 3.15; MDG indicator 6.7**

Note:

Figures shown in parenthesis are based on denominators of 25-49 un-weighted cases

The survey results indicate that 94.4 per cent of children under the age of 5 slept under some type of mosquito net the night prior to the survey and only 9.4 per cent slept under an insecticide treated net (Table CH.12). A higher percentage of children sleep under ITNs in poorer households and in rural areas. Having a mother with low or no education or living in an ethnic minority household is associated with a higher likelihood of sleeping under ITNs. Here too the living standards pattern mentioned above explains why children in disadvantaged households have higher ITN use rates. Overall, some 87.6 per cent of children slept under an ITN in the households that have such nets. This means that 12.4 per cent of children under age 5 did not sleep under an ITN even though the household had at least one of these nets.

Table CH.13: Pregnant women sleeping under mosquito nets

Percentage of pregnant women who slept under a mosquito net during the previous night, by type of net, Viet Nam, 2011

	Percentage of pregnant women who stayed in the household the previous night	Number of pregnant women	Percentage of pregnant women who:		Number of pregnant women who slept in the household the previous night	Percentage of pregnant women who slept under an ITN, living in households with at least one ITN	Number of pregnant women living in households with at least one ITN
			Slept under any mosquito net	Slept under ITN[1]			
Region							
Red River Delta	98	68	100	4.9	67	*	5
Northen Midland and Mountain areas	97.8	76	98	10.6	74	*	14
North Central area and Central Coastal area	94.3	91	98.4	23.2	86	*	22
Central Highlands	*	24	*	*	24	*	7
South East	94.8	70	73.6	3	66	*	3
Mekong River Delta	95.9	60	97.7	4.2	58	*	2
Area							
Urban	97.3	119	87.5	4	116	*	5
Rural	95.7	271	97	14.6	259	(78.3)	48
Age group							
15-19	94.5	54	98.1	20.2	51	*	15
20-24	96.2	147	94.1	8.6	142	*	17
25-29	95.2	106	93.1	9.9	101	*	10
30-34	98.3	64	94.7	10.9	63	*	7
35-39	*	16	*	*	16	*	1
40-44	*	2	*	*	2	*	2
45-49	*	1	*	*	1	*	0
Women's education							
None	*	7	*	*	7	*	2
Primary	98.3	50	(95.4)	(16.8)	49	*	13
Lower Secondary	97.2	145	92.8	9.6	141	*	19
Upper Secondary	95.3	102	97.5	12.5	98	*	12
Tertiary	94.2	85	90.9	7.8	80	*	6
Wealth index quintiles							
Poorest	97.3	83	97.5	16	81	*	18
Second	96	69	100	16.4	66	*	14
Middle	95.9	61	97.8	11.2	58	*	9
Fourth	94.9	92	90.9	9.1	87	*	9
Richest	97	85	86.7	5	82	*	4
Ethnicity of household head						`	
Kinh/Hoa	95.8	334	93.8	9	320	(82.7)	35
Ethnic Minorities	98.5	56	95.5	24.9	55	*	18
Total	96.2	390	94.1	11.3	375	80.2	53

[1] **MICS indicator 3.19**
Note:
Figures denoted by an asterisk are based on denominators of 24 un-weighted cases and less
Figures shown in parenthesis are based on denominators of 25-49 un-weighted cases

Table CH.13 presents the proportion of pregnant women who slept under a mosquito net or ITN during the previous night. Some 94.1 per cent of pregnant women slept under any mosquito net the night prior to the survey but only 11.3 per cent slept under an ITN.

Questions on the prevalence and treatment of fever were asked for all children under age 5. About 16.4 per cent of children under 5 years of age were ill with fever in the two weeks prior to the survey (Table CH.14). Fever prevalence peaked at the age group 12–23 months (20.1 per cent) and declined with age. Fever is less commonly reported among children from the Central Highlands (8.6 per cent) compared to those from the North Central area and Central Coastal area (21.7 per cent).

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

Percentage of children aged 0-59 months who had fever in the last two weeks who received anti-malarial drugs, Viet Nam, 2011

| | Had a fever in the last two weeks | Number of children aged 0-59 months | Anti-malarials: | | | | Anti-biotic pill or syrup | Anti-biotic injection | Other medications: | | | | | Percentage who took an anti-malarial drug the same or next day[2] | Number of children with fever in last two weeks |
			Chloro-quine	Quinine sulphate ,ACT, Quinine dihydrochlorate Dihydro-artemisinin-Piperaquine, Primaquine	Other anti-malarial	Any anti-malarial drug[1]			Paracet-amol/ Panadol/ Acetamin-ophen	Aspirin	Ibuprofen	Other	Missing/ DK		
Sex															
Male	17.4	1,869	0.4	0.4	0.5	1.2	23.7	7.4	47.4	1.9	0.7	22.7	10.1	1.1	325
Female	15.3	1,809	0.7	0.6	0.2	1.2	23.7	5.2	38.6	2.3	0.7	27.2	8.7	0.7	277
Region															
Red River Delta	14.8	798	0	0	0	0	15.8	8.5	28	3.4	0	24.8	3.2	0	118
Northern Midland and Mountain areas	16.8	707	0	0	0	0	36.5	8.5	28.3	3.4	0	34.2	1.5	0	119
North Central area and Central Coastal area	21.7	719	0.9	0	0.5	1.3	21.1	6.9	57.8	1	1.1	13.3	6.4	0.5	156
Central Highlands	8.6	233	*	*	*	*	*	*	*	*	*	*	*	*	20
South East	19.3	572	1.2	2.7	0.8	3.6	23.5	3.4	47.9	1.7	2.3	29.1	17.8	3.2	110
Mekong River Delta	12.3	650	0.8	0	0	0.8	20	3.5	51.9	0.8	0	28.3	26.8	0.8	80
Area															
Urban	15.5	1,013	1.3	1.3	0.5	2.5	26.2	4.3	46.1	1.1	1	27.9	8.3	1.4	157
Rural	16.7	2,665	0.3	0.2	0.3	0.7	22.8	7.1	42.4	2.4	0.6	23.7	9.9	0.7	445
Age (months)															
0-11	14.6	668	0	0	1.5	1.5	16.5	1.3	38.7	0	1.8	26.2	4.1	1.5	98
12-23	20.1	759	0	0.6	0	0.3	26.2	11.3	40.4	3	0.6	28.4	7.8	0.3	153
24-35	18.4	792	0	0.3	0	0.3	21.7	6	42.3	1.1	0.4	26.8	13	0	146
36-47	14.2	764	1.8	1.4	0	2.5	29.3	3.9	45.9	3.6	1	17.4	10.9	1.3	108
48-59	14.1	695	1.3	0	0.7	2.1	23.6	7.1	51.4	2.4	0	22.8	10.5	2.1	98
Mother's education															
None	19.5	207	(0)	(0)	(0)	(0)	(21.1)	(10.4)	(53.7)	(0)	(0)	(16.9)	(8.3)	(0)	40
Primary	16.6	658	1.2	0	0.5	1.7	25.3	2.3	40.6	1.4	0	25.2	12.3	0.5	109
Lower Secondary	17.7	1,479	0.8	1	0.6	1.9	22.6	7.9	41.4	2.6	1	24.3	12.3	1.9	261
Upper Secondary	13.9	670	0	0	0	0	25.7	6.4	47.3	0.2	0	15.8	7.5	0	93
Tertiary	14.9	664	0	0.5	0	0.5	24	5.2	43.7	4	1.8	37.1	1.2	0	99

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

Percentage of children aged 0-59 months who had fever in the last two weeks who received anti-malarial drugs, Viet Nam, 2011

| | Had a fever in the last two weeks | Number of children aged 0-59 months | Anti-malarials: | | | | Other medications: | | | | | | | Percentage who took an anti-malarial drug the same or next day[2] | Number of children with fever in last two weeks |
			Chloro-quine	Quinine sulphate ,ACT, Quinine dihydrochlorateDihydro-artemisinin-Piperaquine, Primaquine	Other anti-malarial	Any anti-malarial drug[1]	Anti-biotic pill or syrup	Anti-biotic injection	Paracet-amol/ Panadol/ Acetamin-ophen	Aspirin	Ibuprofen	Other	Missing/ DK		
Wealth index quintiles															
Poorest	18.8	831	0	0.6	0	0.3	25.9	10.9	37	1	0	21.6	8.9	0.3	156
Second	15.3	673	1.3	0	0.5	1.8	23.6	3.3	55.3	1.6	0	27.3	9.1	0.5	103
Middle	16.6	700	0	0	0.6	0.6	22.3	8.1	37.3	0.7	0	21.1	14	0.6	116
Fourth	16	749	1.1	1.3	0	1.8	21.8	5.2	42.7	2.4	1.5	30	10.8	1.8	120
Richest	14.9	725	0.6	0.4	0.8	1.9	24.1	2.3	48.5	5.3	2.4	25.2	4.3	1.4	108
Ethnicity of household head															
Kinh/Hoa	16.4	3,143	0.6	0.4	0.4	1.3	21.7	5.8	44.4	2.4	0.8	25.1	10.4	1	517
Ethnic Minorities	16	535	0	1.2	0	0.6	35.7	9.9	37.3	0	0	23.2	3.8	0.6	86
Total	16.4	3,678	0.5	0.5	0.4	1.2	23.7	6.4	43.4	2.1	0.7	24.8	9.5	0.9	602

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

Note:
Figures denoted by an asterisk are based on denominators of 24 un-weighted cases and less
Figures shown in parenthesis are based on denominators of 25-49 un-weighted cases

Overall, the use of "appropriate"[17] anti-malarial drugs for children with fever is very low in Viet Nam, at 1.2 per cent. The majority of children are given other medications, including anti-pyretics such as paracetamol, panadol, acetaminophen, or antibiotic drugs. Because of the overall low rate of anti-malarial drug use, the percentage of children with fever who received anti-malarial drugs the same or next day is also low, barely 1 per cent. Since Viet Nam is a low prevalence country for malaria, it is normal that anti-malarials are not given for any fever, except in areas where the disease remains endemic.

Table CH.15: Malaria diagnostics usage		
Percentage of children aged 0–59 months who had a fever in the last two weeks and who had a finger or heel stick for malaria testing, Viet Nam, 2011		
	Had a finger or heel stick[1]	Number of children aged 0-59 months with fever in the last two weeks
Region		
Red River Delta	4.6	798
Northern Midland and Mountain areas	6.7	707
North Central area and Central Coastal area	12.5	719
Central Highlands	13.4	233
South East	15.1	572
Mekong River Delta	15.7	650
Area		
Urban	12.3	1013
Rural	10.2	2665
Mother's education		
None	4.7	207
Primary	12.9	658
Lower Secondary	7.9	1479
Upper Secondary	13.1	670
Tertiary	16.1	664
Wealth index quintiles		
Poorest	8.4	831
Second	9.2	673
Middle	12	700
Fourth	13.5	749
Richest	11.1	725
Ethnicity of household head		
Kinh/Hoa	11	3143
Ethnic Minorities	9.4	535
Total	10.7	3678
[1] **MICS indicator 3.16**		

Table CH.15 provides the proportion of children aged 0–59 months who had a fever in the last two weeks and who had a finger or heel stick for malaria testing. Only 10.7 per cent of children with a fever in the last two weeks had a finger or heel stick. The regions with the lowest rates of children with fever who had a finger or heel stick are the Red River Delta and Northern Midland and Mountain areas, with 4.6 and 6.7 per cent respectively. The percentages increase gradually from North to Central to South. Lower percentages are also observed among children with uneducated mothers (4.7 per cent) and those living in the poorest households (8.4 per cent).

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[17] "Appropriate" anti-malarial drugs include: chloroquine, quinine sulphate, artemisinin based combinations therapy (ACT), quinine dihydrochlorate, dihydro-artemisinin-piperaquine, artesunate, or primaquine.

VII. WATER, SANITATION AND HYGIENE

Safe drinking water and hygienic sanitation are basic necessities for good health. Unsafe drinking water and unhygienic sanitation can be significant carriers of diseases such as trachoma, diarrhoea, cholera, typhoid, and schistosomiasis (a parasitic disease). Drinking water can also be tainted with chemical, physical and radiological contaminants with harmful effects on human health. In addition to its association with disease, access to drinking water and secured sanitation facilities is particularly important for women and children, especially in rural areas, who bear the primary responsibility for carrying water, often for long distances, and who are the most vulnerable in using un-secured sanitation facilities.

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 World Fit for Children goal 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 indicators used in Viet Nam MICS 2011 are as follows:

Water

- Use of improved drinking water sources

- 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

Hygiene

- Place for handwashing

- Availability of soap

For more details on water and sanitation and to access some reference documents, please visit the UNICEF childinfo website http://www.childinfo.org/wes.html.

Use of Improved Water Sources

The distribution of the population in Viet Nam by source of drinking water is shown in Table WS.1 and Figure WS.1. The population using *improved sources* of drinking water are those using any of the following types of supply: piped water (into dwelling, compound, yard or plot, public tap/standpipe), tube well/borehole, protected well, protected spring, and rainwater collection. Bottled water is considered as an improved water source only if the household population is using an improved water source for other purposes, such as hand-washing and cooking.

Table WS.1: Use of improved water sources

Percentage distribution of household population according to main source of drinking water and percentage of household population using improved drinking water sources, Viet Nam, 2011

	Main source of drinking water															Total	Percentage using improved sources of drinking water[1]	Number of household members
	Improved sources									Unimproved sources								
	Piped water				Tube-well/bore-hole	Protected well	Protected spring	Rain-water collection	Bottled Water§	Unprotected well	Unprotected spring	Tanker truck, cart with tank/drum	Surface water	Bottled water§	Other			
	Into dwelling	Into yard/plot	To neighbour	Public tap/stand-pipe														
Region																		
Red River Delta	23.7	3.9	0.3	0	25.9	6	0.1	34.6	4.5	0.8	0.1	0.1	0	0.1	0	100	99	9261
Northern Midland and Mountain areas	9	3.4	0.1	0.2	18.3	33.8	11.9	2	1.9	5.1	5.7	0	7	0.1	1.3	100	80.7	7242
North Central area and Central Coastal area	23.1	0.8	1.2	0.1	22.5	27.1	1.2	8.9	5	7.6	1	0.2	0.2	1.1	0	100	89.8	9443
Central Highlands	12.6	1.1	0.2	0.1	3.7	52.8	4.2	1.6	9.9	10.1	2.8	0	0.2	0.7	0.1	100	86.1	2551
South East	33.3	0.7	0.5	0.1	21.8	11.9	0	1	29.1	0.5	0	0.2	0.1	0.6	0.1	100	98.4	7066
Mekong River Delta	17.2	2.5	0.4	0.1	8.2	0.7	0	43.6	20.2	0.6	0	0	5.1	1.1	0.1	100	93.1	8434
Area																		
Urban	50.7	3.2	0.7	0.2	8.9	7.3	0.5	7.9	18.9	0.9	0.3	0.1	0.1	0.2	0	100	98.4	13003
Rural	8.3	1.8	0.4	0.1	22.6	22.2	3.3	22.4	8.3	4.5	1.8	0.1	3.1	0.8	0.3	100	89.4	30995
Education of household head§§																		
None	14.3	1.8	0.9	0.4	13.5	18.8	6.3	19.8	6.3	6.6	4.2	0	5.2	0.8	1.1	100	82.1	2651
Primary	14.5	2.4	0.7	0.1	16	18.7	3.9	20.8	11.4	4.4	2.2	0.2	3.6	0.9	0.2	100	88.6	11331
Lower Secondary	16	2.2	0.3	0.1	22.8	20.6	1.9	19	10.3	3.3	1.1	0.1	1.6	0.6	0.2	100	93.1	17452
Upper Secondary	27.7	1.9	0.4	0	16.8	15.1	1.7	16.5	14.5	2.7	0.4	0.1	1.3	0.7	0.3	100	94.5	7222
Tertiary	43.9	2.7	0.6	0	15.3	9.6	0.8	11	13.8	1	0.5	0	0.7	0.1	0.1	100	97.7	5190
Wealth index quintile																		
Poorest	2	1.6	0.6	0.2	14.2	28.2	10.5	17	1	9.8	6.3	0.3	7.1	0.2	0.9	100	75.4	8803
Second	7.9	2.2	0.9	0	24.1	26.3	1.3	25.1	3.8	4.6	0.3	0.1	2.6	0.8	0.2	100	91.5	8796
Middle	10.8	2.6	0.3	0.2	23.5	19.6	0.5	24.3	13.9	1.9	0.1	0	1.2	0.9	0.2	100	95.6	8798
Fourth	22.3	2.9	0.5	0.1	21.6	10.8	0.1	18	22.2	0.6	0.1	0	0.1	0.8	0	100	98.4	8797
Richest	61	1.8	0.1	0	9.5	4	0	6.5	16.4	0.2	0	0.1	0	0.4	0	100	99.3	8803
Ethnicity of household head																		
Kinh/Hoa	23.3	2.4	0.5	0.1	19.9	16.2	0.5	19.7	12.6	2.5	0.2	0.2	1.2	0.7	0.1	100	95.3	38675
Ethnic Minorities	3	1	0.1	0.2	9	28.8	16.9	6.6	2.9	10.3	10.1	0	9.4	0.1	1.7	100	68.4	5323
Total	20.8	2.2	0.5	0.1	18.6	17.8	2.5	18.2	11.5	3.4	1.4	0.1	2.2	0.6	0.3	100	92	43998

[1] MICS indicator 4.1; MDG indicator 7.8

§Households using bottled water as the main source of drinking water are classified into improved or unimproved drinking water users according to the water source used for other purposes such as cooking and handwashing.
§§151 cases with missing education of household head not shown

Overall, 92 per cent of the population use an improved source of drinking water – 98.4 per cent in urban areas and 89.4 per cent in rural areas. The situation in the Northern Midland and Mountain areas, where 80.7 per cent of the population get their drinking water from an improved source, is slightly worse than in other regions. In contrast, 17.8 per cent of the population in this region are using unimproved sources, including unprotected springs, unprotected wells or surface water. The percentage of the population using improved sources of drinking water shows a wide differential of 27 percentage points between the populations living in Kinh/Hoa households and those living in ethnic minority households.

As shown in table WS.1, the source of drinking water used varies strongly by living standards, area, region, as well as by education and ethnicity of household head. In the South East, 34.6 per cent of the population use drinking water that is piped into their dwelling, into their yard or plot, to their neighbour or via a public tap/standpipe. This region shows the highest percentage of the population using piped water sources, followed by the Red River Delta and the North Central area and Central Coastal area, where 27.9 and 25.2 per cent, respectively, use a piped water source. In contrast, only 12.7 per cent of the population in the Northern Midland and Mountain areas and 14 per cent of the population in the Central Highlands use a piped water source. As expected, the highest differential for piped water into dwelling emerges by living standards, with 2 per cent of the population in the poorest housdeholds using piped water sources, compared with 61 percent in the richest households. A similar differential is observed between urban and rural areas, standing at 50.7 and 8.3 per cent respectively. People living in the Mekong River Delta and the Red River Delta are the most likely to be using rain water collection among the six regions, at 43.6 and 34.6 per cent, respectively. In both regions, rain water also represents the most popular source of drinking water, higher than piped water into dwellings.

More than half of the population in the Central Highlands use protected wells as their main source of drinking water (52.8 per cent). The same water source is used by one third of the population living in the Northern Midland and Mountain areas (33.8 per cent). Ethnic minorities represent the highest proportion of the population using surface water (river, stream, pond), at 9.4 per cent. Closely related, 7 per cent of the population in the Northern Midland and Mountain areas, where the ethnic minority population is concentrated, use surface water. With 31.6 and 19.3 per cent respectively, people living in ethnic minority households and in the Northern Midland and Mountain areas represent the highest proportion of the population using unimproved drinking water sources.

Figure WS.1: Percentage distribution of population by source of drinking water, Viet Nam, 2011
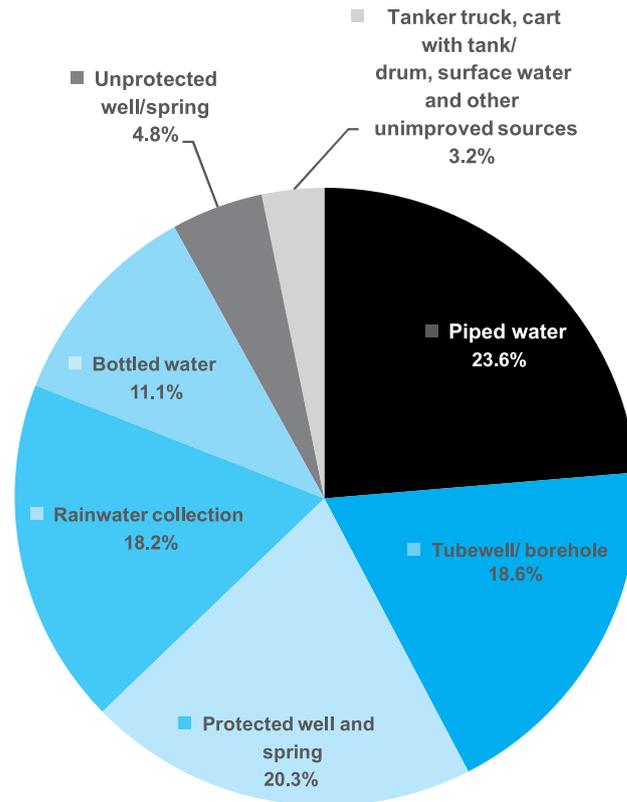
Use of in-house water treatment by key background characteristics is presented in Table WS.2. Households were asked about how they treat water at home to make it safer to drink such as boiling, adding bleach or chlorine, using a water filter, and using solar disinfection. These are considered proper treatment methods of drinking water. The table shows water treatment methods used in all households and the percentage of household members living in households using unimproved water sources but using appropriate water treatment methods. No treatment, straining through a cloth, and letting it stand and settle are considered inappropriate water treatment methods.

Boiling is the most common method used by households for treatment of drinking water. 84 per cent of the population boil the water before drinking. The largest differential in the practice of boiling water is observed between the Red River Delta with 98 per cent, and the Mekong River Delta with 60.9 per cent. The differences in water boiling by other background characteristics are negligible. The use of water filters is higher in urban areas, among households where the heads have higher education levels and among the better off. As many as 89.6 per cent of household members in households using unimproved drinking water sources are using an appropriate water treatment method.

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, Viet Nam, 2011

	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	Strain through a cloth	Use water filter	Solar dis-infection	Let it stand and settle	Other			
Region											
Red River Delta	1.4	98	0.8	0.6	30.7	0.1	7.4	3	9261	*	96
Northern Midland and Mountain areas	1.7	97.7	0.3	0.2	13.1	0	2.1	1.8	7242	96.6	1396
North Central area and Central Coastal area	6.9	91.3	1.1	0.8	16.1	0.3	4.4	1.4	9443	86.2	962
Central Highlands	14.2	85.5	0.7	0	7.1	0	0.9	2.6	2551	80.3	355
South East	28.6	68.6	0	0.7	21.3	0.3	3.5	2	7066	(68.7)	110
Mekong River Delta	25.8	60.9	6.1	8.1	4.4	0.2	25.5	1.1	8434	86.7	584
Area											
Urban	15.8	81	0.6	1.6	21.4	0.1	5.5	2.7	13003	91.1	212
Rural	11	85.2	2.1	2.1	14.8	0.2	9.6	1.6	30995	89.6	3291
Education of household head[§]											
None	17.9	76	1.6	2.6	6.1	0	9.2	0.9	2651	83.2	476
Primary	16.2	77.5	2.6	3.6	10.8	0.1	11.4	1.3	11331	89.6	1297
Lower Secondary	10.2	87.1	1.5	1.7	18.4	0	7.8	1.7	17452	91.9	1201
Upper Secondary	11.8	86.4	1.2	0.7	19.7	0.4	6.9	2	7222	87.5	396
Tertiary	9.7	88.2	1	0.9	25.2	0.4	4.9	4.2	5190	(100)	121
Wealth index quintile											
Poorest	8.5	86.6	2.6	2.7	5.1	0.1	10.2	0.7	8803	92.2	2161
Second	9.1	85.8	2.7	3.1	12.2	0.1	12.5	1.1	8796	91.7	749
Middle	15.3	82	1.9	2.2	15.6	0.3	8.1	1.9	8798	85.2	385
Fourth	17.7	79.1	0.8	1.2	20.1	0.3	7.3	2.4	8797	(72.7)	145
Richest	11.5	86.3	0.3	0.8	30.7	0.1	3.7	3.4	8803	*	62
Ethnicity of household head											
Kinh/Hoa	12.8	83.4	1.8	2.1	18.5	0.2	8.8	2	38675	88	1819
Ethnic Minorities	9.4	88.1	0.4	1.4	4.2	0	5	0.8	5323	91.4	1684
Total	12.4	84	1.7	2	16.7	0.2	8.4	1.9	43998	89.6	3502

[1] MICS indicator 4.2

[§] 151 cases with missing education of household head not shown

Note:

Figures denoted by an asterisk are based on denominators of 24 un-weighted cases and less

Figures shown in parenthesis are based on denominators of 25-49 un-weighted cases;

The amount of time it takes to obtain water is presented in Table WS.3. Note that these results refer to one round-trip from home to the drinking water source. Information on the number of trips made in one day was not collected.

Table WS.3 shows that 94.6 per cent of the population have the drinking water source on their premises. Of these, 89.5 per cent have an improved and 5.1 per cent an unimproved water source on their premises. The Red River Delta and the South East regions display the highest coverage (above 98 per cent), meaning that virtually all people living in those regions have a water source on their premises. Rather than geography, ethnicity of the household head displays the widest differential. As such, 96.8 per cent of people living in Kinh/Hoa households have drinking water on their premises, compared with 79.4 per cent of people living in ethnic minority households. Among the 5.2 per cent of the popluation without a water source on their premises, 4.6 per cent needed less than 30 minutes to go to a source, get water and return, and less than 1 per cent needed 30 minutes or more.

Table WS.3: Time to source of drinking water

Percentage 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, Viet Nam, 2011

| | Time to source of drinking water | | | | | | | |
| | Users of improved drinking water sources | | | Users of unimproved drinking water sources | | | | |
	Water on premises	Less than 30 minutes	30 minutes or more	Water on premises	Less than 30 minutes	30 minutes or more	Total	Number of household members
Region								
Red River Delta	97.3	1.6	0	0.8	0.1	0	100	9261
Northern Midland and Mountain areas	76.8	3.6	0.2	12.9	6	0.4	100	7242
North Central area and Central Coastal area	86.8	2.8	0.1	7	2.3	0.8	100	9443
Central Highlands	79.3	4.7	1.9	9.4	2.8	1.6	100	2551
South East	97.2	1.1	0.1	1.1	0.2	0.1	100	7066
Mekong River Delta	91.4	1.3	0.1	3.2	3.6	0.1	100	8434
Area								
Urban	97.1	1.2	0	1.3	0.2	0	100	13003
Rural	86.3	2.7	0.3	6.7	3.3	0.5	100	30995
Education of household head[§]								
None	75.1	5.4	1.3	8.8	8	1	100	2651
Primary	85.1	3	0.1	7.2	3.7	0.5	100	11331
Lower Secondary	90.7	2.1	0.2	4.8	1.8	0.3	100	17452
Upper Secondary	93.4	1	0	4.1	0.9	0.4	100	7222
Tertiary	96.7	1	0	1.7	0.7	0	100	5190
Wealth index quintile								
Poorest	68.5	6.1	0.7	14.4	8.8	1.2	100	8803
Second	88.5	2.5	0.1	6.2	2.2	0	100	8796
Middle	94.1	1.5	0	3.5	0.7	0.2	100	8798
Fourth	97.3	0.9	0.1	1.3	0.2	0.2	100	8797
Richest	99	0.2	0	0.2	0.1	0.3	100	8803
Ethnicity of household head								
Kinh/Hoa	93.5	1.6	0.1	3.3	1.2	0.2	100	38675
Ethnic Minorities	60.5	6.7	1.1	18.9	11.2	1.6	100	5323
Total	89.5	2.2	0.2	5.1	2.4	0.4	100	43998

[§]151 cases with missing education of household head not shown

Information about the person who usually collects water in Viet Nam is shown in Table WS.4. In the majority of households without a drinking water source on premises, an adult woman is usually the person collecting the water. An adult woman is twice as likely to be collecting water than adult men (65 versus 30.2 per cent). In Viet Nam it is uncommon for boys or girls under 15 years of age to collect water. This is practiced in only 2.4 per cent of households, of which 1.8 per cent by girls and 0.6 per cent by boys.

Table WS.4: Person collecting water								
Percentage of households without drinking water on the premises, and percentage distribution of households without drinking water on the premises according to the person usually collecting drinking water used by the household, Viet Nam, 2011								
			Person usually collecting drinking water					Number of households without drinking water on premises
	Percentage of households without drinking water on premises	Number of households	Adult woman	Adult man	Female child under age 15	Male child under age 15	Missing/ DK	Total	
Region									
Red River Delta	2.1	2601	74.3	25.7	0	0	0	100	54
Northern Midlands and Mountain area	9.2	1836	71.4	24.3	2.7	0	1.6	100	168
North Central and Central Coastal area	5.6	2522	69.6	26.2	2.4	1.1	0.7	100	141
Central Highlands	10.5	604	66.3	28.3	2.2	0.9	2.3	100	63
South East	1.7	1873	(45.5)	(45.8)	(0)	(2.4)	(6.3)	(100)	33
Mekong River Delta	5.4	2178	50.6	42.3	1.1	0.4	5.5	100	118
Area									
Urban	1.6	3454	64.2	25.7	0.8	0.9	8.3	100	54
Rural	6.4	8160	65	30.7	1.9	0.5	1.7	100	523
Education of household head									
None	14.7	691	67.8	28.4	2.9	0	0.9	100	102
Primary	6.9	2919	61.8	31.6	1.4	0.8	4.4	100	203
Lower Secondary	4.4	4568	70.7	25	2.2	0.6	1.4	100	202
Upper Secondary	2.4	1904	(50.8)	(45.9)	(0)	(1.3)	(2)	(100)	46
Tertiary	1.6	1504	*	*	*	*	*	*	24
Wealth index quintile									
Poorest	15.5	2329	70.8	26.2	2	0.9	0.1	100	360
Second	5.1	2368	58.1	34.2	1.7	0	5.9	100	120
Middle	2.3	2406	57	37.9	0	0	5.1	100	55
Fourth	1.2	2326	(48.6)	(46.6)	(4.8)	(0)	(0)	(100)	29
Richest	0.6	2186	*	*	*	*	*	*	14
Ethnicity of household head									
Kinh/Hoa	3.2	10436	57.4	37.2	1	0.7	3.7	100	334
Ethnic Minorities	20.7	1178	75.3	20.7	3	0.5	0.5	100	244
Total	5	11614	65	30.2	1.8	0.6	2.4	100	577

Note:
Figures denoted by an asterisk are based on denominators of 24 un-weighted cases and less
Figures shown in parenthesis are based on denominators of 25-49 un-weighted cases

Use of Improved Sanitation Facilities

Inadequate disposal of human excreta and personal hygiene are associated with a range of diseases including diarrhoeal diseases and polio. An improved sanitation facility is defined as one that hygienically separates human excreta from human contact. Improved sanitation can reduce diarrhoeal disease and can significantly lessen the adverse health

impacts of other disorders responsible for death and disease among children. Improved sanitation facilities for excreta disposal include flush or pour flush toilets flowing to a piped sewer system, septic tank, or latrine; ventilated improved pit latrine, pit latrine with slab, and composting toilet.

About 78 per cent of the population of Viet Nam live in households using improved sanitation facilities (Table WS.5). This percentage increases to 93.8 per cent in urban areas and decreases to 71.4 per cent in rural areas. People living in the Mekong River Delta are considerably less likely than residents in any of the other five regions to use improved sanitation facilities, with only 44.3 per cent of the population in the Mekong River Delta using such facilities, compared, for example, with 97.4 per cent in the Red River Delta. The use of improved sanitation facilities is strongly correlated with living standards, education of household head and area of residence. For example, the likelihood of using improved sanitation facilities more than doubles from 42 per cent in the poorest households to 99.9 per cent in the wealthiest households. This pattern is mainly attributable to the availability of flush/pour flush toilets in the richest households.

Both in urban and in rural areas, people predominantly use flush (septic tank) toilets, with as many as 81.1 per cent of the urban population using such facilities. However, despite it being the most common type of sanitation facility used, septic tank toilets are only used by 38.6 per cent of the rural population. In contrast, more than 28.6 per cent of the rural population use unimproved sanitation facilities, with as many as 8.6 per cent practicing open defecation. The practice of open defecation is more prevalent among people living in ethnic minority households (27.7 per cent), in households with uneducated heads (26.9 per cent) and in poor households (22.9 per cent).

Table WS.5: Use of improved sanitation facilities

Percentage distribution of household population according to type of toilet facility used by the household, and the percentage of household population using improved sanitation facilities, Viet Nam, 2011

	Type of toilet facility used by household															Number of household members
	Improved sanitation facility							Unimproved sanitation facility							Percentage of population using improved sanitation facilities	
	Flush/pour flush to:				Ventilated improved pit latrine	Pit latrine with slab	Compos-ting toilet	Flush/pour flush to somewhere else	Pit latrine without slab/ open pit	Bucket	Hanging toilet/ hanging latrine	Other	Open defecation (no facility, bush, field)	Total		
	Piped sewer system	Septic tank	Pit latrine	Unknown place/not sure/DK where												
Region																
Red River Delta	3.1	65.4	3.4	0	0	8.5	17	0.3	1.3	0	0.1	0.6	0.3	100	97.4	9261
Northern Midland and Mountain areas	1.6	23.5	1.7	0.1	1.3	19.9	28.2	0.7	7.8	0.2	0.2	0.1	14.8	100	76.3	7242
North Central area and Central Coastal area	0.4	48.3	4.9	0	0.1	15.6	12.9	0.2	7.5	0	1	0	9	100	82.2	9443
Central Highlands	0.8	39.6	10.3	0	0.3	12.5	5	0.5	12	0	0.1	0.5	18.2	100	68.5	2551
South East	2.8	79.3	6.4	1.1	1.4	1.4	0.1	0.5	4.1	0	0.7	0.2	2	100	92.5	7066
Mekong River Delta	1.1	42.2	0.8	0	0	0	0	1.1	0	0.3	50.7	0.7	2.9	100	44.3	8434
Area																
Urban	3.9	81.1	3.1	0.4	0.7	2.4	2.1	0.6	1.1	0.1	3.2	0.1	1.1	100	93.8	13003
Rural	0.8	38.6	4.1	0.1	0.4	12.3	15.2	0.5	6	0.1	13	0.5	8.6	100	71.4	30995
Education of household head[§]																
None	1.1	26.7	2.5	0.3	0.4	7.1	9	0.6	8.1	0.4	16.4	0.7	26.9	100	47	2651
Primary	1	36.2	3.3	0.2	0.5	9.1	11.4	0.6	6.6	0	20.9	0.5	9.7	100	61.7	11331
Lower Secondary	1.3	49.6	4.1	0.1	0.5	12.1	15.3	0.5	4.1	0.1	7.3	0.3	4.7	100	82.9	17452
Upper Secondary	2.7	67.1	4.6	0.2	0.2	7.7	8	0.5	3.2	0.1	3.5	0.3	1.8	100	90.5	7222
Tertiary	3.7	79.5	3.8	0.5	0.7	3.9	3.8	0.5	1.4	0.1	1.5	0	0.6	100	95.9	5190
Wealth index quintile																
Poorest	0.6	2.6	1.4	0	0.7	16.2	20.5	0.2	14.5	0.2	19.8	0.5	22.9	100	42	8803
Second	0.6	18.4	6.3	0.1	0.4	18.7	21.5	0.7	5.3	0.2	20.8	0.8	6.2	100	66	8796
Middle	1.6	52.3	6.1	0.4	0.7	10.7	12.7	0.9	2.7	0.1	8.8	0.5	2.5	100	84.5	8798
Fourth	3	87.6	3.5	0.2	0.5	1.2	1.8	0.7	0.2	0	1.1	0	0.2	100	97.7	8797
Richest	2.7	94.9	1.8	0.3	0.1	0	0	0.1	0	0	0	0.1	0	100	99.9	8803
Ethnicity of household head																
Kinh/Hoa	1.8	56.7	4	0.2	0.3	8.7	10.5	0.5	2.9	0.1	10.5	0.4	3.4	100	82.2	38675
Ethnic Minorities	1.1	10.9	2.5	0.1	1.7	14.3	17.4	0.8	16.1	0.2	6.9	0.3	27.7	100	48	5323
Total	1.7	51.2	3.8	0.2	0.5	9.4	11.3	0.5	4.5	0.1	10.1	0.4	6.4	100	78	43998

[§]151 cases with missing education of household head not shown

Note:
Table calculates the indicator (use of improved sanitation facilities) irrespective of whether or not the facility is shared.

MDGs and the WHO/UNICEF Joint Monitoring Programme (JMP) for Water Supply and Sanitation classify households as using an unimproved sanitation facility if they are using otherwise acceptable sanitation facilities but sharing a facility between two or more households or using a public toilet facility.

As shown in Table WS.6, 73.8 per cent of the population is using an improved sanitation facility that is not shared. The use of shared sanitation facilities is low (below 5 per cent) among both groups of households, i.e. those using improved and those using unimproved sanitation facilities. One in four households in the Mekong River Delta use a shared sanitation facility, the majority of which are unimproved (19.7 per cent).

The information on the household population using improved sanitation facilities which are not shared shows considerable disparities by living standards, education of the household head, ethnicity and area of residence. For example, people living in the wealthiest households are almost three times more likely to use an improved sanitation facility that is not shared compared with people living in the poorest households (98.5 per cent versus 38.4 per cent). Similarly, the likelihood of using improved sanitation facilities which are not shared is twice as high in households where the head has tertiary education than in households with a head with no education (92 per cent versus 43.1 per cent). A slightly lesser yet still noticeable difference emerges for Kinh/Hoa versus ethnic minority households (77.9 per cent versus 44.2 per cent).

Table WS.6: Shared use of sanitation facilities

Percentage 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, Viet Nam, 2011

| | Users of improved sanitation facilities | | | Users of unimproved sanitation facilities | | | | | |
| | | | Shared by | | | Shared by | Open defe-cation (no facility, bush, field) | Total | Number of household members |
	Not shared[1]	Public facility	2 households or more	Not shared	Public facility	2 households or more			
Region									
Red River Delta	91.6	0.6	5.3	2.2	0	0.1	0.3	100	9261
Northern Midland and Mountain areas	71.5	0.5	4.3	8.3	0	0.6	14.8	100	7242
North Central area and Central Coast area	79.1	0.1	3	8.3	0.1	0.4	9	100	9443
Central Highlands	65.5	0	3	11.9	0	1.3	18.2	100	2551
South East	87.5	0.9	4	4.5	0.2	0.9	2	100	7066
Mekong River Delta	41.4	0.1	2.8	30	3.1	19.7	2.9	100	8434
Area									
Urban	88.9	0.6	4.3	3.2	0.2	1.7	1.1	100	13003
Rural	67.5	0.3	3.6	13.9	0.8	5.3	8.6	100	30995
Education of household head[§]									
None	43.1	0.4	3.6	15.6	2.3	8.3	26.9	100	2651
Primary	57.2	0.3	4.1	18.2	1.5	8.9	9.7	100	11331
Lower Secondary	78.4	0.3	4.1	9.3	0.2	2.8	4.7	100	17452
Upper Secondary	86.8	0.4	3.3	6.2	0.2	1.3	1.8	100	7222
Tertiary	92	0.7	3.2	3.1	0.1	0.4	0.6	100	5190
Wealth index quintile									
Poorest	38.4	0.2	3.4	24.5	1.1	9.5	22.9	100	8803
Second	60.3	0.1	5.6	18.5	1.6	7.7	6.2	100	8796
Middle	77.8	0.8	5.8	9	0.6	3.4	2.5	100	8798
Fourth	94.1	0.7	3	1.6	0	0.4	0.2	100	8797
Richest	98.5	0.1	1.3	0.1	0	0	0	100	8803
Ethnicity of household head									
Kinh/Hoa	77.9	0.4	3.9	9.6	0.7	4.1	3.4	100	38675
Ethnic Minorities	44.2	0.5	3.2	19.1	0.4	4.8	27.7	100	5323
Total	73.8	0.4	3.8	10.8	0.7	4.2	6.4	100	43998

[1]**MICS indicator 4.3; MDG indicator 7.9**

[§]151 cases with missing education of household head not shown

The place of disposal of faeces of children aged 0–2 years is presented in Table WS.7. The disposal of child's faeces is considered safe if the child is using a toilet or if the stool is rinsed into a toilet or latrine.

For 61.1 per cent of Vietnamese children aged 0–2 years the stools were disposed of safely the last time the child defecated. This percentage is higher in urban than in rural areas (81.6 versus 53 per cent). The largest differential for safe disposal of childrens' faeces is observed by mother's education: it is as low as 15.6 per cent when mothers have no education, progressively increases to 38.2 per cent when mothers have primary education and reaches 82 per cent when mothers have tertiary education. Wide disparities in the practice of safe disposal of childrens' faeces emerge between Kinh/Hoa and ethnic minority households (68.5 versus 21.5 per cent). In the Red River Delta and the South East regions, safe disposal of stools is practiced for almost 78 per cent of children aged 0–2 years. This percentage decreases to 39 per cent for children living in the Northern Midland and Mountain areas.

By place of disposal, the most common practice is to put/rinse a child's faeces into a toilet or latrine. This practice is considered to be safe, and was observed for 58 per cent of children aged 0–2 years. The other disposal method that is considered to be safe, notably the child using the toilet/latrine, has limited practice in Viet Nam, at only 3 per cent. The most common unsafe practice of disposing of children's faeces is putting/rinsing them into a drain or ditch (12.1 per cent), followed by leaving them in the open (10.4 per cent). Almost one in every two ethnic minority children have their faeces disposed by leaving them in the open. Differences in the safety of disposing of child faeces are observed by the type of sanitation facility available in the household. The most common disposal method in households with improved sanitation facilities is putting/rinsing the child's stool into the toilet or latrine, which is a safe practice, standing at almost 70 per cent. Meanwhile, the most common disposal method in households with unimproved sanitation facilities is putting/rinsing the child's stool into a drain or ditch, which is an unsafe practice, standing at 46 per cent.

Table WS.7: Disposal of child's faeces

Percentage distribution of children aged 0–2 years according to place of disposal of child's faeces, and the percentage of children aged 0–2 years whose stools were disposed of safely the last time the child passed stools, Viet Nam, 2011

| | Place of disposal of child's faeces | | | | | | | | | Percentage of children whose stools were disposed of safely[1] | Number of children aged 0–2 years |
	Child used toilet/ latrine	Put/ rinsed into toilet, latrine	Put/ rinsed into drain, ditch	Thrown into garbage	Buried	Left in the open	Other	Missing/ DK	Total		
Type of sanitation facility in dwelling											
Improved	3.5	69.7	4.7	9	1	5.4	6.2	0.5	100	73.2	1706
Unimproved	2	27.9	46	2.8	1.6	15.3	4.1	0.3	100	29.8	343
Open defecation	0	2	17.9	2.3	17.3	51.2	9.3	0	100	2	170
Region											
Red River Delta	3.6	74.4	5.2	7.1	0.6	0.3	8.4	0.5	100	77.9	496
Northern Midland and Mountain areas	1.8	37.2	5.8	5.6	0	32.1	16.7	0.7	100	39	440
North Central area and Central Coast area	2.2	59.8	12.5	8.3	5.9	9.7	1.3	0.2	100	62.1	423
Central Highlands	1.1	53.7	3.1	4.3	8	27.1	2.5	0.3	100	54.8	144
South East	4.4	73.3	1.9	13.5	3.2	1.3	2	0.3	100	77.7	339
Mekong River Delta	4.1	46.7	40.6	5.4	0.3	1.1	1.5	0.2	100	50.9	376
Area											
Urban	4	77.6	5	10.2	0.7	1.3	0.5	0.7	100	81.6	626
Rural	2.6	50.3	14.9	6.5	3	14	8.3	0.3	100	53	1594
Mother's education											
None	2.1	13.5	19.6	0	2.3	61.5	1.1	0	100	15.6	110
Primary	3.8	34.3	24.2	5.5	6.5	17.7	7.7	0.2	100	38.2	367
Lower Secondary	2.5	59.4	12.2	5.3	1.9	8.4	9.8	0.5	100	61.9	873
Upper Secondary	3.1	65.9	9.1	11.2	1.7	4.9	3.8	0.3	100	69	428
Tertiary	3.5	78.5	2.9	11.9	0.4	1.1	1.2	0.4	100	82	441
Wealth index quintile											
Poorest	1.5	25	21.1	3.4	4.6	33.5	10.9	0	100	26.5	495
Second	2	45.2	22.9	2.4	3.7	12.2	10.7	0.8	100	47.2	402
Middle	4	60.7	12.3	11.1	1.9	3.5	6.2	0.2	100	64.8	427
Fourth	2.2	79	4.1	9.3	1.4	0.4	3.1	0.5	100	81.2	434
Richest	5.3	82.5	0.3	11.5	0	0	0	0.5	100	87.7	462
Ethnicity of household head											
Kinh/Hoa	3.3	65.2	11.9	8.5	2.3	3.4	5.1	0.3	100	68.5	1869
Ethnic Minorities	1.4	20	12.8	2.5	2.6	48	11.7	0.9	100	21.5	351
Total	3	58	12.1	7.5	2.3	10.4	6.1	0.4	100	61.1	2219

[1] **MICS indicator 4.4**

Table WS.8 presents the percentages of the population using improved sources of drinking water and improved sanitation facilities, both separately and combined.

Table WS.8: Use of improved water sources and improved sanitation facilities				
Percentage of household population using both improved drinking water sources and improved sanitation facilities, Viet Nam, 2011				
	Percentage of household population:			
	Using improved sources of drinking water[1]	Using improved sanitation facilities[2]	Using improved sources of drinking water and improved sanitation facilities	Number of household members
Region				
Red River Delta	99	91.6	90.7	9261
Northern Midland and Mountain areas	80.7	71.5	62.6	7242
North Central area and Central Coastal area	89.8	79.1	73.1	9443
Central Highlands	86.1	65.5	59.5	2551
South East	98.4	87.5	86.5	7066
Mekong River Delta	93.1	41.4	40.2	8434
Area				
Urban	98.4	88.9	87.9	13003
Rural	89.4	67.5	62.7	30995
Education of household head[§]				
None	82.1	43.1	37.5	2651
Primary	88.6	57.2	53.1	11331
Lower Secondary	93.1	78.4	74.5	17452
Upper Secondary	94.5	86.8	83.5	7222
Tertiary	97.7	92	90.7	5190
Wealth index quintile				
Poorest	75.4	38.4	29.7	8803
Second	91.5	60.3	55.5	8796
Middle	95.6	77.8	75.2	8798
Fourth	98.4	94.1	92.6	8797
Richest	99.3	98.5	97.8	8803
Ethnicity of household head				
Kinh/Hoa	95.3	77.9	75.5	38675
Ethnic Minorities	68.4	44.2	31.3	5323
Total	92	73.8	70.1	43998

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

[§]151 cases with missing education of household head not shown

Note:
Table calculates the indicator as only those improved sanitation facilities that are not shared

The percentage of the population using both improved sources of drinking water and improved sanitation facilities is 70.1 per cent at the national level. Large differences emerge by ethnicity, with 75.5 per cent of people living in Kinh/Hoa households using such facilities, compared with only 31.3 per cent of people living in ethnic minority households. Substantial disparities can also be observed by living standards, education of household head and regions. For example, people living in the poorest households are three times less likely to use both improved drinking water sources and improved sanitation facilities than people living in the wealthiest households (29.7 per cent versus 97.8 per cent). In the Mekong River Delta, only 40.2 per cent of the population use improved sources of drinking water and improved sanitation facilities, while in the Red River Delta and the South East the percentage is relatively high, at around 90 per cent.

Handwashing

Handwashing with water and soap is the most cost-effective health intervention to reduce both the incidence of diarrhoea and pneumonia in children under 5 years of age. 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 if water and soap (or other local cleansing materials) are present at a specific place for handwashing.

Table WS.9: Water and soap at place for handwashing

Percentage of households where place for handwashing was observed and percentage distribution of households by availability of water and soap at place for handwashing, Viet Nam, 2011

| | Percentage of households where place for handwashing was observed | Number of households | Percent distribution of households where place for handwashing was observed, where: | | | | | Number of households where place for handwashing was observed |
			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	Total	
Region								
Red River Delta	98.8	2601	92.8	6.8	0.3	0.1	100	2569
Northern Midland and Mountain areas	99.3	1836	81.4	18.1	0.2	0.3	100	1823
North Central area and Central Coastal area	97.8	2522	81.2	17.7	0.6	0.5	100	2466
Central Highlands	98.7	604	82.6	15.3	0.9	1.2	100	596
South East	96.4	1873	93.3	6.1	0.6	0.1	100	1806
Mekong River Delta	97	2178	85.1	14	0.7	0.2	100	2113
Area								
Urban	97.1	3454	93.4	6.1	0.5	0	100	3355
Rural	98.3	8160	83.7	15.4	0.5	0.4	100	8018
Education of household head[§]								
None	95.7	691	68.1	30.3	0.4	1.1	100	661
Primary	97.6	2919	80.5	t18.3	0.6	0.6	100	2848
Lower Secondary	98.3	4568	87.6	11.9	0.4	0.1	100	4489
Upper Secondary	98	1904	92.6	6.7	0.7	0	100	1865
Tertiary	98.5	1504	96	3.7	0.3	0	100	1481
Wealth index quintiles								
Poorest	98.1	2329	69.2	29.7	0.3	0.8	100	2285
Second	98.5	2368	84.3	14.8	0.7	0.2	100	2332
Middle	98.9	2406	88.5	10.8	0.5	0.3	100	2379
Fourth	96.9	2326	93.9	5.4	0.6	0.1	100	2254
Richest	97.1	2186	97.9	1.8	0.3	0	100	2122
Ethnicity of household head								
Kinh/Hoa	97.9	10436	88.7	10.5	0.5	0.2	100	10216
Ethnic Minorities	98.2	1178	67.1	31.3	0.4	1.2	100	1157
Total	97.9	11614	86.6	12.6	0.5	0.3	100	11373

[1]MICS indicator 4.5

[§]29 cases with missing education of household head not shown

In Viet Nam, a specific place for handwashing was observed in 97.9 per cent of all households (Table WS.9). In households where a place for handwashing was observed, 86.6 per cent had both water and soap present at the designated place. In 12.6 per cent of the households only water was available, while in 0.5 per cent of the households only soap but no water was available. The remaining 0.3 per cent of households had neither water

nor soap available at the handwashing place. The availability of water and soap is strongly correlated with education of the household head, ethnicity, as well as living standards. For example, the difference between the poorest and the second poorest households alone is about 15 per cent. This is largely attributable to the lack of soap in the poorer households, as well as in households with a less educated household head. Interesting disparities in the availability of soap also emerge by region, with as many as 18.1 per cent of households in the Northern Midland and Mountain areas lacking soap, compared to less than 7 per cent in the South East and the Red River Delta.

In 87 per cent of households with a handwashing place, soap was observed. In 8.5 per cent of households with a handwashing place, the soap was shown to the interviewer, and in 4.4 per cent there was no soap available (Table WS.10). Overall, 95.1 per cent of households had soap available somewhere in the dwelling. Households are less likely to have soap if the household head has no education and belongs to an ethnic minority, as well as if the household is poor and located in the Central Highlands. In all of these cases, the percentage drops below 90 per cent.

Table WS.10: Availability of soap

Percentage distribution of households by availability of soap in the dwelling, Viet Nam, 2011

| | Place for hand washing observed | | | Place for hand washing not observed | | | | |
| | | Soap not observed at place for hand washing | | | | | Percentage of households with soap | |
	Soap observed	Soap shown	No soap in household	Soap shown	No soap in household	Total	somewhere in the dwelling[1]	Number of households
Region								
Red River Delta	93.1	5.7	1.2	86	14	100	98.6	2601
Northern Midland and Mountain areas	81.6	12.7	5.7	90.6	9.4	100	94.3	1836
North Central area and Central Coastal area	81.8	9.9	8.3	73.2	26.8	100	91.3	2522
Central Highlands	83.5	5.7	10.8	38.5	61.5	100	88.5	604
South East	93.8	3.7	2.4	82.6	17.4	100	97	1873
Mekong River Delta	85.7	11.5	2.7	82	18	100	96.2	2178
Area								
Urban	93.9	4.5	1.6	93	7	100	98.1	3454
Rural	84.2	10.1	5.6	70.3	29.7	100	93.8	8160
Education of household head[§]								
None	68.1	16.5	15	60.7	39.3	100	83.4	691
Primary	81	12	6.9	70.5	29.5	100	92.3	2919
Lower Secondary	88	8.3	3.7	80.6	19.4	100	96	4568
Upper Secondary	93.3	5.1	1.6	96.8	3.2	100	98.3	1904
Tertiary	96.3	2.9	0.8	98.8	1.2	100	99.2	1504
Wealth index quintile								
Poorest	69.4	17.7	12.8	48.7	51.3	100	86.4	2329
Second	85	10.2	4.9	55.2	44.8	100	94.3	2368
Middle	89	8.2	2.8	84	16	100	96.9	2406
Fourth	94.5	4.2	1.3	94.8	5.2	100	98.5	2326
Richest	98.2	1.6	0.2	95.4	4.6	100	99.6	2186
Ethnicity of household head								
Kinh/Hoa	89.3	7.2	3.5	77.7	16.8	100	96.1	10436
Ethnic Minorities	67.5	19.9	12.6	42.7	57.3	100	86.5	1178
Total	87	8.5	4.4	79.6	20.4	100	95.1	11614

[1] **MICS indicator 4.6**

[§]28 cases with missing education of household head not shown

VIII. REPRODUCTIVE HEALTH
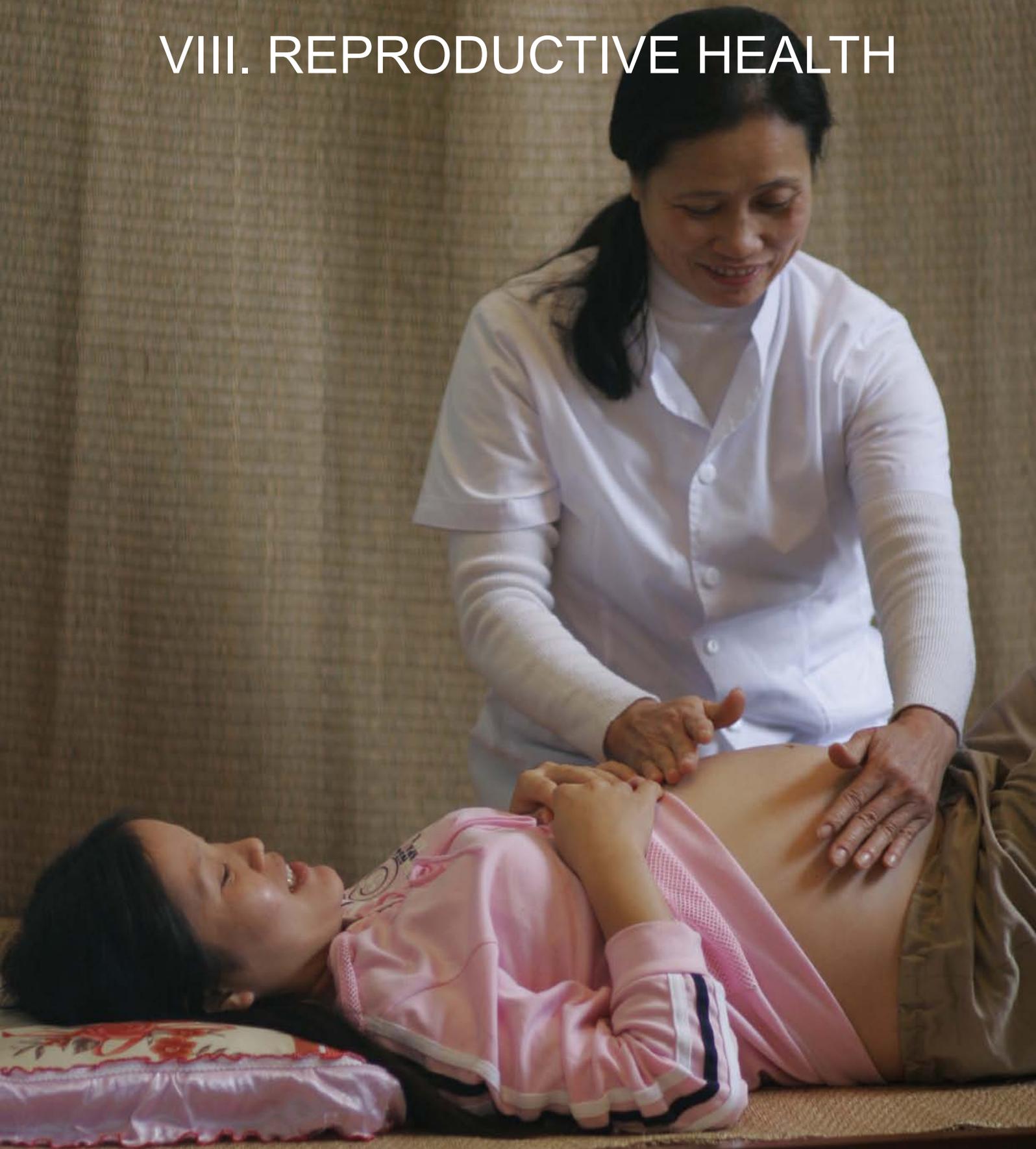
Fertility

Management of fertility levels is important for supporting national population resources. Data on fertility indicators are therefore necessary for informing the preparation of development plans and vision documents addressing current and future population needs. In the Viet Nam MICS 2011, adolescent birth rates and total fertility rates are calculated by using information on the date of last birth of each woman and are based on the one year period preceding the survey.

Table RH.1 shows adolescent birth rate and total fertility rate in Viet Nam. The adolescent birth rate (age-specific fertility rate for women aged 15–19) is defined as the number of births to women aged 15–19 years during the one year period preceding the survey, divided by the average number of women aged 15–19 during the same period, expressed per 1,000 women. The adolescent birth rate is 46 in Viet Nam. It is higher in the Northern Midland and Mountain areas, among women with lower levels of education, in the poorer living standard quintiles, in the ethnic minority households and in rural areas. The findings show a strong correlation between the adolescent birth rate and the education level: for example, the adolescent birth rate is above 100 for women with no education, women with primary education and women with lower secondary education, and sharply drops to below 20 for upper secondary and tertiary levels of education.

The total fertility rate (TFR) is obtained by summing the age-specific fertility rates calculated for each of the five-year age groups of women, from age 15 through to age 49. The TFR denotes the average number of children to which a woman will have given birth by the end of her reproductive years if current fertility rates prevail. The total fertility rate is 2 nationally and indicates differentials by all background characteristics included in Table RH.1. In the South East and the Mekong River Delta the TFR is lower by one child compared to the Northern Midland and Mountain areas. The total fertility rate is higher at the lower education levels and in the poorer quintiles. The adolescent birth rate and the TFR are higher in rural than in urban areas.

Table RH.1: Adolescent birth rate and total fertility rate		
Adolescent birth rates and total fertility rates, Viet Nam 2011		
	Adolescent birth rate[1] (Age-specific fertility rate for women aged 15–19)	Total fertility rate
Region		
Red River Delta	36	2.1
Northern Midland and Mountain areas	100	2.6
North Central area and Central Coastal area	38	2.0
Central Highlands	37	2.2
South East	29	1.5
Mekong River Delta	40	1.7
Area		
Urban	15	1.6
Rural	59	2.2
Education level		
None	126	2.9
Primary	171	2.8
Lower Secondary	110	2.2
Upper Secondary	19	2.3
Tertiary	13	1.7
Wealth index quintile		
Poorest	95	2.5
Second	56	2.3
Middle	28	1.8
Fourth	39	1.7
Richest	15	1.8
Ethnicity of household head		
Kinh/Hoa	37	1.9
Ethnic Minorities	99	2.6
Total	46	2
[1] **MICS indicator 5.1; MDG indicator 5.4**		

Sexual activity and childbearing early in life carry substantial risks for young people. Table RH.2 presents early childbearing indicators for women aged 15–19 and 20–24 while Table RH.3 presents the trends for early childbearing. As shown in Table RH.2, 4.6 per cent of women aged 15–19 have already had a birth, 2.9 per cent are pregnant with the first child, thus a total of 7.5 per cent of young women aged 15–19 have begun childbearing, although only 0.1 per cent have had a live birth before age 15. The percentage of women aged 20–24 years who have had a live birth before age 18 is 3. Regional patterns indicate that among women aged 20–24 years 10.1 per cent have had a live birth before age 18 in the Central Highlands, while in other regions only 5.8 per cent or less have had a live birth. There is a strong correlation with women's education level, as the majority of early child births occur to uneducated or less-educated young women. The percentage is 10.9 for women aged 20–24 with primary education while no women with tertiary education have had a live birth before age 18. Early childbearing in the life of young women is higher among the poorer households (9.8 per cent among the poorest and 0.5 per cent among the richest households).

Table RH.2: Early childbearing

Percentage of women aged 15–19 years who have had a live birth or who are pregnant with the first child and percentage of women aged 15–19 years who have begun childbearing, percentage of women who have had a live birth before age 15, and percentage of women aged 20–24 who have had a live birth before age 18, Viet Nam 2011

	Percentage of women age 15–19 who:				Number of women aged 15–19	Percentage of women aged 20–24 who have had a live birth before age 18[1]	Number of women aged 20–24
	Have had a live birth	Are pregnant with first child	Have begun childbearing	Have had a live birth before age 15			
Region							
Red River Delta	3.6	4	7.6	0	330	1.7	343
Northern Midland and Mountain areas	9.3	5.8	15.2	0	265	4.1	247
North Central area and Central Coastal area	2.9	2.7	5.6	0	427	1	289
Central Highlands	7.1	3.6	10.7	0.8	130	10.1	88
South East	2.3	0.8	3.1	0	275	0.6	329
Mekong River Delta	5	1	6.1	0	280	5.8	313
Area							
Urban	2.2	1.6	3.9	0	493	1.2	567
Rural	5.6	3.4	9	0.1	1214	3.9	1042
Women's education							
None	(23.3)	(1.5)	(24.8)	(1.5)	29	(21.4)	46
Primary	20.4	11.1	31.5	0.8	69	10.9	129
Lower Secondary	11.7	6.4	18.1	0	347	4.8	491
Upper Secondary	1.5	1.6	3.1	0	1110	0.1	422
Tertiary	0	1.2	1.2	0	151	0	520
Wealth index quintile							
Poorest	10.9	5.2	16.1	0.2	314	9.8	270
Second	5.3	2.7	8	0.1	369	2.5	270
Middle	2.5	2.2	4.7	0	361	2.7	344
Fourth	3.4	3.9	7.3	0	330	1	390
Richest	1.5	0.7	2.2	0	333	0.5	335
Ethnicity of household head							
Kinh/Hoa	3.2	2.5	5.7	0	1465	2	1380
Ethnic Minorities	13.4	5.2	18.7	0.4	242	8.5	229
Total	4.6	2.9	7.5	0.1	1707	3	1608

[1] **MICS indicator 5.2**

Note:
Figures shown in parenthesis are based on denominators of 25–49 un-weighted cases

The overall childbearing before age 15 is low in Viet Nam (0.1 per cent). As expected the percentages are slightly higher in rural areas. Early childbearing before age 18 is more prevalent in the 35–39, 30–34 and 25–29 age groups of women, all groups indicating above 4 per cent, as shown in Table RH.3.

Table RH.3: Trends in early childbearing

Percentage of women who have had a live birth, by age 15 and 18, by residence and age group, Viet Nam 2011

	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												
15–19	0	493	na	na	0.1	1,214	na	na	0.1	1,707	na	na
20–24	0	567	1.2	567	0.3	1,042	3.9	1,042	0.2	1,608	3	1,608
25–29	0.4	572	1.9	572	0.5	1,234	5.1	1,234	0.4	1,806	4.1	1,806
30–34	0	558	2.2	558	0.2	1,259	5.6	1,259	0.1	1,817	4.6	1,817
35–39	0	502	3	502	0.2	1,154	5.6	1,154	0.1	1,657	4.8	1,657
40–44	0	525	2.6	525	0	1,095	4	1,095	0	1,621	3.5	1,621
45–49	0.1	459	2.5	459	0	988	3.8	988	0	1,448	3.4	1,448
Total	0.1	3676	2.2	3183	0.2	7,987	4.7	6,773	0.1	11,663	3.9	9,956

Contraception

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

Table RH.4 presents information on the use of various contraception methods by women aged 15–49 years who are married or in a union, hereafter simply referred to as married. Current use of contraception was reported by 77.8 per cent of these women. The most common method is the intrauterine device (IUD) which is used by 31 per cent of married women in Viet Nam. The next most common method women rely on is the male condom (12.7 per cent of all women rely on their sexual partner using this method), followed by periodic abstinence with 11.3 per cent. The male condom is relied on most heavily by women with tertiary education and those living in the richest quintile households. One in ten women aged 15–49 years uses contraceptive pills.

Table RH.4: Use of contraception

Percentage of women aged 15–49 years currently married or in union who are using (or whose partner is using) a contraceptive method, Viet Nam 2011

	Not using any method													Any modern method	Any traditional method	Any method[1]	Number of women currently married or in union
		Female sterilization	Male sterilization	IUD	Injectables	Implants	Pill	Male condom	Others§	LAM§§	Periodic abstinence	Withdrawal	Other				
Region																	
Red River Delta	23.7	2.7	0.1	31	0.5	0.2	5.3	18.3	0.17	0.3	12.9	4.7	0.1	58.3	18	76.3	1,755
Northern Midland and Mountain areas	26.2	5.1	0.1	34.2	1.8	0.4	10.4	7.4	0.01	0.1	9.1	5.2	0	59.3	14.5	73.8	1,491
North Central area and Central Coastal area	20.1	4.5	0.2	35.9	1.4	0.3	7.6	13.1	0.12	0.1	8.8	7.8	0	63.1	16.8	79.9	1,674
Central Highlands	24.2	5.8	0.1	28.5	4.2	0	8.2	10.8	0.13	0.2	9.5	8.2	0.1	57.9	17.9	75.8	467
South East	21.4	4.6	0	23.4	1.7	0	12.4	15.5	0.07	0.7	13.7	6.5	0	57.8	20.9	78.6	1,335
Mekong River Delta	19.3	2.5	0.1	29.9	2.4	0.4	16.3	9.3	0	0	12.8	7	0	60.9	19.8	80.7	1,619
Area																	
Urban	22.4	2.7	0	24.3	0.9	0.2	9.8	20.2	0.10	0.2	12.9	6.2	0	58.3	19.3	77.6	2,434
Rural	22.1	4.4	0.1	33.8	2	0.3	10.2	9.6	0.07	0.2	10.7	6.4	0	60.5	17.4	77.9	5,908
Age																	
15–19	79	0	0	6.1	0.7	0	4.6	3.9	0	1.5	1.1	3.1	0	15.3	5.7	21	143
20–24	46.6	0.2	0	19.7	1.1	0.2	11.1	11.7	0	0.6	4.9	3.9	0	44	9.4	53.4	828
25–29	24.8	0.5	0	29.4	1.6	0.2	13.2	14.5	0.04	0.3	9.3	6.1	0	59.5	15.7	75.2	1,498
30–34	15	1.5	0.1	36.5	2.5	0.5	13.3	15.6	0.07	0.3	9.3	5.4	0	70	15	85	1,643
35–39	11.5	4.1	0	36	1.8	0.5	11.2	13.3	0.19	0.2	12.9	8.2	0	67.1	21.3	88.5	1,530
40–44	14.6	7	0.2	34.4	1.5	0	8.1	12.3	0	0	15.4	6.2	0.1	63.6	21.8	85.4	1,456
45–49	28	10.5	0.3	25.9	1.2	0	3.1	8	0.16	0	15.1	7.6	0	49.1	22.8	72	1,244
Number of living children																	
0	85.2	0	0	0.4	0.1	0	3	5.2	0	0	4.3	1.9	0	8.6	6.2	14.8	537
1	31.5	0.7	0	24.1	1.3	0.1	9.1	17	0.03	0.4	9.8	5.9	0	52.4	16.1	68.5	1,977
2	11.7	2.9	0	37.5	1.7	0.4	12.3	13.8	0.11	0.2	12.8	6.6	0	68.7	19.5	88.3	3,883
3	14.3	8.6	0.3	35.2	2	0.2	9	9.5	0	0.3	12.6	7.9	0	64.8	20.9	85.7	1,298
4+	20.5	13.6	0.6	30.2	3.3	0.3	8.3	5.3	0.28	0.1	10.7	6.9	0	61.8	17.7	79.5	647

Table RH.4: Use of contraception

Percentage of women aged 15–49 years currently married or in union who are using (or whose partner is using) a contraceptive method, Viet Nam 2011

	Not using any method	Female sterili-zation	Male sterili-zation	IUD	Injectables	Implants	Pill	Male condom	Others[§]	LAM[§§]	Periodic abstinence	Withdrawal	Other	Any modern method	Any tradi-tional method	Any method[1]	Number of women currently married or in union
Women's education																	
None	25.3	7.5	0.1	34.4	3.9	0.6	16.9	2.8	0	0.3	5.6	2.6	0.1	66.1	8.6	74.7	396
Primary	19.3	7.1	0.1	32	2.6	0.5	13.4	7.2	0.12	0.3	9.6	7.8	0	63	17.7	80.7	1,626
Lower Secondary	20.4	3.6	0.1	34.8	1.7	0.1	10.2	10.3	0.09	0.2	12.1	6.5	0	60.9	18.8	79.6	3,739
Upper Secondary	25.7	2.9	0	27.6	0.9	0.3	6.4	18.3	0	0.4	11.4	6	0	56.5	17.8	74.3	1,413
Tertiary	27	0.7	0.1	20.3	0.4	0.1	7.6	24.8	0.11	0.1	13.3	5.4	0	54.2	18.8	73	1,167
Wealth index quintile																	
Poorest	23.3	5.9	0.3	37.5	3.3	0.5	13.5	4.1	0.03	0.1	7.9	3.5	0	65.1	11.6	76.7	1,558
Second	20.8	4.9	0.2	34.2	2.3	0.4	11.4	8.2	0.12	0.1	9.8	7.4	0	61.8	17.4	79.2	1,604
Middle	21	3.9	0	33.7	1.4	0.1	9.8	11.4	0	0.3	10.6	7.9	0	60.1	18.8	79	1,708
Fourth	23.8	3.1	0	27.5	1	0.1	8.3	15.1	0.06	0.3	13.5	7.1	0.1	55.2	21	76.2	1,763
Richest	22.2	2.1	0	22.9	0.6	0.2	8.1	23.7	0.18	0.2	14.4	5.5	0	57.7	20.1	77.8	1,708
Ethnicity of household head																	
Kinh/Hoa	21.9	3.6	0.1	30.4	1.3	0.2	9.5	14	0.1	0.2	12.1	6.7	0	59.1	19	78.1	7,277
Ethnic Minorities	24.7	6.4	0.3	34.8	4	0.5	14.6	4.2	0.0	0.2	6.1	4.1	0	64.8	10.5	75.3	1,065
Total	22.2	3.9	0.1	31	1.7	0.2	10.1	12.7	0.1	0.2	11.3	6.3	0	59.8	17.9	77.8	8,341

[1] MICS indicator 5.3; MDG indicator 5.3

[§]Others include Female condom and Diaphragm/Foam/Jelly;
[§§]LAM is lactational amenorrhea

Contraceptive prevalence rates indicate minimal differences by education, living standards, area or region. What seems to influence prevalence the most is women's age and the number of children the women already have. Women are less likely to use contraception methods in younger ages (15–19 years and 20–24 years), and when they have no children or only one child. In addition, roughly 80 per cent of women aged 15–19 years, and 85.2 per cent of women with no children do not use any method of contraception.

Three in five women (59.8 per cent) use modern contraceptive methods while one in five (17.9 per cent) use traditional methods. The use of traditional methods is positively correlated with the women's age, living standard and education level: the older the woman, the richer and the more educated she is, the more likely she is to use a traditional contraceptive method. The use of traditional contraceptive methods is higher among women living in Kinh/Hoa households than women in ethnic minority households (19 per cent versus 10.5 per cent). In contrast, 64.8 per cent of women living in ethnic minority households use modern contraceptive methods compared with 59.1 per cent of women living in Kinh/Hoa households.

Unmet Need

Unmet need for contraception refers to fecund women who are not using any method of contraception, but who wish to postpone the next birth (spacing) or who wish to stop childbearing altogether (limiting). Unmet need is identified in the MICS by using a set of questions that elicit current behaviours and preferences pertaining to contraceptive use, fecundity, and fertility.

Women with an unmet need for spacing include women who are currently married (or in a 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(nother) child, but want to have the child at least two years later, or after marriage.

Women with an unmet need for limiting are those women who are currently married (or in a 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 pregnant but had not wanted the pregnancy at all, and women who are not currently pregnant but do not want to have a(nother) child.

Total unmet need for contraception is simply the sum of unmet need for spacing and unmet need for limiting.

Table RH.5 shows the results of the survey on contraception, unmet need, and the demand for contraception satisfied in Viet Nam.

Some 2.3 per cent of 15–49 year old women who are married or in a union have an unmet need for contraception for spacing and 2 per cent for limiting children. As expected, the unmet need for spacing is higher among younger women and for limiting among the women in the age groups 30 and above. It is notable that young women aged 15–19 years report the highest rate of unmet need for contraception (15.6 per cent), which may contribute to why their contraceptive rate is so low.

Table RH.5: Unmet need for contraception

Percentage of women aged 15–49 years currently married or in union with an unmet need for family planning and percentage of demand for contraception satisfied, Viet Nam 2011

	Met need for contraception			Unmet need for contraception			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
	For spacing	For limiting	Total	For spacing	For limiting	Total[1]			
Region									
Red River Delta	15.4	60.9	76.3	3.2	1.4	4.6	1755	94.3	1,419
Northern Midland and Mountain areas	14.7	59	73.8	3.5	2.8	6.3	1491	92.1	1,194
North Central area and Central Coastal area	16.7	63.5	80.1	1.9	1.7	3.7	1674	95.6	1,403
Central Highlands	18.9	56.9	75.8	3.3	2.1	5.4	467	93.3	380
South East	25.2	53.4	78.6	1.3	1.8	3.1	1335	96.2	1,091
Mekong River Delta	19.1	61.6	80.7	1.2	2.4	3.6	1619	95.7	1,365
Area									
Urban	20.8	56.8	77.6	2.3	2.1	4.5	2434	94.5	1,998
Rural	16.8	61	77.9	2.3	2	4.3	5908	94.8	4,855
Age									
15–19	16.6	4.4	21	14.6	1.1	15.6	143	57.3	52
20–24	41.7	11.8	53.4	8.6	1.7	10.3	828	83.8	527
25–29	40.4	34.9	75.2	4.5	1.1	5.5	1,498	93.1	1,211
30–34	20.9	64.1	85	1.5	3.3	4.8	1,643	94.6	1,477
35–39	9.3	79.2	88.5	0.6	2	2.7	1,530	97.1	1,394
40–44	2.5	83	85.5	0	1.9	1.9	1,456	97.8	1,273
45–49	0.5	71.5	72	0	1.9	1.9	1,244	97.5	918
Women's education									
None	7.8	66.8	74.7	1.8	4.8	6.7	396	91.8	322
Primary	12.9	67.9	80.7	1.2	2.7	3.8	1,626	95.5	1,375
Lower Secondary	16.1	63.6	79.7	1.9	1.8	3.6	3,739	95.6	3,116
Upper Secondary	22.5	51.8	74.3	4.1	1.4	5.5	1,413	93.1	1,128
Tertiary	29.3	43.8	73	3.4	1.7	5.1	1,167	93.5	912
Wealth index quintiles									
Poorest	12.9	63.8	76.7	2.3	2.7	5.1	1,558	93.8	1,273
Second	15.8	63.4	79.2	1.9	2	3.9	1,604	95.4	1,332
Middle	18.8	60.2	79	2.1	1.5	3.5	1,708	95.7	1,410
Fourth	20.9	55.4	76.3	2.7	2.2	4.8	1,763	94	1,430
Richest	21	56.9	78	2.6	1.9	4.4	1,708	94.6	1,407
Ethnicity of household head									
Kinh/Hoa	18.7	59.4	78.2	2.2	1.9	4.1	7,277	95	5,987
Ethnic Minorities	13.1	62.2	75.3	3.1	2.9	6	1,065	92.6	866
Total	18	59.8	77.8	2.3	2	4.3	8,341	94.7	6,852

[1] **MICS indicator 5.4; MDG indicator 5.6**

Met need for limiting includes women who are using a contraceptive method and who want no more children, have undergone sterilisation (or their partner/husband has undergone sterilisation) or declare themselves as infecund. Met need for spacing includes women who are using a contraceptive method and who want to have another child or are undecided whether to have another child. The total of met need for spacing and limiting adds up to the total met need for contraception. In Viet Nam the total percentage of women whose contraceptive needs are met is 77.8, of which 18 per cent have a met need for spacing and 59.8 for limiting. The met need for contraception for spacing is higher among younger women particularly those aged 20–29 years (around 40 per cent), while the met need for limiting is higher among women aged 30–49 years (above 60 per cent).

Using information on contraception and unmet need, the percentage of demand for contraception that is satisfied is also estimated from the Viet Nam MICS 2011 data. The percentage of demand that is satisfied is defined as the proportion of women currently married or in a marital union who are currently using contraception, out 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. The percentage of demand for contraception that is satisfied is 94.7. It is more than 90 per cent for all women currently married or in a union for all regions, educational levels, wealth index quintiles and age groups. It is below 90 per cent for women aged 15–19 years at 57.3 per cent and for women aged 20–24 years (83.8 per cent).

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 antenatal care as an intervention to improve both maternal and newborn health. For example, if the antenatal period is used to inform women and families about the danger signs and symptoms and about the risks during 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 mother and infant. The prevention and treatment of malaria among pregnant women, management of anaemia during pregnancy and treatment of sexually transmittable infections (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 antenatal care. WHO guidelines are specific on the content of antenatal care visits, which should include:

- Blood pressure measurement

- Urine testing for bateriuria and proteinuria

- Blood testing to detect syphilis and severe anaemia

- Weight/height measurement (optional)

The type of personnel providing antenatal care to women aged 15–49 years who gave birth in the two years preceding the survey is presented in Table RH.6. Coverage of antenatal care (by a doctor, nurse, or midwife) is high in Viet Nam with 93.7 per cent of women receiving antenatal care at least once during the latest pregnancy. The highest level of antenatal care is found in the Red River Delta and South East regions (99 per cent), while the lowest level is observed in the Northern Midland and Mountain areas (82.8 per cent). Antenatal care coverage increases notably with the women's education level. Some 57.4 per cent of uneducated women have not received any antenatal care, compared with 5.8 per cent or less of women with primary education or above. About 78.4 per cent of women

living in the poorest households receive antenatal care from skilled personnel, compared to 96.2 per cent or higher for women in the richer quintiles. Accounting for 80.6 per cent, doctors are the main antenatal care provider among the health personnel providing such care.

Table RH.6: Antenatal care coverage

Percentage distribution of women age 15–49 years who gave birth in the two years preceding the survey by type of personnel providing antenatal care, Viet Nam 2011

	Person providing antenatal care						No antenatal care received	Total	At least once by skilled personnel[1]	Number of women who gave birth in the preceding two years
	Doctor	Nurse/ Midwife	Auxiliary midwife/nurse	Village health worker	Other	Missing				
Region										
Red River Delta	90.6	8.4	0	0	0		1	100	99	294
Northern Midland and Mountain areas	60	22.2	0.6	1	0		16.2	100	82.8	285
North Central area and Central Coastal area	79.5	16.1	1	0.7	0		2.7	100	96.6	287
Central Highlands	72.4	15	0.5	1	0		11.2	100	87.9	92
South East	95.7	3.3	0	0	0.5		0.4	100	99.1	214
Mekong River Delta	84.4	9.3	0.7	2.6	0		3	100	94.4	210
Area										
Urban	94.7	3.3	0	0	0		2.1	100	97.9	402
Rural	74.9	16.5	0.7	1.1	0.1		6.8	100	92	980
Mother's age at birth										
Less than 20	72.5	15.2	0	0.2	0		12.1	100	87.7	130
20–34	82.5	11.5	0.5	1	0.1		4.5	100	94.4	1,106
35–49	73.2	19.5	1.3	0	0		6	100	94	114
Women's education										
None	28.6	12.2	0.7	1	0		57.4	100	41.6	64
Primary	74	18.5	0.7	1	0		5.8	100	93.3	203
Lower Secondary	77.3	17.3	0.6	1	0.2		3.6	100	95.2	523
Upper Secondary	88	9.6	0	1.1	0		1.3	100	97.6	296
Tertiary	95	3.5	0.5	0	0		1	100	99	295
Wealth index quintiles										
Poorest	51.1	25.5	1.7	1.4	0.4		19.9	100	78.4	300
Second	77.1	18.6	0.6	1	0		2.7	100	96.2	263
Middle	86.3	10.9	0	1.6	0		1.1	100	97.2	251
Fourth	92.1	7.2	0	0	0		0.8	100	99.2	270
Richest	98.2	0.8	0	0	0		0.9	100	99.1	299
Ethnicity of household head										
Kinh/Hoa	87.6	9.7	0.4	0.6	0.1		1.6	100	97.7	1,158
Ethnic Minorities	44.5	28	0.7	1.9	0		24.9	100	73.2	225
Total	80.6	12.6	0.5	0.8	0.1		5.4	100	93.7	1,383

[1] **MICS indicator 5.5a; MDG indicator 5.5**

UNICEF and WHO recommend a minimum of at least four antenatal care visits during pregnancy. Table RH.7 shows the number of antenatal care visits during the last pregnancy during the two years preceding the survey, regardless of provider by selected characteristics. More than nine in ten mothers (91.2 per cent) received antenatal care (ANC) more than once and over half of all mothers received ANC at least four times (59.6 per cent). Mothers with no education, those from the poorest households and those living in ethnic minority households are less likely to receive ANC four or more times. For example, 27.2 per cent

of the women living in the poorest households reported four or more antenatal care visits compared with 88.7 per cent among those living in the richest households. One in four women living in ethnic minority households (24.9 per cent) have not received any antenatal care compared to only 1.6 per cent of women living in Kinh/Hoa households. Following the same pattern, women living in Kinh/Hoa households have a three times higher chance of receiving the four recommended ANC visits (67 per cent) compared to women living in ethnic minority households (21.3 per cent).

Education is the strongest predictor of antenatal care: 87.3 per cent of women with tertiary level of education reported receiving four or more antenatal care visits compared to only 5.6 per cent of women with no education. A high 57.4 per cent of women with no education have not received any antenatal care during the last pregnancy. Among the regions of Viet Nam, the Northern Midland and Mountain areas and Central Highlands are the two regions showing the lowest proportion of women receiving four or more ANC visits among women with a live birth in the two years preceding the survey (37.8 per cent and 37.6 per cent).

Table RH.7: Number of antenatal care visits

Percentage distribution of women who had a live birth during the two years preceding the survey by number of antenatal care visits by any provider, Viet Nam, 2011

	Percentage distribution of women who had:						Number of women who had a live birth in the preceding two years
	No antenatal care visits	One visit	Two visits	Three visits	Four or more visits[1]	Total	
Region							
Red River Delta	1	1.3	6.6	15.7	75.3	100	294
Northern Midland and Mountain areas	16.2	5.2	18.7	21.6	37.8	100	285
North Central area and Central Coastal area	2.7	3.8	9.7	31.3	52.3	100	287
Central Highlands	11.2	5.6	16.7	28.7	37.6	100	92
South East	0.4	2.1	3.8	6.3	87.1	100	214
Mekong River Delta	3	2.4	12.8	22.9	58.8	100	210
Area							
Urban	2.1	1.1	4.4	10.5	81.6	100	402
Rural	6.8	4.1	13.6	24.9	50.5	100	980
Mother's age at birth							
Less than 20	12.1	7.3	15.4	23.7	41.3	100	130
20–34	4.6	2.9	9.9	20.3	62.2	100	1139
35–49	6	1.9	16.4	20.9	54.3	100	114
Women's education							
None	57.4	9.8	10.5	16.7	5.6	100	64
Primary	5.8	7.3	21.9	21	44	100	203
Lower Secondary	3.6	2.9	13.7	28.5	51.1	100	523
Upper Secondary	1.3	1.3	8.5	19.3	69.4	100	296
Tertiary	1	1.3	.9	9	87.3	100	295
Wealth index quintile							
Poorest	19.9	9.7	18.1	25	27.2	100	300
Second	2.7	2.8	16.2	33.1	45	100	263
Middle	1.1	0.7	13.3	26	58.5	100	251
Fourth	0.8	1.3	6	13.3	78.7	100	270
Richest	0.9	1	1.6	7.5	88.7	100	299
Ethnicity of household head							
Kinh/Hoa	1.6	2.2	9.4	19.6	67	100	1158
Ethnic Minorities	24.9	8.5	19	26.4	21.3	100	225
Total	5.4	3.2	10.9	20.7	59.6	100	1383

[1] **MICS indicator 5.5b; MDG indicator 5.5**

Details about the types of services pregnant women received are shown in Table RH.8. Among women who have given birth to a child during the two years preceding the survey, 77.5 per cent reported that their blood pressure was measured, 64.1 per cent that a urine specimen was taken, and 48 per cent reported that a blood sample was taken during antenatal care visits. Some 42.5 per cent reported that they received all three types of services (blood pressure measured, urine and blood sample taken). Comparison across regions shows that the South East has the highest percentage of women receiving all three types of services (73.7 per cent). The high percentage in the South East is largely due to the high rate of women having their blood sample taken during their antenatal care (80.4 per cent). The percentage of all three types of services is also high among women in the richest households (73.5 per cent) but very low among women living in the poorest households (17.6 per cent). The same pattern occurs among women with different educational levels: only 7 per cent of non-educated women received all three types of services compared with 67.9 per cent of women with tertiary education. Women in urban areas are twice as likely to get the full range of recommended services compared to women in rural areas (64.9 per cent and 33.4 per cent).

Table RH.8: Content of antenatal care

Percentage of women aged 15–49 years who had their blood pressure measured, urine sample taken, and blood sample taken as part of antenatal care, Viet Nam 2011

	Percentage of pregnant women who had:				Number of women who had a live birth in the preceding two years
	Blood pressure measured	Urine sample taken	Blood sample taken	Blood pressure measured, urine and blood sample taken[1]	
Region					
Red River Delta	80.5	79.8	59.2	52.2	294
Northern Midland and Mountain areas	60	44	27.8	20.7	285
North Central area and Central Coastal area	78.9	62.7	44.7	41.2	287
Central Highlands	58.7	33	24.1	19.3	92
South East	94.8	84.1	80.4	73.7	214
Mekong River Delta	85.9	64.8	42	38.9	210
Area					
Urban	90	81	69.7	64.9	402
Rural	72.4	57.2	39.1	33.4	980
Mother's age at birth					
Less than 20	64.7	52.5	35	32	130
20–34	78.5	66	49.7	43.6	1,139
35–49	82.2	58.9	45.6	44	114
Women's education					
None	26.7	12.8	9.5	7	64
Primary	70.7	47.2	31.3	24.8	203
Lower Secondary	75.2	58.8	35.4	30.7	523
Upper Secondary	84.1	76	65.1	58	296
Tertiary	90.8	84.6	73.1	67.9	295
Wealth index quintile					
Poorest	54.7	38.3	20	17.6	300
Second	72.5	57.5	36.8	29	263
Middle	80.8	66.9	43.3	38.1	251
Fourth	86.7	71.9	62.3	53.5	270
Richest	93.9	86.6	77.1	73.5	299
Ethnicity of household head					
Kinh/Hoa	82.8	70.9	53.9	48.3	1,158
Ethnic Minorities	50.4	29.2	17.5	13	225
Total	77.5	64.1	48	42.5	1,383

[1] **MICS indicator 5.6**

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 emergency. One of the A World Fit for Children goals is to ensure that women have ready and affordable access to skilled attendance at delivery. The monitoring indicators include the proportion of births with a skilled attendant and proportion of deliveries in a health care facility. The skilled attendant at delivery indicator is also used to track progress toward the Millennium Development goal of reducing the maternal mortality ratio by three quarters between 1990 and 2015.

The Viet Nam MICS 2011 included a number of questions to assess the proportion of births attended by a skilled attendant. *A skilled attendant* includes a doctor, nurse, midwife or auxiliary midwife or nurse.

More than 9 out of 10 births occurring in the two years preceding the survey (92.9) were delivered by skilled personnel (Table RH.9). The percentage is highest in the Red River Delta at 99.2 and lowest in the Northern Midland and Mountain areas at 78.3. The more educated a woman is, the more likely she is to have delivered with the assistance of a skilled attendant. The range is from 45.4 per cent if the woman has no education, to 98.9 per cent if the woman has tertiary education. Fewer women are assisted by a skilled attendant if living in households belonging to the poorest quintile or in ethnic minority households.

Doctors assisted with the delivery of 79.2 per cent of births (the majority), followed by nurses/midwifes with 12.7 per cent, and auxiliary midwives for 1 per cent of births. Women in the richer households and those with higher levels of education were predominantly assisted by doctors at delivery. About 20 per cent of women in Viet Nam delivered by Caesarean section. In the Red River Delta and in the South East the Caesarean section rate is double that in other regions. Delivery through Caesarean section is higher for urban women (30.9 per cent) than for rural women (15.5 per cent). It increases with educational level and living standards. Some 2.8 per cent of women with no education gave birth by Caesarean section compared to 34.5 per cent of women with tertiary education. About 6.7 per cent of women living in the poorest households gave birth by Caesarean section compared to 35.9 per cent of women in the richest households. In addition, women living in Kinh/Hoa households are four times more likely to give birth by Caesarean section than women living in ethnic minority households (22.7 per cent and 5.7 per cent). It is important to note that high rates of Caesarean sections are harmful, yet low rates put mothers and babies at risk as well.

Table RH.9: Assistance during delivery

Percentage distribution of women aged 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 Caesarean section, Viet Nam 2011

	Person assisting at delivery									Any skilled attendant[1][§]	Percentage delivered by Caesarean section[2]	Number of women who had a live birth in preceding two years
	Doctor	Nurse/ Midwife	Auxiliary midwife/ nurse	Traditional birth attendant	Village health worker	Relative/ Friend	Other/ Missing	No attendant	Total			
Region												
Red River Delta	86	11.4	1.7	0	0	0	0.8	0	100	99.2	26.6	294
Northern Midland and Mountain areas	62.2	15.1	1	4.7	3.5	5.8	7.4	0.3	100	78.3	14	285
North Central area and Central Coastal area	77.9	17.2	1.3	1.4	1.8	0	0.3	0.2	100	96.4	15.9	287
Central Highlands	68.2	10.8	0.7	8.8	1.7	8.6	1.2	0	100	79.7	11.4	92
South East	93.4	6	0	0.3	0	0.3	0	0	100	99.4	33.5	214
Mekong River Delta	84.6	12.9	0.7	1.1	0	0	0.7	0	100	98.2	14.5	210
Area												
Urban	90.9	7.9	0	0	0.1	0.3	0.9	0	100	98.8	30.9	402
Rural	74.3	14.7	1.4	2.9	1.7	2.4	2.4	0.2	100	90.5	15.5	980
Mother's age at birth												
Less than 20	69.4	12.6	3.9	1.8	1.7	5.1	5.5	0	100	86	9.8	130
20–34	79.6	13.3	0.7	2	1.1	1.4	1.7	0.1	100	93.6	20.1	1,139
35–49	85.8	7.3	0.3	3.2	1.6	1.8	0	0	100	93.5	30.4	114
Place of delivery												
Public sector health facility	85	13.6	1	0	0.4	0	0	0	100	99.6	21.6	1220
Private sector health facility	96.2	3.8	0	0	0	0	0	0	100	100	23	57
Home	2.8	7.1	1.7	27.8	11.7	24.6	22.7	1.6	100	11.6	0	102
Women's education												
None	25.6	19.8	0	15.1	5.6	16.4	16.1	1.4	100	45.4	2.8	64
Primary	66.8	16.6	1.3	4.8	3.8	4	2.3	0.3	100	84.7	12.6	203
Lower Secondary	82.4	13	0.5	1	0.7	1	1.4	0	100	95.9	15.5	523
Upper Secondary	85.1	10.8	1.6	1.2	0.7	0.1	0.6	0	100	97.4	22.2	296
Tertiary	87.7	10	1.2	0	0	0.3	0.8	0	100	98.9	34.5	295

Table RH.9: Assistance during delivery

Percentage distribution of women aged 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 Caesarean section, Viet Nam 2011

	Person assisting at delivery										Percentage delivered by Caesarean section[2]	Number of women who had a live birth in preceding two years
	Doctor	Nurse/ Midwife	Auxiliary midwife/ nurse	Traditional birth attendant	Village health worker	Relative/ Friend	Other/ Missing	No attendant	Total	Any skilled attendant[1§]		
Wealth index quintiles												
Poorest	49.3	21	1.6	8.3	3.4	8.1	7.8	0.5	100	71.9	6.7	300
Second	79.1	16.7	0.6	0.9	2.4	0.3	0.1	0	100	96.3	10.3	263
Middle	86.5	11.4	1.7	0.4	0	0	0	0	100	99.6	21.7	251
Fourth	93.8	4.9	0.8	0	0.1	0	0.3	0	100	99.6	24.9	270
Richest	89.8	9.1	0.3	0	0	0	0.8	0	100	99.2	35.9	299
Ethnicity of household head												
Kinh/Hoa	85.8	11.7	1	0.4	0.6	0	0.4	0	100	98.6	22.7	1,158
Ethnic Minorities	44.8	17.7	0.9	10.8	4.2	11.1	9.7	0.7	100	63.4	5.7	225
Total	79.2	12.7	1	2.1	1.2	1.8	1.9	0.1	100	92.9	20	1,383

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

[§]This indicator includes doctor, nurse/ midwife and auxiliary midwife/nurse

Place of Delivery

Increasing the proportion of births that are delivered in health facilities is an important factor that has potential to reduce the health risks to both the mother and the baby. Proper medical attention and hygienic conditions during delivery can reduce the risks of complications and infection that can cause morbidity and mortality to either the mother or the baby. Table RH.10 presents the percentage distribution of women aged 15–49 with a live birth in the two years preceding the survey by place of delivery and the total percentage of births delivered in a health facility.

Some 92.4 per cent of births in Viet Nam are delivered in a health facility. Of these, 88.2 per cent are deliveries which occurred in public sector facilities and 4.1 per cent in private sector facilities. The remaining 7.4 per cent of deliveries occurred at home. The majority of home deliveries occur in rural areas, in the Northern Midland and Mountain areas and the Central Highlands, among uneducated and women, living in households belonging to the poorest quintile and headed by ethnic minorities. Among these background characteristics Table RH.10 reveals the widest differentials for women delivering in a health facility. For example, 98.9 per cent of women with the highest levels of education deliver in a health facility compared to only 43.7 per cent of women with no education. The proportion of births delivered in a health facility increases as living standards increase, from 70.4 per cent of births in the poorest quintile to 99.2 per cent among those in the richest quintile. Women who do not have any antenatal care visits are three times less likely to deliver in a health facility and six times more likely to deliver at home compared to those who have at least one ANC visit.

Table RH.10: Place of delivery

Percentage distribution of women aged 15–49 who had a live birth in two years preceding the survey by place of delivery, Viet Nam 2011

	Place of delivery					Delivered in health facility[1]	Number of women who had a live birth in preceding two years
	Public sector health facility	Private sector health facility	Home	Other	Total		
Region							
Red River Delta	98.6	0	0.6	0.8	100	98.6	294
Northern Midland and Mountain areas	76.5	1.5	22	0	100	78	285
North Central area and Central Coastal area	92.5	2.5	4.7	0.3	100	95	287
Central Highlands	69.4	9.5	20.7	0.5	100	78.9	92
South East	90.6	8.8	0.6	0	100	99.4	214
Mekong River Delta	89.7	8.6	1.8	0	100	98.2	210
Area							
Urban	94.6	3.6	1	0.8	100	98.2	402
Rural	85.6	4.3	10	0	100	90	980
Mother's age at birth							
Less than 20	76.2	6.2	17.6	0	100	82.4	130
20–34	89.6	3.8	6.3	0.3	100	93.4	1139
35–49	88.1	5	6.9	0	100	93.1	114
Number of antenatal care visits							
None	30.7	0.3	64.2	4.8	100	31	74
1–3 visits	84.9	4.7	10.4	0	100	89.6	481
4+ visits	95.3	4.2	0.5	0	100	99.5	824
Women's education							
None	43.7	0	56.3	0	100	43.7	64
Primary	77.5	7.2	15.3	0	100	84.7	203
Lower Secondary	91	3.9	4.9	0.2	100	94.8	523
Upper Secondary	91.6	5.8	2.6	0	100	97.4	296
Tertiary	97.1	1.8	0.3	0.8	100	98.9	295
Wealth index quintiles							
Poorest	67.2	3.2	29.5	0.1	100	70.4	300
Second	92.2	4.1	3.6	0	100	96.4	263
Middle	93.8	5.7	0.5	0	100	99.5	251
Fourth	95.4	3.3	0.9	0.3	100	98.8	270
Richest	94.7	4.5	0	0.8	100	99.2	299
Ethnicity of household head							
Kinh/Hoa	93.6	4.8	1.4	0.3	100	98.3	1158
Ethnic Minorities	60.8	0.9	38.3	0	100	61.7	225
Total	88.2	4.1	7.4	0.3	100	92.4	1383

[1] **MICS indicator 5.8**

Early Childhood Education and Learning

Pre-school attendance in an organised learning or child education program is important for the readiness of children for school.

As shown in table CD.1, 71.9 per cent of children aged 36–59 months are attending pre-school in Viet Nam. The mother's education and regional differentials are important determinants– the figure for pre-school attendance is as high as 96.4 per cent for children whose mothers have tertiary education, compared to only 38.4 per cent for children whose mothers have no education. Attendance in pre-school is highest in the Red River Delta at 90 per cent, and lowest in the Mekong River Delta at 47.2 per cent. The gender difference is negligible, while the differentials by socioeconomic status are substantial. Some 90.6 per cent of children living in households belonging to the richest quintile attend pre-school, while the figure drops to 58.8 per cent among households in the poorest quintile. At earlier ages, children are less likely to attend pre-school; only 62.3 per cent of children age 36–47 months (3–4 years old) are attending pre-school compared to 82.5 per cent of those age 48–59 months (5 years old).

Table CD.1: Early childhood education		
Percentage of children aged 36–59 months who are attending an organized early childhood education programme, Viet Nam, 2011		
	Percentage of children aged 36–59 months currently attending early childhood education[1]	Number of children aged 36–59 months
Sex		
Male	70.8	726
Female	73.1	733
Region		
Red River Delta	90	301
Northern Midland and Mountain areas	89.2	266
North Central area and Central Coastal area	67.4	296
Central Highlands	57.9	89
South East	69.1	233
Mekong River Delta	47.2	274
Area		
Urban	75.8	387
Rural	70.5	1072
Age of child (months)		
36–47	62.3	764
48–59	82.5	695
Mother's education		
None	38.4	97
Primary	53.3	292
Lower Secondary	73.7	606
Upper Secondary	80.8	242
Tertiary	96.4	222
Wealth index quintile		
Poorest	58.8	336
Second	63.3	272
Middle	73.4	274
Fourth	76.5	315
Richest	90.6	263
Ethnicity of household head		
Kinh/Hoa	72.6	1275
Ethnic Minorities	67.5	184
Total	71.9	1459
[1] MICS indicator 6.7		

It is well recognised that a period of rapid brain development occurs in the first 3–4 years of life, and the quality of home care is a major determinant of the child's development during this period. In this context, adult activities with children, presence of books in the home for the child, and conditions of care are important indicators of quality of home care. Children should be physically healthy, mentally alert, emotionally secure, socially competent and ready to learn.

Information on a number of activities that support early learning was collected in the survey. These included the involvement of adults with children 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. These results are presented in Table CD.2.

For about three-fourths (76.8 per cent) of children under age 5, an adult household member engaged in more than four activities that promote learning and school readiness during the three days preceding the survey. The average number of activities that adults and fathers engaged with children was 4.5 and 1.6 respectively. The table also indicates that the prevalence of father's involvement in one or more such activities was 61.3 per cent. Some 13.7 per cent of children aged 36–59 months were living in a household without their fathers.

Table CD.2: Support for learning

Percentage of children aged 36–59 months with whom an adult household member engaged in activities that promote learning and school readiness during the last three days, Viet Nam, 2011

	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	74	58.1	4.4	1.5	14.9	726
Female	79.5	64.5	4.6	1.7	12.5	733
Region						
Red River Delta	87.8	62.9	4.9	1.7	17.6	301
Northern Midland and Mountain areas	69.3	65.7	4.2	1.5	9.1	266
North Central area and Central Coastal area	71.4	62.8	4.4	1.7	15.7	296
Central Highlands	72	65.3	4.2	1.6	5	89
South East	80	68.1	4.7	2	10.5	233
Mekong River Delta	76.7	46.5	4.5	1	17.3	274
Area						
Urban	85.3	71.7	5	2	10.3	387
Rural	73.7	57.6	4.4	1.4	15	1072
Age of child (months)						
36–47	78.4	60	4.6	1.5	13.6	764
48–59	75	62.7	4.5	1.7	13.9	695
Mother's education						
None	36.2	40.6	2.9	0.7	13.8	97
Primary	67.6	49.7	4	1.1	16.4	292
Lower Secondary	76.1	61.7	4.5	1.5	12.1	606
Upper Secondary	90.9	71.4	5.2	1.9	10.6	242
Tertiary	93.2	73.5	5.3	2.4	18.1	222
Father's education[§]						
None	(35)	(50.9)	(3)	(0.9)	na	48
Primary	63.7	56.3	3.9	1.2	na	227
Lower Secondary	78	68.9	4.5	1.6	na	518
Upper Secondary	87.2	76.6	5	2	na	265
Tertiary	89.3	87.2	5.2	3	na	200
Wealth index quintiles						
Poorest	62.9	54.6	3.8	1.2	13.5	336
Second	70.6	52	4.2	1.3	13.5	272
Middle	80.3	61.5	4.7	1.5	13.4	274
Fourth	79.5	61.9	4.7	1.5	16.3	315
Richest	94.1	78.5	5.4	2.4	11.5	263
Ethnicity of household head						
Kinh/Hoa	79.7	61.9	4.7	1.6	14.3	1275
Ethnic Minorities	56.8	57.3	3.6	1.2	9.6	184
Total	76.8	61.3	4.5	1.6	13.7	1459

[1] **MICS indicator 6.1**

[2] **MICS Indicator 6.2**

[§]200 cases with missing education of father not shown

Note:
Figures shown in parenthesis are based on denominators of 25-49 un-weighted cases

Mothers' and fathers' education differentials exist both in terms of adult activities with children and in terms of fathers engaging in activities with children. A larger proportion of adults and fathers engaged in activities with children in the households in which fathers and mothers have higher levels of education. On the contrary, the lower the education of the parents, the less likely the child will receive support for learning. For example, in households where mothers have no education, adults engaged in learning activities with children in 36.2 per cent of cases, compared to 93.2 per cent of the children living in households with mothers who have tertiary education. The father's education level shows a similar correlation with adult engagement in learning activities with children. While the child's sex and age do not indicate strong differences, living standard quintile and area reveal important differences.

Exposure to books in early years not only provides the child with greater understanding of the nature of print, but may also give the child opportunities to see others reading, such as older siblings doing school work. Presence of books is important for later school performance and IQ scores. The mothers/caregivers of all children under 5 were asked about the number of children's or picture books, household or outside objects, and homemade or manufactured toys that are available at home for the child. The results of these questions are presented in Table CD.3.

In Viet Nam, only 19.6 per cent of children aged 0–59 months are living in households where at least 3 children's books are present and this declines to 10 per cent for children with 10 or more books. A disproportionate share of the 19 respectively 10 per cent of children who have at least 3 respectively 10 books come from the most wealthy and educated households. While no gender differentials are observed, sharp contrasts are observed by all other background variables.

Children with 3 or more books are more likely to be living in urban areas, in the South East and Red River Delta regions, have mothers with higher education, be from households in the richer quintiles and have a Kinh/Hoa household head. As one case in point, 49 per cent of children living in the richest quintile households have three or more books, compared to barely 3 per cent of those living in the poorest quintile. The data also indicate a preference for households to have children or picture books for older children. Some 6.6 per cent of children aged 0–23 months live in households with three or more children's books, while this percentage is 27.9 among children at age 24–59 months.

Likewise, the same background variables are associated with a higher likelihood for children to have 10 or more children's books. Children living in the poorest quintile households have no chance to have ten or more books. The survey data also indicate that no children from mothers with no education have 10 or more books. This again highlights the strong correlation between wealth and education, both in outcomes and in disparities. Roughly 29.3 per cent of children live in households with 10 or more books if the mother has tertiary education or the household is in the richest quintile. Ethnicity is an important determinant for the availability of children's books in households, with children in Kinh/Hoa households being seven times more likely to have three or more books and sixteen times more likely to have 10 or more books compared to children in ethnic minority households.

Table CD.3: Learning materials

Percentage of children under age 5 by numbers of children's books present in the household, and by playthings that the child plays with, Viet Nam, 2011

	Household has for the child:		Child plays with:				Number of children under age 5
	Three or more children's books[1]	10 or more children's books	Home-made toys	Toys from a shop/ manufactured toys	Household objects/ objects found outside	Two or more types of playthings[2]	
Sex							
Male	19.6	9.8	22.8	76	51.8	50.5	1869
Female	19.7	10.2	21.1	75.2	48.7	48	1809
Region							
Red River Delta	30.5	17	19.9	86.8	46.7	51.4	798
Northern Midland and Mountain areas	10	3.9	26	61	50.9	45.5	707
North Central area and Central Coastal area	14.6	6.2	32.6	65.9	55.4	53	719
Central Highlands	10.7	4.3	19.2	64.6	48.1	40.6	233
South East	34.3	18.1	13.4	90	49.1	51.6	572
Mekong River Delta	12.5	7	16.7	79.8	50.1	47.9	650
Area							
Urban	36.1	22.3	18.7	89	46.8	52.6	1013
Rural	13.4	5.3	23.2	70.5	51.6	48	2665
Age of child (months)							
0–23	6.6	3.2	13	64.5	33.1	32	1427
24–59	27.9	14.2	27.6	82.7	61.1	60.3	2251
Mother's education							
None	1.6	0	18.2	24.5	57.1	27.3	207
Primary	5.5	1.3	17.7	61.9	54.2	43.2	658
Lower Secondary	12.9	4.5	22.5	80.3	50.7	51.8	1479
Upper Secondary	27.1	14.5	21.3	80	48.2	51.1	670
Tertiary	46.5	29.3	26.7	90.3	45.6	54.7	664
Wealth index quintiles							
Poorest	2.8	0	25.9	44.9	55.9	40.5	831
Second	7.4	2.3	22.3	72.2	52.3	47.1	673
Middle	15.4	5.2	20.7	81.2	46.7	49.5	700
Fourth	24.7	11.3	21.5	90.5	48.7	56.7	749
Richest	49	31.7	18.6	93.2	47	53.6	725
Ethnicity of household head							
Kinh/Hoa	22.4	11.5	21.7	81.5	49.6	51.6	3143
Ethnic Minorities	3.2	0.7	23.1	40.7	54.3	35.8	535
Total	19.6	10	21.9	75.6	50.3	49.3	3678

[1] **MICS indicator 6.3**

[2] **MICS indicator 6.4**

Table CD.3 also shows that 49.3 per cent of children aged 0–59 months had two or more playthings to play with in their homes. The playthings in the MICS included home-made toys (such as dolls, 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). Some 75.6 per cent of children play with toys from a store; 50.3 per cent with household objects or objects found outside and 21.9 per cent with home-made toys. The proportion of children who have two or more playthings is 54.7 per cent among children whose mothers have tertiary education but only 27.3 per cent among children whose mothers have no education, which is only half as many.

Another interesting finding is that playing with household object playthings decreases with wealth as playing with toys increases. Similar to the indicator for books, gender differentials are negligible in respect to playthings. Ethnicity of the household head however shows a 16 percentage point differential between Kinh/Hoa and ethnic minority households.

Leaving children alone or in the presence of other young children is known to increase the risk of accidents. In MICS 2011 in Viet Nam, two questions were asked to find out whether during the week preceding the interview children aged 0–59 months were left alone, and whether children were left in the care of other children under 10 years of age.

Table CD.4 shows that 7.8 per cent of children aged 0–59 months were left in the care of other children under 10, while 3.5 per cent were left alone during the week preceding the interview. Combining the two care indicators, it is calculated that 9.4 per cent of children were left with inadequate care during the week preceding the survey, either by being left alone or in the care of another child.[18] Substantial differences were observed by most background variables, including area, region, child's age, mother's education, living standards quintile and ethnicity of the household head. For example, it is five times more likely that a child living in a poorest quintile household will be left with inadequate care compared to a child living in the richest quintile.

In urban areas, some 3.8 per cent of children under age 5 were left in the care of another child younger than 10 years of age, while this percentage is 9.3 per cent in rural areas. This pattern is similar for children left alone, although to a lesser degree. Children aged 24–59 months were left alone or in the care of a child younger than 10 years of age more than those who were aged 0–23 months. The combined effect led to a similar pattern of inadequate care, which shows that the older age group is almost three times more likely to be left with inadequate care (12.4 per cent versus 4.6 per cent). The mother's education and socioeconomic status of the household are the two background variables accounting for the widest differences for all three indicators presented in Table CD.4.

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[18] The indicator *left with inadequate care in the past week* is calculated based on the occurrence of either of both scenarios (i.e. children left alone or in the care of other children), meaning that children who experience both are only counted once. Therefore, the indicator on inadequate care does not equal (but amounts to less than) the sum of both children left alone and children left in the care of other children.

Table CD.4: Inadequate care

Percentage of children under 5 years of age left alone or left in the care of another child younger than 10 years of age for more than one hour at least once during the past week, Viet Nam, 2011

	Percentage of children under 5 years of age			
	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 5 years of age
Sex				
Male	4.3	7.9	9.9	1869
Female	2.8	7.7	8.9	1809
Region				
Red River Delta	1.6	4.6	5.6	798
Northern Midland and Mountain areas	3.6	8.4	9.6	707
North Central area and Central Coastal area	6.6	15	17.4	719
Central Highlands	5.5	13.1	14.6	233
South East	1.9	3.2	4.3	572
Mekong River Delta	3.2	5.4	7.5	650
Area				
Urban	2.1	3.8	4.9	1013
Rural	4.1	9.3	11.1	2665
Age of child (months)				
0–23	0.8	4.3	4.6	1427
24–59	5.2	10	12.4	2251
Mother's completed education level				
None	11.9	19.5	22.7	207
Primary	6.7	12.4	15.6	658
Lower Secondary	2.8	8.8	10.1	1479
Upper Secondary	1.8	2.8	3.7	670
Tertiary	1.1	2.4	3.3	664
Wealth index quintiles				
Poorest	7.2	14.5	17	831
Second	3.4	10	12.3	673
Middle	3	6.5	7.8	700
Fourth	2.4	4.5	5.4	749
Richest	1.2	2.9	3.5	725
Ethnicity of household head				
Kinh/Hoa	3.1	6.7	8.3	3143
Ethnic Minorities	6.3	14.3	15.7	535
Total	3.5	7.8	9.4	3678

[1] **MICS indicator 6.5**

Early Childhood Development

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 ten-item module was included in the Viet Nam MICS 2011 survey which was used to calculate the Early Child Development Index (ECDI). The index is based on some benchmarks that children would be expected to achieve if they are developing on par with

the majority of children in that age group.

Each of the 10 items is used in one of four domains to determine if children at age 3–5 years are developmentally on track in that domain. The domains are:

- Literacy-numeracy: Children are identified as being developmentally on track depending on whether they can identify or name at least ten letters of the alphabet; whether they can read at least four simple, common 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 the mother/caregiver 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 are 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, 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.

The ECDI is calculated as the percentage of children who are developmentally on track in at least three of these four domains.

Table CD.5: Early child development index

Percentage of children aged 36–59 months who are developmentally on track in literacy-numeracy, physical, social-emotional, and learning domains, and the early child development index score, Viet Nam, 2011

	Percentage of children aged 36–59 months who are developmentally on track for indicated domains				Early child development index score[1]	Number of children aged 36–59 months
	Literacy-numeracy	Physical	Social-Emotional	Learning		
Sex						
Male	23	98.6	87	92.1	83.6	726
Female	25.1	96.9	90.2	90.4	82.1	733
Region						
Red River Delta	24.1	99.1	89.7	94.3	86.5	301
Northern Midland and Mountain areas	23.9	98.7	89.3	90.7	81.8	266
North Central area and Central Coastal area	20.8	98.5	90.2	92	84.5	296
Central Highlands	17.4	93.8	81	77.8	68.2	89
South East	32.6	98.5	86.8	96.2	86.3	233
Mekong River Delta	22.6	95.1	89	87.8	79.8	274
Area						
Urban	33.9	98.1	87.4	96.2	88.3	387
Rural	20.5	97.6	89	89.5	80.9	1072
Age of child (months)						
36–47	12.6	97.6	87.7	88.6	78.5	764
48–59	36.7	97.9	89.6	94.2	87.6	695
Preschool attendance						
Attending pre-school	29.3	98.2	89.8	94	86.2	1049
Not attending pre-school	10.6	96.6	85.6	84.2	74.3	409
Mother's education						
None	10.7	96.4	80.9	68.6	62.9	97
Primary	14.8	95.5	87	87.8	74.8	292
Lower Secondary	22.3	98.7	91.4	92.1	86.3	606
Upper Secondary	31.7	98	88.7	96.6	87.1	242
Tertiary	38.6	98.4	86.3	97.6	88.1	222
Wealth index quintiles						
Poorest	15.6	97	88.4	81.9	75.2	336
Second	20.8	97.8	88.3	93.5	82.8	272
Middle	23	97.3	89.8	90.3	81.8	274
Fourth	24.9	98.4	88.1	94.6	85.2	315
Richest	38.3	98.4	88.6	97.8	90.7	263
Ethnicity of household head						
Kinh/Hoa	25.3	98	89.7	93.6	85.4	1275
Ethnic Minorities	15.8	96.1	81.1	75.5	64.8	184
Total	24.1	97.7	88.6	91.3	82.8	1459

[1] **MICS indicator 6.6**

The results are presented in Table CD.5. In Viet Nam, 82.8 per cent of children aged 36–59 months are developmentally on track. The ECDI is similar among boys (83.6 per cent) and girls (82.1 per cent). As expected, the ECDI is higher in the older age group (87.6 per cent among 48–59 months old compared to 78.5 per cent among 36–47 months old), since children develop more skills with increasing age. A higher ECDI is seen in children attending pre-school, 86.2 per cent, compared to those who are not attending preschool, 74.3 per cent. Children living in households with mothers with no education have a lower ECDI (62.9 per cent) compared to children of mothers with tertiary education (88.1 per cent). The Central Highlands scores the lowest on the ECDI with 68.2 per cent, which is nearly

20 points lower than the ECDI calculated for the Red River Delta and the South East. The analysis of four domains of child development shows that 97.7 per cent of children are on track in the physical domain, while this figure is only 24.1 per cent in the literacy-numeracy domain. However, it is interesting to note that the low percentage in the literacy-numeracy domain does not substantially impact the overall early child development index score, which is 82.8 per cent. The percentage of children who are developmentally on track for learning is quite high, 91.3 per cent, and in the social-emotional domain it reaches 88.6 per cent. In both domains, literacy-numeracy and learning, higher scoresare associated with children of more highly educated mothers, those who attend pre-school, live in urban areas, in the richest households, with a Kinh/Hoa household head, and with older children.

Literacy among Young Women

One of the World Fit for Children goals is to achieve adult literacy. Adult literacy is also an MDG indicator, relating to both men and women. Since only a women's questionnaire was administered in MICS 2011, the results presented here only refer to females aged 15–24 years. Literacy was assessed based on the ability of women to read a short simple statement or on past school attendance.

The results on literacy among young women are presented in Table ED.1. About 96.4 per cent of women aged 15–24 years are literate in Viet Nam. Virtually all young women in urban areas are literate, 99.2 per cent, compared with 95.1 per cent in rural areas. The comparison between ethnic groups shows a difference of 16.5 percentage points, with the percentage of literate young women in ethnic minority households being 82.3 per cent, and that in Kinh/Hoa households being 98.8 per cent. Only two out of six regions have literacy rates below 90 per cent, the Northern Midland and Mountain areas with 89.4 per cent and the Central Highlands with 89.9 per cent. The majority of illiterate young women live in the poorest households, with a literacy rate of 85.2 per cent compared with all the other living standards quintiles which display nearly a total literacy.

Table ED.1: Literacy among young women			
Percentage of women age 15–24 years who are literate, Viet Nam, 2011			
	Percentage literate[1]	Percentage not known	Number of women age 15–24 years
Region			
Red River Delta	99.8	0	673
Northern Midland and Mountain areas	89.4	0.2	512
North Central area and Central Coastal area	98.6	0	716
Central Highlands	89.9	0.5	218
South East	98.3	0	604
Mekong River Delta	96.6	0	593
Area			
Urban	99.2	0	1059
Rural	95.1	0.1	2256
Education level			
None	3.2	1.4	76
Primary	77	0.6	198
Lower Secondary	100	0	838
Upper Secondary	100	0	1532
Tertiary	100	0	671
Age group			
15–19	97.4	0	1707
20–24	95.4	0.1	1608
Wealth index quintile			
Poorest	85.2	0.2	584
Second	98.2	0.2	639
Middle	98	0	705
Fourth	99.5	0	720
Richest	99.6	0	668
Ethnicity of household head			
Kinh/Hoa	98.8	0	2845
Ethnic Minorities	82.3	0.2	471
Total	96.4	0.1	3315
[1] MICS indicator 7.1; MDG indicator 2.3			

School Readiness

Attendance in pre-school education in an organised learning or child education programme is important for child readiness for school. Table ED.2 shows the proportion of children

in the first grade of primary school who attended pre-school the previous year. Overall, 92.6 per cent of children who are currently attending the first grade of primary school were attending pre-school the previous year. The school readiness proportions are similar between male and female, between urban and rural areas, and between ethnicities of the household head. For example, both in Kinh/Hoa and ethnic minority households the children's school readiness is 92.6 per cent. Regional differentials are relatively slim, with the Mekong River Delta and the South East displaying the lowest school readiness at about 82 and 89 per cent, respectively, compared with about 99 per cent in the Northern Midland and Mountain areas. The Mother's education appears to have a positive correlation with school readiness. While the indicator reaches 99 per cent among the children of mother's with tertiary education, it drops to about 80 per cent among children whose mother has no education.

Table ED.2: School readiness		
Percentage of children attending the first grade of primary school who attended pre-school the previous year, Viet Nam, 2011		
	Percentage of children attending first grade who attended preschool in the previous year[1]	Number of children attending the first grade of primary school
Sex		
Male	91.9	425
Female	93.4	357
Region		
Red River Delta	97.5	133
Northern Midland and Mountain areas	98.5	149
North Central area and Central Coastal area	95.8	154
Central Highlands	94.7	64
South East	89.	124
Mekong River Delta	81.9	159
Area		
Urban	94	195
Rural	92.1	588
Mother's education		
None	79.5	82
Primary	87.1	180
Lower Secondary	95.5	346
Upper Secondary	98.2	83
Tertiary	99	92
Wealth index quintile		
Poorest	92.4	230
Second	88.8	145
Middle	90.3	148
Fourth	94.6	136
Richest	97.9	124
Ethnicity of household head		
Kinh/Hoa	92.6	631
Ethnic Minorities	92.6	152
Total	92.6	783
[1] **MICS indicator 7.2**		

Primary and Secondary School Participation

Universal access to basic education and the completion of primary education by the world's children is one of the most important goals of the Millennium Development Goals and A World Fit for Children. Education is a vital prerequisite for combating poverty, empowering women, protecting children from hazardous and exploitative labour and sexual exploitation, promoting human rights, protecting the environment, and influencing population growth.

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

The indicators of school progression include:

- Children reaching last grade of primary

- Primary completion rate

- Transition rate to secondary school

In Viet Nam, the primary school entry age is 6 years and primary school ages are from 6 to 10 years. Table ED.3 shows information about children's entry to primary school. Among children who are of primary school entry age in Viet Nam, about 95 per cent are attending the first grade of primary school. Differentials by background characteristics are generally small or almost non-existent. For example, 95.9 per cent of boys of primary school entry age entered grade 1, compared with a similar 93.9 per cent of girls. With all regions showing a percentage above 90, the indicator on primary school entry reveals virtually no regional disparities. The largest correlate of primary school entry observed was mother's education. In particular children of mothers with no education indicate low primary school entry of about 78.2 per cent. A substantially higher figure, 97.8 per cent and above is observed for children of mothers with lower secondary education and above.

Table ED.3: Primary school entry

Percentage of children of primary school entry age entering grade 1 (net intake rate), Viet Nam, 2011

	Percentage of children of primary school entry age entering grade 1[1]	Number of children of primary school entry age
Sex		
Male	95.9	411
Female	93.9	377
Region		
Red River Delta	98.7	132
Northern Midland and Mountain areas	95.5	152
North Central area and Central Coastal area	92.4	158
Central Highlands	90.4	56
South East	95.4	130
Mekong River Delta	94.9	160
Area		
Urban	95.8	218
Rural	94.6	570
Mother's education		
None	78.2	66
Primary	91.5	178
Lower Secondary	97.8	354
Upper Secondary	100	92
Tertiary	97.3	98
Wealth index quintile		
Poorest	90.9	198
Second	93.4	149
Middle	97.6	153
Fourth	100	139
Richest	94.4	148
Ethnicity of household head		
Kinh/Hoa	95.7	659
Ethnic Minorities	90.8	128
Total	94.9	788
[1] MICS indicator 7.3		

Table ED.4 provides the percentage of children of primary school age, 6-10 years, who are attending primary or secondary school. The majority of children of primary school age are attending school (97.9 per cent). The remaining 2 per cent of children are out of school. By all background variables primary school attendance is above 90 per cent, including region, ethnicity of household head, area and household living standards. The only exception is primary school attendance in relation to the mother's educational level. Only 88.8 per cent of children of primary school age attend primary school among children whose mother has no education, and the proportion is slightly higher among boys (90 per cent) than girls (87.7 per cent). This is 10 percentage points lower than children whose mother has primary education or above (97 per cent). In the remaining mother's education groups there is almost full attendance. Other remarkable differentials between male and female are not observed.

Table ED.4: Primary school attendance

Percentage of children of primary school age attending primary or secondary school (adjusted net attendance ratio*), Viet Nam, 2011

	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						
Red River Delta	99.5	366	100	323	99.8	688
Northern Midland and Mountain areas	97.3	348	96.1	315	96.7	663
North Central area and Central Coastal area	98.4	375	98	373	98.2	749
Central Highlands	95.6	142	96.2	126	95.9	268
South East	97.9	293	96.9	260	97.4	553
Mekong River Delta	97.6	401	98.1	363	97.9	764
Area						
Urban	98.1	497	98.2	476	98.1	973
Rural	97.9	1428	97.6	1283	97.8	2711
Age at beginning of school year						
6	95.9	411	94.9	377	95.4	788
7	97.6	391	98.5	331	98	722
8	98.6	356	99.3	339	98.9	694
9	98.9	376	98.7	367	98.8	743
10	99.1	391	97.5	346	98.4	737
Mother's education						
None	90	164	87.7	171	88.8	335
Primary	97	444	97.1	435	97	879
Lower Secondary	99	869	99.5	802	99.3	1671
Upper Secondary	100	242	100	189	100	431
Tertiary	99.5	205	98.7	162	99.2	367
Wealth index quintile						
Poorest	95.7	474	94.9	421	95.3	895
Second	98.2	387	97.9	381	98	768
Middle	98.3	344	98.6	348	98.5	692
Fourth	100	380	99.4	306	99.7	686
Richest	98.3	339	98.8	303	98.5	642
Ethnicity of household head						
Kinh/Hoa	98.4	1649	98.3	1477	98.4	3126
Ethnic Minorities	95.1	275	94.7	282	94.9	558
Total	98	1925	97.7	1759	97.9	3684

[1] **MICS indicator 7.4**

[§]Ratios presented in this table are "adjusted" since they include not only primary school attendance, but also secondary school attendance in the numerator.

Information on secondary school attendance is presented in Table ED.5. Unlike primary school non-attendance, which is low at 2 per cent, one in five children of secondary school age (about 19 per cent) do not attend secondary school or higher. Of these, only 2 per cent are attending primary school and the remaining 17 per cent are out of school.

The largest differentials are observed by mother's education, living standards, region and ethnicity of the household head. For example, only one in two secondary school age children whose mothers have no education are attending secondary school or higher (48.3 per cent). This is half the rate of the secondary school attendance of children whose mothers have tertiary education (96.9 per cent). There is a considerable 18 percentage point difference

between children living in Kinh/Hoa versus ethnic minority households (83.7 versus 65.6 per cent). The two regions showing a comparatively lower percentage of secondary school age children attending secondary school or higher are the Central Highlands and the Mekong River Delta, with 71.6 and 72.3 per cent respectively.

With some exceptions it is generally observed that female secondary school attendance is higher than male. Lower male attendance is particularly noticeable among children from the Mekong River Delta, among children aged 15, 16 and 17 years at the beginning of the school year, children living in urban areas, and living in Kinh/Hoa households. For example, in urban areas, 90.6 per cent of girls (compared to 84.4 per cent boys) of secondary school age attend secondary school or higher. A 16 percentage point difference between boys and girls emerges among 17 year olds, standing at 72 per cent for girls and 55.4 per cent for boys. A considerable decline in male secondary school attendance is observed as age rises, gradually falling from 92.7 per cent among 12 year olds to 55.4 per cent among 17 year olds, with a very notable break from near parity occuring at age 15.

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, Viet Nam, 2011

	Male			Female			Total		
	Secondary school net attendance ratio (adjusted§)	Percentage attending primary school	Number of children	Secondary school net attendance ratio (adjusted§)	Percentage attending primary school	Number of children	Secondary school net attendance ratio (adjusted§)[1]	Percentage attending primary school	Number of children
Region									
Red River Delta	90.1	0.5	499	92.3	0.6	516	91.2	0.5	1016
Northern Midland and Mountain areas	81.9	1.1	470	78.7	4.5	446	80.3	2.8	916
North Central area and Central Coastal area	78.6	1.3	682	88	1.2	654	83.2	1.2	1335
Central Highlands	68.5	5.7	221	74.8	4.4	211	71.6	5.1	432
South East	79.7	0.9	379	82	1.1	405	80.9	1	784
Mekong River Delta	67	4	536	79	2.9	433	72.3	3.5	968
Area									
Urban	84.4	1.3	727	90.6	0.9	677	87.4	1.1	1404
Rural	76.2	2.2	2061	81.5	2.6	1987	78.8	2.4	4048
Age at beginning of school year									
11	86.8	10.2	355	88.1	9.4	329	87.4	9.8	684
12	92.7	2.3	390	91.6	4.5	378	92.2	3.4	767
13	88.8	1.2	407	91.4	1.8	398	90.1	1.5	804
14	86.8	0.3	442	84.8	0.5	389	85.8	0.4	831
15	70.9	0.6	416	81	0	330	75.4	0.3	746
16	66.6	0.1	381	79.4	0	437	73.4	0.1	818
17	55.4	0	397	72	0	405	63.8	0	801
Mother's education§§									
None	49	9.3	247	47.6	10.5	232	48.3	9.8	479
Primary	69.5	2.3	711	76.9	3.3	631	73	2.8	1342
Lower Secondary	84.5	1.2	1196	90.8	1	1204	87.6	1.1	2400
Upper Secondary	93.4	0.2	360	96.3	0.2	331	94.8	0.2	691
Tertiary	95.4	0	189	98.5	0	172	96.9	0	361

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, Viet Nam, 2011

	Male			Female			Total		
	Secondary school net attendance ratio (adjusted§)	Percentage attending primary school	Number of children	Secondary school net attendance ratio (adjusted§)	Percentage attending primary school	Number of children	Secondary school net attendance ratio (adjusted§)[1]	Percentage attending primary school	Number of children
Wealth index quintile									
Poorest	64.6	4.7	661	66	5.8	537	65.2	5.2	1198
Second	73	1.6	621	81.7	1.7	592	77.2	1.7	1212
Middle	80.3	1.1	535	88.1	2.1	553	84.2	1.6	1088
Fourth	84.9	1.3	485	89	0.5	508	87	0.9	993
Richest	95	0.2	486	96.4	0.4	475	95.7	0.3	960
Ethnicity of household head									
Kinh/Hoa	80.4	1.4	2380	87.2	1.5	2262	83.7	1.4	4642
Ethnic Minorities	66.3	5.1	407	65	6	403	65.6	5.5	810
Total	78.3	1.9	2787	83.9	2.2	2664	81	2	5452

[1] MICS indicator 7.5

§Ratios presented in this table are "adjusted" since they include not only secondary school attendance, but also attendance to higher levels in the numerator.
§§This excludes 13 missing cases (of mothers not present in the household)

The percentage of children entering first grade who eventually reach the last grade of primary school is presented in Table ED.6. Of all children starting grade one, the majority (99.4 per cent) will eventually reach the last grade. This number includes children who repeat grades and who eventually move up to reach the last grade. The high percentages throughout Table ED.6 indicate virtually no drop outs in primary school. No large variations are observed among particular groups of children and background characteristics.

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 last grade of primary school), Viet Nam, 2011					
	Percentage attending grade 1 last year who are in grade 2 this year	Percentage attending grade 2 last year who are attending grade 3 this year	Percentage attending grade 3 last year who are attending grade 4 this year	Percentage attending grade 4 last year who are attending grade 5 this year	Percentage who reach grade 5 of those who enter grade 1 [1]
Sex					
Male	100	99.9	99.9	100	99.7
Female	99.9	99.9	100	99.3	99.1
Region					
Red River Delta	100	100	100	100	100
Northern Midland and Mountain areas	100	100	100	99.5	99.5
North Central area and Central Coastal area	100	100	100	100	100
Central Highlands	99.4	98.3	99.3	100	97
South East	100	100	100	100	100
Mekong River Delta	100	100	100	98.7	98.7
Area					
Urban	100	100	100	100	100
Rural	99.9	99.8	99.9	99.5	99.2
Mother's education					
None	99.5	99.7	99.3	98.9	97.3
Primary	100	100	100	99	99
Lower Secondary	100	99.9	100	100	99.9
Upper Secondary	100	100	100	100	100
Tertiary	100	100	100	100	100
Wealth index quintile					
Poorest	100	99.5	99.7	99.6	98.8
Second	99.8	100	100	98.9	98.7
Middle	100	100	100	100	100
Fourth	100	100	100	100	100
Richest	100	100	100	100	100
Ethnicity of household head					
Kinh/Hoa	100	100	100	99.7	99.7
Ethnic Minorities	99.7	99.3	99.6	99.2	97.7
Total	100	99.9	99.9	99.7	99.4
[1] MICS indicator 7.6; MDG indicator 2.2					

The primary school completion rate[19] and transition rate to secondary education are presented in Table ED.7. At the time of the survey, 99.6 per cent of children of primary completion age (10 years) were attending the last grade of primary education. This value

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[19] This indicator is calculated as the number of children (of any age) attending the last grade of primary school (excluding repeaters) [numerator] over the total number of children of primary school completion age (age appropriate to final grade of primary school) [denominator].

should be distinguished from the gross primary completion ratio[20] which includes children of any age attending the last grade of primary. The gross primary completion ratio is not shown in table ED.7.

Disparities in primary school completion rate are observed between Kinh/Hoa (103.1 per cent) and ethnic minority (79.8 per cent) children. No such difference is noticed between male and female children, both having a primary school completion the rate of nearly 100 per cent. Considerable regional disparities emerge in terms of primary school completion, with the Mekong River Delta showing the lowest completion rate of 80.8 per cent. On the other hand, the South East region has the highest rate at 113.1 per cent. Mother's education is positively correlated with primary school completion, with a 25 percentage point difference between children whose mother has no education (84.1 per cent) and children whose mother has lower secondary education (109.6 per cent).

The transition rate to secondary school is 98.8 per cent in Viet Nam, which means that nearly all children who successfully completed the last grade of primary school were found at the moment of the survey to be attending the first grade of secondary school. The high transition rate to secondary school is observed across all background variables ranging from a minimum of 93.6 per cent (among children whose mother has no education) to a maximum of 100 per cent (among children living in the Red River Delta, whose mother has upper secondary and above education, living in an urban area and in the middle to richest households).

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[20] This indicator is calculated as the number of children (of any age) attending the last grade of primary school (excluding repeaters) [numerator] over the total number of children of any age [denominator].

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

Primary school completion rate and transition rate to secondary school, Viet Nam, 2011

	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	99.6	391	98.6	385
Female	99.5	346	99.1	327
Region				
Red River Delta	107.3	143	100	139
Northern Midland and Mountain areas	96.3	140	98	127
North Central area and Central Coastal area	109.9	139	99	146
Central Highlands	92	54	97.2	53
South East	113.1	99	98.2	83
Mekong River Delta	80.8	161	99.2	164
Area				
Urban	109.1	178	99.9	175
Rural	96.5	559	98.5	537
Mother's completed education level				
None	84.1	77	93.6	57
Primary	90.7	198	98	192
Lower Secondary	109.6	329	99.8	334
Upper Secondary	100.3	82	99.9	84
Tertiary	91	51	(100)	44
Wealth index quintile				
Poorest	88.6	191	95.9	169
Second	97.7	153	99.2	156
Middle	119.9	134	100	141
Fourth	90.9	148	100	137
Richest	108	112	99.9	108
Ethnicity of household head				
Kinh/Hoa	103.1	625	99.1	604
Ethnic Minorities	79.8	113	97.4	108
Total	99.6	737	98.8	712

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

[§]This indicator is calculated as the number of children (of any age) attending the last grade of primary school (excluding repeaters) [numerator] over the total number of children of primary school completion age (age appropriate to final grade of primary school) [denominator].

Note:
Figures shown in parenthesis are based on denominators of 25-49 un-weighted cases

The ratios of girls to boys attending primary and secondary education are provided in Table ED.8. These ratios are better known as the Gender Parity Index (GPI). The ratios included here are obtained from net attendance ratios rather than gross attendance ratios. The table shows that gender parity for primary school is 1.00, indicating no difference in the attendance of girls and boys in primary school. However, the indicator increases to 1.07 for secondary education, showing a slight advantage of girls in secondary education. This female advantage is observed by most of the background characteristics, particularly among children living in the Mekong River Delta (1.17), children whose mothers have primary education (1.11) and children living in households with near poor (1.12) or middle (1.10) living standards quintiles.

Table ED.8: Education gender parity

Ratio of adjusted net attendance ratios of girls to boys, in primary and secondary school, Viet Nam, 2011

	Primary school adjusted net attendance ratio (NAR), girls	Primary school adjusted net attendance ratio (NAR), boys	Gender parity index (GPI) for primary school adjusted NAR[1]	Secondary school adjusted net attendance ratio (NAR), girls	Secondary school adjusted net attendance ratio (NAR), boys	Gender parity index (GPI) for secondary school adjusted NAR[2]
Region						
Red River Delta	100	99.5	1.00	92.3	90.1	1.02
Northern Midland and Mountain areas	96.1	97.3	0.99	78.7	81.9	0.97
North Central area and Central Coastal area	98	98.4	1.00	88	78.6	1.12
Central Highlands	96.2	95.6	1.01	74.8	68.5	1.09
South East	96.9	97.9	0.99	82	79.7	1.03
Mekong River Delta	98.1	97.6	1.00	79	67	1.17
Area						
Urban	98.2	98.1	1.00	90.6	84.4	1.08
Rural	97.6	97.9	1.00	81.5	76.2	1.07
Mother'seducation						
None	87.7	90	0.97	47.6	49	0.97
Primary	97.1	97	1.00	76.9	69.5	1.11
Lower Secondary	99.5	99	1.00	90.8	84.5	1.07
Upper Secondary	100	100	1.00	96.3	93.4	1.03
Tertiary	98.7	99.5	0.99	98.5	95.4	1.03
Wealth index quintile						
Poorest	94.9	95.7	0.99	66	64.6	1.02
Second	97.9	98.2	1.00	81.7	73	1.12
Middle	98.6	98.3	1.00	88.1	80.3	1.10
Fourth	99.4	100	0.99	89	84.9	1.04
Richest	98.8	98.3	1.00	96.4	95	1.01
Ethnicity of household head						
Kinh/Hoa	98.3	98.4	1.00	87.2	80.4	1.09
Ethnic Minorities	94.7	95.1	1.00	65	66.3	0.98
Total	97.7	98	1.00	83.9	78.3	1.07

[1] **MICS indicator 7.9; MDG indicator 3.1**

[2] **MICS indicator 7.10; MDG indicator 3.1**

XI. CHILD PROTECTION

Birth Registration

The International Convention on the Rights of the Child 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. The World Fit for Children states the goal to develop systems to ensure the registration of every child at or shortly after birth, and fulfil his or her right to acquire a name and a nationality, in accordance with national laws and relevant international instruments. The monitoring indicator is the percentage of children under 5 years of age whose birth is registered.

Information on birth registration including by selected background characteristics is presented in table CP.1. The births of 95 per cent of children under 5 years of age in Viet Nam have been registered. The indicator shows virtually no variation by sex (94.6 per cent for boys compared to 95.3 per cent for girls) and only minor differences between regions and areas. However, children are less likely to be registered if their mother has no education or if they belong to a household from the poorest wealth index quintile and to ethnic minority households. For example, the difference between children whose mothers have tertiary education and those whose mothers have no education is more than 20 percentage points. Similarly, children of ethnic minority households are less likely to have their birth registered by age 5, with 84.9 per cent of ethnic minority children having their birth registered, compared to 96.7 per cent of Kinh/Hoa children.

Table CP.1: Birth registration

Percentage of children under 5 years of age by whether birth is registered and percentage of children not registered whose mothers/caregivers know how to register birth, Viet Nam, 2011

	Children under 5 years of age whose birth is registered with civil authorities					Children under 5 years of age whose birth is not registered	
	Has birth certificate					Percentage of children whose mother/ caregiver knows how to register birth	Number of children without birth registration
	Seen	Not seen	No birth certificate	Total registered[1]	Number of children		
Sex							
Male	65.5	27.9	1.2	94.6	1869	60.7	100
Female	66.8	27.5	1.0	95.3	1809	61.3	84
Region							
Red River Delta	67.8	30.3	0.1	98.2	798	*	14
Northern Midland and Mountain areas	60	33	1.4	94.4	707	(47.9)	39
North Central area and Central Coastal area	67.2	27.1	1.3	95.6	719	(61.2)	32
Central Highlands	65	25.6	1.9	92.4	233	*	18
South East	74.9	20.5	0.8	96.2	572	*	21
Mekong River Delta	62.3	26.5	1.8	90.7	650	53.2	60
Area							
Urban	71.3	24.8	1.0	97.1	1013	(70.3)	30
Rural	64.2	28.8	1.2	94.2	2665	59.2	155
Age (months)							
0–11	58.8	23.8	1.8	84.5	668	66.8	104
12–23	67.9	26.2	1.5	95.7	759	(64.3)	33
24–35	68.5	27.6	1.1	97.2	792	*	22
36–47	67.4	29.8	0.7	97.8	764	*	16
48–59	67.1	30.9	0.5	98.6	695	*	10
Mother's education							
None	39.3	32	6.3	77.6	207	(37.8)	46
Primary	63.1	25.3	1.8	90.2	658	60.5	65
Lower Secondary	66.3	29.9	0.7	96.9	1479	(67)	45
Upper Secondary	71.4	25.3	0.6	97.3	670	*	18
Tertiary	71.9	26.4	0.3	98.5	664	*	10
Wealth index quintile							
Poorest	56.6	27.4	2.8	86.8	831	48.9	110
Second	66.8	28.4	1.1	96.2	673	(62.5)	25
Middle	70.5	26.1	0.4	97.1	700	*	20
Fourth	66.4	30.5	0.9	97.8	749	*	16
Richest	72	26.1	0.1	98.2	725	*	13
Ethnicity of household head							
Kinh/Hoa	68.5	27.4	0.7	96.7	3143	75.6	104
Ethnic Minorities	52.1	29.5	3.3	84.9	535	42	81
Total	66.1	27.7	1.1	95	3678	61	185

[1] **MICS indicator 8.1**

Note:
Figures denoted by an asterisk are based on denominators of 24 un-weighted cases and less
Figures shown in parenthesis are based on denominators of 25-49 un-weighted cases

Table CP.1 provides additional information on birth certificates and the practice of keeping birth certificates in households. In total, there are 93.8 per cent of children whose mother or

caregiver reported to have a birth certificate, yet only 66.1 per cent of certificates have been seen by the interviewer. This indicates a relatively low level of keeping birth registration documents in households overall, which seems to increase with children's age, mothers' education and household living standards.

Child Labour

Article 32 of the Convention on the Rights of the Child 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..." A World Fit for Children mentions nine strategies to combat child labour and the MDGs call for the protection of children against exploitation. In the Viet Nam MICS 2011 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:

- Ages 5–11: at least one hour of economic work or 28 hours of domestic work per week.

- Ages 12–14: 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.

Tables CP.2a and CP.2b present the results of child labour by type of work and background characteristics for the two age groups 5–11 years (CP.2a) and 12–14 years (CP2b). Percentages do not add up to the total child labour children may be involved in more than one type of work. Overall, 9.5 per cent of children at aged 5–14 years are involved in child labour in Viet Nam. The percentage of children involved in child labour is slightly different between boys and girls, with relatively more girls involved in such activities than boys (10.6 per cent versus 8.5 per cent). A minor difference also emerges between the two age groups (9.2 per cent for children aged 5–11 years and 10.4 per cent for children aged 12–14 years).

Substantial differences in both age groups become apparent between regions, urban and rural areas, mother's education, wealth index quintiles, ethnic groups, and whether or not the child attends school. For example, in the Northern Midland and Mountain areas, 16.4 per cent of children aged 5–14 years are involved in child labour activities, compared with 4.4 per cent in the Red River Delta. Socio-economic status also affects children's involvement in child labour, with the percentage of child labourers being highest among poorest households (19.8 per cent for children aged 5–14 years) and lowest for children living in the richest households (2.3 per cent for children aged 5–14 years). This percentage is three times higher among ethnic minority children compared to Kinh/Hoa children aged 5–14 years. The overall prevalence of child labour is similar among both age groups (10.4 per cent for children aged 12–14 years and 9.2 per cent for children aged 5–11 years). However, school attendance among child labourers varies substantially between these age groups with as many as 50.4 per cent of child labourers aged 12–14 years not attending school, compared with 18.8 per cent of child labourers aged 5–11 years. Another noteworthy point is that the disparities within groups (e.g: by mother's education) increase from the 5-11 age group to

the 12-14 age group. For example, the disparity of 23 percentage points for children aged 5-11 years by mother's education increases to 32 percentage points for children aged 12-14 years. This is most pronounced with school attendance, where 7 percentage point gap among younger children aged 5-11 years increases to 43 percentage points for older children aged 12-14 years. It clearly shows that children who do not move on to secondary school are working, and that inequalities compound and become exacerbated over time.

Table CP.2a: Child labour

Percentage of children by involvement in economic activity and household chores during the past week, for the age group 5–11 years, and percentage of children aged 5–14 years involved in child labour, Viet Nam, 2011

	Total child labour (5–14 years)[1]	Number of children aged 5–14 years	Percentage of children aged 5–11 years involved in Economic activity				House-hold chores less than 28 hours	House-hold chores for 28 hours or more	Child labour	Number of children aged 5–11 years
			Working outside household		Working for family business	Economic activity for at least one hour				
			Paid work	Un-paid work						
Sex										
Male	8.5	3912	0.4	0.8	7.2	8.3	32.9	0.4	8.6	2701
Female	10.6	3599	0.5	1.2	8.2	9.6	46.7	0.2	9.8	2465
Region										
Red River Delta	4.4	1430	0.3	1.5	2.3	3.9	36.7	0.2	3.9	1000
Northern Midland and Mountain areas	16.4	1299	0.2	0.5	13.5	14	45.3	0.6	14.5	920
North Central area and Central Coastal area	8.9	1636	0.4	1.2	8.5	9.7	42.1	0.1	9.7	1070
Central Highlands	11.5	562	0	1.3	9.4	10	41.4	0.5	10.5	373
South East	6.3	1105	0.5	1.3	3.6	5.4	33.7	0.1	5.4	749
Mekong River Delta	10.9	1480	0.9	0.6	9.1	10.5	38	0.5	11	1054
Area										
Urban	4.4	1923	0.5	1.1	2.4	4	32	0.2	4.1	1369
Rural	11.3	5588	0.4	1	9.5	10.7	42.2	0.3	11	3797
School attendance										
Yes	8.3	7193	0.4	1	7.4	8.6	39.9	0.3	8.9	5035
No	37.3	318	4.1	1.3	16.4	18.8	24.8	0	18.8	131
Mother's education										
None	28.6	695	2.1	0.8	23.8	25.6	42.2	0.6	26.2	469
Primary	13.3	1856	0.6	1.2	10.3	11.9	42.6	0.9	12.6	1237
Lower Secondary	6.6	3394	0.2	0.8	5.7	6.7	41.3	0.1	6.7	2324
Upper Secondary	2.9	890	0	0.9	2.6	3.5	31.9	0	3.5	615
Tertiary	2.9	675	0.2	1.7	1.3	3.3	30.5	0	3.3	521
Wealth index quintile										
Poorest	19.8	1773	0.7	0.8	17.4	18.3	43.2	0.5	18.6	1251
Second	12.1	1598	1.1	0.9	9.8	11.4	46.1	0.6	12	1053
Middle	5.6	1455	0.2	1.1	3.3	4.5	41.5	0.4	4.8	976
Fourth	4.3	1413	0.1	0.9	3.1	4.1	35.2	0	4.1	1000
Richest	2.3	1272	0.1	1.5	1.4	3	29.1	0	3	886
Ethnicity of household head										
Kinh/Hoa	7.1	6376	0.5	1	5.5	6.9	38.3	0.2	7	4387
Ethnic Minorities	23.5	1135	0.3	0.9	19.9	20.5	46.1	0.8	21.2	779
Total	9.5	7511	0.4	1	7.7	8.9	39.5	0.3	9.2	5166

[1] MICS indicator 8.2

Table CP.2b: Child labour

Percentage of children by involvement in economic activity and household chores during the past week, for the age group 12–14 years, and percentage of children aged 5–14 years involved in child labour, Viet Nam, 2011

			Percentage of children aged 12–14 years involved in								
			Economic activity								
	Total child labour (5–14 years)[1]	Number of children aged 5–14 years	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 years
			Paid work	Un-paid work							
Sex											
Male	8.5	3912	1.9	2.1	23.6	18.6	8.0	73.8	0.6	8.5	1211
Female	10.6	3599	3.7	2.2	25.1	16.7	11.9	85.8	0.5	12.5	1134
Region											
Red River Delta	4.4	1430	0.4	2.0	11.0	8.1	5.0	87.7	0.7	5.5	430
Northern Midland and Mountain areas	16.4	1299	2.0	2.5	49.5	31.5	20.6	86.1	0.4	21.1	379
North Central area and Central Coastal area	8.9	1636	1.8	3.3	27.1	22.4	7.1	79.2	0.2	7.3	566
Central Highlands	11.5	562	1.8	2.5	30.0	19.7	12.6	72.8	1.1	13.5	189
South East	6.3	1105	5.7	1.8	14.0	12.8	7.1	73.2	1.0	8.1	356
Mekong River Delta	10.9	1480	5.2	0.7	17.8	12.2	10.2	74.6	0.5	10.7	425
Area											
Urban	4.4	1923	1.9	2.7	11.0	9.6	4.7	72.5	0.5	5.2	554
Rural	11.3	5588	3.0	2.0	28.4	20.2	11.5	81.8	0.6	12	1791
School attendance											
Yes	8.3	7193	1.0	1.9	22.7	18.2	6.5	80.9	0.5	7.0	2158
No	37.3	318	23	5.0	42.8	11.9	49.4	64.5	1.1	50.4	187
Mother's education											
None	28.6	695	11.3	2.5	50.6	25.6	33.4	78.3	0.3	33.7	227
Primary	13.3	1856	4.4	2.1	29.4	19.5	14.2	78.4	0.5	14.8	618
Lower Secondary	6.6	3394	1.1	2.2	21.9	18.2	6.0	80.7	0.7	6.6	1070
Upper Secondary	2.9	890	0.2	1.4	13.2	13.3	1.0	80.2	0.6	1.6	275
Tertiary	2.9	675	0.0	3.0	1.7	3.7	1.0	77.3	0.5	1.5	154
Wealth index quintile											
Poorest	19.8	1773	4.4	3.1	51.5	31.9	22.6	81.7	0.2	22.8	523
Second	12.1	1598	5.3	1.6	29.1	23.3	11.6	79.8	1.2	12.5	545
Middle	5.6	1455	1.4	2.9	17.5	14.1	6.6	83.7	0.6	7.2	479
Fourth	4.3	1413	1.2	1.5	11.2	9.2	4.0	80.5	0.6	4.7	413
Richest	2.3	1272	0.4	1.5	3.3	4.2	0.7	70.4	0.2	0.9	386
Ethnicity of household head											
Kinh/Hoa	7.1	6376	2.4	1.9	18.0	14.5	6.6	78.8	0.6	7.2	1989
Ethnic Minorities	23.5	1135	4.5	3.8	59.8	35.6	28.3	84.3	0.2	28.5	356
Total	9.5	7511	2.8	2.2	24.3	17.7	9.9	79.6	0.6	10.4	2345

[1] MICS indicator 8.2

The percentage of children aged 5–14 years involved in child labour who are attending school and the percentage of children aged 5–14 years attending school who are involved in child labour are presented in Table CP.3. Of the 95.8 per cent of children 5–14 years of age attending school, 8.3 per cent are also involved in child labour activities.

The prevalence of child labour among students whose mother has higher education levels is much lower compared to students whose mother has no education (2.8 per cent versus 23.7 per cent, respectively). A similar pattern is observed in the case of students belonging to the richest households compared to the poorest households (2.3 per cent versus 17.6 per cent, respectively). A child who attends school is roughly three times more likely to become a labourer if living in an ethnic minority household. Among the six regions in Viet Nam, the South East and the Red River Delta have the lowest percentage of students who are child labourers, standing at 4.6 per cent and 4.3 per cent respectively, compared to the Northern Midland and Mountain areas, where it is 14.9 per cent.

Of the 9.5 per cent of children who are involved in child labour, the majority (83.4 per cent) are also attending school. School attendance among child labourers drops considerably with age, from 94.8 per cent among younger children aged 5-11 years to 61.4 per cent among older children aged 12-14 years. Mother's education and region of residence also indicate disparities for the indicator. Almost all child labourers whose mother has tertiary education are attending school (95.8 per cent), compared with only 68.9 per cent whose mother has no education. Similarly, almost 97.1 per cent of child labourers in the Red River Delta are attending school compared with only 69.8 per cent in the South East.

Table CP.3: Child labour and school attendance							
Percentage of children aged 5–14 years involved in child labour who are attending school, and percentage of children aged 5–14 years attending school who are involved in child labour, Viet Nam, 2011							
	Percentage of children involved in child labour	Percentage of children attending school	Number of children aged 5–14 years	Percentage of child labourers who are attending school[1]	Number of children aged 5–14 years involved in child labour	Percentage of children attending school who are involved in child labour[2]	Number of children aged 5–14 years attending school
Sex							
Male	8.5	95.6	3912	84.0	334	7.5	3741
Female	10.6	95.9	3599	82.9	383	9.2	3452
Region							
Red River Delta	4.4	99.1	1430	97.1	63.0	4.3	1417
Northern Midland and Mountain areas	16.4	95.9	1299	87.2	214	14.9	1246
North Central area and Central Coastal area	8.9	96.4	1636	84.9	145	7.8	1578
Central Highlands	11.5	92.8	562	72.4	65	9.0	522
South East	6.3	94.8	1105	69.8	69	4.6	1047
Mekong River Delta	10.9	93.4	1480	82.0	161	9.6	1383
Area							
Urban	4.4	97.3	1923	82.5	85	3.8	1872
Rural	11.3	95.2	5588	83.6	632	9.9	5321
Age group							
5–11	9.2	97.5	5166	94.8	473	8.9	5035
12–14	10.4	92.0	2345	61.4	244	7.0	2158
Mother's education							
None	28.6	83.1	695	68.9	199	23.7	578
Primary	13.3	93.0	1856	82.8	247	11.9	1725
Lower Secondary	6.6	98.4	3394	94.2	226	6.4	3338
Upper Secondary	2.9	99.0	890	97.9	26	2.9	881
Tertiary	2.9	99.3	675	95.8	19	2.8	670
Wealth index quintile							
Poorest	19.8	91.2	1773	81	352	17.6	1618
Second	12.1	94.8	1598	85.5	194	10.9	1515
Middle	5.6	97.4	1455	83.5	81	4.8	1417
Fourth	4.3	97.9	1413	84.1	61	3.7	1383
Richest	2.3	99.0	1272	97.3	30	2.3	1260
Ethnicity of household head							
Kinh/Hoa	7.1	96.6	6376	84.8	450	6.2	6158
Ethnic Minorities	23.5	91.2	1135	81.1	267	20.9	1035
Total	9.5	95.8	7511	83.4	717	8.3	7193

[1] **MICS indicator 8.3**

[2] **MICS indicator 8.4**

Child Discipline

As stated in A World Fit for Children, "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 Viet Nam MICS 2011 survey, parents or caregivers of children aged 2–14 years were asked a series of questions on the ways parents discipline their children when they misbehave. Note that for the child discipline module, one child aged

2–14 years was selected randomly per household during fieldwork. Out of these questions, the two indicators used to describe aspects of child discipline are: 1) the number of children aged 2–14 years that experience psychological aggression as punishment, minor physical punishment or severe physical punishment; and 2) the number of parents or caregivers of children aged 2–14 years of age who believe that in order to raise their children properly, they need to physically punish them.

Table CP.4: Child discipline								
Percentage of children aged 2–14 years according to method of disciplining the child, Viet Nam, 2011								
	Percentage of children aged 2–14 years who experienced:					Number of children aged 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	20.0	57.2	58.3	3.9	76.3	5016	18.6	3338
Female	24.4	53.5	51.5	3.0	71.4	4731	15.6	2953
Region								
Red River Delta	27.5	47.6	55.1	3.3	68.9	1920	17.1	1265
Northern Midland and Mountain areas	25.5	55.1	48.6	4.4	71.5	1709	14.8	1060
North Central area Central Coastal area	15.7	51.9	65.0	3.2	78.2	2062	23.6	1329
Central Highlands	17.0	65.1	61.9	7.7	78.2	702	19.9	391
South East	26.2	51.5	48.7	2.3	69.5	1457	13.8	989
Mekong River Delta	19.5	66.7	52.2	2.5	78.2	1896	14.4	1258
Area								
Urban	27.5	48.3	52.1	2.0	69.1	2523	14.6	1760
Rural	20.2	57.8	56.0	4.0	75.6	7224	18.2	4532
Age (years)								
2–4	19.3	48.6	62.1	2.9	73.9	2205	15.3	1485
5–9	20.7	56.4	60.5	3.4	75.9	3622	18.4	2264
10–14	25.0	58.2	46.0	3.8	72.0	3919	17.2	2543
Education of household head								
None	17.4	66.4	58.9	8.6	80.2	691	19.0	368
Primary	15.7	66.1	56.2	4.6	80.3	2560	20.4	1580
Lower Secondary	22.6	53.0	55.2	2.6	73.2	4032	17.3	2591
Upper Secondary	27.5	50.3	53.7	3.2	68.9	1422	14.2	993
Tertiary	32.3	36.8	50.8	1.3	63.1	1014	13.5	743
Respondent's education level								
None	13.8	72.0	58.5	10.1	82.8	684	16.1	347
Primary	17.8	64.9	53.9	4.1	79.3	2367	21.5	1463
Lower Secondary	21.6	54.7	57.1	2.8	74.3	4408	17.9	2814
Upper Secondary	26.7	47.4	52.0	2.5	67.6	1301	11.9	941
Tertiary	34.4	34.3	49.8	1.6	61.4	986	13.4	726
Wealth index quintile								
Poorest	16.1	61.3	59.6	5.7	79.5	2287	20.1	1307
Second	18.8	62.7	54.8	2.7	78.2	1996	20.7	1263
Middle	23.2	54.6	54.7	4.3	72.7	1890	16.2	1244
Fourth	21.1	54.9	56.4	2.3	74.5	1886	15.8	1269
Richest	34.2	40.1	48.0	1.7	61.9	1687	13.0	1209
Ethnicity of household head								
Kinh/Hoa	22.7	54.4	55.2	3.0	73.4	8304	17.0	5493
Ethnic Minorities	18.9	61.0	54.1	6.2	76.8	1442	18.4	799
Total	22.1	55.4	55.0	3.5	73.9	9746	17.2	6292
[1] **MICS indicator 8.5**								

As shown in table CP.4, 73.9 per cent of children in Viet Nam aged 2–14 years experienced violent discipline, meaning they were subjected to at least one form of psychological or physical punishment by their parents/caregivers or other household members. 3.5 per cent of children were subjected to severe physical punishment and 55.0 per cent to any physical punishment. On the other hand, only 17.2 per cent of parents/caregivers stated that they believe children should be physically punished. This shows an interesting contrast between the actual prevalence of physical discipline (55.0 per cent) and parents' stated beliefs about physical discipline (17.2 per cent). On par with the proportion of children subjected to any physical punishment, 55.4 per cent of children were subjected to psychological aggression. With the increase in age of the child the physical punishment is likely to decrease, from 62.1 per cent of children 2–4 years of age to 46.0 per cent of those 10–14 years of age. In contrast the severity of punishment is likely to slightly increase for the older children. Severe punishment of children is more common in rural areas, as well as in less educated, poorer and ethnic minority households. Psychological punishment shows similar variations especially depending on the education level of the household head and wealth index quintile. Children in households in which the head has tertiary education are nearly 30 percentage points less likely to be subjected to psychological aggression than children in households in which the household head has no education.

Early Marriage and Polygyny

Marriage before the age of 18 is a reality for many young girls. According to UNICEF's worldwide estimates, over 64 million women age 20–24 were married/in a union before the age of 18. 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.

In many parts of the world parents encourage the marriage of their daughters while they are still children hoping that the marriage will benefit them both financially and socially, while also relieving financial burdens on the family. In actual fact, 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 Convention on the Elimination of all Forms of Discrimination against Women 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 Convention on the Rights of the Child, child marriage is linked to other rights – such as the right to express their 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. The Convention on Consent to Marriage, Minimum Age for Marriage and Registration of Marriages is another international agreement related to child marriage.

Young married girls are a unique, though often invisible, group. Required to perform heavy amounts of domestic work, under pressure to demonstrate fertility, and responsible for raising children while still children themselves, married girls and child mothers face constrained

decision-making and reduced life choices. Boys are also affected by child marriage but the issue impacts girls in far larger numbers and with more intensity. Cohabitation – when a couple lives together as if married – raises the same human rights concerns as marriage. Where a girl lives with a man and takes on the role of caregiver for him, the assumption is often that she has become an adult woman, even if she has not yet reached the age of 18. Additional concerns due to the informality of the relationship – for example, inheritance, citizenship and social recognition – might make girls in informal unions vulnerable in different ways than those who are in formally recognized marriages.

Many factors can place a child at risk of marriage. Poverty, protection of girls, family honour and the provision of stability during unstable social periods are considered as significant factors in determining a girl's risk of becoming married while still a child. Women who married at younger ages were more likely to believe that it is sometimes acceptable for a husband to beat his wife and were more likely to experience domestic violence themselves. The age gap between partners is thought to contribute to these abusive power dynamics and to increase the risk of untimely widowhood.

Closely related to the issue of child marriage is the age at which girls become sexually active. Women who are married before the age of 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.

Information about early marriage is provided in Table CP.5. The Vietnamese Law on Marriage and Family sets the legal minimum marriage age at 20 for males and 18 for females. Some 8.4 percentage of young women aged 15–19 years are currently married or in union. The proportion in urban areas (4.5 per cent) is half that in rural areas (9.9 per cent), and is inversely related to the level of education and household living standards. As an example, 17.7 per cent of women aged 15–19 years are currently married or in a union in the poorest households, compared with only 2.8 per cent in the richest households. Similarly, 26.9 per cent of women aged 15–19 years with no education are currently married or in a union, compared with only 1.2 per cent of their peers with tertiary education. The Northern Midland and Mountain areas followed by the Central Highlands are the two regions where the percentage of currently married 15–19 year old women is the highest, standing at 16.5 and 11.2 per cent, respectively.

Less than 1 per cent of women are married before the age of 15. However, 12.3 per cent of women in the age group 20–49 years were married by the age of 18. The indicator is two and a half times higher in rural areas compared with urban areas, with 6.2 per cent of women in urban areas married before age 18, and 15.2 per cent of women in rural areas. Yet, living standards, ethnicity of the household head, and most importantly, education display the widest differentials. For example, one third of women aged 20–49 years with no education married before the age of 18 compared to less than one per cent of women with tertiary level education. The percentage of women aged 20–49 years married before age 18 is highest in the Northern Midland and Mountain areas, at approximately 18.8 per cent.

Table CP.5 also includes data about women in a polygynous union[21]. In Viet Nam, polygynous marriages are prohibited by the constitution, which stipulates that a lawful marriage must be monogamous. Yet 2.5 per cent of women aged 15–49 years are in polygynous marriages and/or unions. The differentials in each classification are small because of the relatively low level of the phenomenon overall. Ethnicity does not seem to be a determinant in the incidence of polygyny, with 2.5 and 2.6 per cent of women in

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[21]   Polygyny refers to a form of marriage in which a man has two or more wives at the same time.

Kinh/Hoa and ethnic minority households living in a polygynous marriage or union respectively.

Table CP.5: Early marriage and polygyny

Percentage of women aged 15–49 years who first married or entered a marital union before their 15th birthday, percentages of women aged 20–49 years who first married or entered a marital union before their 15th and 18th birthdays, percentage of women aged 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, Viet Nam, 2011

	Percentage married before age 15[1]	Number of women aged 15–49 years	Percentage married before age 15	Percentage married before age 18[2]	Number of women aged 20–49 years	Percentage of women aged 15–19 years currently married/in union[3]	Number of women aged 15–19 years	Percentage of women aged 15–49 years in polygynous marriage/union[4]	Number of women aged 15–49 years currently married/in union
Region									
Red River Delta	0.0	2368	0.0	9.5	2037	8.7	330	2.3	1755
Northern Midland and Mountain areas	1.2	1896	1.2	18.8	1630	16.5	265	3.1	1491
North Central area and Central Coastal area	0.4	2429	0.4	8.5	2002	5.0	427	1.5	1674
Central Highlands	1.7	671	1.6	15.1	542	11.2	130	2.0	467
South East	0.5	2080	0.6	8.8	1805	4.0	275	3.1	1335
Mekong River Delta	1.1	2220	1.3	16.3	1940	8.3	280	2.6	1619
Area									
Urban	0.4	3676	0.5	6.2	3183	4.5	493	2.4	2434
Rural	0.8	7987	0.8	15.2	6773	9.9	1214	2.5	5908
Age group									
15–19	0.4	1707	na	na	0	8.4	1707	1.5	143
20–24	0.5	1608	0.5	9.3	1608	na	na	1.9	828
25–29	0.8	1806	0.8	11.3	1806	na	na	1.6	1498
30–34	1.0	1817	1.0	13.9	1817	na	na	1.8	1643
35–39	0.7	1657	0.7	15.8	1657	na	na	2.9	1530
40–44	0.6	1621	0.6	11	1621	na	na	2.2	1456
45–49	0.7	1448	0.7	12.5	1448	na	na	4.6	1244
Education level									
None	6.6	479	6.3	35.9	450	(26.9)	29	3.4	396
Primary	1.0	1900	0.9	21.3	1831	33.9	69	4.0	1626
Lower Secondary	0.6	4517	0.6	13.8	4170	19.1	347	2.3	3739
Upper Secondary	0.1	2836	0.1	5.1	1725	3.9	1110	2.0	1413
Tertiary	0.1	1931	0.1	0.7	1780	1.2	151	1.0	1167
Wealth index quintile									
Poorest	2.0	2062	2.0	20.6	1748	17.7	314	2.8	1558
Second	0.5	2200	0.5	15.9	1831	7.3	369	3.2	1604
Middle	0.4	2429	0.4	11.8	2068	6.0	361	2.3	1708
Fourth	0.6	2479	0.7	10.2	2149	8.9	330	2.1	1763
Richest	0.2	2493	0.2	5.2	2160	2.8	333	1.9	1708
Ethnicity of household head									
Kinh/Hoa	0.4	10247	0.5	10.4	8782	6.6	1465	2.5	7277
Ethnic Minorities	2.5	1416	2.4	26.8	1174	19.3	242	2.6	1065
Total	0.7	11663	0.7	12.3	9956	8.4	1707	2.5	8341

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

Note:
Figures shown in parenthesis are based on denominators of 25-49 un-weighted cases

Table CP.6 presents the proportion of women who were first married or entered into a marital union before age 15 and 18 by residence area and age groups. Examining the percentages of women married before 15 and 18 by different age groups allows for the identification of trends in early marriage over time. It is not possible to reach any decisive conclusion for women married before age 15 since the overall incidence is very small (below 1 per cent overall).

Table CP.6: Trends in early marriage

Percentage of women who were first married or entered into a marital union before age 15 and 18, by residence and age group, Viet Nam, 2011

Age group	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
15–19	0.1	493	na	na	0.6	1214	na	na	0.4	1707	na	na
20–24	0.2	567	4.3	567	0.6	1042	12.1	1042	0.5	1608	9.3	1608
25–29	0.7	572	5.0	572	0.9	1234	14.2	1234	0.8	1806	11.3	1806
30–34	0.8	558	6.8	558	1.1	1259	17.0	1259	1.0	1817	13.9	1817
35–39	0.6	502	7.9	502	0.8	1154	19.2	1154	0.7	1657	15.8	1657
40–44	0.3	525	7.6	525	0.8	1095	12.6	1095	0.6	1621	11.0	1621
45–49	0.4	459	5.5	459	0.9	988	15.7	988	0.7	1448	12.5	1448
Total	0.4	3676	6.2	3183	0.8	7987	15.2	6773	0.7	11663	12.3	9956

Spousal age difference indicates the percentage of women in a marriage or union whose current spouse is ten or more years older. Table CP.7 presents the results of the age difference between wives and their husbands. 4.8 per cent of women aged 20–24 years are currently married to or in a union with a man/partner who is ten or more years older. This increases to 7.4 per cent for women aged 15–19 years. More women aged 20–24 years live with husbands 10 or more years older than them in urban areas than in rural areas (8.5 per cent versus 3.7 per cent, respectively).

Table CP.7: Spousal age difference

Percentage distribution of women currently married/in union aged 15–19 years and 20–24 years according to the age difference with their husband or partner, Viet Nam, 2011

	Percentage of currently married/in union women aged 15–19 years whose husband or partner is:						Number of women aged 15–19 years currently married/in union	Percentage of currently married/in union women aged 20–24 years whose husband or partner is:						Number of women aged 20–24 years currently married/ in union
	Younger	0–4 years older	5–9 years older	10+ years older[1]	Husband/ partner's age unknown	Total		Younger	0–4 years older	5–9 years older	10+ years older[2]	Husband/ partner's age unknown	Total	
Region														
Red River Delta	(0)	(39.6)	(56.4)	(4.1)	(0)	(100)	29	4.4	61.3	30	2.2	2.1	100	187
Northern Midland and Mountain areas	(7.2)	(56.2)	(30.5)	(6.1)	(0)	(100)	44	15.2	64.4	19.8	0.5	0.2	100	172
North Central area and Central Coastal area	*	*	*	*	*	*	21	2.9	64.0	30.4	2.6	0.0	100	143
Central Highlands	*	*	*	*	*	*	15	(7.5)	(52.1)	(32.2)	(6.7)	(1.5)	(100.)	48
South East	*	*	*	*	*	*	11	9.8	50.3	24.8	15.1	0.0	100	117
Mekong River Delta	*	*	*	*	*	*	23	13.3	53.1	27	6.6	0.0	100	161
Area														
Urban	*	*	*	*	*	*	22	9.7	52.7	27	8.5	2.1	100	195
Rural	4.6	53	35	7.1	0.4	100	121	8.9	60.6	26.7	3.7	0.1	100	633
Education level														
None	*	*	*	*	*	*	8	(40.7)	(37.3)	(19.8)	(0)	(2.2)	(100)	32
Primary	*	*	*	*	*	*	23	6.5	61.1	25.8	6.2	0.3	100	93
Lower Secondary	1.9	45.3	46.9	5.9	0	100	66	6.1	60.8	26.8	5.8	0.6	100	350
Upper Secondary	(0.6)	(60.7)	(28.3)	(9.4)	(1.1)	(100)	45	11.6	57.7	26.6	3.9	0.3	100	239
Tertiary	*	*	*	*	*	*		6.4	58.6	29.8	4.2	1.0	100	114
Wealth index quintile														
Poorest	9.7	57.0	30.6	2.7	0	100	55	15.0	62.7	19.3	2.4	0.5	100	179
Second	(0)	(57.7)	(35.8)	(6.5)	(0)	(100)	27	8.6	65.4	25.0	1.0	0.0	100	171
Middle	*	*	*	*	*	*	22	5.2	57.4	29.7	6.6	1.2	100	170
Fourth	(0)	(41.7)	(42.6)	(15.6)	(0)	(100)	29	7.9	58.1	28.2	5.8	0.0	100	200
Richest	*	*	*	*	*	*	9	8.5	44.7	34.7	10.4	1.8	100	108
Ethnicity of household head														
Kinh/Hoa	1.7	45.7	44.2	8.4	0	100	96	7.4	57.5	29.2	5.4	0.6	100	682
Ethnic Minorities	(8.8)	(63.6)	(21.2)	(5.4)	(1)	(100)	47	16.8	64.6	15.6	2.4	0.7	100	146
Total	4.0	51.5	36.7	7.4	0.3	100	143	9.1	58.7	26.8	4.8	0.6	100	828

[1] MICS indicator 8.10a; [2] MICS indicator 8.10b

Note:

Figures denoted by an asterisk are based on denominators of 24 un-weighted cases and less

Figures shown in parenthesis are based on denominators of 25-49 un-weighted cases

Domestic Violence

A number of questions were asked to women aged 15–49 years to assess their attitudes towards whether husbands are justified to hit or beat their wives/partners for a variety of reasons. These questions were asked to have an indication of cultural beliefs that tend to be associated with the prevalence of violence against women by their husbands/partners. The main assumption here is that women that agree with the statements indicating that husbands/partners are justified to beat their wives/partners under the situations described in reality tend to be abused by their own husbands/partners. The responses to these questions can be found in Table CP.8.

More than one third of women in Viet Nam feel that a husband/partner has a right to hit or beat his wife/partner for at least one of the following five reasons: if she (1) goes out without telling him; (2) neglects the children; (3) argues with him; (4) refuses sex with him; (5) burns the food. Women who approve of their partner's violence, in most cases agree and justify violence in instances of when they neglect the children (26.8 per cent), or if they demonstrate their autonomy, e.g. by arguing with them (20.6 per cent). Roughly 14 per cent of women believe that a partner/husband has a right to hit or beat his partner/wife if she goes out without telling him and almost 6 per cent if she refuses to have sex with him. Some 3.2 per cent of women believe that a husband or partner is justified to hit his partner or wife for burning the food.

Acceptance of domestic violence is more present among the poorest, less educated, and ethnic minority households. For example, nearly half of all the women living in the poorest households agree that a husband is justified in beating his wife for any of the above reasons, compared with 20.1 per cent of women who share that opinion in the richest households. Similarly, women in rural areas are more likely to have an accepting attitude towards violence than in urban areas (39.8 versus 27.3 per cent, respectively). Appreciable differences also emerge between regions, with three out of six regions, namely the North Central area and Central Coastal area, the Northern Midland and Mountain areas, and the Mekong River Delta revealing the highest percentage of women with an accepting attitude towards domestic violence, at above 40 per cent. However, the most considerable disparities in the acceptance of violence are by the woman's level of education: more than one in two women aged 15–49 years with no education state an accepting attitude compared to one in six women with tertiary education. It is noteworthy to see that acceptance of domestic violence dose not decrease over time as the percentage of women who accept it holds fairly constant over all age cohorts.

Table CP.8: Attitudes toward domestic violence

Percentage of women aged 15–49 years who believe a husband is justified in beating his wife/partner in various circumstances, Viet Nam, 2011

	Percentage of women aged 15–49 years who believe a husband is justified in beating his wife/partner:						
	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 reasons[1]	Number of women aged 15–49 years
Region							
Red River Delta	7.3	19.3	16.4	2.7	0.7	27.4	2368
Northern Midland and Mountain areas	18.0	33.1	27.4	11.0	5.0	43.5	1896
North Central area and Central Coastal area	15.0	30.3	27.7	5.9	4.5	44.4	2429
Central Highlands	15.0	23.9	26	6.5	3.0	36.3	671
South East	5.4	16.5	9.6	2.4	0.6	21.9	2080
Mekong River Delta	22.3	35.9	20.0	7.3	5.3	41.8	2220
Area							
Urban	8.9	21.4	12.8	2.9	1.8	27.3	3676
Rural	15.8	29.2	24.2	7.0	3.8	39.8	7987
Age group							
15–19	10.8	28.3	18.4	3.9	2.1	34.5	1707
20–24	11.0	24.8	17.4	3.8	2.0	32.1	1608
25–29	12.1	24.5	18.7	5.2	2.3	33.8	1806
30–34	13.7	25.8	21.2	5.3	4.2	36.3	1817
35–39	15.8	26.8	21.4	6.4	2.8	36.6	1657
40–44	17.5	28.9	24.4	8.0	4.4	39.9	1621
45–49	14.6	28.7	23.0	8.1	4.6	38.0	1448
Marital/Union status							
Currently married/in union	14.6	27.5	22.3	6.5	3.5	37.6	8341
Widowed	15.0	28.2	19.2	10.9	5.0	34.6	223
Divorced	22.1	35	23.8	6.6	4.3	42.9	148
Separated	16.9	33.1	24.4	8.5	3.2	44.1	101
Never married/in union	9.9	24.0	15.4	3.0	2.1	30.1	2849
Education level							
None	32.8	41.2	39.0	18.4	8.8	55	479
Primary	23.8	36.8	26.3	10.6	6.0	46.3	1900
Lower Secondary	14.9	29.4	25.0	6.1	3.5	41.0	4517
Upper Secondary	8.7	23.7	15.6	2.9	1.3	30.7	2836
Tertiary	3.1	11.6	7.5	1.2	1.0	16.3	1931
Wealth index quintile							
Poorest	22.3	35.8	31.6	10.9	5.9	48.8	2062
Second	16.8	32.8	26.1	7.8	4.1	43.5	2200
Middle	14.7	29.3	21.5	5.7	3.3	38.3	2429
Fourth	11.2	23.5	16.8	3.1	2.1	31.6	2479
Richest	4.8	14.7	9.3	2.3	1.1	20.1	2493
Ethnicity of household head							
Kinh/Hoa	12.3	25.6	19.4	4.6	2.9	34.3	10247
Ethnic Minorities	22.6	35.4	29.1	13.7	5.2	47.2	1416
Total	13.6	26.8	20.6	5.7	3.2	35.8	11663

[1] **MICS indicator 8.14**

Orphanhood

According to the Framework for the Protection, Care and Support of Orphans and Vulnerable Children Living in a World with HIV and AIDS (July 2004) orphanhood is defined as follows:

"Maternal orphans are children whose mother has died (includes double orphans), paternal orphans are children whose father has died (includes double orphans), double orphans are children whose mothers and fathers have died."

In MICS an orphan is defined as a child under 18 years of age whose mother, father or both parents have died from any cause. Children who are orphaned may be at increased risk of neglect or exploitation if the parents are not available to assist them. Monitoring the variations in different outcomes for orphans and comparing them to their peers gives us a measure of how well communities and governments are responding to their needs.

Children's living arrangements (living with neither parent, mother only, or father only) and children with at least one parent dead are presented in Table CP.9. In Viet Nam, 83.7 percent of children aged 0–17 years live with both parents while 5.2 per cent live with neither parent. Some 5.7 per cent live only with their mother even though the father is alive and 2.4 per cent live with their mother only when the father is dead. 1.8 per cent live only with their father even though the mother is alive and 0.7 per cent live with their father only when the mother is dead. About 5.3 per cent do not live with a biological parent and this percentage is highest in the Mekong River Delta (8.8 per cent), and lowest in the Central Highlands (2.3 per cent). Some 3.9 per cent of children have one or both parents dead. The percentage is 6.3 per cent among the poorest households and decreases to 3.5 per cent for the richest households.

Table CP.9: Children's living arrangements and orphanhood

Percentage distribution of children aged 0–17 years according to living arrangements, percentage of children aged 0–17 years in households not living with a biological parent and percentage of children who have one or both parents dead, Viet Nam 2011

	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 aged 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	83.4	0.1	0.5	4.4	0.3	5.5	2.4	2.1	0.7	0.5	100	5.3	4.0	7002
Female	83.9	0.1	0.4	4.4	0.3	5.9	2.3	1.5	0.6	0.7	100	5.2	3.7	6593
Region														
Red River Delta	82.6	0.1	0.5	3.2	0.5	8.5	1.7	1.6	0.5	0.7	100	4.4	3.3	2689
Northern Midland and Mountain areas	86.3	0.1	0.3	3.6	0.1	4.4	2.3	1.5	1.0	0.5	100	4.1	3.8	2414
North Central area and Central Coastal area	82.6	0.1	0.5	4.2	0.2	5.1	3.4	2.7	0.7	0.5	100	5.0	4.9	2962
Central Highlands	89.1	0.1	0.1	1.7	0.3	3.2	3.6	0.5	0.9	0.4	100	2.3	5.0	988
South East	82.4	0.2	0.5	4.6	0.1	7.4	1.9	1.8	0.4	0.8	100	5.4	3.0	2006
Mekong River Delta	82.3	0.1	0.5	7.7	0.5	4.3	1.7	1.6	0.7	0.5	100	8.8	3.5	2534
Area														
Urban	84.3	0.0	0.5	3.7	0.3	6.8	2.1	1.6	0.2	0.5	100	4.5	3.1	3595
Rural	83.4	0.1	0.4	4.7	0.3	5.3	2.4	1.8	0.8	0.6	100	5.5	4.1	10000
Age group														
0–4	84.4	0.1	0.1	4.4	0.1	8.4	1.0	1.0	0.1	0.4	100	4.7	1.4	3668
5–9	84.6	0.1	0.3	4.9	0.2	5.1	1.8	1.9	0.5	0.5	100	5.5	2.9	3706
10–14	83.5	0.1	0.9	3.8	0.4	4.2	3.1	2.3	1.1	0.4	100	5.3	5.7	3805
15–17	81.2	0.2	0.4	4.7	0.5	4.7	4.1	1.8	1.2	1.2	100	5.7	6.3	2415
Wealth index quintiles														
Poorest	82	0.0	0.7	5.1	0.6	4.4	3.8	1.7	1.1	0.7	100	6.3	6.2	3105
Second	84.1	0.1	0.4	4.8	0.1	4.6	2.7	1.5	1.1	0.6	100	5.4	4.4	2797
Middle	83.2	0.2	0.2	4.7	0.2	6.7	1.6	2	0.4	0.8	100	5.2	2.6	2643
Fourth	83.5	0.1	0.6	4.7	0.2	5.9	2.2	2.2	0.2	0.4	100	5.6	3.3	2592
Richest	85.9	0.1	0.4	2.7	0.3	7.2	1.1	1.5	0.4	0.5	100	3.5	2.3	2458
Ethnicity of household head														
Kinh/Hoa	83	0.1	0.5	4.7	0.3	6.0	2.3	1.9	0.6	0.6	100	5.5	3.8	11584
Ethnic Minorities	87.4	0.1	0.3	3.1	0.4	3.7	2.8	0.8	0.8	0.6	100	3.8	4.3	2010
Total	83.7	0.1	0.4	4.4	0.3	5.7	2.4	1.8	0.7	0.6	100	5.3	3.9	13594

[1] MICS indicator 8.15; [2] MICS indicator 8.16

XII. HIV/AIDS AND SEXUAL BEHAVIOUR

Knowledge about HIV Transmission and Misconceptions about HIV/AIDS

One of the most important prerequisites for reducing the rate of HIV infection is accurate knowledge of how HIV is transmitted and strategies for preventing transmission. Correct information is the first step toward raising awareness and giving young people the tools to protect themselves from infection. Misconceptions about HIV are common and can confuse young people and hinder prevention efforts or fuel stigma and discrimination. Different regions are likely to have variations in misconceptions although some appear to be universal (for example that sharing food or mosquito bites can transmit HIV). The United Nations General Assembly Special Session (UNGASS) on HIV/AIDS called on governments to improve the knowledge and skills of young people to protect themselves from HIV. The indicators to monitor this goal as well as the MDG of reducing HIV infections by half include improving the level of knowledge of HIV and its prevention, and changing behaviours to prevent further spread of the disease. The HIV module was administered to women 15–49 years of age.

One indicator which is both an MDG and an UNGASS indicator is the percentage of young women who have comprehensive and correct knowledge of HIV prevention and transmission. In the Viet Nam MICS 2011 all women who have heard of AIDS were asked whether they knew the two main ways of preventing HIV transmission – having only one faithful uninfected partner and using a condom every time they have sexual relations. The results are presented in Table HA.1. In Viet Nam, almost all the interviewed women (95.4 per cent) have heard of HIV/AIDS. However, the percentage of women who know the two main ways of preventing HIV transmission is about 80 per cent. Some 85.1 per cent of women know about having one faithful uninfected sex partner, and 86.1 per cent know about using a condom every time as the main ways of preventing HIV transmission. Knowledge among women about prevention of HIV transmission is above 90 per cent in the Red River Delta, among women with tertiary education and among those living in the richest quintile of households. A 25 percentage point difference in knowledge about prevention of HIV transmission is also observed between women in Kinh/Hoa versus ethnic minority households. The percentage of women who have heard about AIDS in the first place is also lower among ethnic minority households.

Table HA.1 also includes detailed information regarding women's knowledge about misconceptions of HIV transmission. This indicator is based on the two most common misconceptions in Viet Nam (i.e. that HIV can be transmitted by mosquito bites and supernatural means) and the percentage who know that a healthy looking person can have the HIV virus. Overall, one in every two women age 15–49 rejects the two most common misconceptions and knows that a healthy looking person can have HIV (49.6 per cent). Variations in the level of misconceptions are noticed throughout the spectrum of background characteristics. Once again women's education level and household living standards show the widest disparities. For example, only 9 per cent of women with no education reject the two most common misconceptions and know that a healthy looking person can have the HIV virus, compared to almost 80 per cent of women with tertiary education.

Information on comprehensive knowledge about HIV transmission is also included in Table HA.1. The indicator is based on the number of women aged 15–49 years who correctly identify two ways of preventing HIV infection, know that a healthy looking person can have HIV, and reject the two most common misconceptions about HIV transmission. Overall, 45.1 per cent of 15–49 year old women have comprehensive knowledge about HIV transmission. This knowledge is positively correlated with women's education level, with 74.6 per cent of women with tertiary education showing comprehensive knowledge, compared with only 6.7

per cent of women with no education. Comprehensive HIV knowledge is also correlated with other background variables such as region, living standards and ethnicity. For example, the Mekong River Delta displays the lowest level of comprehensive HIV knowledge among 15–49 year old women, at 33.7 per cent (compared with 57.7 per cent in the Red River Delta). Similarly, women in the poorest households show a considerably lower level of knowledge on HIV than women in the richest households (28.7 per cent versus 67.1 per cent), as do women in ethnic minority households (28.7 per cent), as opposed to Kinh/Hoa headed households (47.3 per cent).

Table HA.1: Knowledge about HIV transmission, misconceptions about HIV/AIDS, and comprehensive knowledge about HIV transmission

Percentage of women aged 15—49 years who know the main ways of preventing HIV transmission, percentage who know that a healthy looking person can have the HIV, percentage who reject common misconceptions, and percentage who have comprehensive knowledge about HIV transmission, Viet Nam, 2011

| | Percentage who have heard of HIV/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 HIV | 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 HIV | Percentage with comprehensive knowledge[1] | Number of women aged 15–49 years |
		Having only one faithful uninfected sex partner	Using a condom every time			Mosquito bites	Supernatural means	Sharing food with someone with HIV			
Region											
Red River Delta	99.2	94.6	96.0	92.1	88.6	67.4	95.1	91.1	60.6	57.7	2368
Northern Midland and Mountain areas	90.5	81.6	85.8	79.5	75.6	57.4	82.8	80.6	47.7	44.4	1896
North Central area and Central Coastal area	94.4	81.0	82.0	75.1	71.3	64.5	86.1	84.7	47.9	40.9	2429
Central Highlands	87	78.2	77.3	71.6	59.9	63.7	80.4	78.5	45.1	40.9	671
South East	98.7	90.8	86.5	82.3	77.1	70.3	93.6	90.5	54.4	49.7	2080
Mekong River Delta	96.1	79.3	82.3	72.1	59.1	62.3	85.5	85.7	38.4	33.7	2220
Area											
Urban	98.4	91.0	90.0	85.5	82.1	74.4	93.8	92.4	62.5	58.0	3676
Rural	94.0	82.4	84.3	77.2	69.6	60.0	85.8	83.3	43.7	39.1	7987
Age											
15–24	96.5	86.6	87.7	81.1	78.2	70.7	92	88.5	56.8	51.1	3315
25–29	95.6	87.9	88.2	83.5	77.7	67.9	90.7	88.5	55.1	51.7	1806
30–39	94.9	83.9	85.4	78.6	71.3	61.5	87.2	85.8	46.6	41.9	3473
40–49	94.7	83.2	83.7	77.5	68.6	59.3	84.2	82.8	42.1	38.3	3068
Marital status											
Ever married/in union	94.8	84.4	85.3	79.2	71.8	61.5	86.7	84.9	46.3	42.3	8814
Never married/in union	97.3	87.3	88.3	81.6	79.0	73.8	93.1	90.3	59.8	53.5	2849

Table HA.1: Knowledge about HIV transmission, misconceptions about HIV/AIDS, and comprehensive knowledge about HIV transmission

Percentage of women aged 15–49 years who know the main ways of preventing HIV transmission, percentage who know that a healthy looking person can have the HIV, percentage who reject common misconceptions, and percentage who have comprehensive knowledge about HIV transmission, Viet Nam, 2011

| | Percentage who have heard of HIV/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 HIV | 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 HIV | Percentage with comprehensive knowledge[1] | Number of women aged 15–49 years |
		Having only one faithful uninfected sex partner	Using a condom every time			Mosquito bites	Supernatural means	Sharing food with someone with HIV			
Women's education											
None	55.1	32.2	34.7	25.1	28.1	21.2	40.2	36.5	9.1	6.7	479
Primary	90.7	72.9	75.6	65.4	54.4	48.6	76.9	74.8	27.1	23.9	1900
Lower Secondary	97.1	87.2	87.6	81.6	72.6	60.3	89.3	86.8	43.4	38.6	4517
Upper Secondary	99.5	92.3	93	87.6	83.3	73.5	95.7	93.8	61.2	56	2836
Tertiary	99.9	94.8	95.3	91.6	91.6	87.4	98.3	97.2	79.5	74.6	1931
Wealth index quintiles											
Poorest	84.2	68.8	71.5	63.4	57.4	49.8	72.4	70.1	32.7	28.7	2062
Second	95.5	83.1	84.8	77.4	70.1	57.9	86	83.4	41.5	37	2200
Middle	97.1	86.6	87.1	80.5	71.7	61.9	90.2	87.3	45.2	40.8	2429
Fourth	99	90.1	90.3	84.3	77.5	68.3	92.9	91.7	53.2	48	2479
Richest	99.3	94.1	94	90.2	87.9	81.2	97	95.4	71.5	67.1	2493
Ethnicity of household head											
Kinh/Hoa	97.5	87.9	88.4	82.4	76.1	66.9	90.8	89	52	47.3	10247
Ethnic Minorities	80	65.3	68.8	60.6	55.2	47.4	69.9	65.6	32.2	28.7	1416
Total	95.4	85.1	86.1	79.8	73.6	64.5	88.3	86.2	49.6	45.1	11663

[1]MICS indicator 9.1

The results for women aged 15–24 years are separately presented in Table HA.2. Virtually all young women in Viet Nam, 96.5 per cent, have heard of AIDS. The percentage of young women with correct knowledge about the prevention of HIV transmission (i.e. who know the two main ways of prevention – having only one faithful uninfected partner and using a condom every time) is 81.1 per cent. Meanwhile, 86.6 per cent of women know about having one faithful uninfected sex partner, and 87.7 per cent know about using a condom every time they have sexual intercourse. The largest disparities emerge along the education background variable. While one in four women with no education (23 per cent) display correct knowledge, as many as seven out of eight women with tertiary education (88.6 per cent) know how to prevent HIV transmission.

With regards to knowledge about misconceptions of HIV transmission, 56.8 per cent of young women rejected the two most common misconceptions and know that a healthy looking person can have the HIV virus. Women's education and household living standards display the largest range of differentials among the background characteristics. With 46.6 per cent, the Central Highlands region reveals the lowest knowledge about misconceptions among women aged 15–24 years among the six regions in Viet Nam. A relatively lower percentage is also observed among women living in ethnic minority households (39.5 per cent) compared to those with a Kinh/Hoa head (59.6 per cent).

About 51 per cent of young women in Viet Nam correctly identified two ways of preventing HIV infection, knew that a healthy looking person can have HIV, and rejected the two most common misconceptions about HIV transmission. Such comprehensive knowledge is more likely among women with higher education levels (69.7 per cent among women with tertiary education and only 7.2 per cent among women with no education), living in better off households (68 per cent of women living in the richest households compared to 37.6 per cent of women living in the poorest households) and in households headed by Kinh/Hoa (53.6 per cent of women living in Kinh/Hoa headed households and 35.7 per cent of women living in ethnic minority households). Both in the Central Highlands and in the Mekong River Delta the percentage is somewhat lower than in the other regions (42.5 per cent compared to about 50 per cent or higher).

Table HA.2: Knowledge about HIV transmission, misconceptions about HIV/AIDS, and comprehensive knowledge about HIV transmission among young people

Percentage of young women aged 15–24 years who know the main ways of preventing HIV transmission, percentage who know that a healthy looking person can have the HIV, percentage who reject common misconceptions, and percentage who have comprehensive knowledge about HIV transmission Viet Nam, 2011

| | Percentage who have heard of HIV/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 HIV | 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 HIV | Percentage with comprehensive knowledge[1] | Number of women aged 15–24 |
		Having only one faithful uninfected sex partner	Using a condom every time			Mosquito bites	Supernatural means	Sharing food with someone with HIV			
Region											
Red River Delta	99.1	94.1	96.4	92.2	90.1	72.3	97.2	91.6	63.6	60.6	673
Northen Midland and Mountain areas	90.4	82.0	86.1	80.0	75.7	62.8	85.3	80.8	51.9	49.1	512
North Central area and Central Coastal area	98.2	84.6	86.3	77.7	80.4	72.6	93.6	91.6	60.1	50.8	716
Central Highlands	89.5	78.7	79.8	73.1	60.8	68.1	83.3	81.0	46.6	42.5	218
South East	98.6	90.6	87.2	82.2	80.4	76.2	95.2	90.8	60.6	53.9	604
Mekong River Delta	97.1	83.4	84.4	75.3	68.6	68.6	89.6	88.5	49.2	42.5	593
Area											
Urban	99.4	90.8	90.8	84.8	84.6	77.1	96.7	93.6	65.1	58.3	1059
Rural	95.1	84.7	86.3	79.3	75.3	67.6	89.8	86.1	52.9	47.6	2256
Age											
15–19	97.2	86.3	88.4	80.8	78.3	71.6	92.8	89.5	57.5	51.2	1707
20–24	95.7	87.0	87.0	81.4	78.2	69.7	91.1	87.5	56.0	50.9	1608
Marital status											
Ever married/in union	92.4	82.8	83.5	77.5	74.7	61.3	86.0	82.2	47.9	43.7	990
Never married/in union	98.2	88.3	89.5	82.6	79.7	74.7	94.5	91.2	60.6	54.2	2326
Women's education											
None	52.9	34.4	32.3	23.1	30.2	26.5	42.3	25.6	12.6	7.2	76
Primary	82.9	64.6	67.6	57.6	52.0	51.2	67.7	69.5	30.5	27.9	198
Lower Secondary	95.4	83.9	84.5	78.0	67.3	59.6	88.9	84.1	39.6	35.4	838
Upper Secondary	99.4	90.8	92.1	85.4	84.5	75.2	96.5	93.1	63.2	56.6	1532
Tertiary	100	92.9	93.7	88.6	90.9	85.0	98.3	96.3	76.4	69.7	671

Table HA.2: Knowledge about HIV transmission, misconceptions about HIV/AIDS, and comprehensive knowledge about HIV transmission among young people

Percentage of young women aged 15–24 years who know the main ways of preventing HIV transmission, percentage who know that a healthy looking person can have the HIV, percentage who reject common misconceptions, and percentage who have comprehensive knowledge about HIV transmission Viet Nam, 2011

| | Percentage who have heard of HIV/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 HIV | 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 HIV | Percentage with comprehensive knowledge[1] | Number of women aged 15–24 |
		Having only one faithful uninfected sex partner	Using a condom every time			Mosquito bites	Supernatural means	Sharing food with someone with HIV			
Wealth index quintiles											
Poorest	86.3	74.2	76.6	69.2	63.5	56.8	78.6	75.1	40.8	37.6	584
Second	97.8	87.2	87.2	80.5	75.7	68.1	91.9	89.3	53.6	48.0	639
Middle	98.7	88.9	88.8	82.4	78.9	71.2	93.6	90.3	55.7	50.1	705
Fourth	99.1	89.6	91.2	84.4	80.9	72.0	96.1	91.2	56.6	49.9	720
Richest	99.0	91.3	93.1	87.0	89.9	83.3	97.6	94.8	75.1	68.0	668
Ethnicity of household head											
Kinh/Hoa	98.6	89.4	90.2	83.8	81.4	73.4	94.7	91.2	59.6	53.6	2845
Ethnic Minorities	83.7	70.1	72.9	64.5	59.2	54.4	75.3	72.3	39.5	35.7	471
Total	96.5	86.6	87.7	81.1	78.2	70.7	92.0	88.5	56.8	51.1	3315

[1]MICS indicator 9.2; MDG indicator 6.3

Comparing the results between the women in the age group 15–49 years from Table HA.1 and those in the age group 15–24 years from the Table HA.2 reveals that younger women have a somewhat higher level of comprehensive knowledge about HIV transmission. The 6 percentage point higher knowledge level among younger women (15–24 years) is primarily on account of their higher level of misconception rejection and correct knowledge that a healthy looking person can have HIV – which is 7 percentage points higher, among younger women than among all women of reproductive age (56.8 versus 49.6 per cent). The pattern of differentials between the two groups of women is similar, with their education, household living standards and ethnicity of household head producing the largest ranges.

Major differentials in comprehensive knowledge of young women aged 15-24 by selected background characteristics are illustrated in Figure HA.1.

Figure HA.1: Percentage of women (15–24 years) with comprehensive knowledge about HIV/AIDS by background characteristics, Viet Nam, 2011
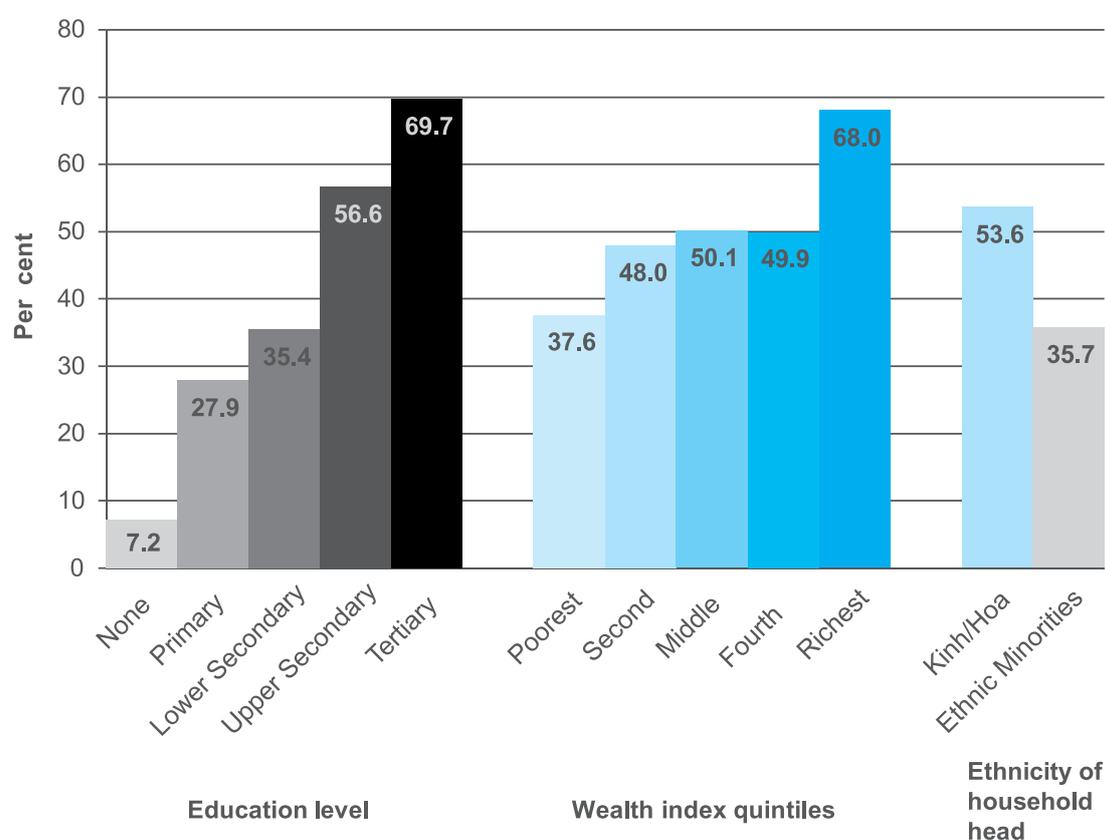
Knowledge of mother-to-child transmission of HIV is an important first step for women to seek HIV testing when they are pregnant to avoid infection of the baby. Women should know that HIV can be transmitted during pregnancy, delivery, and through breastfeeding. The level of knowledge among women aged 15–49 years concerning mother-to-child transmission is presented in Table HA.3.

Overall, 92.4 per cent of women know that HIV can be transmitted from mother to child. The percentage of women who know all three ways of mother-to-child transmission is 49.6, with 90.6 per cent knowing that HIV can be transmitted during pregnancy, 74.7 per cent knowing about HIV transmission during delivery and 55.2 per cent knowing about transmission by breastfeeding. Yet 3 per cent of women did not know of any specific way. The most important differences are between regions and women's education level. The percentage of women with correct knowledge about all three ways of HIV transmission from mother-to-child is lowest in the North Central area and Central Coastal area, at 41.1 per cent. In comparison the Mekong River Delta scores 20 percentage points higher for the same indicator. About half as many women with no education are knowledgeable about all three ways of mother-to-child transmission compared to their peers with tertiary education. Some 74.4 per cent of women living in ethnic minority households know that HIV can be transmitted from mother to child, compared to 94.9 per cent of women living in Kinh/Hoa headed households. However, the level of correct knowledge on the three ways of mother-to-child transmission of HIV shows less of a differential between Kinh/Hoa and ethnic minority households: 50 per cent of women living in Kinh/Hoa headed households are aware of all three ways of mother-to-child transmission of HIV, and 46.5 per cent of women living in ethnic minority households.

Table HA.3: Knowledge of mother-to-child HIV transmission

Percentage of women aged 15–49 years who correctly identify means of HIV transmission from mother to child, Viet Nam, 2011

	Percentage who know HIV can be transmitted from mother to child	Percentage who know HIV can be transmitted:				Does not know any of the specific means	Number of women aged 15–49 years
		During pregnancy	During delivery	By breastfeeding	All three means[1]		
Region							
Red River Delta	97.3	94.7	76.4	52.9	46.3	1.9	2368
Northern Midland and Mountain areas	85.6	83.7	70.3	50.7	45.7	4.8	1896
North Central area and Central Coastal area	91.5	90.6	73.2	44.1	41.1	2.9	2429
Central Highlands	83.6	82.8	66.6	47.9	44.9	3.4	671
South East	96.1	94.3	80.2	61.5	55.9	2.6	2080
Mekong River Delta	93.2	91.1	75.5	69.7	61.2	3.0	2220
Area							
Urban	96.1	94.2	79.4	58.8	53.1	2.3	3676
Rural	90.7	89.0	72.5	53.5	48.0	3.3	7987
Age group							
15–24	94.6	93.3	75.9	55.5	49.6	1.8	3315
25+	91.5	89.5	74.2	55.0	49.6	3.5	8348
Age group							
15–19	95.4	94.3	76.7	54.9	48.8	1.8	1707
20–24	93.8	92.3	75.1	56.1	50.4	1.9	1608
25–29	93.1	91.1	76.3	54.8	50.1	2.5	1806
30–39	91.6	89.6	74.4	56.0	50.3	3.3	3473
40–49	90.5	88.5	72.8	54.1	48.5	4.2	3068
Marital status							
Ever married/in union	91.5	89.6	74.0	55.2	49.5	3.3	8814
Never married/in union	95.3	93.8	76.8	55.1	49.7	2.0	2849
Women's education							
None	46.0	44.9	37.8	32.1	28.5	9.0	479
Primary	85.0	82.7	67.8	55.1	49.1	5.7	1900
Lower Secondary	94.1	92.2	74.8	56.4	50.5	3.1	4517
Upper Secondary	98.1	96.6	78.2	55.3	49.5	1.4	2836
Tertiary	99.0	97.3	85.3	57.8	53.2	0.9	1931
Wealth index quintiles							
Poorest	78.8	77.0	63.9	48.4	43.6	5.4	2062
Second	91.9	90.2	71.4	52.8	46.5	3.6	2200
Middle	94.3	92.1	74.9	56.8	50.5	2.8	2429
Fourth	97.0	95.7	79.2	59.6	54.0	2.0	2479
Richest	97.6	95.7	81.8	56.8	51.9	1.7	2493
Ethnicity of household head							
Kinh/Hoa	94.9	93.1	76.4	55.8	50.0	2.6	10247
Ethnic Minorities	74.4	72.4	62.0	50.9	46.5	5.6	1416
Total	92.4	90.6	74.7	55.2	49.6	3.0	11663

[1] MICS indicator 9.3

Accepting Attitudes toward People Living with HIV/AIDS

The indicators on attitudes toward people living with HIV measure stigma and discrimination in the community. Stigma and discrimination are low if respondents report an accepting attitude on the following four questions: 1) would care for family member sick with AIDS; 2) would buy fresh vegetables from an HIV positive vendor; 3) think that a female teacher who is HIV positive should be allowed to teach in school; and 4) would **not** want to keep the HIV status of a family member a secret. Table HA.4 presents the attitudes of women towards people living with HIV/AIDS. In Viet Nam 98.5 per cent of women who have heard of AIDS agree with at least one accepting attitude. The most common discriminatory attitude is that women would want to keep it a secret that a family member got infected with the HIV virus. Only 51 per cent would not want to keep that a secret (note that the MICS3 shows that in Viet Nam, 64 per cent of women who have heard about AIDS would not want to keep it a secret if a family member got infected with the HIV/AIDS virus). The most accepting attitude is caring for an HIV infected family member in their own home: 94 per cent of women who heard of AIDS indicate that they would do that. Believing that a teacher living with HIV and who is not sick should be allowed to teach is accepted by 69 per cent of women who heard of AIDS. Some 64.3 per cent expressed an accepting attitude in terms of buying vegetables from a shopkeeper or vendor who has the HIV virus. Overall, only 28.9 per cent of women who heard of AIDS expressed an accepting attitude for all four scenarios. The accepting attitude on all four indicators is the lowest among uneducated women, among whom it is only 9.5 per cent. Women who heard of AIDS in the Mekong River Delta indicate the lowest accepting attitude on all four indicators among all six regions in Viet Nam (18.6 per cent), with women in the Red River Delta and the Northern Midland and Mountain areas being twice as likely to show an accepting attitude (37.2 per cent and 36.3 per cent, respectively).

Table HA.4: Accepting attitudes toward people living with HIV/AIDS

Percentage of women aged 15—49 years who have heard of HIV/AIDS and express an accepting attitude towards people living with HIV/AIDS, Viet Nam, 2011

	Percentage of women who:						Number of womenaged 15—49 who have heard of HIV/AIDS
	Are willing to care for a family member with HIV in own home	Would buy fresh vegetables from a shopkeeper or vendor living with HIV	Believe that a female teacher living with HIV and who is not sick should be allowed to continue teaching	Would not want to keep secret that a family member got infected with HIV	Agree with at least one accepting attitude	Express accepting attitudes on all four indicators[1]	
Region							
Red River Delta	96.8	70.8	76.5	56.6	99.1	37.2	2348
Northen Midland and Mountain areas	95.0	65.2	69.9	59.2	98.6	36.3	1716
North Central area and Central Coastal area	93.6	64.7	67.2	57.5	98.1	33.0	2292
Central Highlands	94.5	67.2	72.6	41.6	97.7	25.4	584
South East	94.1	63.9	70.5	39.2	98.7	20.4	2053
Mekong River Delta	91.1	55.3	60.2	45.4	98.1	18.6	2134
Area							
Urban	94.9	69.3	74.7	44.5	98.4	28.2	3618
Rural	93.8	61.8	66.4	54.2	98.5	29.3	7508
Age group							
15–24	94.1	68.8	75.1	48.7	98.4	30.4	3199
25+	94.2	62.4	66.7	52.0	98.5	28.3	7928
Age group							
15–19	93.8	70.3	78.1	47.7	98.0	30.9	1660
20–24	94.3	67.2	72.0	49.7	98.8	29.8	1539
25–29	94.9	70.3	71.2	46.1	99.1	28.4	1727
30–39	93.2	62.4	66.4	51.5	98.4	28.2	3296
40–49	94.9	57.8	64.4	56.0	98.4	28.4	2904
Marital status							
Ever married/in union	94.2	62.1	66.1	52.1	98.7	28.1	8353
Never married/in union	93.9	70.8	78.2	47.8	98.0	31.3	2773
Women's education							

Table HA.4: Accepting attitudes toward people living with HIV/AIDS

Percentage of women aged 15–49 years who have heard of HIV/AIDS and express an accepting attitude towards people living with HIV/AIDS, Viet Nam, 2011

	Percentage of women who:						Number of women aged 15–49 who have heard of HIV/AIDS
	Are willing to care for a family member with HIV in own home	Would buy fresh vegetables from a shopkeeper or vendor living with HIV	Believe that a female teacher living with HIV and who is not sick should be allowed to continue teaching	Would not want to keep secret that a family member got infected with HIV	Agree with at least one accepting attitude	Express accepting attitudes on all four indicators[1]	
None	79.2	29.6	34.3	51.6	94.0	9.5	264
Primary	91.9	44.5	50.9	47.9	97.4	16.2	1723
Lower Secondary	94.1	62.0	66.2	54.0	98.6	29.4	4388
Upper Secondary	95.5	73.6	79.1	51.5	99.1	34.7	2821
Tertiary	96.2	78.0	82.2	46.4	99.0	33.4	1929
Wealth index quintiles							
Poorest	93.2	52.7	57.7	60.1	98.5	27.9	1737
Second	93.7	58.0	64.8	56.3	98.3	29.3	2101
Middle	93.5	64.8	68.6	51.6	98.3	29.3	2360
Fourth	94.7	68.1	71.9	47.0	99.0	28.1	2454
Richest	95.3	73.3	78.7	43.7	98.5	29.7	2474
Ethnicity of household head							
Kinh/Hoa	94.4	65.6	70.4	50.0	98.6	28.9	9994
Ethnic Minorities	92.2	52.8	57.9	60.2	98.0	29.1	1132
Total	94.1	64.3	69.1	51.0	98.5	28.9	11126

[1] MICS indicator 9.4

Knowledge of a Place for HIV Testing, Counselling and Testing during Antenatal Care

Another important indicator is the knowledge of where to be tested for HIV and use of such services. In order to protect themselves and to prevent infecting others, it is important for individuals to know their HIV status. Knowledge of one's status is a prerequisite to seeking treatment. Questions related to knowledge among women of a facility for HIV testing and whether they have ever been tested are presented in Table HA.5. In Viet Nam, 61.1 per cent of women know where to be tested, while 22.4 per cent have actually been tested and 9.2 per cent have been tested in the last 12 months. Only a small proportion, 6.6 per cent of women, have been tested and has been told the result. The Central Highlands has the lowest percentage on all indicators among the regions. Living standards, are positively correlated with all four indicators. For example, 37.7 per cent of women in the poorest quintile households know where to get tested compared to 82.7 per cent in the richest quintile. Similarly, only 2.8 per cent of women have been tested and been told the result in the poorest quintile compared to 10.5 per cent in the richest.

Table HA.5: Knowledge of a place for HIV testing

Percentage of women aged 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, Viet Nam, 2011

	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 and have been told result[2]	Number of women
Region					
Red River Delta	68.8	26.8	11.2	7.9	2368
Northern Midland and Mountain areas	62.2	24.1	10.7	7.9	1896
North Central area and Central Coastal area	53.2	15.8	6.7	4.8	2429
Central Highlands	41.7	8.2	3.2	2.9	671
South East	73.7	28.6	11.5	8.0	2080
Mekong River Delta	54.7	21.8	8.2	5.9	2220
Area					
Urban	73.6	29.2	11.3	8.7	3676
Rural	55.4	19.2	8.2	5.6	7987
Age group					
15–19	56.9	4.6	3.3	2.7	1707
20–24	68.6	25.0	11.9	7.0	1608
25–29	70.1	36.1	14.6	9.2	1806
30–34	62.5	29.9	11.6	7.9	1817
35–39	60.2	25.2	9.6	7.2	1657
40–44	54.9	18.2	6.4	6	1621
45–49	53.1	15.3	6.1	5.9	1448
Marital status					
Ever married/in union	60.4	26.8	10.7	7.5	8814
Never married/in union	63.5	8.6	4.4	3.9	2849
Wealth index quintiles					
Poorest	37.7	11.1	4.6	2.8	2062
Second	50.8	15.8	6.3	4.0	2200
Middle	60.0	21.2	9.6	7.3	2429
Fourth	69.2	25.6	10.2	7.5	2479
Richest	82.7	35.4	14.2	10.5	2493
Ethnicity of household head					
Kinh/Hoa	64.2	24.1	9.8	7.1	10247
Ethnic Minorities	39.3	10.1	4.5	2.9	1416
Total	61.1	22.4	9.2	6.6	11663

[1] **MICS indicator 9.5**

[2] **MICS indicator 9.6**

Table HA.6 presents the same results for sexually active young women aged 15–24 years. The proportion of young women who have been tested and have been told the result provides a measure of the effectiveness of interventions that promote HIV counselling and testing among young people. Some 60.7 per cent of young women knew where to be tested, while 32.1 per cent have actually been tested. In the last 12 months, 16.2 per cent have been tested. Only 7.9 per cent have been tested and told the result. Prevalence of young women who have had HIV testing in the past 12 months and received the results were different depending on among groups of education, wealth index quintiles, living areas and ethnicity.

The proportion of young women who have been tested and received the result increase by women's education. The young women with primary education have only 4.3 per cent who have been tested and none have been told the result while 28.7 per cent of young women with tertiary education have been tested for HIV and 16.4 per cent received the result.

The proportion of women living in the poorest of households who have been tested and received the result are 10.1 per cent and 38 percent respectively, whit the similar proportion of women living in the richest households are 26.2 percent and 12 percent.

Table HA.6: Knowledge of a place for HIV testing among sexually active young women

Percentage of women aged 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, Viet Nam 2011

| | Percentage who have had sex in the last 12 months | Number of women aged 15–24 years | Percentage of women who: | | | | Number of women aged 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 and have been told result[1]	
Region							
Red River Delta	32.5	673	68.2	42.6	21.9	11.2	219
Northen Midland and Mountain areas	42.5	512	58.1	26.7	13.6	6.3	218
North Central and Central Coastal area	23.0	716	56.6	26.2	18.3	8.1	165
Central Highlands	29.8	218	35.3	6.7	1.1	1.1	65
South East	21.9	604	78.5	48.7	21.6	10.2	133
Mekong River Delta	31.2	593	54.8	28.1	12.0	6.3	185
Area							
Urban	21.6	1059	76.6	43.6	18.2	11.2	229
Rural	33.5	2256	55.9	28.6	15.6	6.9	755
Age							
15–19	8.9	1707	39.8	16.8	12.7	7.3	151
20–24	51.8	1608	64.5	34.8	16.8	8.0	832
Marital status							
Ever married/in union	96.9	990	60.3	32.3	16.2	7.7	959
Never married/in union	1.1	2326	(75.9)	(23.2)	(17.4)	(17.4)	25.0
Women's education							
None	53.8	76	(9.8)	(6)	(4.9)	(1.6)	41.0
Primary	59.8	198	30.8	12.9	4.3	0.0	118
Lower Secondary	49.3	838	56.6	23.9	11.3	5.3	413
Upper Secondary	18.7	1532	74.0	45.8	24.3	12.0	286
Tertiary	18.6	671	88.8	54.0	28.7	16.4	125
Wealth index quintiles							
Poorest	41.4	584	38.1	16.7	10.1	3.8	242
Second	30.9	639	54.3	23.7	13.3	4.3	197
Middle	26.6	705	64.3	38.0	19	12.3	188
Fourth	32.3	720	72.9	38.9	17.2	9.4	233
Richest	18.6	668	86.9	53.1	26.2	12.0	124
Ethnicity of household head							
Kinh/Hoa	27.6	2845	66.1	36.1	18.1	9.5	787
Ethnic Minorities	41.9	471	39.3	16.0	8.6	1.6	197
Total	29.7	3315	60.7	32.1	16.2	7.9	984

[1] **MICS indicator 9.7**

Note:
Figures shown in parenthesis are based on denominators of 25-49 un-weighted cases

Among women who have given birth within the two years preceding the survey, the percentage who received counselling and HIV testing during antenatal care is presented in Table HA.7. Some 93.7 per cent of women who gave birth in the 2 years preceding the Viet Nam MICS 2011 received antenatal care from a health care professional, 20.9 per cent received HIV counselling during antenatal care visits, 36.1 per cent were offered a HIV test and were tested and 28.6 per cent received the results during the antenatal care visits. At the same time 7.5 per cent were offered a HIV test and were tested but did not receive the results. Being tested but not receiving the results occurs to women of all backgrounds. Women who reported having received all three services during antenatal care: 1) received HIV counselling, 2) were offered a HIV test and were tested, and 3) received the result, account for only 16.4 per cent. There are considerable differences between women with different educational levels in receiving HIV related services during antenatal care visits. This disparity is demonstrated when we consider that only 41.6 per cent of women with no education received antenatal care, compared to 99 per cent of women with tertiary level education, a gap of nearly 60 percentage points. Large disparities are also noticed among women across different living standards and between women in Kinh/Hoa and ethnic minority households. Only 11 per cent of women in rural areas received HIV related services (counselling, testing and the test result) during antenatal care visits, compared to 29.4 per cent of women in urban areas.

Table HA.7: HIV counselling and testing during antenatal care

Among women aged 15–49 years who gave birth in the last 2 years, percentage of women who received antenatal care from a health professional during the last pregnancy, percentage who received HIV counselling, percentage who were offered and accepted HIV test and received the results, Viet Nam 2011

	Percentage of women who:					
	Received antenatal care from a health care professional for last pregnancy	Received HIV counselling during antenatal care[1]	Were offered a HIV test and were tested for HIV during antenatal care	Were offered a HIV test and were tested for HIV during antenatal care, and received the results[2]	Received HIV counselling, were offered a HIV test, accepted and received the results	Number of women who gave birth in the 2 years preceding the survey
Region						
Red River Delta	99.0	21.3	47.9	41.5	18.8	294
Northen Midland and Mountain areas	82.8	16.0	25.5	16.7	9.7	285
North Central area and Central Coastal area	96.6	11.0	22.9	16.5	7.3	287
Central Highlands	87.9	2.3	6.5	4.8	1.8	92
South East	99.1	48.9	69.4	57.6	40.5	214
Mekong River Delta	94.4	20.3	31.0	24.3	16.2	210
Area						
Urban	97.9	34.7	56.4	49.4	29.4	402
Rural	92.0	15.2	27.7	20.1	11.0	980
Young women						
15–24	91.4	16.6	33.8	24.9	12.4	468
Age group						
15–19	90.7	10.0	16.4	8.0	5.8	71
20–24	91.5	17.7	36.9	27.9	13.6	397
25–29	94.2	21.5	40.2	32.3	17.2	479
30–34	96.5	26.7	35.7	31.8	22.3	283
35–49	94.2	21.6	30.6	22.8	14.9	152
Marital status						
Ever married/in union	93.8	20.9	36.2	28.7	16.4	1374
Never married/in union	*	*	*	*	*	9
Women's education						
None	41.6	0.0	2.1	0.0	0.0	64
Primary	93.3	13.5	18.7	11.0	7.9	203
Lower Secondary	95.2	16.6	28.4	22.7	12.7	523
Upper Secondary	97.6	23.8	44.0	33.8	17.6	296
Tertiary	99.0	35.4	61.1	52.3	31.1	295
Wealth index quintiles						
Poorest	78.4	7.8	13.4	9.1	4.0	300
Second	96.2	10.9	17.9	14.3	6.5	263
Middle	97.2	18.4	34.2	23.2	12.7	251
Fourth	99.2	28.2	45.4	36	24.3	270
Richest	99.1	38.4	68.1	58.9	33.3	299
Ethnicity of household head						
Kinh/Hoa	97.7	24.1	41.7	33.7	19.3	1158
Ethnic Minorites	73.2	4.7	7.0	2.6	1.1	225
Total	93.7	20.9	36.1	28.6	16.4	1383

[1] **MICS indicator 9.8;** [2] **MICS indicator 9.9**

Note:
Figures denoted by an asterisk are based on denominators of 24 un-weighted cases and less

Sexual Behaviour Related to HIV Transmission

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 of age, thus a change in behaviour among this age group will be especially important to reduce new infections. A module of questions was administered to women aged 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.

Table HA.8: Sexual behaviour that increases the risk of HIV infection

Percentage of never-married young women aged 15–24 years who have never had sex, percentage of young women aged 15–24 years who have had sex before age 15, and percentage of young women aged 15–24 years who had sex with a man 10 or more years older during the last 12 months, Viet Nam 2011

	Percentage of never-married women aged 15–24 years who have never had sex[1]	Number of never-married women aged 15–24 years	Percentage of women aged 15–24 years who had sex before age 15[2]	Number of women aged 15–24 years	Percentage of women aged 15–24 years who had sex in the last 12 months with a man 10 or more years older[3]	Number of women aged 15–24 years who had sex in the 12 months preceding the survey
Region						
Red River Delta	97.9	456	0.0	673	2.1	219
Northen Midland and Mountain areas	98.3	289	0.7	512	2.2	218
North Central area and Central Coastal area	98.3	549	0.1	716	7.4	165
Central Highlands	97.3	154	2.7	218	8.2	65
South East	98.8	469	0.2	604	14.8	133
Mekong River Delta	99.5	408	0.5	593	8.4	185
Area						
Urban	98.1	838	0.1	1059	8.2	229
Rural	98.6	1488	0.6	2256	5.7	755
Age						
15–19	99.2	1561	0.4	1707	8.5	151
20–24	97.0	765	0.5	1608	5.9	832
Marital status						
Ever married/in union	n.a.	n.a.	1.5	990	6.4	959
Never married/in union	98.5	2326	0.0	2326	(1)	25
Women's education						
None	96.4	34	7.7	76	(1.1)	41
Primary	96.5	80	3.0	198	7.0	118
Lower Secondary	96.9	411	0.4	838	7.1	413
Upper Secondary	99.2	1247	0.0	1532	6.2	286
Tertiary	98.4	554	0.0	671	5.1	125

Table HA.8: Sexual behaviour that increases the risk of HIV infection

Percentage of never-married young women aged 15–24 years who have never had sex, percentage of young women aged 15–24 years who have had sex before age 15, and percentage of young women aged 15–24 years who had sex with a man 10 or more years older during the last 12 months, Viet Nam 2011

	Percentage of never-married women aged 15–24 years who have never had sex[1]	Number of never-married women aged 15–24 years	Percentage of women aged 15–24 years who had sex before age 15[2]	Number of women aged 15–24 years	Percentage of women aged 15–24 years who had sex in the last 12 months with a man 10 or more years older[3]	Number of women aged 15–24 years who had sex in the 12 months preceding the survey
Wealth index quintiles						
Poorest	97.5	339	2	584	2.5	242
Second	99.3	437	0.1	639	4.1	197
Middle	98.8	513	0.2	705	10.4	188
Fourth	97.9	488	0.1	720	6.5	233
Richest	98.5	548	0	668	10.6	124
Ethnicity of household head						
Kinh/Hoa	98.7	2055	0.1	2845	7.1	787
Ethnic Minorities	97.1	270	2.3	471	3	197
Total	98.5	2326	0.5	3315	6.3	984

[1] **MICS indicator 9.10**
[2] **MICS indicator 9.11**
[3] **MICS indicator 9.12**

Note:
Figures shown in parenthesis are based on denominators of 25-49 un-weighted cases

The frequency of sexual behaviour that increases the risk of HIV infection among women is presented in Table HA.8 and Figure HA.2. The percentage of never-married young women who have never had sex is 98.5 per cent. In other words, only 1.5 per cent of never-married women aged 15–24 years have had sex. The percentage who had sex before age 15 among all young women is minimal, at 0.5 per cent. Women in the same age group who had sex in the last 12 months with a man 10 or more years older is 6.3 per cent. It is higher in the age group 15–19 years (8.5 per cent) and lower in the age group 20–24 years (5.9 per cent). Considerable differences are observed by living standards – with the likelihood of women having sex with a man 10 or more years older being five times higher in the richest households (10.6 per cent) than in the poorest households (2.5 per cent). Large differentials are also observed by region – with the South East region indicating the highest percentage of young women who had sex in the last 12 months with a man 10 or more years older, at 14.8 per cent, compared to 2.1 per cent in the Red River Delta.

Figure HA.2: Percentage of women at aged 15–24 years who had sex in the last 12 months with a man 10 or more years older by background characteristics, Viet Nam, 2011
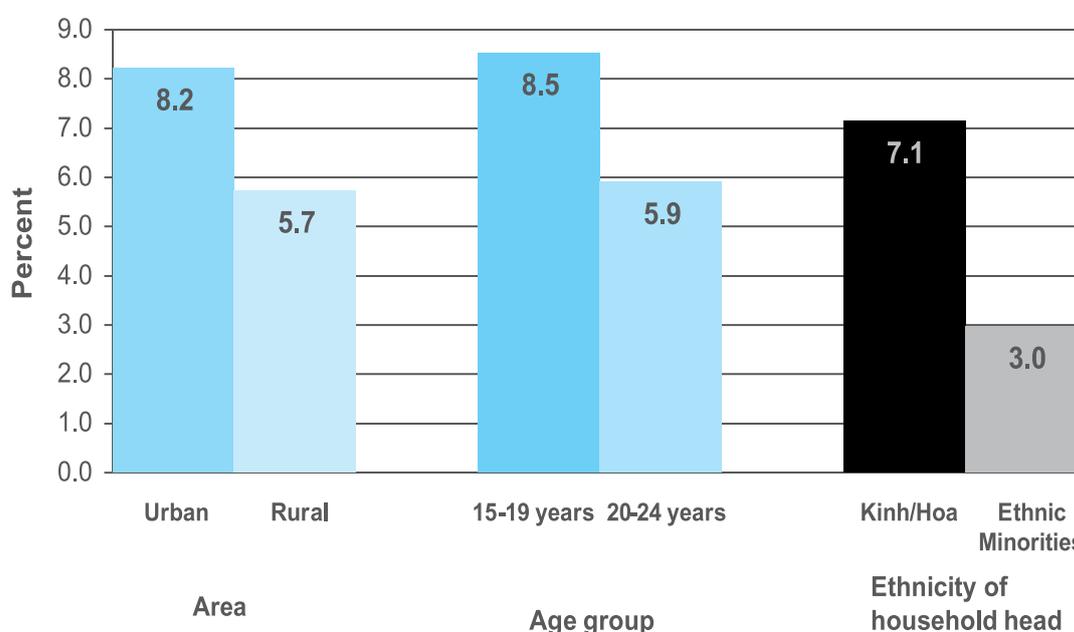
Sexual behaviour and condom use during sex with more than one partner in the last 12 months was assessed for all women and separately for women aged 15–24 years of age who had sex with more than one partner in the previous year. Tables HA.9 and HA.10 include information about women aged 15–49 years and 15–24 years who had sex with more than one partner in the last 12 months. The data on condom use during the last time they had sex with one of multiple partners was excluded due to the small number of observations. Only 0.1 per cent of women 15–49 years of age reported having sex with more than one partner in the last 12 months. The percentage is 0 for young women aged 15–24 years.

Table HA.9: Sex with multiple partners

Percentage of women aged 15–49 years who ever had sex, percentage who had sex in the last 12 months and percentage who have had sex with more than one partner in the last 12 months, Viet Nam, 2011

	Percentage of women who:			
	Ever had sex	Had sex in the last 12 months	Had sex with more than one partner in last 12 months[1]	Number of women aged 15–49 years
Region				
Red River Delta	78.3	74.0	0.1	2368
Northern Midland and Mountain areas	83.4	78.3	0.0	1896
North Central area and Central Coastal area	73.5	68.1	0.2	2429
Central Highlands	75.1	69.6	0.2	671
South East	70.2	64.0	0.0	2080
Mekong River Delta	77.2	72.0	0.1	2220
Area				
Urban	71.5	66.2	0.0	3676
Rural	78.5	73.3	0.1	7987
Age group				
15–24	30.9	29.7	0.0	3315
25–29	86.6	83.0	0.0	1806
30–39	96.2	91.3	0.2	3473
40–49	96.8	85.9	0.2	3068
Marital status				
Ever married/in union	100	93.6	0.1	8814
Never married/in union	3.1	1.5	0.1	2849
Women's education				
None	89	80.9	0.1	479
Primary	92.6	84.6	0.3	1900
Lower Secondary	88.1	82.1	0.1	4517
Upper Secondary	53.1	49.9	0.1	2836
Tertiary	63.5	60.7	0.0	1931
Wealth index quintiles				
Poorest	81.7	74.8	0.1	2062
Second	77.4	72.2	0.1	2200
Middle	75.2	69.7	0.2	2429
Fourth	75.7	70.9	0.0	2479
Richest	72.5	68.6	0.1	2493
Ethnicity of household head				
Kinh/Hoa	75.8	70.6	0.1	10247
Ethnic Minorities	79.6	74.8	0.1	1416
Total	76.3	71.1	0.1	11663

[1] **MICS indicator 9.13**

Table HA.10: Sex with multiple partners (Young women)				
Percentage of women aged 15–24 years who ever had sex, percentage who had sex in the last 12 months and percentage who have had sex with more than one partner in the last 12 months, Viet Nam, 2011				
	Percentage of women aged 15–24 years who:			
	Ever had sex	Had sex in the last 12 months	Had sex with more than one partner in last 12 months	Number of women aged 15–24 years
Region				
Red River Delta	33.6	32.5	0	673
Northern Midland and Mountain areas	44.6	42.5	0	512
North Central area and Central Coastal area	24.5	23	0	716
Central Highlands	31.3	29.8	0.1	218
South East	23.1	21.9	0	604
Mekong River Delta	31.5	31.2	0	593
Area				
Urban	22.4	21.6	0	1059
Rural	34.9	33.5	0	2256
Age				
15–19	9.3	8.9	0	1707
20–24	53.8	51.8	0	1608
Marital status				
Ever married/in union	99.9	96.9	0	990
Never married/in union	1.5	1.1	0	2326
Women's education				
None	57.2	53.8	0	76
Primary	61.2	59.8	0.2	198
Lower Secondary	52.3	49.3	0	838
Upper Secondary	19.3	18.7	0	1532
Tertiary	18.8	18.6	0	671
Wealth index quintiles				
Poorest	43.3	41.4	0.1	584
Second	31.9	30.9	0	639
Middle	28.1	26.6	0	705
Fourth	33.6	32.3	0	720
Richest	19.1	18.6	0	668
Ethnicity of household head				
Kinh/Hoa	28.7	27.6	0	2845
Ethnic Minorities	44.2	41.9	0.1	471
Total	30.9	29.7	0	3315

Tables HA.11 presents the percentage of women aged 15–24 years who ever had sex, percentage who had sex in the last 12 months, and the percentage who had sex with a non-marital, non-cohabiting partner in the last 12 months. Information on condom use the last time they had sex with a non-marital, non-cohabiting partner could not be presented due to the small number of observations. The percentage of young women who had sex with a non-marital, non-cohabiting partner in the last 12 months is 0.8. The low rate of such sexual activity extends throughout the background variables.

Table HA.11: Sex with non-regular partners

Percentage of women aged 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, Viet Nam 2011

	Percentage of women aged 15–24 years who:		Number of women aged 15–24 years	Percentage who had sex with a non-marital, non-cohabiting partner in the last 12 months[1]	Number of women aged 15–24 years who had sex in the last 12 months
	Ever had sex	Had sex in the last 12 months			
Region					
Red River Delta	33.6	32.5	673	1.0	219
Northen Midland and Mountain areas	44.6	42.5	512	0.9	218
North Central area and Central Coastal area	24.5	23.0	716	0.6	165
Central Highlands	31.3	29.8	218	1.3	65
South East	23.1	21.9	604	1.0	133
Mekong River Delta	31.5	31.2	593	0.4	185
Area					
Urban	22.4	21.6	1059	1.3	229
Rural	34.9	33.5	2256	0.6	755
Age					
15–19	9.3	8.9	1707	0.5	151
20–24	53.8	51.8	1608	1.2	832
Marital status					
Ever married/in union	99.9	96.9	990	0.2	959
Never married/in union	1.5	1.1	2326	(1.1)	25
Women's education					
None	57.2	53.8	76	(1.6)	41
Primary	61.2	59.8	198	0.9	118
Lower Secondary	52.3	49.3	838	0.7	413
Upper Secondary	19.3	18.7	1532	0.5	286
Tertiary	18.8	18.6	671	1.5	125
Wealth index quintiles					
Poorest	43.3	41.4	584	1.3	242
Second	31.9	30.9	639	0.1	197
Middle	28.1	26.6	705	0.4	188
Fourth	33.6	32.3	720	1.1	233
Richest	19.1	18.6	668	1.2	124
Ethnicity of household head					
Kinh/Hoa	28.7	27.6	2845	0.7	787
Ethnic Minorities	44.2	41.9	471	1.5	197
Total	30.9	29.7	3315	0.8	984

[1] **MICS indicator 9.15**

Note:
Figures shown in parenthesis are based on denominators of 25-49 un-weighted cases

APPENDIX A. Sample Design

The major features of the sample design are described in this appendix. Sample design features include target sample size, sample allocation, sampling frame and listing, choice of domains, sampling stages, stratification, and the calculation of sample weights.

The primary objective of the sample design for the Viet Nam MICS 2011 was to produce statistically reliable estimates of most indicators, at the national level, for urban and rural areas, and for the six regions of Viet Nam: Red River Delta, Northern Midlands and Mountainous areas, North Central area and Central Coastal area, Central Highlands, South East and Mekong River Delta. Urban and rural areas in each of the six regions were designated as the sampling strata.

A multi-stage, stratified cluster sampling approach was used for the selection of the survey sample.

Sample Size and Sample Allocation

The target sample size for the Viet Nam MICS 2011 was calculated as 12000 households. For the calculation of the sample size, the key indicator used was the underweight prevalence among children aged 0–4 years. The following formula was used to estimate the required sample size for this indicator:

$$n = \frac{[4(r)(1-r)(f)(1.05)]}{[(0.12r)^2(p)(\bar{n})]}$$

where

- n is the required sample size, expressed as number of households

- 4 is a factor to achieve the 95 per cent level of confidence

- r is the predicted or anticipated value of the indicator, expressed in the form of a proportion

- 1.05 is the factor necessary to raise the sample size by 5 per cent for the expected non-response

- f is the shortened symbol for *deff*(design effect)

- $0.12r$ is the margin of error to be tolerated at the 95 per cent level of confidence, defined as 12 per cent of r (relative margin of error of r)

- p is the proportion of the total population upon which the indicator, r, is based on

- $\bar{n}$ is the average household size (number of persons per household).

For the calculation, r (underweight prevalence) was assumed to be 21 per cent. The value of *deff* (design effect) was taken as 2 based on estimates from previous surveys, p (percentage of children aged 0–4 years in the total population) was taken as 8 per cent, $\bar{n}$ (average household size) was taken as 4.25 per cent, and the response rate was assumed to be 95%.

The resulting number of households from this exercise was 2050 households which is the sample size needed in each region – thus yielding about 12000 in total. The average number of households selected per cluster for the Viet Nam MICS 2011 was determined as 20 households, based on a number of considerations, including the design effect, the budget available, and the time that would be needed per team to complete one cluster. Dividing the total number of households by the number of sample households per cluster, it was calculated that 100 sample clusters would need to be selected in each region.

Equal allocation of the total sample size to the six regions was used. Therefore, 100 clusters were allocated to each region, with the final sample size calculated at 12000 households (100 clusters * 6 regions * 20 sample households per cluster). In each region, the clusters (primary sampling units) were distributed to urban and rural domains, proportional to the size of urban and rural populations in that region. The table below shows the allocation of clusters to the sampling strata.

Table SD.1: Allocation of Sample Clusters (Primary Sampling Units) to Sampling Strata						
Region	Number of Selected Clusters			Number of Selected households		
	Urban	Rural	Total	Urban	Rural	Total
Red River Delta	40	60	100	800	1200	2000
Northern Midlands and Mountain areas	40	60	100	800	1200	2000
North Centra area and Central Coastal area	40	60	100	800	1200	2000
Central Highlands	40	60	100	800	1200	2000
South East	60	40	100	1200	800	2000
Mekong River Delta	40	60	100	800	1200	2000
Total	260	340	600	5200	6800	12000

Sampling Frame and Selection of Clusters

The master sample census frame was used for the selection of clusters. Census enumeration areas were defined as primary sampling units (PSUs), and were selected from each of the sampling strata by using systematic pps (probability proportional to size) sampling procedures, based on the estimated sizes of the enumeration areas from the 2009 Population Census. The first stage of sampling was thus completed by selecting the required number of enumeration areas from each of the 6 regions, separately by urban and rural strata.

Listing and Selection of Households

The master sampling frame (based on the 15 per cent sample frame of the Population Census 2009) was up-to-date, and the available lists of Enumeration Areas (EAs) from the 2009 Population Census were used for selecting the EAs for the MICS 2011. Because of migration, it was necessary to update the household lists prior to the selection of households. The selected EAs lists with corresponding maps were sent to the Provincial Statistical Offices (PSOs) for updating prior to the selection of households. For this purpose, PSOs and District Statistical Offices (DSOs) in collaboration with 600 commune authorities (which had selected EAs) updated the lists of households for all selected EAs, with the occupied households. These activities were conducted one month prior to the fieldwork.

The updated households were then sequentially numbered from 1 to n (the total number of households in each enumeration area) at the General Statistics Office, where the selection of 20 households in each enumeration area was carried out using random systematic selection procedures.

Calculation of Sample Weights

The Viet Nam MICS 2011 sample is not self-weighting. Essentially, by allocating equal numbers of households to each of the regions, different sampling fractions were used in each region since the size of the regions varied. For this reason, sample weights were calculated and these were used in the subsequent analyses of the survey data.

The sample weight calculation was performed on the basis of strata.

The major component of the weight is the reciprocal of the sampling fraction employed in selecting the number of sample households in that particular sampling stratum (h) and PSU (i):

$$W_{hi} = \frac{1}{f_{hi}}$$

The term f_{hi}, the sampling fraction for the *i-th* sample PSU in the *h-th* stratum, is the product of probabilities of selection at every stage in each sampling stratum:

$$f_{hi} = p_{1hi} \times p_{2hi} \times p_{3hi}$$

where p_{shi} is the probability of selection of the sampling unit at stage *s* for the *i-th* sample PSU in the *h-th* sampling stratum.

Since the estimated number of households in each enumeration area (PSU) in the sampling frame used for the first stage selection and the updated number of households in the enumeration area from the listing were different, individual sampling fractions for households in each sample enumeration area (cluster) were calculated. The sampling fractions for households in each enumeration area (cluster) therefore included the first stage probability of selection of the enumeration area in that particular sampling stratum and the second stage probability of selection of a household in the sample enumeration area (cluster).

A second component in the calculation of sample weights takes into account the level of non-response for the household and individual interviews. The adjustment for household non-response is equal to the inverse value of:

RR_h = Number of interviewed households in stratum h/ Number of occupied households listed in stratum h

After the completion of fieldwork, response rates were calculated for each sampling stratum. These were used to adjust the sample weights calculated for each cluster. Response rates in the Viet Nam MICS 2011 are shown in Table HH.1 in this report.

Similarly, the adjustment for non-response at the individual level (women and children under 5 years of age) for each stratum is equal to the inverse value of:

RR_h = Completed women's (or under-fives) questionnaires in stratum h / Eligible women (or under-fives) in stratum h

The non-response adjustment factors for woman and children under-five questionnaires

are applied to the adjusted household weights. Numbers of eligible women and children under 5 years of age were obtained from the roster of household members in the Household Questionnaire for households where interviews were completed.

The design weights for the households were calculated by multiplying the above factors for each enumeration area. These weights were then standardized (or normalized), one purpose of which is to make the weighted sum of the interviewed sample units equal to the total sample size at the national level. Normalization is performed by dividing the aforementioned design weights by the average design weight at the national level. The average design weight is calculated as the sum of the design weights divided by the unweighted total. A similar standardization procedure was followed in obtaining standardized weights for the woman and children under-five questionnaires. Adjusted (normalized) weights varied between 0.081396 and 3.072818 in the 600 sample enumeration areas (clusters).

Sample weights were appended to all data sets and analyses were performed by weighting each household, woman or child under 5 years of age with these sample weights.

APPENDIX B. List of Personnel Involved in the Survey

1.   Central Steering Committee:

Ms. Tran Thi Hang, Deputy Director General, GSO

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Mr. Nguyen Dinh Chung, Deputy Director, SESD, GSO

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Ms. Geetanjali Narayan, former Chief, Planning and Social Policy, UNICEF

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Ms. Sigrid Breddy, Monitoring and Evaluation Specialist, UNICEF

3.   Data processing/programming/tabulating team:

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APPENDIX C. Estimates of Sampling Errors

The sample of respondents selected in the Viet Nam Multiple Indicator Cluster Survey 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 the estimates from all possible samples. The extent of variability is not known exactly, but can be estimated statistically from the survey data.

- 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). Standard error is the square root of the variance of the estimate. 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, and is a measure of the relative sampling error.

- 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 ($deft$) is used to show the efficiency of the sample design in relation to the precision. 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, with a specified level of confidence. For any given statistic calculated from the survey, the value of that statistic will fall within a range of plus or minus two times the standard error ($r + 2.se$ or $r - 2.se$) of the statistic in 95 percent of all possible samples of identical size and design.

For the calculation of sampling errors from MICS data, SPSS Version 18 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 level, for the regions, and for urban and rural areas. Three of the selected indicators are based on households, 8 are based on household members, 13 are based on women, and 15 are based on children under 5. 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.10 show the calculated sampling errors for selected domains.

Table SE.1: Indicators selected for sampling error calculations

List of indicators selected for sampling error calculations, and base populations (denominators) for each indicator, Viet Nam, 2011

MICS 2011 Indicator		Base Population
	HOUSEHOLDS	
2.16	Iodised salt consumption	All households in which salt was tested or with no salt
4.5	Place for handwashing	All households
4.6	Availability of soap	All households
	HOUSEHOLD MEMBERS	
4.1	Use of improved drinking water sources	All household members
-	Use of improved sanitation facilities (shared and not shared)	All household members
7.5	Secondary school net attendance ratio (adjusted)	Children of secondary school age
8.2	Child labour	Children aged 5-14 years
9.18	Prevalence of children with at least one parent dead	Children aged 0-17 years
8.5	Violent discipline	Children aged 2-14 years
4.2	Water treatment	All households members in households using unimproved drinking water sources
7.2	School readiness	Children attending the first grade of primary school
7.3	Net intake rate in primary education	Children of school-entry age
7.4	Primary school net attendance ratio (adjusted)	Children of primary school age
7.7	Primary completion rate	Children of primary school completion age
7.8	Transition rate to secondary school	Children who are attending the first grade of secondary school
8.15	Children's living arrangements	Children aged 0-17 years
	WOMEN	
5.3	Contraceptive prevalence	Women aged 15-49 years who are currently married or in union
5.5a	Antenatal care coverage - at least once by skilled personnel	Women aged 15-49 years with a live birth in the 2 years preceding the survey
5.7	Skilled attendant at delivery	Women aged 15-49 years with a live birth in the 2 years preceding the survey
5.8	Institutional deliveries	Women aged 15-49 years with a live birth in the 2 years preceding the survey
5.9	Caesarean section	Women aged 15-49 years with a live birth in the 2 years preceding the survey
8.7	Marriage before age 18	Women aged 20-49 years
8.9	Polygyny	Women aged 15-49 years who are currently married or in union
9.2	Comprehensive knowledge about HIV prevention among young people	Women aged 15-24 years
9.3	Knowledge of mother- to-child transmission of HIV	Women aged 15-49 years
9.4	Accepting attitudes towards people living with HIV	Women aged 15-49 years who have heard of HIV
9.6	Women who have been tested for HIV and know the results	Women aged 15-49 years
5.6	Content of antenatal care	Women aged 15-49 years with a live birth in the 2 years preceding the survey
2.19	Infants weighed at birth	Last live births in the 2 years preceding the survey
2.4	Children ever breastfed	Women aged 15-49 years with a live birth in the 2 years preceding the survey
2.5	Early initiation of breastfeeding	Women aged 15-49 years with a live birth in the 2 years preceding the survey
9.1	Comprehensive knowledge about HIV prevention	Women aged 15-49 years

	Children under 5	
2.1a	Underweight prevalence	Children under age 5
2.2a	Stunting prevalence	Children under age 5
2.3a	Wasting prevalence	Children under age 5
2.6	Exclusive breastfeeding under 6 months	Total number of infants under 6 months of age
2.14	Age-appropriate breastfeeding	Children aged 0-23 months
-	Tuberculosis immunization coverage	Children aged 12-23 months
-	Received polio immunization	Children aged 12-23 months
-	Received DPT immunization	Children aged 12-23 months
-	Received measles immunization	Children aged 12-23 months
-	Diarrhoea in the previous two weeks	Children under age 5
-	Fever in last two weeks	Children under age 5
3.8	Oral rehydration therapy with continued feeding	Children under age 5 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 5 sleeping under insecticide-treated nets (ITNs)	Children under age 5
3.18	Anti-malarial treatment of children under age 5	Children under age 5 reported to have had fever in the previous two weeks
6.1	Support for learning	Children aged 36-59 months
6.7	Attendance to early childhood education	Children aged 36-59 months
8.1	Birth registration	Children under age 5
2.9	Predominant breastfeeding under 6 months	Children under 6 months
2.7	Continued breastfeeding at 1 year	Children aged 12-15 months
2.8	Continued breastfeeding at 2 years	Children aged 20-23 months
2.13	Minimum meal frequency	Children aged 6-23 months
2.15	Milk feeding frequency for non-breastfed children	Non breast-fed children aged 6-23 months
2.11	Bottle feeding	Children aged 0-23 months
2.17	Vitamin A supplementation (children under age 5)	Children aged 6-59 months
-	Fully immunized children	Children aged 12-23 months
-	Acute respiratory infection in last two weeks	Children under age 5
3.9	Care-seeking for suspected pneumonia	Children under age 5 with suspected pneumonia in the previous 2 weeks
6.2	Father's support for learning	Children aged 36-59 months
6.3	Learning materials: children's books	Children under age 5
6.4	Learning materials: playthings	Children under age 5
6.5	Inadequate care	Children under age 5
6.6	Early child development Index	Children aged 36-59 months
4.4	Safe disposal of child's faeces	Children aged 0-2

Table SE.2: Sampling errors: Total sample

Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deff*) and confidence intervals for selected indicators, Viet Nam, 2011

	Table	Value (r)	Standard error (se)	Coefficient of variation (se/r)	Design effect (deff)	Square root of design effect (deff)	Weighted count	Unweighted count	Confidence limits	
									r - 2se	r + 2se
HOUSEHOLDS										
Iodised salt consumption	NU.9	0.451	0.009	0.020	3.636	1.907	11,545	11,556	0.433	0.469
Place for handwashing	WS.9	0.979	0.002	0.002	2.032	1.426	11,614	11,614	0.975	0.983
Availability of soap	WS.10	0.951	0.002	0.003	1.485	1.219	11,614	11,614	0.946	0.956
Child discipline	CP.4	0.739	0.008	0.010	1.934	1.391	9,746	6,424	0.724	0.754
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	WS.1	0.920	0.006	0.007	6.091	2.468	43,998	11,614	0.908	0.933
Water treatment	WS.2	0.896	0.020	0.023	3.867	1.966	3,502	879	0.856	0.937
Use of improved sanitation facilities (shared and not shared)	WS.5	0.780	0.008	0.011	4.708	2.170	43,998	11,614	0.764	0.797
School readiness	ED.2	0.926	0.010	0.011	1.287	1.135	78,273	839	0.905	0.946
Net intake rate in primary education	ED.3	0.949	0.008	0.008	1.045	1.022	78,784	820	0.934	0.965
Primary school net attendance ratio (adjusted)	ED.4	0.979	0.003	0.003	1.344	1.159	368,414	3,848	0.973	0.984
Secondary school net attendance ratio (adjusted)	ED.5	0.810	0.008	0.010	2.287	1.512	545,179	5,786	0.795	0.826
Transition rate to secondary school	ED.7	0.988	0.004	0.004	1.026	1.013	71,181	730	0.980	0.996
Child labour	CP.2	0.095	0.005	0.056	2.610	1.616	751,112	7,868	0.085	0.106
Children's living arrangements	CP.9	0.053	0.003	0.057	2.565	1.602	1,359,433	14,183	0.047	0.059
Prevalence of children with at least one parent dead	CP.9	0.039	0.003	0.073	3.027	1.740	1,359,433	14,183	0.033	0.044
WOMEN										
Antenatal care coverage	RH.6	0.937	0.009	0.010	1.999	1.414	138,252	1,363	0.919	0.956
Skilled attendant at delivery	RH.9	0.929	0.009	0.010	1.745	1.321	138,252	1,363	0.910	0.947
Institutional deliveries	RH.10	0.924	0.009	0.010	1.696	1.302	138,252	1,363	0.905	0.942
Caesarean section	RH.9	0.200	0.012	0.062	1.299	1.140	138,252	1,363	0.175	0.224
Content of antenatal care	RH.8	0.425	0.015	0.036	1.315	1.147	138,252	1,363	0.395	0.456
Infants weighed at birth	NU.11	0.932	0.009	0.010	1.774	1.332	138,252	1,363	0.914	0.951
Children ever breastfed	NU.2	0.980	0.004	0.004	1.146	1.070	138,252	1,363	0.972	0.988

Table SE.2: Sampling errors: Total sample

Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deff*) and confidence intervals for selected indicators, Viet Nam, 2011

	Table	Value (*r*)	Standard error (*se*)	Coefficient of variation (*se/r*)	Design effect (*deff*)	Square root of design effect (*deff*)	Weighted count	Unweighted count	Confidence limits *r − 2se*	Confidence limits *r + 2se*
Early initiation of breastfeeding	NU.2	0.397	0.015	0.038	1.323	1.150	138,252	1,363	0.366	0.427
Contraceptive prevalence	RH.4	0.778	0.006	0.007	1.533	1.238	834,135	8,194	0.766	0.789
Adult literacy	ED.1	0.964	0.005	0.005	2.758	1.661	331,537	3,398	0.954	0.975
Marriage before age 18	CP.5	0.123	0.006	0.045	2.792	1.671	995,607	9,894	0.112	0.134
Polygyny	CP.5	0.025	0.002	0.082	1.403	1.185	834,135	8,194	0.021	0.029
Comprehensive knowledge about HIV prevention	HA.1	0.451	0.007	0.015	2.133	1.460	1,166,300	11,663	0.437	0.464
Comprehensive knowledge about HIV prevention among young people	HA.2	0.511	0.011	0.021	1.538	1.240	331,537	3,398	0.489	0.532
Accepting attitudes towards people living with HIV	HA.4	0.289	0.006	0.021	1.885	1.373	1,112,622	10,966	0.277	0.301
Women who have been tested for HIV during last 12 months and who have been told the results	HA.5	0.066	0.003	0.043	1.554	1.246	1,166,300	11,663	0.060	0.072
Knowledge of mother-to-child transmission of HIV	HA.3	0.496	0.007	0.014	2.280	1.510	1,166,300	11,663	0.482	0.510
Children under 5										
Underweight prevalence	NU.1	0.117	0.006	0.054	1.371	1.171	360,691	3,601	0.105	0.130
Stunting prevalence	NU.1	0.227	0.009	0.038	1.529	1.237	357,211	3,563	0.209	0.244
Wasting prevalence	NU.1	0.041	0.004	0.096	1.395	1.181	356,803	3,561	0.029	0.054
Exclusive breastfeeding under 6 months	NU.3	0.170	0.018	0.107	0.751	0.867	32,719	319	0.134	0.207
Predominant breastfeeding under 6 months	NU.3	0.433	0.024	0.056	0.749	0.866	32,719	319	0.385	0.481
Continued breastfeeding at 1 year	NU.3	0.739	0.021	0.028	0.633	0.796	27,282	276	0.697	0.781
Continued breastfeeding at 2 years	NU.3	0.194	0.015	0.075	0.329	0.573	23,833	241	0.165	0.224
Age-appropriate breastfeeding	NU.5	0.335	0.015	0.044	1.380	1.175	142,711	1,429	0.306	0.365
Minimum meal frequency	NU.7	0.585	0.015	0.026	1.039	1.019	109,992	1,110	0.555	0.615
Milk feeding frequency for non-breastfed children	NU.7	0.822	0.015	0.018	0.659	0.812	45,200	441	0.793	0.852
Bottle feeding	NU.8	0.387	0.015	0.038	1.298	1.139	142,711	1,429	0.358	0.416
Vitamin A supplementation (children under age 5)	NU.10	0.834	0.008	0.010	1.613	1.270	335,081	3,359	0.817	0.850
Tuberculosis immunization coverage	CH.2	0.955	0.006	0.006	0.591	0.769	75,513	755	0.943	0.966

Table SE.2: Sampling errors: Total sample

Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deft*) and confidence intervals for selected indicators, Viet Nam, 2011

	Table	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
Polio immunization coverage	CH.2	0.687	0.018	0.025	1.079	1.039	75,361	754	0.652	0.722
Immunization coverage for DPT	CH.2	0.743	0.015	0.021	0.918	0.958	74,387	745	0.712	0.774
Measles immunization coverage	CH.2	0.922	0.009	0.009	0.766	0.875	74,798	748	0.905	0.939
Fully immunized children	CH.2	0.401	0.023	0.058	1.693	1.301	75,685	757	0.355	0.447
Diarrhoea in last two weeks	CH.4	0.074	0.005	0.071	1.484	1.218	367,800	3,678	0.063	0.084
Oral rehydration therapy with continued feeding	CH.6	0.567	0.021	0.036	0.461	0.679	27,047	267	0.526	0.609
Acute respiratory infection in last two weeks	CH.7	0.033	0.003	0.104	1.347	1.160	367,800	3,678	0.026	0.039
Antibiotic treatment of suspected pneumonia	CH.7	0.683	0.025	0.036	0.336	0.580	12,024	122	0.634	0.732
Care-seeking for suspected pneumonia	CH.7	0.730	0.020	0.027	0.242	0.492	12,024	122	0.691	0.770
Children under 5 sleeping under an insecticide treated net	CH.12	0.094	0.009	0.099	3.650	1.910	356,800	3,578	0.076	0.113
Fever in last two weeks	CH.14	0.164	0.008	0.046	1.549	1.245	367,800	3,678	0.149	0.179
Antimalarial treatment	CH.14	0.009	0.003	0.295	0.455	0.675	60,242	581	0.004	0.014
Attendance to early childhood education	CD.1	0.719	0.016	0.022	1.792	1.339	145,878	1,463	0.688	0.751
Support for learning	CD.2	0.768	0.014	0.018	1.501	1.225	145,878	1,463	0.741	0.795
Father's support for learning	CD.2	0.613	0.014	0.022	1.157	1.076	145,878	1,463	0.586	0.640
Learning materials: children's books	CD.3	0.196	0.009	0.043	1.692	1.301	367,800	3,678	0.179	0.213
Learning materials: playthings	CD.3	0.493	0.009	0.019	1.252	1.119	367,800	3,678	0.474	0.511
Inadequate care	CD.4	0.094	0.006	0.063	1.501	1.225	367,800	3,678	0.082	0.106
Early child development Index	CD.5	0.828	0.011	0.014	1.347	1.161	145,878	1,463	0.805	0.851
Birth registration	CP.1	0.950	0.006	0.006	2.714	1.648	367,800	3,678	0.938	0.962
Safe disposal of child's faeces	WS.7	0.611	0.015	0.025	2.122	1.457	221,922	2,215	0.580	0.641

Table SE.3: Sampling errors: Urban areas

Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deff*) and confidence intervals for selected indicators, Viet Nam, 2011

	Table	Value (*r*)	Standard error (*se*)	Coefficient of variation (*se/r*)	Design effect (*deff*)	Square root of design effect (*deff*)	Weighted count	Unweighted count	Confidence limits *r − 2se*	Confidence limits *r + 2se*
HOUSEHOLDS										
Iodised salt consumption	NU.9	0.444	0.014	0.032	4.058	2.015	3,431	4,975	0.416	0.472
Place for handwashing	WS.9	0.971	0.003	0.003	1.336	1.156	3,454	5,001	0.966	0.977
Availability of soap	WS.10	0.981	0.002	0.002	1.444	1.202	3,454	5,001	0.976	0.985
Child discipline	CP.4	0.691	0.013	0.019	2.023	1.422	2,523	2,582	0.665	0.717
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	WS.1	0.984	0.003	0.004	3.756	1.938	13,003	5,001	0.977	0.991
Water treatment	WS.2	0.911	0.015	0.016	0.281	0.530	212	106	0.881	0.940
Use of improved sanitation facilities (shared and not shared)	WS.5	0.938	0.008	0.009	5.817	2.412	13,003	5,001	0.921	0.954
School readiness	ED.2	0.940	0.014	0.015	1.086	1.042	19,517	296	0.911	0.968
Net intake rate in primary education	ED.3	0.958	0.014	0.015	1.572	1.254	21,800	308	0.929	0.987
Primary school net attendance ratio (adjusted)	ED.4	0.981	0.005	0.005	1.823	1.350	97,323	1,446	0.971	0.991
Secondary school net attendance ratio (adjusted)	ED.5	0.874	0.011	0.013	2.302	1.517	140,363	2,164	0.852	0.896
Transition rate to secondary school	ED.7	0.999	0.001	0.001	0.168	0.410	17,451	255	0.998	1.000
Child labour	CP.2	0.044	0.005	0.106	1.497	1.224	192,296	2,888	0.035	0.054
Children's living arrangements	CP.9	0.045	0.004	0.093	2.193	1.481	359,481	5,362	0.037	0.054
Prevalence of children with at least one parent dead	CP.9	0.031	0.004	0.117	2.357	1.535	359,481	5,362	0.024	0.038
WOMEN										
Antenatal care coverage	RH.6	0.979	0.007	0.008	1.480	1.216	40,245	542	0.965	0.994
Skilled attendant at delivery	RH.9	0.988	0.006	0.006	1.745	1.321	40,245	542	0.975	1.000
Institutional deliveries	RH.10	0.982	0.008	0.008	1.926	1.388	40,245	542	0.966	0.998
Caesarean section	RH.9	0.309	0.022	0.070	1.180	1.086	40,245	542	0.266	0.352
Content of antenatal care	RH.8	0.649	0.024	0.036	1.317	1.148	40,245	542	0.602	0.696
Infants weighed at birth	NU.11	0.984	0.008	0.008	2.032	1.425	40,245	542	0.968	0.999
Children ever breastfed	NU.2	0.979	0.007	0.007	1.317	1.147	40,245	542	0.965	0.993

Table SE.3: Sampling errors: Urban areas

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deff) and confidence intervals for selected indicators, Viet Nam, 2011

	Table	Value (r)	Standard error (se)	Coefficient of variation (se/r)	Design effect (deff)	Square root of design effect (deff)	Weighted count	Unweighted count	Confidence limits r - 2se	r + 2se
Early initiation of breastfeeding	NU.2	0.303	0.023	0.077	1.387	1.178	40,245	542	0.256	0.349
Contraceptive prevalence	RH.4	0.776	0.008	0.011	1.345	1.160	243,369	3,446	0.759	0.792
Adult literacy	ED.1	0.992	0.003	0.003	1.342	1.159	105,945	1,474	0.986	0.997
Marriage before age 18	CP.5	0.062	0.005	0.076	1.680	1.296	318,322	4,458	0.052	0.071
Polygyny	CP.5	0.024	0.003	0.114	1.107	1.052	243,369	3,446	0.019	0.030
Comprehensive knowledge about HIV prevention	HA.1	0.580	0.010	0.017	2.163	1.471	367,601	5,183	0.560	0.600
Comprehensive knowledge about HIV prevention among young people	HA.2	0.583	0.015	0.025	1.301	1.140	105,945	1,474	0.554	0.613
Accepting attitudes towards people living with HIV	HA.4	0.282	0.008	0.029	1.646	1.283	361,808	5,064	0.266	0.298
Women who have been tested for HIV during last 12 months and who have been told the results	HA.5	0.087	0.005	0.062	1.902	1.379	367,601	5,183	0.076	0.098
Knowledge of mother-to-child transmission of HIV	HA.3	0.531	0.011	0.021	2.603	1.613	367,601	5,183	0.509	0.554
Children under 5										
Underweight prevalence	NU.1	0.060	0.008	0.131	1.504	1.226	99,019	1,376	0.045	0.076
Stunting prevalence	NU.1	0.118	0.012	0.102	1.892	1.375	98,268	1,364	0.094	0.142
Wasting prevalence	NU.1	0.039	0.006	0.158	1.368	1.170	97,778	1,359	0.023	0.055
Exclusive breastfeeding under 6 months	NU.3	0.128	0.033	0.255	1.111	1.054	8,294	117	0.063	0.194
Predominant breastfeeding under 6 months	NU.3	0.331	0.049	0.149	1.277	1.130	8,294	117	0.232	0.430
Continued breastfeeding at 1 year	NU.3	0.626	0.035	0.056	0.655	0.809	9,453	125	0.556	0.696
Continued breastfeeding at 2 years	NU.3	0.168	0.028	0.164	0.577	0.760	8,055	107	0.113	0.223
Age-appropriate breastfeeding	NU.5	0.285	0.026	0.090	1.798	1.341	40,782	561	0.233	0.336
Minimum meal frequency	NU.7	0.610	0.026	0.043	1.272	1.128	32,488	444	0.558	0.662
Milk feeding frequency for non-breastfed children	NU.7	0.951	0.010	0.010	0.386	0.622	15,624	197	0.932	0.970
Bottle feeding	NU.8	0.533	0.022	0.041	1.062	1.030	40,782	561	0.490	0.577
Vitamin A supplementation (children under age 5)	NU.10	0.844	0.013	0.015	1.629	1.277	92,961	1,292	0.818	0.869

Table SE.3: Sampling errors: Urban areas

Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deff*) and confidence intervals for selected indicators, Viet Nam, 2011

	Table	Value (*r*)	Standard error (*se*)	Coefficient of variation (*se/r*)	Design effect (*deff*)	Square root of design effect (*deff*)	Weighted count	Unweighted count	Confidence limits	
									r − 2se	*r* + 2se
Tuberculosis immunization coverage	CH.2	0.975	0.008	0.008	0.809	0.900	23,222	313	0.959	0.991
Polio immunization coverage	CH.2	0.770	0.023	0.030	0.930	0.965	23,169	312	0.724	0.816
Immunization coverage for DPT	CH.2	0.823	0.023	0.027	1.085	1.042	23,117	311	0.778	0.868
Measles immunization coverage	CH.2	0.952	0.013	0.013	1.118	1.057	22,941	311	0.927	0.978
Fully immunized children	CH.2	0.520	0.035	0.068	1.542	1.242	23,197	312	0.450	0.591
Diarrhoea in last two weeks	CH.4	0.053	0.007	0.123	1.203	1.097	101,255	1,409	0.040	0.067
Oral rehydration therapy with continued feeding	CH.6	0.568	0.029	0.052	0.268	0.518	5,409	78	0.509	0.626
Acute respiratory infection in last two weeks	CH.7	0.023	0.004	0.171	0.976	0.988	101,255	1,409	0.015	0.031
Antibiotic treatment of suspected pneumonia	CH.7	0.748	0.043	0.058	0.346	0.588	2,341	36	0.662	0.835
Care-seeking for suspected pneumonia	CH.7	0.730	0.045	0.062	0.358	0.598	2,341	36	0.640	0.819
Children under 5 sleeping under an insecticide treated net	CH.12	0.041	0.007	0.179	1.872	1.368	98,845	1,376	0.026	0.056
Fever in last two weeks	CH.14	0.155	0.011	0.070	1.270	1.127	101,255	1,409	0.133	0.177
Antimalarial treatment	CH.14	0.014	0.001	0.057	0.009	0.096	15,714	209	0.012	0.015
Attendance to early childhood education	CD.1	0.758	0.030	0.040	2.690	1.640	38,696	550	0.698	0.818
Support for learning	CD.2	0.853	0.019	0.022	1.602	1.266	38,696	550	0.814	0.891
Father's support for learning	CD.2	0.717	0.020	0.027	1.044	1.022	38,696	550	0.678	0.756
Learning materials: children's books	CD.3	0.361	0.019	0.052	2.135	1.461	101,255	1,409	0.323	0.398
Learning materials: playthings	CD.3	0.526	0.016	0.030	1.387	1.178	101,255	1,409	0.494	0.557
Inadequate care	CD.4	0.049	0.007	0.152	1.690	1.300	101,255	1,409	0.034	0.064
Early child development Index	CD.5	0.883	0.018	0.020	1.705	1.306	38,696	550	0.847	0.918
Birth registration	CP.1	0.971	0.007	0.007	2.129	1.459	101,255	1,409	0.958	0.984
Safe disposal of child's faeces	WS.7	0.816	0.016	0.020	1.496	1.223	62,559	859	0.784	0.849

Table SE.4: Sampling errors: Rural areas

Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deff*) and confidence intervals for selected indicators, Viet Nam, 2011

	Table	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	Confidence limits r + 2se
HOUSEHOLDS										
Iodised salt consumption	NU.9	0.454	0.011	0.024	3.230	1.797	8,114	6,581	0.432	0.476
Place for handwashing	WS.9	0.983	0.002	0.002	2.267	1.506	8,160	6,613	0.978	0.987
Availability of soap	WS.10	0.938	0.003	0.004	1.270	1.127	8,160	6,613	0.932	0.945
Child discipline	CP.4	0.756	0.009	0.012	1.741	1.320	7,224	3,842	0.737	0.774
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	WS.1	0.894	0.009	0.010	5.225	2.286	30,995	6,613	0.877	0.911
Water treatment	WS.2	0.896	0.021	0.024	3.813	1.953	3,291	773	0.853	0.939
Use of improved sanitation facilities (shared and not shared)	WS.5	0.714	0.011	0.016	4.039	2.010	30,995	6,613	0.692	0.736
School readiness	ED.2	0.921	0.013	0.014	1.228	1.108	58,756	543	0.896	0.947
Net intake rate in primary education	ED.3	0.946	0.009	0.010	0.880	0.938	56,984	512	0.927	0.965
Primary school net attendance ratio (adjusted)	ED.4	0.978	0.003	0.003	1.157	1.075	271,091	2,402	0.971	0.984
Secondary school net attendance ratio (adjusted)	ED.5	0.788	0.010	0.012	2.051	1.432	404,816	3,622	0.768	0.808
Transition rate to secondary school	ED.7	0.985	0.005	0.005	0.904	0.951	53,731	475	0.974	0.995
Child labour	CP.2	0.113	0.007	0.061	2.359	1.536	558,816	4,980	0.099	0.127
Children's living arrangements	CP.9	0.055	0.004	0.069	2.440	1.562	999,952	8,821	0.048	0.063
Prevalence of children with at least one parent dead	CP.9	0.041	0.004	0.087	2.884	1.698	999,952	8,821	0.034	0.049
WOMEN										
Antenatal care coverage	RH.6	0.920	0.013	0.014	1.786	1.337	98,007	821	0.895	0.945
Skilled attendant at delivery	RH.9	0.905	0.013	0.014	1.522	1.234	98,007	821	0.879	0.930
Institutional deliveries	RH.10	0.900	0.013	0.014	1.480	1.217	98,007	821	0.874	0.925
Caesarean section	RH.9	0.155	0.014	0.091	1.257	1.121	98,007	821	0.127	0.183
Content of antenatal care	RH.8	0.334	0.018	0.052	1.131	1.064	98,007	821	0.299	0.369
Infants weighed at birth	NU.11	0.911	0.012	0.014	1.554	1.247	98,007	821	0.887	0.936
Children ever breastfed	NU.2	0.981	0.005	0.005	1.041	1.020	98,007	821	0.971	0.991

Table SE.4: Sampling errors: Rural areas

Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deff*) and confidence intervals for selected indicators, Viet Nam, 2011

	Table	Value (r)	Standard error (se)	Coefficient of variation (se/r)	Design effect (deff)	Square root of design effect (deff)	Weighted count	Unweighted count	Confidence limits r - 2se	Confidence limits r + 2se
Early initiation of breastfeeding	NU.2	0.435	0.019	0.043	1.178	1.086	98,007	821	0.398	0.473
Contraceptive prevalence	RH.4	0.779	0.007	0.009	1.459	1.208	590,766	4,748	0.764	0.793
Adult literacy	ED.1	0.951	0.008	0.008	2.425	1.557	225,592	1,924	0.936	0.967
Marriage before age 18	CP.5	0.152	0.008	0.051	2.514	1.585	677,284	5,436	0.137	0.168
Polygyny	CP.5	0.025	0.003	0.106	1.355	1.164	590,766	4,748	0.020	0.030
Comprehensive knowledge about HIV prevention	HA.1	0.391	0.008	0.021	1.901	1.379	798,699	6,480	0.374	0.408
Comprehensive knowledge about HIV prevention among young people	HA.2	0.476	0.014	0.029	1.472	1.213	225,592	1,924	0.449	0.504
Accepting attitudes towards people living with HIV	HA.4	0.293	0.008	0.027	1.776	1.333	750,814	5,902	0.277	0.309
Women who have been tested for HIV during last 12 months and who have been told the results	HA.5	0.056	0.003	0.059	1.351	1.162	798,699	6,480	0.050	0.063
Knowledge of mother-to-child transmission of HIV	HA.3	0.480	0.009	0.018	1.996	1.413	798,699	6,480	0.462	0.497
Children under 5										
Underweight prevalence	NU.1	0.139	0.008	0.058	1.223	1.106	261,672	2,225	0.123	0.155
Stunting prevalence	NU.1	0.268	0.011	0.041	1.346	1.160	258,943	2,199	0.246	0.290
Wasting prevalence	NU.1	0.042	0.005	0.116	1.308	1.144	259,025	2,202	0.026	0.058
Exclusive breastfeeding under 6 months	NU.3	0.184	0.022	0.118	0.635	0.797	24,425	202	0.141	0.228
Predominant breastfeeding under 6 months	NU.3	0.468	0.027	0.058	0.598	0.773	24,425	202	0.413	0.522
Continued breastfeeding at 1 year	NU.3	0.799	0.027	0.033	0.661	0.813	17,828	151	0.746	0.853
Continued breastfeeding at 2 years	NU.3	0.208	0.017	0.082	0.235	0.485	15,778	134	0.174	0.242
Age-appropriate breastfeeding	NU.5	0.356	0.018	0.050	1.199	1.095	101,928	868	0.320	0.391
Minimum meal frequency	NU.7	0.575	0.018	0.032	0.926	0.962	77,503	666	0.538	0.611
Milk feeding frequency for non-breastfed children	NU.7	0.754	0.022	0.029	0.630	0.794	29,576	244	0.711	0.798
Bottle feeding	NU.8	0.328	0.018	0.056	1.312	1.145	101,928	868	0.292	0.365
Vitamin A supplementation (children under 5)	NU.10	0.830	0.010	0.012	1.519	1.232	242,120	2,067	0.809	0.850

Table SE.4: Sampling errors: Rural areas

Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deff*) and confidence intervals for selected indicators, Viet Nam, 2011

	Table	Value (r)	Standard error (se)	Coefficient of variation (se/r)	Design effect (deff)	Square root of design effect (deff)	Weighted count	Unweighted count	Confidence limits r - 2se	Confidence limits r + 2se
Tuberculosis immunization coverage	CH.2	0.946	0.008	0.008	0.510	0.714	52,292	442	0.930	0.961
Polio immunization coverage	CH.2	0.652	0.023	0.035	1.029	1.014	52,192	442	0.606	0.698
Immunization coverage for DPT	CH.2	0.707	0.020	0.028	0.815	0.903	51,271	434	0.668	0.746
Measles immunization coverage	CH.2	0.909	0.011	0.012	0.648	0.805	51,856	437	0.886	0.931
Fully immunized children	CH.2	0.347	0.029	0.084	1.672	1.293	52,488	445	0.289	0.405
Diarrhoea in last two weeks	CH.4	0.081	0.007	0.083	1.395	1.181	266,545	2,269	0.068	0.095
Oral rehydration therapy with continued feeding	CH.6	0.567	0.025	0.044	0.468	0.684	21,638	189	0.518	0.617
Acute respiratory infection in last two weeks	CH.7	0.036	0.004	0.122	1.281	1.132	266,545	2,269	0.027	0.045
Antibiotic treatment of suspected pneumonia	CH.7	0.667	0.029	0.043	0.312	0.559	9,683	86	0.610	0.725
Care-seeking for suspected pneumonia	CH.7	0.731	0.022	0.030	0.211	0.460	9,683	86	0.686	0.775
Children under 5 sleeping under an insecticide treated net	CH.12	0.115	0.013	0.109	3.406	1.845	257,955	2,202	0.090	0.140
Fever in last two weeks	CH.14	0.167	0.010	0.058	1.512	1.229	266,545	2,269	0.148	0.186
Antimalarial treatment	CH.14	0.007	0.004	0.488	0.651	0.807	44,529	372	0.000	0.014
Attendance to early childhood education	CD.1	0.705	0.019	0.026	1.533	1.238	107,182	913	0.668	0.743
Support for learning	CD.2	0.737	0.017	0.023	1.380	1.175	107,182	913	0.703	0.772
Father's support for learning	CD.2	0.576	0.017	0.030	1.116	1.056	107,182	913	0.541	0.610
Learning materials: children's books	CD.3	0.134	0.009	0.065	1.471	1.213	266,545	2,269	0.116	0.151
Learning materials: playthings	CD.3	0.480	0.011	0.023	1.076	1.076	266,545	2,269	0.458	0.503
Inadequate care	CD.4	0.111	0.008	0.069	1.330	1.153	266,545	2,269	0.096	0.126
Early child development Index	CD.5	0.809	0.014	0.018	1.188	1.090	107,182	913	0.780	0.837
Birth registration	CP.1	0.942	0.008	0.008	2.490	1.578	266,545	2,269	0.926	0.957
Safe disposal of child's faeces	WS.7	0.530	0.019	0.036	1.984	1.408	159,363	1,356	0.492	0.568

Table SE.5: Sampling errors: Red River Delta

Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deft*) and confidence intervals for selected indicators, Viet Nam, 2011

	Table	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*	Confidence limits *r + 2se*
HOUSEHOLDS										
Iodised salt consumption	NU.9	0.278	0.014	0.052	1.981	1.408	2,587	1,899	0.250	0.307
Place for handwashing	WS.9	0.988	0.005	0.005	3.644	1.909	2,601	1,907	0.978	0.997
Availability of soap	WS.10	0.986	0.003	0.003	0.961	0.980	2,601	1,907	0.981	0.991
Child discipline	CP.4	0.689	0.020	0.029	1.731	1.316	1,920	918	0.649	0.729
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	WS.1	0.990	0.005	0.005	3.956	1.989	9,261	1,907	0.980	0.999
Water treatment	WS.2	1.000	0.000	0.000	.	.	96	20	1.000	1.000
Use of improved sanitation facilities (shared and not shared)	WS.5	0.974	0.006	0.007	3.175	1.782	9,261	1,907	0.961	0.987
School readiness	ED.2	0.975	0.013	0.013	0.679	0.824	13,294	97	0.949	1.000
Net intake rate in primary education	ED.3	0.987	0.013	0.013	1.179	1.086	13,207	96	0.962	1.000
Primary school net attendance ratio (adjusted)	ED.4	0.998	0.002	0.002	1.219	1.104	68,832	506	0.993	1.000
Secondary school net attendance ratio (adjusted)	ED.5	0.912	0.014	0.015	1.650	1.285	101,564	737	0.885	0.939
Transition rate to secondary school	ED.7	1.000	0.000	0.000	.	.	13,857	99	1.000	1.000
Child labour	CP.2	0.044	0.009	0.204	1.983	1.408	142,952	1,039	0.026	0.062
Children's living arrangements	CP.9	0.044	0.006	0.133	1.554	1.247	268,912	1,925	0.032	0.055
Prevalence of children with at least one parent dead	CP.9	0.033	0.006	0.167	1.846	1.359	268,912	1,925	0.022	0.045
WOMEN										
Antenatal care coverage	RH.6	0.990	0.008	0.008	1.324	1.151	29,371	203	0.973	1.000
Skilled attendant at delivery	RH.9	0.992	0.008	0.008	1.583	1.258	29,371	203	0.976	1.000
Institutional deliveries	RH.10	0.986	0.010	0.010	1.373	1.172	29,371	203	0.967	1.000
Caesarean section	RH.9	0.266	0.033	0.125	1.153	1.074	29,371	203	0.199	0.333
Content of antenatal care	RH.8	0.522	0.039	0.074	1.214	1.102	29,371	203	0.445	0.600
Infants weighed at birth	NU.11	0.992	0.008	0.008	1.583	1.258	29,371	203	0.976	1.000
Children ever breastfed	NU.2	0.973	0.012	0.012	1.144	1.070	29,371	203	0.949	0.998

Table SE.5: Sampling errors: Red River Delta

Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deff*) and confidence intervals for selected indicators, Viet Nam, 2011

	Table	Value (r)	Standard error (se)	Coefficient of variation (se/r)	Design effect (deff)	Square root of design effect (deff)	Weighted count	Unweighted count	Confidence limits	
									r - 2se	r + 2se
Early initiation of breastfeeding	NU.2	0.331	0.025	0.075	0.568	0.754	29,371	203	0.281	0.381
Contraceptive prevalence	RH.4	0.763	0.014	0.018	1.245	1.116	175,459	1,235	0.736	0.790
Adult literacy	ED.1	0.998	0.002	0.002	0.966	0.983	67,289	475	0.994	1.000
Marriage before age 18	CP.5	0.095	0.009	0.095	1.370	1.171	203,726	1,449	0.077	0.113
Polygyny	CP.5	0.023	0.005	0.202	1.199	1.095	175,459	1,235	0.014	0.033
Comprehensive knowledge about HIV prevention	HA.1	0.577	0.016	0.027	1.662	1.289	236,762	1,682	0.546	0.608
Comprehensive knowledge about HIV prevention among young people	HA.2	0.606	0.022	0.036	0.951	0.975	67,289	475	0.563	0.650
Accepting attitudes towards people living with HIV	HA.4	0.372	0.016	0.043	1.796	1.340	234,798	1,667	0.340	0.404
Women who have been tested for HIV during last 12 months and who have been told the results	HA.5	0.079	0.007	0.091	1.190	1.091	236,762	1,682	0.064	0.093
Knowledge of mother-to-child transmission of HIV	HA.3	0.463	0.018	0.039	2.234	1.495	236,762	1,682	0.427	0.500
Children under 5										
Underweight prevalence	NU.1	0.074	0.013	0.172	1.235	1.111	76,606	519	0.049	0.100
Stunting prevalence	NU.1	0.183	0.019	0.104	1.243	1.115	75,809	514	0.145	0.221
Wasting prevalence	NU.1	0.036	0.008	0.234	1.036	1.018	75,467	511	0.010	0.061
Exclusive breastfeeding under 6 months	NU.3	0.153	0.040	0.258	0.686	0.829	8,304	58	0.074	0.232
Predominant breastfeeding under 6 months	NU.3	0.358	0.056	0.155	0.768	0.876	8,304	58	0.247	0.470
Continued breastfeeding at 1 year	NU.3	0.722	0.042	0.058	0.310	0.556	5,137	36	0.638	0.807
Continued breastfeeding at 2 years	NU.3	0.105	0.026	0.248	0.253	0.503	4,838	36	0.053	0.157
Age-appropriate breastfeeding	NU.5	0.349	0.032	0.091	0.939	0.969	30,445	211	0.286	0.413
Minimum meal frequency	NU.7	0.695	0.036	0.052	0.919	0.959	22,141	153	0.623	0.767
Milk feeding frequency for non-breastfed children	NU.7	0.934	0.020	0.021	0.438	0.662	9,803	70	0.895	0.974
Bottle feeding	NU.8	0.338	0.033	0.097	1.008	1.004	30,445	211	0.273	0.404
Vitamin A supplementation (children under age 5)	NU.10	0.882	0.017	0.019	1.321	1.150	71,465	485	0.849	0.916

Table SE.5: Sampling errors: Red River Delta

Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deff*) and confidence intervals for selected indicators, Viet Nam, 2011

	Table	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	Confidence limits r + 2se
Tuberculosis immunization coverage	CH.2	0.984	0.009	0.009	0.510	0.714	15,625	110	0.966	1.000
Polio immunization coverage	CH.2	0.726	0.042	0.057	0.947	0.973	15,625	110	0.643	0.809
Immunization coverage for DPT	CH.2	0.823	0.040	0.049	1.226	1.107	15,625	110	0.742	0.904
Measles immunization coverage	CH.2	0.958	0.014	0.015	0.512	0.716	15,256	107	0.930	0.986
Fully immunized children	CH.2	0.503	0.047	0.093	0.962	0.981	15,625	110	0.409	0.597
Diarrhoea in last two weeks	CH.4	0.080	0.012	0.151	1.078	1.038	79,769	543	0.056	0.105
Oral rehydration therapy with continued feeding	CH.6	0.570	0.046	0.081	0.377	0.614	6,405	44	0.478	0.663
Acute respiratory infection in last two weeks	CH.7	0.039	0.006	0.141	0.438	0.662	79,769	543	0.028	0.050
Antibiotic treatment of suspected pneumonia	CH.7	0.814	0.060	0.074	0.580	0.762	3,128	25	0.693	0.935
Care-seeking for suspected pneumonia	CH.7	0.586	0.068	0.116	0.457	0.676	3,128	25	0.450	0.722
Children under 5 sleeping under an insecticide treated net	CH.12	0.055	0.016	0.287	2.499	1.581	76,766	525	0.023	0.086
Fever in last two weeks	CH.14	0.148	0.016	0.106	1.050	1.025	79,769	543	0.116	0.179
Antimalarial treatment	CH.14	0.000	0.000	.	.	.	11,775	82	0.000	0.000
Attendance to early childhood education	CD.1	0.900	0.025	0.028	1.402	1.184	30,123	201	0.849	0.950
Support for learning	CD.2	0.878	0.026	0.029	1.221	1.105	30,123	201	0.827	0.929
Father's support for learning	CD.2	0.629	0.032	0.051	0.881	0.939	30,123	201	0.565	0.694
Learning materials: children's books	CD.3	0.305	0.020	0.067	1.063	1.031	79,769	543	0.264	0.346
Learning materials: playthings	CD.3	0.514	0.020	0.040	0.897	0.947	79,769	543	0.473	0.554
Inadequate care	CD.4	0.056	0.008	0.151	0.730	0.854	79,769	543	0.039	0.073
Early child development Index	CD.5	0.865	0.026	0.030	1.149	1.072	30,123	201	0.813	0.917
Birth registration	CP.1	0.982	0.008	0.008	1.818	1.348	79,769	543	0.967	0.997
Safe disposal of child's faeces	WS.7	0.779	0.023	0.029	1.017	1.009	49,646	342	0.734	0.825

Table SE.6: Sampling errors: Northen Midland and Mountain areas

Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deff*) and confidence intervals for selected indicators, Viet Nam, 2011

	Table	Value (*r*)	Standard error (*se*)	Coefficient of variation (*se/r*)	Design effect (*deff*)	Square root of design effect (*deff*)	Weighted count	Un-weighted count	Confidence limits r − 2se	r + 2se
HOUSEHOLDS										
Iodised salt consumption	NU.9	0.400	0.025	0.063	5.230	2.287	1,832	1,950	0.349	0.451
Place for handwashing	WS.9	0.993	0.003	0.003	3.098	1.760	1,836	1,955	0.986	1.000
Availability of soap	WS.10	0.943	0.007	0.008	1.948	1.396	1,836	1,955	0.928	0.958
Child discipline	CP.4	0.715	0.019	0.027	2.021	1.422	1,709	1,099	0.676	0.754
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	WS.1	0.807	0.024	0.029	6.954	2.637	7,242	1,955	0.760	0.854
Water treatment	WS.2	0.966	0.006	0.006	0.354	0.595	1,396	324	0.954	0.978
Use of improved sanitation facilities (shared and not shared)	WS.5	0.763	0.022	0.029	5.367	2.317	7,242	1,955	0.718	0.807
School readiness	ED.2	0.985	0.008	0.008	0.674	0.821	14,899	152	0.968	1.000
Net intake rate in primary education	ED.3	0.955	0.015	0.015	0.758	0.871	15,243	152	0.926	0.985
Primary school net attendance ratio (adjusted)	ED.4	0.967	0.008	0.008	1.346	1.160	66,288	683	0.951	0.983
Secondary school net attendance ratio (adjusted)	ED.5	0.803	0.024	0.030	3.416	1.848	91,606	969	0.756	0.851
Transition rate to secondary school	ED.7	0.980	0.010	0.010	0.574	0.757	12,659	124	0.960	0.999
Child labour	CP.2	0.164	0.019	0.118	3.681	1.919	129,869	1,343	0.126	0.203
Children's living arrangements	CP.9	0.041	0.006	0.156	2.606	1.614	241,435	2,524	0.028	0.053
Prevalence of children with at least one parent dead	CP.9	0.038	0.007	0.193	3.686	1.920	241,435	2,524	0.023	0.052
WOMEN										
Antenatal care coverage	RH.6	0.828	0.034	0.041	2.266	1.505	28,494	278	0.760	0.897
Skilled attendant at delivery	RH.9	0.783	0.034	0.044	1.888	1.374	28,494	278	0.714	0.851
Institutional deliveries	RH.10	0.780	0.034	0.044	1.913	1.383	28,494	278	0.711	0.849
Caesarean section	RH.9	0.140	0.029	0.207	1.931	1.390	28,494	278	0.082	0.197
Content of antenatal care	RH.8	0.207	0.028	0.136	1.331	1.154	28,494	278	0.151	0.263
Infants weighed at birth	NU.11	0.781	0.035	0.045	1.981	1.408	28,494	278	0.711	0.851

Table SE.6: Sampling errors: Northen Midland and Mountain areas

Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deff*) and confidence intervals for selected indicators, Viet Nam, 2011

	Table	Value (r)	Standard error (se)	Coefficient of variation (se/r)	Design effect (deff)	Square root of design effect (deff)	Weighted count	Un-weighted count	Confidence limits r - 2se	r + 2se
Children ever breastfed	NU.2	0.994	0.005	0.005	1.155	1.075	28,494	278	0.983	1.000
Early initiation of breastfeeding	NU.2	0.570	0.035	0.062	1.412	1.188	28,494	278	0.500	0.641
Contraceptive prevalence	RH.4	0.738	0.012	0.017	1.212	1.101	149,144	1,512	0.713	0.763
Adult literacy	ED.1	0.894	0.026	0.029	3.786	1.946	51,209	549	0.842	0.945
Marriage before age 18	CP.5	0.188	0.022	0.119	5.522	2.350	163,045	1,682	0.143	0.232
Polygyny	CP.5	0.031	0.005	0.144	1.016	1.008	149,144	1,512	0.022	0.040
Comprehensive knowledge about HIV prevention	HA.1	0.444	0.023	0.052	4.250	2.061	189,585	1,970	0.398	0.490
Comprehensive knowledge about HIV prevention among young people	HA.2	0.491	0.033	0.068	2.436	1.561	51,209	549	0.424	0.558
Accepting attitudes towards people living with HIV	HA.4	0.363	0.018	0.051	2.555	1.598	171,553	1,759	0.326	0.399
Women who have been tested for HIV during last 12 months and who have been told the results	HA.5	0.079	0.009	0.119	2.422	1.556	189,585	1,970	0.060	0.098
Knowledge of mother-to-child transmission of HIV	HA.3	0.457	0.022	0.047	3.720	1.929	189,585	1,970	0.414	0.500
Children under 5										
Underweight prevalence	NU.1	0.154	0.014	0.089	0.988	0.994	69,239	695	0.127	0.181
Stunting prevalence	NU.1	0.314	0.023	0.072	1.607	1.268	67,963	679	0.269	0.360
Wasting prevalence	NU.1	0.043	0.010	0.233	1.674	1.294	68,261	683	0.016	0.070
Exclusive breastfeeding under 6 months	NU.3	0.376	0.050	0.132	0.766	0.875	7,406	74	0.276	0.475
Predominant breastfeeding under 6 months	NU.3	0.549	0.042	0.077	0.524	0.724	7,406	74	0.465	0.633
Continued breastfeeding at 1 year	NU.3	0.845	0.033	0.039	0.539	0.734	6,609	66	0.780	0.911
Continued breastfeeding at 2 years	NU.3	0.346	0.022	0.065	0.081	0.284	4,325	37	0.301	0.391
Age-appropriate breastfeeding	NU.5	0.425	0.036	0.084	1.512	1.230	29,283	291	0.353	0.496
Minimum meal frequency	NU.7	0.508	0.031	0.061	0.821	0.906	21,877	217	0.446	0.570
Milk feeding frequency for non-breastfed children	NU.7	0.623	0.044	0.070	0.476	0.690	6,831	59	0.535	0.711
Bottle feeding	NU.8	0.186	0.026	0.138	1.264	1.124	29,283	291	0.135	0.238
Vitamin A supplementation (children under age 5)	NU.10	0.849	0.024	0.029	2.930	1.712	63,273	638	0.801	0.898

Table SE.6: Sampling errors: Northen Midland and Mountain areas

Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deff*) and confidence intervals for selected indicators, Viet Nam, 2011

	Table	Value (*r*)	Standard error (*se*)	Coefficient of variation (*se/r*)	Design effect (*deff*)	Square root of design effect (*deff*)	Weighted count	Un-weighted count	Confidence limits *r - 2se*	*r + 2se*
Tuberculosis immunization coverage	CH.2	0.920	0.021	0.023	0.818	0.904	15,089	137	0.877	0.962
Polio immunization coverage	CH.2	0.638	0.041	0.064	0.982	0.991	15,107	137	0.556	0.719
Immunization coverage for DPT	CH.2	0.679	0.043	0.064	1.135	1.065	14,777	134	0.593	0.765
Measles immunization coverage	CH.2	0.906	0.028	0.030	1.215	1.102	15,180	138	0.851	0.961
Fully immunized children	CH.2	0.379	0.060	0.159	2.090	1.446	15,155	137	0.259	0.499
Diarrhoea in last two weeks	CH.4	0.104	0.014	0.134	1.478	1.216	70,678	712	0.076	0.132
Oral rehydration therapy with continued feeding	CH.6	0.641	0.052	0.081	0.897	0.947	7,372	77	0.537	0.746
Acute respiratory infection in last two weeks	CH.7	0.012	0.005	0.391	1.331	1.154	70,678	712	0.003	0.022
Antibiotic treatment of suspected pneumonia	CH.7	0.861	0.000	0.000	0.000	0.000	857	11	0.861	0.861
Care-seeking for suspected pneumonia	CH.7	0.918	0.000	0.000	0.000	0.000	857	11	0.918	0.918
Children under 5 sleeping under an insecticide treated net	CH.12	0.168	0.026	0.156	3.414	1.848	68,427	692	0.116	0.221
Fever in last two weeks	CH.14	0.168	0.017	0.102	1.498	1.224	70,678	712	0.134	0.202
Antimalarial treatment	CH.14	0.000	0.000	.	.	.	11,869	122	0.000	0.000
Attendance to early childhood education	CD.1	0.892	0.031	0.035	2.759	1.661	26,642	278	0.830	0.954
Support for learning	CD.2	0.693	0.041	0.059	2.194	1.481	26,642	278	0.611	0.775
Father's support for learning	CD.2	0.657	0.032	0.049	1.259	1.122	26,642	278	0.593	0.721
Learning materials: children's books	CD.3	0.100	0.014	0.143	1.613	1.270	70,678	712	0.072	0.129
Learning materials: playthings	CD.3	0.455	0.019	0.043	1.074	1.036	70,678	712	0.416	0.493
Inadequate care	CD.4	0.096	0.012	0.124	1.164	1.079	70,678	712	0.072	0.120
Early child development Index	CD.5	0.818	0.030	0.036	1.639	1.280	26,642	278	0.759	0.877
Birth registration	CP.1	0.944	0.011	0.011	1.526	1.235	70,678	712	0.923	0.965
Safe disposal of child's faeces	WS.7	0.390	0.034	0.088	2.147	1.465	44,036	434	0.321	0.458

Table SE.7: Sampling errors: North Central area and Central Coastal area

Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deff*) and confidence intervals for selected indicators, Viet Nam, 2011

	Table	Value (*r*)	Standard error (*se*)	Coefficient of variation (*se/r*)	Design effect (*deff*)	Square root of design effect (*deff*)	Weighted count	Unweighted count	Confidence limits *r - 2se*	*r + 2se*
HOUSEHOLDS										
Iodised salt consumption	NU.9	0.502	0.021	0.041	3.311	1.820	2,515	1,937	0.460	0.543
Place for handwashing	WS.9	0.978	0.003	0.003	0.924	0.961	2,522	1,943	0.971	0.984
Availability of soap	WS.10	0.913	0.007	0.007	1.063	1.031	2,522	1,943	0.899	0.926
Child discipline	CP.4	0.782	0.017	0.022	1.734	1.317	2,062	1,025	0.748	0.816
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	WS.1	0.898	0.015	0.017	4.962	2.228	9,443	1,943	0.868	0.929
Water treatment	WS.2	0.862	0.069	0.080	6.588	2.567	962	164	0.723	1.000
Use of improved sanitation facilities (shared and not shared)	WS.5	0.822	0.019	0.023	4.546	2.132	9,443	1,943	0.785	0.859
School readiness	ED.2	0.958	0.017	0.018	0.849	0.921	15,361	119	0.924	0.992
Net intake rate in primary education	ED.3	0.924	0.019	0.021	0.636	0.798	15,760	122	0.886	0.963
Primary school net attendance ratio (adjusted)	ED.4	0.982	0.005	0.005	0.919	0.958	74,872	567	0.971	0.993
Secondary school net attendance ratio (adjusted)	ED.5	0.832	0.013	0.016	1.252	1.119	133,539	1,017	0.805	0.858
Transition rate to secondary school	ED.7	0.990	0.010	0.010	1.164	1.079	14,598	112	0.969	1.000
Child labour	CP.2	0.089	0.009	0.097	1.120	1.058	163,598	1,230	0.072	0.106
Children's living arrangements	CP.9	0.050	0.006	0.125	1.863	1.365	296,225	2,258	0.037	0.062
Prevalence of children with at least one parent dead	CP.9	0.049	0.008	0.166	3.231	1.797	296,225	2,258	0.033	0.066
WOMEN										
Antenatal care coverage	RH.6	0.966	0.011	0.011	0.696	0.834	28,749	207	0.945	0.987
Skilled attendant at delivery	RH.9	0.964	0.015	0.016	1.380	1.175	28,749	207	0.933	0.994
Institutional deliveries	RH.10	0.950	0.017	0.018	1.231	1.109	28,749	207	0.916	0.984
Caesarean section	RH.9	0.159	0.021	0.132	0.684	0.827	28,749	207	0.117	0.202
Content of antenatal care	RH.8	0.412	0.031	0.076	0.835	0.914	28,749	207	0.350	0.475
Infants weighed at birth	NU.11	0.966	0.016	0.016	1.582	1.258	28,749	207	0.934	0.998
Children ever breastfed	NU.2	0.990	0.008	0.008	1.284	1.133	28,749	207	0.975	1.000

Table SE.7: Sampling errors: North Central area and Central Coastal area

Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deff*) and confidence intervals for selected indicators, Viet Nam, 2011

	Table	Value (*r*)	Standard error (*se*)	Coefficient of variation (*se/r*)	Design effect (*deff*)	Square root of design effect (*deff*)	Weighted count	Unweighted count	Confidence limits	
									r - 2se	*r + 2se*
Early initiation of breastfeeding	NU.2	0.427	0.043	0.101	1.565	1.251	28,749	207	0.340	0.513
Contraceptive prevalence	RH.4	0.799	0.015	0.018	1.694	1.301	167,398	1,278	0.770	0.829
Adult literacy	ED.1	0.986	0.007	0.007	1.652	1.285	71,565	559	0.973	0.999
Marriage before age 18	CP.5	0.085	0.010	0.122	2.129	1.459	200,202	1,547	0.064	0.106
Polygyny	CP.5	0.015	0.003	0.220	0.960	0.980	167,398	1,278	0.009	0.022
Comprehensive knowledge about HIV prevention	HA.1	0.409	0.013	0.031	1.213	1.101	242,861	1,868	0.384	0.434
Comprehensive knowledge about HIV prevention among young people	HA.2	0.508	0.020	0.040	0.936	0.967	71,565	559	0.467	0.549
Accepting attitudes towards people living with HIV	HA.4	0.330	0.015	0.045	1.764	1.328	229,216	1,757	0.300	0.360
Women who have been tested for HIV during last 12 months and who have been told the results	HA.5	0.048	0.005	0.112	1.175	1.084	242,861	1,868	0.037	0.059
Knowledge of mother-to-child transmission of HIV	HA.3	0.411	0.013	0.032	1.341	1.158	242,861	1,868	0.385	0.437
Children under 5										
Underweight prevalence	NU.1	0.143	0.015	0.105	1.000	1.000	71,163	539	0.113	0.174
Stunting prevalence	NU.1	0.284	0.021	0.075	1.199	1.095	70,858	537	0.241	0.326
Wasting prevalence	NU.1	0.043	0.009	0.210	1.057	1.028	70,956	538	0.012	0.073
Exclusive breastfeeding under 6 months	NU.3	0.140	0.035	0.248	0.491	0.700	6,613	50	0.071	0.210
Predominant breastfeeding under 6 months	NU.3	0.495	0.056	0.112	0.605	0.778	6,613	50	0.384	0.606
Continued breastfeeding at 1 year	NU.3	0.789	0.061	0.077	0.921	0.960	5,873	42	0.667	0.912
Continued breastfeeding at 2 years	NU.3	0.215	0.054	0.254	0.598	0.773	4,654	35	0.106	0.324
Age-appropriate breastfeeding	NU.5	0.329	0.039	0.118	1.449	1.204	29,024	215	0.251	0.406
Minimum meal frequency	NU.7	0.517	0.040	0.078	1.055	1.027	22,411	165	0.437	0.597
Milk feeding frequency for non-breastfed children	NU.7	0.691	0.047	0.068	0.584	0.764	7,733	57	0.597	0.785
Bottle feeding	NU.8	0.308	0.034	0.112	1.190	1.091	29,024	215	0.239	0.377
Vitamin A supplementation (children under age 5)	NU.10	0.840	0.016	0.019	0.984	0.992	65,262	498	0.807	0.873
Tuberculosis immunization coverage	CH.2	0.961	0.004	0.004	0.056	0.236	16,049	118	0.953	0.970

Table SE.7: Sampling errors: North Central area and Central Coastal area

Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deff*), and confidence intervals for selected indicators, Viet Nam, 2011

	Table	Value (*r*)	Standard error (*se*)	Coefficient of variation (*se/r*)	Design effect (*deff*)	Square root of design effect (*deff*)	Weighted count	Unweighted count	Confidence limits *r - 2se*	Confidence limits *r + 2se*
Polio immunization coverage	CH.2	0.619	0.046	0.074	1.028	1.014	16,049	118	0.528	0.710
Immunization coverage for DPT	CH.2	0.651	0.030	0.046	0.458	0.677	15,823	116	0.591	0.711
Measles immunization coverage	CH.2	0.941	0.015	0.016	0.490	0.700	15,901	117	0.910	0.972
Fully immunized children	CH.2	0.282	0.057	0.203	1.885	1.373	16,049	118	0.168	0.396
Diarrhoea in last two weeks	CH.4	0.069	0.014	0.200	1.608	1.268	71,876	548	0.041	0.096
Oral rehydration therapy with continued feeding	CH.6	0.529	0.035	0.065	0.173	0.416	4,931	37	0.460	0.598
Acute respiratory infection in last two weeks	CH.7	0.054	0.013	0.233	1.691	1.300	71,876	548	0.029	0.079
Antibiotic treatment of suspected pneumonia	CH.7	0.552	0.045	0.082	0.225	0.474	3,871	28	0.462	0.643
Care-seeking for suspected pneumonia	CH.7	0.585	0.037	0.063	0.151	0.388	3,871	28	0.512	0.659
Children under 5 sleeping under an insecticide treated net	CH.12	0.090	0.027	0.297	4.671	2.161	70,496	536	0.036	0.143
Fever in last two weeks	CH.14	0.217	0.025	0.113	1.944	1.394	71,876	548	0.167	0.266
Antimalarial treatment	CH.14	0.005	0.000	0.071	0.003	0.052	15,564	117	0.004	0.005
Attendance to early childhood education	CD.1	0.674	0.031	0.046	0.994	0.997	29,558	226	0.611	0.736
Support for learning	CD.2	0.714	0.025	0.035	0.686	0.828	29,558	226	0.664	0.763
Father's support for learning	CD.2	0.628	0.029	0.046	0.812	0.901	29,558	226	0.570	0.687
Learning materials: children's books	CD.3	0.146	0.016	0.111	1.159	1.077	71,876	548	0.113	0.178
Learning materials: playthings	CD.3	0.530	0.023	0.044	1.210	1.100	71,876	548	0.483	0.577
Inadequate care	CD.4	0.174	0.020	0.116	1.557	1.248	71,876	548	0.133	0.214
Early child development Index	CD.5	0.845	0.023	0.027	0.889	0.943	29,558	226	0.800	0.891
Birth registration	CP.1	0.956	0.011	0.011	1.439	1.200	71,876	548	0.935	0.977
Safe disposal of child's faeces	WS.7	0.621	0.042	0.068	2.422	1.556	42,318	322	0.536	0.705

Table SE.8: Sampling errors: Central Highlands

Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deff*) and confidence intervals for selected indicators, Viet Nam, 2011

	Table	Value (*r*)	Standard error (*se*)	Coefficient of variation (*se/r*)	Design effect (*deff*)	Square root of design effect (*deff*)	Weighted count	Unweighted count	Confidence limits *r - 2se*	Confidence limits *r + 2se*
HOUSEHOLDS										
Iodised salt consumption	NU.9	0.881	0.011	0.013	2.282	1.511	602	1,952	0.859	0.903
Place for handwashing	WS.9	0.987	0.003	0.003	1.163	1.078	604	1,956	0.981	0.992
Availability of soap	WS.10	0.885	0.016	0.018	4.795	2.190	604	1,956	0.854	0.917
Child discipline	CP.4	0.782	0.016	0.021	1.902	1.379	702	1,249	0.750	0.814
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	WS.1	0.861	0.017	0.020	4.864	2.205	2,551	1,956	0.826	0.895
Water treatment	WS.2	0.803	0.034	0.042	1.570	1.253	355	218	0.736	0.871
Use of improved sanitation facilities (shared and not shared)	WS.5	0.685	0.033	0.048	9.825	3.135	2,551	1,956	0.620	0.751
School readiness	ED.2	0.947	0.020	0.021	1.576	1.255	6,398	205	0.908	0.986
Net intake rate in primary education	ED.3	0.904	0.027	0.030	1.472	1.213	5,586	180	0.850	0.957
Primary school net attendance ratio (adjusted)	ED.4	0.959	0.011	0.011	2.534	1.592	26,756	845	0.937	0.981
Secondary school net attendance ratio (adjusted)	ED.5	0.716	0.033	0.047	7.323	2.706	43,208	1,353	0.649	0.782
Transition rate to secondary school	ED.7	0.972	0.012	0.013	0.946	0.973	5,306	170	0.948	0.997
Child labour	CP.2	0.115	0.013	0.114	3.000	1.732	56,241	1,783	0.089	0.142
Children's living arrangements	CP.9	0.023	0.003	0.133	1.263	1.124	98,807	3,119	0.017	0.028
Prevalence of children with at least one parent dead	CP.9	0.050	0.007	0.146	3.490	1.868	98,807	3,119	0.035	0.065
WOMEN										
Antenatal care coverage	RH.6	0.879	0.027	0.031	1.891	1.375	9,242	272	0.824	0.933
Skilled attendant at delivery	RH.9	0.797	0.046	0.057	3.509	1.873	9,242	272	0.706	0.889
Institutional deliveries	RH.10	0.789	0.046	0.059	3.491	1.868	9,242	272	0.696	0.882
Caesarean section	RH.9	0.114	0.023	0.205	1.465	1.210	9,242	272	0.067	0.160
Content of antenatal care	RH.8	0.193	0.027	0.140	1.265	1.125	9,242	272	0.139	0.247
Infants weighed at birth	NU.11	0.796	0.041	0.052	2.846	1.687	9,242	272	0.714	0.879
Children ever breastfed	NU.2	0.985	0.006	0.006	0.751	0.866	9,242	272	0.972	0.998
Early initiation of breastfeeding	NU.2	0.370	0.037	0.099	1.556	1.247	9,242	272	0.296	0.443

Table SE.8: Sampling errors: Central Highlands

Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deft*) and confidence intervals for selected indicators, Viet Nam, 2011

	Table	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
Contraceptive prevalence	RH.4	0.758	0.017	0.023	2.313	1.521	46,732	1,440	0.724	0.792
Adult literacy	ED.1	0.899	0.028	0.032	5.869	2.423	21,764	658	0.842	0.956
Marriage before age 18	CP.5	0.151	0.013	0.083	2.059	1.435	54,160	1,691	0.126	0.176
Polygyny	CP.5	0.020	0.004	0.215	1.330	1.153	46,732	1,440	0.011	0.028
Comprehensive knowledge about HIV prevention	HA.1	0.409	0.022	0.054	4.155	2.038	67,111	2,078	0.365	0.453
Comprehensive knowledge about HIV prevention among young people	HA.2	0.425	0.033	0.078	2.995	1.731	21,764	658	0.359	0.492
Accepting attitudes towards people living with HIV	HA.4	0.254	0.014	0.054	1.790	1.338	58,388	1,824	0.227	0.281
Women who have been tested for HIV during last 12 months and who have been told the results	HA.5	0.029	0.004	0.152	1.463	1.209	67,111	2,078	0.020	0.038
Knowledge of mother-to-child transmission of HIV	HA.3	0.449	0.022	0.049	4.065	2.016	67,111	2,078	0.405	0.493
Children under 5										
Underweight prevalence	NU.1	0.176	0.014	0.081	1.005	1.003	22,904	714	0.147	0.204
Stunting prevalence	NU.1	0.306	0.022	0.072	1.618	1.272	22,713	709	0.262	0.350
Wasting prevalence	NU.1	0.041	0.008	0.207	1.289	1.135	22,728	709	0.012	0.070
Exclusive breastfeeding under 6 months	NU.3	0.116	0.026	0.226	0.363	0.602	1,752	55	0.064	0.169
Predominant breastfeeding under 6 months	NU.3	0.499	0.033	0.065	0.230	0.480	1,752	55	0.433	0.564
Continued breastfeeding at 1 year	NU.3	0.912	0.028	0.031	0.524	0.724	1,784	53	0.855	0.969
Continued breastfeeding at 2 years	NU.3	0.330	0.046	0.139	0.507	0.712	1,760	54	0.238	0.422
Age-appropriate breastfeeding	NU.5	0.322	0.033	0.101	1.371	1.171	9,307	282	0.257	0.387
Minimum meal frequency	NU.7	0.367	0.027	0.073	0.704	0.839	7,555	227	0.313	0.421
Milk feeding frequency for non-breastfed children	NU.7	0.775	0.028	0.036	0.295	0.544	2,183	66	0.719	0.832
Bottle feeding	NU.8	0.300	0.034	0.114	1.557	1.248	9,307	282	0.231	0.368
Vitamin A supplementation (children under age 5)	NU.10	0.858	0.027	0.031	3.876	1.969	21,557	672	0.804	0.911

Table SE.8: Sampling errors: Central Highlands

Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deff*) and confidence intervals for selected indicators, Viet Nam, 2011

	Table	Value (r)	Standard error (se)	Coefficient of variation (se/r)	Design effect (deff)	Square root of design effect (deff)	Weighted count	Unweighted count	Confidence limits r - 2se	Confidence limits r + 2se
Tuberculosis immunization coverage	CH.2	0.913	0.040	0.044	3.200	1.789	5,304	162	0.833	0.992
Polio immunization coverage	CH.2	0.636	0.041	0.064	1.168	1.081	5,374	163	0.554	0.717
Immunization coverage for DPT	CH.2	0.634	0.037	0.059	0.958	0.979	5,308	161	0.560	0.709
Measles immunization coverage	CH.2	0.879	0.041	0.047	2.519	1.587	5,288	161	0.797	0.961
Fully immunized children	CH.2	0.362	0.033	0.090	0.745	0.863	5,410	164	0.297	0.427
Diarrhoea in last two weeks	CH.4	0.063	0.010	0.165	1.333	1.154	23,309	727	0.042	0.084
Oral rehydration therapy with continued feeding	CH.6	0.584	0.028	0.047	0.135	0.367	1,465	44	0.529	0.639
Acute respiratory infection in last two weeks	CH.7	0.038	0.008	0.203	1.195	1.093	23,309	727	0.023	0.054
Antibiotic treatment of suspected pneumonia	CH.7	0.677	0.050	0.074	0.309	0.556	895	28	0.577	0.777
Care-seeking for suspected pneumonia	CH.7	0.699	0.035	0.050	0.159	0.399	895	28	0.628	0.769
Children under 5 sleeping under an insecticide treated net	CH.12	0.210	0.035	0.166	5.200	2.280	22,842	713	0.141	0.280
Fever in last two weeks	CH.14	0.086	0.010	0.111	0.838	0.915	23,309	727	0.067	0.105
Antimalarial treatment	CH.14	0.028	0.002	0.058	0.006	0.079	2,013	66	0.025	0.031
Attendance to early childhood education	CD.1	0.579	0.043	0.074	2.106	1.451	8,877	284	0.494	0.664
Support for learning	CD.2	0.720	0.042	0.059	2.499	1.581	8,877	284	0.635	0.804
Father's support for learning	CD.2	0.653	0.032	0.049	1.284	1.133	8,877	284	0.589	0.717
Learning materials: children's books	CD.3	0.107	0.013	0.120	1.250	1.118	23,309	727	0.081	0.132
Learning materials: playthings	CD.3	0.406	0.019	0.048	1.141	1.068	23,309	727	0.367	0.445
Inadequate care	CD.4	0.146	0.017	0.118	1.724	1.313	23,309	727	0.111	0.180
Early child development Index	CD.5	0.682	0.036	0.053	1.688	1.299	8,877	284	0.610	0.754
Birth registration	CP.1	0.924	0.020	0.021	4.083	2.021	23,309	727	0.885	0.964
Safe disposal of child's faeces	WS.7	0.548	0.044	0.080	3.414	1.848	14,432	443	0.461	0.636

Table SE.9: Sampling errors: South East

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft) and confidence intervals for selected indicators, Viet Nam, 2011

	Table	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										
Iodised salt consumption	NU.9	0.565	0.022	0.039	3.863	1.966	1,855	1,910	0.521	0.610
Place for handwashing	WS.9	0.964	0.006	0.006	1.750	1.323	1,873	1,928	0.953	0.975
Availability of soap	WS.10	0.970	0.005	0.006	1.939	1.392	1,873	1,928	0.959	0.981
Child discipline	CP.4	0.695	0.020	0.028	1.835	1.354	1,457	1,009	0.656	0.734
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	WS.1	0.984	0.004	0.004	1.729	1.315	7,066	1,928	0.977	0.992
Water treatment	WS.2	0.687	0.064	0.094	0.538	0.734	110	29	0.558	0.816
Use of improved sanitation facilities (shared and not shared)	WS.5	0.925	0.012	0.013	3.729	1.931	7,066	1,928	0.902	0.948
School readiness	ED.2	0.890	0.024	0.027	0.750	0.866	12,378	125	0.842	0.939
Net intake rate in primary education	ED.3	0.954	0.022	0.023	1.352	1.163	13,004	129	0.910	0.997
Primary school net attendance ratio (adjusted)	ED.4	0.974	0.008	0.008	1.522	1.234	55,260	564	0.958	0.991
Secondary school net attendance ratio (adjusted)	ED.5	0.809	0.016	0.020	1.391	1.179	78,411	838	0.777	0.841
Transition rate to secondary school	ED.7	0.982	0.019	0.020	1.759	1.326	8,334	87	0.943	1.000
Child labour	CP.2	0.063	0.008	0.125	1.194	1.093	110,459	1,145	0.047	0.078
Children's living arrangements	CP.9	0.054	0.008	0.143	2.431	1.559	200,635	2,082	0.038	0.069
Prevalence of children with at least one parent dead	CP.9	0.030	0.005	0.173	1.921	1.386	200,635	2,082	0.019	0.040
WOMEN										
Antenatal care coverage	RH.6	0.991	0.004	0.004	0.396	0.629	21,372	215	0.983	0.999
Skilled attendant at delivery	RH.9	0.994	0.006	0.006	1.248	1.117	21,372	215	0.983	1.000
Institutional deliveries	RH.10	0.994	0.006	0.006	1.248	1.117	21,372	215	0.983	1.000
Caesarean section	RH.9	0.335	0.033	0.099	1.058	1.029	21,372	215	0.268	0.401
Content of antenatal care	RH.8	0.737	0.025	0.034	0.713	0.845	21,372	215	0.686	0.788
Infants weighed at birth	NU.11	1.000	0.000	0.000	.	.	21,372	215	1.000	1.000
Children ever breastfed	NU.2	0.959	0.012	0.012	0.775	0.880	21,372	215	0.935	0.983

Table SE.9: Sampling errors: South East

Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deff*) and confidence intervals for selected indicators, Viet Nam, 2011

	Table	Value (r)	Standard error (se)	Coefficient of variation (se/r)	Design effect (deff)	Square root of design effect (deff)	Weighted count	Unweighted count	Confidence limits r - 2se	Confidence limits r + 2se
Early initiation of breastfeeding	NU.2	0.289	0.033	0.115	1.146	1.071	21,372	215	0.223	0.355
Contraceptive prevalence	RH.4	0.786	0.012	0.016	1.224	1.106	133,514	1,334	0.761	0.811
Adult literacy	ED.1	0.983	0.007	0.007	1.934	1.391	60,401	622	0.969	0.997
Marriage before age 18	CP.5	0.088	0.007	0.085	1.267	1.125	180,518	1,832	0.073	0.103
Polygyny	CP.5	0.031	0.006	0.195	1.611	1.269	133,514	1,334	0.019	0.043
Comprehensive knowledge about HIV prevention	HA.1	0.497	0.014	0.028	1.667	1.291	208,015	2,116	0.469	0.525
Comprehensive knowledge about HIV prevention among young people	HA.2	0.539	0.021	0.040	1.135	1.066	60,401	622	0.496	0.581
Accepting attitudes towards people living with HIV	HA.4	0.204	0.010	0.051	1.361	1.167	205,251	2,082	0.183	0.225
Women who have been tested for HIV during last 12 months and who have been told the results	HA.5	0.080	0.006	0.074	1.005	1.002	208,015	2,116	0.068	0.092
Knowledge of mother-to-child transmission of HIV	HA.3	0.559	0.013	0.023	1.467	1.211	208,015	2,116	0.533	0.585
Children under 5										
Underweight prevalence	NU.1	0.045	0.011	0.237	1.523	1.234	56,310	572	0.024	0.067
Stunting prevalence	NU.1	0.097	0.016	0.163	1.616	1.271	55,762	567	0.065	0.129
Wasting prevalence	NU.1	0.037	0.008	0.232	1.149	1.072	55,467	564	0.015	0.058
Exclusive breastfeeding under 6 months	NU.3	0.073	0.025	0.349	0.402	0.634	4,145	43	0.022	0.124
Predominant breastfeeding under 6 months	NU.3	0.333	0.071	0.213	0.951	0.975	4,145	43	0.191	0.474
Continued breastfeeding at 1 year	NU.3	0.598	0.074	0.123	0.926	0.962	3,955	42	0.451	0.746
Continued breastfeeding at 2 years	NU.3	0.074	0.026	0.350	0.438	0.662	4,748	46	0.022	0.125
Age-appropriate breastfeeding	NU.5	0.210	0.031	0.149	1.331	1.154	21,795	225	0.147	0.273
Minimum meal frequency	NU.7	0.701	0.034	0.049	1.017	1.009	17,649	182	0.632	0.769
Milk feeding frequency for non-breastfed children	NU.7	0.986	0.010	0.010	0.785	0.886	10,117	108	0.965	1.000
Bottle feeding	NU.8	0.682	0.032	0.047	1.060	1.030	21,795	225	0.618	0.746
Vitamin A supplementation (children under age 5)	NU.10	0.776	0.017	0.022	0.893	0.945	53,044	538	0.742	0.810
Tuberculosis immunization coverage	CH.2	0.988	0.003	0.003	0.093	0.305	12,086	125	0.982	0.994

Table SE.9: Sampling errors: South East

Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deff*) and confidence intervals for selected indicators, Viet Nam, 2011

	Table	Value (*r*)	Standard error (*se*)	Coefficient of variation (*se/r*)	Design effect (*deff*)	Square root of design effect (*deff*)	Weighted count	Unweighted count	Confidence limits *r - 2se*	Confidence limits *r + 2se*
Polio immunization coverage	CH.2	0.787	0.039	0.050	1.132	1.064	12,086	125	0.709	0.866
Immunization coverage for DPT	CH.2	0.890	0.026	0.029	0.829	0.911	12,086	125	0.838	0.941
Measles immunization coverage	CH.2	0.962	0.014	0.015	0.682	0.826	12,032	124	0.933	0.990
Fully immunized children	CH.2	0.536	0.058	0.109	1.688	1.299	12,086	125	0.419	0.652
Diarrhoea in last two weeks	CH.4	0.050	0.008	0.164	0.820	0.905	57,190	581	0.033	0.066
Oral rehydration therapy with continued feeding	CH.6	0.597	0.054	0.091	0.364	0.604	2,844	31	0.489	0.705
Acute respiratory infection in last two weeks	CH.7	0.035	0.009	0.253	1.346	1.160	57,190	581	0.017	0.053
Antibiotic treatment of suspected pneumonia	CH.7	0.901	0.000	0.000	0.000	0.000	2,009	18	0.901	0.901
Care-seeking for suspected pneumonia	CH.7	1.000	0.000	0.000			2,009	18	1.000	1.000
Children under 5 sleeping under an insecticide treated net	CH.12	0.052	0.015	0.299	2.748	1.658	55,873	568	0.021	0.082
Fever in last two weeks	CH.14	0.193	0.015	0.080	0.875	0.935	57,190	581	0.162	0.223
Antimalarial treatment	CH.14	0.032	0.014	0.447	0.749	0.865	11,010	116	0.003	0.060
Attendance to early childhood education	CD.1	0.691	0.029	0.043	0.959	0.979	23,283	237	0.633	0.750
Support for learning	CD.2	0.800	0.025	0.031	0.900	0.949	23,283	237	0.750	0.849
Father's support for learning	CD.2	0.681	0.029	0.043	0.938	0.969	23,283	237	0.622	0.740
Learning materials: children's books	CD.3	0.343	0.022	0.065	1.280	1.132	57,190	581	0.298	0.388
Learning materials: playthings	CD.3	0.516	0.021	0.041	1.034	1.017	57,190	581	0.474	0.559
Inadequate care	CD.4	0.043	0.008	0.190	0.948	0.974	57,190	581	0.027	0.060
Early child development Index	CD.5	0.863	0.022	0.025	0.950	0.975	23,283	237	0.819	0.906
Birth registration	CP.1	0.962	0.009	0.010	1.368	1.170	57,190	581	0.944	0.981
Safe disposal of child's faeces	WS.7	0.777	0.028	0.036	1.524	1.234	33,907	344	0.722	0.833

Table SE.10: Sampling errors: Mekong River Delta

Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deff*) and confidence intervals for selected indicators, Viet Nam, 2011

	Table	Value (*r*)	Standard error (*se*)	Coefficient of variation (*se/r*)	Design effect (*deff*)	Square root of design effect (*deff*)	Weighted count	Unweighted count	Confidence limits	
									r − 2se	*r + 2se*
HOUSEHOLDS										
Iodised salt consumption	NU.9	0.424	0.020	0.046	3.011	1.735	2,154	1,908	0.384	0.463
Place for handwashing	WS.9	0.970	0.005	0.005	1.522	1.234	2,178	1,925	0.960	0.980
Availability of soap	WS.10	0.962	0.005	0.005	1.156	1.075	2,178	1,925	0.952	0.971
Child discipline	CP.4	0.782	0.014	0.018	1.256	1.121	1,896	1,124	0.755	0.810
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	WS.1	0.931	0.017	0.018	8.509	2.917	8,434	1,925	0.897	0.964
Water treatment	WS.2	0.867	0.023	0.027	0.580	0.762	584	124	0.820	0.914
Use of improved sanitation facilities (shared and not shared)	WS.5	0.443	0.026	0.059	5.312	2.305	8,434	1,925	0.391	0.495
School readiness	ED.2	0.819	0.041	0.050	1.563	1.250	15,944	141	0.737	0.900
Net intake rate in primary education	ED.3	0.949	0.021	0.022	1.232	1.110	15,984	141	0.908	0.991
Primary school net attendance ratio (adjusted)	ED.4	0.979	0.006	0.006	1.189	1.090	76,405	683	0.966	0.991
Secondary school net attendance ratio (adjusted)	ED.5	0.723	0.022	0.030	2.049	1.432	96,850	872	0.680	0.767
Transition rate to secondary school	ED.7	0.992	0.008	0.008	1.053	1.026	16,427	138	0.977	1.000
Child labour	CP.2	0.109	0.012	0.111	2.002	1.415	147,992	1,328	0.085	0.133
Children's living arrangements	CP.9	0.088	0.010	0.109	2.596	1.611	253,420	2,275	0.069	0.107
Prevalence of children with at least one parent dead	CP.9	0.035	0.005	0.148	1.827	1.352	253,420	2,275	0.025	0.046
WOMEN										
Antenatal care coverage	RH.6	0.944	0.026	0.028	2.463	1.570	21,025	188	0.891	0.997
Skilled attendant at delivery	RH.9	0.982	0.009	0.010	0.963	0.981	21,025	188	0.963	1.000
Institutional deliveries	RH.10	0.982	0.009	0.010	0.963	0.981	21,025	188	0.963	1.000
Caesarean section	RH.9	0.145	0.018	0.124	0.483	0.695	21,025	188	0.109	0.180
Content of antenatal care	RH.8	0.389	0.033	0.084	0.838	0.915	21,025	188	0.324	0.455
Infants weighed at birth	NU.11	1.000	0.000	0.000	.	.	21,025	188	1.000	1.000

Table SE.10: Sampling errors: Mekong River Delta

Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deff*) and confidence intervals for selected indicators, Viet Nam, 2011

	Table	Value (*r*)	Standard error (*se*)	Coefficient of variation (*se/r*)	Design effect (*deff*)	Square root of design effect (*deff*)	Weighted count	Unweighted count	Confidence limits	
									r − 2se	*r* + 2se
Children ever breastfed	NU.2	0.977	0.010	0.010	0.776	0.881	21,025	188	0.958	0.996
Early initiation of breastfeeding	NU.2	0.333	0.036	0.107	1.072	1.035	21,025	188	0.262	0.405
Contraceptive prevalence	RH.4	0.807	0.012	0.015	1.332	1.154	161,888	1,395	0.783	0.831
Adult literacy	ED.1	0.966	0.010	0.010	1.494	1.222	59,309	535	0.947	0.985
Marriage before age 18	CP.5	0.163	0.012	0.072	1.693	1.301	193,956	1,693	0.140	0.187
Polygyny	CP.5	0.026	0.005	0.200	1.503	1.226	161,888	1,395	0.016	0.037
Comprehensive knowledge about HIV prevention	HA.1	0.337	0.014	0.040	1.596	1.263	221,966	1,949	0.310	0.364
Comprehensive knowledge about HIV prevention among young people	HA.2	0.425	0.029	0.069	1.853	1.361	59,309	535	0.367	0.483
Accepting attitudes towards people living with HIV	HA.4	0.186	0.010	0.054	1.273	1.128	213,416	1,877	0.166	0.207
Women who have been tested for HIV during last 12 months and who have been told the results	HA.5	0.059	0.006	0.099	1.191	1.091	221,966	1,949	0.047	0.070
Knowledge of mother-to-child transmission of HIV	HA.3	0.612	0.012	0.019	1.132	1.064	221,966	1,949	0.588	0.635
Children under 5										
Underweight prevalence	NU.1	0.143	0.018	0.129	1.555	1.247	64,469	562	0.106	0.180
Stunting prevalence	NU.1	0.207	0.018	0.087	1.089	1.044	64,105	557	0.171	0.243
Wasting prevalence	NU.1	0.048	0.010	0.212	1.258	1.122	63,924	556	0.011	0.085
Exclusive breastfeeding under 6 months	NU.3	0.017	0.000	0.026	0.000	0.021	4,498	39	0.016	0.018
Predominant breastfeeding under 6 months	NU.3	0.355	0.063	0.176	0.649	0.806	4,498	39	0.230	0.480
Continued breastfeeding at 1 year	NU.3	0.571	0.026	0.045	0.099	0.314	3,924	37	0.519	0.623
Continued breastfeeding at 2 years	NU.3	0.199	0.021	0.104	0.086	0.294	3,509	33	0.158	0.241
Age-appropriate breastfeeding	NU.5	0.336	0.028	0.084	0.723	0.850	22,856	205	0.280	0.393
Minimum meal frequency	NU.7	0.606	0.033	0.054	0.753	0.868	18,358	166	0.540	0.672
Milk feeding frequency for non-breastfed children	NU.7	0.790	0.041	0.052	0.823	0.907	8,533	81	0.708	0.873
Bottle feeding	NU.8	0.562	0.035	0.062	0.996	0.998	22,856	205	0.493	0.632
Vitamin A supplementation (children under age 5)	NU.10	0.795	0.018	0.023	1.074	1.036	60,480	528	0.758	0.831

Table SE.10: Sampling errors: Mekong River Delta

Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deff*), and confidence intervals for selected indicators, Viet Nam, 2011

	Table	Value (*r*)	Standard error (*se*)	Coefficient of variation (*se/r*)	Design effect (*deff*)	Square root of design effect (*deff*)	Weighted count	Unweighted count	Confidence limits *r* − 2se	Confidence limits *r* + 2se
Tuberculosis immunization coverage	CH.2	0.937	0.016	0.018	0.468	0.684	11,360	103	0.904	0.970
Polio immunization coverage	CH.2	0.721	0.032	0.044	0.500	0.707	11,120	101	0.657	0.784
Immunization coverage for DPT	CH.2	0.738	0.038	0.051	0.730	0.855	10,768	99	0.662	0.814
Measles immunization coverage	CH.2	0.846	0.020	0.024	0.311	0.558	11,140	101	0.806	0.886
Fully immunized children	CH.2	0.327	0.045	0.136	0.923	0.961	11,360	103	0.238	0.416
Diarrhoea in last two weeks	CH.4	0.062	0.012	0.189	1.335	1.155	64,978	567	0.039	0.085
Oral rehydration therapy with continued feeding	CH.6	0.447	0.050	0.113	0.339	0.582	4,031	34	0.346	0.548
Acute respiratory infection in last two weeks	CH.7	0.019	0.006	0.284	0.907	0.952	64,978	567	0.008	0.031
Antibiotic treatment of suspected pneumonia	CH.7	0.297	0.089	0.298	0.413	0.643	1,264	12	0.120	0.474
Care-seeking for suspected pneumonia	CH.7	1.000	0.000	0.000			1,264	12	1.000	1.000
Children under 5 sleeping under an insecticide treated net	CH.12	0.063	0.016	0.259	2.429	1.558	62,396	544	0.030	0.095
Fever in last two weeks	CH.14	0.123	0.013	0.108	0.930	0.964	64,978	567	0.097	0.150
Antimalarial treatment	CH.14	0.008	0.000	0.048	0.001	0.038	8,011	78	0.007	0.009
Attendance to early childhood education	CD.1	0.472	0.046	0.097	1.985	1.409	27,394	237	0.381	0.564
Support for learning	CD.2	0.767	0.035	0.046	1.659	1.288	27,394	237	0.697	0.838
Father's support for learning	CD.2	0.465	0.033	0.071	1.021	1.011	27,394	237	0.400	0.531
Learning materials: children's books	CD.3	0.125	0.018	0.143	1.648	1.284	64,978	567	0.089	0.161
Learning materials: playthings	CD.3	0.479	0.025	0.051	1.367	1.169	64,978	567	0.430	0.528
Inadequate care	CD.4	0.075	0.014	0.191	1.681	1.296	64,978	567	0.046	0.104
Early child development Index	CD.5	0.798	0.030	0.038	1.336	1.156	27,394	237	0.738	0.859
Birth registration	CP.1	0.907	0.024	0.026	3.862	1.965	64,978	567	0.859	0.955
Safe disposal of child's faeces	WS.7	0.509	0.034	0.067	1.507	1.228	37,584	330	0.441	0.576

APPENDIX D. Data Quality Tables

Table DQ.1: Age distribution of household population Single-year age distribution of household population by sex, Viet Nam, 2011				
	Sex			
	Male		Female	
	Number	Percent	Number	Percent
0	307	1.4	356	1.6
1	399	1.9	371	1.7
2	441	2.0	349	1.6
3	374	1.7	383	1.7
4	346	1.6	342	1.5
5	400	1.9	365	1.6
6	395	1.8	357	1.6
7	423	2.0	356	1.6
8	373	1.7	335	1.5
9	337	1.6	365	1.6
10	400	1.9	356	1.6
11	373	1.7	331	1.5
12	361	1.7	344	1.5
13	412	1.9	386	1.7
14	438	2.0	405	1.8
15	412	1.9	358	1.6
16	397	1.8	405	1.8
17	414	1.9	428	1.9
18	353	1.6	333	1.5
19	305	1.4	251	1.1
20	347	1.6	352	1.6
21	295	1.4	280	1.2
22	311	1.4	337	1.5
23	354	1.6	369	1.6
Age 24	275	1.3	325	1.4
25	354	1.6	364	1.6
26	379	1.8	362	1.6
27	320	1.5	354	1.6
28	363	1.7	397	1.8
29	330	1.5	337	1.5
30	297	1.4	372	1.7
31	300	1.4	332	1.5
32	368	1.7	332	1.5
33	344	1.6	395	1.8
34	340	1.6	356	1.6
35	341	1.6	351	1.6
36	357	1.7	319	1.4
37	359	1.7	331	1.5
38	372	1.7	320	1.4
39	325	1.5	324	1.4
40	317	1.5	362	1.6
41	290	1.3	317	1.4
42	361	1.7	300	1.3
43	264	1.2	264	1.2
44	313	1.5	358	1.6
45	314	1.5	369	1.6
46	339	1.6	313	1.4
47	349	1.6	301	1.3

Table DQ.1: Age distribution of household population
Single-year age distribution of household population by sex, Viet Nam, 2011

	Sex			
	Male		Female	
	Number	Percent	Number	Percent
48	301	1.4	266	1.2
49	215	1.0	199	0.9
50	302	1.4	384	1.7
51	204	0.9	308	1.4
52	265	1.2	326	1.5
53	264	1.2	262	1.2
54	210	1.0	242	1.1
55	204	0.9	236	1.1
56	222	1.0	249	1.1
57	157	0.7	186	0.8
58	177	0.8	219	1.0
59	116	0.5	141	0.6
60	171	0.8	204	0.9
61	140	0.6	168	0.7
62	118	0.5	178	0.8
63	136	0.6	129	0.6
64	98	0.5	115	0.5
65	95	0.4	103	0.5
66	85	0.4	83	0.4
67	70	0.3	107	0.5
68	89	0.4	112	0.5
69	67	0.3	83	0.4
70	75	0.3	142	0.6
71	87	0.4	91	0.4
72	62	0.3	110	0.5
73	82	0.4	94	0.4
74	69	0.3	93	0.4
75	44	0.2	87	0.4
76	59	0.3	79	0.4
77	43	0.2	79	0.4
78	38	0.2	60	0.3
79	38	0.2	57	0.3
80+	320	1.5	576	2.6
DK/missing	0	0.0	0	0.0
Total	21559	100.0	22439	100.0

Table DQ.2: Age distribution of eligible and interviewed women
Household population of women age 10-54, interviewed women age 15-49, and percentage of eligible women who were interviewed, by five-year age groups, Viet Nam, 2011

		Household population of women age 10-54	Interviewed women age 15-49		Percentage of eligible women interviewed (Completion rate)
		Number	Number	Percent	
	10-14	1821	.	.	.
	15-19	1776	1656	14.6	93.3
	20-24	1663	1563	13.8	94.0
	25-29	1814	1754	15.5	96.7
Age	30-34	1786	1763	15.6	98.7
	35-39	1646	1608	14.2	97.7
	40-44	1603	1571	13.9	98.0
	45-49	1447	1407	12.4	97.2
	50-54	1522	.	.	.
Total (15-49)		11735	11322	100.0	96.5

Table DQ.3: Age distribution of children under 5 in household and children under 5 questionnaires
Household population of children age 0-7, children age 0-4 whose mothers/caretakers were interviewed, and percentage of children under 5 whose mothers/caretakers were interviewed, by single ages, Viet Nam, 2011

		Household population of children 0-7 years	Interviewed children under 5		Percentage of eligible Children under 5 interviewed (Completion rate)
		Number	Number	Percent	
	0	663	650	18.0	98.1
	1	770	755	20.8	98.1
	2	790	780	21.5	98.8
	3	757	753	20.8	99.5
Age	4	689	685	18.9	99.5
	5	765	.	.	.
	6	752	.	.	.
	7	779	.	.	.
Total (0-4)		3668	3624	100.0	98.8

Table DQ.4: Completeness of reporting
Percentage of observations that are missing information for selected questions and indicators,
Viet Nam, 2011

	Percent with missing/incomplete information*	Number of cases
Salt testing	0.2	11614
Starting time of interview	0.2	11614
Ending time of interview	0.2	11614
Woman's date of birth: Only month	4.0	11663
Woman's date of birth: Both month and year	0.0	11663
Date of first birth: Only month	0.8	8304
Date of first birth: Both month and year	0.0	8304
Completed years since first birth	0.0	1
Date of last birth: Only month	0.1	8304
Date of last birth: Both month and year	0.2	8304
Date of first marriage/union: Only month	5.0	8814
Date of first marriage/union: Both month and year	1.9	8814
Age at first marriage/union	0.0	8814
Age at first intercourse	0.0	1024
Time since last intercourse	0.0	1024
Starting time of interview	0.2	11663
Ending time of interview	0.3	11663
Date of birth: Only month	0.1	3678
Date of birth: Both month and year	0.0	3678
Anthropometric measurements: Weight	1.9	3678
Anthropometric measurements: Height	2.5	3678
Anthropometric measurements: Both weight and height	1.8	3678
Starting time of interview	0.3	3678
Ending time of interview	0.4	3678

Table DQ.5a: Completeness of information for anthropometric indicators
Distribution of children under 5 by completeness of information for anthropometric indicators, Viet Nam, 2011

| | | Valid weight and date of birth | Reason for exclusion from analysis | | | | Total | Percent of children excluded from analysis | Number of children under 5 |
			Weight not measured	Incomplete date of birth	Weight not measured, incomplete date of birth	Flagged cases (outliers)			
Weight by age	<6 months	95.0	0.0	0.0	0.0	5.0	100.0	5.0	319
	6-11 months	98.3	0.0	0.0	0.0	1.7	100.0	1.7	350
	12-23 months	98.2	0.1	0.0	0.0	1.7	100.0	1.8	760
	24-35 months	98.5	0.1	0.1	0.0	1.3	100.0	1.5	786
	36-47 months	98.7	0.0	0.0	0.0	1.3	100.0	1.3	770
	48-59 months	97.3	0.0	0.3	0.0	2.5	100.0	2.7	693
Total		97.9	0.1	0.1	0.0	2.0	100.0	2.1	3678

Table DQ.5b: Completeness of information for anthropometric indicators
Distribution of children under 5 by completeness of information for anthropometric indicators, Viet Nam, 2011

| | | Valid height and date of birth | Reason for exclusion from analysis | | | | Total | Percent of children excluded from analysis | Number of children under 5 |
			Height not measured	Incomplete date of birth	Height not measured, incomplete date of birth	Flagged cases (outliers)			
Height by age	<6 months	91.2	2.8	0.0	0.0	6.0	100.0	8.8	319
	6-11 months	96.3	0.6	0.0	0.0	3.1	100.0	3.7	350
	12-23 months	97.4	0.5	0.0	0.0	2.1	100.0	2.6	760
	24-35 months	97.6	1.0	0.1	0.0	1.3	100.0	2.4	786
	36-47 months	98.3	0.3	0.0	0.0	1.4	100.0	1.7	770
	48-59 months	96.8	0.1	0.3	0.0	2.7	100.0	3.2	693
Total		96.9	0.7	0.1	0.0	2.3	100.0	3.1	3678

Table DQ.5c: Completeness of information for anthropometric indicators
Distribution of children under 5 by completeness of information for anthropometric indicators, Viet Nam, 2011

					Reason for exclusion from analysis							
		Valid weight and height	Weight not measured	Height not measured	Incomplete date of birth	Weight not measured, incomplete date of birth	Height not measured, incomplete date of birth	Weight and height not measured, incomplete date of birth	Flagged cases (outliers)	Total	Percent of children excluded from analysis	Number of children under 5
Weight by height	<6 months	90.6	0.0	2.8	0.0	0.0	0.0	0.0	6.6	100.0	9.4	319
	6-11 months	97.4	0.0	0.6	0.0	0.0	0.0	0.0	2.0	100.0	2.6	350
	12-23 months	97.2	0.1	0.5	0.0	0.0	0.0	0.0	2.1	100.0	2.8	760
	24-35 months	97.2	0.1	1.0	0.1	0.0	0.0	0.0	1.5	100.0	2.8	786
	36-47 months	98.1	0.0	0.3	0.0	0.0	0.0	0.0	1.7	100.0	1.9	770
	48-59 months	96.7	0.0	0.1	0.3	0.0	0.0	0.0	2.9	100.0	3.3	693
Total		96.7	0.1	0.7	0.1	0.0	0.0	0.0	2.4	100.0	3.3	3678

Table DQ.6: Heaping in anthropometric measurements
Distribution of weight and height/length measurements by digits reported for decimals, Viet Nam, 2011

		Weight		Height	
		Number	Percent	Number	Percent
Digits	0	451	12.5	794	22.0
	1	341	9.5	331	9.2
	2	380	10.5	396	11.0
	3	367	10.2	339	9.4
	4	307	8.5	320	8.9
	5	420	11.7	468	13.0
	6	317	8.8	258	7.2
	7	341	9.5	241	6.7
	8	369	10.2	251	7.0
	9	312	8.7	209	5.8
	0 or 5	871	24.2	1262	35.0
Total		3605	100.0	3607	100.0

Table DQ.7: Observation of bednets and places for hand washing
Percentage of bednets in all households interviewed observed by the interviewer, and percentage of places for handwashing observed by the interviewer in all interviewed households, Viet Nam, 2011

		Percentage of bednets observed by interviewer	Total number of bednets	Observation of places for handwashing: Observed	Place for handwashing not in dwelling	No permission to see	Other	Total	Number of households interviewed
Region	Red River Delta	91.5	4708	99.1	0.3	0.6	0.1	100.0	1907
	Northern Midland and Mountain areas	95.1	5011	98.9	0.5	0.3	0.3	100.0	1955
	North Central area and Central Coastal area	87.7	4609	97.4	1.1	1.2	0.2	100.0	1943
	Central Highlands	95.5	4641	98.8	0.8	0.2	0.2	100.0	1956
	South East	79.3	3558	96.2	0.4	2.6	0.8	100.0	1928
	Mekong River Delta	85.7	5665	96.4	1.2	1.2	1.1	100.0	1925
Area	Urban	85.8	11573	97.2	0.6	1.7	0.5	100.0	5001
	Rural	92.1	16619	98.2	0.8	0.5	0.4	100.0	6613
Wealth index quintiles	Poorest	95.1	5299	97.9	1.6	0.2	0.3	100.0	2307
	Second	92.0	5155	98.4	0.8	0.3	0.5	100.0	2073
	Middle	91.4	5530	98.7	0.4	0.6	0.3	100.0	2251
	Fourth	86.7	5935	97.1	0.7	1.7	0.5	100.0	2435
	Richest	82.4	6273	97.1	0.2	2.1	0.6	100.0	2548
Total		89.5	28192	97.8	0.7	1.0	0.4	100.0	11614

Table DQ.8: 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, Viet Nam, 2011

| | | Woman does not have health card | Woman has health card | | | 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)	Missing/DK			
Region	Red River Delta	38.4	11.8	49.3	0.5	100.0	19.4	203
	Northern Midland and Mountain areas	64.0	9.7	26.3	0.0	100.0	27.0	278
	North Central area and Central Coastal area	38.6	10.1	50.7	0.5	100.0	16.7	207
	Central Highlands	57.0	4.8	37.1	1.1	100.0	11.4	272
	South East	21.4	25.1	53.5	0.0	100.0	32.0	215
	Mekong River Delta	33.5	17.6	48.9	0.0	100.0	26.4	188
Area	Urban	30.6	16.6	52.4	0.4	100.0	24.1	542
	Rural	52.9	10.0	36.8	0.4	100.0	21.4	821
Wealth index quintiles	Poorest	70.6	7.3	21.4	0.6	100.0	25.5	327
	Second	50.2	11.7	38.1	0.0	100.0	23.4	223
	Middle	42.5	9.2	47.9	0.4	100.0	16.1	240
	Fourth	31.3	16.8	51.5	0.4	100.0	24.6	268
	Richest	23.3	18.0	58.4	0.3	100.0	23.6	305
Total		44.0	12.6	43.0	0.4	100.0	22.7	1363

Table DQ.9: Observation of children under 5 birth certificates
Percent distribution of children under 5 by presence of birth certificates,and percentage of birth calendar seen, Viet Nam, 2011

| | | Child does not have birth certificate | Child has birth certificate | | Missing/DK | Total | Percent of birth certificates seen by the interviewer (1)/ (1+2)*100 | Number of children under 5 |
			Seen by the interviewer (1)	Not seen by the interviewer (2)				
Region	Red River Delta	1.8	69.4	28.7	0.0	100.0	70.7	543
	Northern Midland and Mountain areas	8.4	59.6	32.0	0.0	100.0	65.0	712
	North Central area and Central Coastal area	5.3	65.9	28.5	0.4	100.0	69.8	548
	Central Highlands	8.9	65.6	25.3	0.1	100.0	72.2	727
	South East	4.6	73.7	21.7	0.0	100.0	77.3	581
	Mekong River Delta	10.2	63.3	26.5	0.0	100.0	70.5	567
Area	Urban	3.5	70.1	26.2	0.1	100.0	72.8	1409
	Rural	8.8	63.4	27.8	0.0	100.0	69.5	2269
Child's age	0	18.1	59.3	22.3	0.3	100.0	72.6	663
	1	6.8	66.3	26.9	0.0	100.0	71.1	765
	2	4.4	68.7	26.8	0.0	100.0	71.9	787
	3	3.4	67.9	28.7	0.0	100.0	70.3	770
	4	2.3	66.7	30.9	0.1	100.0	68.3	693
Total		6.8	66.0	27.2	0.1	100.0	70.8	3678

Table DQ.10: Observation of vaccination cards
Percent distribution of children under 5 by presence of a vaccination card, and the percentage of vaccination cards seen by the interviewers, Viet Nam, 2011

| | | Child does not have vaccination card | | Child has vaccination card | | | | Percent of vaccination cards seen by the interviewer (1)/ (1+2)*100 | Number of children under 5 |
		Had vaccination card previously	Never had vaccination card	Seen by the interviewer (1)	Not seen by the interviewer (2)	Missing/DK	Total		
Region	Red River Delta	1.7	7.0	38.9	52.5	0.2	100.0	42.5	543
	Northern Midland and Mountain areas	5.9	26.5	31.6	35.8	0.1	100.0	46.9	712
	North Central area and Central Coastal area	6.0	9.1	38.5	46.4	0.2	100.0	45.4	548
	Central Highlands	9.4	8.9	38.5	43.2	0.0	100.0	47.1	727
	South East	4.3	3.1	57.7	34.9	0.0	100.0	62.3	581
	Mekong River Delta	5.1	12.3	39.9	42.7	0.0	100.0	48.3	567
Area	Urban	4.6	6.0	49.4	40.0	0.1	100.0	55.3	1409
	Rural	6.2	15.2	34.9	43.6	0.0	100.0	44.4	2269
Child's age	0	1.4	15.7	65.3	17.6	0.0	100.0	78.7	663
	1	3.5	8.8	51.4	36.3	0.0	100.0	58.6	765
	2	6.1	10.4	37.6	45.9	0.1	100.0	45.1	787
	3	6.0	10.8	28.1	55.1	0.3	100.0	33.8	770
	4	11.0	13.6	21.6	53.8	0.0	100.0	28.7	693
Total		5.6	11.7	40.5	42.2	0.1	100.0	48.9	3678

Table DQ.11: Presence of mother in the household and the person interviewed for the children under 5 questionnaire
Distribution of children under 5 by whether the mother lives in the same household, and the person interviewed for the children under 5 questionnaire, Viet Nam, 2011

		Mother in the household			Mother not in the household					
		Mother interviewed	Father interviewed	Other adult female interviewed	Father interviewed	Other adult female interviewed	Other adult male interviewed	Total	Number of children under 5
Age	0	98.3	0.0	0.2	0.0	1.5	0.0	100.0	663
	1	93.8	0.0	0.0	0.0	5.9	0.3	100.0	770
	2	92.4	0.4	0.0	0.2	6.9	0.1	100.0	790
	3	92.7	0.0	0.2	0.8	6.3	0.0	100.0	757
	4	91.6	0.2	0.0	1.0	6.6	0.7	100.0	689
Total		93.7	0.1	0.1	0.4	5.5	0.2	100.0	3668

Table DQ.12: 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, Viet Nam, 2011

		Percent of households where correct selection was performed	Number of households with two or more children age 2-14 years
Region	Red River Delta	96.6	409
	Northern Midland and Mountain areas	97.8	507
	North Central area and Central Coastal area	95.8	425
	Central Highlands	95.6	680
	South East	94.9	391
	Mekong River Delta	98.5	480
Area	Urban	96.1	984
	Rural	96.8	1908
Number of households by number of children 2-14	2	96.8	2279
	3	95.2	461
	4	96.1	152
Total		96.5	2892

Table DQ.13: School attendance by single age
Distribution of household population age 5-24 by educational level and grade attended in the current (or most recent) school year, Viet Nam, 2011

		Not attending school	Pre school	Primary					Lower Secondary				Upper Secondary	Professional School	College/ University and above	DK	Total	Number of household members
				1	2	3	4	5	6	7	8	9						
Age at beginning of school year	5	5.5	70.2	24.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	763
	6	2.4	2.2	68.4	26.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	788
	7	1.5	0.5	5.6	70.6	21.6	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	722
	8	1.0	0.0	1.0	8.6	68.5	20.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	694
	9	1.2	0.0	0.9	2.1	7.5	64.7	23.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	743
	10	1.6	0.0	0.3	0.4	3.2	6.3	66.7	21.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	100.0	737
	11	2.8	0.0	0.2	0.4	0.7	1.8	6.7	67.6	19.6	0.2	0.0	0.0	0.0	0.0	0.0	100.0	684
	12	4.4	0.0	0.0	0.0	0.2	0.6	2.5	9.9	59.2	23.1	0.0	0.0	0.0	0.0	0.0	100.0	767
	13	8.5	0.0	0.0	0.0	0.3	0.6	0.6	0.7	8.8	56.8	23.3	0.5	0.0	0.0	0.0	100.0	804
	14	13.7	0.0	0.0	0.2	0.2	0.0	0.1	1.2	2.1	8.5	54.9	19.2	0.0	0.0	0.0	100.0	831
	15	24.3	0.0	0.0	0.0	0.2	0.1	0.0	0.4	0.3	2.7	6.9	64.9	0.3	0.0	0.0	100.0	746
	16	26.5	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.7	1.8	70.3	0.4	0.0	0.0	100.0	818
	17	38.5	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.8	55.2	1.9	3.4	0.0	100.0	801
	18	64.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	13.4	3.7	18.5	0.0	100.0	686
	19	66.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	1.8	8.6	23.0	0.0	100.0	593
	20	69.7	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	1.0	7.6	21.5	0.0	100.0	658
	21	77.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	5.0	17.2	0.1	100.0	591
	22	82.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	14.0	0.0	100.0	687
	23	89.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.9	8.8	0.0	100.0	643
	24	90.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	1.4	6.0	0.0	100.0	637

Table DQ.14: 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, Viet Nam, 2011

Age		Children Ever Born			Children Living			Children Deceased			Number of women
		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	
Age	15-19	42	46	0.9	42	45	0.9	0	1	0.0	1769
	20-24	396	411	1.0	384	409	0.9	12	2	6.0	1629
	25-29	1156	1075	1.1	1132	1055	1.1	24	20	1.2	1789
	30-34	1597	1614	1.0	1571	1590	1.0	26	24	1.1	1741
	35-39	1836	1781	1.0	1767	1730	1.0	69	51	1.4	1638
	40-44	2172	1959	1.1	2044	1883	1.1	128	76	1.7	1654
	45-49	2064	1978	1.0	1924	1868	1.0	140	110	1.3	1443
Total		9263	8864	1.0	8864	8580	1.0	399	284	1.8	11663

APPENDIX E. MICS 2011 Indicators: Numerators and Denominators

MICS 2011 INDICATOR	Module[1]	Numerator	Denominator	MDG[2]
1. MORTALITY				
1.1 Under-five mortality rate[3]	CM - BH	Probability of dying by exact age 5 years		MDG 4.1
1.2 Infant mortality rate[4]	CM - BH	Probability of dying by exact age 1 year		MDG 4.2
2. NUTRITION				
2.1a 2.1b Underweight prevalence	AN	Number of children under 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 5	MDG 1.8
2.2a 2.2b Stunting prevalence	AN	Number of children under 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 5	
2.3a 2.3b Wasting prevalence	AN	Number of children under 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 5	
2.4 Children ever breastfed	MN	Number of women with a live birth in the two years preceding the survey who breastfed the child at any time	Total number of women with a live birth in the two years preceding the survey	
2.5 Early initiation of breastfeeding	MN	Number of women with a live birth in the two years preceding the survey who put the newborn infant to the breast within one hour of birth	Total number of women with a live birth in the two years preceding the survey	
2.6 Exclusive breastfeeding under 6 months	BF	Number of infants under 6 months of age who are exclusively breastfed[5]	Total number of infants under 6 months of age	

1 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.

2 MDG indicators as of February 2010

3 Indicator is defined as "Probability of dying between birth and fifth birthday, during the 5-year period preceding the survey" when estimated from the birth history

4 Indicator is defined as "Probability of dying between birth and the first birthday, during the 5-year period preceding the survey" when estimated from the birth history

5 Infants receiving breast milk, and not receiving any other fluids or foods, with the exception of oral rehydration solution, vitamins, mineral supplements and medicines

MICS 2011 INDICATOR		Module[1]	Numerator	Denominator	MDG[2]
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 two years	BF	Number of children age 20-23 months who are currently breastfeeding	Total number of children age 20-23 months	
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[6] 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[7] 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[8] during the previous day	Total number of children age 0-23 months	
2.15	Milk feeding frequency for non-breastfed children	BF	Number of non-breastfed children age 6-23 months who received at least two milk feedings during the previous day	Total number of non-breastfed children age 6-23 months	
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	
2.17	Vitamin A supplementation (children under 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	
2.18	Low-birth-weight infants	MN	Number of last live births in the two years preceding the survey weighing below 2,500 grams at birth	Total number of last live births in the two years preceding the survey	
2.19	Infants weighed at birth	MN	Number of last live births in the two years preceding the survey who were weighed at birth	Total number of last live births in the two years preceding the survey	

6   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)

7   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

8   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

MICS 2011 INDICATOR	Module[1]	Numerator	Denominator	MDG[2]
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	
3.7 Neonatal tetanus protection	MN	Number of women age 15-49 years with a live birth in the two years preceding the survey who were given at least two doses of tetanus toxoid vaccine within the appropriate interval[9] prior to giving birth	Total number of women age 15-49 years with a live birth in the two years preceding the survey	
3.8 Oral rehydration therapy with continued feeding	CA	Number of children under age 5 with diarrhoea in the previous two 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 two weeks	
3.9 Care-seeking for suspected pneumonia	CA	Number of children under age 5 with suspected pneumonia in the previous two weeks who were taken to an appropriate health provider	Total number of children under age 5 with suspected pneumonia in the previous two weeks	
3.10 Antibiotic treatment of suspected pneumonia	CA	Number of children under age 5 with suspected pneumonia in the previous two weeks who received antibiotics	Total number of children under age 5 with suspected pneumonia in the previous two weeks	
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	
3.12 Household availability of insecticide-treated nets (ITNs)[10]	TN	Number of households with at least one insecticide treated net (ITN)	Total number of households	

9 See MICS 2011 manual for a detailed description

10 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

	MICS 2011 INDICATOR	Module[1]	Numerator	Denominator	MDG[2]
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[11] campaign in the last 12 months preceding the survey	Total number of households	
3.14	Children under 5 sleeping under any type of mosquito net	TN	Number of children under 5 who slept under any type of mosquito net the previous night	Total number of children under 5	
3.15	Children under 5 sleeping under insecticide-treated nets (ITNs)	TN	Number of children under 5 who slept under an insecticide-treated mosquito net (ITN) the previous night	Total number of children under 5	MDG 6.7
3.16	Malaria diagnostics usage	ML	Number of children under 5 reported to have had fever in the previous two weeks who had a finger or heel stick for malaria testing	Total number of children under 5 reported to have had fever in the previous two weeks	
3.17	Anti-malarial treatment of children under 5 the same or next day	ML	Number of children under 5 reported to have had fever in the previoustwo weeks who were treated with any anti-malarial drug within the same or next day of onset of symptoms	Total number of children under 5 reported to have had fever in the previous two weeks	
3.18	Anti-malarial treatment of children under 5	ML	Number of children under age reported to have had fever in the previous two weeks who received any antimalarial treatment	Total number of children under 5 reported to have had fever in the previous two weeks	
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	
4. WATER, SANITATION AND HYGIENE					
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-two years whose (last) stools were disposed of safely	Total number of children age 0-two years	
4.5	Place for handwashing	WS	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	WS	Number of households with soap anywhere in the dwelling	Total number of households	

[11] Indoor residual spraying

MICS 2011 INDICATOR		Module[1]	Numerator	Denominator	MDG[2]
5. REPRODUCTIVE HEALTH					
5.1	Adolescent birth rate[12]	CM - BH	Age-specific fertility rate for women age 15-19 years for the one year period preceding the survey		MDG 5.4
5.2	Early childbearing	CM - BH	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 for contraception[13]	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 two 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 two 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 two 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 two years preceding the survey	
5.7	Skilled attendant at delivery	MN	Two 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 two 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 Two years preceding the survey who delivered in a health facility	Total number of women age 15-49 years with a live birth in the two years preceding the survey	
5.9	Caesarean section	MN	Number of last live births in the two years preceding the survey who were delivered by caesarean section	Total number of last live births in the two years preceding the survey	
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	

12 Indicator is defined as "Age-specific fertility rate for women age 15-19 years, for the 3-year period preceding the survey" when estimated from the birth history

13 See MICS 2011 manual for a detailed description

MICS 2011 INDICATOR	Module[1]	Numerator	Denominator	MDG[2]
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 three days	Total number of children age 36-59 months	
6.3 Learning materials: children's books	EC	Number of children under 5 who have three or more children's books	Total number of children under 5	
6.4 Learning materials: playthings	EC	Number of children under 5 with two or more playthings	Total number of children under 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 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	
7. LITERACY AND EDUCATION				
7.1 Literacy rate among young women	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	
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	Total number 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 who are attending the first grade of secondary school	
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

MICS 2011 INDICATOR	Module[1]	Numerator	Denominator	MDG[2]
8. CHILD PROTECTION				
8.1 Birth registration	BR	Number of children under 5 whose births are reported registered	Total number of children under 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	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	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	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 Polygyny	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	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	
8.15 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	
8.16 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. HIV/AIDS AND SEXUAL BEHAVIOUR

MICS 2011 INDICATOR	Module[1]	Numerator	Denominator	MDG[2]
9.1 Comprehensive knowledge about HIV prevention	HA	Number of women age 15-49 years who correctly identify two ways of preventing HIV infection[14], 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	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	HA	Number of women age 15-49 years who correctly identify all three means[15] of mother-to-child transmission of HIV	Total number of women age 15-49 years	
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[16] 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	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	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	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 surveyand 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 two 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 two years preceding the survey	
9.9 HIV testing during antenatal care	HA	Number of women age 15-49 years who gave birth in the two 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 two years preceding the survey	

14   Using condoms and limiting sex to one faithful, uninfected partner

15   Transmission during pregnancy, during delivery, and by breastfeeding

16   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

MICS 2011 INDICATOR		Module[1]	Numerator	Denominator	MDG[2]
9.10	Young women who have never had sex	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	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	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	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	SB	Number of women age 15-49 years who report having had more than one sexual partner in the 12 months preceding the surveywho 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	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	

APPENDIX F. Questionnaires
See the Questionnaires in separate file

▁▁MICS

HOUSEHOLD QUESTIONNAIRE
VIET NAM

HOUSEHOLD INFORMATION PANEL	HH

HHA. Province/ City name and number:

Name _____ ___ ___

HHB. District name and number:

Name _____ ___ ___

HHC. Commune/ Ward name and number: _____ ___ ___

HH1. EA name and number:

Name _____ ___ __

HH2. Household number:

___ ___

HH3. Interviewer name and number:

Name _____ ___ ___

HH4. Team leader name and number:

Name _____ ___ ___

HH5. Day / Month / Year of interview: ___ ___ / ___ ___ / ___ ___ ___ ___

HH6. Area:
Urban...1
Rural..2

HH7. Region:
Red River Delta 1
Northern Midlands and Mountain area 2
North Central and Central Coastal area 3
Central Highlands 4
South East.. 5
Mekong River Delta 6

WE ARE FROM GENERAL STATISTICS OFFICE. WE ARE WORKING ON A SURVEY 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.

MAY I START NOW?

☐   *Yes, permission is given* ⇨ *Go to HH18 to record the time and then begin the interview.*

☐   *No, PERMISSION IS NOT GIVEN* ⇨ *COMPLETE HH9. DISCUSS THIS RESULT WITH YOUR TEAM LEADER.*

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:

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

HH10. Respondent to household questionnaire:

Name:_____

Line Number: ___ ___

**HH11. Total number of household
    members:**   ___ ___

**HH12. Number of women
    age 15-49 years:**   ___ ___

**HH13. Number of woman'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

HL

HOUSEHOLD LISTING FORM

HH18.
Record the time.

Hour............——

Minutes ——

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.

HL1. Line number	HL2. Name	HL3. WHAT IS THE RELATIONSHIP OF (name) TO THE HEAD OF HOUSEHOLD?	HL4. IS (name) MALE OR FEMALE? 1 Male 2 Female	HL5. WHAT IS (name)'s DATE OF BIRTH? Record response in Solar calendar only. If needed use the Lunar-Solar conversion table. 98 DK / 9998 DK			HL6. HOW OLD IS (name)? Record in completed years. If age is 95 or above, record '95'.	HL7. For women age 15-49 Circle line number if woman is age 15-49	HL8. For children age 5-17 WHO IS THE MOTHER OR PRIMARY CARETAKER OF THIS CHILD? Record line number of mother/ caretaker	HL9. For children under age 5 WHO IS THE MOTHER OR PRIMARY CARETAKER OF THIS CHILD? Record line number of mother/ caretaker	HL10. For all household members 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 HOUSEHOLD? Record line number of mother or 00 for "No"	HL13. For children age 0-17 years 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 HOUSEHOLD? Record line number of father or 00 for "No"
				Month	Year	Age									
Line	Name	Relation*	M F	Month	Year	Age	15-49	Mother	Mother	Y N	Y N DK	Mother	Y N DK	Father
01		0 1	1 2	——	————	——	01	——	——	1 2	1 2 8	——	1 2 8	——
02		——	1 2	——	————	——	02	——	——	1 2	1 2 8	——	1 2 8	——
03		——	1 2	——	————	——	03	——	——	1 2	1 2 8	——	1 2 8	——
04		——	1 2	——	————	——	04	——	——	1 2	1 2 8	——	1 2 8	——
05		——	1 2	——	————	——	05	——	——	1 2	1 2 8	——	1 2 8	——
06		——	1 2	——	————	——	06	——	——	1 2	1 2 8	——	1 2 8	——
07		——	1 2	——	————	——	07	——	——	1 2	1 2 8	——	1 2 8	——
08		——	1 2	——	————	——	08	——	——	1 2	1 2 8	——	1 2 8	——

A2

HL

HOUSEHOLD LISTING FORM

HH18. Record the time.

Hour............—— ——

Minutes——— ———

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.

HL1. Line number	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? Record response in Solar calendar only. If needed use the Lunar-Solar conversion table.			HL6. HOW OLD IS (name)? Record in completed years. If age is 95 or above, record '95'.	HL7. For women age 15-49 Circle line number if woman is age 15-49	HL8. For children age 5-17 WHO IS THE MOTHER OR PRIMARY CARETAKER OF THIS CHILD? Record line number of mother/ caretaker	HL9. For children under age 5 WHO IS THE MOTHER OR PRIMARY CARETAKER OF THIS CHILD? Record line number of mother/ caretaker	HL10. For all household members DID (name) STAY HERE LAST NIGHT?	HL11. IS (name)'s NATURAL MOTHER ALIVE?	HL12. DOES (name)'s NATURAL MOTHER LIVE IN THIS HOUSEHOLD? Record line number of mother or 00 for "No"	HL13. For children age 0-17 years IS (name)'s NATURAL FATHER ALIVE?	HL14. DOES (name)'s NATURAL FATHER LIVE IN THIS HOUSEHOLD? Record line number of father or 00 for "No"
			1 Male 2 Female	98 DK	9998 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	Mother	Mother	Y N	Y N DK	Mother	Y N DK	Father
09		— —	1 2	— —	— — — —	— —	09	— —	— —	1 2	1 2 8	— —	1 2 8	— —
10		— —	1 2	— —	— — — —	— —	10	— —	— —	1 2	1 2 8	— —	1 2 8	— —
11		— —	1 2	— —	— — — —	— —	11	— —	— —	1 2	1 2 8	— —	1 2 8	— —
12		— —	1 2	— —	— — — —	— —	12	— —	— —	1 2	1 2 8	— —	1 2 8	— —
13		— —	1 2	— —	— — — —	— —	13	— —	— —	1 2	1 2 8	— —	1 2 8	— —
14		— —	1 2	— —	— — — —	— —	14	— —	— —	1 2	1 2 8	— —	1 2 8	— —
15		— —	1 2	— —	— — — —	— —	15	— —	— —	1 2	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, adopted children) 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.
You should now have a separate questionnaire for each eligible woman and each child under five in the household.

01 Head	11 Niece / Nephew
02 Wife / Husband	12 Other relative
03 Son / Daughter	13 Adopted / Foster / Stepchild
04 Son-In-Law / Daughter-In-Law	14 Not related
05 Grandchild	98 Don't know
06 Parent	
07 Parent-In-Law	
08 Brother / Sister	
09 Brother-In-Law / Sister-In-Law	
10 Uncle / Aunt	

GRADE CONVERTION TABLE FOR UNIVERSALISED EDUCATION SYSTEMS

General education system for conversion		System under the French time	EQUIVALENT GENERAL EDUCATION LEVELS			Complementary education (CE) system	Educational system in Northern Viet Nam			Current national education system
			From 1945 until 1954				Prior to 1981	From Quảng Bình northward		
			Free region		Temporarily occupied region					
Level	Grade		1945-1950	1950-1954				1981-1986	1986-1989	
Primary School	1	Grade 5 (Cours enfantin)			Grade 5 primary school		Pre-school	Grade 1	Grade 1	Grade 1
Primary School	2	Grade 4 (Cours préparatoire)	Grade 4	Grade 1	Grade 4 primary school	Grade 1 CE	Grade 1	Grade 2	Grade 2	Grade 2
Primary School	3	Grade 3 (Cours elementaire)	Grade 3	Grade 2	Grade 3 primary school	Grade 2 CE	Grade 2	Grade 3	Grade 3	Grade 3
Primary School	4	Intermediate 1 (Moyen1) / Intermediate 2 (Moyen2)	Grade 2	Grade 3	Grade 2 primary school	Grade 3 CE	Grade 3	Grade 4	Grade 4	Grade 4
Primary School	5	Upper intermediate (Supérieur) / Certificate (Certificat)	Grade 1	Grade 4	Grade 1 primary school	Grade 4 CE	Grade 4	Grade 5	Grade 5	Grade 5
Lower Secondary School	6	First year (Première année)	First year		7th class Secondary school	Grade 5 CE			Grade 6	Grade 6
Lower Secondary School	7	Second year (Deuxième année)	Second year	Grade 5	6th class Secondary school	Grade 6 CE	Grade 5	Grade 6	Grade 7	Grade 7
Lower Secondary School	8	Third year (Troisième année)	Third year	Grade 6	5th class Secondary school	Grade 7 CE	Grade 6	Grade 7	Grade 8	Grade 8
Lower Secondary School	9	Fourth year - Diploma (Quatrième année - Diplôme)	Fourth year	Grade 7	4th class Secondary school	Grade 7B CE	Grade 7			Grade 9
Upper Secondary School	10	First year Specialisation	First year Specialisation	Grade 8	3rd class Secondary school	Grade 8 CE	Grade 8	Grade 10	Grade 10	Grade 10
Upper Secondary School	11	First part, secondary school degree (Baccalauréat première partie)	Second year Specialisation	Grade 9	2nd class Baccalaureate I	Grade 9 CE / Grade 10A CE	Grade 9	Grade 11	Grade 11	Grade 11
Upper Secondary School	12	Second part, secondary school degree (Baccalauréat deuxième partie)	Third year Specialisation		1st class 2nd education degree	Grade 10B CE	Grade 10	Grade 12	Grade 12	Grade 12

EDUCATION — ED

For household members age 5 and above

ED1. Line number

ED2. Name and age — *Copy from Household Listing Form, HL2 and HL6*

ED3. HAS (*name*) EVER ATTENDED SCHOOL OR PRE-SCHOOL?

1 Yes
2 No ⇨ Next Line

ED4. WHAT IS THE HIGHEST LEVEL OF SCHOOL (*name*) ATTENDED? WHAT IS THE HIGHEST GRADE (*name*) COMPLETED AT THIS LEVEL?

Record response in 12 year system. Use conversion table if needed.

Level:
0 Preschool ⇨ ED5
1 Primary
2 Lower Secondary
3 Upper Secondary
4 Professional School ⇨ ED5
5 College/ University & above ⇨ Next Line
8 DK

Grade:
98 DK

If less than 1 full grade at this level, enter 00.

ED5. DURING THE (*2011*) SCHOOL YEAR, DID (*name*) ATTEND SCHOOL OR PRESCHOOL AT ANY TIME?

1 Yes
2 No ⇨ ED7

For household members age 5-24 years

ED6. DURING THIS SCHOOL YEAR, WHICH LEVEL AND GRADE IS/WAS (*name*) ATTENDING?

Level:
0 Preschool ⇨ ED7
1 Primary
2 Lower Secondary
3 Upper Secondary
4 Professional School ⇨ ED7
5 College/ University & above ⇨ ED7
8 DK

Grade:
98 DK

ED7. DURING THE PREVIOUS SCHOOL YEAR, THAT IS (*2009-2010*), DID (*name*) ATTEND SCHOOL OR PRESCHOOL AT ANY TIME?

1 Yes
2 No ⇨ Next Line
8 DK ⇨ Next Line

ED8. DURING THAT PREVIOUS SCHOOL YEAR, WHICH LEVEL AND GRADE DID (*name*) ATTEND?

Level:
0 Preschool ⇨ Next person
1 Primary
2 Lower Secondary
3 Upper Secondary
4 Professional School 98 DK
5 College/University & above ⇨ Next person
8 DK

Grade:
Next person

Line	Name	Age	ED3 Yes	No	ED4 Level	Grade	ED5 Yes	No	ED6 Level	Grade	ED7 Y	N	DK	ED8 Level	Grade
01		__	1	2	0 1 2 3 4 5 8	__	1	2	0 1 2 3 4 5 8	__	1	2	8	0 1 2 3 4 5 8	__
02		__	1	2	0 1 2 3 4 5 8	__	1	2	0 1 2 3 4 5 8	__	1	2	8	0 1 2 3 4 5 8	__
03		__	1	2	0 1 2 3 4 5 8	__	1	2	0 1 2 3 4 5 8	__	1	2	8	0 1 2 3 4 5 8	__
04		__	1	2	0 1 2 3 4 5 8	__	1	2	0 1 2 3 4 5 8	__	1	2	8	0 1 2 3 4 5 8	__
05		__	1	2	0 1 2 3 4 5 8	__	1	2	0 1 2 3 4 5 8	__	1	2	8	0 1 2 3 4 5 8	__
06		__	1	2	0 1 2 3 4 5 8	__	1	2	0 1 2 3 4 5 8	__	1	2	8	0 1 2 3 4 5 8	__
07		__	1	2	0 1 2 3 4 5 8	__	1	2	0 1 2 3 4 5 8	__	1	2	8	0 1 2 3 4 5 8	__
08		__	1	2	0 1 2 3 4 5 8	__	1	2	0 1 2 3 4 5 8	__	1	2	8	0 1 2 3 4 5 8	__
09		__	1	2	0 1 2 3 4 5 8	__	1	2	0 1 2 3 4 5 8	__	1	2	8	0 1 2 3 4 5 8	__
10		__	1	2	0 1 2 3 4 5 8	__	1	2	0 1 2 3 4 5 8	__	1	2	8	0 1 2 3 4 5 8	__
11		__	1	2	0 1 2 3 4 5 8	__	1	2	0 1 2 3 4 5 8	__	1	2	8	0 1 2 3 4 5 8	__
12		__	1	2	0 1 2 3 4 5 8	__	1	2	0 1 2 3 4 5 8	__	1	2	8	0 1 2 3 4 5 8	__
13		__	1	2	0 1 2 3 4 5 8	__	1	2	0 1 2 3 4 5 8	__	1	2	8	0 1 2 3 4 5 8	__
14		__	1	2	0 1 2 3 4 5 8	__	1	2	0 1 2 3 4 5 8	__	1	2	8	0 1 2 3 4 5 8	__
15		__	1	2	0 1 2 3 4 5 8	__	1	2	0 1 2 3 4 5 8	__	1	2	8	0 1 2 3 4 5 8	__

WATER AND SANITATION	WS

WS1. WHAT IS THE <u>MAIN</u> 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 <u>MAIN</u> SOURCE OF WATER USED BY YOUR HOUSEHOLD FOR OTHER PURPOSES SUCH AS COOKING AND HANDWASHING?	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 No2 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 ....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
	
	Composting toilet... 31
	Bucket.. 41
	Hanging toilet, Hanging latrine 51
	
	No facility, Bush, Field .... 95 95⇨Next Module
	
	Other (*specify*)_____ 96

WS9. Do you share this facility with others who are not members of your household?	Yes.. 1 No2 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?	Buddhism.. 1 Muslim .... 2 Cao Dai.. 3 Hoa Hao .... 4 Christian Catholic .... 5 Christian Protestant .... 9 Other religion (*specify*) _____ 6 No religion 7
HC1C. To what ethnic group does the head of this household belong?	Kinh .... 01 Tay .... 02 Thai.. 03 Muong.. 04 Khmer .... 05 Chinese .... 06 Nung .... 07 Hmong .... 08 Other (*specify*)_____ 96 Unspecified _____ 97
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
	 Rudimentary floor
	    Wood planks.. 21
	    Palm / Bamboo 22
	 Finished floor
	    Parquet or polished wood.................................... 31
	    Vinyl sheets 32
	    Ceramic tiles... 33
	    Cement/ concrete 34
	    Carpet... 35
	    Enamelled tiles/ marble 36
	
	 Other (*specify*)_____ 96

HC4. *Main material of the roof.*
 	
 Record observation.
	Natural roofing
	    No Roof 11
	    Thatch / Palm leaf/ Straw 12
	 Rudimentary Roofing
	    Bamboo/ tree-trunk.. 22
	    Wood planks/ shingles... 23
	    Cardboard.. 24
	 Finished roofing
	    Metal/ corrugated iron sheet................................ 31
	    Calamine / Cement fibre...................................... 33
	    Ceramic tiles... 34
	    Cement/ reinforced concrete 35
	    Stone slates.. 37
	    Asphalt sheets.. 38
	
	 Other (*specify*)_____ 96

HC5. *Main material of the exterior walls.*
 	
    Record observation.
	Natural walls
	    No walls 11
	    Bamboo/ Cane / Palm / Tree-Trunks 12
	    Dirt 13
	    Reed 14
	Rudimentary walls
	    Bamboo with mud 21
	    Stone with mud 22
	    Uncovered adobe 23
	    Plywood 24
	    Cardboard 25
	    Reused wood (packing wood) 26
	Finished walls
	    Reinforced concrete 31
	    Stone/ Laterite 32
	    Bricks (covered or uncovered) 33
	    Cement blocks/ coal residue bricks 34
	    Covered adobe 35
	    Wood planks / shingles 36
	
	Other (*specify*)_____ 96

HC6. Wʜᴀᴛ ᴛʏᴘᴇ ᴏꜰ ꜰᴜᴇʟ ᴅᴏᴇs ʏᴏᴜʀ ʜᴏᴜsᴇʜᴏʟᴅ <u>ᴍᴀɪɴʟʏ</u> ᴜsᴇ ꜰᴏʀ ᴄᴏᴏᴋɪɴɢ?	Electricity .... 01 Liquefied Petroleum Gas (LPG) .... 02 Natural gas .... 03 Biogas .... 04 Kerosene .... 05 Coal/ Pit-coal/ light coal .... 06 Charcoal .... 07 Wood .... 08 Straw / Shrubs / Grass .... 09 Animal dung .... 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 ᴛʜᴇ ᴄᴏᴏᴋɪɴɢ ᴜsᴜᴀʟʟʏ ᴅᴏɴᴇ ɪɴ ᴛʜᴇ ʜᴏᴜsᴇ, ɪɴ ᴀ sᴇᴘᴀʀᴀᴛᴇ ʙᴜɪʟᴅɪɴɢ, ᴏʀ ᴏᴜᴛᴅᴏᴏʀs?
 	
    If 'In the house', probe: ɪs ɪᴛ ᴅᴏɴᴇ ɪɴ ᴀ sᴇᴘᴀʀᴀᴛᴇ ʀᴏᴏᴍ ᴜsᴇᴅ ᴀs ᴀ ᴋɪᴛᴄʜᴇɴ?
	In the house
	    In a separate room used as kitchen 1
	    Elsewhere in the house 2
	In a separate building 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
[F] A BED?	Bed 1		2
[G] A TABLE AND CHAIRS SET?	Table and chairs set.....................................1		2
[H] A SOFA?	Sofa 1		2
[I] A CUPBOARD FOR CLOTH?	Cupboard...1		2
[J] KITCHEN CABINETS?	Kitchen cabinets 1		2
[K] A FAN?	Fan 1		2
[L] CABLE/ DIGITAL TV?	Cable/ digital TV 1		2
[M] A COMPUTER?	Computer...1		2
[N] AIR CONDITIONER?	Air conditioner..1		2

HC9. DOES ANY MEMBER OF YOUR HOUSEHOLD OWN:

		Yes	No
[A] A WRIST WATCH?	Wrist 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] A POWER-TILLER OR TRACTOR?	Power-tiller / Tractor 1		2
[F] A CAR OR TRUCK?	Car / Truck 1		2
[G] A SHIP OR BOAT WITH A MOTOR?	Ship/ Boat with motor 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 OR HAVE USER RIGHTS FOR ANY LAND THAT CAN BE USED FOR AGRICULTURE?	Yes..1 No2	2⇨HC12A
HC12. HOW MANY SQUARE METERS (M²) OF AGRICULTURAL LAND DO MEMBERS OF THIS HOUSEHOLD OWN OR HAVE USER RIGHTS FOR? *If unknown, record '99998'.*	M² ___ ___ ___ ___ ___	
HC12A. DOES ANY MEMBER OF THIS HOUSEHOLD OWN OR HAVE USER RIGHTS FOR ANY WATER SURFACE AREA THAT CAN BE USED FOR AQUACULTURE?	Yes..1 No2	2⇨HC13
HC12B. HOW MANY SQUARE METERS (M²) OF WATER SURFACE AREA DO MEMBERS OF THIS HOUSEHOLD OWN OR HAVE USER RIGHTS FOR? *If unknown, record '99998'.*	M² ___ ___ ___ ___ ___	
HC13. DOES THIS HOUSEHOLD OWN ANY LIVESTOCK, HERDS, OTHER FARM ANIMALS, OR POULTRY?	Yes..1 No2	2⇨HC15

HC14. HOW MANY OF THE FOLLOWING ANIMALS DOES THIS HOUSEHOLD HAVE?

[A] BUFFALO, MILK COWS, OR BULLS?

[B] HORSES?

Buffalo, milk cows, or bulls .... ___ ___

[C] GOATS?

Horses .... ___ ___

[D] SHEEP?

Goats .... ___ ___

[E] CHICKENS?

Sheep .... ___ ___

[F] PIGS?

Chickens .... ___ ___

[G] DUCKS, GEESE, OR SWANS?

Pigs .... ___ ___

If none, record '00'.
If 95 or more, record '95'.
If unknown, record '98'.

Ducks, geese, swans .... ___ ___

HC15. DOES ANY MEMBER OF THIS HOUSEHOLD HAVE A BANK ACCOUNT?

Not including Deposit Certificate.

Yes 1
No   2

TN

INSECTICIDE TREATED NETS

TN1. Does your household have any mosquito nets that can be used while sleeping?

Yes 1
No .... 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 6 NETS IN THE HOUSEHOLD. IF MORE THAN 6 NETS, USE ADDITIONAL QUESTIONNAIRE(S).*

	1st Net	2nd Net	3rd Net	4th Net	5th Net	6th Net
TN4. Mosquito net observed?	Observed .... 1 Not observed 2	Observed .... 1 Not observed 2	Observed .... 1 Not observed 2	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 Global Fund ...... 11 Other *(specify)* .... 16 DK brand .... 18 Pre-treated nets Global Fund ...... 21 Other *(specify)* .... 26 DK brand .... 28 Other net *(specify)* ___ 31 DK brand / type 98	Long-lasting treated nets Global Fund ...... 11 Other *(specify)* .... 16 DK brand .... 18 Pre-treated nets Global Fund ...... 21 Other *(specify)* .... 26 DK brand .... 28 Other net *(specify)* ___ 31 DK brand / type 98	Long-lasting treated nets Global Fund ...... 11 Other *(specify)* .... 16 DK brand .... 18 Pre-treated nets Global Fund ...... 21 Other *(specify)* .... 26 DK brand .... 28 Other net *(specify)* ___ 31 DK brand / type 98	Long-lasting treated nets Global Fund ...... 11 Other *(specify)* .... 16 DK brand .... 18 Pre-treated nets Global Fund ...... 21 Other *(specify)* .... 26 DK brand .... 28 Other net *(specify)* ___ 31 DK brand / type 98	Long-lasting treated nets Global Fund ...... 11 Other *(specify)* .... 16 DK brand .... 18 Pre-treated nets Global Fund ...... 21 Other *(specify)* .... 26 DK brand .... 28 Other net *(specify)* ___ 31 DK brand / type 98	Long-lasting treated nets Global Fund ...... 11 Other *(specify)* .... 16 DK brand .... 18 Pre-treated nets Global Fund ...... 21 Other *(specify)* .... 26 DK brand .... 28 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	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 (21-28)* ⇨ *TN9* ☐ *Else* ⇨ *Continue*	☐ *Long-lasting (11-18)* ⇨ *TN11* ☐ *Pre-treated (21-28)* ⇨ *TN9* ☐ *Else* ⇨ *Continue*	☐ *Long-lasting (11-18)* ⇨ *TN11* ☐ *Pre-treated (21-28)* ⇨ *TN9* ☐ *Else* ⇨ *Continue*	☐ *Long-lasting (11-18)* ⇨ *TN11* ☐ *Pre-treated (21-28)* ⇨ *TN9* ☐ *Else* ⇨ *Continue*	☐ *Long-lasting (11-18)* ⇨ *TN11* ☐ *Pre-treated (21-28)* ⇨ *TN9* ☐ *Else* ⇨ *Continue*	☐ *Long-lasting (11-18)* ⇨ *TN11* ☐ *Pre-treated (21-28)* ⇨ *TN9* ☐ *Else* ⇨ *Continue*
TN8. WHEN YOU GOT THE NET, WAS IT ALREADY TREATED WITH AN 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	Yes .... 1 No .... 2 DK / Not sure 8	Yes .... 1 No .... 2 DK / Not sure 8	Yes .... 1 No .... 2 DK / Not sure 8

	Net	Net	Net	Net	Net
TN9. SINCE YOU GOT THE NET, WAS IT EVER SOAKED OR DIPPED IN A LIQUID TO KILL OR REPEL MOSQUITOES?	Yes...............1 No2 ⇨TN11 DK / Not sure......8 ⇨TN11	Yes...............1 No2 ⇨TN11 DK / Not sure......8 ⇨TN11	Yes...............1 No2 ⇨TN11 DK / Not sure......8 ⇨TN11	Yes...............1 No2 ⇨TN11 DK / Not sure......8 ⇨TN11	Yes...............1 No2 ⇨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	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 No2 ⇨TN13 DK / Not sure......8 ⇨TN13	Yes ....1 No2 ⇨TN13 DK / Not sure......8 ⇨TN13	Yes ....1 No2 ⇨TN13 DK / Not sure......8 ⇨TN13	Yes ....1 No2 ⇨TN13 DK / Not sure......8 ⇨TN13	Yes ....1 No2 ⇨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 .... ___	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.	Name _____ Line number .... ___ *Go back to TN4 for next net. If no more nets, go to next module*	Name _____ Line number .... ___ *Go back to TN4 for next net. If no more nets, go to next module*	Name _____ Line number .... ___ *Go back to TN4 for next net. If no more nets, go to next module*	Name _____ Line number .... ___ *Go back to TN4 for next net. If no more nets, go to next module*	Name _____ Line number .... ___ *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 No2 DK.. 8	

CHILD LABOUR CL

To be administered for children in the household age 5-17 years. For household members below age 5 or above age 17, leave rows blank.
NOW I WOULD LIKE TO ASK ABOUT ANY WORK CHILDREN IN THIS HOUSEHOLD MAY DO.

CL1. Line number	CL2. Name and Age		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?
Line	Name	Age	Yes Paid	Yes Unpaid	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	___
02		__	1	2	3	___	1	2	___	1	2	___	1	2	___
03		__	1	2	3	___	1	2	___	1	2	___	1	2	___
04		__	1	2	3	___	1	2	___	1	2	___	1	2	___
05		__	1	2	3	___	1	2	___	1	2	___	1	2	___
06		__	1	2	3	___	1	2	___	1	2	___	1	2	___
07		__	1	2	3	___	1	2	___	1	2	___	1	2	___
08		__	1	2	3	___	1	2	___	1	2	___	1	2	___
09		__	1	2	3	___	1	2	___	1	2	___	1	2	___
10		__	1	2	3	___	1	2	___	1	2	___	1	2	___
11		__	1	2	3	___	1	2	___	1	2	___	1	2	___
12		__	1	2	3	___	1	2	___	1	2	___	1	2	___
13		__	1	2	3	___	1	2	___	1	2	___	1	2	___
14		__	1	2	3	___	1	2	___	1	2	___	1	2	___
15		__	1	2	3	___	1	2	___	1	2	___	1	2	___

Copy from Household Listing Form, HL2 and HL6

CHILD DISCIPLINE **CD**

Table 1: Children Aged 2-14 Years Eligible for Child Discipline Questions

o 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.
o Record the line number, name, sex, and age for each child.
o 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				__ __

o 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

o 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.
o 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.
o Check the total number of eligible children (2-14) in CD6 above. This is the number of the column you should go to.
o 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. Last digit of household number (HH2)	Total Number of Eligible Children in the Household (CD6)							
	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 the 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 <u>YOU OR ANYONE ELSE IN YOUR HOUSEHOLD</u> HAS USED THIS METHOD WITH *(name)* <u>IN THE PAST MONTH</u>.

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 BEHAVIOR 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 handwashing.* *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 soap or detergent is present at the specific place for handwashing.* *Circle all that apply.* *Skip to HH19 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 in your household for washing hands?	Yes 1 No2	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 Form, 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 Form, column HL9 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 ⇨ End the interview by thanking the respondent for his/her cooperation.*
Gather together all questionnaires for this household and complete HH8 to HH15 on
the cover page.

Interviewer's Observations

Field Editor's Observations

Team Leader's Observations

MICS

QUESTIONNAIRE FOR INDIVIDUAL WOMEN

VIET NAM

WOMAN'S INFORMATION PANEL	WM

This questionnaire is to be administered to all women age 15 through 49 (see Household Listing Form, column HL7). A separate questionnaire should be used for each eligible woman.

WMA. Province/ City name and number:
Name .... __ __

WMB. District name and number:
Name _____ __ __

WMC. Commune/ Ward name and number: _____- __ __

WM1. EA name and number:

Name .... __ __ __

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 GENERAL STATISTICS OFFICE. WE ARE WORKING ON A SURVEY 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.

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 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 ⇨ Go to WM10 to record the time and then begin the interview.*

☐ *No, permission is not given ⇨ Complete WM7. Discuss this result with your team leader.*

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):

Name .... __ __

WM9. Data entry clerk (Name and number):

Name .... __ __

WM10. *Record the time.*

Hour and minutes .... __ __ : __ __

WOMAN'S BACKGROUND		WB
WB1. In what month and year were you born? *Record response in Solar calendar only. If needed use the Lunar-Solar conversion table.*	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 Lower Secondary...2 Upper Secondary...3 Professional School.......................................4 College/ University & above 5	0⇨WB7 4⇨Next module 5⇨Next module
WB5. What is the highest grade you completed at that level? *If less than 1 full grade at this level, enter "00"*	Grade.. __ __	
WB6. *Check WB4:* ☐ *Lower Secondary or higher.* ⇨ *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

All questions refer only to LIVE births.

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

CM2. What was the date of your first birth?
 	
I mean the very first time you gave birth, even if the child is no longer living, or whose father is not your current partner.
 	
Skip to CM4 only if year of first birth is given. Otherwise, continue with CM3.
	Date of first birth
	  Day .... __ __
	  DK day.. 98
	
	  Month.. __ __
	  DK month.. 98
	
	  Year .... __ __ __ __
	  DK year...9998
		⇨CM4

CM3. How many years ago did you have your first birth?	Completed years since first birth .... __ __	
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? *If none, record '00'.*	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? *If none, record '00'.*	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? *If none, record '00'.*	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 ILLNESS SYMPTOMS Module*

☐ *One or more live births ⇨ Continue with CM12*

☐ *No ⇨ Check responses to CM1-CM10 and make corrections as necessary before proceeding to CM12*

CM12. Of these (*total number in CM10*) births you have had, when did you deliver the last one (even if he or she has died)? *Month and year must be recorded.*	Date of last birth Day .... __ __ DK day... 98 Month.. __ __ Year .... __ __ __ __

CM13. *Check CM12: Last birth occurred within the last 2 years, that is, since (day and month of interview) in* ***2008/2009***

☐ *No live birth in last 2 years.* ⇨ *Go to ILLNESS SYMPTOMS Module.*

☐ *One or more live births in last 2 years.* ⇨ *Ask for the name of the child*

Name of child_____

If child has died, take special care when referring to this child by name in the following modules.

Continue with the next module.

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 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 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
	     Elementary midwife/nurse C
	 Other person
	     Traditional birth attendant ....F
	     Village health worker .... 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 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 TOXOID, 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?* ☐ *Two or more tetanus injections during last pregnancy.* ⇨ *Go to MN17* ☐ *One tetanus injection 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⇨MN17 8⇨MN17
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⇨MN17
MN11. HOW MANY YEARS AGO DID YOU RECEIVE THE LAST TETANUS INJECTION BEFORE YOUR PREGNANCY WITH (*name*)?	Years ago .... __ __	

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
	      Elementary midwife/ nurse C
	Other person
	      Traditional birth attendant ....F
	      Village health worker .... 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
	      Commune health centre 22
	      Policlinic 25
	      Sectoral hospital (army, police) 24
	      Other public (*specify*) _____ 26
	
	Private Medical Sector
	      Private hospital 31
	      Private clinic 32
	      Private maternal hospital 33
	      Other private
	            medical (*specify*)_____ 36
	
	Other (*specify*)_____ 96
		11⇨MN20
		12⇨MN20
		
		96⇨MN20

MN19. WAS (*name*) DELIVERED BY CAESAREAN SECTION? (THAT IS, DID THEY CUT YOUR BELLY OPEN TO TAKE THE BABY OUT?)	Yes... 1 No 2

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 immunization handbook or Certificate of Hospital Discharge after Delivery, if available.*	From handbook ....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 Rice soup.. 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 difficult breathing ....E Child has blood in stool ....F Child is drinking poorly .... G Child is vomiting ....H Child choked.. I Other (*specify*)_____X Other (*specify*)_____Y Other (*specify*)_____Z

CONTRACEPTION		CP
CP1. I WOULD LIKE TO TALK WITH YOU ABOUT ANOTHER SUBJECT – FAMILY PLANNING. ARE YOU PREGNANT NOW?	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	2⇨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..B IUD ....C Injectables ....D Implants ....E PillF 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?
 	
Circle all the codes if more than one reason is given.
	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 amenorrheic ....F
	Breastfeeding .... G
	Too old ....H
	Fatalistic I
	
	Other (*specify*)_____X
	
	Don't know..Z	

UN12. *Check UN11. "Never menstruated" mentioned?*

☐ *Mentioned* ⇨ *Go to Next Module*

☐ *Not mentioned* ⇨ *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

ATTITUDES TOWARD DOMESTIC 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:

	Yes	No	DK
[A] IF SHE GOES OUT WITHOUT TELLING HIM?			
Goes out without telling	1	2	8
[B] IF SHE NEGLECTS THE CHILDREN?			
Neglects children	1	2	8
[C] IF SHE ARGUES WITH HIM?			
Argues with him	1	2	8
[D] IF SHE REFUSES TO HAVE SEX WITH HIM?			
Refuses sex...	1	2	8
[E] IF SHE BURNS THE FOOD?			
Burns food	1	2	8

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	
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 <u>FIRST</u> MARRY OR START LIVING WITH A MAN AS IF MARRIED?	Date of first marriage
	   Month... __ __
	   DK month.. 98
	
	   Year .... __ __ __ __
	
	   DK year.. 9998
		
		⇨Next Module

MA9. HOW OLD WERE YOU WHEN YOU STARTED LIVING WITH YOUR FIRST HUSBAND/PARTNER?	Age in years... __ __	

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?	Age of sexual partner .... __ __	
If response is DK, probe: ABOUT HOW OLD IS THIS PERSON?	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	

HIV/AIDS		**HA**
HA1. NOW I WOULD LIKE TO TALK WITH YOU ABOUT SOMETHING ELSE. HAVE YOU EVER HEARD OF AN ILLNESS CALLED HIV/AIDS?	Yes... 1 No.. 2	2⇨WM11
HA2. CAN PEOPLE REDUCE THEIR CHANCE OF GETTING THE HIV/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 HIV/AIDS VIRUS BECAUSE OF WITCHCRAFT OR OTHER SUPERNATURAL MEANS?	Yes... 1 No .... 2 DK.. 8	
HA4. CAN PEOPLE REDUCE THEIR CHANCE OF GETTING THE HIV/AIDS VIRUS BY USING A CONDOM EVERY TIME THEY HAVE SEX?	Yes... 1 No.. 2 DK.. 8	
HA5. CAN PEOPLE GET THE HIV/AIDS VIRUS FROM MOSQUITO BITES?	Yes... 1 No.. 2 DK.. 8	
HA6. CAN PEOPLE GET THE HIV/AIDS VIRUS BY SHARING FOOD WITH A PERSON WHO HAS THE AIDS VIRUS?	Yes... 1 No.. 2 DK.. 8	
HA7. IS IT POSSIBLE FOR A HEALTHY-LOOKING PERSON TO HAVE THE HIV/AIDS VIRUS?	Yes... 1 No.. 2 DK.. 8	

HA8. CAN THE VIRUS THAT CAUSES HIV/AIDS BE TRANSMITTED FROM A MOTHER TO HER BABY:		Yes	No	DK
[A] DURING PREGNANCY?	During pregnancy	1	2	8
[B] DURING DELIVERY?	During delivery.......................................	1	2	8
[C] BY BREASTFEEDING?	By breastfeeding....................................	1	2	8

HA9. In your opinion, if a female teacher has the HIV/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 HIV/AIDS virus?	Yes.. 1 No.. 2 DK / Not sure / Depends................................ 8
HA11. If a member of your family got infected with the HIV/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 HIV/AIDS, would you be willing to care for her or him in your own household?	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*

		Y	N	DK
HA15. During any of the antenatal visits for your pregnancy with (*name*), were you given any information about: [A] Babies getting the HIV/AIDS virus from their mother?	AIDS from mother.......................................	1	2	8
[B] Things that you can do to prevent getting the HIV/AIDS virus?	Things to do...	1	2	8
[C] Getting tested for the HIV/AIDS virus?	Tested for AIDS..	1	2	8
were you: [D] offered a test for the HIV/AIDS virus?	Offered a test..	1	2	8

HA16. I don't want to know the results, but were you tested for the HIV/AIDS virus as part of your antenatal care?	Yes.. 1 No.. 2 2⇨HA19 DK.. 8 8⇨HA19
HA17. I don't want to know the results, but did you get the results of the test?	Yes.. 1 No.. 2 2⇨HA22 DK.. 8 8⇨HA22
HA18. Regardless of the result, all women who are tested are supposed to receive counseling after getting the result. After you were tested, did you receive counselling?	Yes.. 1 1⇨HA22 No.. 2 2⇨HA22 DK.. 8 8⇨HA22

HA19. *Check MN17: Birth delivered by health professional (A, B or C)?*

☐ *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 HIV/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 HIV/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 HIV/AIDS virus?	Less than 12 months ago ....1 12-23 months ago..2 2 or more years ago..3	1⇨WM11 2⇨WM11 3⇨WM11
HA24. I don't want to know the results, but have you ever been tested to see if you have the HIV/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	
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⇨WM11 2⇨WM11 8⇨WM11
HA27. Do you know of a place where people can go to get tested for the HIV/AIDS virus?	Yes...1 No..2	

WM11. *Record the time*.	Hour and minutes .... __ __ : __ __
WM12. *Check Household Listing Form, column HL9.* *Is the respondent the mother or caretaker of any child age 0-4 living in this household?* ☐ *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

Team Leader's Observations

▪▫▪▫ MICS QUESTIONNAIRE FOR CHILDREN UNDERFIVE VIET NAM

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.

UFA. Province/ City name and number:	UFB. District name and number:
Name .... ___ ___	Name .... ___ ___

UFC. Commune/ Ward name and number: _____ ___ ___

UF1. EA name and number:	UF2. Household number:
Name .... ___ ___ ___	___ ___

UF3. Child's name:	UF4. Child's line number:
Name_____	___ ___

UF5. Mother's / Caretaker's name:	UF6. Mother's / Caretaker's line number:
Name_____	___ ___

UF7. Interviewer name and number:	UF8. Day / Month / Year of interview:
Name_____ ___ ___ ___	___ ___ / ___ ___ / ___ ___ ___ ___

Repeat greeting if not already read to this respondent:

WE ARE FROM GENERAL STATISTICS OFFICE. WE ARE WORKING ON A SURVEY 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* ⇨ *Go to UF12 to record the time and then begin the interview.*

☐ *No, permission is not given* ⇨ *Complete UF9. Discuss this result with your team leader.*

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 DAY, 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)... __

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 2⇨EC7 DK...8 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.

		Mother	Father	Other	No one
[A] READ BOOKS TO OR LOOKED AT PICTURE BOOKS WITH (*name*)?	Read books	A	B	X	Y
[B] TOLD STORIES TO (*name*)?	Told stories	A	B	X	Y
[C] SANG SONGS TO (*name*) OR WITH (*name*), INCLUDING LULLABIES?	Sang songs	A	B	X	Y
[D] TOOK (*name*) OUTSIDE THE HOME, COMPOUND, YARD OR ENCLOSURE?	Took outside	A	B	X	Y
[E] PLAYED WITH (*name*)?	Played with	A	B	X	Y
[F] NAMED, COUNTED, OR DREW THINGS TO OR WITH (*name*)?	Named/counted	A	B	X	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	2⇨BF3
	DK... 8	8⇨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 the night. I am interested in whether (*name*) had the item even if it was combined with other foods.		
Did (*name*) <u>drink plain water</u> yesterday, during the day or night?	Yes... 1	
	No 2	
	DK... 8	
BF4. Did (*name*) <u>drink infant formula (similac, mama sua non, friso, nestle, or other)</u> yesterday, during the day or night?	Yes... 1	
	No 2	2⇨BF6
	DK... 8	8⇨BF6
BF5. How many times did (*name*) drink infant formula?	Number of times .... __ __	
BF6. Did (*name*) <u>drink milk, such as condensed, powdered or fresh animal milk</u> yesterday, during the day or night?	Yes... 1	
	No 2	2⇨BF8
	DK... 8	8⇨BF8
BF7. How many times did (*name*) drink condensed, powdered or fresh animal milk?	Number of times .... __ __	
BF8. Did (*name*) <u>drink juice or juice drinks</u> yesterday, during the day or night?	Yes... 1	
	No 2	
	DK... 8	

BF9. DID (*name*) DRINK CLEAR BROTH OR HERBAL/ MEAT WATER 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
BF12. DID (*name*) DRINK ANY OTHER LIQUIDS (TEA, COFFEE, COKE, OR OTHER) 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 2⇨BF15 DK...8 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 (RICE 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 2⇨BF18 DK...8 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 A 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 breastmilk). 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 Oral Rehydration Solution (ORS)? [B] A pre-packaged ORS fluid for diarrhoea? [C] Water from rice porridge/ rice soup (with salt)? [D] Lemon-orange/ coconut drink? [E] Soup water from boiled vegetables/ meat? [F] Water from fried-and-boiled rice?	Y N DK Fluid from ORS packet .... 1 2 8 Pre-packaged ORS fluid..................................... 1 2 8 Water from rice porridge/ rice soup .... 1 2 8 Lemon-orange/ coconut drink............................. 1 2 8 Soup water from boiled vegetables/ meat .... 1 2 8 Water from fried-and-boiled rice 1 2 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 / 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
	  Commune health centre ....B
	  Policlinic...C
	  Village health worker ....D
	  Mobile clinic (health service) ....E
	  Sectoral hospital (army, police) ....F
	  Govt. pharmacy .... G
	  Other public (*specify*) _____H
	
	Private medical sector
	  Private hospital / clinic............................... I
	  Private doctor .... J
	  Private pharmacy ....K
	  Other private medical (*specify*)_____ O
	
	Other source
	  Relative / Friend ....P
	  Shop ....Q
	  Traditional healer ....R
	
	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:
	    Chloroquine (tab.)......................................B
	    Quinine sulfate (tab.) ....D
	    Artemisinin based Combination Therapy (ACT) ......E
	    Quinine dihydrochlorate (inj.)..................F
	    Dihydroartemisinin-Piperaquine (tab.)....................G
	    Artesunate (inj.) ....K
	    Primaquine (tab.).......................................L
	    Other anti-malarial
	        (*specify*)_____H
	
	Antibiotic drugs
	    Pill / Syrup I
	    Injection ....J
	
	Other medications:
	    Paracetamol/ Panadol /Acetaminophen ....P
	    Aspirin.. Q
	    Ibuprofen ....R
	
	Other (*specify*)_____X
	DK...Z
		CH
		QU
		
		AR
		QDI
		DPH
		ART
		PRI
		
		OA

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:
	    Chloroquine (tab.)......................................B
	    Quinine sulfate (tab.) ....D
	    Artemisinin based Combination Therapy (ACT) ......E
	    Quinine dihydrochlorate (inj.)..................F
	    Dihydroartemisinin-Piperaquine (tab.)....................G
	    Artesunate (inj.) ....K
	    Primaquine (tab.).......................................L
	    Other anti-malarial
	        (*specify*)_____H
	
	Antibiotic drugs
	    Pill / Syrup I
	    Injection ....J
	
	Other medications:
	    Paracetamol/ Panadol/ Acetaminophen ....P
	    Aspirin.. Q
	    Ibuprofen ....R
	
	Other (*specify*)_____X
	DK...Z

ML10. *Check ML6 and ML9: Anti-malarial mentioned (codes B, D, E, F, G, K, L, 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.*	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/ handbook is available, copy the dates in IM3 for each type of immunization recorded on the card/ handbook. IM6-IM16 are for registering vaccinations that are not recorded on the card/ handbook. IM6-IM16 will only be asked when a card/handbook is not available.

IM1. Do you have a card/ handbook where (*name*)'s vaccinations are written down? (*If yes*) May I see it please?	Yes, seen .... 1 Yes, not seen .... 2 No card/ handbook 3	1⇨IM3 2⇨IM6
IM2. Did you ever have a vaccination card/ handbook for (*name*)?	Yes.. 1 No 2	1⇨IM6 2⇨IM6

IM3.

(a) *Copy dates for each vaccination from the card/ handbook.*

(b) *Write '44' in day column if card/ handbook shows that vaccination was given but no date recorded.*

Date of Immunization

		Day	Month	Year
BCG	BCG			
Polio 1	OPV1			
Polio 2	OPV2			
Polio 3	OPV3			
Pentavalent1 *Record this vaccine only from the new handbook (page 6).*	DPT-VGB-Hib1	DPT: Bach hau - Ho ga - UV VGB: Viem phoi HiB: Viem mang nao		
Pentavalent2 *Record this vaccine only from the new handbook (page 6).*	DPT-VGB-Hib2			
Pentavalent3 *Record this vaccine only from the new handbook (page 6).*	DPT-VGB-Hib3			
DPT1	DPT1			
DPT2	DPT2			
DPT3	DPT3			
HepB at birth *Available from the new handbook (page 5), or record from the card if HepB1 vaccine was administered on the date of birth.*	H0			
HepB1	H1			
HepB2	H2			
HepB3	H3			
Measles (or MMR)	Measles			
Vitamin A (most recent)	VitA			

IM4. *Check IM3. Are all vaccines (BCG to Measles) recorded?* ☐ *Yes ⇨ Go to IM18* ☐ *No ⇨ Continue with IM5*	
IM5. In addition to what is recorded on this card/handbook, 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 2⇨IM18 DK...8 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 2⇨IM18 DK...8 8⇨IM18
IM7. Has (*name*) ever received a BCG vaccination against tuberculosis — that is, an injection in the upper arm that usually causes a scar?	Yes...1 No...12 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 2⇨IM10A DK...8 8⇨IM10A
IM10. How many times was the polio vaccine received?	Number of times .... __
IM10A. Has (*name*) ever received a pentavalent (DPT-VGB-Hib) vaccination — that is, an injection in the thigh or buttocks — to prevent him/her from getting DPT, Hepatitis B and Hib? *Probe by indicating that Pentavalent vaccine is sometimes called 5 in 1.*	Yes...1 No..2 2⇨IM11 DK...8 8⇨IM11
IM10B. How many times was a pentavalent (DPT-VGB-Hib) vaccine received?	Number of times .... __
IM11. Has (*name*) ever received a DPT 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 vaccination is sometimes given at the same time as Polio.*	Yes...1 No..2 2⇨IM13 DK...8 8⇨IM13
IM12. How many times was a DPT vaccine received?	Number of times .... __
IM13. Has (*name*) ever been given a Hepatitis B vaccination — that is, an injection in the thigh or buttocks — to prevent him/her from getting Hepatitis B? *Probe by indicating that the Hepatitis B vaccine is sometimes given at the same time as Polio and DPT vaccines.*	Yes...1 No..2 2⇨IM16 DK...8 8⇨IM16
IM14. Was the first Hepatitis B vaccine received within 24 hours after birth, or later?	Within 24 hours..1 Later 2
IM15. How many times was a Hepatitis B vaccine received?	Number of times .... __
IM16. Has (*name*) ever received a Measles injection or an MMR 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 common types of ampules / capsules / syrups*	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] June 2010, Vitamin A campaign
 	
  [B] December 2010, Vitamin A campaign
 	
  [C] September-November 2010, Measles Vaccination campaign/ Measles supplementary immunization activity (SIA)
	Y N DK
	
	June 2010, Vitamin A.......................... 1 2 8
	
	December 2010, Vitamin A................. 1 2 8
	
	Sep-Nov 2010, Measles 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*	Kilograms (kg) .... __ __ . __ Weight not measured 99.9	

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).*
	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

Team Leader's Observations

Viet Nam Multiple Indicator Cluster Survey 2011

Website: mics.gso.gov.vn

unicef

United Nations
Children's Fund

UNFPA

United Nations
Population Fund