VIET NAM

Monitoring the situation of children and women

Multiple Indicator Cluster Survey 2011

General Statistics
Office - Viet Nam

MICS

MICS

Viet Nam
Multiple Indicator Cluster Survey
2011

Final Report

December, 2011

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UNFPA

The Viet Nam Multiple Indicator Cluster Survey (MICS) was carried out in 2010-2011 by the General Statistics Office of Viet Nam. 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).

MICS is an international household survey programme developed by UNICEF. The Viet Nam MICS was conducted as part of the fourth global round of MICS surveys (MICS 4). MICS provides up-to-date information on the situation of children and women and measures key indicators that allow countries to monitor progress towards the Millennium Development Goals (MDGs) and other internationally agreed upon commitments. Additional information on the global MICS project may be obtained from www.childinfo.org.

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General Statistics Office

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United Nations Children's Fund

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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			Antenatal care coverage		
	5.5a	*5.5*	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.

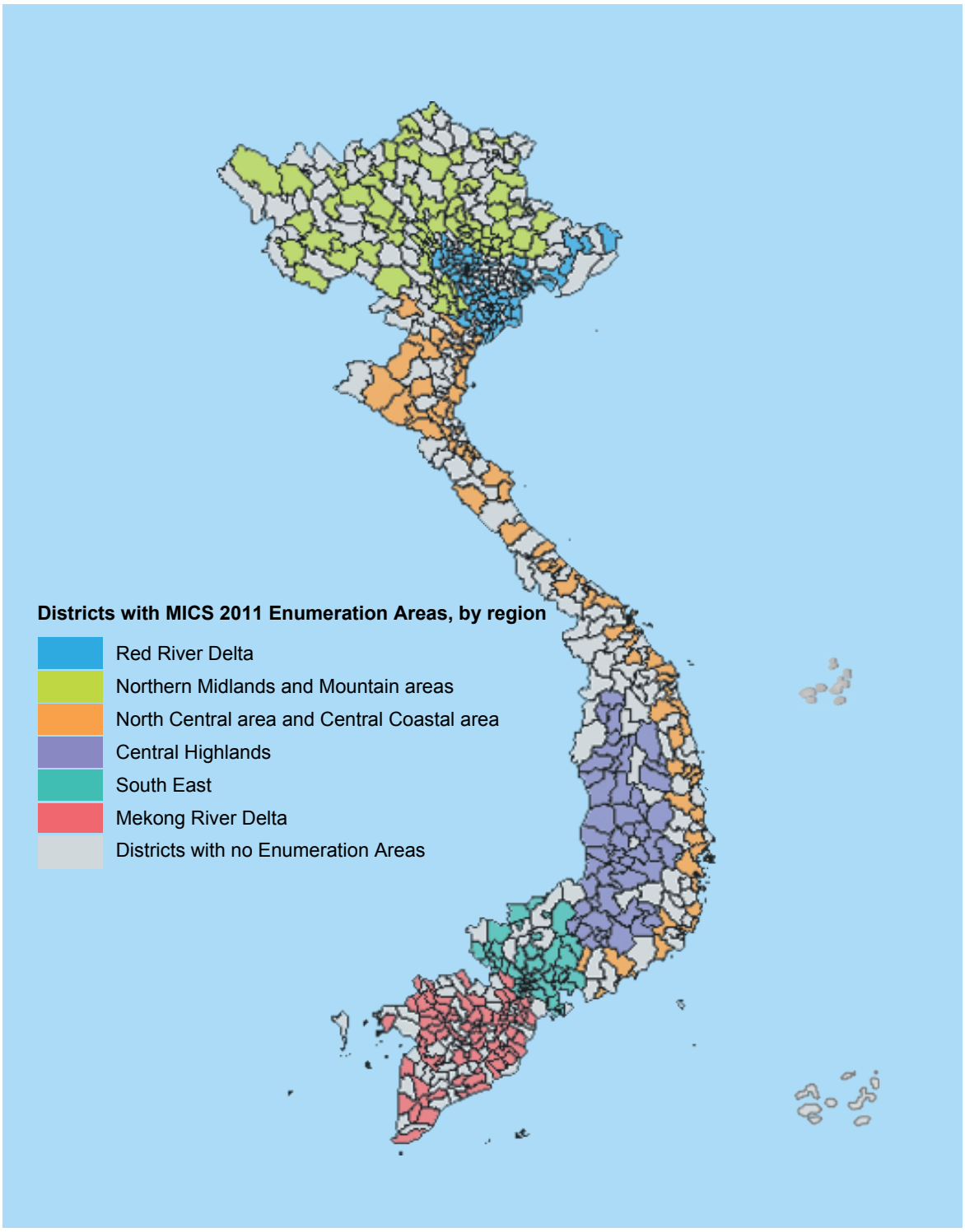
We are grateful for the continuous active cooperation from all national as well as international agencies, organisations and individuals for the benefit of Viet Nam's children.

LottaSylwander
Representative, UNICEF Viet Nam

Do Thuc
Director General, General Statistics Office

MAP OF DISTRICTS WITH MICS 2011 DATA COLLECTION

SITES



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.

[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).

[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.

I. INTRODUCTION

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.

II. SAMPLE AND SURVEY METHODOLOGY

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.

[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

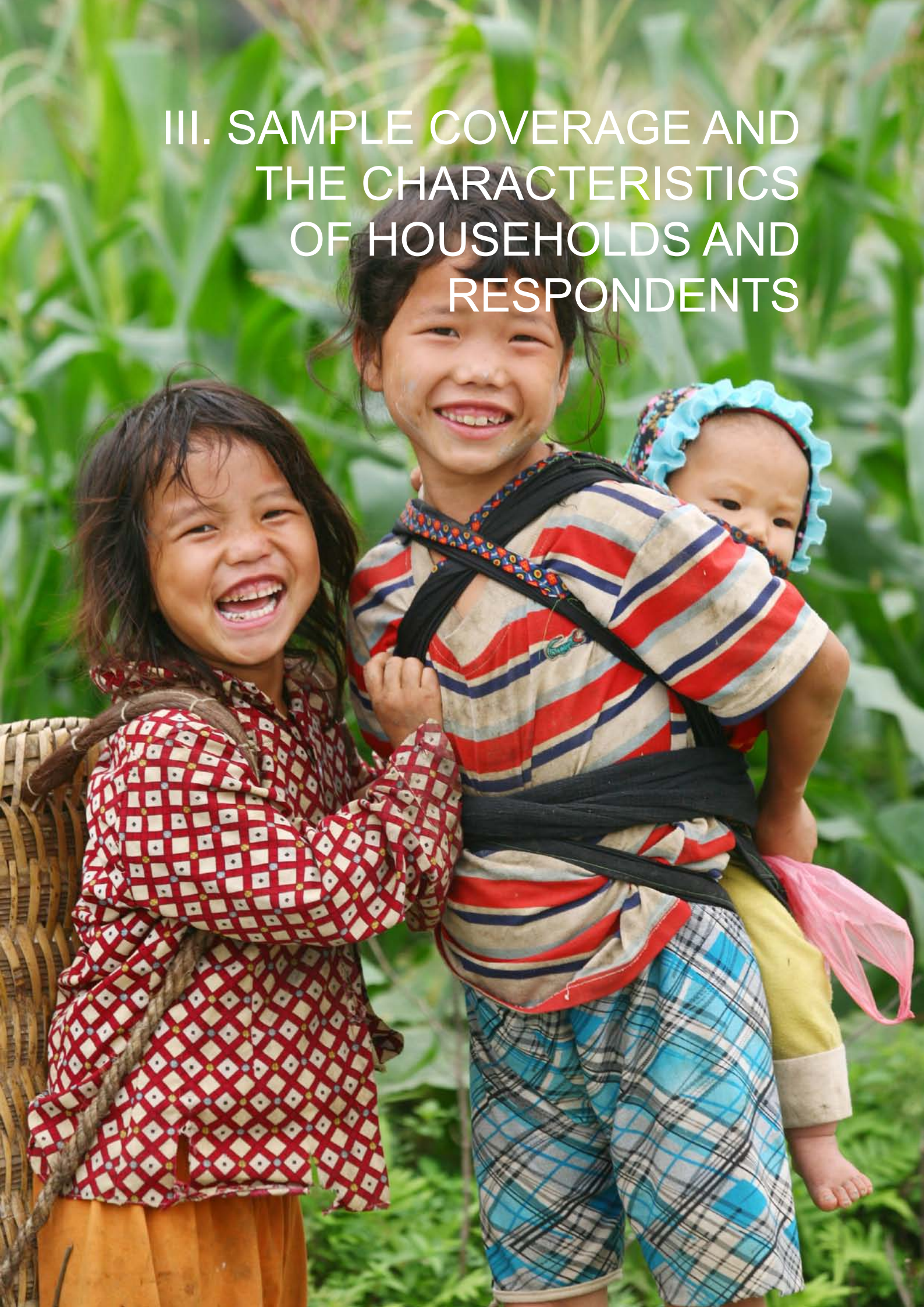
GSO conducted two training courses for interviewers, measurers, field data editors, team leaders and supervisors. About 250 field workers participated. One training was conducted in Can Tho city for the participants from the Southern provinces, and another in Ha Noi for those from the Northern provinces. 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

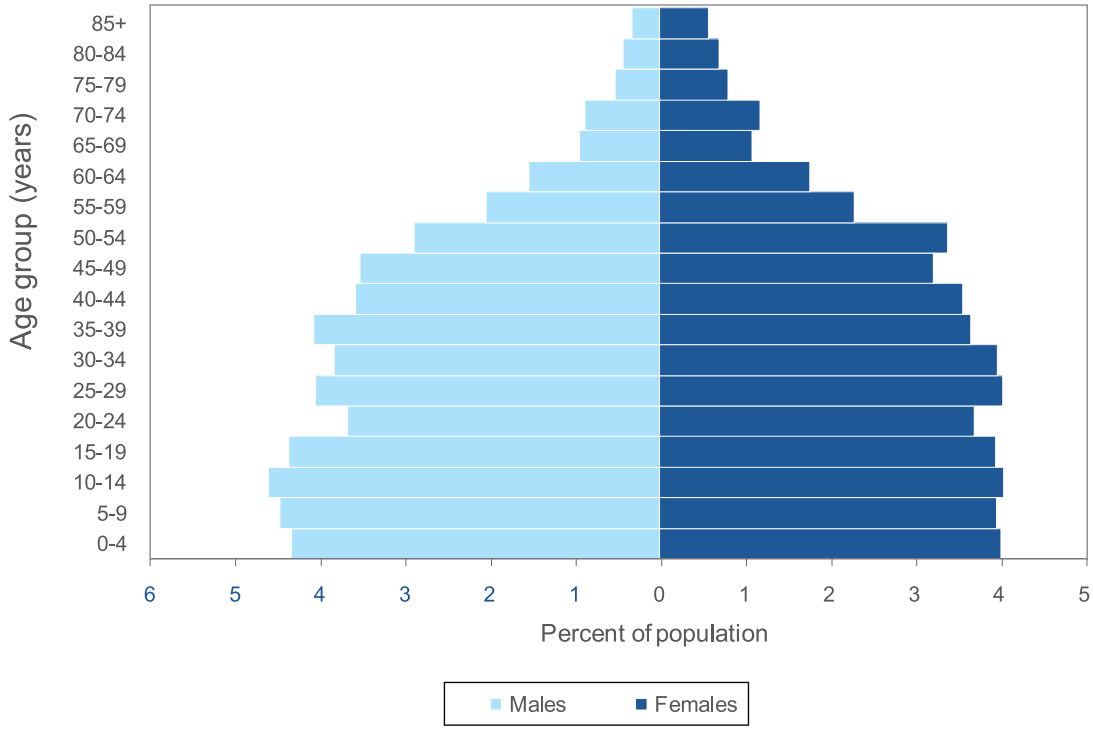
	Males		Females		Total	
	Number	Percentage	Number	Percentage	Number	Percentage
Age (years)						
0-4	1867	8.7	1802	8	3668	8.3
5-9	1928	8.9	1778	7.9	3706	8.4
10-14	1984	9.2	1821	8.1	3805	8.6
15-19	1881	8.7	1776	7.9	3657	8.3
20-24	1582	7.3	1663	7.4	3245	7.4
25-29	1746	8.1	1814	8.1	3560	8.1
30-34	1648	7.6	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

[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.

[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

		Number of households	
	Weighted percentage	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

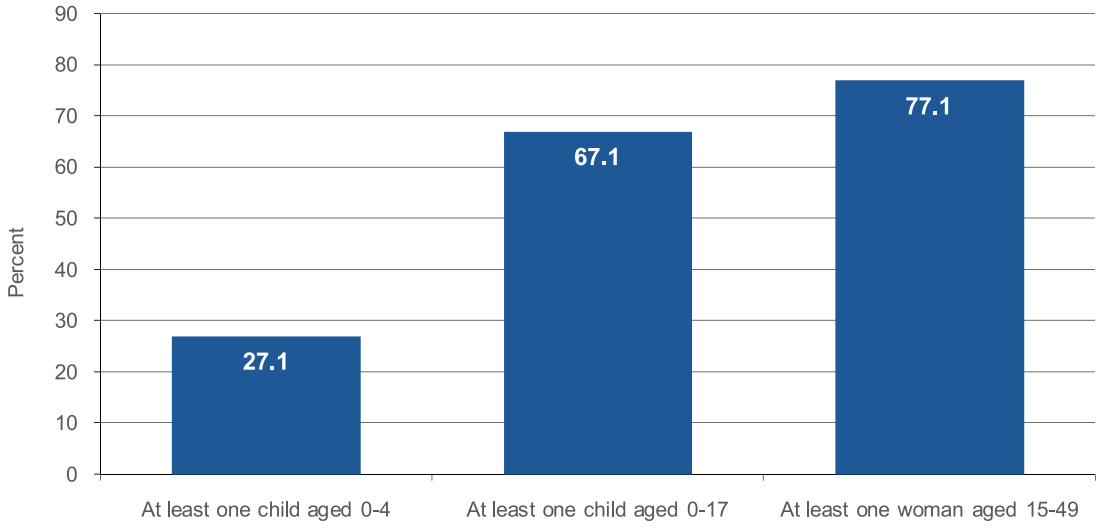
Note:
Figures shown in parenthesis are based on denominators of 25-49 un-weighted cases

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).

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

IV. CHILD MORTALITY

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.

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

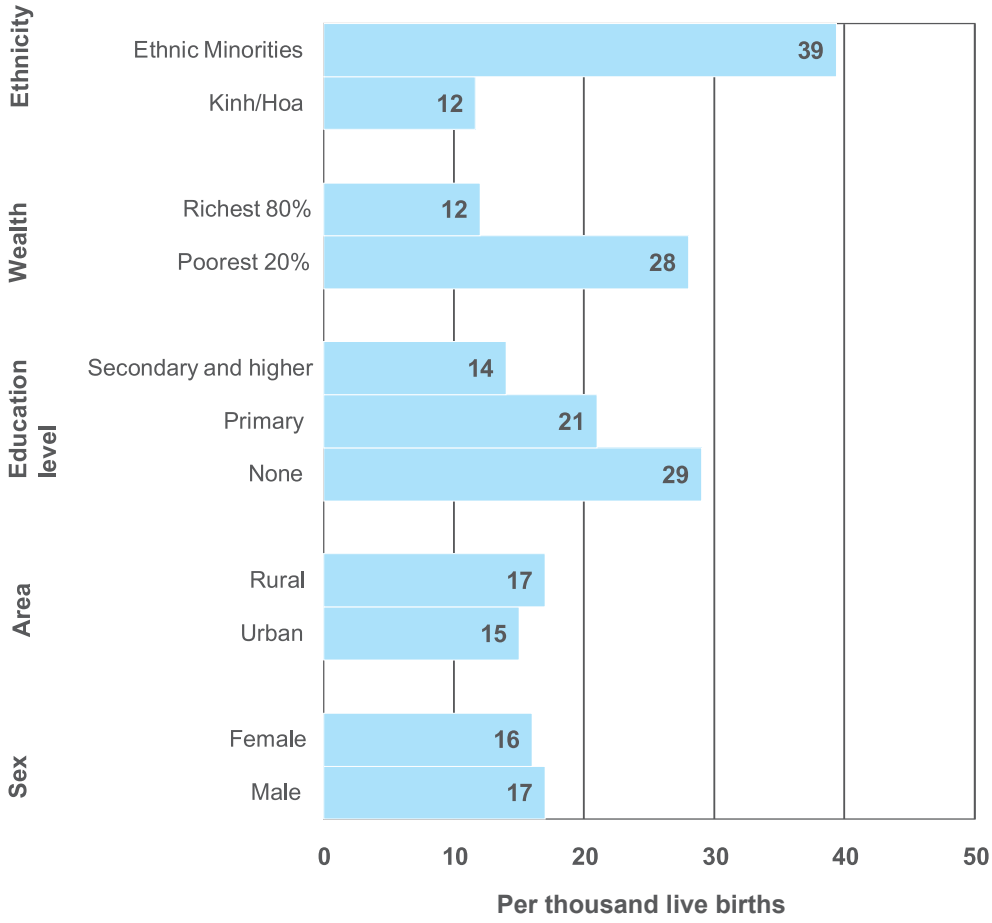


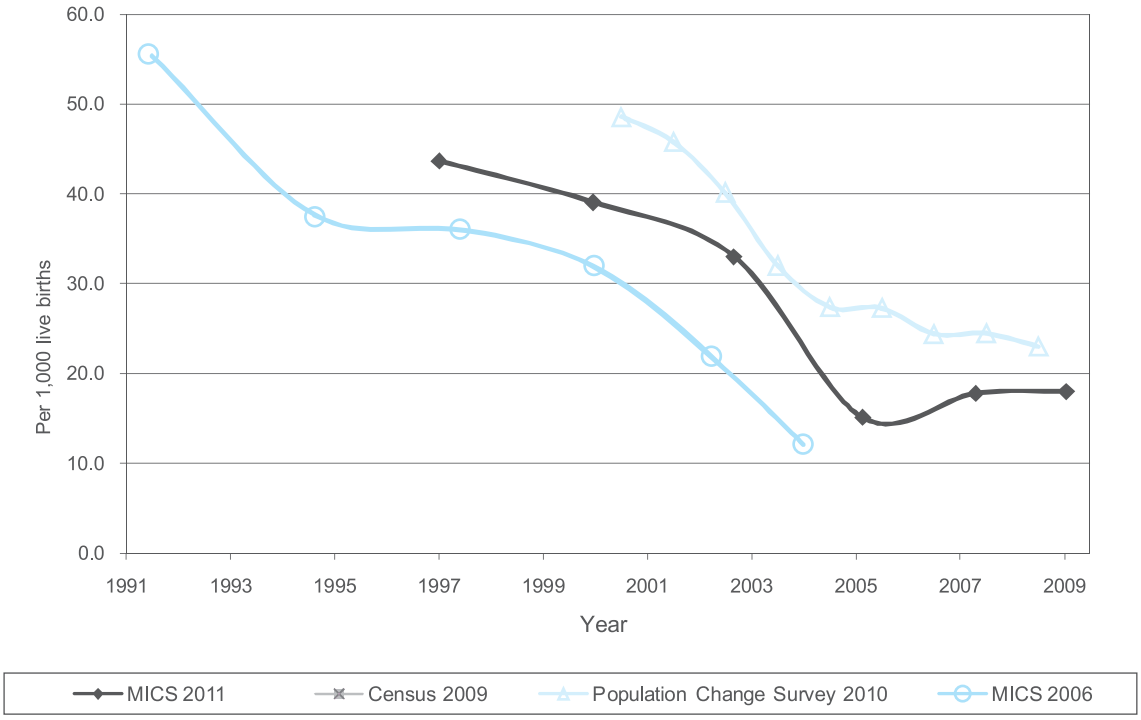
Figure CM.2 shows various series of U5MR estimates from different surveys, based on responses of women in different age groups, and referring to various points in time, thus showing the estimated trend in U5MR. The MICS estimates indicate a decline in mortality over the last 10 years. The most recent 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.

[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.

[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				Percentage below				Percentage below		Percentage above		
	- 2 SD[1]	- 3 SD[2]			- 2 SD[3]	- 3 SD[4]			- 2 SD[5]	- 3 SD[6]	+ 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		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				Percentage below				Percentage below		Percentage above		
	- 2 SD[1]	- 3 SD[2]			- 2 SD[3]	- 3 SD[4]			- 2 SD[5]	- 3 SD[6]	+ 2 SD		
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

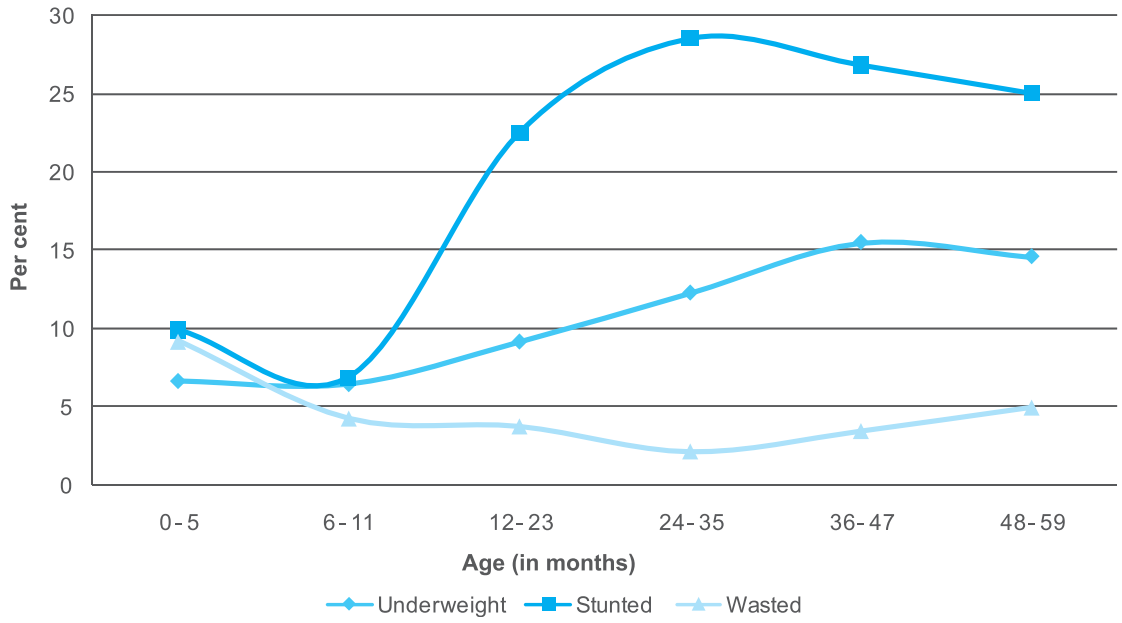
[5] MICS indicator 2.3a, [6] MICS indicator 2.3b

[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 ever breastfed[1]	Percentage who were first breastfed:		Percentage who received a prelacteal feed	Number of last-born children in the two years preceding the survey
		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

[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

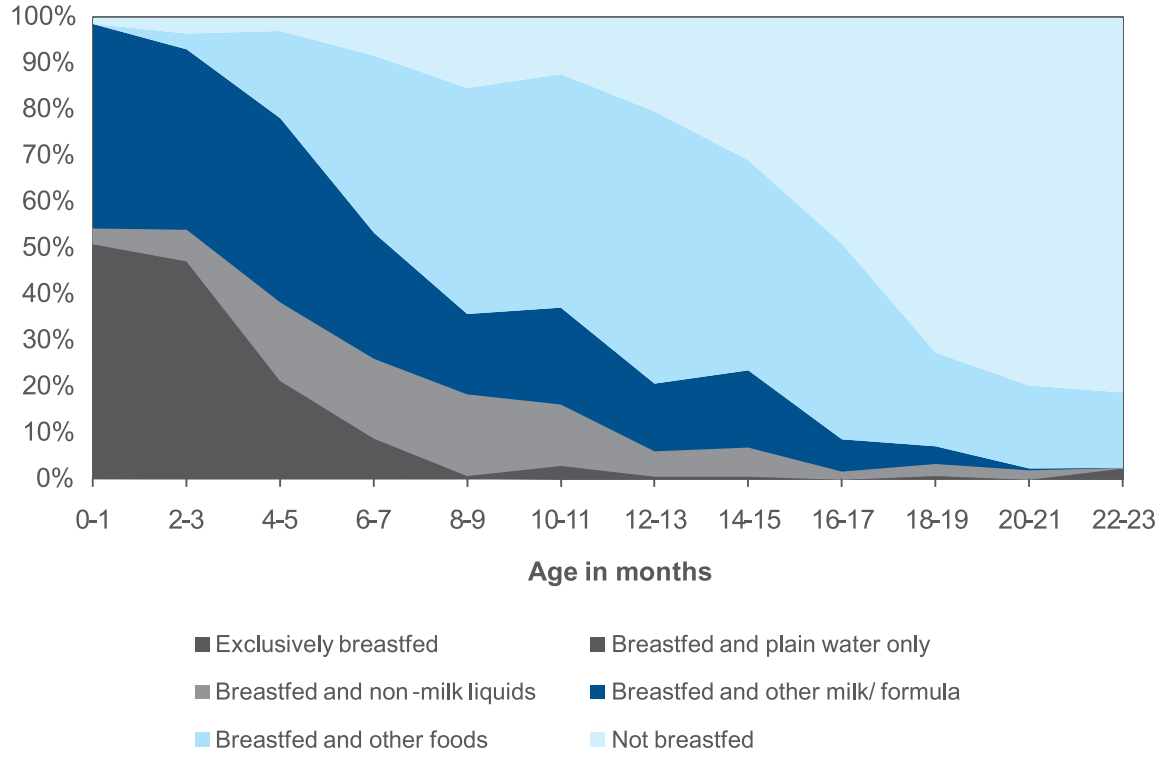


Table NU.4 shows the median duration of breastfeeding by selected background characteristics. Among children under age 3, the median duration is 16.7 months for any breastfeeding, 0.5 months for exclusive breastfeeding, and 1.4 months for predominant breastfeeding.

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 ($\geq$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

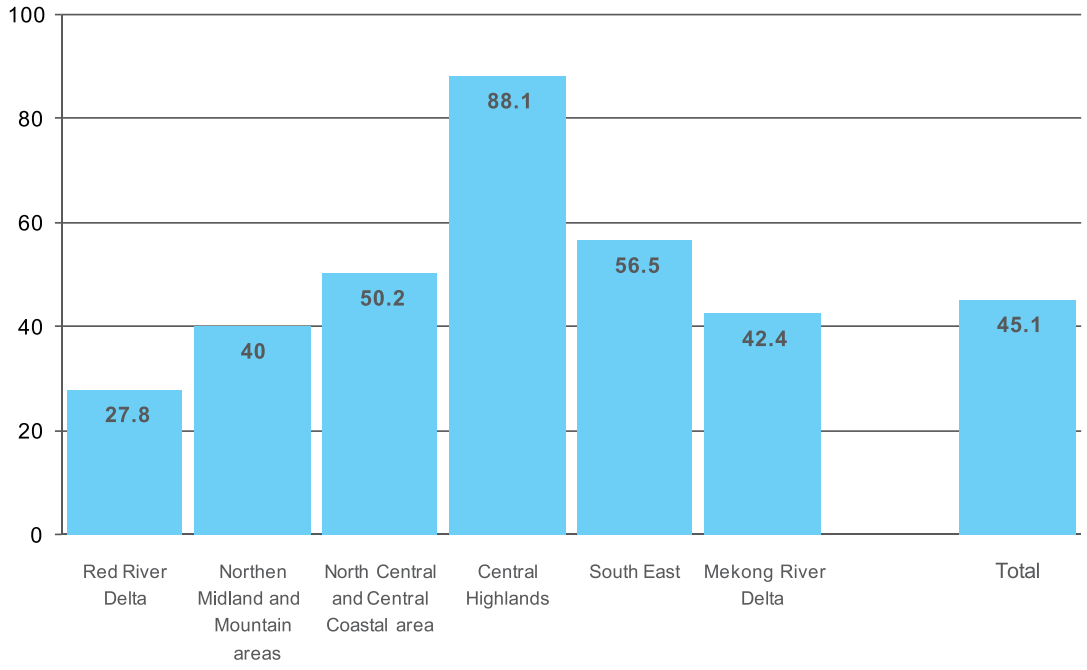
Percentage distribution of households by consumption of iodised salt, Viet Nam, 2011

	Percentage of households in which salt was tested	Number of households	Percentage of households with Salt test result: No salt	Not iodised 0 ppm	>0 and <15 ppm	15+ ppm[1]	Total	Number of households in which salt was tested or with no salt
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].

[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

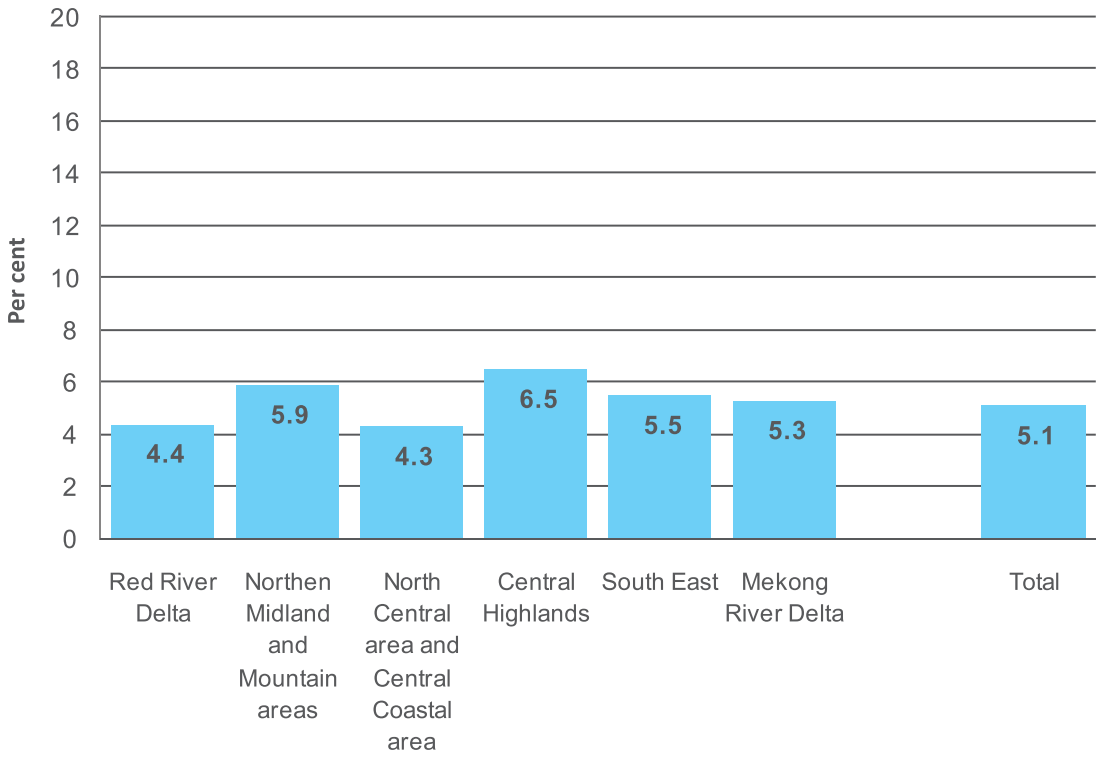
	Percent of live births:		
	Below 2500 grams[1]	Weighed at birth[2]	Number of live births in the last 2 years
Region			
Red River Delta	4.4	99.2	294
Northern Midland and Mountain areas	5.9	78.1	285
North Central area and Central Coastal area	4.3	96.6	287
Central Highlands	6.5	79.6	92
South East	5.5	100	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



VI. CHILD HEALTH

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

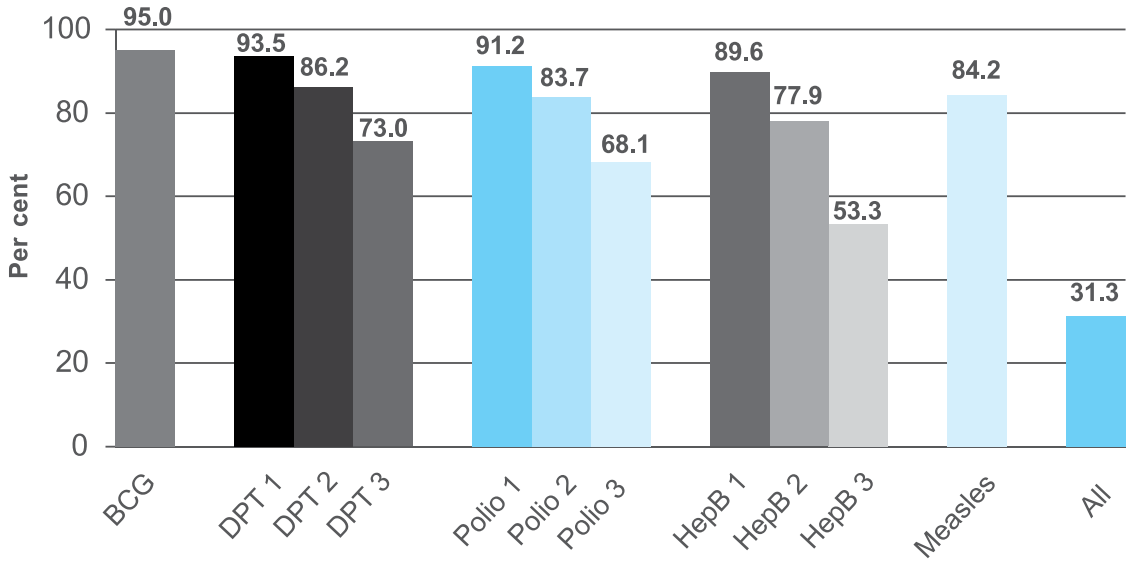


Table CH.2 shows the vaccination coverage rates among children aged 12–23 months by background characteristics. The figures indicate children receiving the vaccinations at any time up to the date of the survey, and are based on information from both the immunization cards and mothers'/caregivers' reports. 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

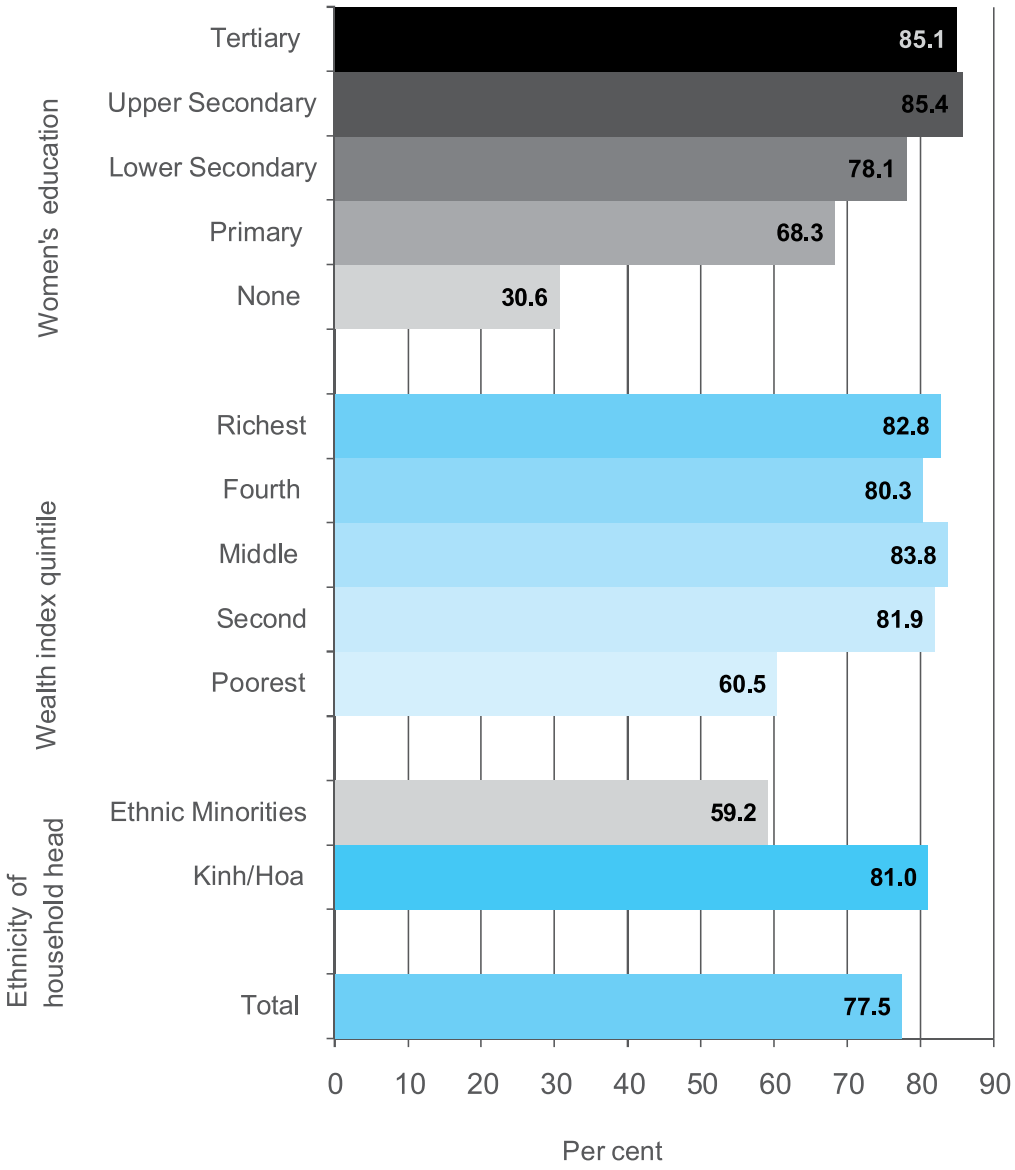
Percentage of women aged 15-49 years with a live birth in the last two years protected against neonatal tetanus, Viet Nam, 2011

	Percentage of women who received at least two doses during last pregnancy	Percentage of women who did not receive two or more doses during their last pregnancy but received:			Protected against tetanus[1]	Number of women with a live birth in the last two years
		two doses, the last within the past three years	three doses, the last within the past five years	four doses, the last within the past ten 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

			Children with diarrhoea who received:						
				Recommended homemade fluids					
	Had diarrhoea in last two weeks	Number of children age 0-59 months	ORS (Fluid from ORS packet or pre-packaged ORS fluid)	Rice porridge/ rice soup	Lemon/orange/ coconut drink	Soup water from boiled vegetables	Any recommended homemade fluid	ORS or any recommended homemade fluid	Number of children aged 0-59 months with diarrhoea in last two weeks
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

			Children with diarrhoea who received:						
				Recommended homemade fluids					
	Had diarrhoea in last two weeks	Number of children age 0-59 months	ORS (Fluid from ORS packet or pre-packaged ORS fluid)	Rice porridge/ rice soup	Lemon/orange/ coconut drink	Soup water from boiled vegetables	Any recommended homemade fluid	ORS or any recommended homemade fluid	Number of children age 0-59 months with diarrhoea in last two weeks
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

			Drinking practices during diarrhoea:						Eating practices during diarrhoea:							
	Had diarrhoea in last two weeks	Number of children aged 0–59 months	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	Number of children aged 0–59 months with diarrhoea in last two weeks
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

			Drinking practices during diarrhoea:						Eating practices during diarrhoea:							
	Had diarrhoea in last two weeks	Number of children aged 0–59 months	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	Number of children aged 0–59 months with diarrhoea in last two weeks
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:											
				Pill or syrup					Injection						
	ORS or increased fluids	ORT (ORS or recommended homemade fluids or increased fluids)	ORT with continued feeding[1]	Antibiotic	Anti-motility drug	Zinc	Other	Unknown	Antibiotic	Unknown	Intravenous therapy	Home remedy, herbal medicine	Other	Not given any treatment or drug	Number of children aged 0–59 months with diarrhoea in last two weeks
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:											
				Pill or syrup					Injection						
	ORS or increased fluids	ORT (ORS or recommended homemade fluids or increased fluids)	ORT with continued feeding[1]	Anti-biotic	Anti-motility drug	Zinc	Other	Un-known	Anti-biotic	Un-known	Intra-venous therapy	Home remedy, herbal medicine	Other	Not given any treatment or drug	Number of children aged 0–59 months with diarrhoea in last two weeks
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

			Children with suspected pneumonia who were taken to:											
			Public sources			Private sources								
	Had suspected pneumonia in the last two weeks	Number of children aged 0-59 months	Gov. hospital	Commune health centre	Village health worker	Private hospital/ clinic	Private physician	Private pharmacy	Other private facility	Relative/ Friend	Traditional practitioner	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
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 given antibiotics, Viet Nam, 2011

			Children with suspected pneumonia who were taken to:											
			Public sources			Private sources								
	Had suspected pneumonia in the last two weeks	Number of children aged 0-59 months	Gov. hospital	Commune health centre	Village health worker	Private hospital/ clinic	Private physician	Private pharmacy	Other private facility	Relative/ Friend	Traditional practitioner	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
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:									
	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	Mothers/ caregivers who recognise the two danger signs of pneumonia	Number of mothers/ caregivers of children aged 0-59 months
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: Slept under any mosquito net	Slept under ITN[1]	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
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

			Anti-malarials:						Other medications:						
	Had a fever in the last two weeks	Number of children aged 0-59 months	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	Percentage who took an anti-malarial drug the same or next day[2]	Number of children with fever in last two weeks
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

			Anti-malarials:						Other medications:						
	Had a fever in the last two weeks	Number of children aged 0-59 months	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	Percentage who took an anti-malarial drug the same or next day[2]	Number of children with fever in last two weeks
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).

[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																	
	Improved sources									Unimproved sources								
	Piped water																	
	Into dwelling	Into yard/ plot	To neighbour	Public tap/ stand-pipe	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	Total	Percentage using improved sources of drinking water[1]	Number of household members
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.

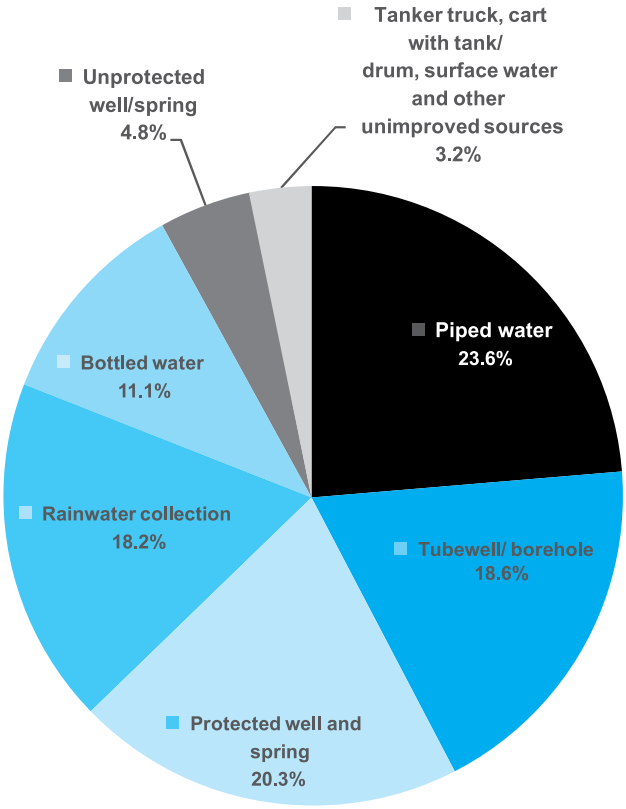
[§§]151 cases with missing education of household head not shown

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 ethinic 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										
	None	Boil	Add bleach/ chlorine	Strain through a cloth	Use water filter	Solar dis-infection	Let it stand and settle	Other	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
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

	Percentage of households without drinking water on premises	Number of households	Person usually collecting drinking water						Number of households without drinking water on premises
			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															
	Improved sanitation facility							Unimproved sanitation facility								
	Flush/pour flush to:															
	Piped sewer system	Septic tank	Pit latrine	Unknown place/not sure/ DK where	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	Percentage of population using improved sanitation facilities	Number of household members
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			
	Not shared[1]	Public facility	2 households or more	Not shared	Public facility	2 households or more	Open defecation (no facility, bush, field)	Total	Number of household members
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						
	Soap observed	Soap shown	No soap in household	Soap shown	No soap in household	Total	Percentage of households with soap 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

	Percentage of women (currently married or in union) who are using:																Number of women currently married or in union
	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]	
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

	Percentage of women (currently married or in union) who are using:															Number of women currently married or in union
	Not using any method	Female sterilization	Male sterilization	IUD	Injectables	Implants	Pill	Male condom	Others[§]	LAM[§§]	Periodic abstinence	Withdrawal	Other	Any modern method	Any traditional method	Any method[1]	
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								
	Doctor	Nurse/ Midwife	Auxiliary midwife/nurse	Village health worker	Other	Missing	No antenatal care received	Total	At least once by skilled personnel[1]	Number of women who gave birth in the preceding two years
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											
	Doctor	Nurse/ Midwife	Auxiliary midwife/ nurse	Traditional birth attendant	Village health worker	Relative/ Friend	Other/ Missing	No attendant	Total	Any skilled attendant[1§]	Percentage delivered by Caesarean section[2]	Number of women who had a live birth in preceding two years
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											
	Doctor	Nurse/ Midwife	Auxiliary midwife/ nurse	Traditional birth attendant	Village health worker	Relative/ Friend	Other/ Missing	No attendant	Total	Any skilled attendant[1§]	Percentage delivered by Caesarean section[2]	Number of women who had a live birth in preceding two years
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						
	Public sector health facility	Private sector health facility	Home	Other	Total	Delivered in health facility[1]	Number of women who had a live birth in preceding two years
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**

IX. CHILD DEVELOPMENT

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:				
	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]	Number of children under age 5
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.

[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.

X. LITERACY AND EDUCATION

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

[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).

[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						
	Seen	Not seen	No birth certificate	Total registered[1]	Number of children	Percentage of children whose mother/ caregiver knows how to register birth	Number of children without birth registration
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

			Percentage of children aged 5–11 years involved in Economic activity							
			Working outside household							
	Total child labour (5–14 years)[1]	Number of children aged 5–14 years	Paid work	Un-paid work	Working for family business	Economic activity for at least one hour	House-hold chores less than 28 hours	House-hold chores for 28 hours or more	Child labour	Number of children aged 5–11 years
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: Paid work	Working outside household: Un-paid work	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
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
			Physical punishment					
	Only non-violent discipline	Psychological aggression	Any	Severe	Any violent discipline method[1]			
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

[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

	Urban				Rural				All			
Age group	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 neither parent				Living with mother only		Living with father only						
	Living with both parents	Only father alive	Only mother alive	Both are alive	Both are dead	Father alive	Father dead	Mother alive	Mother dead	Impossible to determine	Total	Not living with a biological parent[1]	One or both parents dead [2]	Number of children aged 0–17 years
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 know transmission can be prevented by:				Percentage who know that HIV cannot be transmitted by:					
	Percentage who have heard of HIV/AIDS	Having only one faithful uninfected sex partner	Using a condom every time	Percentage of women who know both ways	Percentage who know that a healthy looking person can have HIV	Mosquito bites	Supernatural means	Sharing food with someone with HIV	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
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

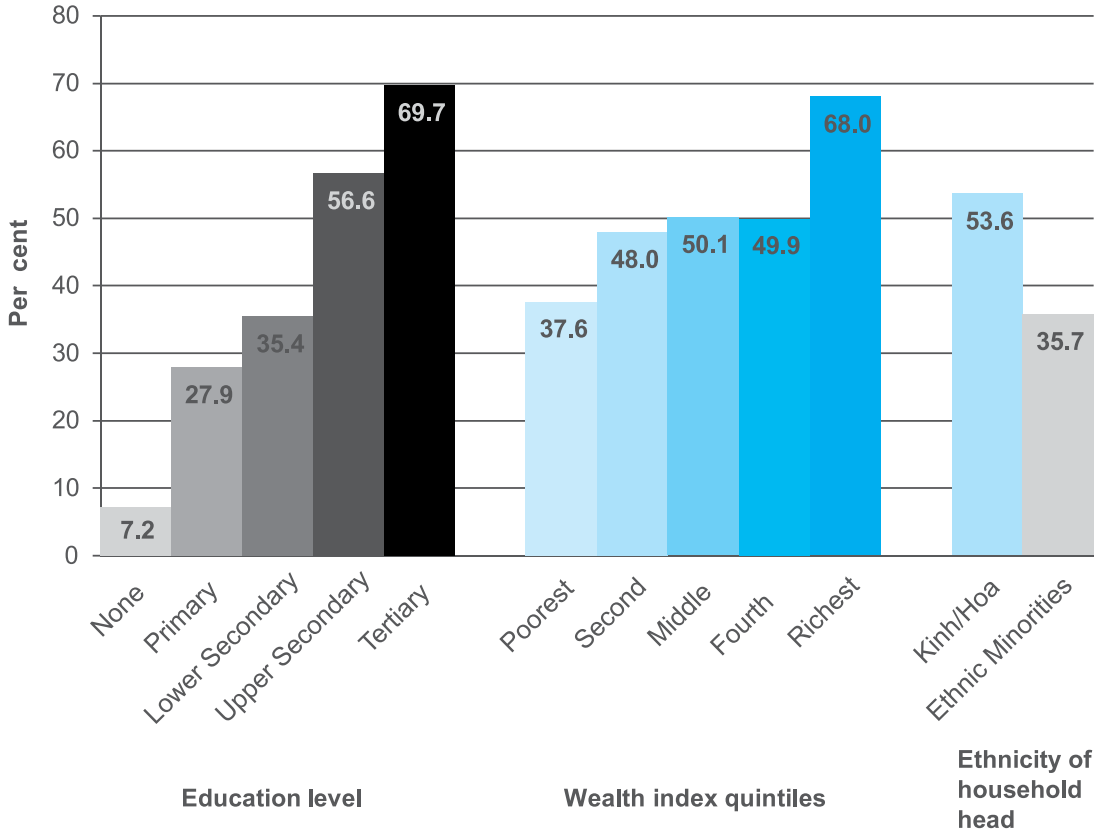
		Percentage who know transmission can be prevented by:				Percentage who know that HIV cannot be transmitted by:					
	Percentage who have heard of HIV/AIDS	Having only one faithful uninfected sex partner	Using a condom every time	Percentage of women who know both ways	Percentage who know that a healthy looking person can have HIV	Mosquito bites	Supernatural means	Sharing food with someone with HIV	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
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:						
	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]	Number of womenaged 15–49 who have heard of HIV/AIDS
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:						
	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]	Number of womenaged 15–49 who have heard of HIV/AIDS
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 increass 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

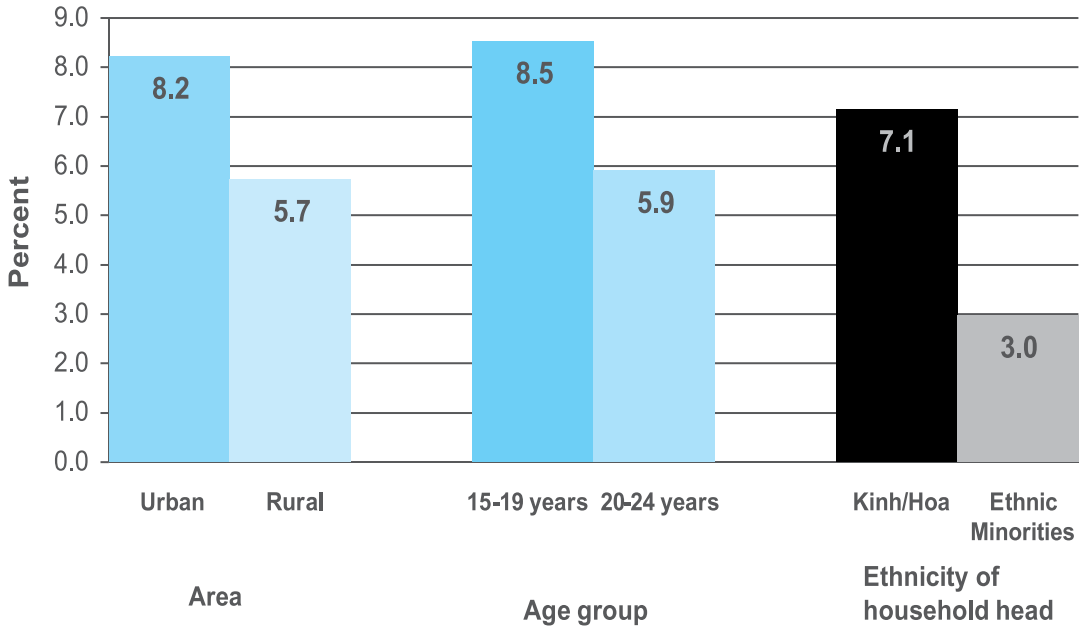
	Percentage of never-married women aged 15–24 years who have never had sex[1]	Number of never-married women aged 15–24 years	Percentage of women aged 15–24 years who had sex before age 15[2]	Number of women aged 15–24 years	Percentage of women aged 15–24 years who had sex in the last 12 months with a 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