

Vietnam



Population and
AIDS Indicator Survey

2005

VIETNAM POPULATION AND AIDS INDICATOR SURVEY 2005

General Statistical Office
National Institute of Hygiene and Epidemiology
Ha Noi, Vietnam

ORC Macro
Calverton, Maryland, USA

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This report presents findings from the 2005 Vietnam Population and AIDS Indicator Survey (VPAIS) carried out by the General Statistical Office (GSO) and the National Institute of Hygiene and Epidemiology (NIHE). ORC Macro provided technical assistance for the survey through the USAID-funded MEASURE DHS program, which is designed to assist developing countries to collect data on fertility, family planning, maternal and child health, and HIV/AIDS. Technical assistance was also provided by the U.S. Centers for Disease Control and Prevention/Global AIDS Program (CDC/GAP). Financial support was provided by the Government of Vietnam, the U.S. President's Emergency Plan for AIDS Relief, through the U.S. Agency for International Development (USAID), and the U.S. Centers for Disease Control and Prevention/Global AIDS Program (CDC/GAP).

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PREFACE

The 2005 Vietnam Population and AIDS Indicator Survey (VPAIS) was designed with the objective of obtaining national and sub-national information about program indicators of knowledge, attitudes and sexual behavior related to HIV/AIDS.

The VPAIS was implemented by the General Statistical Office (GSO) in collaboration with the National Institute of Hygiene and Epidemiology (NIHE). ORC Macro provided technical assistance for the survey through the USAID-funded MEASURE DHS program. Technical assistance was also provided by U.S. Centers for Disease Control and Prevention/Global AIDS Program (CDC/GAP). Financial support was provided by the Government of Vietnam, the U.S. President's Emergency Plan for AIDS Relief, through the U.S. Agency for International Development (USAID), and the U.S. Centers for Disease Control and Prevention/Global AIDS Program (CDC/GAP).

The survey obtained information on knowledge, attitudes, and behavior regarding HIV/AIDS. In addition, in Hai Phong province, the survey also collected blood samples from survey respondents in order to estimate the prevalence of HIV. The overall goal of the survey was to provide program managers and policymakers involved in HIV/AIDS programs with strategic information needed to effectively plan, implement and evaluate future interventions.

This report presents the major findings from the 2005 VPAIS. Data were obtained from a nationally representative sample survey and are representative of the entire population of Vietnam. Results are also available for North, Central, South Vietnam, urban-rural residence and target provinces. We hope that these findings will be used by policymakers and program implementers to monitor and evaluate existing programs and to design new strategies for combating the HIV/AIDS epidemic in Vietnam. It thus gives us great pleasure to present this report to all planners, policymakers, researchers and concerned users. I wish to warmly thank all the institutions and individuals who participated in the implementation of the survey and compilation of this report.

We warmly welcome all comments from planners, policymakers and researcher, both within and outside Vietnam.

Dr. Le Manh Hung
Director-General
General Statistical Office

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Taking the opportunity of the release of this publication, on behalf of VPAIS project, I would like to extend our sincere thanks to the Leaders of General Statistical Office for their fruitful contribution to the timely execution of the survey activities, and the successful completion of the survey as planned.

I am very grateful to ORC Macro for its technical assistance in fieldworker training, fieldwork supervision and data processing, and to USAID/Vietnam and CDC/Vietnam for their support throughout the project. I would also like to thank the staff of the Department for Population and Labor Statistics, General Statistical Office and of the National Institute of Hygiene and Epidemiology at both central and local levels, who have worked with their enthusiasm and whole-heartedness for the survey's success.

Finally, I owe much gratitude to the survey respondents who generously donated their time to fully provide answers to the survey's many questions.

Dong Ba Huong
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Department for Population and Labor Statistics, GSO
National Director
VPAIS Survey

SUMMARY OF INDICATORS

Program area	Code	Indicator	Women	Men	Found in table:
U.S. President's Emergency Plan for AIDS Relief					
Policy and Systems Strengthening	2	Percentage of the general population with accepting attitudes toward persons living with HIV/AIDS	23.0	28.3	5.1.1 & 5.1.2
Prevention	1	Percentage of young people age 15-24 who both correctly identify ways of preventing the sexual transmission of HIV and reject major misconceptions about HIV transmission	42.3	50.3	7.1
	2	Percentage of never-married young men and women age 15-24 who have never had sex	99.8	96.2	7.4
	3	Percentage of never-married women and men age 15-24 who had sex in the last 12 months	0.2	2.7	7.4
	4	Percentage of women and men age 15-49 who had sex with more than one partner in the last 12 months	0.0	0.7	6.2.1 & 6.2.2
	5	Percentage of women and men age 15-49 who say they used a condom the last time they had sex with a non-marital, non-cohabiting partner, of those who have had sex with such a partner in the last 12 months	**	72.5	6.2.1 & 6.2.2
	6	Percentage of men reporting sex with a sex worker in the last 12 months who used a condom during last paid intercourse	NA	0.5	6.3
	8	Average number of medical injections per person per year	1.6	1.3	6.7
Counseling and Testing	9	Proportion of women and men reporting that the last health care injection was given with a syringe and needle set from a new, unopened package	94.6	96.8	6.7
	1	Percentage of women and men age 15-49 who have been tested for HIV in the past 12 months and received their test results the last time they were tested	2.1	2.6	6.4
UNGASS (United Nations General Assembly Special Session on HIV/AIDS) Core Indicators for Monitoring the Declaration of Commitment ON HIV/AIDS					
Knowledge and Behavior	10 ^a	Percentage of young women and men aged 15-24 who both correctly identify ways of preventing the sexual transmission of HIV and who rejects major misconceptions about HIV transmission	42.3	50.3	7.1
	11	Percentage of young women and young men 15-24 who have sex before the age of 15	0.5	0.3	7.2
	11A	Percentage of young women and young men 18-24 who have sex before the age of 18	9.8	3.2	7.2
	12	Percentage of young women and men aged 15-24 who have had sex with a non-marital, non-cohabiting sexual partner in the last 12 months (among those who had sexual intercourse in the last 12 months)	0.7	21.3	7.5
	13 ^a	Percentage of young women and men aged 15-24 reporting the use of a condom the last time they had sex with a non-marital, non-cohabiting sexual partner (among those who had sex with a non-marital, non-cohabiting sexual partner in the past 12 months)	**	67.6	7.5
	14 ^a	Ratio of current school attendance among orphans to that among non-orphans, aged 10-14	**	**	**
UNAIDS: National AIDS Programmes - Guide for Monitoring and Evaluation					
Stigma and Discrimination	1	Accepting attitudes toward those living with HIV (among those who have heard of HIV/AIDS) Note: UNAIDS indicator includes all respondents in the denominator	23.0	28.3	5.1.1 & 5.1.2
Knowledge	1	Knowledge of HIV prevention methods	78.8	86.0	4.2
	2	No incorrect beliefs about AIDS Note: Major misconceptions are determined on a country-specific basis	41.8	53.7	4.3.1 & 4.3.2
	5	Knowledge of prevention of mother-to-child transmission of HIV	15.4	13.5	4.4
Voluntary Counseling and Testing	1	Population requesting an HIV test, receiving a test and receiving test results Note: The "voluntary component" of the UNAIDS indicator is not included in the calculation	4.7	5.3	6.4
Mother-to-Child Transmission	1	Pregnant women counseled and tested for HIV	6.0	NA	6.5
Sexual Negotiation and Attitudes	1	Women's ability to negotiate safer sex with husband	86.0	88.4	5.2
Sexual Behavior	1	Higher-risk sex in the last year	0.4	3.7	6.2.1 & 6.2.2
	2	Condom use at last higher-risk sex	**	72.5	6.2.1 & 6.2.2
	3	Commercial sex in the last year	NA	0.5	6.3
	4	Condom use at last commercial sex, client report	NA	**	6.3
Young People's Sexual Behavior	2	Young people having premarital sex	0.2	2.7	7.4
	3	Young people using a condom during premarital sex	**	67.9	7.4
	5	Young people using a condom at last higher-risk sex (among those who had sex with a non-marital, non-cohabiting sexual partner in the past 12 months) Note: UNAIDS indicator includes all young men and women 15-24 in the denominator	**	67.6	7.5.1 & 7.5.2
	6	Condom use at first sex	3.5	19.2	7.3
	7	Age mixing in sexual relationships (among youth age 15-24 and includes only non-marital, non-cohabiting partners in the last 12 months)	**	**	**
STI Care and Prevention	4	Men and women seeking treatment for STIs Note: The UNAIDS indicator specifies "... Percentage who sought care at a service provider with personnel trained in STI care."	71.5	**	NA
Health and Social Impact	4	Prevalence of orphanhood among children under 15	3.5		8.1
	5	Ratio of orphans to non-orphans who are in school	**	**	**

Program area	Code	Indicator	Women	Men	Found in table:
Indicators for Monitoring and Evaluating National HIV/AIDS Programmes for Young People					
Risk Factors and Protective Factors	9	Percentage of young women and men aged 15-24 who both correctly identify ways of preventing the sexual transmission of HIV and who rejects major misconceptions about HIV transmission	42.3	50.3	7.1
	10	Knowledge of a formal source of condoms among young people	55.6	57.4	7.1
	15	Adult support of education about condom use for prevention of HIV/AIDS among young	28.6	32.4	5.3
Behavioral	16	Sex before the age of 15	0.5	0.3	7.2
	17	Condom use among young people who had higher-risk sex in the past year	**	67.6	7.5
	20	Age-mixing in sexual partnerships among young women Note: The Youth indicator is calculated for women 15-24 and includes all partners (higher risk and non higher risk partners) who are 10+ older	**	**	**
	21	Sex with commercial sex worker among young people	NA	0.0	6.3
	22	Sex among young people while they are intoxicated Note: The Youth indicator includes people under influence of drugs.	3.1	1.9	7.6
	23	HIV Testing behavior among young people	3.0	4.3	7.7
Impact	30	Young people who have an STI Note: The Youth Guide definition specifies: "Young people with STIs that were detected during diagnostic testing"	3.2	0.3	6.6
Indicators for Monitoring and Evaluating the National Response for Children Orphaned and Made Vulnerable by HIV/AIDS (OVC)					
Strengthening the Capacity of Families to Protect and Care for Children	1	Basic Material Needs (ratio of the proportion of OVCs to non-OVC)	1.0	1.0	8.3
	A4	Succession planning	44.0		8.5
Mobilizing and Strengthening Community-based Responses	A5	Orphans living with siblings (Percentage of orphans not living with all siblings under age 18)	15.3		8.4
Ensuring Access to Essential Services	6	Orphan school attendance ratio	**	**	**
	7	Birth registration	92.5	93.0	8.2
Ensuring that Governments Protect the Most Vulnerable Children	A6	Property dispossession	9.4	NA	8.6
Raising Awareness to Create a Supportive Environment	9	Percentage of children under 18 who are orphans	4.7	3.7	8.1
	A7	Stigma and discrimination	23.0	28.3	5.1.1 & 5.1.2

^a Millennium Development Goal (MDG) Indicators

NA = Not applicable

** Too few cases to be calculated

Map of Administrative Units of Vietnam



INTRODUCTION

1.1 BACKGROUND INFORMATION

Since the detection of the first HIV case in 1981, the spread of AIDS has developed into a pandemic with which all countries in the world have had to contend.

UNAIDS and WHO report that globally, by the end of 2003, there were 46 million people living with HIV/AIDS, including 5.8 newly infected people and 3.5 million deaths from AIDS in that year alone. In many developing countries, significant proportions of newly infected people are among the young; about one-third of people living with HIV/AIDS are age 15-24. The majority of infected people are unaware that they are infected with HIV. The highest levels of HIV prevalence are being experienced in sub-Saharan Africa, followed by the Asia-Pacific region.

The first case of HIV in Vietnam was detected in December 1990. Fifteen years later, by December 2005, 103,084 cases of HIV infection had been reported nationwide, of which 17,124 had developed into full-blown AIDS. This fifteen-year period witnessed 9,941 deaths from AIDS. While national HIV prevalence is low, a number of provinces are thought to have a greater number of HIV/AIDS cases per 100,000 people, especially among high risk groups: Quang Ninh, Hai Phong, Ho Chi Minh City, Ba Ria – Vung Tau, An Giang and Ha Noi.

The HIV/AIDS epidemic is a serious threat to the population's health and has serious implications for social services. Additional risks include the threat to Vietnam's social and economic development, and the future of the Vietnamese race. Over time, the number of people infected with HIV/AIDS has continued to increase, and the scenario of infection has become more complex in coverage and form.

1.2 NATIONAL POLICY ON HIV/AIDS

A National Strategy coordinating a multi-sectoral response to HIV/AIDS is indispensable to effectively controlling the spread of the disease and reducing its socio-economic impact. On 17 March 2004 the Prime Minister signed Decision No. 36/2004/QĐ-TTg, approving the National Vision on HIV/AIDS Prevention and Control till 2010, with a Vision to 2020. The strategy defines the Government's point of view, sets priorities for the implementation of HIV/AIDS related activities, and sets targets on the road towards solutions.

The overall objective of the HIV/AIDS Strategy is to restrict the HIV prevalence rate among the general population to below 0.3 percent by 2010, with no further increase after 2010. In addition, the Strategy aims to reduce the adverse effects of HIV/AIDS on socio-economic development.

Regardless of efforts made in the current decade, the spread of HIV/AIDS will continue through the decade of 2010-2020 and continue to affect the health of the population and impinge on socio-economic development. Therefore, even if the target set for 2010 is achieved, it will still be necessary to continue HIV/AIDS prevention and control activities if targets are to be maintained. The State will continue to enhance and invest in the management and direction of HIV/AIDS prevention and control activities. The State will strive to combat discrimination and continue to support its national and

international commitments to the prevention and control of HIV/AIDS. All activities will be performed in an environment of enhancing multi-sectoral efforts.

The level of impact of HIV/AIDS on the population's health and socio-economic development will be largely dependent on the efficiency of the implementation of the HIV/AIDS prevention and control programs during the 2004-2010 period. In the current period, HIV/AIDS remains concentrated among higher-risk groups such as injecting drug users and female sex workers. Therefore, it is of the utmost importance to prevent the transmission of HIV/AIDS from the higher-risk groups to the wider community. This will be necessary in order to reduce the spread of the disease in subsequent decades. Reduced spread of the illness will result in better care and support for those infected, as well as reduce the impact of HIV/AIDS on socio-economic development.

The focus of the HIV/AIDS prevention and control programs in the 2010-2020 period will be to solve the dilemmas caused by the spread of HIV/AIDS. This will likely include widespread admission of a preventive vaccine and medicines for treatment to those already infected. Therefore, this period will require multi-sectoral coordination for the care, treatment, and resolution of problems resulting from HIV/AIDS. Priorities of the HIV/AIDS prevention and control strategy for 2010-2020 will include i) technical measures to prevent the spread of HIV/AIDS, ii) care and treatment for those infected with HIV/AIDS, and iii) care for others not infected, yet affected by the consequences of the disease. The HIV/AIDS action strategy for 2010-2020 will include i) care and treatment for HIV/AIDS infected people, and ii) prevention and reduction of the socio-economic consequences of HIV/AIDS.

1.3 OBJECTIVES OF THE SURVEY

The 2005 Vietnam Population and AIDS Indicator Survey (VPAIS) was designed with the objective of obtaining national and sub-national information about program indicators of knowledge, attitudes and sexual behavior related to HIV/AIDS. Data collection took place from 17 September 2005 until mid-December 2005.

The VPAIS was implemented by the General Statistical Office (GSO) in collaboration with the National Institute of Hygiene and Epidemiology (NIHE). ORC Macro provided financial and technical assistance for the survey through the USAID-funded MEASURE DHS program. Financial support was provided by the Government of Vietnam, the United States President's Emergency Plan for AIDS Relief, the United States Agency for International Development (USAID), and the United States Centers for Disease Control and Prevention/Global AIDS Program (CDC/GAP).

The survey obtained information on sexual behavior, and knowledge, attitudes, and behavior regarding HIV/AIDS. In addition, in Hai Phong province, the survey also collected blood samples from survey respondents in order to estimate the prevalence of HIV. The overall goal of the survey was to provide program managers and policymakers involved in HIV/AIDS programs with strategic information needed to effectively plan, implement and evaluate future interventions.

The information is also intended to assist policymakers and program implementers to monitor and evaluate existing programs and to design new strategies for combating the HIV/AIDS epidemic in Vietnam. The survey data will also be used to calculate indicators developed by the United Nations General Assembly Special Session on HIV/AIDS (UNGASS), UNAIDS, WHO, USAID, the United States President's Emergency Plan for AIDS Relief, and the HIV/AIDS National Response.

The specific objectives of the 2005 VPAIS were:

- to obtain information on sexual behavior.

- to obtain accurate information on behavioral indicators related to HIV/AIDS and other sexually transmitted infections.
- to obtain accurate information on HIV/AIDS program indicators.
- to obtain accurate estimates of the magnitude and variation in HIV prevalence in Hai Phong Province.

1.4 SAMPLE SIZE AND DESIGN

The sampling frame for the 2005 Vietnam Population and AIDS Indicator Survey (VPAIS) was the master sample used by the General Statistical Office (GSO) for its annual Population Change Survey (PCS 2005). The master sample itself was constructed in 2004 from the 1999 Population and Housing Census. As was true for the VNDHS 1997 and the VNDHS 2002 the VPAIS 2005 is a nationally representative sample of the entire population of Vietnam.

The survey utilized a two-stage sample design. In the first stage, 251 clusters were selected from the master sample. In the second stage, a fixed number of households were systematically selected within each cluster, 22 households in urban areas and 28 in rural areas.

The total sample of 251 clusters is comprised of 97 urban and 154 rural clusters. HIV/AIDS programs have focused efforts in the four provinces of Hai Phong, Ha Noi, Quang Ninh and Ho Chi Minh City; therefore, it was determined that the sample should be selected to allow for representative estimates of these four provinces in addition to the national estimates. The selected clusters were allocated as follows: 35 clusters in Hai Phong province where blood samples were collected to estimate HIV prevalence; 22 clusters in each of the other three targeted provinces of Ha Noi, Quang Ninh and Ho Chi Minh City; and the remaining 150 clusters from the other 60 provinces throughout the country.

Prior to the VPAIS fieldwork, GSO conducted a listing operation in each of the selected clusters. All households residing in the sample points were systematically listed by teams of enumerators, using listing forms specially designed for this activity, and also drew sketch maps of each cluster. A total of 6,446 households were selected. The VPAIS collected data representative of:

- the entire country, at the national level
- for urban and rural areas
- for three regions (North, Central and South), see Appendix for classification of regions.
- for four target provinces: Ha Noi, Hai Phong, Quang Ninh and Ho Chi Minh City.

All women and men aged 15-49 years who were either permanent residents of the sampled households or visitors present in the household during the night before the survey were eligible to be interviewed in the survey. All women and men in the sample points of Hai Phong who were interviewed were asked to voluntarily give a blood sample for HIV testing. For youths aged 15-17, blood samples were drawn only after first obtaining consent from their parents or guardians.

1.5 QUESTIONNAIRE

Two questionnaires were used in the survey, the Household Questionnaire and the Individual Questionnaire for women and men aged 15-49. The content of these questionnaires was based on the

model AIDS Indicator Survey (AIS) questionnaires developed by the MEASURE DHS program implemented by ORC Macro.

In consultation with government agencies and local and international organizations, the GSO and NIHE modified the model questionnaires to reflect issues in HIV/AIDS relevant to Vietnam. These questionnaires were then translated from English into Vietnamese. The questionnaires were further refined after the pretest.

The Household Questionnaire was used to list all the usual members and visitors in the selected households. Some basic information was collected on the characteristics of each person listed, including age, sex, relationship to the head of the household, education, basic material needs, survivorship and residence of biological parents of children under the age of 18 years and birth registration of children under the age of 5 years. The main purpose of the Household Questionnaire was to identify women and men who were eligible for the individual interview. The Household Questionnaire also collected information on characteristics of the household's dwelling unit, such as the source of drinking water, type of toilet facilities, type of material used in the flooring of the house, and ownership of various durable goods, in order to allow for the calculation of a wealth index. The Household Questionnaire also collected information regarding ownership and use of mosquito nets.

The Individual Questionnaire was used to collect information from all women and men aged 15-49 years and covered the following topics:

- Background characteristics (education, media exposure, occupation, religion, employment, etc.)
- Reproduction (number of births, date of last birth, current pregnancy)
- Marriage and sexual activity
- Knowledge and attitudes towards HIV/AIDS
- Knowledge and reported prevalence of other Sexually Transmitted Infections (STIs), and other health issues (injections).
- Blood collection (in Hai Phong).

All questionnaires were administered in a face-to-face interview. Because cultural norms in Vietnam restrict open discussion of sexual behavior, there is concern that this technique may contribute to potential under-reporting of sexual activity, especially outside of marriage. This matter is further discussed in the introduction of Chapter 6.

All aspects of VPAIS data collection were pre-tested in July 2005. In total, 24 interviewers (12 men and 12 women) were involved in this task. They were trained for thirteen days (including three days of fieldwork practice) and then proceeded to conduct the survey in the various urban and rural districts of Ha Noi. In total, 240 individual interviews were completed during the pretest. The lessons learnt from the pretest were used to finalize the survey instruments and logistical arrangements for the survey and blood collection.

1.6 TRAINING

Training courses for field staff were carried out in two locations. The first course took place in Ba Vi district of Ha Tay province, September 5-17, 2005, and the second course took place in My Tho city of

Tien Giang province, September 12-24, 2005. A total of 79 candidates were trained. The courses consisted of introduction on interviewing skills and fieldwork procedures, detailed editing of questionnaires, mock interviews among trainees, and practice interviews in households outside the VPAIS sample points.

Testing of candidates at the end of the first week of training directed the selection of 72 candidates (36 men and 36 women) to form 12 data collection teams. Each team consisted of 1 male supervisor, 1 female field editor, 2 female interviewers and 2 male interviewers. Supervisors and field editors were trained in methods of editing, procedures for checking data quality, and logistics of field cooperation. In addition, team members assigned to Hai Phong province (12 in total) were trained on blood collection procedures. Trainers were senior staff from the VPAIS project, assisted by ORC Macro experts.

1.7 COMMUNITY MOBILIZATION AND FIELDWORK

Prior to the start of fieldwork, the provincial statistical offices were requested to nominate candidates for VPAIS fieldwork and to undertake numerous activities designed to promote awareness of the survey and encourage participation. Letters to thank respondents for their participation and brochures on HIV were distributed to survey participants during the survey fieldwork operation. Respondents in Hai Phong were also given VCT information.

Provincial statistical offices visited localities of the selected clusters to notify authorities about the survey. Local authorities were also notified with regard to mapping and listing activities conducted during the time of sample design, and again at the commencement of data collection. Advocacy and mobilization activities continued throughout the survey period to ensure smooth and successful implementation. The purpose of the survey, its design, implementation, utilization of survey data and the need for community participation were discussed, as well as issues of confidentiality and anonymity of HIV testing.

Twelve teams carried out data collection for the survey. VPAIS staff coordinated and supervised fieldwork activities, assisted by occasional visits of ORC Macro experts. Data collection took place over a three-month period, September 18 through the end of December 2005.

1.8 BLOOD SAMPLE COLLECTION IN HAI PHONG AND HIV TESTING

All women and men aged 15-49 who were interviewed in Hai Phong province were asked to voluntarily provide a blood sample for subsequent testing of HIV. The protocol for the blood specimen collection and analysis was developed jointly by all parties to the survey. The protocol allows for the merging of the test results to the socio-demographic and behavioral data collected in the individual questionnaires, provided that the information that could potentially identify an individual be destroyed before the linking is effected. This requires that cluster and household codes be scrambled in the data file, while maintaining the integrity of each cluster, and that the back page of the Individual Questionnaire that contains the bar code labels be destroyed before any testing of blood could be performed. This step was completed at the time of producing the preliminary report, before the NIHE laboratory began any testing of the blood specimens.

Chapter 9 contains the analysis of the fully linked dataset. However, sample size and very low prevalence result in too few HIV cases to permit detailed analysis of HIV prevalence by background characteristics. The data do not have sufficient power to show statistically significant differences in prevalence between sub-populations.

All team members assigned to Hai Phong were trained in blood sample collection. To obtain informed consent for blood sampling, the interviewers explained the procedure, the confidentiality of the data, and the fact that the HIV test results could not be linked or made available to the respondent.

Since respondents were not offered the results of their HIV test, survey respondents who wanted to know their HIV status were given a voucher for a free voluntary counseling and testing (VCT) visit to the nearest VCT site, as well as an educational pamphlet explaining available services and the benefits of testing.

After providing consent, respondents provided a blood sample from a finger prick obtained with a single-use, spring-loaded, sterile lancet. In the case of a youth respondent age 15-17, consent was first sought from the parent or guardian of the youth prior to requesting consent from the youth. Blood drops from the finger prick were collected on a filter paper card containing a bar-coded identification label. Matching labels were also pasted on the respondent's Individual Questionnaire and on a transmittal sheet used for inventory control.

All filter paper cards with blood drops were air dried overnight in plastic boxes, and then stored in zip-lock bags containing desiccants to absorb moisture. Specimens were periodically collected from the field and taken to the NIHE laboratory for storage until the end of data collection.

Upon receipt at NIHE laboratory, specimens were counted and checked against transmittal sheets to verify the bar-coded identification labels, and then kept in a freezer at -80°C. Testing began only after the survey data files had been scrambled according to survey protocol and the pages of the questionnaire with respondent identifiers had been destroyed.

Specimens were removed from freezer storage and kept at room temperature for at least 30 minutes prior to testing. One-quarter-inch disks were punched from the dried blood spots and submerged in 200 microlitres of elution buffer (PBS pH 7.4 with 0.05% Tween 20) for overnight elution at 40°C. The following day, serum was eluted and appropriate dilutions were made, according to test kit specifications. Dilutions had been determined in a validation study of the test kits, validating test kits on both dried blood spots and venous blood samples. Eluted serum was tested following manufacturer's recommendations for each of the test kits.

All specimens were tested with a screening test, Genscreen HIV ½ Version 2 from Bio-Rad. Each plate contained 12 control samples. All samples testing positive and 10 per cent of the negative samples on the first ELISA were then tested with a second ELISA (Vironostika Uni-Form 2 Plus O, BioMerieux). Samples positive on the first and second test were considered as HIV positive. Samples negative on both tests were considered as HIV negative. Samples with discordant results on the two assays, were tested with Western Blot. The result on Western Blot was considered as the final result. The 90 percent of negative samples that did not go on for a second ELISA were rendered negative after having tested negative on the first ELISA.

1.9 DATA PROCESSING

The data processing of the VPAIS questionnaire began shortly after the fieldwork commenced. The first stage of data editing was done by the field editors, who checked the questionnaires for completeness and consistency. Supervisors also reviewed the questionnaires in the field. The completed questionnaires were then sent periodically to the GSO in Ha Noi by mail for data processing.

The office editing staff first checked that questionnaires of all households and eligible respondents had been received from the field. The data were then entered and edited using CSPro, a software package developed collaboratively between the U.S. Census Bureau, ORC Macro, and SerPRO

to process complex surveys. All data were entered twice (100 percent verification). The concurrent processing of the data was a distinct advantage for data quality, as VPAIS staff was able to advise field teams of errors detected during data entry. The data entry and editing phases of the survey were completed by the end of December 2005.

1.10 RESPONSE RATES

Table 1.1 shows response rates for the VPAIS. A total of 6,446 households were selected in the sample, of which 6,346 (98 percent) were found to be occupied at the time of the fieldwork. Occupied households include dwellings in which the household was present but no competent respondent was home, the household was present but refused the interview, and dwellings that were not found. Of occupied households, 6,337 were interviewed, yielding a household response rate close to 100 percent. Calculation of response rates is defined in Appendix A.

Table 1.1 Results of the household and individual interviews			
Number of households, number of interviews and response rates, according to residence, Vietnam 2005			
Result	Residence		Total
	Urban	Rural	
Households			
Households selected	2,134	4,312	6,446
Households occupied	2,096	4,250	6,346
Households interviewed	2,092	4,245	6,337
Household response rate	99.8	99.9	99.9
Women			
Number of eligible women	2,554	4,815	7,369
Number of eligible women interviewed	2,517	4,772	7,289
Eligible women response rate	98.6	99.1	98.9
Men			
Number of eligible men	2,210	4,578	6,788
Number of eligible men interviewed	2,180	4,527	6,707
Eligible men response rate	98.6	98.9	98.8

All women and men aged 15-49 years who were either permanent residents of the sampled households or visitors present in the household during the night before the survey were eligible to be interviewed in the survey. Within interviewed households, a total of 7,369 women aged 15-49 were identified as eligible for interview, of whom 7,289 were interviewed, yielding a response rate to the Individual interview of 99 percent among women. The high response rate was also achieved in male interviews. Among the 6,788 men aged 15-49 identified as eligible for interview, 6,707 were successfully interviewed, yielding a response rate of 99 percent. Response rates are almost identical in urban and rural areas. Response rates for the three regions and the four targeted provinces are shown in Appendix A; response rates are above 96 percent for all seven sub-groups.

2.1 KEY FINDINGS

- Vietnamese households are comprised, on average, of 4.2 members, having declined slightly from 4.4 in 2002 and 4.6 in 1999.
- Nearly 4 percent of households include an orphaned child.
- Three-quarters of households obtain their drinking water from a safe source (22 percent piped water and 53 percent from a well).
- One-third of households use a flush toilet. Four in ten households uses a traditional pit latrine.
- Nearly all households have electricity (96 percent).
- More than four-fifths of all households own a television, 42 percent own a radio, and 32 percent of households possess a telephone.
- The urban population is predominantly in the two highest wealth quintiles. The rural population is more evenly distributed across the wealth quintiles. The South has the largest segment of those in the highest wealth quintile when compared to the North and Central regions.
- In Vietnam, nearly every household (97 percent) owns at least one mosquito net. Only households in Ho Chi Minh City are an exception to the high national ownership level. One in three households in Ho Chi Minh City does not own a mosquito net.
- Only 12 percent of households own an insecticide treated net (ITN).
- Sleeping under a mosquito net is nearly universal among children (95 percent) and women in Vietnam. Only in Ho Chi Minh City did one-third of women not sleep under a mosquito net on the night before the survey

2.2 INTRODUCTION

This chapter summarizes selected socio-economic characteristics of households and the members of those households surveyed in the 2005 VPAIS. They include age, sex, residence and education of household members and individual respondents. This chapter also includes measures of housing conditions, such as water source, toilet facilities, and possession of durable consumer goods. This information provides context for interpreting survey findings and also provides an approximate indication of the representativeness of the sample.

In the VPAIS, a household was considered a person or group of persons who share meals and living space. Members of a household may or may not share a common household budget. Members of a household may or may not have a blood relationship. In order to collect all the necessary information about households and individuals, two types of questionnaires – a Household and Individual Questionnaire – were designed. The Household Questionnaire was used to record information on all usual

residents and visitors who spent the night preceding the day of interview in the household. This allows estimation of both the de jure (usual residents) and de facto (those who were there at the time of the survey) population. The Individual Questionnaire was used to record detailed information about females and males aged 15-49.

2.3 HOUSING CHARACTERISTICS

Respondents of the VPAIS were asked a number of questions about their household environment. Table 2.1 presents characteristics of households which reflect the socio-economic conditions of surveyed households. Housing characteristics are also important determinants of the health status of household members. Proper hygiene and sanitation aid in the prevention of major childhood diseases. Housing characteristics can be used as indicators of socio-economic status.

Sources of household drinking water vary greatly by residence. Piped water is the predominant source for urban households, where two out of three households drink piped water (65 percent). Only 11 percent of rural households drink piped water. The predominant source of drinking water for rural households is well water (59 percent). Fewer than one-third of urban households drink well water (30 percent). Fourteen percent of rural households drink rain water and an additional 14 percent drink water from rivers, springs, or streams. Three percent of urban households drink rainwater.

One-third of all households use a flush toilet (32 percent), but of course this varies greatly by residence. Four out of five urban households uses a flush toilet (80 percent), while one out of five rural households do so. The predominant facility used by rural households is a pit toilet (51 percent). An additional 10 percent of rural households use a ventilated improved pit toilet. One in five rural households in Vietnam uses no structured toilet facility at all, and four percent of urban households also use the bush or fields.

In Vietnam, seventy nine percent of households have a finished floor made of ceramic tiles, cement etc. Nearly all urban households live in structures with a floor made

Table 2.1 Housing characteristics

Percent distribution of households by housing characteristics, according to residence, Vietnam 2005

	Residence		
Housing characteristic	Urban	Rural	Total
Source of drinking water			
Piped into residence/plot	61.1	10.1	20.4
Piped to public tap	3.6	0.8	1.4
Well into residence/dwelling	29.4	56.4	51.0
Public well	0.8	2.7	2.3
Spring	0.2	7.4	6.0
River, stream	0.9	7.3	6.0
Rainwater	3.2	14.0	11.8
Tanker truck	0.7	0.6	0.6
Other	0.2	0.6	0.4
Total	100.0	100.0	100.0
Sanitation facility			
Flush toilet	80.4	19.3	31.6
Ventilated improved pit latrine	6.3	10.1	9.3
Traditional pit toilet/latrine	9.6	51.1	42.8
No facility, bush, field	3.7	19.5	16.3
Total	100.0	100.0	100.0
Flooring material			
Earth, sand	3.2	18.2	15.2
Wood planks	0.6	5.3	4.4
Palm, bamboo	0.0	2.0	1.6
Ceramic tiles	77.5	42.1	49.3
Cement	18.5	31.9	29.2
Other	0.1	0.3	0.3
Total	100.0	100.0	100.0
Main roof material			
Thatch/palm leaf	1.3	8.9	7.4
Metal	48.6	20.8	26.4
Calamine/cement fiber	10.6	11.6	11.4
Ceramic tiles	17.6	44.7	39.2
Cement	21.5	13.0	14.7
Other	0.5	1.0	0.9
Total	100.0	100.0	100.0
Main wall material			
No walls	0.0	0.0	0.0
Cane/palm/trunks	2.2	12.5	10.4
Dirt	0.1	0.7	0.6
Bamboo with mud	1.0	3.6	3.1
Plywood	0.6	2.3	2.0
Reused wood	1.2	3.8	3.3
Cement	0.7	1.9	1.7
Bricks	90.8	65.4	70.5
Covered adobe	1.1	0.9	0.9
Wood planks/shingles	1.6	6.1	5.2
Other	0.8	2.7	2.3
Total	100.0	100.0	100.0
Rooms in house for sleeping			
One room	28.2	32.5	31.7
Two rooms	42.7	48.4	47.2
Three or more rooms	28.5	19.1	21.0
Total	100.0	100.0	100.0
Number of households	1,274	5,063	6,337

of tile or cement (96 percent), while three out of four rural households do (74 percent). About one-fourth of rural households reside in dwellings with earth, sand, wood, or bamboo flooring (26 percent). Only four percent of urban households live in dwellings with this type of flooring.

Two out of three households live in homes with roofs made of either ceramic tile or metal. Other commonly used materials include cement, cement fiber, and thatch or palm leaf. One-half of urban households live in homes made with metal roofs (49 percent), while rural households prefer to use ceramic tile or cement roofing (58 percent of rural households).

Brick accounts for the wall material used by the majority of households (71 percent). Nine out of ten urban households use brick for wall construction, while 65 percent of rural households use brick. Ten percent of households have walls made with cane, palm, or trunks.

As a measure of crowding, information was collected on the number of sleeping rooms in the household. Nearly half of all households have two sleeping rooms (47 percent), one-third of households have only one room. About one-fifth of households have three or more sleeping rooms. The proportion of urban households with three or more sleeping rooms (29 percent) is greater than among rural households (19 percent). This suggests the economic status of urban households is higher than that of rural households.

The VPAIS also collected information on the energy source and type of cooking fuel used by interviewed households. Table 2.2 shows the high level of electrification in Vietnam. Nearly all households have electricity (96 percent). A difference between urban and rural areas exists, but is quite small. Five percent of rural households have no electricity, while less than one percent of urban households have no electricity. The proportion of rural households with electricity has increased from 74 percent in 1997 to 87 percent in 2002 and to 95 percent in 2005.

Commonly used cooking fuels include wood, gas, straw and coal, with wood and gas accounting for the fuel source of three-quarters of households in Vietnam (77 percent). Nearly one-half of all households use wood for cooking (46 percent) and nearly one-third use gas (31 percent). Eleven percent of households use straw and an additional ten percent use coal. Not surprisingly, type of fuel varies by urban and rural residence. Two out of three urban households rely on gas for cooking (67 percent), while only one in five rural households use gas (21 percent). Rural households commonly use wood for cooking (54 percent of rural households), while 14 percent of urban households use wood.

Table 2.2 Household energy source

Percent distribution of households by energy source, according to residence, Vietnam 2005

Energy source	Residence		Total
	Urban	Rural	
Electricity			
Yes	99.6	95.2	96.1
No	0.4	4.8	3.9
Total	100.0	100.0	100.0
Type of cooking fuel			
Electricity	1.5	0.8	0.9
Gas	67.1	21.2	30.5
Kerosene	5.6	0.6	1.6
Coal	10.0	9.4	9.5
Wood	14.4	54.4	46.4
Straw	1.1	13.7	11.1
Other	0.2	0.0	0.1
Total	100.0	100.0	100.0
Number of households	1,274	5,063	6,337

2.4 HOUSEHOLD DURABLE GOODS

The VPAIS inquired as to household possession of a range of durable goods in order to ascertain general household living standard. The durable goods asked about also indicate other benefits available to the household. Households were asked whether they owned a radio, television, or telephone (a measure of access to mass media), a refrigerator (a measure of ability to store food), a washing machine, water pump,

cupboard, table and chairs (a measure of living convenience), and a bicycle, motorcycle, or car (a measure of access to transportation).

Table 2.3 shows that about 4 in ten households (42 percent) own a radio and 8 in ten (84 percent) own a television. Nearly one in three households owns a telephone (32 percent), although this varies greatly by urban and rural residence. As many as two-thirds of urban households has a telephone (68 percent), while nearly one-quarter of rural households has a telephone (23 percent).

Not surprisingly, ownership of appliances varies by urban and rural households. As many as one-half of urban households (56 percent) own a refrigerator and over one-quarter own a washing machine (28 percent). Twelve and four percent of rural households own a refrigerator and washing machine. However, urban and rural households are equally likely to own a water pump; one-half of urban and rural households own a water pump. In urban areas water pumps are used in daily life to obtain water, and in rural areas water pumps are commonly used in agricultural production.

The mode of transport common to both urban and rural areas is the bicycle. Three quarters of all households own a bicycle (73 percent of urban households and 79 percent of rural households). Over one-half of households own a motorcycle (56 percent); over three-quarters of urban households own a motorcycle (78 percent) and one-half of rural households own a motorcycle. Of course rural households have forms of transport urban households tend not to need; nearly one in five rural households have a boat or animal drawn cart. Three percent of the urban households own a car or truck.

Household ownership of most durable goods has increased since 2002. For example, the proportion of households possessing a television has increased from 70 to 84 percent, while the proportion owning a telephone has nearly doubled (from 18 to 32 percent). Not surprisingly, ownership of radios has declined, from 50 to 42 percent. In spite of being more expensive, televisions are more attractive to own. Other than furniture (cupboard and table and chairs), the television is the most commonly owned household possession asked about in the VPAIS in both urban and rural areas. As televisions are not a necessity, this suggests that living standards in Vietnam have generally increased, as households can afford to purchase items for entertainment.

2.5 WEALTH QUINTILES

Table 2.4 shows the percent distribution of population by wealth quintile, an indicator of the economic status of households. The wealth index is an indicator of the level of wealth that is consistent with expenditure and income measures (Rutstein, 1999). The index is used as a background characteristic in many tables, and has been tested in a number of countries in relation to inequities in household income, use of health services, and health outcomes (Rutstein and Johnson, 2004; Rutstein et al., 2000). The wealth index was constructed using household asset data and principal components analysis. Household

Table 2.3 Household durable goods

Percentage of households possessing various durable consumer goods, by urban-rural residence, Vietnam 2005

Durable consumer good	Residence		Total
	Urban	Rural	
Radio	51.6	40.1	42.4
Television	94.9	81.1	83.9
Telephone (Any kind)	67.8	22.9	31.9
Refrigerator	55.5	12.3	21.0
Washing machine	28.0	3.5	8.4
Water pump	50.3	48.9	49.1
Cupboard	94.6	78.9	82.1
Table and chairs	93.4	84.7	86.5
Bicycle	72.8	78.6	77.4
Motorcycle/motor scooter	78.2	50.3	55.9
Animal-drawn cart	0.8	5.0	4.2
Car/truck	2.8	0.6	1.0
Boat with a motor	1.4	7.0	5.9
Boat without a motor	0.5	6.2	5.0
None of the above	0.2	3.1	2.5
Number of households	1,274	5,063	6,337

asset information was collected in the VPAIS Household Questionnaire and covers information on household ownership of a number of consumer items ranging from a television to a bicycle or car, as well as dwelling characteristics such as source of drinking water, type of sanitation facilities, and type of materials used in dwelling construction.

Each asset was assigned a weight (factor score) generated through principal component analysis, and the resulting asset scores were standardized in relation to a standard normal distribution with a mean of zero and standard deviation of one (Gwatkin et al., 2000). Each household was then assigned a score for each asset, and the scores were summed for each household. Individuals were ranked according to the total score of the household in which they resided. The sample was then divided into quintiles from one (lowest wealth level) to five (highest wealth level).

Table 2.4 Wealth quintiles							
Percent distribution of the de jure population by wealth quintiles, according to background characteristics, Vietnam 2005							
Background characteristic	Wealth quintile					Total	Number of de jure population ¹
	Lowest	Second	Middle	Fourth	Highest		
Residence							
Urban	2.8	4.6	7.9	24.2	60.6	100.0	5,169
Rural	24.3	23.8	22.8	19.0	10.1	100.0	21,545
Region							
North	22.6	16.7	23.4	19.7	17.5	100.0	10,113
Central	16.5	26.6	23.2	19.8	14.0	100.0	7,096
South	20.3	18.8	13.8	20.3	26.9	100.0	9,506
Province							
Ha Noi	0.3	2.4	10.0	20.6	66.7	100.0	871
Ho Chi Minh City	0.0	2.0	3.6	25.4	69.0	100.0	1,533
Hai Phong	1.9	16.9	24.5	28.3	28.5	100.0	567
Quang Ninh	14.2	14.8	15.5	21.6	33.9	100.0	361
Total	20.1	20.1	19.9	20.0	19.9	100.0	26,715
¹ Household members, i.e., usual residents							

Table 2.4 clearly indicates that the urban population resides in the highest wealth quintiles while the rural population does not. The vast majority of the urban population belongs to the fourth and highest wealth quintile (85 percent). Half the rural population (48 percent) belongs to the second and lowest wealth quintile. By region, it is not surprising to see that the South has the highest proportion of the population in the highest wealth quintile (27 percent) as compared to the Central and North regions (about 15 percent). The South includes the provinces of the Southeast (namely, Ho Chi Minh city, Dong Nai, Binh Duong and Ba Ria Vung Tau), which have seen the most rapid development of their economies over the last two decades.

Comparing the targeted provinces, Ho Chi Minh City and Hanoi have two-thirds of their population in the highest wealth quintile (69 and 67 percent, respectively). Overall between the four targeted provinces, HCMC has the greatest percentage of its population in the fourth and highest wealth quintile (94 percent), followed by Hanoi (88 percent), with Hai Phong and Quang Ninh having lower percentages in the highest wealth quintiles (57 and 56 percent, respectively).

2.6 HOUSEHOLD POPULATION BY AGE, SEX, AND RESIDENCE

In the VPAIS, information was collected for usual residents of the selected households and visitors who had spent the previous night in the households. A household was defined as a person living alone or a group of persons who live and eat together.

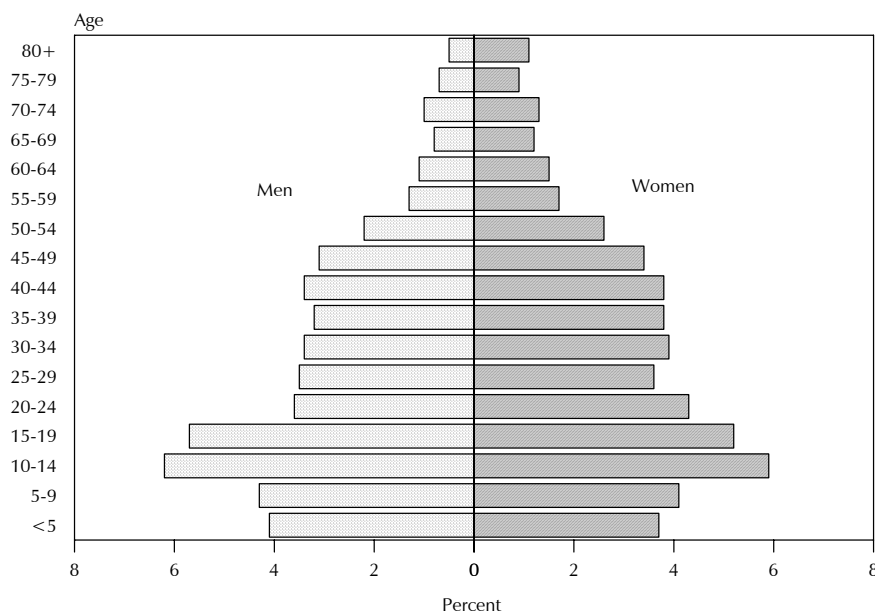
Table 2.5 presents the percent distribution of the de facto population by five-year age groups, according to urban-rural residence and sex. The distribution of the surveyed population was 20 percent urban and 80 percent rural.

Age	Urban			Rural			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
<5	6.5	7.0	6.7	8.9	7.2	8.0	8.4	7.2	7.8
5-9	8.1	5.9	6.9	9.1	8.3	8.7	8.9	7.8	8.4
10-14	10.6	8.2	9.3	13.4	12.0	12.7	12.8	11.3	12.0
15-19	11.1	9.8	10.4	12.0	10.1	11.0	11.8	10.1	10.9
20-24	8.3	9.9	9.2	7.4	7.8	7.6	7.6	8.2	7.9
25-29	7.2	7.6	7.4	7.3	6.9	7.1	7.3	7.0	7.1
30-34	7.9	7.8	7.8	7.0	7.3	7.2	7.2	7.4	7.3
35-39	7.5	8.3	7.9	6.5	7.1	6.8	6.7	7.3	7.0
40-44	7.8	7.8	7.8	6.8	7.2	7.0	7.0	7.3	7.2
45-49	8.3	7.0	7.6	6.1	6.3	6.2	6.5	6.5	6.5
50-54	5.3	5.9	5.6	4.4	4.8	4.6	4.6	5.0	4.8
55-59	3.3	4.1	3.7	2.7	3.0	2.8	2.8	3.2	3.0
60-64	2.0	3.0	2.5	2.3	3.0	2.6	2.2	3.0	2.6
65-69	2.1	2.3	2.2	1.6	2.3	1.9	1.7	2.3	2.0
70-74	1.6	2.1	1.9	2.1	2.5	2.3	2.0	2.4	2.2
75-79	1.4	1.2	1.3	1.6	1.8	1.7	1.6	1.7	1.6
80 +	1.0	2.1	1.6	0.9	2.1	1.6	1.0	2.1	1.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	2,420	2,734	5,154	10,248	10,922	21,170	12,668	13,656	26,324

Current age composition is affected by past levels of fertility and mortality. The population pyramid (Figure 2.1) has a narrow top and a wide base, reflecting a pattern typical of countries with a history of relatively high fertility. The pyramid also reflects the rapid decline in fertility in the ten years just prior to the survey; this can be deduced by the two bottom blocks of the pyramid being shorter than the blocks representing the 10-20 years prior to the survey.

Women outnumber men for all ages above 20 years. The proportion of the population age less than 15 years has declined over time from 40 percent in 1989 (GSO, 1991) to 30 percent in 2002 (CPFC and ORC Macro, 2003) to 28 percent in 2005.

Figure 2.1 Age Pyramid, Vietnam 2005



2.7 HOUSEHOLD COMPOSITION

Table 2.6 presents information on the percent distribution of households by sex of head of household and household size. The size and composition of the household may affect the allocation of financial resources among household members, which in turn influences the wellbeing of these individuals. Household size determines the extent of crowding in the dwelling; overcrowding can potentially lead to unfavorable health conditions.

Data indicate that males head 73 percent of the households in Vietnam, while only 27 percent of households are headed by females. Female headed households are more common in urban areas than rural areas (39 versus 24 percent).

The average household size has slowly decreased over time, from 4.6 in 1999 (population census), to 4.4 in 2002, (VNDHS 2002), to 4.2 in the VPAIS 2005. The average household size in urban areas is only slightly lower than that in rural areas (4.1 versus 4.3 people). Almost two-thirds (65 percent) of households consist of 3 to 5 persons.

Table 2.6 Household composition

Percent distribution of households by sex of head of household, household size, and orphan and foster children, according to residence, Vietnam 2005

Characteristic	Residence		Total
	Urban	Rural	
Sex of head of household			
Male	60.8	76.0	73.0
Female	39.2	24.0	27.0
Total	100.0	100.0	100.0
Number of usual members			
1	4.7	4.1	4.2
2	12.5	10.5	10.9
3	22.2	18.0	18.8
4-5	44.1	47.3	46.6
6-7	12.1	15.7	15.0
8-9	3.1	3.4	3.3
10+	1.4	1.1	1.2
Total	100.0	100.0	100.0
Mean size	4.1	4.3	4.2
Orphans and foster children			
HH with foster children	5.3	4.9	5.0
HH with double orphans	0.1	0.3	0.2
HH with single orphans	2.5	4.0	3.7
HH with no orphans	97.4	95.7	96.0
Number of households	1,274	5,063	6,337

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

The most common household size is 4 to 5 persons (47 percent of all households). The proportion of households with 6 or more persons has declined from 22 percent in VNDHS 2002 to 19 percent in the VPAIS 2005. This may be the result of both smaller family size as well as improved socio-economic conditions allowing more young couples to move out of their parental home and to live on their own.

In Vietnam, about 4 percent of households include an orphaned child; 3 percent of households include a double orphan (both parents have died) and 1 percent a single orphan (one parent has died).

2.8 EDUCATIONAL ATTAINMENT OF HOUSEHOLD POPULATION

Educational attainment is commonly associated with other socio-economic factors such as income and housing conditions, as well as with behaviors influencing health.

Formal education in Vietnam is based on a three-tier system, known as the 5-4-3 system. It consists of 5 years of primary, 4 years of lower secondary, and 3 years of upper secondary education. Graduates of higher secondary school may then further their education by enrolling at any of the various national universities, colleges, or technical schools throughout the country to acquire more specific skills.

Data in Table 2.7 indicate there are significant differences in level of education between males and females by background characteristics. Generally speaking, males are slightly better educated than females: 4 percent of men and 9 percent of women age six and above have not received any formal education. While the male-female gap exists at all levels of education, this gap has narrowed in recent years, which is especially evident in the age group 6-24. Above age 45 the gap widens substantially.

As expected, the urban population is more educated than the rural population. The urban/rural differential is greatest at the highest levels of education. The proportion of the population with more than secondary education is nearly four times higher in the urban population as it is in the rural population, among both men and women. Eighteen percent of urban men have pursued more than secondary education, while only 5 percent of rural men have done so. Likewise among women, 16 percent of urban women have pursued more than secondary education, while only 4 percent of rural women have done so.

Regional variation in educational attainment continues to exist. While the proportion of the population that has not attended school is fairly similar across the three regions, the proportions attaining secondary and higher education are greater in the North than in the Central and South regions. The proportion of the population attaining secondary and higher education is greatest in the North (men: 72 percent; women: 62 percent) and lowest in the South (men: 59 percent; women 50 percent). This differential can be explained by acknowledging the educational programs which existed in the North during the war and the continuation of these programs even after reunification.

Among the targeted provinces it is not surprising that Hanoi has the largest proportion of its population having achieved more than secondary education. As the political, economic, scientific and cultural center of Vietnam, Hanoi offers an environment that can attract educated people. Nearly one-third (29 percent) of men and one-quarter (24 percent) of women who live in Hanoi have achieved more than secondary education. Ho Chi Minh City has the second highest proportion of men with more than secondary education, where nearly one in five men have achieved more than secondary education (19 percent). Among the four targeted provinces, Hai Phong has the smallest proportion of its population that has achieved more than secondary education (10 percent of men and 8 percent of women).

Table 2.7 Educational attainment of household population

Percent distribution of the de facto female and male household populations age six and over by highest level of education attended or completed, according to background characteristics, Vietnam 2005

Background characteristic	Women						Men					
	Never attended school	Primary	Secondary	More than secondary	Total	Number of women	Never attended school	Primary	Secondary	More than secondary	Total	Number of men
Age												
6-9	4.3	95.7	0.0	0.0	100.0	860	3.7	96.1	0.2	0.0	100.0	894
10-14	1.8	29.0	69.2	0.0	100.0	1,541	1.3	30.9	67.8	0.0	100.0	1,626
15-19	2.7	12.4	81.6	3.4	100.0	1,376	2.2	10.2	83.7	3.8	100.0	1,497
20-24	5.2	19.6	55.0	20.1	100.0	1,127	2.9	19.1	60.9	17.1	100.0	958
25-29	6.0	23.3	58.2	12.5	100.0	959	4.4	24.9	57.9	12.9	100.0	922
30-34	7.4	21.6	62.9	8.1	100.0	1,014	6.9	20.8	63.4	8.9	100.0	908
35-39	7.3	22.8	62.8	7.1	100.0	1,004	4.9	18.0	68.0	9.1	100.0	844
40-44	7.3	25.8	58.6	8.2	100.0	1,003	5.2	19.7	65.8	9.3	100.0	891
45-49	7.1	29.6	55.7	7.6	100.0	884	2.7	17.7	69.5	10.0	100.0	825
50-59	8.2	37.5	45.0	9.3	100.0	686	1.7	24.5	60.1	13.7	100.0	580
60-69	11.0	45.5	34.0	9.3	100.0	441	6.1	34.4	48.5	10.9	100.0	351
70+	35.4	52.8	9.6	2.0	100.0	1,266	10.5	48.7	32.6	8.0	100.0	852
Wealth quintile												
Lowest	24.3	46.6	28.2	0.7	100.0	2,394	14.0	47.5	37.7	0.8	100.0	2,193
Second	9.5	38.7	50.7	1.2	100.0	2,511	3.0	35.8	59.7	1.4	100.0	2,290
Middle	6.1	31.3	59.2	3.4	100.0	2,504	1.6	26.3	68.2	3.9	100.0	2,333
Fourth	4.3	29.5	57.5	8.7	100.0	2,515	1.5	22.6	67.0	8.8	100.0	2,253
Highest	2.7	21.0	57.3	19.0	100.0	2,548	0.8	16.1	59.5	23.5	100.0	2,292
Residence												
Urban	4.3	24.1	54.9	16.6	100.0	2,510	2.0	20.5	59.3	18.2	100.0	2,217
Rural	10.5	35.6	49.8	4.2	100.0	9,961	4.6	31.7	58.5	5.2	100.0	9,145
Region												
North	11.2	27.1	53.7	7.9	100.0	4,828	4.1	24.2	62.1	9.7	100.0	4,192
Central	8.0	31.1	53.9	7.0	100.0	3,237	4.6	26.6	63.5	5.3	100.0	3,079
South	8.0	41.6	45.3	5.1	100.0	4,406	3.8	37.2	51.5	7.6	100.0	4,091
Targeted provinces												
Ha Noi	5.0	16.8	54.5	23.6	100.0	409	1.6	12.2	57.1	29.2	100.0	372
Ho Chi Minh City	4.1	29.9	52.9	13.1	100.0	742	2.3	24.7	54.4	18.5	100.0	645
Hai Phong	4.6	22.1	64.8	8.4	100.0	278	0.7	18.9	70.2	10.2	100.0	243
Quang Ninh	8.0	26.6	51.7	13.6	100.0	167	2.9	25.1	59.0	13.0	100.0	154
Total	9.2	33.3	50.8	6.7	100.0	12,472	4.1	29.5	58.6	7.7	100.0	11,362

There is a clear correlation between education and the wealth index. This is particularly evident among the populations with the lowest and highest levels of education. The proportion of the population that has never attended school declines steadily with increasing wealth and the proportion of the population with more than secondary education increases steadily with increasing wealth. For example, the population in the lowest wealth quintile has the largest proportion that has never attended school (14 percent of men and 24 percent of women). The population in the highest wealth quintile has the largest proportion of its population with more than secondary education (24 percent of men and 19 percent of women). Households of higher wealth can more readily provide the investment required to educate their children.

2.9 MALARIA

The enormous headway made by Vietnam's Malaria Program during the decade of the 90's in controlling malaria is documented by Dr. Claudio Schuftan (Schuftan, 2000). The Program shifted its

focus from that of malaria eradication to malaria control, and intensified funding, distribution of drugs and mosquito nets, instituted bi-annual interior residential insecticide spraying and increased health education at the local level. The result was an astounding reduction in malaria deaths of 97 percent and a reduction in malaria cases of 59 percent.

In 1998 Vietnam joined in the World Health Organization's establishment of the Roll Back Malaria Project, the global partnership to intensify the international effort to reduce the malaria burden. In addition, Vietnam has also joined a regional initiative of the Roll Back Malaria Project in the Mekong region aimed at reducing malaria deaths by 50 percent between 1998 and 2010.

The causes of malaria transmission still exist in Vietnam, so the risk of resurgence continues to exist. If measures are not continued, malaria outbreaks can still occur. For example, malaria is still endemic in the central and southern provinces of the Tay Nguyen highlands, an environment of forested mountainous lands (Erhart et al., 2004). In its 2001 Decision, the Ministry of Health clearly stated its overall objective "to firmly maintain the results of the program obtained in the past years". The Malaria Control Project specified targets to "reduce the malaria morbidity rate to below 4.1 percent of the population, to reduce the malaria mortality rate to 0.15/100,000 persons," and declared that "60-70 man-times of people shall be protected with chemicals (spraying and impregnating mosquito nets with chemicals); 15-20 million cases of malaria patients shall be given treatment" (Ministry of Health, 2001).

The VPAIS collected information useful to the monitoring and evaluation on three out of the five Indicators of Population Coverage for Rollback Malaria Technical Strategies (Roll Back Malaria et. al., 2004). These three indicators of population coverage are: a) proportion of households with at least one insecticide-treated net (ITN), b) proportion of children under 5 years old who slept under an ITN the previous night, and c) proportion of pregnant women who slept under an ITN the previous night; data are shown in Tables 2.8, 2.9, and 2.10.

2.10 OWNERSHIP OF MOSQUITO NETS

Anopheles mosquitoes carrying malaria transmitting parasites are typically most active at night. Thus use of mosquito nets while sleeping is a primary health intervention for reducing malaria transmission. Efficacy of a net to deter mosquitoes can be increased by soaking a net with insecticide. There are various types of Insecticide Treated Nets (ITN); some nets are long-lasting and require re-treatment only after about five years, while others need to be re-treated every six months or after three washes. Table 2.8 shows the percentage of households with at least one and more than one mosquito net (treated or untreated), and the percentage of households that have at least one and more than one ITN by their background characteristics.

Nearly every household (97 percent) owns at least one mosquito net, whether treated or untreated. Only households in Ho Chi Minh City are an exception to the high national ownership level. One in three households in Ho Chi Minh City does not own a mosquito net. The vast majority of households (88 percent) own multiple mosquito nets, 2.6 nets on average.

Household ownership of insecticide-treated nets is not common, with only 12 percent of households owning an ITN. There is a linear decline in ownership of an ITN with increasing wealth. Nearly one-quarter of households at the lowest wealth quintile owns an ITN and this percentage steadily declines to only six percent among the wealthiest households. Highest level of ownership of a net that has ever been treated is seen among households of the lowest wealth quintile, with 43 percent of such households owning a net that has been soaked with insecticide at some time.

Table 2.8 Household possession of mosquito nets

Percentage of households with at least one, percentage with more than one, and average number of nets per household, by type of mosquito net (treated or untreated, and insecticide treated net), according to background characteristics, Vietnam 2005

Background characteristic	Any type of mosquito net			Ever-treated mosquito net			Insecticide treated mosquito net (ITN) ¹			
	Percentage of households with at least one net	Percentage of households with more than one net	Average number of nets per household	Percentage of households with at least one net	Percentage of households with more than one net	Average number of ever treated nets per household	Percentage of households with at least one net	Percentage of households with more than one net	Average number of ITNs per household	Number of households
Wealth quintile										
Lowest	98.7	83.6	2.5	42.7	37.1	1.1	23.8	20.5	0.6	1,172
Second	99.0	85.5	2.5	20.3	17.3	0.5	12.5	11.4	0.3	1,306
Middle	99.4	90.9	2.7	18.1	14.8	0.4	10.0	9.0	0.3	1,271
Fourth	97.6	91.4	2.6	13.1	10.9	0.3	9.2	8.0	0.2	1,307
Highest	90.7	87.0	2.7	8.3	8.0	0.2	5.8	5.6	0.2	1,280
Residence										
Urban	89.6	80.8	2.4	7.9	6.8	0.2	4.9	4.4	0.1	1,274
Rural	98.9	89.5	2.7	23.2	19.9	0.6	13.8	12.3	0.4	5,063
Region										
North	99.1	89.1	2.6	22.2	18.8	0.6	10.1	9.0	0.3	2,455
Central	98.9	88.7	2.5	25.7	22.0	0.6	18.9	16.5	0.5	1,687
South	93.4	85.5	2.7	13.4	11.8	0.4	8.9	8.1	0.2	2,195
Targeted provinces										
Ha Noi	94.6	85.3	2.4	13.7	12.2	0.4	10.9	10.0	0.3	213
Ho Chi Minh City	68.0	57.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0	356
Hai Phong	98.0	89.3	2.4	5.7	4.4	0.1	4.0	3.4	0.1	150
Quang Ninh	98.8	91.8	2.6	28.5	24.9	0.7	19.6	17.7	0.5	92
Total	97.1	87.8	2.6	20.1	17.3	0.5	12.0	10.7	0.3	6,337

¹ An insecticide treated net (ITN) is (1) a factory treated net that does not require any further treatment, (2) a pretreated net obtained within the past 12 months, or (3) a net that has been soaked with insecticide within the past 12 months

2.11 USE OF MOSQUITO NETS BY CHILDREN

Age is an important factor in determining levels of acquired immunity to malaria. For about six months following birth, antibodies acquired from the mother during pregnancy protect children born in areas of endemic malaria. This immunity is gradually lost and children start to develop their own immunity to malaria. The pace at which immunity is developed depends on their exposure to malaria infection, and in high malaria-endemic areas, children are thought to have attained a high level of immunity by their fifth birthday. Such children may experience episodes of malaria illness but usually do not suffer from severe, life-threatening malaria. Immunity in areas of low malaria transmission is acquired more slowly and malaria illness affects all age groups of the population.

In the 2005 VPAIS, respondents to the Household Questionnaire were asked about the use of mosquito nets by all members of the household the night before the interview. Table 2.9 shows the protection afforded to children less than five years of age by various categories of mosquito nets. The table includes the percentage of de facto children under age five years who slept under a mosquito net the night before the survey and the percentage that slept under an ITN, by background characteristics.

Sleeping under a mosquito net is nearly universal among children in Vietnam; 95 percent of children less than five years of age slept under a mosquito net on the night before the survey. Only in Ho Chi Minh City is there an exception to the nearly universal usage of nets; one-quarter of children in Ho Chi Minh City did not sleep under a mosquito net on the night prior to the survey. Only one in five children under five years of age slept under a net that had ever been treated with insecticide. Only 13 percent of children slept under an ITN the night before the survey. Sleeping under an ITN is more common in the central regions of Vietnam, where malaria carrying mosquitoes are more prevalent.

2.12 USE OF MOSQUITO NETS BY WOMEN

In malaria-endemic areas adults usually have acquired some degree of immunity to severe, life-threatening malaria. However, pregnancy leads to a depression of the immune system so that pregnant women, especially those in their first pregnancy, have a higher risk to malaria. Moreover, these malarias may be asymptomatic and lead to malaria-induced anemia and may interfere with the mother-fetus exchange resulting in low birth weight births. During pregnancy women can reduce the risk of the adverse effects of malaria by sleeping under insecticide-treated mosquito nets. Table 2.10 presents the use of mosquito nets by all women and pregnant women. The table shows the percentage of women age 15-49 who slept under a mosquito net (treated or untreated), an ever treated mosquito net, and an ITN the night before the survey, by background characteristics.

Sleeping under a mosquito net is nearly universal among adult women, whether pregnant or not pregnant. Only in Ho Chi Minh City did one-third of women not sleep under a mosquito net on the night before the survey. Patterns by background characteristics mimic the patterns found in household ownership of nets.

Table 2.9 Use of mosquito nets by children

Percentage of children under five years of age who slept under a mosquito net (treated or untreated), an ever-treated mosquito net, and an insecticide treated net (ITN) the night before the survey, by background characteristics, Vietnam 2005

Background characteristic	Percentage who slept under any net last night	Percentage who slept under an ever-treated net last night ¹	Percentage who slept under an ITN last night ²	Number of children
Age (in years)				
<1	95.2	21.6	13.8	386
1	95.1	19.8	12.9	435
2	94.7	19.4	10.9	406
3	94.4	21.6	14.0	385
4	96.3	22.9	13.4	432
Sex				
Male	96.0	20.4	12.4	976
Female	94.4	21.6	13.5	1,069
Wealth quintile				
Lowest	93.6	43.4	24.8	515
Second	95.9	19.8	14.5	383
Middle	98.3	13.7	8.6	363
Fourth	96.5	13.2	8.2	421
Highest	91.8	7.1	4.6	362
Residence				
Urban	89.3	6.5	3.3	347
Rural	96.4	24.0	15.0	1,697
Region				
North	96.2	22.5	9.4	813
Central	96.0	31.0	25.1	553
South	93.2	11.2	7.4	679
Targeted provinces				
Ha Noi	94.3	19.5	17.2	60
Ho Chi Minh City	74.9	0.0	0.0	105
Hai Phong	97.8	7.8	5.8	36
Quang Ninh	93.7	26.8	16.2	28
Total	95.2	21.0	13.0	2,044

¹ An ever-treated net is a pretreated or a non-pretreated net which has subsequently been soaked with insecticide at any time.

² An insecticide treated net (ITN) is a factory treated net that does not require any further treatment; or a pretreated net obtained within the past 12 months; or a net that has been soaked with insecticide within the past 12 months.

Table 2.10 Use of mosquito nets by women

Percentage of all women age 15-49 and pregnant women age 15-49 who slept under a mosquito net (treated or untreated), an ever-treated mosquito net, and an Insecticide Treated Net¹ (ITN) the night before the survey, by background characteristics, Vietnam 2005

Background characteristic	Percentage of all women age 15-49 who:				Percentage of pregnant women age 15-49 who:			
	Slept under a net last night	Slept under an ever-treated net last night ¹	Slept under an ITN last night ²	Number of women	Slept under a net last night	Slept under an ever-treated net last night ¹	Slept under an ITN last night ²	Number of women
Wealth quintile								
Lowest	97.8	44.2	22.7	1,309	(91.0)	(40.9)	(24.6)	43
Second	97.2	19.8	12.5	1,391	(92.8)	(16.1)	(12.1)	32
Middle	98.9	16.0	10.3	1,507	(98.1)	(18.7)	(17.3)	35
Fourth	96.3	12.6	9.0	1,509	(92.9)	(14.2)	(14.2)	43
Highest	86.8	7.3	5.4	1,585	81.6	8.0	7.6	41
Residence								
Urban	86.1	6.2	4.1	1,571	87.0	2.8	1.1	40
Rural	97.7	22.7	13.7	5,730	92.1	24.4	19.0	154
Region								
North	98.0	22.9	10.7	2,806	94.5	30.5	17.5	65
Central	97.3	24.5	18.2	1,819	95.2	20.7	19.9	62
South	90.9	11.6	8.1	2,675	83.8	9.0	9.0	66
Targeted provinces								
Ha Noi	92.8	13.6	10.8	236	*	*	*	9
Ho Chi Minh City	63.7	0.0	0.0	481	*	*	*	13
Hai Phong	95.4	5.9	3.9	164	(94.0)	(3.1)	(0.0)	5
Quang Ninh	96.2	26.5	19.9	101	*	*	*	3
Total	95.2	19.2	11.6	7,301	91.1	20.0	15.4	194

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

¹ An ever-treated net is a pretreated or a non-pretreated net which has subsequently been soaked with insecticide at any time.

² An insecticide treated net (ITN) is a factory treated net that does not require any further treatment; or a pretreated net obtained within the past 12 months; or a net that has been soaked with insecticide within the past 12 months.

CHARACTERISTICS OF RESPONDENTS

3.1 KEY FINDINGS

- One-third of respondents are below age 25.
- Over 90 percent of both women and men have been to school.
- Over 90 percent of the population watches television at least once a week.
- Over 80 percent of the population is currently working.
- One-third of women marry in their adolescent years (below 20), compared to 15 percent of men. More than half of women are married before age 22 (below age 22 years).
- In only 2 percent of couples is the husband ten or more years older than the wife.

3.2 INTRODUCTION

This chapter presents a brief description of some demographic and socio-economic characteristics of the surveyed respondents, such as age, sex, religion, ethnicity, marital status, currently pregnant, education and residence. Study of these characteristics of individuals not only helps to assess the accuracy of the survey data, but also provides a picture of real trends of these characteristics. Most importantly, it provides a basic for the analysis of the way these characteristics are related to the other issues addressed in the survey, namely knowledge, attitude, behavior, and prevalence relating to HIV/AIDS.

3.3 BACKGROUND CHARACTERISTICS OF RESPONDENTS

Table 3.1 shows the percent distribution of women and men aged 15-49 by selected background characteristics. The table shows both the actual (unweighted) and weighted number of women and men interviewed. Targeted provinces were over-sampled in order to provide a sufficient number of cases for estimation and weighting compensates for having over-sampled the four targeted provinces. Weighting also compensates for non-response, although non-response was very low. Resulting weighted estimates are representative of the entire population of Vietnam, as well as for urban and rural areas, North, South, and Central regions, and for the four targeted provinces.

The age distribution of survey respondents reveals that about one third of women and men interviewed are under age 25 (females: 34 percent, males: 36 percent). The proportions of both women and men decline with increasing age between the 15-19 and the 25-29 age groups, then remain at the same level of about 13 percent in each age group. One-third of respondents (35 percent) are never married at the time of the survey. Thirty-one percent of women and thirty-nine percent of men age 15-49 are never married. Sixty five percent of women and 60 percent of men are currently married or living together. The proportion of women who are widowed, divorced or no longer living together with their partner is greater than that of men (4 versus 1 percent). This may be the result of the greater propensity men have for re-marrying, as well as their higher mortality.

Three percent of women interviewed reported that they were pregnant at the time of interview.

Table 3.1 Background characteristics of respondents

Percent distribution of women and men by background characteristics, Vietnam 2005

Background characteristic	Women			Men		
	Weighted percent	Weighted number	Unweighted number	Weighted percent	Weighted number	Unweighted number
Age						
15-19	18.6	1,359	1,346	22.0	1,472	1,400
20-24	15.3	1,112	1,132	13.9	934	974
25-29	13.0	948	963	13.5	902	888
30-34	13.9	1,012	969	13.2	887	871
35-39	13.5	986	993	12.4	831	840
40-44	13.6	995	989	13.1	879	890
45-49	12.0	878	897	11.9	801	844
Religion						
No religion	90.1	6,570	6,684	90.4	6,063	6,161
Buddhist	1.4	100	109	1.4	93	87
Catholic	6.3	462	402	6.2	413	374
Protestant	0.3	22	21	0.3	21	20
Cao dai	0.9	66	48	0.8	52	40
Hoa hao	0.9	69	25	1.0	65	25
Ethnicity						
Vietnamese	86.1	6,277	6,170	86.1	5,777	5,668
Tay	2.3	170	199	2.7	183	200
Thai	1.2	90	133	1.0	64	106
Chinese	0.8	61	83	1.1	72	98
Khmer	0.8	62	54	0.7	47	44
Muong	1.4	101	81	1.1	76	61
Nung	1.4	104	99	1.4	95	93
Phu la	0.1	8	7	0.1	8	7
E De	0.3	21	17	0.2	16	13
Dao	2.2	159	196	2.2	145	186
Cham	0.0	2	1	0.0	0	0
Hmong	0.7	50	54	0.6	43	47
Gia rai	0.5	40	59	0.5	35	52
Ba Na	0.0	1	2	0.0	0	0
Xo Dang	0.1	6	26	0.1	8	26
San Chay (Cao Lan - San Chi)	0.0	3	11	0.0	2	10
San Diu	0.8	60	48	0.9	60	47
Mnong	1.0	70	42	1.1	74	44
Ma	0.0	3	6	0.0	2	4
Ta Oi	0.0	1	1	0.0	0	0
Missing	0.0	0	0	0.0	2	1
Marital status						
Never married	30.5	2,223	2,237	39.0	2,618	2,595
Married	64.9	4,734	4,692	59.8	4,012	4,028
Living together	0.2	16	22	0.2	13	16
Widowed	2.0	144	151	0.3	18	16
Divorced	1.5	112	125	0.5	33	36
Not living together	0.8	60	62	0.2	13	16
Currently pregnant						
No or unsure	97.3	7,096	7,071	na	na	na
Yes	2.7	193	218	na	na	na
Education						
Never attended school	5.6	407	422	3.5	234	228
Primary	21.6	1,574	1,383	18.1	1,215	1,076
Secondary	63.3	4,612	4,567	68.6	4,599	4,554
More than secondary	9.6	696	917	9.8	658	849
Wealth quintile						
Lowest	17.9	1,306	1,202	18.8	1,261	1,151
Second	19.0	1,387	1,156	19.0	1,275	1,091
Middle	20.6	1,503	1,259	20.6	1,384	1,196
Fourth	20.7	1,507	1,519	20.5	1,378	1,381
Highest	21.8	1,587	2,153	21.0	1,410	1,888
Residence						
Urban	21.6	1,575	2,517	20.5	1,378	2,180
Rural	78.4	5,714	4,772	79.5	5,329	4,527
Region						
North	38.4	2,802	3,741	36.6	2,455	3,324
Central	24.8	1,808	1,390	25.9	1,735	1,349
South	36.7	2,679	2,158	37.5	2,517	2,034
Targeted provinces						
Ha Noi	3.2	235	581	3.2	218	538
Ho Chi Minh City	6.6	484	635	6.4	427	567
Hai Phong	2.3	167	971	2.1	141	820
Quang Ninh	1.4	100	595	1.4	93	558
Total	100.0	7,289	7,289	100.0	6,707	6,707

Note: Unweighted numbers refer to the interviews actually completed.
na = Not applicable

Nine out of ten respondents report having no religious affiliation. Six percent of respondents report being Catholic, and one percent Buddhist. While Vietnam is comprised of many ethnicities, the Kinh (Vietnamese) are of the overwhelming majority. Eighty-six percent of survey respondents are Kinh, and the 1999 Census reports the Kinh to be 89 percent of the total population of Vietnam. Tay and Dao ethnicities comprise two percent each of survey respondents and the remaining ten percent are comprised of smaller ethnic groups.

The overwhelming majority of women (94 percent) and men (96 percent) have been to school. Twenty-two percent of women and 18 percent of men have primary education, and about two-thirds of women (63 percent) and men (69 percent) have secondary education. The same proportion of women and men (10 percent) has achieved more than a secondary education.

The distribution of sample respondents across wealth quintiles is such that approximately one-fifth of respondents falls into one of each of the quintiles. The wealth index was constructed such that the sample was purposefully divided into quintiles and the distribution shown in Table 3.1 reflects that construction. See Chapter 2 for a discussion of the wealth index.

About four-fifths of women (78 percent) and men (80 percent) reside in rural areas. The distribution of respondents by region shows that 25 percent live in the Central region while equal proportions (37-38 percent) live in the North and the South.

Table 3.1 also shows the proportion of women and men who reside in four provinces (Ha Noi, Ho Chi Minh City, Hai Phong and Quang Ninh). Because HIV/AIDS programs target these provinces, they were over-sampled and all survey results are available for each of them.

3.4 EDUCATION ATTAINMENT

A key determinant of lifestyle and status of an individual is education. It affects many aspects of human life. This survey, like many others, shows that educational attainment is strongly related to awareness, knowledge, attitudes, and behavior towards prevention, care and support regarding HIV/AIDS. Table 3.2 presents the percent distribution of female and male respondents aged 15-49 by their highest level of education achieved, according to selected background characteristics.

About 6 percent of women and 4 percent of men have never attended school. For both women and men, the gradual decline over time in the proportion of the population that has not attended school reflects improvements in the educational system over the past years. Data also suggest that men and women are nearly equally likely to be educated. For example, while the proportion of men with secondary education is slightly higher than that of women (69 and 63 percent, respectively), the proportion of men and women with more than secondary education is the same (10 percent). One in five 20-24 year-olds has achieved more than secondary education (17 percent of men and 20 percent of women).

There is a very strong association between educational attainment and the wealth index. Data indicate that respondents in the higher wealth quintiles are much more likely to be educated than respondents of the lower wealth quintiles. The proportion of people that has never attended school decreases dramatically as the wealth index increases, and the proportion of people with some schooling increases as the wealth index increases. For example, one-quarter of women (24 percent) and 15 percent of men in the lowest wealth quintile have never been to school, compared to less than 1 percent of those in the highest wealth quintile. Conversely, more than one-quarter of women and men in the highest wealth quintile have achieved more than secondary education, compared to about 1 percent of those in the lowest wealth quintile having achieved more than secondary education.

Table 3.2 Educational attainment of respondents by background characteristics

Percent distribution of women and men 15-49 by highest level of schooling attended, according to background characteristics, Vietnam 2005

Background characteristic	Women						Men					
	Never attended school	Primary	Second-ary	More than second-ary	Total	Number of women	Never attended school	Primary	Second-ary	More than second-ary	Total	Number of men
Age												
15-24	3.3	15.6	70.2	10.9	100.0	2,471	1.8	13.7	75.4	9.1	100.0	2,406
15-19	2.3	12.6	81.7	3.4	100.0	1,359	1.6	10.4	84.1	3.9	100.0	1,472
20-24	4.4	19.3	56.1	20.2	100.0	1,112	2.0	18.9	61.8	17.3	100.0	934
25-29	5.8	23.3	58.3	12.6	100.0	948	3.5	25.1	58.5	12.9	100.0	902
30-39	7.2	22.4	62.6	7.7	100.0	1,997	5.7	19.7	65.3	9.3	100.0	1,718
40-49	6.8	27.7	57.3	8.1	100.0	1,873	3.6	19.1	67.5	9.8	100.0	1,680
Wealth quintile												
Lowest	23.6	41.6	33.5	1.2	100.0	1,306	14.6	39.1	45.2	1.1	100.0	1,261
Second	3.9	27.9	66.2	1.9	100.0	1,387	2.2	22.9	72.6	2.3	100.0	1,275
Middle	1.4	19.0	74.6	5.0	100.0	1,503	0.7	13.1	81.3	4.8	100.0	1,384
Fourth	0.9	15.4	72.0	11.6	100.0	1,507	0.7	11.5	76.9	10.9	100.0	1,378
Highest	0.6	7.9	66.1	25.4	100.0	1,587	0.1	6.5	65.2	28.3	100.0	1,410
Residence												
Urban	1.3	13.0	63.8	21.9	100.0	1,575	1.3	10.5	66.3	21.9	100.0	1,378
Rural	6.8	24.0	63.1	6.1	100.0	5,714	4.1	20.1	69.2	6.7	100.0	5,329
Region												
North	7.1	14.2	68.2	10.5	100.0	2,802	3.8	12.5	72.6	11.1	100.0	2,455
Central	3.8	17.0	67.9	11.2	100.0	1,808	3.2	12.9	76.3	7.5	100.0	1,735
South	5.2	32.4	55.0	7.4	100.0	2,679	3.4	27.2	59.3	10.2	100.0	2,517
Targeted provinces												
Ha Noi	0.0	3.4	63.7	32.8	100.0	235	0.0	1.9	62.8	35.3	100.0	218
Ho Chi Minh City	0.5	21.0	62.9	15.7	100.0	484	1.2	15.8	61.4	21.7	100.0	427
Hai Phong	0.4	7.5	79.8	12.3	100.0	167	0.3	7.0	80.2	12.6	100.0	141
Quang Ninh	4.3	14.4	62.3	19.1	100.0	100	2.9	12.8	68.6	15.6	100.0	93
Total	5.6	21.6	63.3	9.6	100.0	7,289	3.5	18.1	68.6	9.8	100.0	6,707

As expected, educational attainment of urban respondents is greater than that of rural residents. This is especially evident when comparing the percent of the population that has never been to school and the percent of the population that has achieved more than secondary education. The proportion of urban respondents with no education is lower than among rural respondents for both women and men (1 versus 7 percent among women; 1 versus 4 percent among men). In contrast, the share of the urban population with more than secondary education is much higher than that among the rural population, again, among both women and men (22 versus 6 percent among women; 22 versus 7 percent among men).

The proportion of women and men with no schooling and with the highest level of schooling does not differ greatly across regions. The greatest differentials are seen within primary and secondary schooling. The South has the largest percent of its population having stopped schooling at the primary level. One-third of women and one-quarter of men in the South have achieved primary education, while these proportions are lower in the North and Central regions where greater proportions have gone on to achieve secondary education. With one-third of its population having achieved more than secondary education, it is not surprising that Hanoi has the largest component of its population having achieved the highest levels of education among the four targeted provinces.

3.5 EXPOSURE TO MASS MEDIA

To assess exposure to the mass media, respondents of VPAIS were asked if they usually read a newspaper, listen to the radio, or watch television at least once a week. This information is important for planning the dissemination of HIV/AIDS messages. Table 3.3 shows the most popular media source is television, followed by radio. For example, 91 percent of women and 94 percent of men watch television at least once a week, while only 34 percent of women and 47 percent of men listen to the radio at least once a week, and only 27 percent of women and 36 percent of men read a newspaper at least once a week. Fifteen percent of women and 22 percent of men use all three above-mentioned media on a weekly basis. Seven percent of women and 4 percent of men report having no exposure to any of these mass media. The data show that men are somewhat more likely to be exposed to mass media than women.

Exposure to television and radio does not vary by age for either women or men. The proportion of women who reads a newspaper once a week declines steadily with increasing age.

There is a clear positive association between level of exposure to mass media and level of education. The proportion of respondents with regular exposure to all three types of mass media increases steadily with increasing level of education, among both women and men. About one-half of the population with more than secondary education has regular access to all three forms of media.

As with education, there is also a clear positive association between level of exposure to mass media and the wealth index. Proportions of the population with regular exposure to all three media steadily increase with increasing wealth quintile. Contributing factors to this pattern may include the fact that people in the higher wealth quintiles have greater information needs in their daily living, perhaps also have more free time, and lastly, have the economic means for purchasing televisions, radios, and newspapers.

While a greater proportion of urban residents has exposure to all three mass media, the difference is largely attributed to readership of newspapers. The proportion of the population that watches television or listens to the radio is fairly similar across urban and rural areas. However, one in two urban women and two in three urban men reads a newspaper at least once a week, while only one in five rural women and one in four rural men read a newspaper at least once a week. The vast majority of both urban and rural residents has regular access to a television.

Regional variation in access to media is not great. Fairly similar proportions of the population reads a newspaper, watches television, or listens to the radio across the North, Central and South regions. The proportion of the population that reads a newspaper at least once a week is higher in all four targeted provinces than the national average.

Table 3.3 Exposure to mass media

Percentage of women and men 15-49 who are exposed to specific media on a weekly basis, by background characteristics, Vietnam 2005

Background characteristic	Women						Men					
	Reads a newspaper at least once a week	Watches television at least once a week	Listens to the radio at least once a week	All three media	No media	Number of women	Reads a newspaper at least once a week	Watches television at least once a week	Listens to the radio at least once a week	All three media	No media	Number of men
Age												
15-19	39.2	92.9	35.4	19.1	5.8	1,359	34.6	95.2	40.9	18.6	3.2	1,472
20-24	33.0	91.1	38.7	20.7	7.4	1,112	42.6	93.2	49.4	28.1	4.8	934
25-29	26.8	90.0	29.2	13.5	8.1	948	35.2	94.3	47.9	22.6	4.5	902
30-34	22.7	89.4	30.5	12.2	8.4	1,012	32.3	92.2	44.5	19.8	7.0	887
35-39	20.0	90.0	28.1	9.7	9.1	986	36.4	94.8	50.2	23.3	4.4	831
40-44	21.6	91.9	37.1	12.9	6.4	995	31.9	93.3	48.3	21.5	4.5	879
45-49	18.0	91.4	35.4	11.3	7.4	878	36.1	96.8	48.2	23.4	2.4	801
Education												
Never attended school	0.3	51.8	11.2	0.3	44.4	407	0.0	62.7	20.0	0.0	31.9	234
Primary	4.8	84.6	22.9	2.6	13.2	1,574	10.6	87.9	38.0	6.9	9.6	1,215
Secondary	28.1	95.6	36.7	15.3	3.2	4,612	36.3	96.8	47.8	22.3	2.1	4,599
More than secondary	83.6	98.2	51.0	45.3	0.8	696	88.4	99.5	62.8	57.3	0.3	658
Wealth quintile												
Lowest	7.2	66.8	21.5	4.9	29.4	1,306	10.5	78.1	35.9	6.9	17.3	1,261
Second	12.3	91.8	29.7	7.5	6.2	1,387	18.7	95.9	40.6	12.7	3.0	1,275
Middle	20.3	96.5	36.4	11.1	2.3	1,503	28.0	97.2	48.7	19.2	1.8	1,384
Fourth	31.8	97.8	36.7	17.8	1.8	1,507	45.2	99.2	52.5	28.3	0.5	1,378
Highest	57.1	98.8	41.7	29.0	0.6	1,587	71.1	99.7	53.2	41.2	0.1	1,410
Residence												
Urban	53.3	97.0	38.1	26.5	2.0	1,575	68.3	98.3	45.4	35.8	1.4	1,378
Rural	19.5	89.4	32.4	11.3	8.9	5,714	27.0	93.3	46.8	18.6	5.1	5,329
Region												
North	24.5	89.0	30.6	12.8	9.1	2,802	33.7	92.7	46.1	19.7	4.7	2,455
Central	26.2	92.1	37.5	15.2	6.6	1,808	29.2	96.4	36.3	15.0	3.2	1,735
South	29.5	92.5	34.3	16.1	6.2	2,679	41.6	94.4	53.9	29.4	4.7	2,517
Targeted provinces												
Ha Noi	55.2	99.0	23.2	17.8	0.7	235	70.5	99.2	46.9	34.0	0.2	218
Ho Chi Minh City	61.0	97.5	38.3	28.7	1.4	484	81.6	98.9	35.4	27.7	0.6	427
Hai Phong	46.8	97.5	52.6	33.8	1.9	167	47.5	98.6	55.1	28.5	1.0	141
Quang Ninh	41.6	92.5	36.9	23.2	4.8	100	62.2	94.7	81.1	56.9	1.3	93
Total	26.8	91.1	33.7	14.6	7.4	7,289	35.5	94.3	46.5	22.1	4.3	6,707

3.6 EMPLOYMENT STATUS OF RESPONDENTS

In the VPAIS 2005, respondents aged 15-49 were asked if they were working during the 7 days preceding the interview and if not, whether they had done any work in the past 12 months. Those who had worked were asked their occupation, and those who had not worked were asked what they had been doing for most of the time during the preceding year. The percent distribution of respondents by employment status is shown in Tables 3.4.1 and 3.4.2 by selected background characteristics. Nationally, 80 percent of women and 82 percent of men are currently working, while nearly 3 percent of women and 1 percent of men are not currently working, although they worked in the last 12 months.

Table 3.4.1 Employment status: women

Percent distribution of women by employment status or (if not employed) main activity during 12 months preceding the survey, according to background characteristics, Vietnam 2005

Background characteristic	Employed in last 12 months		Not employed in the last 12 months				Total	Number of women
	Currently employed ¹	Not currently employed	Was going to school, studying	Looking for work	Housework/ child care	Other		
Age								
15-24	56.5	3.2	34.2	1.4	4.3	0.4	100.0	2,471
15-19	40.0	2.4	53.1	0.7	3.3	0.4	100.0	1,359
20-24	76.7	4.3	11.0	2.3	5.4	0.3	100.0	1,112
25-29	89.4	4.0	0.3	0.2	6.1	0.0	100.0	948
30-39	91.2	2.6	0.0	0.0	5.7	0.4	100.0	1,997
40-49	92.1	1.5	0.0	0.0	5.6	0.7	100.0	1,873
Wealth quintile								
Lowest	86.8	5.3	4.4	0.1	2.9	0.5	100.0	1,306
Second	82.0	3.4	9.2	0.0	4.9	0.5	100.0	1,387
Middle	79.5	3.0	13.5	0.9	2.9	0.3	100.0	1,503
Fourth	79.0	0.9	13.4	0.8	5.4	0.4	100.0	1,507
Highest	71.6	1.5	16.2	0.7	9.5	0.5	100.0	1,587
Residence								
Urban	73.1	1.4	15.0	0.8	9.1	0.6	100.0	1,575
Rural	81.2	3.1	10.7	0.4	4.2	0.4	100.0	5,714
Region								
North	86.2	0.6	11.2	0.3	1.4	0.3	100.0	2,802
Central	78.6	1.7	14.8	0.9	3.1	0.9	100.0	1,808
South	72.9	5.6	9.9	0.5	10.8	0.3	100.0	2,679
Targeted provinces								
Ha Noi	78.9	1.4	16.8	0.0	2.2	0.6	100.0	235
Ho Chi Minh City	69.6	1.4	10.4	1.5	17.1	0.0	100.0	484
Hai Phong	81.5	0.5	13.8	0.4	3.4	0.4	100.0	167
Quang Ninh	85.1	1.1	10.5	0.2	2.8	0.3	100.0	100
Total	79.5	2.7	11.6	0.5	5.3	0.4	100.0	7,289

¹ Worked in the past seven days. Includes persons who did not work in the past seven days but who are regularly employed and were absent from work for leave, illness, vacation, or any other such reason.

The proportion of the population currently working increases with increasing age, such that over 90 percent of the population age 30-49 is currently employed. The proportion of the population currently employed declines with increasing wealth quintile, and as the proportion of those in school studying increases. For example, the highest quintile has the lowest percentage currently working, among both women and men (women: 72 percent, men: 79 percent).

Among women who have not worked in the previous 12 months, the main activities are studying (12 percent) and household/child care (5 percent). The main activity of men who have not worked is studying (15 percent).

Regional and provincial variation show that a higher proportion of women are working in the North (86 percent) than in the Central and South regions (79 and 73 percent), and in Quang Ninh (85 percent) as compared to the other targeted provinces. A higher proportion of men are working in the South (84 percent) and North (82 percent) than in the Central (79 percent) region, and in HCMC (84 percent) and Hai Phong (83 percent) as compared to the other targeted provinces.

Table 3.4.2 Employment status: men

Percent distribution of men by employment status or (if not employed) main activity during 12 months preceding the survey, according to background characteristics, Vietnam 2005

Background characteristic	Employed in last 12 months		Not employed in the last 12 months				Total	Number of men
	Currently employed ¹	Not currently employed	Was going to school, studying	Looking for work	Housework/ child care	Other		
Age								
15-24	55.5	1.1	41.7	0.8	0.2	0.7	100.0	2,406
15-19	37.1	1.2	60.1	0.6	0.2	0.8	100.0	1,472
20-24	84.5	1.0	12.8	1.1	0.2	0.5	100.0	934
25-29	96.4	2.1	0.7	0.5	0.0	0.4	100.0	902
30-39	97.8	1.3	0.0	0.3	0.2	0.4	100.0	1,718
40-49	95.2	1.8	0.0	0.0	0.9	2.1	100.0	1,680
Wealth quintile								
Lowest	87.9	2.2	9.3	0.0	0.2	0.4	100.0	1,261
Second	83.4	2.4	12.9	0.3	0.1	1.0	100.0	1,275
Middle	79.9	0.9	17.3	0.4	0.7	0.8	100.0	1,384
Fourth	79.9	1.2	16.6	0.7	0.2	1.4	100.0	1,378
Highest	78.5	0.6	18.6	0.8	0.5	1.0	100.0	1,410
Residence								
Urban	78.8	0.9	17.3	1.1	0.5	1.5	100.0	1,378
Rural	82.6	1.6	14.5	0.3	0.3	0.8	100.0	5,329
Region								
North	81.6	0.5	16.4	0.4	0.5	0.7	100.0	2,455
Central	78.8	0.9	18.0	0.5	0.3	1.5	100.0	1,735
South	84.0	2.7	11.7	0.5	0.3	0.8	100.0	2,517
Targeted province								
Ha Noi	77.6	0.5	18.9	0.3	1.3	1.4	100.0	218
Ho Chi Minh C	84.1	0.9	12.9	0.6	0.5	1.0	100.0	427
Hai Phong	82.8	0.4	14.3	1.3	0.4	0.8	100.0	141
Quang Ninh	78.0	0.9	18.0	1.0	0.7	1.2	100.0	93
Total	81.8	1.4	15.1	0.4	0.3	0.9	100.0	6,707

¹ Worked in the past seven days. Includes persons who did not work in the past seven days but who are regularly employed and were absent from work for leave, illness, vacation, or any other such reason.

3.7 CURRENT MARITAL STATUS

In the VPAIS, “marriage” refers to both formal and informal unions. Informal unions are those in which a man and woman stay together, intending to have a lasting relationship, even if a formal, civil, or religious ceremony has not been conducted. The demographic significance of marriage patterns derives from the fact that formal or informal unions are primary indicators of exposure to the risk of pregnancy and HIV infection.

Sixty-five percent of women are married or living in an informal union with a man, compared to 60 percent of men (Table 3.5). Because men marry later in life than women, two-fifths of surveyed men (39 percent) have never married, compared to 31 percent of women. Four percent of women and one percent of men are either widowed, divorced, or separated.

Table 3.5 Current marital status

Percent distribution of women and men 15-49 by current marital status, according to age, Vietnam 2005

Age	Marital status						Total	Number
	Never married	Married	Living together	Widowed	Divorced	Not living together		
WOMEN								
15-24	74.9	24.4	0.2	0.1	0.3	0.2	100.0	2,471
15-19	93.8	6.0	0.1	0.0	0.2	0.0	100.0	1,359
20-24	51.9	46.9	0.4	0.2	0.3	0.3	100.0	1,112
25-29	16.3	80.2	0.2	0.8	1.6	0.9	100.0	948
30-39	7.4	88.1	0.3	1.4	2.1	0.8	100.0	1,997
40-49	3.8	86.1	0.2	5.6	2.6	1.8	100.0	1,873
Total	30.5	64.9	0.2	2.0	1.5	0.8	100.0	7,289
MEN								
15-24	89.9	9.8	0.2	0.0	0.0	0.0	100.0	2,406
15-19	98.5	1.3	0.2	0.0	0.0	0.0	100.0	1,472
20-24	76.4	23.3	0.3	0.0	0.0	0.0	100.0	934
25-29	32.9	65.4	0.5	0.4	0.6	0.1	100.0	902
30-39	7.4	91.3	0.2	0.1	0.8	0.2	100.0	1,718
40-49	1.7	96.2	0.0	0.7	0.9	0.4	100.0	1,680
Total	39.0	59.8	0.2	0.3	0.5	0.2	100.0	6,707

The proportion of respondents who have never married decreases with age from 94 percent of women and 99 percent of men age 15-19 to less than 4 percent of those aged 45-49, indicating that marriage is almost universal in Vietnam. Men tend to marry at older ages than women as evidenced by the fact that 47 percent of women age 20-24 are currently married, compared with only 23 percent of men age 20-24.

3.8 AGE AT FIRST MARRIAGE AND FIRST SEX

Marriage marks the point in a woman's life at which sexual intercourse becomes socially acceptable in Vietnam. Women who marry early will on average have longer exposure to the risk of sexually transmitted infections. Information on age at marriage was obtained by asking women and men the month and year (or age, if year was not known) when they started living together with their husband or wife (or first husband/wife for those married more than once).

Table 3.6 presents the percentage of women and men who were first married by exact ages. The last column presents the median age at first marriage by age group. The latter indicates the exact age by which half of an entire cohort has married. For each cohort the accumulated percentages stop at the lower age boundary of the cohort to avoid censoring problems. For instance, for the cohort currently age 20-24, accumulation should stop with the percentage married by exact age 20.

The data from Table 3.6 indicate that one-third of women marry in their adolescent years (below age 20), compared to 15 percent of men. More than half of women (58 percent) are married by the time they reach age 22.

Table 3.6 Age at first marriage

Percentage of women and men age 15-49 who were first married by specific exact ages, and median age at first marriage, according to current age, Vietnam 2005

	Percentage of respondents that were first married by exact age:					Percentage never married	Number of respondents	Median age at first marriage
Current age	15	18	20	22	25			
WOMEN								
15-24	0.5	na	na	na	na	74.9	2,471	a
15-19	0.5	na	na	na	na	93.8	1,359	a
20-24	0.5	10.2	30.3	na	na	51.9	1,112	a
25-29	0.8	13.6	34.5	54.2	77.2	16.3	948	21.6
30-39	0.8	13.9	37.0	61.0	79.8	7.4	1,997	21.0
40-49	0.6	13.3	33.7	57.5	79.1	3.8	1,873	21.3
20-49	0.7	13.0	34.3	na	na	16.0	5,930	a
25-49	0.7	13.6	35.3	58.3	79.0	7.7	4,818	21.2
MEN								
15-24	0.2	na	na	na	na	89.9	2,406	a
15-19	0.2	na	na	na	na	98.5	1,472	a
20-24	0.3	2.7	8.6	na	na	76.4	934	a
25-29	0.2	2.7	11.4	25.2	51.0	32.9	902	24.9
30-39	0.6	5.4	17.4	34.5	62.2	7.4	1,718	23.6
40-49	0.1	3.3	14.3	31.6	63.1	1.7	1,680	23.8
20-49	0.3	3.8	13.8	na	na	22.3	5,235	a
25-49	0.3	4.0	14.9	31.4	60.2	10.6	4,301	23.9

na = Not applicable due to censoring

a = Omitted because less than 50 percent of the respondents married for the first time before reaching the beginning of the age group

Unlike much of the world, age at marriage in Vietnam has not increased among women over the last 25 years. Median age at marriage has remained at about 21 years for age cohorts 25-29 through 45-49. Age at marriage has increased slightly over the last 25 years among men, with the median age at marriage increasing from about 24 to 25 years of age.

Because marriage marks the point in a woman's life at which sexual intercourse becomes socially acceptable in Vietnam, patterns of reported age at first sexual intercourse closely mimic the patterns of age at first marriage, as shown in Table 3.7.

Table 3.7 Age at first sexual intercourse

Percentage of women and men age 15-49 who had first sexual intercourse by specified exact ages and median age at first intercourse, according to current age, Vietnam 2005

Current age	Percentage of women/men who had first sexual intercourse by exact age:					Percentage who never had intercourse	Number of respondents	Median age at first intercourse
	15	18	20	22	25			
WOMEN								
15-24	0.5	na	na	na	na	74.8	2,471	a
15-19	0.5	na	na	na	na	93.5	1,359	a
20-24	0.5	10.5	30.5	na	na	51.8	1,112	a
25-29	0.8	13.6	34.7	55.0	77.7	15.6	948	21.5
30-39	0.7	14.0	37.4	61.1	79.7	6.8	1,997	21.0
40-49	0.6	13.3	34.0	57.6	79.1	3.3	1,873	21.2
20-49	0.6	13.1	34.6	na	na	15.5	5,930	a
25-49	0.7	13.6	35.6	58.5	79.1	7.2	4,818	21.2
MEN								
15-24	0.3	na	na	na	na	86.5	2,406	a
15-19	0.3	na	na	na	na	96.8	1,472	a
20-24	0.3	3.3	10.6	na	na	70.3	934	a
25-29	0.2	3.4	15.3	31.1	58.4	25.1	902	24.2
30-39	0.6	5.6	18.9	38.7	66.7	4.8	1,718	23.1
40-49	0.1	3.7	15.7	34.1	65.8	1.4	1,680	23.5
20-49	0.3	4.2	15.8	na	na	18.9	5,235	a
25-49	0.3	4.4	16.9	35.3	64.6	7.7	4,301	23.5

na = Not applicable due to censoring

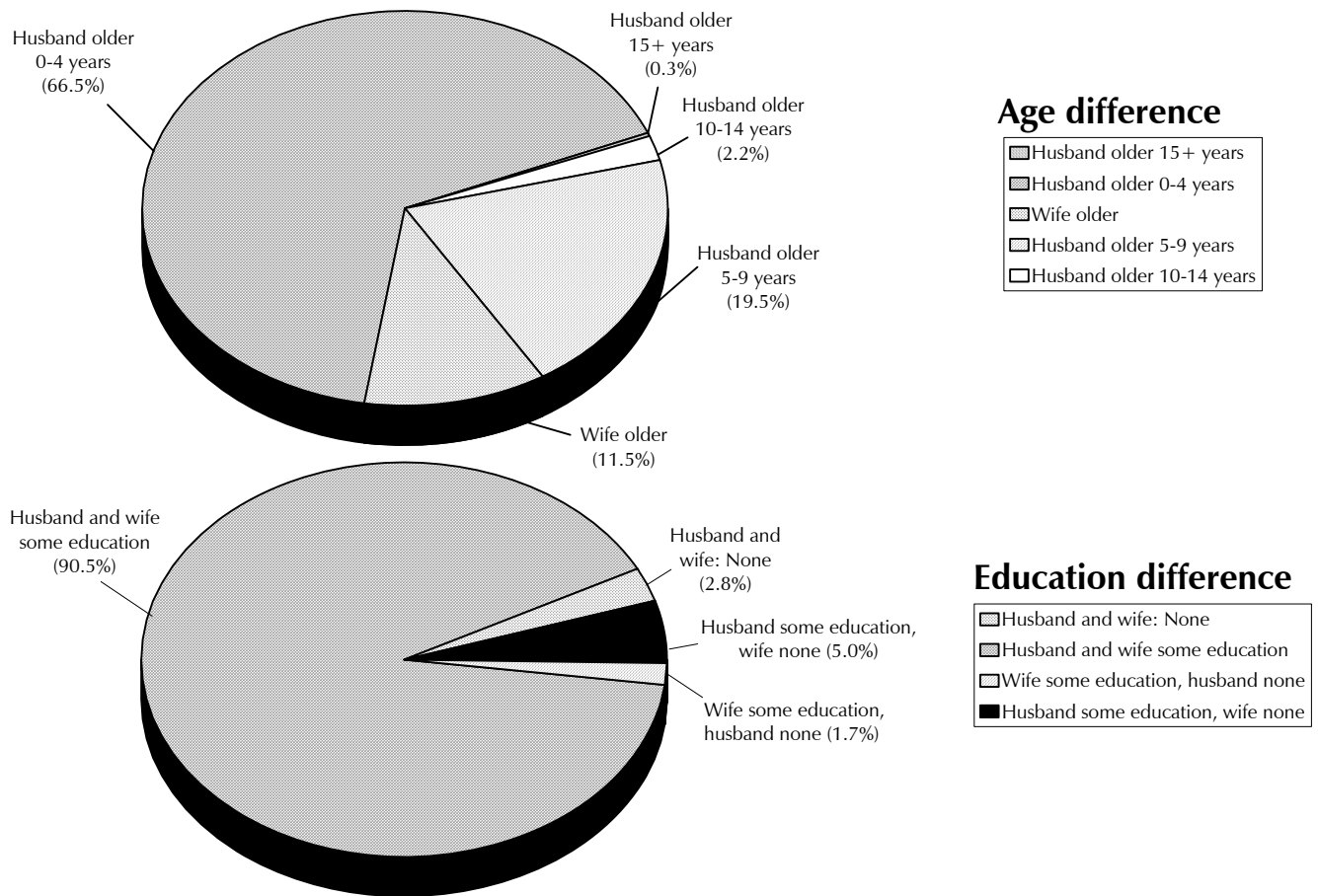
a = Omitted because less than 50 percent of the respondents married for the first time before reaching the beginning of the age group

3.9 CHARACTERISTICS OF COUPLES

In the VPAIS, both women and men in the same household were interviewed, so it is possible to match cohabiting couples by linking the data from a woman to that of her husband/live-in partner. In this way, data for 3,852 married couples were matched. The distribution of couples by difference of age and education between wife and husband is presented in Figure 3.1. Figure 3.1 shows that in two out of three couples the wife and husband are within five years of age of each other. In only a small minority of couples is the husband 10 or more years older than the wife (2 percent), while in another 20 percent of couples, the husband is 5 to 9 years older than his wife/partner. For 12 percent of couples, the wife is older than her husband.

Since the vast majority of the population has some education, it is not surprising that for 9 out of 10 couples both the wife and husband have some education. For very small proportion of couples (3 percent), neither the wife nor husband has any education. Among five percent of couples the husband has some education while the wife has none. Only in 2 percent of couples does the wife have some education while her husband has none.

Figure 3.1 Percent Distribution of Couples According to Difference of Age and Education between Husband and Wife, Vietnam 2005



HIV/AIDS-RELATED KNOWLEDGE

4.1 KEY FINDINGS

- Knowledge of existence of AIDS is nearly universal.
- One-half of women and men who have not attended school have not yet heard of AIDS.
- Abstinence as a means of preventing AIDS is less well known than using condoms and being faithful.
- Nearly one in two women and one in three men does not know that AIDS cannot be transmitted by mosquitoes.
- Knowledge of mother-to-child transmission during pregnancy is high while knowledge of existence of ARVs during pregnancy is low.

4.2 INTRODUCTION

Acquired Immune Deficiency Syndrome (AIDS) is caused by the human immunodeficiency virus (HIV) that weakens the immune system, making the body susceptible to opportunistic diseases that often lead to death.

The current mode of HIV transmission in Vietnam is predominantly through sharing of HIV tainted syringes and needles. Other modes of transmission include unprotected sexual contact, contact with HIV infected blood or blood products, and perinatal transmission, by which a woman passes the virus to a child during pregnancy, delivery or breastfeeding.

The future direction of the AIDS pandemic depends in large part on the level of knowledge of how the virus is spread and consequent changes in sexual behavior. The information obtained from the 2005 VPAIS provides an opportunity to assess the level of knowledge regarding transmission of the HIV virus. The results are useful for AIDS control programs to target those individuals and groups of individuals most in need of information.

The VPAIS included a series of questions related to HIV/AIDS knowledge. Respondents were asked if they had ever heard of AIDS; if they knew about specific means of transmission of the virus; and if they were aware of mother-to-child transmission. The language of the survey instrument refers to the AIDS virus. While it is well documented that AIDS is not a virus and that it is the HIV virus that can later develop into AIDS, the language of “AIDS virus” used in the questionnaire, and therefore in this report, was chosen in the event that respondents to the VPAIS may know of AIDS without knowing of the complexities between HIV and AIDS.

4.3 AWARENESS OF AIDS

Attitudinal and behavioral changes being promoted to stem the tide of the AIDS epidemic rely on a basic awareness of HIV/AIDS transmission and understanding that its transmission can be controlled or avoided. The percentages of women and men 15-49 who have heard of AIDS are presented in Table 4.1 by background characteristics.

General awareness of AIDS is high among women and men in the reproductive ages. Ninety-three percent of women and 95 percent of men have heard of AIDS. Knowledge of AIDS is essentially universal in urban areas, whereas 1 in 10 rural residents has not yet heard of AIDS (91 percent of rural women and 94 percent of rural men have heard of AIDS). However, general awareness is significantly lower among respondents who have never been to school; only half of respondents without any formal schooling have heard of AIDS. Women and men in the lowest wealth quintiles are also below the national level of knowledge (73 percent and 82 percent respectively).

Abstaining from sex, being faithful to one uninfected partner, and using condoms are important ways to avoid the spread of HIV/AIDS. To ascertain the depth of knowledge about modes of HIV/AIDS transmission, respondents were asked specific questions about whether it is possible for people to reduce their chances of getting AIDS by using a condom at every sexual encounter, by having just one sexual partner who is not infected and has no other partners, and by not having sexual intercourse at all. Table 4.2 shows the percentage of women and men by their answers to these questions.

Table 4.2 reveals that most people have some knowledge of the primary means of avoiding AIDS. More than 4 in 5 respondents (83 percent of women and 90 percent of men) reported that they know that people can reduce their chances of getting the AIDS virus by using condoms. More than 4 in 5 respondents (85 percent of women and 89 percent of men) also reported that they know that people can reduce their chances of getting the AIDS virus by limiting sex to one partner who is not infected and who has no other partners. Knowledge of both these means of avoiding HIV transmission is also high, with 79 percent of women and 86 percent of men citing both as ways of reducing the risk of getting the AIDS virus.

Table 4.1 Knowledge of HIV/AIDS

Percentage of women and men 15-49 who have heard of HIV/AIDS, by background characteristics, Vietnam 2005

Background characteristic	Women		Men	
	Has heard of HIV/AIDS	Number of women	Has heard of HIV/AIDS	Number of men
Age				
15-24	91.8	2,471	94.0	2,406
15-19	90.7	1,359	93.0	1,472
20-24	93.1	1,112	95.7	934
25-29	95.2	948	96.3	902
30-39	91.6	1,997	94.8	1,718
40-49	93.0	1,873	95.7	1,680
Education				
Never attended school	48.9	407	50.7	234
Primary	85.6	1,574	89.6	1,215
Secondary	97.6	4,612	97.9	4,599
More than secondary	99.8	696	100.0	658
Marital status				
Never married	92.6	2,223	95.0	2,618
Ever had sex *		30	99.8	204
Never had sex	92.6	2,193	94.6	2,414
Married/living together	92.7	4,750	95.0	4,025
Divorced/separated/widowed	89.4	316	91.3	64
Wealth quintile				
Lowest	73.4	1,306	81.7	1,261
Second	93.5	1,387	96.2	1,275
Middle	96.5	1,503	97.3	1,384
Fourth	97.2	1,507	99.1	1,378
Highest	99.2	1,587	99.2	1,410
Residence				
Urban	97.6	1,575	98.9	1,378
Rural	91.1	5,714	93.9	5,329
Region				
North	91.6	2,802	93.6	2,455
Central	91.5	1,808	93.2	1,735
South	94.2	2,679	97.5	2,517
Targeted provinces				
Ha Noi	99.9	235	99.4	218
Ho Chi Minh City	96.9	484	98.9	427
Hai Phong	97.1	167	98.7	141
Quang Ninh	96.7	100	99.6	93
Total	92.5	7,289	94.9	6,707

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

However, abstinence as a means of avoiding the AIDS virus is less commonly acknowledged. One in two women and one in three men did not acknowledge abstinence as a means of reducing the chances of contracting the AIDS virus. Those who have never attended school were the least likely to acknowledge abstinence as a means of avoiding AIDS; nearly 3 out of 4 women and men who have never attended school did not acknowledge abstinence as a means of reducing the chances of contracting the AIDS virus.

Table 4.2 Knowledge of HIV prevention methods

Percentage of women and men who, in response to a prompted question, say that people can reduce the risk of getting the AIDS virus by using condoms and by having sex with just one partner who is not infected and who has no other partners, by background characteristics, Vietnam 2005

Background characteristic	Women					Men				
	Using condoms ¹	Limiting sex to one uninfected partner ²	Using condoms and limiting sex to one uninfected partner ³	Abstaining from sexual intercourse	Number of women	Using condoms ¹	Limiting sex to one uninfected partner ²	Using condoms and limiting sex to one uninfected partner ³	Abstaining from sexual intercourse	Number of men
Age										
15-24	77.8	80.8	73.3	52.3	2,471	86.7	84.4	80.7	63.8	2,406
15-19	74.1	78.1	69.7	49.4	1,359	84.7	82.1	77.9	61.8	1,472
20-24	82.3	84.1	77.6	55.8	1,112	89.7	88.1	85.1	67.0	934
25-29	88.3	90.0	85.5	59.5	948	91.6	91.2	88.6	67.8	902
30-39	84.1	86.9	81.5	54.6	1,997	91.0	91.7	88.7	69.4	1,718
40-49	84.0	87.1	79.7	58.8	1,873	92.1	92.2	89.4	70.9	1,680
Education										
Never attended school	33.0	37.1	27.0	25.5	407	41.4	40.2	36.3	22.5	234
Primary	70.8	74.4	66.0	48.5	1,574	80.9	80.2	74.9	60.1	1,215
Secondary	88.6	91.3	85.1	59.9	4,612	93.3	92.7	89.8	71.7	4,599
More than secondary	97.4	98.4	96.1	59.7	696	98.8	98.4	97.4	68.1	658
Marital status										
Never married	77.5	80.5	72.7	49.6	2,223	88.3	86.0	82.8	64.4	2,618
Ever had sex *	*	*	*	*	30	98.5	94.3	94.2	68.5	204
Never had sex	77.2	80.4	72.5	49.8	2,193	87.4	85.3	81.8	64.1	2,414
Married/living together	84.9	87.6	81.6	58.2	4,750	90.8	91.2	88.2	69.6	4,025
Divorced/separated/widowed	81.4	84.0	78.2	56.2	316	86.4	83.8	83.8	68.5	64
Wealth quintile										
Lowest	59.9	63.1	56.2	43.5	1,306	73.9	71.6	67.0	52.1	1,261
Second	82.1	82.9	75.5	54.9	1,387	89.0	87.6	84.0	68.1	1,275
Middle	85.3	89.6	81.8	57.4	1,503	93.0	93.0	90.1	73.3	1,384
Fourth	88.9	92.5	86.3	61.1	1,507	95.0	94.9	92.1	73.6	1,378
Highest	92.7	94.7	90.2	58.8	1,587	96.5	96.7	94.9	69.3	1,410
Residence										
Urban	90.3	91.3	86.4	56.9	1,575	95.1	94.9	92.8	70.1	1,378
Rural	80.3	83.6	76.7	55.1	5,714	88.4	87.6	84.3	66.9	5,329
Region										
North	83.1	87.7	81.2	58.5	2,802	89.0	88.2	85.2	68.2	2,455
Central	83.6	83.3	78.8	55.1	1,808	86.6	85.8	82.4	66.5	1,735
South	81.1	84.1	76.3	52.7	2,679	92.8	92.3	89.4	67.6	2,517
Targeted provinces										
Ha Noi	95.5	99.2	94.8	75.7	235	97.5	94.9	94.5	75.2	218
Ho Chi Minh City	83.3	85.6	76.8	52.0	484	96.8	98.1	96.3	69.7	427
Hai Phong	84.9	92.6	83.1	66.8	167	96.4	96.5	94.8	82.2	141
Quang Ninh	92.9	92.8	90.1	81.0	100	94.3	94.4	90.9	79.4	93
Total	82.5	85.3	78.8	55.5	7,289	89.8	89.1	86.0	67.6	6,707

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

¹ Every time they have sexual intercourse

² Who has no other partners

³ Corresponds to UNAIDS Knowledge Indicator 1 "Knowledge of HIV prevention methods"

Knowledge of all three means of avoiding transmission (abstinence, being faithful, and using condoms) varies greatly by education, among women and men. For each of these knowledge indicators, men are slightly more informed than women. The urban/rural differential in knowledge is greater than any regional differences.

4.4 REJECTION OF MISCONCEPTIONS ABOUT AIDS TRANSMISSION

In addition to knowing about effective ways to avoid contracting HIV/AIDS, it is also useful to be able to identify incorrect beliefs about AIDS, in order to eliminate misconceptions. Common misconceptions about AIDS include the idea that all HIV-infected people appear ill and the belief that the virus can be transmitted through mosquito or other insect bites, or by sharing food with someone who is infected. Respondents were asked about these three misconceptions.

Data shown in Tables 4.3.1 and 4.3.2 indicate that the majority of Vietnamese adults know that people infected with HIV do not necessarily show signs of infection. Sixty-seven percent of women and 79 percent of men know that a healthy-looking person can have the virus that causes AIDS.

Three of 4 respondents know that people cannot get the AIDS virus by sharing food with a person who has AIDS (76 percent of women and 78 percent of men). Fewer respondents understand that the AIDS virus cannot be transmitted by mosquito bites; 56 percent of women and 65 percent of men know that AIDS cannot be transmitted by mosquito bites.

Comprehensive knowledge refers to those who know two means of reducing HIV risk (being faithful to one uninfected partner and consistent use of condoms) and who reject the two most common misconceptions about transmission (transmission risk through sharing food and receiving mosquito bites) and who know that a healthy looking person can have HIV. Looking at all three beliefs together, 39 percent of women and 51 percent of men have comprehensive knowledge on all these issues. Each aspect of knowledge reported in the tables varies greatly by both education and wealth index, among women and men.

Table 4.3.1 Beliefs about AIDS: women

Percentage of women who say that a healthy-looking person can have the AIDS virus and who, in response to prompted questions, correctly reject local misconceptions about AIDS transmission and prevention, and the percentage with comprehensive knowledge about AIDS, by background characteristics, Vietnam 2005

Background characteristic	Percentage of women who say that:			Percentage who reject two most common misconceptions and say that a healthy-looking person can have the AIDS virus ¹	Percentage with comprehensive knowledge about AIDS ²	Number of women
	A healthy-looking person can have the AIDS virus	AIDS cannot be transmitted by mosquito bites	A person cannot become infected by sharing food with someone with AIDS			
Age						
15-24	71.4	60.5	77.8	47.3	42.3	2,471
15-19	69.8	63.3	77.8	48.8	42.0	1,359
20-24	73.4	57.0	77.8	45.6	42.5	1,112
25-29	68.5	59.2	79.9	42.9	40.7	948
30-39	63.7	53.6	74.4	39.0	37.4	1,997
40-49	64.8	51.5	74.1	37.0	34.5	1,873
Education						
Never attended school	16.4	19.3	26.1	6.4	3.7	407
Primary	44.3	39.6	58.8	20.6	18.5	1,574
Secondary	75.4	60.6	83.4	46.4	42.9	4,612
More than secondary	94.6	85.5	96.9	79.8	77.2	696
Marital status						
Never married	71.9	65.8	81.2	51.1	45.6	2,223
Ever had sex	*	*	*	*	*	30
Never had sex	71.8	65.7	81.1	51.0	45.4	2,193
Married/living together	65.6	52.1	74.1	38.0	35.9	4,750
Divorced/separated/widowed	58.4	48.3	73.1	34.0	32.4	316
Wealth quintile						
Lowest	37.8	40.8	52.0	22.0	18.8	1,306
Second	62.7	49.7	72.6	32.5	29.9	1,387
Middle	73.7	52.4	76.9	40.6	37.9	1,503
Fourth	76.9	61.4	84.0	49.4	46.6	1,507
Highest	80.0	72.7	91.3	60.2	56.2	1,587
Residence						
Urban	74.3	69.1	88.4	54.9	51.3	1,575
Rural	65.3	52.5	72.9	38.2	35.3	5,714
Region						
North	75.0	55.5	75.3	46.9	44.2	2,802
Central	74.1	55.6	74.6	44.4	40.4	1,808
South	54.4	57.1	78.2	34.8	31.9	2,679
Targeted provinces						
Ha Noi	90.8	73.6	93.1	66.9	65.0	235
Ho Chi Minh City	52.0	58.5	85.4	36.3	32.5	484
Hai Phong	79.4	62.0	83.4	50.1	44.5	167
Quang Ninh	84.8	74.8	86.4	64.9	62.7	100
Total	67.2	56.1	76.2	41.8	38.7	7,289

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

¹ The two most common local misconceptions involve transmission by mosquito bites and by sharing food with someone with AIDS. Corresponds to UNAIDS Knowledge Indicator 2 "No incorrect beliefs about AIDS."

² Respondents with a comprehensive knowledge say that use of condom during every sexual intercourse and having just one uninfected and faithful partner can reduce the chance of getting the AIDS virus; say that a healthy-looking person can have the AIDS virus; and reject the two most common local misconceptions.

Table 4.3.2 Beliefs about AIDS: men

Percentage of men age 15-49 who say that a healthy-looking person can have the AIDS virus and who, in response to prompted questions, correctly reject local misconceptions about AIDS transmission and prevention, and the percentage with comprehensive knowledge about AIDS, by background characteristics, Vietnam 2005

Background characteristic	Percentage of men who say that:			Percentage who reject two most common misconceptions and say that a healthy-looking person can have the AIDS virus ¹	Percentage with comprehensive knowledge about AIDS ²	Number of men
	A healthy-looking person can have the AIDS virus	AIDS cannot be transmitted by mosquito bites	A person cannot become infected by sharing food with someone with AIDS			
Age						
15-24	77.7	66.7	76.9	54.6	50.3	2,406
15-19	76.5	66.6	74.8	53.5	48.1	1,472
20-24	79.6	66.7	80.4	56.4	53.6	934
25-29	81.6	64.2	79.1	54.6	51.9	902
30-39	78.9	62.0	78.2	51.3	49.5	1,718
40-49	80.5	64.9	79.3	54.4	52.7	1,680
Education						
Never attended school	20.1	21.5	26.0	8.9	8.9	234
Primary	59.3	40.7	57.5	25.2	22.9	1,215
Secondary	85.0	69.3	83.6	58.7	55.5	4,599
More than secondary	96.7	92.5	97.0	87.5	85.4	658
Marital status						
Never married	80.3	69.2	79.7	57.9	53.6	2,618
Ever had sex	87.2	76.2	90.5	66.0	63.0	204
Never had sex	79.7	68.6	78.8	57.2	52.8	2,414
Married/living together	78.8	62.0	77.4	51.2	49.3	4,025
Divorced/separated/widowed	63.8	51.1	65.8	40.9	40.9	64
Wealth quintile						
Lowest	50.8	42.8	53.0	26.9	24.6	1,261
Second	77.4	59.2	75.1	47.3	42.5	1,275
Middle	87.4	66.4	82.5	56.4	54.3	1,384
Fourth	88.0	73.3	86.3	63.7	60.4	1,378
Highest	89.8	79.2	91.2	71.3	69.4	1,410
Residence						
Urban	87.8	77.2	89.6	68.3	65.7	1,378
Rural	77.0	61.5	75.2	50.0	47.1	5,329
Region						
North	79.6	62.5	74.8	52.2	49.3	2,455
Central	83.6	69.5	78.9	61.1	57.0	1,735
South	75.9	63.5	80.9	50.2	48.2	2,517
Targeted provinces						
Ha Noi	91.3	81.3	91.9	74.0	71.2	218
Ho Chi Minh City	81.8	67.5	82.2	56.2	56.0	427
Hai Phong	90.4	67.7	87.7	59.8	58.2	141
Quang Ninh	88.4	82.4	91.0	72.4	70.4	93
Total	79.2	64.7	78.2	53.7	50.9	6,707

¹The two most common local misconceptions involve transmission by mosquito bites and by sharing food with someone with AIDS. Corresponds to UNAIDS Knowledge Indicator 2 "No incorrect beliefs about AIDS."

²Respondents with a comprehensive knowledge say that use of condom during every sexual intercourse and having just one uninfected and faithful partner can reduce the chance of getting the AIDS virus; say that a healthy-looking person can have the AIDS virus; and reject the two most common local misconceptions.

4.5 KNOWLEDGE OF MOTHER-TO-CHILD TRANSMISSION

An HIV positive mother can potentially transmit HIV to her child during pregnancy, labor and delivery, or while breastfeeding. Risk of mother to child transmission can be reduced through the use of anti-retroviral therapy. Therefore, increasing the level of knowledge of transmission of the virus from mother to child is critical to improving the health of HIV-infected mothers and reducing the risk of transmission to their children.

All women and men interviewed in the VPAIS were asked if the virus that causes AIDS can be transmitted from a mother to a child during pregnancy, during delivery, or during breastfeeding. Those who reported they were aware of the risk of mother to child transmission were further asked if there are any special medications that a doctor or nurse can give to a pregnant woman who is infected with the AIDS virus to reduce the risk of transmission to the baby. Theoretically, knowledge that mother to child transmission can be prevented will alter the woman's care-seeking and breastfeeding behavior.

Knowledge of mother to child transmission varies greatly by transmission mode. Knowledge of transmission during pregnancy and delivery is high among both women and men, while knowledge of transmission through breastfeeding is less commonly known. Three-quarters of all respondents know that HIV can be transmitted during delivery and 90 percent of respondents know that HIV can be transmitted during pregnancy. While only 2 in 10 women and men know about anti-retroviral drugs to reduce the risk of mother to child transmission, 21 percent of women and 18 percent of men know that there are special drugs that a doctor or nurse can give to a pregnant woman infected with the AIDS virus to reduce the risk of transmitting the virus to the baby. About four in ten women and men of reproductive age know that HIV can be transmitted from a mother to her child by breastfeeding (43 percent of women and 39 percent of men as shown in Table 4.4). Thus, the combined indicator shows that only about 15 percent of women and men of reproductive age know both that HIV can be transmitted through breastfeeding and that the risk of mother to child HIV transmission during pregnancy can be reduced with medication.

Women and men are about equally knowledgeable with regard to the risk of HIV transmission through breastfeeding and the existence of ARVs for reducing mother to child transmission. Those least likely to be aware of these aspects of transmission are women and men who have never attended school; they are less than half as likely as people with some formal schooling to know of breastfeeding transmission and ARVs.

Table 4.4 Knowledge of prevention of mother-to-child transmission of HIV

Percentage of women and men age 15-49 who know that HIV can be transmitted from mother to child by breastfeeding, and that the risk of mother-to-child transmission (MTCT) of HIV can be reduced by the mother taking special drugs during pregnancy, by background characteristics, Vietnam 2005

Background characteristic	Women				Men			
	HIV can be transmitted by breastfeeding	Risk of MTCT can be reduced by mother taking drugs during pregnancy	HIV can be transmitted by breastfeeding and risk of MTCT can be reduced by mother taking drugs during pregnancy ¹	Number of women	HIV can be transmitted by breastfeeding	Risk of MTCT can be reduced by mother taking drugs during pregnancy	HIV can be transmitted by breastfeeding and risk of MTCT can be reduced by mother taking drugs during pregnancy ¹	Number of men
Age								
15-24	40.1	21.2	15.0	2,471	36.4	15.6	11.4	2,406
15-19	37.3	18.6	12.2	1,359	34.0	13.6	9.4	1,472
20-24	43.5	24.4	18.3	1,112	40.2	18.7	14.5	934
25-29	45.3	22.0	17.9	948	41.9	17.7	13.6	902
30-39	45.6	19.4	14.8	1,997	38.3	18.7	14.1	1,718
40-49	43.9	21.1	15.3	1,873	41.9	20.6	15.8	1,680
Education								
Never attended school	18.1	2.4	1.7	407	18.6	2.5	1.4	234
Primary	40.2	11.0	6.7	1,574	42.5	9.0	6.6	1,215
Secondary	46.4	23.0	17.5	4,612	40.0	19.4	14.2	4,599
More than secondary	43.8	38.5	29.1	696	32.8	29.5	25.2	658
Marital status								
Never married	38.5	20.9	14.1	2,223	35.8	16.1	12.0	2,618
Ever had sex	*	*	*	30	46.4	19.2	14.3	204
Never had sex	38.3	20.9	14.1	2,193	34.9	15.9	11.8	2,414
Married/living together	45.5	21.2	16.4	4,750	41.1	19.1	14.5	4,025
Divorced/separated/widowed	43.5	14.0	10.0	316	41.4	15.7	11.1	64
Wealth quintile								
Lowest	33.0	9.8	7.9	1,306	34.8	8.6	6.6	1,261
Second	43.5	16.5	11.7	1,387	43.1	16.2	12.3	1,275
Middle	41.9	23.4	18.1	1,503	42.7	18.5	12.7	1,384
Fourth	47.8	24.2	18.2	1,507	39.7	20.0	15.0	1,378
Highest	48.6	27.8	19.7	1,587	34.8	25.2	20.0	1,410
Residence								
Urban	47.4	27.3	17.6	1,575	32.4	21.4	16.8	1,378
Rural	42.1	19.0	14.8	5,714	40.7	17.0	12.6	5,329
Region								
North	37.4	25.0	18.7	2,802	39.9	21.1	15.9	2,455
Central	36.2	25.3	21.5	1,808	28.8	18.7	12.3	1,735
South	54.1	13.3	7.8	2,679	45.1	14.2	11.9	2,517
Targeted provinces								
Ha Noi	48.1	44.6	29.4	235	32.8	34.8	24.6	218
Ho Chi Minh City	54.8	19.6	10.0	484	41.1	12.6	7.4	427
Hai Phong	49.6	26.7	18.3	167	38.4	22.2	17.0	141
Quang Ninh	47.0	27.5	21.4	100	22.9	37.2	33.5	93
Total	43.3	20.8	15.4	7,289	39.0	17.9	13.5	6,707

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

¹ Corresponds to UNAIDS Knowledge Indicator 5 "Knowledge that mother-to-child transmission (MTCT) can be prevented"

ATTITUDES RELATING TO HIV/AIDS

5.1 KEY FINDINGS

- While nearly all women and men report they would care for a family member with HIV at home, 4 in 10 respondents would want the positive status of an HIV positive family member to remain a secret.
- There is widespread acceptance of the ability of a woman to negotiate safer sex with her husband either by refusing to have sex or by requesting condom use if she knows he has a sexually transmitted infection.
- Women and men who believe children should be taught about condom use to avoid HIV/AIDS are in the minority.

5.2 INTRODUCTION

Not only has the HIV/AIDS epidemic emerged as a global problem with a disastrous impact on survival and human development, it has also instilled fear and social anxiety, often disseminating negative repercussions for those who contract the illness. This chapter presents measures of attitudes regarding HIV/AIDS. It includes indicators of stigma towards people living with HIV/AIDS, justifications for women negotiating safer sex with their husbands, and attitudes towards teaching children about condom use.

5.3 HIV/AIDS-RELATED STIGMA

Stigma is a burden that many people living with HIV/AIDS carry in addition to their illness. The stigma is put upon them by others in society who label them as deserving of being marginalized. While the psycho-sociological basis for humans alienating each other is complex, the consequences for people living with HIV/AIDS who are stigmatized are clearly grave. Ultimately, a community, individual, or society that can rationalize the marginalizing of others can excuse itself from the responsibility of caring for and looking after those who have been marginalized.

In order to assess the level of stigma, VPAIS respondents who have heard of AIDS were asked four questions related to their attitudes towards those infected with HIV/AIDS. Respondents were asked if they would be willing to care for a family member in their own household if that family member was sick with the AIDS virus. Respondents were asked whether they would buy fresh vegetables from a market vendor who had the AIDS virus. Respondents were asked whether they thought a female teacher infected with the AIDS virus who is not sick should be allowed to continue teaching in school. Respondents were asked to imagine if a member of their family got infected with the virus that causes AIDS, would they want it to remain secret or not. Tables 5.1.1 and 5.1.2 show the results.

Survey results show that nearly all respondents (more than 9 in 10 women and men age 15-49 who have heard of AIDS) say they would be willing to care for a family member in their own household who is sick with AIDS. However, only 5 in 10 women and men were able to say that the HIV status of an HIV positive family member need not be kept secret. Presumably, the 4 in 10 respondents (both women

and men) who reported that the HIV status of a family member infected with HIV should be kept secret would be motivated to maintain secrecy primarily out of fear that the family member would be stigmatized as a result of their HIV status.

Only 5 in 10 women and 6 in 10 men who have heard of AIDS report that they would buy fresh vegetables from a vendor if they knew that he/she is HIV-positive. And about 6 in 10 feel that a female teacher who has the AIDS virus but is not sick should be allowed to continue teaching in school.

Background characteristic	Percentage of women who:				Percentage expressing accepting attitudes on all four measures ¹	Number of women who have heard of HIV/AIDS
	Are willing to care for a family member with HIV at home	Would buy fresh vegetables from shopkeeper with AIDS	Believe HIV-positive female teacher should be allowed to keep teaching	Believe HIV-positive status of a family member does not need to remain a secret		
Age						
15-24	92.7	58.0	62.1	49.9	27.3	2,267
15-19	92.3	57.7	65.3	51.0	28.6	1,232
20-24	93.2	58.4	58.2	48.6	25.8	1,035
25-29	94.0	54.0	57.5	47.1	23.3	903
30-39	93.0	49.9	53.4	49.9	22.0	1,830
40-49	92.1	43.8	48.5	52.4	18.4	1,742
Education						
Never attended school	86.7	19.3	23.7	39.8	3.5	199
Primary	89.2	27.1	32.6	44.0	8.1	1,348
Secondary	93.4	55.9	59.8	51.9	25.4	4,501
More than secondary	97.5	80.1	82.5	53.6	42.2	695
Marital status						
Never married	92.1	59.4	63.2	49.7	28.6	2,060
Ever had sex	*	*	*	*	*	28
Never had sex	92.1	59.4	63.2	49.8	28.7	2,031
Married/living together	93.1	48.5	52.9	50.3	21.2	4,401
Divorced/separated/widowed	93.1	43.3	42.0	52.1	10.3	282
Wealth quintile						
Lowest	92.0	30.4	36.0	46.3	12.3	959
Second	93.8	43.1	47.1	53.9	20.9	1,296
Middle	94.6	51.9	57.4	52.1	24.1	1,450
Fourth	92.4	58.4	62.8	52.5	27.4	1,465
Highest	91.3	65.0	66.2	45.5	26.3	1,574
Residence						
Urban	90.1	63.7	63.2	46.3	26.3	1,537
Rural	93.6	48.0	53.4	51.3	22.1	5,206
Region						
North	97.8	57.5	63.4	56.5	29.4	2,566
Central	94.6	64.8	60.9	55.1	31.5	1,654
South	86.6	36.9	44.2	40.5	11.0	2,523
Targeted provinces						
Ha Noi	99.0	70.4	72.7	38.7	23.0	235
Ho Chi Minh City	83.8	55.5	58.0	42.9	18.3	469
Hai Phong	96.7	49.8	68.3	55.8	23.3	162
Quang Ninh	99.1	71.2	75.0	65.0	44.0	97
Total	92.8	51.6	55.6	50.2	23.0	6,743

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

¹ Corresponds to President's Emergency Plan for AIDS Relief *Policy and Systems Strengthening (Capacity Building)* Indicator 2 "Percentage of the general population with accepting attitudes toward persons living with HIV/AIDS" and UNICEF-OVC *Raising awareness to create a supportive environment* Indicator A7 "Stigma and discrimination."

Table 5.1.2 Accepting attitudes towards those living with HIV: men

Among men age 15-49 who have heard of HIV/AIDS, percentage expressing accepting attitudes toward people with HIV, by background characteristics, Vietnam 2005

Background characteristic	Percentage of men who:				Percentage expressing accepting attitudes on all four measures ¹	Number of men who have heard of HIV/AIDS
	Are willing to care for a family member with HIV at home	Would buy fresh vegetables from shopkeeper with AIDS	Believe HIV-positive female teacher should be allowed to keep teaching	Believe HIV-positive status of a family member does not need to remain a secret		
Age						
15-24	96.5	60.5	62.3	44.5	26.9	2,262
15-19	96.2	59.8	62.5	43.7	26.8	1,369
20-24	96.9	61.6	62.0	45.8	27.0	893
25-29	96.2	64.0	62.9	50.7	28.7	869
30-39	95.5	60.2	60.3	55.1	29.8	1,630
40-49	96.2	60.3	63.0	53.5	28.6	1,607
Education						
Never attended school	87.3	13.3	20.9	36.8	6.4	119
Primary	93.7	31.4	34.8	41.6	9.7	1,089
Secondary	96.6	65.2	65.8	51.3	30.4	4,502
More than secondary	98.4	88.8	88.9	60.4	49.0	658
Marital status						
Never married	96.4	63.4	65.2	46.1	29.0	2,487
Ever had sex	98.3	69.6	68.1	38.1	21.7	204
Never had sex	96.3	62.8	65.0	46.8	29.6	2,283
Married/living together	95.9	59.5	60.2	53.1	28.1	3,823
Divorced/separated/widowed	98.4	47.0	53.1	51.6	11.3	58
Wealth quintile						
Lowest	92.9	34.4	37.5	44.8	12.4	1,030
Second	95.9	53.4	52.7	45.6	21.7	1,226
Middle	96.0	66.0	65.1	54.9	32.5	1,347
Fourth	97.1	68.4	69.6	53.2	32.9	1,366
Highest	97.9	74.6	78.2	51.3	37.3	1,399
Residence						
Urban	97.0	69.9	74.5	48.8	33.1	1,362
Rural	95.9	58.4	58.7	50.7	27.0	5,006
Region						
North	95.6	66.5	66.1	61.4	37.2	2,297
Central	96.5	74.9	68.5	46.6	32.9	1,617
South	96.3	46.4	54.1	42.4	17.0	2,454
Targeted provinces						
Ha Noi	96.2	84.0	78.6	53.0	39.3	217
Ho Chi Minh City	97.0	60.2	69.0	42.7	27.0	423
Hai Phong	97.3	64.2	77.1	55.4	30.7	139
Quang Ninh	98.0	70.7	75.2	61.9	44.1	92
Total	96.1	60.9	62.1	50.3	28.3	6,368

¹Corresponds to President's Emergency Plan for AIDS Relief *Policy and Systems Strengthening (Capacity Building)* Indicator 2 "Percentage of the general population with accepting attitudes toward persons living with HIV/AIDS" and UNICEF-OVC *Raising awareness to create a supportive environment* Indicator A7 "Stigma and discrimination."

A composite indicator measuring accepting attitudes expressed in response to all four questions is also shown in Tables 5.1.1 and 5.1.2. Only 23 percent of women and 28 percent of men express positive attitudes on all four measures. It is interesting to note that in general, women and men express fairly similar levels of acceptance on all the indicators across background characteristics. There is far less variability between men and women in their attitudes than there is across other background characteristics. The percentage expressing accepting attitudes increases with increasing education and increasing wealth among both women and men.

5.4 ATTITUDES TOWARDS NEGOTIATING SAFER SEX

The ability to safeguard oneself against HIV transmission can be hampered if one feels powerless to negotiate safer sex with one's sexual partner. The ability to negotiate for self-protection against HIV is likely to be more of a problem for women than for men. To assess women's ability to negotiate for safer sex in circumstances in which she suspects her husband may have a sexually transmitted infection, respondents in the VPAIS were asked two questions. Respondents were asked whether they think a wife is justified in refusing to have sex with her husband if she knows he has an infection that can be transmitted through sexual contact. Respondents were also asked if they think that a woman who knows her husband has an infection that can be transmitted through sexual contact is justified in asking him to use a condom.

As shown in Table 5.2, 72 percent of women and 75 percent of men feel that a wife is justified in refusing to have sex with her husband if she knows he has a sexually-transmitted infection, while 83 percent of women and 87 percent of men believe that a wife is justified in asking that they use a condom if she knows that her husband has a sexually-transmitted infection. Nearly nine in ten women and men agree with at least one statement, indicating widespread acceptance of the ability of women to negotiate safer sex with their husbands. Acceptance increases with increasing education. A smaller proportion of young people and those who have never been married report that the woman is justified to negotiate for safer sex in these circumstances.

Table 5.2 Attitudes toward negotiating safer sex with husband

Percentage of women and men who believe that, if a husband has an STI, his wife can either refuse to have sex with him or propose condom use, by background characteristics, Vietnam 2005

Background characteristic	Women				Men			
	Woman is justified in:				Woman is justified to:			
	Refusing to have sex	Asking that they use a condom	Either refusing sex or asking to use a condom ¹	Number of women	Refusing to have sex	Asking that they use a condom	Either refusing sex or asking to use a condom ¹	Number of men
Age								
15-24	58.0	68.5	71.9	2,471	63.6	75.4	76.7	2,406
15-19	49.9	60.2	63.9	1,359	57.8	70.6	72.1	1,472
20-24	67.9	78.6	81.7	1,112	72.7	83.0	84.0	934
25-29	77.6	91.5	94.3	948	79.3	89.5	90.7	902
30-39	76.1	89.4	92.4	1,997	80.9	93.8	95.2	1,718
40-49	81.2	90.2	93.6	1,873	83.6	95.5	96.8	1,680
Education								
Never attended school	55.8	55.8	64.3	407	43.5	50.7	54.4	234
Primary	74.5	79.0	83.2	1,574	77.7	83.8	86.2	1,215
Secondary	72.3	84.9	87.6	4,612	75.2	88.3	89.3	4,599
More than secondary	68.6	93.2	95.0	696	81.1	97.4	98.2	658
Marital status								
Never married	52.7	64.3	67.6	2,223	63.8	75.8	77.0	2,618
Ever had sex	*	*	*	30	78.4	93.8	94.8	204
Never had sex	52.3	63.9	67.2	2,193	62.6	74.3	75.5	2,414
Married/living together	79.8	91.4	94.5	4,750	82.4	94.4	95.8	4,025
Divorced/separated/widowed	78.4	84.4	88.3	316	84.1	86.6	86.6	64
Wealth quintile								
Lowest	67.0	67.8	74.0	1,306	66.2	74.6	76.3	1,261
Second	73.7	82.8	84.9	1,387	76.0	87.0	87.9	1,275
Middle	74.0	84.7	87.0	1,503	75.4	89.8	91.0	1,384
Fourth	73.2	87.6	89.7	1,507	76.9	91.0	92.0	1,378
Highest	69.2	88.8	92.6	1,587	80.3	91.7	93.4	1,410
Residence								
Urban	69.0	86.3	89.3	1,575	80.4	89.6	91.3	1,378
Rural	72.2	81.8	85.1	5,714	73.8	86.4	87.6	5,329
Region								
North	70.9	87.7	91.0	2,802	70.4	91.7	92.5	2,455
Central	69.2	76.6	78.0	1,808	65.4	75.4	76.6	1,735
South	73.6	81.9	86.2	2,679	86.5	90.5	92.4	2,517
Targeted provinces								
Ha Noi	35.0	95.1	96.2	235	69.6	97.0	97.4	218
Ho Chi Minh City	75.2	89.2	95.0	484	92.8	94.4	97.9	427
Hai Phong	64.9	83.2	85.3	167	86.4	97.1	97.2	141
Quang Ninh	79.2	90.4	91.4	100	84.6	92.9	93.3	93
Total	71.5	82.8	86.0	7,289	75.1	87.0	88.4	6,707

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

¹ Corresponds to UNAIDS *Sexual Negotiation* Indicator 1 "Women's ability to negotiate safer sex with husband"

5.5 ATTITUDES TOWARDS EDUCATING YOUTH ABOUT CONDOM USE

Condom use is one of the main strategies for combating the spread of AIDS; however, educating young people about using condoms is sometimes controversial. In order to gauge attitudes towards condom education, respondents were asked if they thought that children age 12-14 should be taught about using a condom to avoid AIDS. Results are tabulated for respondents age 18-49 in Table 5.3.

Table 5.3 Adult support of education about condom use to prevent AIDS

Percentage of women and men age 18-49 who agree that children age 12-14 years should be taught about using a condom to avoid AIDS, by background characteristics, Vietnam 2005

Background characteristic	Women 18-49		Men 18-49	
	Percentage who agree ¹	Number of women	Percentage who agree ¹	Number of men
Age				
18-24	32.2	1,597	36.7	1,359
18-19	32.2	485	40.7	426
20-24	32.2	1,112	34.9	934
25-29	27.3	948	34.0	902
30-39	25.9	1,997	30.8	1,718
40-49	29.0	1,873	29.8	1,680
Education				
Never attended school	10.1	385	12.5	214
Primary	18.8	1,481	24.7	1,119
Secondary	30.8	3,859	34.0	3,674
More than secondary	47.4	691	43.6	654
Marital status				
Never married	32.8	1,360	37.3	1,581
Married/living together	27.5	4,740	30.7	4,016
Divorced/separated/widowed	25.8	315	18.7	63
Wealth quintile				
Lowest	15.1	1,157	23.3	1,067
Second	20.6	1,209	30.2	1,058
Middle	33.9	1,292	33.7	1,128
Fourth	29.6	1,341	35.0	1,181
Highest	40.4	1,417	38.8	1,227
Residence				
Urban	34.4	1,412	38.5	1,207
Rural	26.9	5,004	30.8	4,454
Region				
North	36.4	2,442	39.9	2,074
Central	24.2	1,597	26.1	1,424
South	23.5	2,376	29.5	2,163
Targeted provinces				
Ha Noi	59.2	213	63.7	198
Ho Chi Minh City	28.0	435	44.0	387
Hai Phong	37.5	144	51.3	123
Quang Ninh	43.2	89	51.8	81
Total 18-49	28.6	6,415	32.4	5,660

¹Corresponds to Youth Guide *Determinants* Indicator 15 "Adults support of education about condom use to prevent HIV/AIDS among young people"

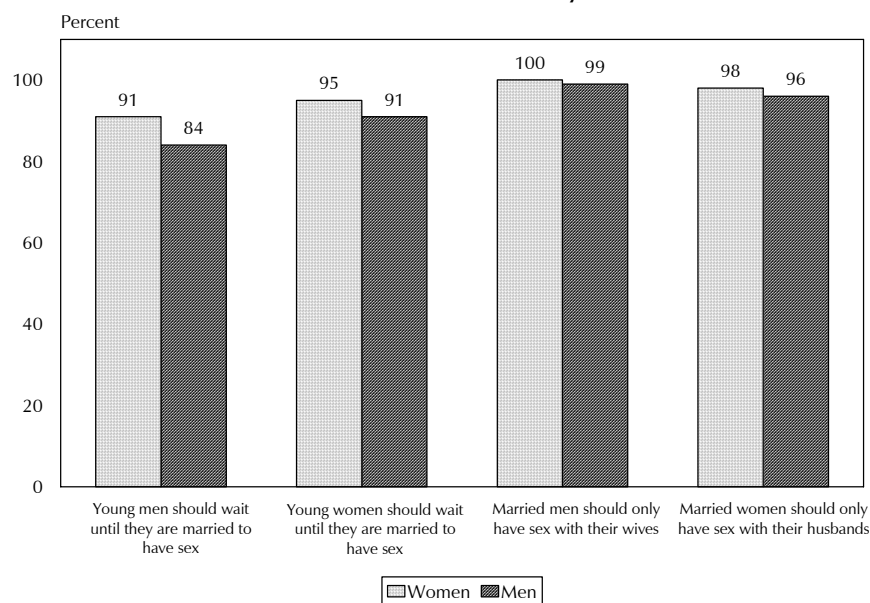
The data show that only 3 in 10 adults agree that children age 12-14 should be taught about using a condom to avoid AIDS. There is little difference in attitudes by age. Attitudes do vary greatly by education and across the targeted provinces. The proportion who support educating children in schools about condom use increases steadily with increasing education of the respondent. A higher proportion of people in the North support educating children about condom use than do people in the Central and South regions.

5.6 ATTITUDES TOWARDS ABSTINENCE AND FAITHFULNESS

All VPAIS respondents were asked questions to ascertain their perceptions and beliefs regarding abstinence and faithfulness. They were asked the following questions: i) whether young men should wait until they are married to have sex; ii) whether young women should wait until they are married to have sex; iii) whether married men should only have sex with their wives; iv) whether married women should only have sex with their husbands. Figure 5.1 presents the level of agreement with these norms regarding sexual behavior, for all respondents.

The vast majority of respondents agree with maintaining abstinence and faithfulness among the never-married and married population, respectively. With one exception, over 90 percent of women and men reported that they agree with practicing abstinence and faithfulness behaviors. Men are less likely than women to advocate premarital abstaining for men. Eighty-four percent of men believe that young men should wait until they are married to have sex, while 91 percent of women hold this belief.

Figure 5.1 Percentage of Respondents Who Agree with Specific Issues of Abstinence and Faithfulness, by Sex, Vietnam 2005



6.1 KEY FINDINGS

- One in three women and men age 15-49 has never had sexual intercourse.
- Fewer than 2 percent of never married women report ever having had sex.
- Only 8 percent of never married men report ever having had sex.
- No women report having more than one sexual partner in the previous year.
- Only one percent of men report having more than one sexual partner in the previous year.
- Only 0.5 percent of men age 15-49 reported sex with a prostitute in the previous year.
- Five percent of the population has ever received an HIV test.
- Five percent of women report having had an STI in the previous year.
- Women and men received an average of 1.6 and 1.3 injections in the previous year.

6.2 INTRODUCTION

This chapter explores the prevalence of behaviors that relate to and influence the spread of HIV/AIDS and other sexually transmitted infections. Discussed are issues such as multiple sexual partners, sex with commercial sex workers, and prevalence of voluntary counseling and testing for HIV, which are related to the risk of spreading HIV. The chapter also examines other health-related factors associated with the potential spread of HIV, including the prevalence of sexually transmitted infections and the use of injections.

It soon becomes apparent to the reader of the VPAIS survey results that sexual behavior in Vietnam is generally confined to within marital relationships. Whether such findings are factual or an artifact of reporting bias is a question that will soon come to the reader's mind when reviewing the survey findings. Vietnamese society and cultural norms generally dictate only protracted discussions of sexual activity. It can be postulated that by using face-to-face interviews, the data collection strategy of the VPAIS may have adversely affected the reporting of sexual behaviors by contributing to potential under-reporting of sexual activity.

Two recent studies, the Household Survey on HIV Prevalence and AIDS Indicators in Ho Chi Minh City and Thai Binh Province (NIHE, September 2005), and the Survey Assessment of Vietnamese Youth (SAVY) (General Statistics Office, August 2005) have asked the same sexual activity questions as has the VPAIS. One study was a survey of women and men age 15-49 in Ho Chi Minh City and Thai Binh province, the other was a nationally representative study of youth. With the aim of avoiding any potential under-reporting of sexual activity, both surveys incorporated self-administered portions of the interview specifically to allow for maximum privacy during reporting of sexual activity. In spite of having taken great care to offer respondents privacy, both studies found overall generally low levels of reporting of sexual behaviors. It is feasible that the same cultural sensitivities that surround (and perhaps limit) any discussion of sexual activity also surround (and perhaps limit) sexual behavior itself. Authors of the SAVY study concluded: "The majority [of youth] do not support premarital sex, instead choosing commitment, love and marriage before sexual relationships."

6.3 RECENT SEXUAL ACTIVITY

In the absence of any protection, the probability of HIV infection is related to the frequency of intercourse. Thus, information on sexual activity can be used to refine measures of exposure to contracting HIV or other sexually transmitted infections. But not all women and men who have ever had intercourse are currently sexually active. Women who are not sexually active may be abstaining in the period following a birth, or may be abstaining for various other reasons (spousal separation, illness, etc.). Tables 6.1.1 and 6.1.2 present data on the timing of last sexual intercourse, by selected background and demographic characteristics.

One in three women and men age 15-49 has never had sexual intercourse (30 percent of women and 36 percent of men). Five and three percent of women and men, respectively, report that their last sexual encounter occurred one or more years before the survey. Overall, 65 percent of women and 62 percent of men age 15-49 have had sexual intercourse within the 12 months preceding the survey.

Reporting of sexual activity among the population that is not currently married is extremely low. Only 1 percent of never married women report ever having had sexual intercourse. Only 8 percent of the never married men report ever having had sexual intercourse. Among the divorced/separated and widowed population, only 18 percent of men and 10 percent of women report having had intercourse in the year prior to the survey. The percentage of women and men who have not yet initiated sexual activity shows a strong correlation with education, with the percentage increasing greatly with increasing education.

Table 6.1.1 Recent sexual activity: women

Percent distribution of women age 15-49 by timing of last sexual intercourse, according to background characteristics, Vietnam 2005

Background characteristic	Time since last sexual intercourse			Total	Number of women
	Within 1 year	One or more years ago	Never had sexual intercourse		
Age					
15-19	6.3	0.2	93.5	100.0	1,359
20-24	47.1	1.0	51.8	100.0	1,112
25-29	80.6	3.9	15.6	100.0	948
30-34	86.7	4.4	9.0	100.0	1,012
35-39	89.5	5.9	4.5	100.0	986
40-44	88.0	8.9	3.1	100.0	995
45-49	81.3	15.1	3.6	100.0	878
Education					
Never attended school	82.9	4.9	12.2	100.0	407
Primary	72.6	7.9	19.5	100.0	1,574
Secondary	61.8	4.5	33.7	100.0	4,612
More than secondary	56.0	3.2	40.8	100.0	696
Marital status					
Never married	0.4	0.9	98.6	100.0	2,223
Married/living together	98.5	1.5	0.0	100.0	4,750
Divorced/separated/widowed	10.0	90.0	0.0	100.0	316
Marital duration¹					
Married only once					
0-4 years	97.0	3.0	0.0	100.0	837
5-9 years	95.6	4.4	0.0	100.0	828
10-14 years	94.0	6.0	0.0	100.0	924
15-19 years	93.9	6.1	0.0	100.0	981
20-24 years	89.2	10.8	0.0	100.0	793
25+ years	87.7	12.3	0.0	100.0	584
Married more than once	83.1	16.9	0.0	100.0	119
Wealth quintile					
Lowest	70.4	5.1	24.5	100.0	1,306
Second	65.0	7.3	27.7	100.0	1,387
Middle	62.7	4.2	33.1	100.0	1,503
Fourth	65.0	4.7	30.3	100.0	1,507
Highest	61.6	4.6	33.8	100.0	1,587
Residence					
Urban	57.2	5.9	36.9	100.0	1,575
Rural	66.9	4.9	28.2	100.0	5,714
Region					
North	68.1	4.3	27.6	100.0	2,802
Central	64.1	6.3	29.6	100.0	1,808
South	61.7	5.2	33.1	100.0	2,679
Targeted provinces					
Ha Noi	62.0	4.5	33.5	100.0	235
Ho Chi Minh City	52.7	5.9	41.4	100.0	484
Hai Phong	64.3	6.2	29.5	100.0	167
Quang Ninh	67.3	6.6	26.1	100.0	100
Total	64.8	5.1	30.1	100.0	7,289

¹ Excludes women who are never married

Table 6.1.2 Recent sexual activity: men

Percent distribution of men age 15-49 by timing of last sexual intercourse, according to background characteristics, Vietnam 2005

Background characteristic	Time since last sexual intercourse		Never had sexual intercourse	Total	Number of men
	Within 1 year	One or more years ago			
Age					
15-19	3.0	0.3	96.8	100.0	1,472
20-24	27.1	2.5	70.3	100.0	934
25-29	70.6	4.3	25.1	100.0	902
30-34	89.8	3.0	7.2	100.0	887
35-39	96.5	1.2	2.3	100.0	831
40-44	95.2	3.1	1.7	100.0	879
45-49	94.6	4.3	1.1	100.0	801
Education					
Never attended school	76.6	2.3	21.2	100.0	234
Primary	72.5	3.1	24.4	100.0	1,215
Secondary	58.2	2.4	39.3	100.0	4,599
More than secondary	59.1	1.5	39.4	100.0	658
Marital status					
Never married	5.1	2.7	92.2	100.0	2,618
Married/living together	99.0	1.0	0.0	100.0	4,025
Divorced/separated/widowed	18.3	81.7	0.0	100.0	64
Marital duration¹					
Married only once					
0-4 years	98.9	1.1	0.0	100.0	735
5-9 years	97.2	2.8	0.0	100.0	707
10-14 years	98.9	1.1	0.0	100.0	774
15-19 years	97.5	2.5	0.0	100.0	839
20-24 years	96.3	3.7	0.0	100.0	619
25+ years	96.5	3.5	0.0	100.0	296
Married more than once	97.3	2.7	0.0	100.0	118
Wealth quintile					
Lowest	64.8	3.0	32.2	100.0	1,261
Second	61.9	2.0	36.2	100.0	1,275
Middle	59.1	2.1	38.8	100.0	1,384
Fourth	61.2	2.8	36.0	100.0	1,378
Highest	61.1	2.4	36.5	100.0	1,410
Residence					
Urban	59.7	3.2	37.1	100.0	1,378
Rural	62.0	2.3	35.7	100.0	5,329
Region					
North	66.1	1.4	32.5	100.0	2,455
Central	58.1	2.2	39.8	100.0	1,735
South	59.5	3.7	36.8	100.0	2,517
Targeted provinces					
Ha Noi	62.3	2.8	34.9	100.0	218
Ho Chi Minh City	55.9	5.1	38.9	100.0	427
Hai Phong	65.4	2.8	31.8	100.0	141
Quang Ninh	64.9	1.2	33.8	100.0	93
Total	61.6	2.5	36.0	100.0	6,707

¹ Excludes men who are never married

6.4 MULTIPLE SEXUAL PARTNERS

Among those who did report having sexual intercourse in the 12 months prior to the survey, the VPAIS also asked the number of partners with whom respondents had sex in the 12 months prior to the survey. Tables 6.2.1 and 6.2.2 present the percentage of women and men who had two or more sexual partners in the 12 months prior to the survey.

Reporting of multiple partners is extremely uncommon. Essentially no women reported having more than one sexual partner in the 12 months preceding the survey, and only 1 percent of men who had sex in the year before the survey reported having had more than one partner. Even among the population of never-married men who have had sexual intercourse, those who report multiple partners are in the minority. Only 13 percent of never-married men who had sex in the year before the survey reported having had more than one partner.

Among those who have had sexual intercourse, Tables 6.2.1 and 6.2.2 also present the mean number of sexual partners respondents have had in their entire lifetime. Women report having had only one sexual partner over their lifetime. Men report a mean of 1.4 sexual partners over their lifetime, with little variability by age or education. The only sub-population presented in Table 6.2.2 to have a mean number of partners greater than 2 are the never-married, the formerly married, and men living in HCMC. Men in HCMC have the highest mean number of partners (2.4) of the four targeted provinces, while having a higher than average percentage who are not yet sexually active (among the four targeted provinces, Tables 6.1.2 and 6.2.2).

Table 6.2.1 Multiple sexual partners and higher-risk sexual intercourse in the past 12 months: women

Among women age 15-49 who had sexual intercourse in the past 12 months, the percentage who had intercourse with more than one partner and the percentage who had higher-risk sexual intercourse in the past 12 months, and among those having higher-risk intercourse in the last 12 months, the percentage reporting that a condom was used at last higher-risk intercourse, and the mean number of sexual partners during their lifetime for women who ever had sexual intercourse, by background characteristics, Vietnam 2005

Background characteristic	Among women who had sexual intercourse in the past 12 months:			Among women who ever had sexual intercourse:	
	Percentage who had 2+ partners in the past 12 months ¹	Percentage who had higher-risk intercourse in the past 12 months ²	Number of women	Mean number of sexual partners in lifetime	Number of women
Age					
15-24	0.0	0.7	609	1.0	623
15-19	0.0	3.9	85	1.0	88
20-24	0.0	0.1	524	1.0	536
25-29	0.0	0.8	764	1.0	799
30-39	0.0	0.2	1,759	1.0	1,862
40-49	0.0	0.3	1,589	1.1	1,810
Education					
Never attended school	0.0	0.2	337	1.1	357
Primary	0.1	0.1	1,143	1.1	1,267
Secondary	0.0	0.5	2,851	1.0	3,058
More than secondary	0.0	0.1	390	1.0	412
Marital status					
Never married	*	*	9	*	30
Married/living together	0.0	0.0	4,680	1.0	4,748
Divorced/separated/widowed	(0.0)	(23.1)	32	1.1	316
Wealth quintile					
Lowest	0.0	0.4	919	1.1	986
Second	0.0	0.1	902	1.0	1,003
Middle	0.0	0.4	942	1.0	1,004
Fourth	0.1	0.3	980	1.0	1,051
Highest	0.0	0.7	977	1.0	1,050
Residence					
Urban	0.1	0.3	901	1.0	995
Rural	0.0	0.4	3,820	1.0	4,100
Region					
North	0.0	0.3	1,909	1.0	2,028
Central	0.0	0.7	1,159	1.0	1,273
South	0.0	0.2	1,654	1.0	1,793
Targeted provinces					
Ha Noi	0.0	0.5	146	1.0	157
Ho Chi Minh City	0.3	0.3	255	1.0	284
Hai Phong	0.0	0.0	107	1.0	118
Quang Ninh	0.2	0.0	67	1.0	74
Total	0.0	0.4	4,721	1.0	5,094

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

¹ Corresponds to the President's Emergency Plan for AIDS Relief *Prevention Indicator 4* "Percentage of women and men aged 15-49 who had sex with more than one partner in the last 12 months"

²Sexual intercourse with a partner who was neither a spouse nor who lived with the respondent. Corresponds to UNAIDS *Sexual Behavior Indicator 1* "Higher-risk sex in the last year."

Table 6.2.2 Multiple sexual partners and higher-risk sexual intercourse in the past 12 months: men

Among men age 15-49 who had sexual intercourse in the past 12 months, the percentage who had intercourse with more than one partner and the percentage who had higher-risk sexual intercourse in the past 12 months, and among those having higher-risk intercourse in the last 12 months, the percentage reporting that a condom was used at last higher-risk intercourse, and the mean number of sexual partners during their lifetime for men who ever had sexual intercourse, by background characteristics, Vietnam 2005

Background characteristic	Among men who had sexual intercourse in the past 12 months:			Among men who had higher-risk intercourse in the past 12 months:		Among men who ever had sexual intercourse:	
	Percentage who had 2+ partners in the past 12 months ¹	Percentage who had higher-risk intercourse in the past 12 months ²	Number of men	Percentage reporting condom use at last higher-risk sex ³	Number of men	Mean number of sexual partners in lifetime	Number of men
Age							
15-24	2.3	21.3	297	67.6	63	1.4	324
15-19	(0.0)	(51.7)	44	*	23	(1.1)	47
20-24	2.7	16.1	253	67.6	41	1.5	277
25-29	1.7	7.3	637	80.1	46	1.3	673
30-39	0.6	2.5	1,599	70.2	40	1.4	1,635
40-49	0.2	0.3	1,596	*	5	1.4	1,654
Education							
Never attended school	1.5	0.6	179	*	1	1.4	184
Primary	1.1	2.1	882	*	18	1.4	919
Secondary	0.6	3.6	2,678	72.3	96	1.4	2,785
More than secondary	0.3	9.9	389	74.0	39	1.5	399
Marital status							
Never married	12.6	100.0	134	73.5	134	2.5	203
Married/living together	0.3	0.3	3,983	*	12	1.3	4,019
Divorced/separated/widowed	*	*	12	*	8	2.1	64
Wealth quintile							
Lowest	0.9	1.2	817	*	10	1.2	855
Second	0.3	2.3	789	*	18	1.2	814
Middle	0.8	3.5	818	(84.6)	28	1.3	847
Fourth	1.0	3.9	843	(65.6)	33	1.5	879
Highest	0.7	7.5	861	75.6	65	1.7	892
Residence							
Urban	0.8	7.7	822	75.0	63	1.8	864
Rural	0.7	2.7	3,306	70.7	90	1.3	3,423
Region							
North	0.6	3.1	1,622	79.7	50	1.3	1,652
Central	0.2	1.5	1,008	*	15	1.2	1,045
South	1.3	5.9	1,498	70.3	88	1.6	1,590
Targeted provinces							
Ha Noi	0.0	9.1	136	(80.4)	12	1.5	142
Ho Chi Minh City	1.4	11.7	239	(66.9)	28	2.4	261
Hai Phong	2.3	7.2	92	(87.3)	7	1.8	96
Quang Ninh	0.0	1.7	60	*	1	1.2	61
Total	0.7	3.7	4,128	72.5	154	1.4	4,287

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

¹ Corresponds to the President's Emergency Plan for AIDS Relief *Prevention* Indicator 4 "Percentage of women and men aged 15-49 who had sex with more than one partner in the last 12 months"

² Sexual intercourse with a partner who was neither a spouse nor who lived with the respondent. Corresponds to UNAIDS *Sexual Behavior* Indicator 1 "Higher-risk sex in the last year."

³ Corresponds to President's Emergency Plan for AIDS Relief *Prevention* Indicator 5 "Percentage of women and men age 15-49 who say they used a condom the last time they had sex with a non-marital, non-cohabiting partner, of those who have had sex with such a partner in the last 12 months"

6.5 HIGHER-RISK SEX

Condom use is an important tool in the fight to curtail the spread of HIV/AIDS. Although truly effective protection would require condom use at every sexual encounter, the most important sexual encounters in which to use condoms are those considered to be “higher risk.” In the context of this survey, higher-risk sex is defined as sex with a non-marital, non-cohabitating partner in the 12 months preceding the survey. Tables 6.2.1 and 6.2.2 show the proportion of women and men who were sexually active in the 12 months preceding the survey and had engaged in higher-risk sex, and among the men, the proportion that used a condom the most recent time they had sex with a higher-risk partner.

The results show that, among those who were sexually active in the 12 months preceding the survey, less than one percent of women and 4 percent of men engaged in higher-risk sex in the 12 months preceding the survey. Three-quarters of those men who did have higher-risk intercourse reported using condoms at the most recent higher-risk sex (73 percent).

Since all premarital sex is by definition higher-risk sex, the prevalence of higher-risk sex among men is higher among the youngest respondents and among those who are never married. Condom use at higher-risk sex is highest among respondents in their late 20s. The prevalence of higher-risk sexual behavior tends to increase slightly with increasing education and wealth.

6.6 SEX WITH PROSTITUTES

As presented above, higher-risk sex is defined as having sex with a non-marital, non-cohabiting partner. This includes sex with commercial sex workers (i.e., prostitutes). Sex with prostitutes is particularly risky since prostitutes are more likely than the general population to have sexually transmitted infections, as a result of having more sexual partners.

Of all the male respondents to the VPAIS, only 0.5 percent reported that they had sex with a prostitute in the 12 months preceding the survey (Table 6.3). This proportion hardly changes across any of the background characteristics. While men were also asked whether or not they used a condom the most recent time they had sex with a commercial sex worker, there are too few cases of men reporting sex with a commercial sex worker to present these data.

Table 6.3 Payment for sexual intercourse

Percentage of men age 15-49 reporting payment for sexual intercourse in the past 12 months, by background characteristics, Vietnam 2005

Background characteristic	Percentage ¹	Number of men
Age		
15-24	0.5	2,406
15-19	0.2	1,472
20-24	1.0	934
25-29	1.0	902
30-39	0.6	1,718
40-49	0.2	1,680
Education		
Never attended school	0.4	234
Primary	0.4	1,215
Secondary	0.6	4,599
More than secondary	0.3	658
Marital status		
Never married	0.8	2,618
Ever had sex	10.3	204
Never had sex	0.0	2,414
Married/living together	0.3	4,025
Divorced/separated/widowed	1.0	64
Wealth quintile		
Lowest	0.1	1,261
Second	0.4	1,275
Middle	0.5	1,384
Fourth	0.6	1,378
Highest	0.9	1,410
Residence		
Urban	0.8	1,378
Rural	0.4	5,329
Region		
North	0.3	2,455
Central	0.4	1,735
South	0.8	2,517
Targeted provinces		
Ha Noi	0.2	218
Ho Chi Minh City	0.3	427
Hai Phong	1.1	141
Quang Ninh	0.3	93
Total	0.5	6,707

¹ Corresponds to UNAIDS Sexual Behavior Indicator 3 “Commercial sex in last year.” For youth 15-24, it corresponds to Youth Guide Behavioral Indicator 21 “Sex with commercial sex worker among young people.”

6.7 VOLUNTARY HIV COUNSELING AND TESTING

Knowledge of one's HIV status can empower individuals to take precautions to protect against either acquiring or transmitting the disease. Consequently, Vietnam has established a number of voluntary counseling and testing (VCT) sites across the country.

The vast majority of people in the country have not been tested for HIV. The general population tends to have the perception that VCT is for IDUs and CSWs. Nationally, only five percent of all women and men age 15-49 reported to have ever undertaken an HIV test (Table 6.4). Two percent of women and 3 percent of men had been tested within the 12 months preceding the survey and received their test results.

With ten percent of women and men having ever been tested, those in their late 20s are more likely than other ages to have ever been tested. With 10-15 percent having ever been tested, both women and men of the highest education levels and of the highest wealth quintile are more apt to have been tested than those with less education and less wealth. However, only half as many have been tested within the previous year. Women and men in the targeted provinces are above the national average for prevalence of HIV testing. As many as one-quarter of women and men in Ha Noi report having ever received an HIV test result. About half as many have done so within the 12 months prior to the survey.

Table 6.4 Coverage of prior HIV testing

Percent distribution of women and men age 15-49 by whether ever tested for HIV and by whether received the results of the test; and percentage of women and men who received their test results the last time they were tested for HIV in the past 12 months, according to background characteristics, Vietnam 2005

Background characteristic	Women						Men					
	Ever tested		Never tested	Total	Percentage who were tested and received results in past 12 months ²	Number of women	Ever tested		Never tested	Total	Percentage who were tested and received results in past 12 months ²	Number of men
	Received results ¹	No results					Received results ¹	No results				
Age												
15-24	2.5	0.2	97.3	100.0	1.2	2,471	3.3	0.5	96.2	100.0	2.0	2,406
15-19	0.8	0.0	99.1	100.0	0.6	1,359	1.6	0.2	98.2	100.0	1.3	1,472
20-24	4.5	0.4	95.1	100.0	2.0	1,112	6.1	0.9	92.9	100.0	3.0	934
25-29	9.2	0.5	90.2	100.0	3.7	948	8.4	1.2	90.3	100.0	3.9	902
30-39	6.4	0.4	93.2	100.0	2.7	1,997	7.2	0.2	92.5	100.0	3.2	1,718
40-49	3.4	0.2	96.5	100.0	1.6	1,873	4.6	0.3	95.1	100.0	2.1	1,680
Education												
Never attended school	0.6	0.0	99.4	100.0	0.0	407	0.3	0.0	99.7	100.0	0.3	234
Primary	1.8	0.1	98.1	100.0	0.7	1,574	2.0	0.0	98.0	100.0	0.4	1,215
Secondary	4.8	0.3	94.9	100.0	2.1	4,612	5.1	0.6	94.4	100.0	2.5	4,599
More than secondary	12.4	1.0	86.7	100.0	6.0	696	15.1	1.0	83.9	100.0	7.7	658
Marital status												
Never married	1.6	0.1	98.3	100.0	0.8	2,223	4.2	0.8	95.0	100.0	2.2	2,618
Ever had sex	*	*	*	100.0	*	30	16.5	3.6	79.9	100.0	10.3	204
Never had sex	1.5	0.1	98.5	100.0	0.8	2,193	3.1	0.6	96.3	100.0	1.6	2,414
Married/living together	6.1	0.4	93.5	100.0	2.7	4,750	6.1	0.3	93.6	100.0	2.8	4,025
Divorced/separated/widowed	3.8	0.3	95.9	100.0	0.9	316	5.9	0.0	94.1	100.0	2.6	64
Wealth quintile												
Lowest	1.2	0.4	98.4	100.0	0.8	1,306	1.4	0.2	98.5	100.0	0.6	1,261
Second	1.7	0.3	98.0	100.0	0.9	1,387	2.9	0.5	96.6	100.0	1.3	1,275
Middle	2.5	0.1	97.4	100.0	1.1	1,503	4.0	0.9	95.1	100.0	2.0	1,384
Fourth	6.0	0.2	93.8	100.0	2.4	1,507	6.1	0.2	93.8	100.0	2.4	1,378
Highest	10.8	0.5	88.7	100.0	4.6	1,587	11.7	0.6	87.6	100.0	6.2	1,410
Residence												
Urban	9.8	0.6	89.6	100.0	4.5	1,575	9.6	0.7	89.8	100.0	4.5	1,378
Rural	3.2	0.2	96.6	100.0	1.4	5,714	4.3	0.4	95.3	100.0	2.1	5,329
Region												
North	5.8	0.5	93.7	100.0	2.5	2,802	8.7	0.7	90.6	100.0	4.2	2,455
Central	3.1	0.1	96.8	100.0	1.3	1,808	2.5	0.2	97.3	100.0	1.4	1,735
South	4.6	0.2	95.3	100.0	2.0	2,679	4.1	0.4	95.5	100.0	1.8	2,517
Targeted provinces												
Ha Noi	25.1	0.4	74.5	100.0	10.8	235	26.6	1.2	72.2	100.0	15.3	218
Ho Chi Minh City	13.5	0.2	86.4	100.0	6.8	484	10.0	0.3	89.7	100.0	5.1	427
Hai Phong	10.3	1.1	88.6	100.0	3.9	167	13.4	0.5	86.1	100.0	6.3	141
Quang Ninh	13.8	0.7	85.5	100.0	6.9	100	19.3	0.7	80.0	100.0	9.8	93
Total	4.7	0.3	95.0	100.0	2.1	7,289	5.3	0.5	94.2	100.0	2.6	6,707

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

¹ Partially corresponds to UNAIDS *Voluntary Counseling and Testing* Indicator 1 "Population requesting an HIV test, receiving a test and receiving test results." The voluntary part of the indicator is not included in the table.

² Corresponds to the President's Emergency Plan for AIDS Relief *Counseling and Testing* Indicator 1 "Percentage of women and men age 15-49 who have been tested for HIV in the past 12 months and received their test results the last time they were tested"

Women who become pregnant have an opportunity to receive counseling when they attend antenatal clinics and after counseling, if they consent, they have an opportunity for testing and knowing their status. Survey data show in Table 6.5 that among women who delivered a baby in the two years preceding the survey, 12 percent received HIV counseling during an antenatal care visit. Ten percent of women who gave a birth in the two years prior to the survey were offered an HIV test, accepted the offer, and received the results. However, fewer women received both counseling and testing; only 6 percent were counseled during an antenatal care visit, were offered an HIV test, accepted the offer, and received the results. Women in the South are more likely than women in the North and Central regions to have received HIV counseling, and to have received the result of an HIV test during an antenatal visit. Of the targeted provinces, Ha Noi stands out; 4 in 10 women were counseled during an antenatal care visit, and 6 in 10 were tested for HIV and received the results. This does indicate that some women in Ha Noi are being tested for HIV without receiving counseling. It should be noted that while the number of women who gave birth in the last 2 years shown in Table 6.5 is quite low among each of the targeted provinces, the number of unweighted cases (not shown) is large enough to report the figures.

Table 6.5 Pregnant women counseled and tested for HIV

Among women who gave birth in the two years preceding the survey, percentage who received HIV counseling during antenatal care for their most recent birth, and percentage who accepted an offer of HIV testing, whether or not they received their test results, by background characteristics, Vietnam 2005

Background characteristic	Percentage who received HIV counseling during antenatal care ¹	Percentage who were offered and accepted an HIV test during antenatal care and who: ²		Percentage who were counseled, accepted an offer for HIV test, and received results ^{2, 3}	Number of women who gave birth in the last 2 years ⁴
		Received results	Did not receive results		
Age					
15-24	7.5	4.8	0.6	2.4	293
15-19	(3.4)	(0.4)	(0.0)	(0.0)	39
20-24	8.1	5.4	0.7	2.8	254
25-29	14.1	14.6	0.4	9.2	228
30-39	17.2	11.0	1.5	7.7	264
40-49	*	*	*	*	18
Education					
Never attended school	3.5	0.0	0.0	0.0	64
Primary	9.8	6.2	0.0	4.2	186
Secondary	13.3	11.2	0.6	6.5	482
More than secondary	21.4	19.4	5.1	13.0	71
Residence					
Urban	22.2	28.2	2.0	15.1	135
Rural	10.4	6.1	0.6	4.2	667
Region					
North	10.0	8.7	0.7	4.5	333
Central	8.3	5.7	1.1	4.3	229
South	19.6	15.4	0.7	9.7	240
Targeted provinces					
Ha Noi	39.2	62.9	0.0	32.9	22
Ho Chi Minh City	(34.1)	(42.3)	(0.0)	(20.8)	39
Hai Phong	24.4	22.9	6.6	12.2	16
Quang Ninh	23.4	20.7	0.0	14.4	10
Total	12.4	9.8	0.8	6.0	803

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

¹ In this context, "counseled" means that someone talked with the respondent about all three of the following topics: 1) babies getting the AIDS virus from their mother, 2) preventing the virus, and 3) getting tested for the virus

² Only women who were offered the test are included here; women who were either required or asked for the test are excluded from this measure

³ Corresponds to UNAIDS *Mother to Child Transmission Indicator 1* "Pregnant women counseled and tested"

⁴ Denominator for percentages includes women who did not receive antenatal care for their last birth in the past two years

6.8 PREVALENCE OF SEXUALLY TRANSMITTED INFECTIONS

While it is not the aim of this report to relate the prevalence of HIV to that of other sexually transmitted infections (STIs), it is important to note that the prevalence of sexually transmitted infections is usually positively related with that of HIV. It is believed that if STIs are not treated immediately, one's chances of becoming infected with HIV during unprotected sex with an HIV-positive partner increase.

Data from the VPAIS reflect modest levels of reported STIs (Table 6.6); however, questions on sensitive issues such as STIs may result in underreporting of STIs and STI symptoms because of embarrassment on the part of the respondent. It is also possible for people to have an STI without experiencing any symptoms. Five percent of women and 0.5 percent of men who ever had sex directly reported having an STI in the 12 months preceding the survey. Thirteen percent of women reported that they had an abnormal genital discharge in the year before the survey, and three percent had a genital sore or ulcer. Overall, 16 percent of women and 1 percent of men reported having an STI, an abnormal genital discharge or a genital sore or ulcer. Seventy-two percent of women who reported having an STI or symptom of an STI in the 12 months preceding the survey also reported having gone to a clinic, hospital, or health professional for advice or treatment.

Among women, differentials in the reported prevalence of STIs across regions are very small. Prevalence of those reporting an STI, abnormal discharge, or sore/ulcer declines with increasing education. With one-quarter of women in Hai Phong reporting an STI, abnormal discharge, or genital sore/ulcer, women in Hai Phong have a higher prevalence than women in the other targeted provinces. However, women in Quang Ninh are more likely to directly report an STI.

Table 6.6 Self-reported prevalence of sexually transmitted infection (STIs) and STI symptoms

Among women and men 15-49 who ever had sexual intercourse, percentage reporting having an STI and/or symptoms of an STI in the past 12 months, by background characteristics, Vietnam 2005

Background characteristic	Women					Men				
	Percent- age with an STI ¹	Percentage with abnormal genital discharge	Percentage with genital sore/ulcer	Percentage with STI/ discharge/ genital sore/ ulcer	Number of women who ever had sexual intercourse	Percent- age with an STI ¹	Percentage with abnormal genital discharge	Percentage with genital sore/ulcer	Percentage with STI/ discharge/ genital sore/ ulcer	Number of men who ever had sexual intercourse
Age										
15-24	3.2	14.1	2.5	16.6	623	0.3	0.6	0.5	1.0	324
15-19	2.3	6.4	1.9	7.7	88	(0.0)	(0.0)	(0.0)	(0.0)	47
20-24	3.3	15.3	2.6	18.0	536	0.3	0.7	0.6	1.2	277
25-29	5.9	13.0	2.3	16.0	801	0.4	0.3	0.7	0.9	676
30-39	6.1	14.2	2.8	18.3	1,862	0.6	0.6	0.6	1.4	1,636
40-49	4.8	11.9	2.5	14.3	1,810	0.4	0.4	0.4	1.0	1,657
Education										
Never attended school	2.7	17.5	4.4	20.3	357	0.0	0.0	0.6	0.6	184
Primary	4.8	14.6	2.5	16.0	1,267	0.4	0.3	0.5	1.2	919
Secondary	5.8	12.5	2.5	16.5	3,060	0.6	0.5	0.5	1.1	2,790
More than secondary	4.9	10.0	2.3	12.5	412	0.1	0.7	0.8	1.4	399
Marital status										
Never married, ever had sex	*	*	*	*	30	0.2	1.4	0.6	1.6	204
Married/living together	5.4	13.6	2.7	16.7	4,750	0.5	0.4	0.6	1.1	4,025
Divorced/separated/ widowed	3.1	8.1	1.3	11.3	316	0.0	0.0	0.0	0.0	64
Residence										
Urban	3.2	9.6	2.4	11.9	995	0.1	0.4	0.2	0.5	867
Rural	5.7	14.0	2.6	17.4	4,101	0.5	0.5	0.6	1.3	3,426
Region										
North	5.8	13.6	3.1	18.5	2,030	1.1	0.0	0.4	1.2	1,658
Central	4.9	10.9	1.5	14.3	1,273	0.2	1.2	1.1	2.0	1,045
South	4.9	14.3	2.8	15.2	1,793	0.0	0.4	0.4	0.5	1,590
Targeted provinces										
Ha Noi	1.7	17.1	2.0	17.4	157	0.3	0.0	0.0	0.3	142
Ho Chi Minh City	0.5	8.6	4.7	11.8	284	0.0	0.7	0.4	0.7	261
Hai Phong	2.9	22.9	7.2	24.9	118	0.0	0.2	0.0	0.2	96
Quang Ninh	6.7	7.2	1.7	10.4	74	0.0	0.0	0.0	0.0	61
Total	5.2	13.2	2.6	16.3	5,096	0.5	0.4	0.5	1.1	4,293

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

¹Partially correspond to Youth Guide *Impact* Indicator 30 "Young people with a sexually transmitted infection." The Youth Guide definition specifies: "Young people with STIs that were detected during diagnostic testing."

6.9 INJECTIONS

When given with previously used needles, injections pose a risk of infection with HIV and other blood-borne pathogens to the recipient of the injection. Overuse of injections in a medical setting could potentially lead medical providers to resort to re-using injection supplies. Thus, respondents were asked how many injections they received in the 12 months prior to the survey. Self-administered medical injections are not included (e.g., diabetics self-administering insulin). Table 6.7 shows that 26 percent of women and 19 percent of men reported receiving an injection in the 12 months prior to the survey. The average number of injections received over the previous 12 months was 1.6 among women and 1.3 among men. The percentage of the population receiving injections in the previous year does not vary greatly across most of the background characteristics in Table 6.7. Across the targeted provinces, use of injections is more common in Hai Phong than the other provinces for both women and men. Nearly one-third of women in Hai Phong have received an injection in the previous year, as compared to about one in five in the other targeted provinces, and they have received an average of 2.4 injections. While smaller proportions of men receive injections as compared to women, nearly 30 percent of men in Hai Phong have received an injection in the previous year and they have received an average of 3 injections.

Respondents who had received an injection in the previous 12 months were also asked whether the health worker administering their most recent injection retrieved the syringe and needle from a new, unopened package. The vast majority of injections were given with a needle and syringe taken from a newly opened package (95 and 97 percent among women and men, respectively). Variation by most socio-demographic characteristics is minimal, with the exception of education. Only 75 percent of women with no education reported the syringe and needle being taken from a newly opened package. However, of those who could not report in the affirmative that the needle and syringe was taken from a newly opened package, most simply did not know, rather than having reported that the syringe and needle were taken from a previously opened package.

Table 6.7 Prevalence of injections

Percentage of women and men age 15-49 who received at least one injection from a health worker in the last 12 months, the average number of medical injections per person and, among those who received an injection, the percentage whose health worker took the syringe and needle for the last injection from a newly opened package, Vietnam 2005

Background characteristic	Women					Men				
	Percentage who received an injection from a health worker in the past 12 months ¹	Average number of medical injections per year ²	Number of women	Last injection, syringe and needle taken from newly opened package ³	Number of women who received a medical injection in the past 12 months	Percentage who received an injection from a health worker in the past 12 months ¹	Average number of medical injections per year ²	Number of men	Last injection, syringe and needle taken from newly opened package ³	Number of men who received a medical injection in the past 12 months
Age										
15-24	24.2	1.0	2,471	94.6	597	15.5	0.7	2,406	96.0	372
15-19	20.2	0.7	1,359	95.0	274	13.7	0.6	1,472	94.8	202
20-24	29.0	1.3	1,112	94.2	323	18.2	0.9	934	97.5	170
25-29	31.0	1.4	948	96.7	294	19.5	1.2	902	98.1	176
30-39	26.5	1.8	1,997	93.7	528	20.3	1.4	1,718	98.0	349
40-49	23.4	2.2	1,873	94.4	439	20.5	2.0	1,680	95.8	344
Education										
Never attended school	21.3	1.7	407	75.0	87	16.6	1.2	234	(86.6)	39
Primary	25.8	1.4	1,574	92.9	407	19.5	1.4	1,215	96.7	237
Secondary	25.7	1.6	4,612	96.3	1,187	18.1	1.2	4,599	96.9	832
More than secondary	25.5	1.5	696	96.6	177	20.4	1.3	658	99.6	135
Wealth quintile										
Lowest	25.7	1.6	1,306	84.6	336	17.0	1.0	1,261	92.4	214
Second	26.6	1.4	1,387	96.3	369	20.0	1.5	1,275	97.0	255
Middle	26.6	1.9	1,503	97.4	400	17.1	1.2	1,384	98.3	237
Fourth	24.9	1.5	1,507	97.6	375	19.1	1.1	1,378	97.9	263
Highest	23.8	1.4	1,587	96.0	378	19.3	1.5	1,410	97.6	273
Residence										
Urban	22.5	1.2	1,575	97.4	354	17.9	1.3	1,378	97.5	246
Rural	26.3	1.7	5,714	93.9	1,504	18.7	1.3	5,329	96.6	996
Region										
North	24.2	1.8	2,802	95.8	679	16.1	1.5	2,455	97.9	394
Central	24.1	1.4	1,808	90.8	436	16.4	1.1	1,735	92.5	285
South	27.7	1.4	2,679	95.7	742	22.3	1.2	2,517	98.2	562
Targeted provinces										
Ha Noi	22.0	1.3	235	93.7	52	13.1	0.9	218	97.5	29
Ho Chi Minh City	21.9	0.8	484	96.1	106	18.1	0.6	427	98.1	77
Hai Phong	31.7	2.4	167	97.6	53	28.3	3.0	141	97.8	40
Quang Ninh	22.6	1.3	100	100.0	23	13.9	1.4	93	100.0	13
Total	25.5	1.6	7,289	94.6	1,858	18.5	1.3	6,707	96.8	1,242

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

¹ Includes injections given by a doctor, nurse, pharmacist, dentist or other health worker

² Corresponds to the President's Emergency Plan for AIDS Relief *Prevention* Indicator 8 "Average number of medical injections per person per year"

³ Corresponds to President's Emergency Plan for AIDS Relief *Prevention* Indicator 9 "Proportion of women and men reporting that the last health care injection was given with a syringe and needle set from a new, unopened package"

7.1 KEY FINDINGS

- Knowledge of AIDS varies dramatically by education.
- Nineteen percent of youth age 15-24 have ever had sex.
- Almost no never-married young women reported ever having had sex.
- Only four percent of never-married young men reported ever having had sex.
- Twenty percent of young men used a condom the first time they had sex.

7.2 INTRODUCTION

Promoting safe sexual behavior is a key feature of many HIV/AIDS prevention programs. Those who are not yet sexually active or those who have recently made their sexual debut are considered potentially accepting of programs that seek to educate their audience to make informed behavioral choices. Thus, this chapter focuses on the knowledge of HIV prevention and transmission among young women and men age 15-24 and the sexual behaviors that affect their risk of exposure to HIV. Youths aged 15-24 are of particular interest because the period between initiation of sexual activity and marriage is often a time of sexual experimentation, and may also involve risky behaviors.

7.3 HIV/AIDS-RELATED KNOWLEDGE AMONG YOUTH

Knowledge of the means of transmission of HIV is crucial in enabling people to protect themselves. Avoiding HIV is especially important for young people, who are often at greater risk because they may have shorter relationships with more partners or engage in other risky behaviours, such as experimenting with drug use. Young respondents were asked the same set of questions as older respondents to determine their level of knowledge about HIV/AIDS.

The data in Table 7.1 show the level of comprehensive knowledge among young people, namely, the proportion who, in response to a prompted question, agree that people can reduce their chances of getting the AIDS virus by having sex with only one uninfected, faithful partner and by using condoms consistently; who know that a healthy-looking person can have the AIDS virus; and who know that HIV cannot be transmitted by mosquito bites or by sharing food with a person who has AIDS (the two most common misconceptions).

Forty-two percent of young women and 50 percent of young men have comprehensive knowledge about HIV/AIDS. Comprehensive knowledge is higher among urban youths than rural youths (Figure 7.1). Knowledge increases dramatically with increasing education and also increases greatly and steadily with increasing wealth status. Young women and men who have ever been married are somewhat less likely to have comprehensive knowledge about HIV/AIDS than never-married youths.

Table 7.1 Comprehensive knowledge about AIDS and of a source for condoms among youth

Percentage of young women and young men age 15-24 with comprehensive knowledge about AIDS and percent with knowledge of a source of condoms, by background characteristics, Vietnam 2005

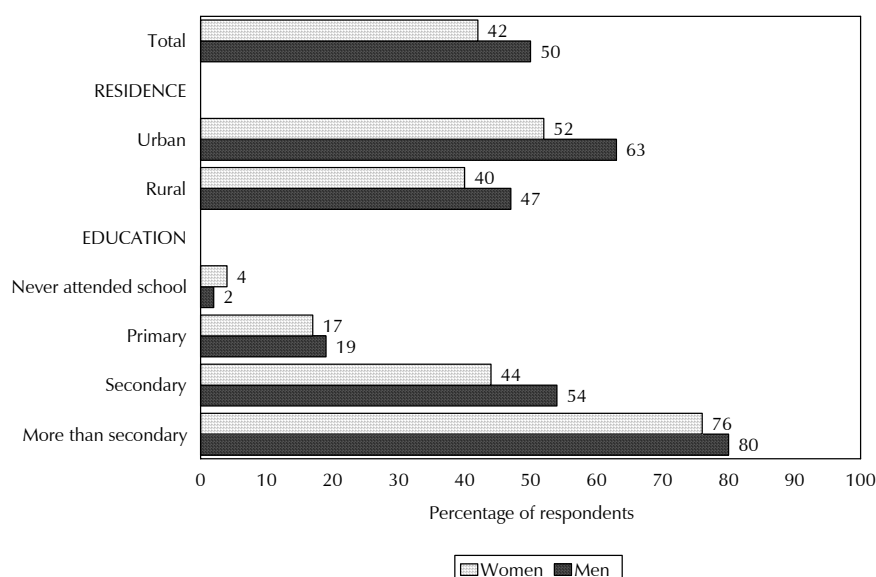
Background characteristic	Women age 15-24			Men age 15-24		
	Percentage with comprehensive knowledge of AIDS ¹	Knows a source for condoms ²	Number of women	Percentage with comprehensive knowledge of AIDS ¹	Knows a source for condoms ²	Number of men
Age						
15-19	42.0	45.4	1,359	48.1	48.4	1,472
15-17	42.8	39.5	874	46.2	42.4	1,047
18-19	40.7	56.0	485	53.0	63.2	426
20-24	42.5	68.0	1,112	53.6	71.5	934
20-22	42.8	66.6	660	52.1	70.3	556
23-24	42.2	70.2	452	55.9	73.2	377
Education						
Never attended school	3.6	15.7	81	(1.5)	(28.4)	43
Primary	17.3	43.6	386	19.0	44.1	329
Secondary	44.4	55.6	1,735	53.5	57.3	1,815
More than secondary	75.5	84.7	270	80.4	83.7	219
Marital status						
Never married	45.9	49.6	1,851	51.9	56.1	2,164
Ever had sex *	*	*	4	56.4	97.9	82
Never had sex	46.0	49.5	1,847	51.7	54.5	2,082
Ever married	31.3	73.6	620	35.4	68.6	242
Wealth quintile						
Lowest	24.1	39.3	454	29.5	41.2	469
Second	34.3	50.2	469	43.9	54.9	475
Middle	43.9	58.2	559	55.3	56.6	520
Fourth	50.9	61.3	493	59.6	64.6	466
Highest	56.1	67.0	495	62.3	69.4	476
Residence						
Urban	51.9	63.5	531	62.8	66.1	459
Rural	39.6	53.4	1,940	47.3	55.3	1,947
Region						
North	51.0	58.8	936	51.6	52.0	874
Central	36.8	59.5	626	53.1	49.3	634
South	37.0	49.6	908	47.0	68.3	898
Targeted provinces						
Ha Noi	70.2	74.6	77	73.2	67.2	76
Ho Chi Minh City	38.5	58.1	169	50.7	73.2	152
Hai Phong	45.7	49.8	58	61.3	50.8	50
Quang Ninh	64.8	57.5	31	65.8	50.9	29
Total 15-24	42.3	55.6	2,471	50.3	57.4	2,406

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

¹ Comprehensive knowledge means knowing that use of condom and having just one uninfected faithful partner can reduce the chance of getting the AIDS virus; knowing that a healthy-looking person can have the AIDS virus; and rejecting the two most common local misconceptions. Corresponds to the President's Emergency Plan for AIDS Relief *Prevention Indicator 1* "Percentage of young people age 15-24 who both correctly identify ways of preventing the sexual transmission of HIV and reject major misconceptions about HIV transmission; Youth Guide *Determinants Indicator 9* "Knowledge of HIV prevention among young people;" and UNGASS *Knowledge and Behavior Indicator 10* "Young people's knowledge about HIV prevention."

² Corresponds to Youth Guide *Determinants Indicator 10* "Knowledge of a formal source of condoms among young people." For the purposes of this table, the following categories are not considered sources for condoms: friends, family members, and home.

Figure 7.1 Comprehensive Knowledge about AIDS, by Residence and Education, Vietnam 2005



Respondents were asked whether they know of a place to obtain condoms. Condom use among young people plays an important role in the prevention of transmission of HIV and other sexually transmitted infections, as well as unwanted pregnancies. Youths can be at a higher risk of contracting sexually transmitted infections, as they may be more likely to have shorter relationships with more partners before marriage. Knowledge of a place to get condoms is a necessary precursor to use of condoms. Results are reported in Table 7.1.

Knowledge of a source of condoms increases dramatically with increasing education for both women and men. For young women, knowledge of a source for condoms increases from 16 percent for those who have never attended school to 85 percent for those with more than secondary education. A similar pattern exists for knowledge of condom sources by wealth quintile, with youths from the lowest quintile being the least likely to know of a place to get condoms.

7.4 FIRST SEXUAL ACTIVITY

Young women and men were asked at what age they first had sexual intercourse. The percentage of young women and men who had sexual intercourse before reaching age 15 and age 18 is shown in Table 7.2. Some youth in the age category of 15-19 are under age 18 and may as yet initiate sex before reaching age 18; therefore, the proportions who had sex before age 18 are only shown for those age 20-24.

Sexual activity in the early teen years is not common in Vietnam. Less than 1 percent of women and men age 15-24 said that they had sex before they were 15. Only 11 percent of women and 3 percent of men who are age 18-24 reported having had sex before reaching age 18. As only the smallest minority of never-married youth report ever having had sexual intercourse, the data in Table 7.2 come predominantly from married women and men. In fact, only 0.2 percent of never-married young women and 4 percent of never-married young men report ever having had sexual intercourse (data shown later in Table 7.4). Thus, differentials in proportions having had sex reflect differentials in age at marriage. For

Table 7.2 Age at first sex among young women and men by background characteristics

Percentage of young women and men age 15-24 who have had sex by exact ages 15 and 18, by background characteristics, Vietnam 2005

Background characteristic	Women age 15-24				Men age 15-24			
	Percentage who had sex before exact age 15 ¹	Number of women 15-24	Percentage who had sex before exact age 18 ²	Number of women 18-24	Percentage who had sex before exact age 15 ¹	Number of men 15-24	Percentage who had sex before exact age 18 ²	Number of men 18-24
Age								
15-19	0.5	1,359	na	na	0.3	1,472	na	na
15-17	0.2	874	na	na	0.4	1,047	na	na
18-19	0.9	485	8.2	485	0.2	426	3.2	426
20-24	0.5	1,112	10.5	1,112	0.3	934	3.3	934
20-22	0.7	660	10.0	660	0.2	556	3.0	556
23-24	0.2	452	11.2	452	0.4	377	3.7	377
Education								
Never attended school	0.3	81	30.1	58	(0.0)	43	*	23
Primary	1.8	386	25.7	293	0.7	329	8.5	233
Secondary	0.2	1,735	6.5	982	0.3	1,815	2.4	889
More than secondary	0.0	270	0.0	265	0.0	219	0.9	215
Marital status								
Never married	0.0	1,851	0.0	988	0.1	2,164	0.6	1,127
Ever married	1.8	620	25.7	609	2.4	242	15.9	232
Know condom source³								
Yes	0.6	1,374	9.9	1,028	0.3	1,380	3.3	936
No	0.3	1,097	9.6	569	0.3	1,025	3.0	423
Wealth quintile								
Lowest	1.7	454	23.8	305	1.1	469	9.3	274
Second	0.3	469	12.6	291	0.0	475	1.5	258
Middle	0.1	559	6.1	349	0.0	520	2.4	264
Fourth	0.1	493	4.8	327	0.3	466	2.6	269
Highest	0.2	495	3.1	325	0.2	476	0.5	293
Residence								
Urban	0.4	531	3.7	368	0.2	459	1.0	288
Rural	0.5	1,940	11.6	1,230	0.3	1,947	3.8	1,071
Region								
North	0.7	936	11.1	576	0.5	874	4.9	492
Central	0.5	626	9.6	416	0.0	634	1.0	323
South	0.2	908	8.7	606	0.2	898	3.0	544
Targeted provinces								
Ha Noi	0.0	77	1.7	55	0.0	76	0.0	56
Ho Chi Minh City	0.9	169	6.5	121	0.5	152	1.3	111
Hai Phong	0.3	58	5.9	35	0.0	50	1.0	32
Quang Ninh	0.0	31	6.1	20	0.0	29	2.0	17
Total 15-24	0.5	2,471	9.8	1,597	0.3	2,406	3.2	1,359

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

na = Not applicable

¹ Corresponds to the Youth Guide *Behavioral* Indicator 16 "Sex before the age of 15" and to UNGASS Knowledge and Behavior Indicator 11 "Sex before the age of 15 among 15-24 youth"

² Corresponds to UNGASS *Knowledge and Behavior* Indicator 11A "Sex before the age of 18 among 18-24 youth"

³ For the purposes of this table, the following categories are not considered sources for condoms: friends, family members, and home.

example, ten percent of female youth have had sex before the age of 18, while only 3 percent of male youth report having done so. However, women tend to marry at younger ages than men do; the median age at marriage is two years younger among women (21.2 years old) than it is among men (23.5 years old) (VNDHS 2002). Likewise, rural residents tend to marry at younger ages than urban residents, thereby resulting in higher proportions having had sex by age 18 in rural areas than in urban areas.

Among women, there is a strong relationship between level of education and age at first sex, which also correlates to age at marriage (data not shown). Young women aged 18-24 who have not attended school are far more likely to have had sex before age 18 (30 percent) than young women with at least secondary education (7 percent).

In terms of wealth, survey results show that young women aged 18-24 who are in poorer households are more likely than those who are in wealthier households to have had sex by age 18; there is a similar but less pronounced pattern among young men.

7.5 CONDOM USE AT FIRST SEX

Along with postponement of first sexual intercourse, early and consistent condom use is a means for youths to prevent becoming infected with HIV. In order to assess the extent of condom use from the beginning of sexual exposure, respondents aged 15-24 were asked whether they had used condoms the first time they had sex. The results are shown in Table 7.3 by background characteristics.

Four percent of young women and 19 percent of young men aged 15-24 said that they used condoms the first time they had sexual intercourse. Never-married men are much more likely to have used a condom at first sex (58 percent) than men who have married (6 percent). Urban women and especially urban men are more likely than rural women and men to have used a condom at first sex. There is a tendency for the percent of youths who used condoms at first sex to increase with increasing education and increasing wealth. Men in the South are more likely than men in the North or Central regions to have used a condom at first sex (29 percent versus 17 and 4 percent, respectively).

Table 7.3 Condom use at first sexual intercourse among youth

Among women and men age 15-24 who have ever had sexual intercourse, percentage who used a condom the first time they ever had sex, by background characteristics, Vietnam 2005

Background characteristic	Women age 15-24		Men age 15-24	
	Used a condom at first sex ¹	Number of women who have ever had sex	Used a condom at first sex ¹	Number of men who have ever had sex
Age				
15-19	7.6	88	(30.9)	47
15-17	*	10	*	16
18-19	8.7	77	(36.8)	31
20-24	2.8	536	17.2	277
20-22	1.7	259	16.0	112
23-24	3.8	276	18.0	165
Education				
Never attended school	0.0	49	*	14
Primary	2.6	169	9.3	96
Secondary	3.9	369	20.3	192
More than secondary	(7.4)	36	(55.7)	22
Marital status				
Never married	*	4	57.8	82
Ever married	2.9	620	6.1	242
Know condom source²				
Yes	4.7	460	24.2	246
No	0.0	163	3.5	78
Wealth quintile				
Lowest	0.7	178	7.3	106
Second	3.0	134	13.5	70
Middle	1.5	133	28.7	56
Fourth	4.6	103	19.9	44
Highest	12.9	75	41.7	49
Residence				
Urban	12.3	74	43.1	47
Rural	2.3	549	15.2	277
Region				
North	2.6	265	16.8	150
Central	0.5	152	3.5	51
South	6.7	207	28.6	124
Targeted provinces				
Ha Noi	(8.6)	14	(41.9)	11
Ho Chi Minh City	(21.1)	32	(42.1)	20
Hai Phong	4.5	14	(35.5)	8
Quang Ninh	(0.0)	7	*	3
Total 15-24	3.5	623	19.2	324

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

¹ Corresponds to UNAIDS *Young People's Sexual Behavior Indicator 6* "Condom use at first sex"

² For the purposes of this table, the following categories are not considered sources for condoms: friends, family members, and home.

7.6 PREMARITAL SEX

The period between first sexual intercourse and marriage can be a time of sexual experimentation. In the era of HIV/AIDS, it can also be a risky time. Table 7.4 shows the percentage of never-married young women and men aged 15-24 years who have not yet engaged in sex, as well as the percentage who had sex in the 12 months preceding the survey and the percentage who used condoms during their most recent sex (for the few instances in which there existed sufficient numbers of cases to present).

Table 7.4 Premarital sex in the past year and condom use during premarital sex among youth

Among never-married women and men age 15-24, percentage who have never had sex, percentage who had sex in the past 12 months, and, among those who had premarital sex in the past 12 months, percentage who used a condom at last sex, by background characteristics, Vietnam 2005

Background characteristic	Never-married women age 15-24			Never-married men age 15-24				
	Never had sex ¹	Had sex in past 12 months ²	Number of never-married women	Never had sex ¹	Had sex in past 12 months ²	Number of never married men	Used condom at last sex ³	Number of men who had sex in the past 12 months
Age								
15-19	99.7	0.3	1,274	98.2	1.6	1,450	*	23
15-17	100.0	0.0	863	99.4	0.4	1,037	*	4
18-19	99.2	0.8	411	95.4	4.4	413	*	18
20-24	99.9	0.0	577	92.0	5.2	713	68.2	37
20-22	100.0	0.0	401	94.5	3.5	470	*	16
23-24	99.8	0.0	176	87.2	8.4	243	(56.3)	20
Education								
Never attended school	(100.0)	(0.0)	31	(96.6)	(3.4)	30	*	1
Primary	99.7	0.3	217	94.4	3.9	247	*	10
Secondary	99.8	0.2	1,369	96.9	2.0	1,674	(70.4)	34
More than secondary	100.0	0.0	234	92.4	6.9	213	*	15
Know condom source⁴								
Yes	99.6	0.4	918	93.4	4.8	1,214	68.4	58
No	100.0	0.0	934	99.8	0.1	949	*	1
Wealth quintile								
Lowest	100.0	0.0	276	96.9	1.7	375	*	6
Second	100.0	0.0	335	96.9	2.7	419	*	11
Middle	100.0	0.0	426	97.0	2.1	478	*	10
Fourth	99.8	0.2	391	96.5	2.1	437	*	9
Highest	99.3	0.6	423	93.8	4.9	456	(69.2)	23
Residence								
Urban	99.8	0.2	458	94.1	4.4	438	(72.0)	19
Rural	99.8	0.2	1,393	96.7	2.3	1,726	(66.0)	40
Region								
North	99.9	0.0	671	97.1	2.3	745	(88.4)	17
Central	100.0	0.0	475	99.1	0.7	588	*	4
South	99.5	0.5	705	93.3	4.6	830	(60.1)	38
Targeted provinces								
Ha Noi	99.4	0.0	64	91.6	6.5	72	*	5
Ho Chi Minh City	99.5	0.5	138	92.8	4.9	142	*	7
Hai Phong	100.0	0.0	44	94.5	4.8	44	*	2
Quang Ninh	100.0	0.0	23	98.8	1.2	26	*	0
Total 15-24	99.8	0.2	1,851	96.2	2.7	2,164	67.9	59

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

¹ Corresponds to the President's Emergency Plan for AIDS Relief *Prevention* Indicator 2 "Percentage of never married young men and women age 15-24 who have never had sex"

² Correspond to the President's Emergency Plan for AIDS Relief *Prevention* Indicator 3 "Percent of never married women and men age 15-24 who had sex in the last 12 months" and to UNAIDS *Young People's Sexual Behavior* Indicator 2 "Young people having premarital sex"

³ Correspond to UNAIDS *Young People's Sexual Behavior* Indicator 3 "Young people using a condom during premarital sex"

⁴ For the purposes of this table, the following categories are not considered sources for condoms: friends, family members, and home.

Practically all never-married women age 15-24 reported that they have never had sexual intercourse. Only 4 percent of never-married men age 15-24 reported ever having had sex. The proportion of never-married young men who have ever had sex increases with age, from one percent of the 15-17 year-olds to 13 percent of the 23-24 year-olds. Note that the data in Table 7.4 are limited to never-married youth, while the data in Table 7.2 include all youth regardless of marital status. Since a lower percentage of never-married youth have had sexual intercourse than have married youth, percentages of youth having had sexual intercourse are lower among the never-married population than among the total youth population.

Six percent of urban young men report having had premarital sex and three percent of rural men report having had premarital sex. Seven percent of never-married youth in the South report ever having had premarital sex, while only 3 and 1 percent of men, respectively, in the North and Central regions report ever having had sexual intercourse.

7.7 HIGHER-RISK SEX AND CONDOM USE AMONG YOUTH

The most common means of transmission of HIV is through unprotected sex with an infected person. To prevent HIV/AIDS transmission, it is therefore important to practice safer sex, primarily through the recommended “ABC” method (abstinence, being faithful to one uninfected partner, and condom use). Table 7.5 shows the proportion of young people who engaged in higher-risk sex in the previous 12 months and the extent to which they used condoms in higher-risk sexual encounters. In this context, higher-risk sex refers to sex with a non-marital, non-cohabiting partner, that is, sex with someone who is neither a spouse nor a live-in partner. All premarital sex by definition is higher-risk sex.

Among women who reported having had sex in the year prior to the survey, less than 1 percent engaged in higher-risk sex. There is almost no variation in the percentage of women engaged in higher risk sexual activity. The number of women reporting having engaged in higher-risk sex is too few to report on condom use during higher-risk sex.

Among sexually active young men aged 15-24 years, 21 percent engaged in higher-risk sexual activity in the 12 months preceding the survey.

A higher proportion of men aged 15-19 engage in higher-risk sex than those age 20-24 (52 versus 16 percent), simply because a larger proportion of men in their early 20s are married. By definition, all sexually active youth who are not married engage in higher-risk sex.

Higher-risk sexual intercourse is higher among urban men than rural men (53 percent versus 17 percent) and among those living in the South (38 percent) than in the North (13 percent) and the Central region (12 percent). Higher-risk sex among young men also increases with increasing education and increasing wealth status. By education, the percentage of young men engaged in higher-risk sex increases from 11 percent among those with primary education to 80 percent among those with more than secondary education. Two out of three young men who did engage in higher-risk sex report having used a condom the last time they had higher-risk sex.

Table 7.5 Higher-risk sexual intercourse among youth and condom use at last higher-risk intercourse in the past 12 months

Among young women and men age 15-24 who had sexual intercourse in the past 12 months, the percentage who had higher-risk sexual intercourse in the past 12 months, and among those having higher-risk intercourse in the past 12 months, the percentage reporting that a condom was used at last higher-risk intercourse, by background characteristics, Vietnam 2005

Background characteristic	Women age 15-24		Men age 15-24			
	Percentage engaging in higher-risk intercourse in the past 12 months ¹	Number of women who had sexual intercourse in the past 12 months	Percentage engaging in higher-risk intercourse in the past 12 months ¹	Number of men who had sexual intercourse in the past 12 months	Percentage who reported using a condom at last higher-risk sex ²	Number of men who had higher-risk sex in past 12 months
Age						
15-19	3.9	85	(51.7)	44	*	23
15-17	*	10	*	13	*	4
18-19	4.5	75	(59.4)	31	*	18
20-24	0.1	524	16.1	253	67.6	41
20-22	0.0	255	17.7	101	*	18
23-24	0.3	269	15.0	152	(61.0)	23
Education						
Never attended school	0.0	49	*	14	*	1
Primary	0.4	164	10.9	88	*	10
Secondary	0.9	361	21.0	174	(72.4)	37
More than secondary	(0.0)	36	(80.4)	20	*	16
Know condom source³						
Yes	0.7	449	28.3	220	68.0	62
No	0.4	160	1.3	77	*	1
Wealth quintile						
Lowest	0.4	176	6.6	98	*	6
Second	0.0	132	16.7	68	*	11
Middle	0.0	131	19.5	51	*	10
Fourth	0.7	99	(30.7)	38	*	12
Highest	3.7	71	56.9	42	(64.9)	24
Residence						
Urban	1.1	69	52.6	40	(66.8)	21
Rural	0.6	541	16.5	257	(67.9)	42
Region						
North	0.3	261	13.4	145	(89.8)	19
Central	0.0	148	(11.5)	50	*	6
South	1.7	200	37.5	102	(60.1)	38
Targeted provinces						
Ha Noi	(0.0)	13	*	9	*	5
Ho Chi Minh City	(2.4)	30	*	16	*	7
Hai Phong	0.0	14	(28.1)	8	*	2
Quang Ninh	(0.0)	7	*	3	*	0
Total 15-24	0.7	609	21.3	297	67.6	63

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

¹ Higher-risk intercourse is sexual intercourse with a partner who was neither a spouse nor lived with the respondent. Corresponds to UNGASS *Knowledge and Behavior* Indicator 12 "High-risk sex among young women and men in the last 12 months".

² Corresponds to UNGASS *Knowledge and Behavior* Indicator 13 "Percent of young women and men aged 15-24 reporting the use of condom the last time they had sex with a non-marital non-cohabiting sexual partner" and to Youth Guide *Behavioral* Indicator 17 "Condom use among young people who had higher-risk sex in the past year." It also partially correspond to the UNAIDS *Young people's Sexual Behavior* Indicator 5 "Young people using a condom at last higher-risk sex."

³ For the purposes of this table, the following categories are not considered sources for condoms: friends, family members, and home.

7.8 ALCOHOL USE DURING SEX

Research has shown that alcohol use reduces inhibitions and increases the likelihood of a person to engage in risky behavior. Alcohol use in relationship with sex is associated with a lower prevalence of safe-sex precautions, such as condom use. In the 2005 VPAIS, respondents were asked if they or their partner drank alcohol the last time they had sex. Table 7.6 shows the results by background characteristics.

Table 7.6 Drunkenness during sexual intercourse among youth

Percentage of young women and young men age 15-24 who had sexual intercourse in the past 12 months while being drunk, by background characteristics, Vietnam 2005

Background characteristic	Women 15-24		Men 15-24	
	Percentage of respondents who had sex in past 12 months when drunk or with a partner who was drunk	Number of women	Percentage of respondents who had sex in past 12 months when drunk or with a partner who was drunk	Number of men
Age				
15-19	2.6	85	(5.6)	44
15-17	*	10	*	13
18-19	1.5	75	(8.0)	31
20-24	3.2	524	1.3	253
20-22	3.0	255	1.1	101
23-24	3.4	269	1.5	152
Education				
Never attended school	4.5	49	*	14
Primary	2.9	164	2.5	88
Secondary	3.4	361	2.1	174
More than secondary	(0.0)	36	(0.0)	20
Marital status				
Never married	*	3	7.8	59
Ever had sex	*	3	7.8	59
Ever married	3.1	606	0.5	237
Know condom source²				
Yes	3.0	449	2.1	220
No	3.5	160	1.5	77
Wealth quintile				
Lowest	4.6	176	1.2	98
Second	5.2	132	5.2	68
Middle	0.0	131	2.1	51
Fourth	3.1	99	(0.0)	38
Highest	1.4	71	0.0	42
Residence				
Urban	2.4	69	0.0	40
Rural	3.2	541	2.2	257
Region				
North	3.3	261	0.0	145
Central	3.8	148	(2.3)	50
South	2.4	200	4.5	102
Targeted provinces				
Ha Noi	(0.0)	13	*	9
Ho Chi Minh City	(4.3)	30	*	16
Hai Phong	1.3	14	(0.0)	8
Quang Ninh	(0.0)	7	*	3
Total 15-24	3.1	609	1.9	297

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

¹ For the purposes of this table, the following categories are not considered sources for condoms: friends, family members, and home.

Three percent of women and 2 percent of men report having had sex when one of the partners was drunk during the 12 months preceding the survey (Table 7.6). Differences by most characteristics are minimal.

7.9 HIV TESTING AMONG YOUTH

Young people may feel that there are barriers to accessing and using many services and facilities, particularly for sensitive concerns relating to sexual health, including sexually transmitted infections, such as HIV/AIDS. Table 7.7 assesses the degree of reach of HIV testing services among sexually active young people and their awareness of their HIV status. Data are restricted to youth who reported having had sex in the 12 months prior to the survey.

Nationally, among women and men age 15-24 that have had sexual intercourse in the previous 12 months, 3 percent of women and 4 percent of men took an HIV test and received the results. The highest wealth quintile has the largest proportion of women and men who have received the results of an HIV test, 12 and 11 percent, respectively. While a greater proportion of urban young women have been tested than rural young women (10 versus 2 percent), equal proportions of urban and rural young men have been tested (5 and 4 percent, respectively).

Table 7.7 Recent HIV tests among youth

Among young women and young men age 15-24 who have had sexual intercourse in the past 12 months, the percentage who have had an HIV test in the past 12 months and received the results of the test, by background characteristics, Vietnam 2005

Background characteristic	Women 15-24		Men 15-24	
	Percentage who were tested and received results in the past 12 months	Number of women who had sex in the past 12 months	Percentage who were tested and received results in the past 12 months	Number of men who had sex in the past 12 months
Age				
15-19	3.3	85	(8.7)	44
15-17	*	10	*	13
18-19	3.8	75	8.6	31
20-24	2.9	524	(3.5)	253
20-22	2.8	255	0.9	101
23-24	3.1	269	5.2	152
Education				
Never attended school	0.0	49	*	14
Primary	0.8	164	0.2	88
Secondary	4.2	361	6.3	174
More than secondary	(5.0)	36	(7.4)	20
Marital status				
Never married	*	3	10.1	59
Ever married	3.0	606	2.8	237
Know condom source²				
Yes	3.8	449	5.7	220
No	0.6	160	0.2	77
Wealth quintile				
Lowest	0.0	176	0.0	98
Second	0.6	132	7.2	68
Middle	3.6	131	1.1	51
Fourth	4.2	99	(6.5)	38
Highest	11.8	71	11.4	42
Residence				
Urban	9.6	69	4.6	40
Rural	2.1	541	4.2	257
Region				
North	4.1	261	7.9	145
Central	0.6	148	(0.0)	50
South	3.3	200	1.2	102
Targeted provinces				
Ha Noi	(25.3)	13	*	9
Ho Chi Minh City	(18.2)	30	*	16
Hai Phong	11.2	14	(18.8)	8
Quang Ninh	(9.8)	7	*	3
Total 15-24	3.0	609	4.3	297

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

¹ Corresponds to Youth Guide *Behavioral Indicator 23* "HIV Testing behavior among young people"

² For the purposes of this table, the following categories are not considered sources for condoms: friends, family members, and home.

8.1 KEY FINDINGS

- Four percent of children under age 18 have lost a parent.
- Ninety-nine percent of children age 5-17 possess the three materials considered basic.
- Fifteen percent of orphans (single or double) are not living with all their siblings.
- Forty-four percent of adults responsible for a child have made plans in the event they are unable to care for said children.
- Ten percent of widows have been dispossessed of property.

8.2 INTRODUCTION

The repercussions of HIV are not limited to those infected with the virus. The children of infected parents are likely to become orphans in need of new caretakers. When a household takes in an orphaned child, household resources may be spread more thinly.

8.3 LIVING ARRANGEMENTS

Table 8.1 presents data on the prevalence of orphanhood in Vietnam. Four percent of children under the age of 18 have lost one or both parents. Only a fraction of children are reported to have lost both parents (0.2 percent). Percentage of children who have lost at least one parent increases from 1 percent of those under age two to 7 percent of those age 15-17.

Eighty-five percent of all children under age 18 are living with both their parents. A child not living with both parents is more likely the result of separate living arrangements, rather than the child having been orphaned. A child not living with both parents is most likely living with his/her mother while the father is living elsewhere. This scenario pertains to 7 percent of children under age 18. Boys and girls are equally likely to be living with both of their parents. The percentage of children who live with both parents declines somewhat as children grow older, from 89 percent of children under age 2 living with both parents, to 80 percent of 15-17 year-olds living with both parents. Of the four targeted provinces, one-quarter of children in HCMC do not live with both their parents, and most of this is due to not living with a father who is living elsewhere.

8.4 BIRTH REGISTRATION

In the Household Questionnaire, the VPAIS asked for children under age 5 whether or not the child has a birth certificate. If the child does not have a card, a follow-up probing question enquired whether the child's birth had ever been registered with the civil authorities. Table 8.2 presents the percentage of children under age 5 who have a birth certificate or additionally, whose births are registered with the civil authorities, among the de jure population of children in the households.

Table 8.1 Children's living arrangements and orphanhood

Percent distribution of de jure children under age 18 by children's living arrangements and survival status of parents; percentage not living with either parent; and percentage orphan, according to background characteristics, Vietnam 2005

Background characteristic	Living with both parents	Living with mother but not father		Living with father but not mother		Not living with either parent				Missing information on father/ mother	Total	Number of children	Percentage with one or both parents dead ¹
		Father alive	Father dead	Mother alive	Mother dead	Both alive	Only father alive	Only mother alive	Both dead				
Age													
<2	89.0	8.3	0.6	0.3	0.0	1.6	0.0	0.1	0.0	0.1	100.0	823	0.7
2-4	87.6	8.2	0.5	0.9	0.3	2.4	0.0	0.1	0.0	0.0	100.0	1,237	0.9
5-9	85.2	6.5	2.1	1.8	0.4	3.4	0.1	0.3	0.0	0.1	100.0	2,202	2.9
10-14	84.3	5.7	3.9	1.3	1.0	2.9	0.1	0.5	0.2	0.1	100.0	3,179	5.7
0-14	85.7	6.6	2.4	1.3	0.6	2.9	0.1	0.3	0.1	0.1	100.0	7,442	3.5
15-17	80.2	6.4	4.7	1.5	1.3	5.1	0.2	0.2	0.5	0.0	100.0	1,967	6.8
Sex													
Male	84.7	6.8	2.6	1.6	0.7	3.2	0.1	0.2	0.2	0.1	100.0	4,924	3.7
Female	84.3	6.4	3.2	1.0	0.9	3.5	0.1	0.4	0.2	0.0	100.0	4,484	4.7
Wealth quintile													
Lowest	88.5	3.9	3.0	0.8	1.5	1.9	0.1	0.1	0.2	0.0	100.0	2,114	4.9
Second	85.8	5.5	3.3	0.6	0.7	3.3	0.2	0.4	0.2	0.1	100.0	1,837	4.7
Middle	82.6	7.4	4.0	1.1	0.5	3.6	0.1	0.4	0.2	0.1	100.0	1,940	5.2
Fourth	81.7	9.6	1.7	1.8	0.6	4.3	0.0	0.2	0.0	0.1	100.0	1,847	2.6
Highest	83.3	6.9	2.4	2.4	0.3	3.8	0.0	0.5	0.2	0.2	100.0	1,669	3.4
Residence													
Urban	82.5	7.9	2.4	1.3	0.4	4.9	0.0	0.2	0.0	0.2	100.0	1,627	3.1
Rural	84.9	6.3	3.0	1.3	0.8	3.0	0.1	0.3	0.2	0.0	100.0	7,781	4.4
Region													
North	84.1	7.0	2.8	1.2	0.8	3.6	0.1	0.2	0.2	0.0	100.0	3,642	4.1
Central	85.3	6.5	3.3	1.6	0.7	2.0	0.2	0.3	0.1	0.1	100.0	2,608	4.6
South	84.2	6.3	2.7	1.2	0.7	4.1	0.1	0.3	0.2	0.1	100.0	3,157	4.0
Targeted provinces													
Ha Noi	83.4	9.4	2.0	1.0	0.1	3.2	0.1	0.4	0.0	0.3	100.0	270	2.7
Ho Chi Minh City	73.6	11.8	3.2	1.6	0.5	8.0	0.0	0.0	0.5	0.8	100.0	426	4.2
Hai Phong	84.4	6.4	2.5	1.0	0.6	4.6	0.0	0.4	0.1	0.1	100.0	205	3.6
Quang Ninh	87.5	4.5	2.9	1.1	0.2	3.7	0.0	0.0	0.1	0.0	100.0	140	3.3
Total	84.5	6.6	2.9	1.3	0.8	3.3	0.1	0.3	0.2	0.1	100.0	9,408	4.2

¹ Corresponds to UNICEF-OVC *Raising awareness to create a supportive environment* Core Indicator 9 "Percent of children who are orphans"

Table 8.2 Birth registration

Percentage of children under age 5 whose births are registered with the civil authorities, according to background characteristics, Vietnam 2005

Background characteristic	Had a birth certificate ¹	Registered but no birth certificate	Total registered	Number of children
Age				
<2	83.0	5.7	88.7	823
2-4	93.1	2.3	95.4	1,237
Sex				
Male	88.3	4.2	92.5	1,076
Female	90.0	3.0	93.0	985
Wealth quintile				
Lowest	73.0	9.4	82.4	487
Second	93.5	1.1	94.6	381
Middle	92.3	2.7	95.0	411
Fourth	95.4	2.0	97.4	393
Highest	95.1	1.6	96.7	388
Residence				
Urban	93.8	1.8	95.6	385
Rural	88.0	4.1	92.1	1,675
Region				
North	86.1	5.0	91.1	831
Central	88.8	4.5	93.2	555
South	93.1	1.2	94.3	674
Targeted provinces				
Ha Noi	98.1	0.7	98.8	70
Ho Chi Minh City	96.8	2.6	99.4	111
Hai Phong	96.2	1.2	97.4	44
Quang Ninh	90.6	1.0	91.5	36
Total	89.1	3.6	92.7	2,060

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

¹ Corresponds to UNICEF-OVC *Ensuring access to essential services* Core Indicator 7 "Birth registration"

Nine in ten children under the age of five were reported to have a birth certificate. Among the ten percent who were reported not to have a card, many were reported as being registered with the civil authority (4 in 10). Overall, 93 percent of children under age 5 are registered with the civil authority. Those most likely to have not been registered with the civil authority are those children living in households of the lowest wealth quintile, 18 percent of children under age 5 living in such households have not been registered.

8.5 BASIC MATERIAL NEEDS

Children in Vietnam are not found to be lacking the basic material needs of clothing. The VPAIS enquired whether children age 5-17 possessed three basic needs: shoes, two sets of clothing, and something to cover them while sleeping, if needed. Nationally, 99 percent of children age 5-17 were reported to possess all three basic needs and variation by background characteristics is nearly non-existent.

Table 8.3 also shows the same information by orphanhood status, comparing the children age 5-17 for whom one or both of their natural parents has died, to children for whom both natural parents are living. In general, children who are orphans fair as well as non-orphans with regard to the provision of these three basic needs. Orphans in the lowest wealth quintile fair only slightly less well than the non-orphans in the lowest wealth quintile.

Table 8.3 Possession of basic material needs by orphans

Among children age 5-17, the percentage possessing three minimum basic material needs (shoes, two sets of clothing and something to cover self at night when needed), and the percentage of orphans and non-orphans who possesses all three basic material needs, according to background characteristics, Vietnam 2005

Background characteristic	Percentage of children who have:					Percentage with all three basic needs by orphanhood status				
	Shoes	Two sets of clothes	Night time covering when needed	All three basic needs	Number of children	One or both parents deceased	Number of orphans ²	Non-orphans	Number of non-orphans	Ratio of orphans to non-orphans ¹
Age										
5-9	99.0	99.3	99.4	98.3	2,202	94.2	64	98.4	2,138	1.0
10-14	99.6	99.8	99.9	99.5	3,179	99.2	180	99.5	2,999	1.0
15-17	99.8	100.0	99.8	99.6	1,967	97.8	134	99.7	1,832	1.0
Sex										
Male	99.5	99.7	99.7	99.2	3,848	96.7	172	99.3	3,676	1.0
Female	99.4	99.7	99.8	99.1	3,500	98.9	207	99.1	3,293	1.0
Wealth quintile										
Lowest	97.8	98.6	99.1	96.8	1,628	91.7	98	97.1	1,530	0.9
Second	99.9	100.0	99.7	99.6	1,456	100.0	83	99.6	1,373	1.0
Middle	100.0	100.0	100.0	100.0	1,529	100.0	99	100.0	1,430	1.0
Fourth	100.0	100.0	100.0	100.0	1,454	(100.0)	45	100.0	1,408	1.0
Highest	99.8	99.9	99.9	99.8	1,281	100.0	54	99.8	1,227	1.0
Residence										
Urban	99.9	99.9	99.9	99.9	1,242	100.0	49	99.8	1,193	1.0
Rural	99.3	99.6	99.7	99.0	6,105	97.5	330	99.1	5,775	1.0
Region										
North	98.9	99.2	99.4	98.3	2,811	99.0	144	98.3	2,667	1.0
Central	99.7	100.0	99.8	99.5	2,053	97.9	114	99.6	1,939	1.0
South	99.8	100.0	100.0	99.8	2,482	96.4	121	100.0	2,362	1.0
Targeted provinces										
Ha Noi	100.0	100.0	99.8	99.8	200	*	7	99.8	193	*
Ho Chi Minh City	100.0	100.0	100.0	100.0	315	*	17	100.0	298	*
Hai Phong	100.0	100.0	99.8	99.8	161	(100.0)	7	99.8	154	(1.0)
Quang Ninh	100.0	100.0	100.0	100.0	104	*	4	100.0	100	*
Total	99.4	99.7	99.7	99.2	7,348	97.9	379	99.2	6,969	1.0

Note: Table is based on de jure household members, i.e., usual household members. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ Corresponds to UNICEF-OVC *Strengthening the capacity of families to protect and care for children* Core Indicator 1 "Basic Material Needs"

² One or both parents deceased

8.6 SEPARATION OF SIBLINGS

Once a child has lost one or both parents, it is not an uncommon strategy for the living adults responsible for the child to reduce their own burden of care to disburse the orphaned siblings to different households, lessening the burden of care for any one household. This in turn may cause significant stress to the siblings who are consequently separated from one another. Table 8.4 presents the percentage of

orphans who are not living with all of their siblings who are under the age of 18. Once a sibling has reached the age of 18 he or she is considered to be an adult and may be living on his or her own.

The VPAIS found that 15 percent of children who have lost one or both parents are not living with all their siblings who are also under the age of 18. It is more common for orphans to be separated from their siblings when it is their mother who has died. Thirty-four percent of children who have lost their mother have been separated from their siblings, whereas only 10 percent of children who have lost their father are separated one from another. One in four orphans in the Central region is separated from his/her siblings, as compared to only one in ten in the North and South regions.

8.7 SUCCESSION PLANNING

It may be that orphaned siblings are more likely to be separated one from another if their parents were unable to make plans for them while they themselves were still alive. Once the parent dies and no plans had been arranged, the family may be in a greater state of disarray than it would have been if plans had been made for the care of the children while the parents were still alive.

All respondents to the Individual questionnaire were asked whether they are the primary caregiver of any children, regardless of whether or not they are the biological parent of the child. The caregiver is the person primarily responsible for the general well-being of the child, responsible for the primary decision making on behalf of the child. Table 8.5 shows that 60 percent of women and men age 15-49 have at least one child for whom they are the primary caregiver. Forty-four percent of caregivers have made some kind of arrangements for someone to care for their children in the event that they themselves fall sick, or are unable to care for them any longer. Over twice the proportion of caregivers in the Central region has made such arrangements (73 percent) as compared to the North (33 percent) and South (35 percent). There is also great variation between the targeted provinces.

Table 8.4 Orphans not living with siblings

Among orphans under age 18 years who have at least one sibling under the age of 18, percentage who are not living together with all siblings under age 18, by background characteristics, Vietnam 2005

Background characteristic	Percentage not living with all siblings under age 18 ¹	Number of children with at least one sibling under age 18
Age		
<5	*	11
5-9	(19.4)	42
10-14	15.2	128
15-17	15.3	80
Sex		
Male	13.2	121
Female	17.1	140
Orphan status		
Maternal orphan	34.2	57
Paternal orphan	10.1	202
Both parents deceased	*	2
Wealth quintile		
Lowest	20.8	82
Second	(17.6)	50
Middle	(10.1)	62
Fourth	*	33
Highest	(3.2)	33
Residence		
Urban	6.6	31
Rural	16.4	230
Region		
North	9.2	91
Central	24.6	94
South	11.0	75
Targeted provinces		
Ha Noi	*	3
Ho Chi Minh City	*	11
Hai Phong	*	4
Quang Ninh	*	3
Total 0-17	15.3	261

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

¹ Corresponds to UNICEF-OVC *Mobilizing and strengthening community-based responses* Indicator A5 "Orphans living with siblings"

Table 8.5 Succession planning

Percentage of de facto women and men age 15-49 who are primary caregivers for children under age 18 years, and among them, percentage who made arrangements for someone to take care of these children in the event that they fall sick or are unable to take care of them, by selected background characteristics, Vietnam 2005

Background characteristic	Primary caregivers		Succession arrangements	
	Percentage of women and men who are primary caregivers	All women and men age 15-49	Percentage of caregivers who have made succession arrangements ¹	Number of primary caregivers
Age				
15-24	13.5	4,877	45.5	658
25-29	68.8	1,851	47.3	1,274
30-39	90.5	3,716	46.1	3,363
40-49	88.2	3,553	39.9	3,134
Sex				
Women	63.6	7,289	40.0	4,635
Men	56.6	6,707	48.8	3,794
Education				
Never attended school	78.8	641	47.4	505
Primary	71.5	2,789	44.1	1,994
Secondary	57.0	9,211	43.5	5,251
More than secondary	50.1	1,355	44.4	679
Wealth quintile				
Lowest	65.9	2,566	45.4	1,692
Second	63.0	2,662	47.2	1,676
Middle	57.6	2,886	41.9	1,662
Fourth	59.2	2,885	40.7	1,708
Highest	56.4	2,997	44.5	1,690
Residence				
Urban	54.7	2,953	53.9	1,616
Rural	61.7	11,043	41.6	6,814
Region				
North	63.9	5,257	33.4	3,361
Central	60.3	3,543	72.6	2,136
South	56.4	5,196	35.1	2,932
Targeted provinces				
Ha Noi	54.8	453	33.4	249
Ho Chi Minh City	48.1	911	69.0	439
Hai Phong	59.4	308	48.8	183
Quang Ninh	65.2	193	78.2	126
Total	60.2	13,996	44.0	8,429

Note: Table is based on de facto household members, persons who slept in household the night preceding the interview.

¹ Corresponds to UNICEF-OVC *Strengthening the capacity of families to protect and care for children* Indicator A4 "Succession Planning"

8.8 PROPERTY DISPOSSESSION

The situation of a wife losing her husband and a child losing his/her father can be made more dire when family members, in the absence of the husband/father, dispossess the wife of her belongings. Around the globe, it is not uncommon for widows and their children to be denied an inheritance, whether through common law or religious law. Even where laws for property transfer exist, enforcement of such laws may be weak. An increasing number of countries are establishing and harmonising legislation to give women and dependent children inheritance rights when their husbands/fathers die.

The VPAIS asked women who had ever lost a husband whether they had any property taken away from them after the death of their husband. Table 8.6 shows that 2 percent of women age 15-49 have been widowed, and of these, 9 percent were dispossessed of property. Because the number of widowed women is so small, it is not possible to explain with confidence any differentials by socio-demographic characteristics.

Table 8.6 Property dispossession

Percentage of women age 15-49 who have been widowed, and, among them, percentage who have been dispossessed of property, by selected background characteristics, Vietnam 2005

Background characteristic	Widowhood		Dispossession of property among widowed women	
	Percentage of ever-widowed women	Number of women	Percentage dispossessed ¹	Number of ever-widowed women
Age				
15-24	0.1	2,471	*	2
25-29	1.2	948	*	11
30-39	2.0	1,997	10.7	40
40-49	6.2	1,873	6.5	116
Education				
Never attended school	4.0	407	*	16
Primary	3.8	1,574	12.2	60
Secondary	1.8	4,612	9.5	82
More than secondary	1.7	696	*	12
Wealth quintile				
Lowest	2.8	1,306	(5.5)	36
Second	3.7	1,387	(14.9)	52
Middle	1.4	1,503	*	21
Fourth	2.5	1,507	(7.7)	38
Highest	1.4	1,587	(11.6)	22
Residence				
Urban	2.0	1,575	8.4	32
Rural	2.4	5,714	9.6	138
Region				
North	2.3	2,802	14.6	65
Central	2.3	1,808	(0.0)	42
South	2.3	2,679	10.2	63
Total	2.3	7,289	9.4	170

Note: Table is based on de facto household members, persons who slept in household the night preceding the interview. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ Such that most of late husband's property went to another wife, to the husband's family (not including respondent or children) or to another person. Corresponds to UNICEF-OVC *Ensuring that governments protect the most vulnerable children* Core Indicator A6 "Property Dispossession."

HIV PREVALENCE IN HAI PHONG PROVINCE

9

9.1 KEY FINDINGS

- An estimated 0.5 percent of adults age 15-49 in Hai Phong province are infected with HIV.
- Ninety-four percent of women and men agreed to provide blood samples for HIV testing. Coverage rates were 95 percent among women and 92 percent among men.

9.2 INTRODUCTION

HIV prevalence data provide important information to plan the national response, to evaluate program impact, and to measure progress on the National Vision on HIV/AIDS Prevention and Control in Vietnam until 2010 with a Vision to 2020. The understanding of the distribution of HIV infection within the population and analysis of the social, biological, and behavioral factors associated with HIV infection offer new insights about HIV in Vietnam, which may lead to more precisely targeted messages and interventions.

9.3 SENTINEL SURVEILLANCE DATA IN HAI PHONG

In Vietnam, national HIV prevalence estimates to date have been derived using prevalence data from sentinel surveillance among pregnant women attending antenatal clinics (ANC), although sentinel surveillance also collects blood samples from additional populations including commercial sex workers (CSW), injecting drug users (IDU), tuberculosis patients, patients accessing clinics for sexually transmitted infections treatment, and military recruits. Sentinel surveillance of HIV infection utilizing ANC attendees was established in 1994 in 8 provinces. In 2005, sentinel surveillance was expanded to 40 provinces. As one of the 40 sentinel surveillance provinces, Hai Phong surveillance data have been used to estimate HIV prevalence among IDUs, CSWs, and women attending ANC. HIV prevalence among these sub-populations has been estimated for 2005 as 58 percent, 6 percent, and 0.3 percent, respectively.

While HIV prevalence among pregnant women has been shown to be a reasonable proxy for prevalence among the combined male and female adult population in a number of settings, there are recognized limitations in estimating HIV prevalence in the general adult population from data derived exclusively from pregnant women attending selected sentinel clinics. The inclusion of HIV testing in the VPAIS in Hai Phong province offers the opportunity to estimate the magnitude of the infection in the general reproductive-age population of a province with some of the highest sentinel HIV prevalence estimates.

9.4 COVERAGE OF HIV TESTING IN THE VPAIS

Tables 9.1 and 9.2 present coverage rates for HIV testing in Hai Phong province among eligible women, men and both sexes combined. Coverage rates are based on unweighted data and are presented by respondent background characteristics in order to determine whether respondents who refuse to provide a blood sample differ substantially from respondents who agree to provide a sample. With regard to coverage rates, respondents fall into one of three categories, namely:

1. Those who were interviewed, consented to the HIV testing, and provided a blood sample
2. Those who were interviewed and refused to provide a blood sample
3. Those who were not tested for some reason not related to informed consent, such as a mismatch between the questionnaires and the blood samples, or a technical problem in collecting the blood.

Blood was collected only from respondents who voluntarily agreed to participate in HIV testing after having been read an informed consent statement. As shown in Table 9.1, overall coverage rates in the VPAIS were high, with 94 percent of women and men interviewed having agreed to provide blood samples for laboratory testing of HIV. Six percent of respondents refused to provide a blood sample, and less than one percent of respondents agreed to provide a sample but have not been included in the HIV testing due to miscellaneous logistical reasons.

Coverage rates were slightly higher among women (95 percent) than men (92 percent). Table 9.2 shows that this also tended to be true across most of the background characteristics shown in the table.

Table 9.1 shows that HIV testing coverage was higher in rural areas (96 percent) than in urban areas (90 percent). Refusals for giving a blood sample are more common among urban respondents than among rural respondents, and this is true among both women and men. Eight percent of urban women and 12 percent of urban men refused to provide a sample, while only 2 percent of rural women and 5 percent of rural men refused to provide a sample.

Table 9.2 shows coverage rates to be generally high across age, education, and wealth quintile of respondents. Coverage rates are lowest among those with the highest levels of education and among those in the highest wealth quintile. Lowest coverage rates of 85 percent are seen among men of the highest education and among men in the highest wealth quintile.

Table 9.1 Coverage of HIV testing by residence					
Percent distribution of women and men age 15-49 eligible for HIV testing by testing status, according to residence, Hai Phong Vietnam 2005 (unweighted data)					
Residence	Interviewed			Total	Number
	Tested	Refused testing	Other/missing		
WOMEN					
Urban	91.7	7.8	0.5	100.0	384
Rural	97.3	2.4	0.3	100.0	587
Total	95.1	4.5	0.4	100.0	971
MEN					
Urban	87.5	11.8	0.7	100.0	287
Rural	94.0	5.1	0.9	100.0	533
Total	91.7	7.4	0.9	100.0	820
TOTAL					
Urban	89.9	9.5	0.6	100.0	671
Rural	95.7	3.7	0.6	100.0	1,120
Total	93.5	5.9	0.6	100.0	1,791

Table 9.2 Coverage of HIV testing by background characteristics					
Percent distribution of women and men age 15-49 eligible for HIV testing by testing status, according to background characteristics, Hai Phong Vietnam 2005 (unweighted)					
Background characteristic	Interviewed			Total	Number
	Tested	Refused testing	Other/missing		
WOMEN					
Age					
15-19	94.1	5.9	0.0	100.0	188
20-24	95.3	4.7	0.0	100.0	150
25-29	94.1	5.9	0.0	100.0	101
30-34	93.8	5.3	0.9	100.0	113
35-39	96.1	2.3	1.6	100.0	129
40-44	95.1	4.9	0.0	100.0	144
45-49	96.6	2.7	0.7	100.0	146
Education					
Never attended school	*	*	*	100.0	4
Primary	94.3	4.3	1.4	100.0	70
Secondary	95.7	4.0	0.3	100.0	771
More than secondary	91.3	7.9	0.8	100.0	126
Wealth quintile					
Lowest	*	*	*	100.0	12
Second	94.9	5.1	0.0	100.0	136
Middle	95.9	3.2	0.9	100.0	217
Fourth	97.6	2.0	0.3	100.0	293
Highest	92.0	7.7	0.3	100.0	313
Total	95.1	4.5	0.4	100.0	971
MEN					
Age					
15-19	88.6	9.6	1.8	100.0	166
20-24	90.2	9.8	0.0	100.0	122
25-29	92.9	5.9	1.2	100.0	85
30-34	88.8	11.2	0.0	100.0	89
35-39	95.4	2.8	1.8	100.0	109
40-44	95.1	4.1	0.8	100.0	123
45-49	92.1	7.9	0.0	100.0	126
Education					
Never attended school	*	*	*	100.0	2
Primary	96.4	3.6	0.0	100.0	55
Secondary	92.4	6.9	0.8	100.0	654
More than secondary	85.3	12.8	1.8	100.0	109
Wealth quintile					
Lowest	*	*	*	100.0	9
Second	96.7	2.5	0.8	100.0	120
Middle	94.8	3.3	1.9	100.0	210
Fourth	93.1	6.9	0.0	100.0	233
Highest	85.1	14.1	0.8	100.0	248
Total	91.7	7.4	0.9	100.0	820
Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.					

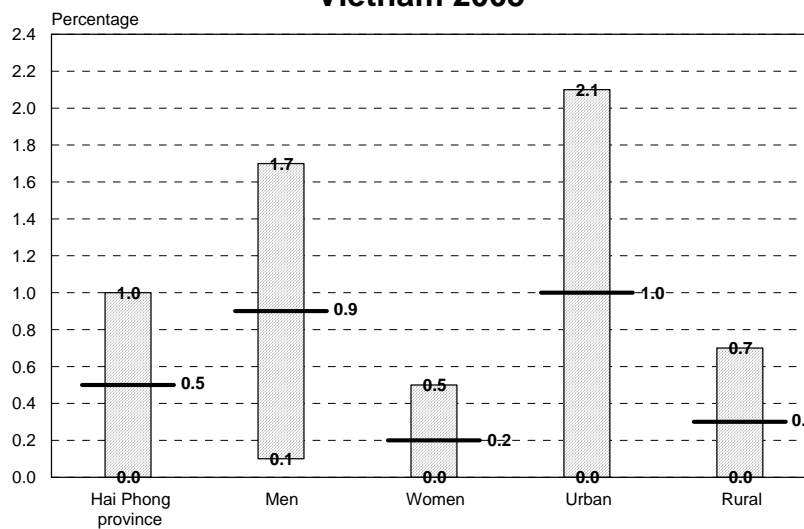
Additional tables in Appendix A present coverage rates by additional background and sexual behavior characteristics. Coverage rates remain high across the sub-populations shown, and coverage does not vary to a degree great enough to reduce confidence in the HIV prevalence estimates.

9.5 HIV PREVALENCE

The 2005 VPAIS found that 0.5 percent of Hai Phong adults age 15-49 are infected with HIV. The VPAIS tested 1,675 individuals for presence of HIV infection. Nine people were found to be HIV positive, two women and seven men. HIV prevalence in Hai Phong is low among both women and men. HIV prevalence was found to be 0.2 percent among women and 0.9 percent among men.

The low prevalence has repercussions for what, if any, further analyses might be possible. The very small number of positive cases identified is a function of both prevalence itself being very low, and the sample size. This does not reduce our confidence in the estimate itself; however, the confidence intervals of the estimate, in conjunction with the low level of prevalence, make it difficult to conclude that there exist any statistically significant differentials in prevalence. This is illustrated in Figure 9.1 which presents HIV prevalence estimates with their confidence intervals.

Figure 9.1 Confidence Intervals of HIV Prevalence, Vietnam 2005



So while one of the objectives of the VPAIS was to learn more about the characteristics of people infected with HIV, this will not be possible because the low prevalence level results in identifying too few cases of HIV-positive people for further analysis.

Hai Phong was selected as the province in which to do HIV testing as it was a province suspected of higher than national prevalence. Given the low level of prevalence, simply conducting a survey with a larger sample would not be a worthwhile investment.

Equally low levels of prevalence have been found in a survey conducted in 2005 (NIHE 2005) in Thai Binh province and Ho Chi Minh City. The survey collected 3,000 blood samples in Thai Binh province and 1,501 samples in Ho Chi Minh City. The survey identified 11 HIV-positive cases in Thai Binh province, resulting in a prevalence estimate of 0.3 percent, and 10 HIV-positive cases in Ho Chi Minh City, resulting in a prevalence estimate of 0.7 percent.

9.6 HIV PREVALENCE BY BACKGROUND CHARACTERISTICS

Findings are presented in Table 9.3 by background characteristics of respondents. While confidence in the estimates is high, nevertheless differentials across sub-groups of the population cannot be established.

Background characteristic	Women		Men		Total	
	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number
Age						
15-19	0.0	176	0.0	148	0.0	324
20-24	0.0	143	1.8	110	0.8	253
25-29	1.1	95	1.1	80	1.1	175
30-34	0.9	106	2.5	80	1.6	186
35-39	0.0	124	1.8	104	0.8	229
40-44	0.0	137	0.0	116	0.0	253
45-49	0.0	141	0.0	116	0.0	256
Residence						
Urban	0.3	332	2.0	237	1.0	569
Rural	0.2	589	0.4	517	0.3	1,106
Education						
Never attended school	*	4	*	2	*	6
Primary	0.0	68	3.7	54	1.6	122
Secondary	0.3	738	0.6	608	0.4	1,345
More than secondary	0.0	111	1.0	90	0.5	201
Marital status						
Never married	0.0	269	1.1	268	0.5	537
Ever had sex	*	1	(5.6)	34	(5.4)	35
Never had sex	0.0	268	0.4	234	0.2	502
Married/living together	0.3	611	0.6	479	0.5	1,090
Divorced, separated, widowed	(0.0)	41	*	7	(1.9)	48
Total	0.2	921	0.9	754	0.5	1,675

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

Among women age 15-49, HIV-positive cases were found only among women age 25 to 34. A larger sample size would likely have found a few HIV-positive cases among women of other ages as well. The VPAIS found infection occurring among men age 20 to 39, a broader age range than was found among women. However, as with women, a larger sample size would likely have found a few HIV-positive cases among other age groups as well.

This is the first time in Vietnam that testing of HIV has incorporated the ability to know the prevalence of both partners among cohabiting couples. The VPAIS identified 443 couples for which HIV test results are available for both partners. In 99.3 percent of couples, both partners were HIV negative. Among 0.4 percent of couples, both partners were HIV positive, and 0.2 percent were discordant, that is, one partner was HIV positive and the other was not.

Although survey estimates do not allow drawing conclusions with regard to differentials in HIV prevalence, the VPAIS does provide, for the first time, a robust estimate of HIV prevalence among the general population of both sexes of reproductive age in Hai Phong province.

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A.1 INTRODUCTION

The 2005 Vietnam Population and AIDS Indicator Survey (VPAIS 2005) is a nationwide survey calling for a nationally representative sample of approximately 7,200 women with completed interviews and 6,500 men with completed interviews between the ages of 15 and 49. It is designed to provide information on their sexual behaviors, their use of contraception, their knowledge and attitudes towards HIV/AIDS and other sexually transmitted infections (STI). In Vietnam, there are 64 provinces, each province consists of districts, and each district consists of communes. Survey estimates are reported for the country as a whole, for urban and rural areas, for 3 geographical regions North, Central and South, and for 4 individual provinces Ha Noi, Ho Chi Minh City, Hai Phong and Quang Ninh. Table A.1 shows the composition of the three geographical regions.

In the province of Hai Phong, all eligible women and men aged 15-49 in the selected households who voluntarily provided a blood sample after having been read an informed consent statement were anonymously tested for HIV to estimate HIV prevalence in the general population of Hai Phong.

Table A.1 Resgions and provinces		
Distribution of provinces across regions, Vietnam VPAIS 2005		
North	Central	South
Ha Noi	Thanh Hoa	Ho Chi Minh City
Hai Phong	Nghe An	Ninh Thuan
Quang Ninh	Ha Tinh	Binh Thuan
Ha Giang	Quang Binh	Binh Phuoc
Cao Bang	Quang Tri	Tay Ninh
Bac Kan	Thua Thien - Hue	Binh Duong
Tuyen Quang	Da Nang	Dong Nai
Lao Cai	Quang Nam	Ba Ria -Vung Tau
Dien Bien	Quang Ngai	Long An
Lai Chau	Binh Dinh	Tien Giang
Son La	Phu Yen	Ben Tre
Yen Bai	Khanh Hoa	Tra Vinh
Hoa Binh	Kon Tum	Vinh Long
Thai Nguyen	Gia Lai	Dong Thap
Lang Son	Dak Lak	An Giang
Bac Giang	Dak Nong	Kien Giang
Phu Tho	Lam Dong	Can Tho
Vinh Phuc		Hau Giang
Bac Ninh		Soc Trang
Ha Tay		Bac Lieu
Hai Duong		Ca Mau
Hung Yen		
Thai Binh		
Ha Nam		
Nam Dinh		
Ninh Binh		

A.2 SAMPLING FRAME

The sampling frame used for VPAIS 2005 was the Population Change Survey sample 2005 (PCS 2005) which was constructed in 2004 from the 1999 Population and Housing Census (PHC), provided by the General Statistical Office (GSO). This sample consisted of 3840 enumeration areas (EA) selected randomly from the 1999 PHC frame. It contains fresh information about the number of households and the population of each cluster updated in 2004 and 2005, respectively. Census EA maps are available for each EA on which the boundaries of the EA and the locations of dwelling structures residing in the EA are clearly indicated. A household list dated on March 2005 for each EA is also available. Using the PCS 2005 sample as the sampling frame for the VPAIS 2005 had considerable advantages over using the 1999 PHC frame. The PCS 2005 sample is a stratified sample with special allocations in urban and rural areas of each of the 64 provinces. Therefore 128 sampling strata were constructed. A sample of a predetermined number of EAs was drawn independently with equal probability using systematic sampling from each sampling stratum. The sample allocation of the PCS sample is shown in Table A.7. The weighted population distribution of the PCS 2005 sample according to urban and rural residence in each province is shown in Table A.8. The population distribution based on the 2003 population estimation is shown in Table A.9. The population distribution based on the 1999 population census is shown in Table A.10. From Table A.8 and Table A.10 it can be seen that, though the PCS 2005 systematically underestimates the population, the weighted population distribution of the sample is quite close to the 1999 census distribution. Therefore, the PCS sample is suitable to be the sampling frame of the VPAIS 2005. Table A.2 below shows the distribution of the PCS 2005 on number of EAs and number of households according to study domain and by type of residence.

Study domain	Number of households		Number of EAs		Total	
	Urban	Rural	Urban	Rural	Household	EA
North Region	59,873	98,222	565	986	158,095	1,551
Central Region	39,302	61,769	383	636	101,071	1,019
South Region	49,306	76,090	489	781	125,396	1,270
Total	148,481	236,081	1,437	2,403	384,562	3,840
Ha Noi	5,312	2,659	48	24	7,971	72
Ho Chi Minh City	6,075	1,254	60	12	7,329	72
Hai Phong	2,976	3,652	30	35	6,628	65
Quang Ninh	2,603	3,223	27	33	5,826	60

Source: PCS 2005, GSO

The percent distribution of the population according to the study domain and by type of residence, based on the 2003 population estimation, is shown in Table A.3. Twenty-six percent of Vietnam's population lives in urban areas. The sample allocation of the VPAIS 2005 is based on this distribution (see Table A.3 for the distribution by province and by urban-rural residence).

Study domain	Population distribution	
	Percentage urban	Percentage domain
North Region	0.20	0.36
Central Region	0.22	0.27
South Region	0.36	0.37
Total	0.26	1.00
Ha Noi	0.63	0.04
Ho Chi Minh City	0.90	0.07
Hai Phong	0.37	0.02
Quang Ninh	0.46	0.01

Source: Statistical Yearbook, Vietnam 2005

A.3 SAMPLING PROCEDURE

The sample for VPAIS 2005 was a stratified sample selected in two stages from the PCS 2005. Stratification was achieved by separating every reporting domain into urban and rural areas. The 7 domains were stratified into 14 sampling strata, among them, the urban and rural areas of each of the four individual provinces and the rest of the urban and rural areas of the North and South regions, and the urban and rural areas of the Central region. Samples were selected independently in every stratum, by a two stage selection. Implicit stratifications were achieved at each of the lower geographical/administrative levels by sorting the sampling frame according to the geographical/administrative order and by using a probability proportional to size selection at the first stage sampling.

In the first stage, 251 EAs were selected with probability proportional to the EA size. The EA size is defined as the number of households residing in the EA. A household listing operation was carried out in all selected EAs, and the resulting lists of households served as the sampling frame for the selection of households in the second stage. Some of the selected EAs could be of large size. In order to minimize the task of household listing for large EAs, selected EAs which had more than 300 households were segmented. Only one segment was selected for inclusion in the survey with probability proportional to the segment size. Household listing was conducted only in the selected segment. The resulting VPAIS 2005 cluster is either an EA or a segment of an EA. In the second stage selection, an average number of 22 households were selected in every urban cluster, and an average of 28 households were selected in every rural cluster, by an equal probability systematic sampling. A spreadsheet indicating the selected household numbers for each cluster was prepared. Survey interviewers interviewed only the pre-selected households. No replacements and no changes of the pre-selected households was allowed during fieldwork in order to prevent bias. All women and men aged 15-49 were interviewed in the selected households.

Table A.4 below shows the sample allocation of clusters and households according to the study domains and by type of residence. Table A.5 below shows the sample allocation of completed women and men interviews according to the study domains and by type of residence. The allocation takes into account the urban-rural distribution of each study domain, and the test of HIV in the province of Hai Phong. Because of the tight budget restrictions, 22 clusters were allocated to each of the three provinces of Ha Noi, Ho Chi Minh City and Quang Ninh, 150 clusters were allocated to each of the three regions of North, Central, and South, not including the four individual provinces. Thirty-five clusters were allocated to Hai Phong province in order to provide a sample size sufficient for acceptable precision for HIV estimates. The four individual provinces are largely over sampled compared to other provinces to provide sufficient sample size for separate estimates. As a consequence, the North region and urban areas are over sampled. Because urban areas are smaller than rural areas, it is necessary to over sample the urban areas to provide separate estimates for urban areas that are reliable. A proportional allocation according to the urban-rural residence would not provide enough samples to guarantee comparable precision between urban and rural areas. Among the 251 clusters, 97 clusters are in urban areas, 154 clusters are in rural areas.

Study domain	Allocation of clusters			Allocation of households		
	Urban	Rural	Total	Urban	Rural	Total
North Region	50	79	129	1,100	2,212	3,312
Central Region	13	37	50	286	1,036	1,322
South Region	34	38	72	748	1,064	1,812
Total	97	154	251	2,134	4,312	6,446
Ha Noi	15	7	22	330	196	526
Ho Chi Minh City	20	2	22	440	56	496
Hai Phong	15	20	35	330	560	890
Quang Ninh	12	10	22	264	280	544

Table A.5 Sample allocation of expected completed women and men interviews according to study domains and by type of residence, VPAIS 2005						
Study domain	Allocation of completed women interviews (15-49)			Allocation of completed men interviews (15-49)		
	Urban	Rural	Total	Urban	Rural	Total
North Region	1,234	2,482	3,716	1,116	2,243	3,359
Central Region	320	1,162	1,482	290	1,050	1,340
South Region	840	1,194	2,034	758	1,079	1,837
Total	2,394	4,838	7,232	2,164	4,372	6,536
Ha Noi	370	220	590	335	199	534
Ho Chi Minh City	494	63	557	446	57	503
Hai Phong	370	628	998	335	568	903
Quang Ninh	296	315	611	268	284	552

The above sample allocations are calculated based on facts obtained from Vietnam Demographic and Health Survey 2002 (VDHS 2002) and the 1999 PHC: there are 1.18 women aged 15-49 and 1.10 men aged 15-49 per household; household response rate was 97 percent; woman individual response rate was 98 percent; men individual response rate was assumed to be 95 percent since men were not included in the VDHS 2002.

For HIV testing in the province of Hai Phong, the sample allocation of expected number of completed HIV tests for men, women and for both men and women, and the expected precision of prevalence estimates under various assumptions of HIV prevalence levels are shown in table A.6 below. The response rate for HIV testing was assumed to be 90 percent for men and women; no other previous survey results were available at the time in Vietnam on which to base expected response rates for testing.

Table A.6 Sample allocation with expected precision of HIV prevalence estimates assuming various prevalence levels in Hai Phong province, VPAIS, 2005			
	Women	Men	Total
NUMBER OF INDIVIDUAL INTERVIEWS FOR HIV TESTING			
Respondents			
Expected number eligible	998	903	1,901
Expected number tested	900	810	1,710
98% CONFIDENCE INTERVAL FOR HIV PREVALENCE ESTIMATE			
Assumed prevalence			
p = 1%	(0.2%, 1.8%)	(0.1%, 1.9%)	(0.4%, 1.6%)
p = 1.5%	(0.5%, 2.5%)	(0.5%, 2.6%)	(0.8%, 2.2%)
p = 2.0%	(0.9%, 3.2%)	(0.8%, 3.2%)	(1.2%, 2.9%)
p = 2.5%	(1.2%, 3.8%)	(1.1%, 3.9%)	(1.6%, 3.5%)

A.4 SAMPLING PROBABILITIES

Sampling probabilities were calculated separately for each sampling stage and for each cluster. We use the following notations:

- P_{0hi} sampling probability in the PCS sample of the i^{th} cluster in stratum h
- P_{1hi} first-stage sampling probability of the i^{th} cluster in stratum h from the PCS sample
- P_{2hi} second-stage sampling probability within the i^{th} cluster (households)

Let a_h be the number of clusters selected in stratum h , M_{hi} the number of households according to the sampling frame in the i^{th} cluster, and $\sum M_{hi}$ the total number of households in the stratum. The probability of selecting the i^{th} cluster in the VPAIS sample is calculated as follows:

$$\frac{a_h M_{hi}}{\sum M_{hi}}$$

Let b_{hi} be the proportion of households in the selected segment compared to the total number of households in the EA i in stratum h if the EA is segmented, otherwise $b_{hi} = 1$. Then the probability of selecting cluster i in the sample is:

$$P_{1hi} = \frac{a_h M_{hi}}{\sum M_{hi}} \times b_{hi}$$

Let L_{hi} be the number of households listed in the household listing operation in cluster i in stratum h , let g_{hi} be the number of households selected in the cluster. The second stage selection probability for each household in the cluster is calculated as follows:

$$P_{2hi} = \frac{g_{hi}}{L_{hi}}$$

The overall selection probability of each household in cluster i of stratum h is therefore the production of the selection probabilities:

$$P_{hi} = P_{0hi} \times P_{1hi} \times P_{2hi}$$

Because of the non-proportional allocation of the sample to the different 7 reporting domains, sampling weights are required for any analysis using VPAIS 2005 data to ensure the actual representativity of the sample at the national level. The sampling weight for each household in cluster i of stratum h is the inverse of its selection probability:

$$W_{hi} = 1 / P_{hi}$$

Table A.7 Total number of EAs and number of EAs selected in each province and by urban-rural residence in PCS 2005

Province name	Total number of EAs			Number of EAs selected in DSS		
	Urban	Rural	Total	Urban	Rural	Total
Ha Noi	2969	2,275	5,244	48	24	72
Ha Giang	125	1,192	1,317	20	38	58
Cao Bang	145	1,119	1,264	20	38	58
Bac Kan	95	507	602	20	36	56
Tuyen Quang	190	1,554	1,744	20	38	58
Lao Cai	259	1,053	1,312	20	38	58
Dien Bien	166	736	902	20	36	56
Lai Chau	60	553	613	20	36	56
Son La	248	1,831	2,079	20	40	60
Yen Bai	328	1,171	1,499	20	38	58
Hoa Binh	232	1,459	1,691	20	38	58
Thai Nguyen	491	1,796	2,287	20	40	60
Lang Son	298	1,299	1,597	20	38	58
Quang Ninh	1,118	1,325	2,443	27	33	60
Bac Giang	252	3,069	3,321	20	40	60
Phu Tho	383	2,321	2,704	20	40	60
Vinh Phuc	250	2,118	2,368	20	40	60
Bac Ninh	168	1,793	1,961	20	40	60
Ha Tay	389	4,536	4,925	20	40	60
Hai Duong	507	3,199	3,706	20	40	60
Hai Phong	1,402	2,566	3,968	30	35	65
Hung Yen	184	2,009	2,193	20	40	60
Thai Binh	246	4,240	4,486	20	40	60
Ha Nam	93	1,492	1,585	20	40	60
Nam Dinh	521	3,753	4,274	20	40	60
Ninh Binh	282	1,859	2,141	20	40	60
Thanh Hoa	690	6,873	7,563	24	41	65
Nghe An	677	5,454	6,131	22	40	62
Ha Tinh	267	2,751	3,018	20	40	60
Quang Binh	197	1,610	1,807	20	39	59
Quang Tri	244	982	1,226	20	38	58
Thua Thien - Hue	528	1,475	2,003	20	40	60
Da Nang	1,146	357	1,503	45	15	60
Quang Nam	444	2,823	3,267	20	40	60
Quang Ngai	290	2,422	2,712	20	40	60
Binh Dinh	743	2,427	3,170	20	40	60
Phu Yen	326	1,381	1,707	20	39	59
Khanh Hoa	869	1,394	2,263	25	35	60
Ninh Thuan	238	790	1,028	20	38	58
Binh Thuan	447	1,682	2,129	20	40	60
Kon Tum	212	500	712	22	38	60
Gia Lai	464	1,554	2,018	20	40	60
Dak Lak	625	2,142	2,767	20	40	60
Dak Nong	96	482	578	20	36	56
Lam Dong	790	1,303	2,093	25	35	60
Binh Phuoc	212	1,238	1,450	20	39	59
Tay Ninh	252	1,841	2,093	20	40	60
Binh Duong	481	1,054	1,535	25	34	59
Dong Nai	1,226	3,063	4,289	28	37	65
Ba Ria – Vung Tau	650	979	1,629	25	34	59
Ho Chi Minh City	8,439	1,692	10,131	60	12	72
Long An	461	2,507	2,968	20	40	60
Tien Giang	493	3,347	3,840	19	41	60
Ben Tre	243	2,796	3,039	20	40	60
Tra Vinh	258	1,821	2,079	20	40	60
Vinh Long	287	1,916	2,203	20	40	60
Dong Thap	448	3,057	3,505	20	40	60
An Giang	814	3,338	4,152	20	40	60
Kien Giang	706	2,800	3,506	20	40	60
Can Tho	653	1,308	1,961	31	29	60
Hau Giang	211	1,527	1,738	21	39	60
Soc Trang	411	1,917	2,328	20	40	60
Bac Lieu	334	1,055	1,389	20	38	58
Ca Mau	405	1,993	2,398	20	40	60
Total	37,678	128,476	166,154	1,437	2,403	3,840

Table A.8 Weighted population distribution according to the PCS 2005

Province name	Population		Percentage	
	Total	Urban	Urban	Province
Ha Noi	2,354,495	1,296,525	0.551	0.032
Ha Giang	603,993	53,006	0.088	0.008
Cao Bang	549,620	55,376	0.101	0.008
Bac Kan	246,180	36,380	0.148	0.003
Tuyen Quang	716,514	71,972	0.100	0.010
Lao Cai	560,653	97,721	0.174	0.008
Dien Bien	413,918	55,527	0.134	0.006
Lai Chau	275,534	24,027	0.087	0.004
Son La	888,559	97,018	0.109	0.012
Yen Bai	687,021	125,034	0.182	0.009
Hoa Binh	744,987	88,206	0.118	0.010
Thai Nguyen	991,479	198,904	0.201	0.014
Lang son	706,718	122,612	0.173	0.010
Quang Ninh	943,378	389,809	0.413	0.013
Bac Giang	1,469,625	95,634	0.065	0.020
Phu Tho	1,216,544	170,875	0.140	0.017
Vinh Phuc	1,086,000	99,700	0.092	0.015
Bac Ninh	811,894	68,964	0.085	0.011
Ha Tay	2,111,891	177,287	0.084	0.029
Hai Duong	1,599,602	216,514	0.135	0.022
Hai Phong	1,571,480	522,572	0.333	0.022
Hung Yen	911,611	79,433	0.087	0.013
Thai Binh	1,677,128	86,174	0.051	0.023
Ha Nam	645,475	38,642	0.060	0.009
Nam Dinh	1,685,870	191,989	0.114	0.023
Ninh Binh	844,800	110,727	0.131	0.012
Thanh Hoa	3,164,423	278,099	0.088	0.044
Nghe An	2,748,900	260,922	0.095	0.038
Ha Tinh	1,212,733	110,752	0.091	0.017
Quang Binh	780,693	81,540	0.104	0.011
Quang Tri	546,929	106,347	0.194	0.008
Thua Thien - Hue	987,157	248,477	0.252	0.014
Da Nang	678,602	539,206	0.795	0.009
Quang Nam	1,329,560	189,632	0.143	0.018
Quang Ngai	1,164,257	125,643	0.108	0.016
Binh Dinh	1,411,853	325,285	0.230	0.019
Phu Yen	763,199	146,211	0.192	0.010
Khanh Hoa	1,026,882	380,066	0.370	0.014
Ninh Thuan	456,884	97,413	0.213	0.006
Binh Thuan	949,121	211,900	0.223	0.013
Kon Tum	302,348	90,033	0.298	0.004
Gia Lai	906,305	220,680	0.243	0.012
Dak Lak	1,308,272	292,000	0.223	0.018
Dak Nong	248,722	38,597	0.155	0.003
Lam Dong	917,318	335,845	0.366	0.013
Binh Phuoc	532,379	81,779	0.154	0.007
Tay Ninh	903,204	105,223	0.116	0.012
Binh Duong	610,674	192,515	0.315	0.008
Dong Nai	1,948,973	567,726	0.291	0.027
Ba Ria - Vung Tau	749,382	289,770	0.387	0.010
Ho Chi Minh City	4,622,430	3,842,136	0.831	0.064
Long An	1,260,853	216,186	0.171	0.017
Tien Giang	1,657,899	214,118	0.129	0.023
Ben Tre	1,362,045	110,905	0.081	0.019
Tra Vinh	892,260	106,954	0.120	0.012
Vinh Long	962,743	126,553	0.131	0.013
Dong Thap	1,513,458	192,528	0.127	0.021
An Giang	1,866,225	351,607	0.188	0.026
Kien Giang	1,554,216	301,286	0.194	0.021
Can Tho	910,688	305,941	0.336	0.013
Hau Giang	753,656	87,806	0.117	0.010
Soc Trang	1,112,078	207,781	0.187	0.015
Bac Lieu	661,585	158,600	0.240	0.009
Ca Mau	1,134,083	188,953	0.167	0.016
Total	72,227,958	16,297,641	0.226	1.000

Source: Population Change Survey, Vietnam 2005

Table A.9 Population distribution according to the 2003 population estimation

Province name	Population		Percentage	
	Total	Urban	Urban	Province
Ha Noi	3,007,007	1,883,751	0.626	0.037
Ha Giang	648,087	71,853	0.111	0.008
Cao Bang	502,954	68,382	0.136	0.006
Bac Kan	291,693	44,270	0.152	0.004
Tuyen Quang	709,395	67,548	0.095	0.009
Lao Cai	551,848	102,138	0.185	0.007
Dien Bien	431,864	74,650	0.173	0.005
Lai Chau	298,105	41,220	0.138	0.004
Son La	955,400	108,089	0.113	0.012
Yen Bai	713,023	142,898	0.200	0.009
Hoa Binh	792,259	120,279	0.152	0.010
Thai Nguyen	1,085,872	253,066	0.233	0.013
Lang son	724,280	144,024	0.199	0.009
Quang Ninh	1,055,612	488,325	0.463	0.013
Bac Giang	1,547,146	128,768	0.083	0.019
Phu Tho	1,302,698	193,959	0.149	0.016
Vinh Phuc	1,142,908	129,737	0.114	0.014
Bac Ninh	976,766	103,550	0.106	0.012
Ha Tay	2,479,447	209,967	0.085	0.031
Hai Duong	1,689,168	238,428	0.141	0.021
Hai Phong	1,754,174	651,296	0.371	0.022
Hung Yen	1,112,451	113,758	0.102	0.014
Thai Binh	1,831,071	136,028	0.074	0.023
Ha Nam	814,863	76,962	0.094	0.010
Nam Dinh	1,935,045	252,778	0.131	0.024
Ninh Binh	905,988	125,506	0.139	0.011
Thanh Hoa	3,620,354	354,104	0.098	0.045
Nghe An	2,977,267	316,894	0.106	0.037
Ha Tinh	1,283,899	128,412	0.100	0.016
Quang Binh	823,804	106,336	0.129	0.010
Quang Tri	608,479	145,981	0.240	0.008
Thua Thien - Hue	1,101,748	350,572	0.318	0.014
Da Nang	747,081	607,275	0.813	0.009
Quang Nam	1,438,818	220,606	0.153	0.018
Quang Ngai	1,250,353	179,603	0.144	0.015
Binh Dinh	1,530,275	384,398	0.251	0.019
Phu Yen	836,672	184,771	0.221	0.010
Khanh Hoa	1,096,617	440,981	0.402	0.014
Ninh Thuan	546,015	179,846	0.329	0.007
Binh Thuan	1,120,248	391,926	0.350	0.014
Kon Tum	357,421	114,962	0.322	0.004
Gia Lai	1,075,200	289,808	0.270	0.013
Dak Lak	1,656,659	374,191	0.226	0.020
Dak Nong	361,114	47,433	0.131	0.004
Lam Dong	1,120,090	455,351	0.407	0.014
Binh Phuoc	764,606	131,119	0.171	0.009
Tay Ninh	1,017,095	173,655	0.171	0.013
Binh Duong	851,093	260,705	0.306	0.011
Dong Nai	2,142,691	681,920	0.318	0.026
Ba Ria - Vung Tau	884,845	393,225	0.444	0.011
Ho Chi Minh City	5,554,798	4,992,601	0.899	0.069
Long An	1,392,293	235,732	0.169	0.017
Tien Giang	1,664,838	248,725	0.149	0.021
Ben Tre	1,337,872	130,465	0.098	0.017
Tra Vinh	1,002,673	140,836	0.140	0.012
Vinh Long	1,036,077	154,538	0.149	0.013
Dong Thap	1,626,024	246,022	0.151	0.020
An Giang	2,146,756	524,026	0.244	0.027
Kien Giang	1,606,599	375,513	0.234	0.020
Can Tho	1,114,259	558,989	0.502	0.014
Hau Giang	767,422	117,141	0.153	0.009
Soc Trang	1,242,018	231,864	0.187	0.015
Bac Lieu	775,890	202,612	0.261	0.010
Ca Mau	1,181,228	226,251	0.192	0.015
Total	80,920,315	21,270,619	0.263	1.000

Source: Statistical Yearbook, Vietnam 2003

Table A.10 Population distribution according to the 1999 population census

Province name	Population		Percentage	
	Total	Urban	Urban	Province
Ha Noi	2,675,166	1,523,936	0.570	0.035
Ha Giang	602,525	63,750	0.106	0.008
Cao Bang	490,335	66,361	0.135	0.006
Bac Kan	275,165	38,920	0.141	0.004
Tuyen Quang	676,174	61,501	0.091	0.009
Lao Cai	514,128	91,124	0.177	0.007
Dien Bien	388,681	57,187	0.147	0.005
Lai Chau	279,137	22,238	0.080	0.004
Son La	882,077	97,942	0.111	0.012
Yen Bai	679,068	132,450	0.195	0.009
Hoa Binh	756,713	101,429	0.134	0.010
Thai Nguyen	1,045,906	228,078	0.218	0.014
Lang Son	703,824	129,431	0.184	0.009
Quang Ninh	1,004,839	459,601	0.457	0.013
Bac Giang	1,492,899	121,427	0.081	0.020
Phu Tho	1,261,559	177,119	0.140	0.017
Vinh Phuc	1,092,040	113,982	0.104	0.014
Bac Ninh	942,106	86,961	0.092	0.012
Ha Tay	2,378,438	184,635	0.078	0.031
Hai Duong	1,650,624	225,516	0.137	0.022
Hai Phong	1,672,425	569,771	0.341	0.022
Hung Yen	1,069,158	99,901	0.093	0.014
Thai Binh	1,786,382	100,328	0.056	0.023
Ha Nam	793,103	47,200	0.060	0.010
Nam Dinh	1,890,240	231,869	0.123	0.025
Ninh Binh	884,155	112,268	0.127	0.012
Thanh Hoa	3,467,307	314,726	0.091	0.045
Nghe An	2,858,748	288,263	0.101	0.037
Ha Tinh	1,268,968	118,719	0.094	0.017
Quang Binh	794,880	99,497	0.125	0.010
Quang Tri	572,921	133,978	0.234	0.008
Thua Thien – Hue	1,044,875	306,112	0.293	0.014
Da Nang	684,846	543,637	0.794	0.009
Quang Nam	1,373,687	203,298	0.148	0.018
Quang Ngai	1,190,144	136,290	0.115	0.016
Binh Dinh	1,460,727	348,294	0.238	0.019
Phu Yen	787,282	147,227	0.187	0.010
Khanh Hoa	1,031,395	375,995	0.365	0.014
Ninh Thuan	504,997	118,826	0.235	0.007
Binh Thuan	1,046,320	318,113	0.304	0.014
Kon Tum	314,216	100,039	0.318	0.004
Gia Lai	966,950	243,816	0.252	0.013
Dak Lak	1,484,907	333,373	0.225	0.019
Dak Nong	295,828	41,123	0.139	0.004
Lam Dong	998,027	385,447	0.386	0.013
Binh Phuoc	653,926	101,020	0.154	0.009
Tay Ninh	967,097	131,623	0.136	0.013
Binh Duong	716,661	217,126	0.303	0.009
Dong Nai	1,990,678	602,704	0.303	0.026
Ba Ria - Vung Tau	796,186	332,723	0.418	0.010
Ho Chi Minh City	5,034,058	4,207,825	0.836	0.066
Long An	1,305,687	212,006	0.162	0.017
Tien Giang	1,604,165	209,321	0.130	0.021
Ben Tre	1,298,959	108,342	0.083	0.017
Tra Vinh	966,949	123,709	0.128	0.013
Vinh Long	1,010,521	143,705	0.142	0.013
Dong Thap	1,566,571	224,792	0.143	0.021
An Giang	2,044,376	441,389	0.216	0.027
Kien Giang	1,497,639	329,432	0.220	0.020
Can Tho	963,447	308,391	0.320	0.013
Hau Giang	845,997	84,317	0.100	0.011
Soc Trang	1,172,404	20,9005	0.178	0.015
Bac Lieu	735,130	17,9740	0.245	0.010
Ca Mau	1,118,830	20,7955	0.186	0.015
Total	76,323,455	18,076,823	0.237	1.000

Source: Population and Housing Census, Vietnam 1999

Table A.11 Sample implementation

Percent distribution of households, eligible women and eligible men by results of the household and individual interviews, and household, eligible women, eligible men and overall response rates, according to urban-rural residence and region, Vietnam AIS 2005 (unweighted)

Result of interview and response rate	Residence		Region			Targeted provinces				Total
	Urban	Rural	North	Central	South	Ha Noi	Ho Chi Minh City	Hai Phong	Quang Ninh	
Result of interview										
Completed (C)	98.0	98.4	99.9	98.1	95.6	100.0	93.5	99.8	99.6	98.3
Household present but no competent respondent at home (HP)	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Refused (R)	0.2	0.1	0.1	0.2	0.2	0.0	0.4	0.2	0.0	0.1
Dwelling not found (DNF)	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Household absent (HA)	0.8	0.9	0.0	0.6	2.6	0.0	2.4	0.0	0.2	0.9
Dwelling vacant/address not a dwelling (DV)	0.4	0.2	0.0	0.3	0.7	0.0	1.4	0.0	0.2	0.3
Dwelling destroyed (DD)	0.0	0.1	0.0	0.1	0.2	0.0	0.2	0.0	0.0	0.1
Other (O)	0.5	0.2	0.0	0.7	0.7	0.0	2.0	0.0	0.0	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of sampled households	2,134	4,312	3,312	1,322	1,812	526	496	890	544	6,446
Household response rate (HRR) ¹	99.8	99.9	99.9	99.8	99.8	100.0	99.6	99.8	100.0	99.9
Eligible women										
Completed (EWC)	98.6	99.1	98.8	99.6	98.7	99.3	98.3	97.2	99.8	98.9
Not at home (EWNH)	0.4	0.4	0.6	0.1	0.3	0.0	0.3	1.7	0.0	0.4
Refused (EWR)	0.5	0.0	0.2	0.0	0.3	0.2	0.8	0.5	0.0	0.2
Incapacitated (EWI)	0.5	0.5	0.4	0.3	0.7	0.5	0.6	0.6	0.2	0.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	2,554	4,815	3,787	1,396	2,186	585	646	999	596	7,369
Eligible women response rate (EWRR) ²	98.6	99.1	98.8	99.6	98.7	99.3	98.3	97.2	99.8	98.9
Overall response rate (OWRR) ³	98.4	99.0	98.7	99.3	98.5	99.3	97.9	97.0	99.8	98.8
Eligible men										
Completed (EMC)	98.6	98.9	98.5	99.4	98.9	98.9	98.8	96.9	100.0	98.8
Not at home (EMNH)	0.3	0.5	0.7	0.1	0.1	0.2	0.0	1.7	0.0	0.4
Refused (EMR)	0.4	0.2	0.4	0.0	0.2	0.2	0.3	1.2	0.0	0.3
Partly completed (EMPC)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incapacitated (EMI)	0.6	0.5	0.4	0.5	0.7	0.7	0.7	0.2	0.0	0.5
Other (EMO)	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of men	2,210	4,578	3,375	1,357	2,056	544	574	846	558	6,788
Eligible men response rate (EMRR) ⁴	98.6	98.9	98.5	99.4	98.9	98.9	98.8	96.9	100.0	98.8
Overall response rate (OMRR) ⁵	98.5	98.8	98.4	99.2	98.7	98.9	98.4	96.7	100.0	98.7

¹ Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$\frac{100 \times C}{C + HP + R + DNF}$$

² Using the number of eligible women falling into specific response categories, the eligible woman response rate (EWRR) is calculated as:

$$\frac{100 \times EWC}{EWC + EWNH + EWR + EWI}$$

³ The overall response rate for women (OWRR) is calculated as:

$$OWRR = HRR \times EWRR / 100$$

⁴ Using the number of eligible men falling into specific response categories, the eligible man response rate (EMRR) is calculated as:

$$\frac{100 \times EMC}{EMC + EMNH + EMR + EMPC + EMI + EMO}$$

⁵ The overall response rate for men (OMRR) is calculated as:

$$OMRR = HRR \times EMRR / 100$$

Table A.12 Coverage of HIV testing among eligible respondents by socio-demographic characteristics: women

Percent distribution of women age 15-49 by HIV testing status, according to socio-demographic characteristics, Hai Phong Vietnam 2005 (unweighted)

Sociodemographic characteristic	Testing status			Total	Number
	Tested	Refused	Other/missing		
Marital status					
Never married	93.5	6.5	0.0	100.0	291
Ever had sex	100.0	0.0	0.0	100.0	1
Never had sex	93.4	6.6	0.0	100.0	290
Married/living together	96.1	3.3	0.6	100.0	635
Divorced, separated, widowed	91.1	8.9	0.0	100.0	45
Ever had sexual intercourse					
Yes	95.7	3.7	0.6	100.0	681
No	93.4	6.6	0.0	100.0	290
Currently pregnant					
Pregnant	90.3	6.5	3.2	100.0	31
Not pregnant or not sure	95.2	4.5	0.3	100.0	940
Times slept away from home in past 12 months					
None	94.8	4.7	0.5	100.0	762
1-2	96.1	3.9	0.0	100.0	154
3+	96.2	3.8	0.0	100.0	53
Missing	100.0	0.0	0.0	100.0	2
Time away in past 12 months					
Away for more than one month	94.3	5.7	0.0	100.0	35
Away for less than 1 month	96.5	3.5	0.0	100.0	171
Not away	94.8	4.7	0.5	100.0	763
Missing	100.0	0.0	0.0	100.0	2
Total	95.1	4.5	0.4	100.0	971

Table A.13 Coverage of HIV testing among eligible respondents by socio-demographic characteristics: men

Percent distribution of men age 15-49 by testing status, according to sociodemographic characteristics, Hai Phong Vietnam 2005 (unweighted)

Sociodemographic characteristic	Testing status			Total	Number
	Tested	Refused	Other/missing		
Marital status					
Never married	89.3	9.7	1.0	100.0	299
Ever had sex	87.2	12.8	0.0	100.0	39
Never had sex	89.6	9.2	1.2	100.0	260
Married/living together	93.3	5.9	0.8	100.0	511
Divorced, separated, widowed	80.0	20.0	0.0	100.0	10
Ever had sexual intercourse					
Yes	92.7	6.6	0.7	100.0	560
No	89.6	9.2	1.2	100.0	260
Times slept away from home in past 12 months					
None	92.1	7.0	1.0	100.0	629
1-2	91.4	7.6	1.0	100.0	105
3+	90.1	9.9	0.0	100.0	71
Missing	86.7	13.3	0.0	100.0	15
Time away in past 12 months					
Away for more than one month	92.9	7.1	0.0	100.0	56
Away for less than 1 month	90.2	9.0	0.8	100.0	122
Not away	91.9	7.2	0.9	100.0	640
Missing	100.0	0.0	0.0	100.0	2
Total	91.7	7.4	0.9	100.0	820

Table A.14 Coverage of HIV testing by sexual behavior characteristics: women

Percent distribution of women age 15-49 who ever had sex by testing status, according to sexual behavior characteristics, Hai Phong Vietnam 2005 (unweighted)

Sexual behavior characteristic	Testing status			Total	Number
	Tested	Refused	Other/ missing		
Age at first sexual intercourse					
<16	100.0	0.0	0.0	100.0	5
16-17	100.0	0.0	0.0	100.0	52
18-19	97.1	2.9	0.0	100.0	138
20+	94.8	4.4	0.8	100.0	482
Missing	100.0	0.0	0.0	100.0	4
Higher-risk intercourse in past 12 months					
Had sexual intercourse, not higher risk	95.8	3.5	0.6	100.0	620
No sexual intercourse in past 12 months	95.1	4.9	0.0	100.0	61
Number of sexual partners in past 12 months					
0	95.1	4.9	0.0	100.0	61
1	95.8	3.5	0.6	100.0	620
Number of higher-risk partners in past 12 months					
0	95.7	3.7	0.6	100.0	681
Condom use at last sexual intercourse in past 12 months					
Used condom	96.1	2.6	1.3	100.0	76
Did not use condom	95.8	3.7	0.6	100.0	544
Number of lifetime partners					
1	95.7	3.7	0.6	100.0	670
2	100.0	0.0	0.0	100.0	10
3-4	100.0	0.0	0.0	100.0	1
Prior HIV testing status					
Ever tested, total	91.3	7.8	1.0	100.0	103
Never tested	96.5	2.9	0.5	100.0	578
Total	95.7	3.7	0.6	100.0	681

Table A.15 Coverage of HIV testing by sexual behavior characteristics: men

Percent distribution of men age 15-49 who ever had sex by testing status, according to sexual behavior characteristics, Hai Phong Vietnam 2005 (unweighted)

Sexual behavior characteristic	Testing status			Total	Number
	Tested	Refused	Other/ missing		
Age at first sexual intercourse					
<16	100.0	0.0	0.0	100.0	2
16-17	87.5	12.5	0.0	100.0	8
18-19	93.8	6.3	0.0	100.0	64
20+	92.6	6.6	0.8	100.0	486
Higher-risk intercourse in past 12 months					
Had higher-risk intercourse	87.2	12.8	0.0	100.0	39
Had sexual intercourse, not higher risk	93.4	5.8	0.8	100.0	497
No sexual intercourse in past 12 months	87.5	12.5	0.0	100.0	24
Number of sexual partners in past 12 months					
0	87.5	12.5	0.0	100.0	24
1	92.9	6.3	0.8	100.0	524
2	90.9	9.1	0.0	100.0	11
3+	100.0	0.0	0.0	100.0	1
Number of higher-risk partners in past 12 months					
0	93.1	6.1	0.8	100.0	521
1	88.2	11.8	0.0	100.0	34
2	80.0	20.0	0.0	100.0	5
Condom use at last sexual intercourse in past 12 months					
Used condom	91.3	7.8	0.9	100.0	115
Did not use condom	93.3	5.9	0.7	100.0	421
Number of lifetime partners					
1	93.1	5.9	1.0	100.0	393
2	96.6	3.4	0.0	100.0	87
3-4	84.0	16.0	0.0	100.0	50
5+	89.7	10.3	0.0	100.0	29
Missing	100.0	0.0	0.0	100.0	1
Prior HIV testing status					
Ever tested, total	89.4	10.6	0.0	100.0	94
Never tested	93.3	5.8	0.9	100.0	466
Total	92.7	6.6	0.7	100.0	560

The estimates from a sample survey are affected by two types of errors: (1) nonsampling errors, and (2) sampling errors. Nonsampling errors are the results of mistakes made in implementing data collection and data processing, such as failure to locate and interview the correct household, misunderstanding of the questions on the part of either the interviewer or the respondent, and data entry errors. Although numerous efforts were made during the implementation of the 2005 Vietnam Population and AIDS Indicator Survey (VPAIS) to minimize this type of error, nonsampling errors are impossible to avoid and difficult to evaluate statistically.

Sampling errors, on the other hand, can be evaluated statistically. The sample of respondents selected in the 2005 VPAIS is only one of many samples that could have been selected from the same population, using the same design and expected size. Each of these samples would yield results that differ somewhat from the results of the actual sample selected. Sampling errors are a measure of the variability between all possible samples. Although the degree of variability is not known exactly, it can be estimated from the survey results.

A sampling error is usually measured in terms of the *standard error* for a particular statistic (mean, percentage, etc.), which is the square root of the variance. The standard error can be used to calculate confidence intervals within which the true value for the population can reasonably be assumed to fall. For example, for any given statistic calculated from a sample survey, the value of that statistic will fall within a range of plus or minus two times the standard error of that statistic in 95 percent of all possible samples of identical size and design.

If the sample of respondents had been selected as a simple random sample, it would have been possible to use straightforward formulas for calculating sampling errors. However, the 2005 VPAIS sample is the result of a multi-stage stratified design and, consequently, it was necessary to use more complex formulae. The computer software used to calculate sampling errors for the 2005 VPAIS is the ISSA Sampling Error Module. This module used the Taylor linearization method of variance estimation for survey estimates that are means or proportions.

The Taylor linearization method treats any percentage or average as a ratio estimate, $r = y/x$, where y represents the total sample value for variable y , and x represents the total number of cases in the group or subgroup under consideration. The variance of r is computed using the formula given below, with the standard error being the square root of the variance:

$$SE^2(r) = var(r) = \frac{1-f}{x^2} \sum_{h=1}^H \left[\frac{m_h}{m_h - 1} \left(\frac{\sum_{i=1}^{m_h} z_{hi}^2}{m_h} - \frac{z_h^2}{m_h} \right) \right]$$

in which

$$z_{hi} = y_{hi} - rx_{hi} , \text{ and } z_h = y_h - rx_h$$

where h represents the stratum which varies from 1 to H ,
 m_h is the total number of clusters selected in the h^{th} stratum,
 y_{hi} is the sum of the weighted values of variable y in the i^{th} cluster in the h^{th} stratum,
 x_{hi} is the sum of the weighted number of cases in the i^{th} cluster in the h^{th} stratum, and
 f is the overall sampling fraction, which is so small that it is ignored.

In addition to the standard error, ISSA computes the design effect (DEFT) for each estimate, which is defined as the ratio between the standard error using the given sample design and the standard error that would result if a simple random sample had been used. A DEFT value of 1.0 indicates that the sample design is as efficient as a simple random sample, while a value greater than 1.0 indicates the increase in the sampling error due to the use of a more complex and less statistically efficient design. ISSA also computes the relative error and confidence limits for the estimates.

Sampling errors for the 2005 VPAIS are calculated for selected variables considered to be of primary interest for the women's survey and for men's surveys, respectively. The results are presented in this appendix for the country as a whole, for urban and rural areas, for 3 geographical regions and for 4 individual provinces. For each variable, the type of statistic (mean, proportion, or rate) and the base population are given in Table B.1. Tables B.2 to B.11 present the value of the statistic (R), its standard error (SE), the number of unweighted (N) and weighted (WN) cases, the design effect (DEFT), the relative standard error (SE/R), and the 95 percent confidence limits ($R \pm 2SE$), for each variable. The DEFT is considered undefined when the standard error considering simple random sample is zero (when the estimate is close to 0 or 1).

The confidence interval (e.g., as calculated for *accepting attitudes towards people with HIV*) can be interpreted as follows: the overall proportion from the national sample for women 15-49 who answered that they would like to care and help for a relative sick with HIV is 0.230 and its standard error is 0.009. Therefore, to obtain the 95 percent confidence limits, one adds and subtracts twice the standard error to the sample estimate, i.e., $0.230 \pm 2 \times 0.009$. There is a high probability (95 percent) that the *true* proportion of women who had used a condom at last high-risk sex is between 0.212 and 0.248.

Sampling errors are analyzed for the national women's sample. The relative standard errors (SE/R) at the national level range between 0.1 percent and 80.3 percent, with an average value of 11.8 percent. The highest relative standard errors are for estimates of very low values (e.g., *had higher-risk sex with non-marital non-cohabiting partners in past 12 months*). If estimates of very low values (less than 10 percent) were removed, then the average drops to 3 percent. So in general, the relative standard error for most estimates for the country as a whole is small, except for estimates of very small proportions.

For the total sample, the value of the design effect (DEFT), averaged over all variables, is 1.73 which means that, due to multi-stage clustering of the sample, the average standard error is increased by a factor of 1.73 over that in an equivalent simple random sample.

Table B.1 List of selected variables for sampling errors, Vietnam 2005

Variable	Estimate	Base population
Urban residence	Proportion	All women/men 15-49
No education	Proportion	All women/men 15-49
Secondary education	Proportion	All women/men 15-49
Higher education	Proportion	All women/men 15-49
Never married (in union)	Proportion	All women/men 15-49
Currently married (in union)	Proportion	All women/men 15-49
Comprehensive knowledge ¹ on HIV transmission-all	Proportion	Women/men 15-49
Comprehensive knowledge ¹ on HIV transmission-youth	Proportion	Women/men 15-24
Had sex before age 18	Proportion	All women/men 18-24
Had higher risk sex (with a non-marital, non-cohabiting partner) in the last 12 months	Proportion	Women/men 15-49 who had sex in the last 12 months
Abstinence among youth (never had sex)	Proportion	Never-married women/men 15-24
Sexual activity in last 12 months among never-married youth	Proportion	Never-married women/men 15-24
Had sex with a prostitute in last 12 months	Proportion	All men 15-49
Condom use at last sex with a prostitute	Proportion	All men 15-49 who had sex with a prostitute in the last 12 months
Had medical injections in last 12 months	Proportion	All women/men 15-49
Had HIV test in last 12 months and received results last time	Proportion	All women/men 15-49
Accepting attitudes ² towards people with HIV	Proportion	All women/men 15-49 who have heard of HIV/AIDS
HIV prevalence ³	Proportion	All women/men 15-49 who were tested for HIV

¹ Percentage who say that people can reduce the risk of getting the AIDS virus by using a condom every time they have sex and by having sex with just one partner who is not infected and who has no other partners, and who say that people cannot get the AIDS virus from mosquito bites or from sharing food with a person who has AIDS, and who say that a healthy-looking person can have the AIDS virus.

² Percentage who say they would be willing to care for a relative sick with AIDS in their own households and would be willing to buy fresh vegetables from a vendor who had the AIDS virus and they think that a female teacher who has the AIDS virus but is not sick should be allowed to continue teaching, and that if a member of their family got infected with the virus that causes AIDS, they would not want it to remain secret.

³ HIV tests for interviewed women and men were conducted only in Hai Phong province.

Table B.2 Sampling errors for National sample, Vietnam 2005

Variable	Value (R)	Stand- ard error (SE)	Number of cases		Design effect (DEFT)	Rela- tive error (SE/R)	Confidence limits	
			Un- weighted (N)	Weight- ed (WN)			R-2SE	R+2SE
WOMEN								
Urban residence	0.216	0.010	7289	7289	2.040	0.046	0.196	0.236
No education	0.056	0.006	7289	7289	2.341	0.113	0.043	0.068
Secondary education	0.633	0.013	7289	7289	2.238	0.020	0.607	0.658
Higher education	0.096	0.006	7289	7289	1.864	0.067	0.083	0.108
Never married (in union)	0.305	0.010	7289	7289	1.827	0.032	0.285	0.325
Currently married (in union)	0.652	0.010	7289	7289	1.790	0.015	0.632	0.672
Comprehensive knowledge on HIV transmission-all	0.387	0.012	7289	7289	2.081	0.031	0.363	0.411
Comprehensive knowledge on HIV transmission-youth	0.423	0.014	2478	2471	1.427	0.034	0.394	0.451
Had first sex before age 18	0.098	0.010	1615	1597	1.401	0.106	0.077	0.119
Had higher risk sex with non-marital/non-cohabiting partners	0.004	0.001	4668	4721	1.359	0.327	0.001	0.006
Abstinence among youth (never had sex)	0.998	0.001	1862	1851	1.414	0.001	0.995	1.000
Sexual activity in past 12 months among never-married youth	0.002	0.001	1862	1851	1.477	0.803	0.000	0.005
Had medical injections in last 12 months	0.255	0.009	7289	7289	1.666	0.033	0.238	0.272
Had HIV test in past 12 months and received results last time	0.020	0.002	7289	7289	1.215	0.099	0.016	0.024
Accepting attitudes towards people with HIV	0.230	0.009	6730	6743	1.765	0.039	0.212	0.248
MEN								
Urban residence	0.205	0.010	6707	6707	2.012	0.048	0.186	0.225
No education	0.035	0.004	6707	6707	1.699	0.109	0.027	0.042
Secondary education	0.686	0.012	6707	6707	2.070	0.017	0.662	0.709
Higher education	0.098	0.008	6707	6707	2.116	0.078	0.083	0.114
Never married (in union)	0.390	0.009	6707	6707	1.550	0.024	0.372	0.409
Currently married (in union)	0.600	0.009	6707	6707	1.562	0.016	0.581	0.619
Comprehensive knowledge on HIV transmission-all	0.509	0.012	6707	6707	1.984	0.024	0.485	0.533
Comprehensive knowledge on HIV transmission-youth	0.503	0.014	2374	2406	1.377	0.028	0.474	0.531
Had first sex before age 18	0.032	0.006	1422	1359	1.297	0.188	0.020	0.045
Had higher risk sex with non-marital/non-cohabiting partners	0.037	0.004	4186	4128	1.208	0.095	0.030	0.044
Abstinence among youth (never had sex)	0.962	0.006	2122	2164	1.332	0.006	0.951	0.973
Sexual activity in past 12 months among never-married youth	0.027	0.004	2122	2164	1.182	0.153	0.019	0.036
Had medical injections in last 12 months	0.185	0.008	6707	6707	1.736	0.044	0.169	0.202
Had HIV test in past 12 months and received results last time	0.026	0.003	6707	6707	1.330	0.100	0.021	0.031
Accepting attitudes towards people with HIV	0.283	0.010	6348	6368	1.816	0.036	0.263	0.304
HIV PREVALENCE , TOTAL SAMPLE, HAI PHONG								
HIV prevalence (women 15-49)	0.002	0.002	923	921	1.001	0.716	0.000	0.005
HIV prevalence (men 15-49)	0.009	0.004	752	754	1.110	0.426	0.001	0.017
HIV prevalence (women and men 15-49)	0.005	0.002	1675	1675	1.358	0.460	0.000	0.010
HIV PREVALENCE , URBAN SAMPLE, HAI PHONG								
HIV prevalence (women 15-49)	0.003	0.003	352	332	0.980	1.105	0.000	0.008
HIV prevalence (men 15-49)	0.020	0.011	251	237	1.173	0.534	0.000	0.041
HIV prevalence (women and men 15-49)	0.010	0.006	603	569	1.407	0.589	0.000	0.021
HIV PREVALENCE , RURAL SAMPLE, HAI PHONG								
HIV prevalence (women 15-49)	0.002	0.002	571	589	1.022	1.008	0.000	0.005
HIV prevalence (men 15-49)	0.004	0.003	501	517	1.010	0.703	0.000	0.010
HIV prevalence (women and men 15-49)	0.003	0.002	1072	1106	1.312	0.746	0.000	0.007

Table B.3 Sampling errors for Urban sample, Vietnam 2005

Variable	Value (R)	Stand- ard error (SE)	Number of cases		Design effect (DEFT)	Rela- tive error (SE/R)	Confidence limits	
			Un- weighted (N)	Weight- ed (WN)			R-2SE	R+2SE
WOMEN								
Urban residence	1.000	0.000	2517	1575	na	0.000	1.000	1.000
No education	0.013	0.005	2517	1575	2.028	0.351	0.004	0.022
Secondary education	0.638	0.014	2517	1575	1.498	0.023	0.609	0.667
Higher education	0.219	0.015	2517	1575	1.777	0.067	0.190	0.248
Never married (in union)	0.371	0.017	2517	1575	1.739	0.045	0.338	0.405
Currently married (in union)	0.576	0.016	2517	1575	1.622	0.028	0.544	0.608
Comprehensive knowledge on HIV transmission-all	0.513	0.019	2517	1575	1.931	0.038	0.474	0.551
Comprehensive knowledge on HIV transmission-youth	0.519	0.027	840	531	1.556	0.052	0.466	0.573
Had first sex before age 18	0.037	0.011	575	368	1.371	0.291	0.015	0.059
Had higher risk sex with non-marital/non-cohabiting partners	0.004	0.002	1452	901	0.962	0.420	0.001	0.007
Abstinence among youth (never had sex)	0.998	0.002	719	458	0.946	0.002	0.994	1.000
Sexual activity in past 12 months among never-married youth	0.002	0.002	719	458	1.036	0.963	0.000	0.005
Had medical injections in last 12 months	0.225	0.011	2517	1575	1.296	0.048	0.203	0.247
Had HIV test in past 12 months and received results last time	0.044	0.006	2517	1575	1.437	0.133	0.033	0.056
Accepting attitudes towards people with HIV	0.263	0.013	2472	1537	1.432	0.048	0.238	0.288
MEN								
Urban residence	1.000	0.000	2180	1378	na	0.000	1.000	1.000
No education	0.013	0.004	2180	1378	1.565	0.293	0.005	0.020
Secondary education	0.663	0.016	2180	1378	1.605	0.025	0.630	0.695
Higher education	0.219	0.018	2180	1378	2.037	0.082	0.183	0.255
Never married (in union)	0.427	0.014	2180	1378	1.333	0.033	0.399	0.455
Currently married (in union)	0.560	0.014	2180	1378	1.331	0.025	0.532	0.588
Comprehensive knowledge on HIV transmission-all	0.657	0.018	2180	1378	1.766	0.027	0.621	0.693
Comprehensive knowledge on HIV transmission-youth	0.628	0.028	708	459	1.513	0.044	0.573	0.683
Had first sex before age 18	0.010	0.005	465	288	1.150	0.520	0.000	0.021
Had higher risk sex with non-marital/non-cohabiting partners	0.078	0.008	1331	822	1.041	0.098	0.063	0.093
Abstinence among youth (never had sex)	0.941	0.011	672	438	1.181	0.011	0.920	0.963
Sexual activity in past 12 months among never-married youth	0.044	0.008	672	438	1.017	0.182	0.028	0.061
Had medical injections in last 12 months	0.179	0.013	2180	1378	1.621	0.074	0.152	0.205
Had HIV test in past 12 months and received results last time	0.045	0.005	2180	1378	1.098	0.109	0.035	0.054
Accepting attitudes towards people with HIV	0.331	0.015	2164	1362	1.457	0.045	0.301	0.360

na = Not applicable

Table B.4 Sampling errors for Rural sample, Vietnam 2005

Variable	Value (R)	Stand- ard error (SE)	Number of cases		Design effect (DEFT)	Rela- tive error (SE/R)	Confidence limits	
			Un- weighted (N)	Weight- ed (WN)			R-2SE	R+2SE
WOMEN								
Urban residence	0.000	0.000	4772	5714	na	na	0.000	0.000
No education	0.068	0.008	4772	5714	2.166	0.116	0.052	0.083
Secondary education	0.631	0.016	4772	5714	2.237	0.025	0.600	0.663
Higher education	0.061	0.007	4772	5714	1.940	0.110	0.048	0.075
Never married (in union)	0.287	0.012	4772	5714	1.771	0.040	0.264	0.310
Currently married (in union)	0.673	0.012	4772	5714	1.748	0.018	0.649	0.696
Comprehensive knowledge on HIV transmission-all	0.353	0.014	4772	5714	2.001	0.039	0.325	0.380
Comprehensive knowledge on HIV transmission-youth	0.396	0.016	1638	1940	1.347	0.041	0.363	0.429
Had first sex before age 18	0.116	0.013	1040	1230	1.279	0.109	0.091	0.142
Had higher risk sex with non-marital/non-cohabiting partners	0.004	0.001	3216	3820	1.350	0.390	0.001	0.007
Abstinence among youth (never had sex)	0.998	0.002	1143	1393	1.457	0.002	0.994	1.000
Sexual activity in past 12 months among never-married youth	0.002	0.002	1143	1393	1.457	0.993	0.000	0.006
Had medical injections in last 12 months	0.263	0.010	4772	5714	1.621	0.039	0.242	0.284
Had HIV test in past 12 months and received results last time	0.014	0.002	4772	5714	1.262	0.155	0.010	0.018
Accepting attitudes towards people with HIV	0.221	0.011	4258	5206	1.744	0.050	0.198	0.243
MEN								
Urban residence	0.000	0.000	4527	5329	na	na	0.000	0.000
No education	0.041	0.005	4527	5329	1.599	0.116	0.031	0.050
Secondary education	0.692	0.014	4527	5329	2.061	0.020	0.663	0.720
Higher education	0.067	0.008	4527	5329	2.161	0.120	0.051	0.083
Never married (in union)	0.381	0.011	4527	5329	1.538	0.029	0.359	0.403
Currently married (in union)	0.610	0.011	4527	5329	1.553	0.018	0.588	0.633
Comprehensive knowledge on HIV transmission-all	0.471	0.015	4527	5329	1.963	0.031	0.442	0.500
Comprehensive knowledge on HIV transmission-youth	0.473	0.016	1666	1947	1.320	0.034	0.441	0.505
Had first sex before age 18	0.038	0.008	957	1071	1.224	0.198	0.023	0.054
Had higher risk sex with non-marital/non-cohabiting partners	0.027	0.004	2855	3306	1.296	0.145	0.019	0.035
Abstinence among youth (never had sex)	0.967	0.006	1450	1726	1.356	0.007	0.955	0.980
Sexual activity in past 12 months among never-married youth	0.023	0.005	1450	1726	1.223	0.209	0.013	0.033
Had medical injections in last 12 months	0.187	0.010	4527	5329	1.686	0.052	0.167	0.206
Had HIV test in past 12 months and received results last time	0.021	0.003	4527	5329	1.415	0.144	0.015	0.027
Accepting attitudes towards people with HIV	0.270	0.012	4184	5006	1.812	0.046	0.245	0.295

na = Not applicable

Table B.5 Sampling errors for North sample, Vietnam 2005

Variable	Value (R)	Stand- ard error (SE)	Number of cases		Design effect (DEFT)	Rela- tive error (SE/R)	Confidence limits	
			Un- weighted (N)	Weight- ed (WN)			R-2SE	R+2SE
WOMEN								
Urban residence	0.164	0.010	3741	2802	1.575	0.058	0.145	0.183
No education	0.071	0.011	3741	2802	2.620	0.155	0.049	0.093
Secondary education	0.682	0.021	3741	2802	2.738	0.031	0.640	0.724
Higher education	0.105	0.010	3741	2802	2.031	0.097	0.085	0.126
Never married (in union)	0.278	0.015	3741	2802	2.018	0.053	0.249	0.308
Currently married (in union)	0.684	0.016	3741	2802	2.084	0.023	0.652	0.715
Comprehensive knowledge on HIV transmission-all	0.442	0.011	3741	2802	1.395	0.026	0.419	0.465
Comprehensive knowledge on HIV transmission-youth	0.510	0.017	1258	936	1.198	0.033	0.476	0.544
Had first sex before age 18	0.111	0.018	798	576	1.593	0.160	0.076	0.146
Had higher risk sex with non-marital/non-cohabiting partners	0.003	0.001	2488	1909	1.232	0.436	0.000	0.006
Abstinence among youth (never had sex)	0.999	0.001	927	671	0.722	0.001	0.998	1.000
Sexual activity in past 12 months among never-married youth	0.000	0.000	927	671	na	na	0.000	0.000
Had medical injections in last 12 months	0.242	0.014	3741	2802	1.988	0.057	0.215	0.270
Had HIV test in past 12 months and received results last time	0.025	0.004	3741	2802	1.391	0.141	0.018	0.033
Accepting attitudes towards people with HIV	0.294	0.011	3465	2566	1.383	0.036	0.272	0.315
MEN								
Urban residence	0.159	0.012	3324	2455	1.816	0.073	0.136	0.182
No education	0.038	0.005	3324	2455	1.638	0.143	0.027	0.049
Secondary education	0.726	0.015	3324	2455	1.891	0.020	0.697	0.756
Higher education	0.111	0.011	3324	2455	2.004	0.099	0.089	0.132
Never married (in union)	0.348	0.016	3324	2455	1.977	0.047	0.315	0.380
Currently married (in union)	0.648	0.016	3324	2455	1.966	0.025	0.616	0.681
Comprehensive knowledge on HIV transmission-all	0.493	0.016	3324	2455	1.808	0.032	0.462	0.525
Comprehensive knowledge on HIV transmission-youth	0.516	0.020	1142	874	1.363	0.039	0.475	0.556
Had first sex before age 18	0.049	0.014	699	492	1.654	0.274	0.022	0.077
Had higher risk sex with non-marital/non-cohabiting partners	0.031	0.005	2197	1622	1.439	0.172	0.020	0.042
Abstinence among youth (never had sex)	0.971	0.007	989	745	1.246	0.007	0.958	0.984
Sexual activity in past 12 months among never-married youth	0.023	0.006	989	745	1.162	0.242	0.012	0.034
Had medical injections in last 12 months	0.161	0.010	3324	2455	1.609	0.064	0.140	0.181
Had HIV test in past 12 months and received results last time	0.042	0.004	3324	2455	1.098	0.091	0.034	0.050
Accepting attitudes towards people with HIV	0.372	0.017	3140	2297	1.998	0.046	0.337	0.406

na = Not applicable

Table B.6 Sampling errors for Central sample, Vietnam 2005

Variable	Value (R)	Stand- ard error (SE)	Number of cases		Design effect (DEFT)	Rela- tive error (SE/R)	Confidence limits	
			Un- weighted (N)	Weight- ed (WN)			R-2SE	R+2SE
WOMEN								
Urban residence	0.191	0.023	1390	1808	2.223	0.123	0.144	0.238
No education	0.038	0.013	1390	1808	2.629	0.355	0.011	0.065
Secondary education	0.679	0.028	1390	1808	2.204	0.041	0.624	0.735
Higher education	0.112	0.014	1390	1808	1.624	0.123	0.085	0.140
Never married (in union)	0.304	0.019	1390	1808	1.563	0.063	0.266	0.343
Currently married (in union)	0.648	0.021	1390	1808	1.630	0.032	0.606	0.690
Comprehensive knowledge on HIV transmission-all	0.404	0.034	1390	1808	2.567	0.084	0.337	0.472
Comprehensive knowledge on HIV transmission-youth	0.368	0.027	478	626	1.205	0.072	0.315	0.422
Had first sex before age 18	0.096	0.022	317	416	1.329	0.229	0.052	0.141
Had higher risk sex with non-marital/non- cohabiting partners	0.007	0.004	886	1159	1.331	0.550	0.000	0.014
Abstinence among youth (never had sex)	1.000	0.000	357	475	na	0.000	1.000	1.000
Sexual activity in past 12 months among never-married youth	0.000	0.000	357	475	na	na	0.000	0.000
Had medical injections in last 12 months	0.241	0.017	1390	1808	1.477	0.070	0.207	0.275
Had HIV test in past 12 months and received results last time	0.013	0.004	1390	1808	1.249	0.292	0.005	0.021
Accepting attitudes towards people with HIV	0.315	0.028	1220	1654	2.075	0.088	0.259	0.370
MEN								
Urban residence	0.180	0.025	1349	1735	2.377	0.138	0.130	0.229
No education	0.032	0.009	1349	1735	1.957	0.293	0.013	0.051
Secondary education	0.763	0.024	1349	1735	2.080	0.032	0.715	0.812
Higher education	0.075	0.008	1349	1735	1.168	0.111	0.059	0.092
Never married (in union)	0.411	0.018	1349	1735	1.331	0.043	0.375	0.447
Currently married (in union)	0.583	0.017	1349	1735	1.244	0.029	0.549	0.616
Comprehensive knowledge on HIV transmission-all	0.570	0.026	1349	1735	1.958	0.046	0.517	0.623
Comprehensive knowledge on HIV transmission-youth	0.531	0.027	504	634	1.197	0.050	0.477	0.584
Had first sex before age 18	0.010	0.006	269	323	1.030	0.612	0.000	0.023
Had higher risk sex with non-marital/non- cohabiting partners	0.015	0.005	783	1008	1.229	0.357	0.004	0.026
Abstinence among youth (never had sex)	0.991	0.004	459	588	1.038	0.005	0.983	1.000
Sexual activity in past 12 months among never-married youth	0.007	0.004	459	588	1.067	0.586	0.000	0.016
Had medical injections in last 12 months	0.164	0.019	1349	1735	1.895	0.116	0.126	0.202
Had HIV test in past 12 months and received results last time	0.014	0.005	1349	1735	1.682	0.385	0.003	0.025
Accepting attitudes towards people with HIV	0.329	0.024	1224	1617	1.808	0.074	0.281	0.378

na = Not applicable

Table B.7 Sampling errors for South sample, Vietnam 2005

Variable	Value (R)	Stand- ard error (SE)	Number of cases		Design effect (DEFT)	Rela- tive error (SE/R)	Confidence limits	
			Un- weighted (N)	Weight- ed (WN)			R-2SE	R+2SE
WOMEN								
Urban residence	0.287	0.019	2158	2679	1.977	0.067	0.249	0.326
No education	0.052	0.009	2158	2679	1.838	0.168	0.035	0.070
Secondary education	0.550	0.017	2158	2679	1.630	0.032	0.515	0.585
Higher education	0.074	0.010	2158	2679	1.741	0.133	0.054	0.093
Never married (in union)	0.333	0.016	2158	2679	1.623	0.049	0.300	0.366
Currently married (in union)	0.621	0.015	2158	2679	1.438	0.024	0.591	0.651
Comprehensive knowledge on HIV transmission-all	0.319	0.018	2158	2679	1.788	0.056	0.283	0.354
Comprehensive knowledge on HIV transmission-youth	0.370	0.025	742	908	1.404	0.067	0.320	0.420
Had first sex before age 18	0.087	0.015	500	606	1.216	0.177	0.056	0.117
Had higher risk sex with non-marital/non-cohabiting partners	0.002	0.002	1294	1654	1.258	0.738	0.000	0.006
Abstinence among youth (never had sex)	0.995	0.004	578	705	1.316	0.004	0.988	1.000
Sexual activity in past 12 months among never-married youth	0.005	0.004	578	705	1.316	0.791	0.000	0.012
Had medical injections in last 12 months	0.277	0.013	2158	2679	1.398	0.049	0.250	0.304
Had HIV test in past 12 months and received results last time	0.020	0.003	2158	2679	1.029	0.154	0.014	0.026
Accepting attitudes towards people with HIV	0.110	0.007	2045	2523	0.974	0.061	0.097	0.124
MEN								
Urban residence	0.269	0.016	2034	2517	1.643	0.060	0.237	0.301
No education	0.034	0.006	2034	2517	1.446	0.171	0.022	0.046
Secondary education	0.593	0.021	2034	2517	1.927	0.035	0.551	0.635
Higher education	0.102	0.017	2034	2517	2.464	0.162	0.069	0.135
Never married (in union)	0.418	0.014	2034	2517	1.259	0.033	0.390	0.445
Currently married (in union)	0.565	0.015	2034	2517	1.344	0.026	0.536	0.595
Comprehensive knowledge on HIV transmission-all	0.482	0.021	2034	2517	1.891	0.043	0.440	0.524
Comprehensive knowledge on HIV transmission-youth	0.470	0.026	728	898	1.397	0.055	0.418	0.522
Had first sex before age 18	0.030	0.009	454	544	1.101	0.294	0.012	0.048
Had higher risk sex with non-marital/non-cohabiting partners	0.059	0.007	1206	1498	0.955	0.109	0.046	0.072
Abstinence among youth (never had sex)	0.933	0.012	674	830	1.226	0.013	0.909	0.957
Sexual activity in past 12 months among never-married youth	0.046	0.009	674	830	1.075	0.189	0.029	0.063
Had medical injections in last 12 months	0.223	0.014	2034	2517	1.505	0.062	0.196	0.251
Had HIV test in past 12 months and received results last time	0.018	0.004	2034	2517	1.315	0.216	0.010	0.026
Accepting attitudes towards people with HIV	0.170	0.010	1984	2454	1.169	0.058	0.150	0.190

Table B.8 Sampling errors for Ha Noi sample, Vietnam 2005

Variable	Value (R)	Stand- ard error (SE)	Number of cases		Design effect (DEFT)	Rela- tive error (SE/R)	Confidence limits	
			Un- weighted (N)	Weight- ed (WN)			R-2SE	R+2SE
WOMEN								
Urban residence	0.554	0.020	581	235	0.966	0.036	0.514	0.594
No education	0.000	0.000	581	235	na	na	0.000	0.000
Secondary education	0.637	0.030	581	235	1.517	0.048	0.577	0.698
Higher education	0.328	0.032	581	235	1.644	0.098	0.264	0.392
Never married (in union)	0.340	0.020	581	235	1.041	0.060	0.299	0.381
Currently married (in union)	0.624	0.018	581	235	0.879	0.028	0.589	0.660
Comprehensive knowledge on HIV transmission-all	0.650	0.022	581	235	1.130	0.034	0.605	0.694
Comprehensive knowledge on HIV transmission-youth	0.702	0.023	191	77	0.688	0.033	0.657	0.748
Had first sex before age 18	0.017	0.002	137	55	0.194	0.126	0.013	0.021
Had higher risk sex with non-marital/non-cohabiting partners	0.005	0.004	356	146	0.969	0.712	0.000	0.013
Abstinence among youth (never had sex)	0.994	0.006	160	64	1.022	0.006	0.982	1.000
Sexual activity in past 12 months among never-married youth	0.000	0.000	160	64	na	na	0.000	0.000
Had medical injections in last 12 months	0.220	0.017	581	235	1.016	0.080	0.185	0.254
Had HIV test in past 12 months and received results last time	0.108	0.016	581	235	1.210	0.144	0.077	0.139
Accepting attitudes towards people with HIV	0.230	0.016	580	235	0.940	0.072	0.197	0.262
MEN								
Urban residence	0.528	0.022	538	218	1.033	0.042	0.484	0.573
No education	0.000	0.000	538	218	na	na	0.000	0.000
Secondary education	0.628	0.032	538	218	1.534	0.051	0.564	0.692
Higher education	0.353	0.032	538	218	1.563	0.091	0.288	0.417
Never married (in union)	0.418	0.017	538	218	0.818	0.042	0.383	0.453
Currently married (in union)	0.573	0.017	538	218	0.818	0.030	0.538	0.608
Comprehensive knowledge on HIV transmission-all	0.712	0.022	538	218	1.124	0.031	0.668	0.756
Comprehensive knowledge on HIV transmission-youth	0.732	0.036	185	76	1.091	0.049	0.660	0.803
Had first sex before age 18	0.000	0.000	136	56	na	na	0.000	0.000
Had higher risk sex with non-marital/non-cohabiting partners	0.091	0.016	337	136	1.027	0.177	0.059	0.123
Abstinence among youth (never had sex)	0.916	0.018	174	72	0.860	0.020	0.880	0.953
Sexual activity in past 12 months among never-married youth	0.065	0.018	174	72	0.932	0.268	0.030	0.101
Had medical injections in last 12 months	0.131	0.022	538	218	1.486	0.165	0.088	0.174
Had HIV test in past 12 months and received results last time	0.153	0.020	538	218	1.257	0.128	0.114	0.192
Accepting attitudes towards people with HIV	0.393	0.017	535	217	0.809	0.044	0.359	0.427
na = Not applicable								

na = Not applicable

Table B.9 Sampling errors for Ho Chi Minh City sample, Vietnam 2005

Variable	Value (R)	Stand- ard error (SE)	Number of cases		Design effect (DEFT)	Rela- tive error (SE/R)	Confidence limits	
			Un- weighted (N)	Weight- ed (WN)			R-2SE	R+2SE
WOMEN								
Urban residence	0.864	0.042	635	484	3.085	0.049	0.780	0.948
No education	0.005	0.003	635	484	1.288	0.744	0.000	0.012
Secondary education	0.629	0.020	635	484	1.050	0.032	0.589	0.669
Higher education	0.157	0.031	635	484	2.151	0.198	0.095	0.219
Never married (in union)	0.416	0.029	635	484	1.485	0.070	0.357	0.474
Currently married (in union)	0.524	0.026	635	484	1.320	0.050	0.472	0.577
Comprehensive knowledge on HIV transmission-all	0.325	0.042	635	484	2.273	0.130	0.240	0.409
Comprehensive knowledge on HIV transmission-youth	0.385	0.063	224	169	1.925	0.163	0.259	0.510
Had first sex before age 18	0.065	0.029	161	121	1.464	0.438	0.008	0.122
Had higher risk sex with non-marital/non-cohabiting partners	0.003	0.003	331	255	0.963	0.984	0.000	0.009
Abstinence among youth (never had sex)	0.995	0.005	183	138	0.860	0.005	0.985	1.000
Sexual activity in past 12 months among never-married youth	0.005	0.005	183	138	0.860	0.869	0.000	0.015
Had medical injections in last 12 months	0.219	0.025	635	484	1.525	0.114	0.169	0.269
Had HIV test in past 12 months and received results last time	0.066	0.014	635	484	1.381	0.206	0.039	0.093
Accepting attitudes towards people with HIV	0.183	0.016	615	469	1.008	0.086	0.151	0.214
MEN								
Urban residence	0.847	0.009	567	427	0.584	0.010	0.830	0.865
No education	0.012	0.006	567	427	1.275	0.489	0.000	0.023
Secondary education	0.614	0.033	567	427	1.627	0.054	0.547	0.680
Higher education	0.217	0.041	567	427	2.392	0.191	0.134	0.299
Never married (in union)	0.476	0.029	567	427	1.395	0.062	0.417	0.534
Currently married (in union)	0.506	0.029	567	427	1.403	0.058	0.447	0.565
Comprehensive knowledge on HIV transmission-all	0.560	0.032	567	427	1.529	0.057	0.497	0.624
Comprehensive knowledge on HIV transmission-youth	0.507	0.048	202	152	1.371	0.095	0.411	0.604
Had first sex before age 18	0.013	0.009	149	111	0.960	0.692	0.000	0.031
Had higher risk sex with non-marital/non-cohabiting partners	0.120	0.017	314	239	0.935	0.143	0.085	0.154
Abstinence among youth (never had sex)	0.928	0.022	189	142	1.191	0.024	0.883	0.973
Sexual activity in past 12 months among never-married youth	0.049	0.016	189	142	1.019	0.326	0.017	0.081
Had medical injections in last 12 months	0.181	0.025	567	427	1.531	0.137	0.131	0.230
Had HIV test in past 12 months and received results last time	0.051	0.007	567	427	0.793	0.144	0.036	0.065
Accepting attitudes towards people with HIV	0.270	0.021	562	423	1.114	0.077	0.228	0.311

Table B.10 Sampling errors for Hai Phong sample, Vietnam 2005

Variable	Value (R)	Stand- ard error (SE)	Number of cases		Design effect (DEFT)	Rela- tive error (SE/R)	Confidence limits	
			Un- weighted (N)	Weight- ed (WN)			R-2SE	R+2SE
WOMEN								
Urban residence	0.361	0.013	971	167	0.812	0.035	0.336	0.386
No education	0.004	0.002	971	167	0.980	0.492	0.000	0.008
Secondary education	0.798	0.018	971	167	1.399	0.023	0.761	0.834
Higher education	0.123	0.014	971	167	1.349	0.116	0.094	0.151
Never married (in union)	0.296	0.013	971	167	0.911	0.045	0.269	0.323
Currently married (in union)	0.658	0.014	971	167	0.942	0.022	0.629	0.686
Comprehensive knowledge on HIV transmission-all	0.445	0.026	971	167	1.606	0.058	0.394	0.496
Comprehensive knowledge on HIV transmission-youth	0.457	0.034	338	58	1.264	0.075	0.388	0.525
Had first sex before age 18	0.059	0.017	207	35	1.052	0.292	0.025	0.094
Had higher risk sex with non-marital/non- cohabiting partners	0.000	0.000	620	107	na	na	0.000	0.000
Abstinence among youth (never had sex)	1.000	0.000	257	44	na	0.000	1.000	1.000
Sexual activity in past 12 months among never-married youth	0.000	0.000	257	44	na	na	0.000	0.000
Had medical injections in last 12 months	0.317	0.017	971	167	1.132	0.053	0.283	0.351
Had HIV test in past 12 months and received results last time	0.039	0.006	971	167	1.011	0.160	0.027	0.052
Accepting attitudes towards people with HIV	0.233	0.009	944	162	0.675	0.040	0.215	0.252
MEN								
Urban residence	0.316	0.013	820	141	0.794	0.041	0.290	0.342
No education	0.003	0.002	820	141	1.003	0.683	0.000	0.006
Secondary education	0.802	0.012	820	141	0.880	0.015	0.778	0.827
Higher education	0.126	0.010	820	141	0.859	0.079	0.106	0.146
Never married (in union)	0.364	0.013	820	141	0.801	0.037	0.337	0.391
Currently married (in union)	0.624	0.015	820	141	0.858	0.023	0.595	0.653
Comprehensive knowledge on HIV transmission-all	0.582	0.027	820	141	1.552	0.046	0.528	0.635
Comprehensive knowledge on HIV transmission-youth	0.613	0.030	288	50	1.041	0.049	0.554	0.673
Had first sex before age 18	0.010	0.007	185	32	0.947	0.710	0.000	0.023
Had higher risk sex with non-marital/non- cohabiting partners	0.072	0.014	536	92	1.242	0.192	0.045	0.100
Abstinence among youth (never had sex)	0.945	0.016	257	44	1.123	0.017	0.913	0.977
Sexual activity in past 12 months among never-married youth	0.048	0.016	257	44	1.162	0.323	0.017	0.079
Had medical injections in last 12 months	0.283	0.020	820	141	1.261	0.070	0.243	0.322
Had HIV test in past 12 months and received results last time	0.063	0.008	820	141	0.903	0.121	0.048	0.079
Accepting attitudes towards people with HIV	0.307	0.023	810	139	1.437	0.076	0.261	0.354

na = Not applicable

Table B.11 Sampling errors for Quang Ninh sample, Vietnam 2005

Variable	Value (R)	Stand- ard error (SE)	Number of cases		Design effect (DEFT)	Rela- tive error (SE/R)	Confidence limits	
			Un- weighted (N)	Weight- ed (WN)			R-2SE	R+2SE
WOMEN								
Urban residence	0.489	0.019	595	100	0.944	0.040	0.450	0.528
No education	0.043	0.019	595	100	2.325	0.451	0.004	0.081
Secondary education	0.623	0.032	595	100	1.618	0.052	0.559	0.687
Higher education	0.191	0.026	595	100	1.586	0.134	0.140	0.242
Never married (in union)	0.265	0.017	595	100	0.916	0.063	0.232	0.298
Currently married (in union)	0.688	0.016	595	100	0.838	0.023	0.656	0.720
Comprehensive knowledge on HIV transmission-all	0.627	0.032	595	100	1.622	0.051	0.562	0.691
Comprehensive knowledge on HIV transmission-youth	0.648	0.038	182	31	1.064	0.058	0.572	0.723
Had first sex before age 18	0.061	0.024	117	20	1.076	0.391	0.013	0.109
Had higher risk sex with non-marital/non- cohabiting partners	0.002	0.002	400	67	0.924	0.991	0.000	0.006
Abstinence among youth (never had sex)	1.000	0.000	139	23	na	0.000	1.000	1.000
Sexual activity in past 12 months among never-married youth	0.000	0.000	139	23	na	na	0.000	0.000
Had medical injections in last 12 months	0.226	0.022	595	100	1.267	0.096	0.183	0.270
Had HIV test in past 12 months and received results last time	0.069	0.016	595	100	1.565	0.236	0.036	0.102
Accepting attitudes towards people with HIV	0.440	0.025	576	97	1.194	0.056	0.391	0.489
MEN								
Urban residence	0.460	0.019	558	93	0.881	0.040	0.423	0.497
No education	0.029	0.015	558	93	2.081	0.506	0.000	0.059
Secondary education	0.686	0.043	558	93	2.165	0.062	0.601	0.771
Higher education	0.156	0.023	558	93	1.511	0.149	0.110	0.203
Never married (in union)	0.355	0.021	558	93	1.019	0.058	0.314	0.396
Currently married (in union)	0.643	0.021	558	93	1.011	0.032	0.602	0.684
Comprehensive knowledge on HIV transmission-all	0.704	0.021	558	93	1.105	0.030	0.661	0.747
Comprehensive knowledge on HIV transmission-youth	0.658	0.036	176	29	1.015	0.055	0.585	0.731
Had first sex before age 18	0.020	0.014	103	17	1.011	0.707	0.000	0.047
Had higher risk sex with non-marital/non- cohabiting partners	0.017	0.013	363	60	1.839	0.725	0.000	0.043
Abstinence among youth (never had sex)	0.988	0.009	158	26	1.010	0.009	0.970	1.000
Sexual activity in past 12 months among never-married youth	0.012	0.009	158	26	1.010	0.730	0.000	0.030
Had medical injections in last 12 months	0.139	0.018	558	93	1.198	0.126	0.104	0.174
Had HIV test in past 12 months and received results last time	0.098	0.025	558	93	1.994	0.257	0.047	0.148
Accepting attitudes towards people with HIV	0.441	0.029	556	92	1.371	0.066	0.383	0.498

na = Not applicable

PERSONS INVOLVED IN THE 2005 VIETNAM POPULATION AND AIDS INDICATOR SURVEY

Appendix C

General Statistical Office (GSO) personnel

Dong Ba Huong, Project Director
Nguyen Van Phai, Technical Coordinator
Hoang Xuyen, Technical Coordinator
Mai Van Cam, Field Coordinator
Nguyen Duc Tung, Field Coordinator
Phan Thi Minh Hien, Accountant
Nguyen Thi Ngoc Lan, Administration Secretary

National Institute of Hygiene and Epidemiology (NIHE) personnel

Nguyen Tran Hien, Technical Coordinator
Nguyen Anh Tuan, Technical Coordinator
Nguyen Thanh Long, Technical Coordinator
Pham Hong Thang, Laboratory Technician
Hoang Thanh Ha, Laboratory Technician

Data collection personnel

Team 1: Responsible for fieldwork in 22 clusters in Ha Noi:

Pham Van Tan	Supervisor
Le Thanh Huyen	Editor
Hoang Van Thuc	Interviewer
Dang Hong Ha	Interviewer
Tran Van Cay	Interviewer
Tran Hong Loan	Interviewer

Team 2: Responsible for fieldwork in 18 clusters in Hai Phong (including DBS collection):

Phan Xuan Lieu	Supervisor
Pham Thi Ly	Editor
Hoang Xuan An	Interviewer
Nguyen Thu Ha	Interviewer
Mang Quang Dai	Interviewer
Nguyen Thi Hang	Interviewer

Team 3: Responsible for fieldwork in 17 clusters in Hai Phong (including DBS collection):

Do Minh Duong	Supervisor
Do Bich Ngo	Editor
Doan Quang Son	Interviewer
Le Thi Ngoc	Interviewer
Luong Huu Dong	Interviewer
Mai Thi Thanh	Interviewer

Team 4: Responsible for fieldwork in 22 clusters in Quang Ninh:

Vu Huy Tuong	Supervisor
Pham Thi Lam	Editor
Le Duc Quan	Interviewer
Nguyen Thi Hanh	Interviewer
Le Van Dung	Interviewer
Pham Thi Thanh	Interviewer

Team 5: Responsible for fieldwork in 21 clusters in nine provinces: Dien Bien, Lai Chau, Son La, Hoa Binh, Ha Tay, Ha Nam, Nam Dinh, Ninh Binh, Thanh Hoa:

Mai Cong Thanh	Supervisor
Nguyen Thi Dao	Editor
Nguyen Quoc Vuong	Interviewer
Vu Thi Xuan	Interviewer
Dang Viet Hien	Interviewer
Nguyen Thu Huong	Interviewer

Team 6: Responsible for fieldwork in 21 clusters in nine provinces: Ha Giang, Tuyen Quang, Lao Cai, Yen Bai, Phu Tho, Vinh Phuc, Nghe An, Ha Tinh, Quang Binh:

Le Manh Hung	Supervisor
Le Thi Rom	Editor
Nguyen Van Con	Interviewer
Vuong Thi Hang Nga	Interviewer
Pham Ngoc Ninh	Interviewer
Le Thi Thu Ha	Interviewer

Team 7: Responsible for fieldwork in 21 clusters in nine provinces: Cao Bang, Bac Kan, Thai Nguyen, Lang Son, Bac Giang, Bac Ninh, Hai Duong, Hung Yen, Thai Binh:

Chu Van Tien	Supervisor
To Thi Oanh	Editor
Nguyen Xuan Dieu	Interviewer
Nguyen Thi Thanh Thuy	Interviewer
Nguyen Van Ngoc	Interviewer
Le Thi Thu Nga	Interviewer

Team 8: Responsible for fieldwork in 21 clusters in seven provinces: Quang Tri, Thua Thien - Hue, Da Nang, Quang Nam, Quang Ngai, Binh Dinh, Kon Tum

Nguyen Van Minh	Supervisor
Le Thi Hoang Anh	Editor
Van Cong Canh	Interviewer
Tran Hoang Anh	Interviewer
Nguyen Khac Cuong	Interviewer
Nguyen Thi Thoan	Interviewer

Team 9: Responsible for fieldwork in 20 clusters in eight provinces Phu Yen, Khanh Hoa, Gia Lai, Dak Lak, Dak Nong, Lam Dong, Ninh Thuan, Binh Thuan:

Nguyen Quang Tai	Supervisor
Nguyen Thi Hong Loan	Editor
Nguyen Van Thong	Interviewer
Nguyen Thi Binh	Interviewer
Ho Ngoc Quang	Interviewer
Nguyen Thi Phuong	Interviewer

Team 10: Responsible for fieldwork in 22 clusters in Ho Chi Minh:

Phan Dac Loc	Supervisor
Nguyen Thi Kim Lai	Editor
Vo Thanh Sang	Interviewer
Nguyen Thi Le	Interviewer
Nguyen Ngoc Dinh	Interviewer
Vo Le Phuong	Interviewer

Team 11: Responsible for fieldwork in 23 clusters in nine provinces: Binh Phuoc, Tay Ninh, Binh Duong, Dong Nai, Ba Ria - Vung Tau, Long An, Tien Giang, Ben Tre, Tra Vinh:

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Sam Thi Ha	Editor
Pham Văn Huy	Interviewer
Tran Thi Nga	Interviewer
Nguyen Thanh Long	Interviewer
Do Thi Lua	Interviewer

Team 12: Responsible for fieldwork in 23 clusters in nine provinces in nine provinces : Vinh Long, Dong Thap, An Giang, Kien Giang, Can Tho, Hau Giang, Soc Trang, Bac Lieu, Ca Mau:

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Nguyen Hai Yen	Editor
Danh Thanh Toan	Interviewer
Bui Thi Nhung	Interviewer
Le Dang Thanh Phong	Interviewer
Nguyen Cuc Phuong	Interviewer

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VIETNAM POPULATION AND AIDS INDICATOR SURVEY (VPAIS)

HOUSEHOLD QUESTIONNAIRE

CONFIDENTIAL

IDENTIFICATION				
PROVINCE: _____				<input type="text"/>
DISTRICT: _____				<input type="text"/>
COMMUNE: _____				<input type="text"/>
CLUSTER NUMBER:				<input type="text"/>
NAME OF HOUSEHOLD HEAD: _____				<input type="text"/>
HOUSEHOLD NUMBER:				<input type="text"/>
URBAN/RURAL (Urban = 1; Rural = 2):				<input type="text"/>
LARGE CITY/SMALL CITY/TOWN/RURAL (*)				<input type="text"/>
(Large City = 1; Small City = 2; Town = 3; Rural = 4):				
INTERVIEWER VISITS				
	1	2	3	FINAL VISIT
DATE	_____	_____	_____	DAY <input type="text"/>
INTERVIEWER'S NAME	_____	_____	_____	MONTH <input type="text"/>
RESULT (**)	_____	_____	_____	YEAR <input type="text"/>
				INT. NUMBER <input type="text"/>
				RESULT <input type="text"/>
NEXT VISIT				TOTAL NUMBER OF VISITS <input type="text"/>
- DATE	_____	_____		
- TIME	_____	_____		
(**) RESULT CODES: 1 = COMPLETED 2 = NO HOUSEHOLD MEMBER AT HOME OR NO COMPETENT RESPONDENT AT HOME AT TIME OF VISIT 3 = ENTIRE HOUSEHOLD ABSENT FOR EXTENDED PERIOD OF TIME 4 = POSTPONED 5 = REFUSED 6 = DWELLING VACANT OR ADDRESS NOT A DWELLING 7 = DWELLING DESTROYED 8 = DWELLING NOT FOUND 9 = OTHER _____ (SPECIFY)				TOTAL PERSONS IN HOUSEHOLD <input type="text"/> TOTAL ELIGIBLE WOMEN <input type="text"/> TOTAL ELIGIBLE MEN <input type="text"/> LINE NO. OF RESPONDENT TO HH QUESTIONNAIRE <input type="text"/>
SUPERVISOR	FIELD EDITOR	OFFICE EDITOR	KEYED BY	
NAME _____ <input type="text"/>	NAME _____ <input type="text"/>	NAME _____ <input type="text"/>	NAME _____ <input type="text"/>	
DATE _____	DATE _____	DATE _____	DATE _____	

(*) The following guidelines should be used to categorize urban sample points: 'Large cities' are national capitals and places with over 1 million population; 'small cities' are places between 50,000 and 1 million population; remaining urban sample points are 'towns'.

A. HOUSEHOLD SCHEDULE
Now we would like
some information
about the people who
usually live in your
household or who are
staying with you now?

*** CODES FOR Q.3 (RELATIONSHIP TO HEAD OF HH)**

01 = HEAD	09 = NIECE/NEPHEW BY BLOOD
02 = WIFE/HUSBAND	10 = NIECE/NEPHEW BY MARRIAGE
03 = SON/DAUGHTER	11 = OTHER RELATIVE
04 = SON-IN-LAW OR DAUGHTER-IN-LAW	12 = ADOPTED/FOSTER/ STEP CHILD
05 = GRANDCHILD	13 = NOT RELATED
06 = PARENT	98 = DON'T KNOW
07 = PARENT-IN-LAW	
08 = BROTHER/SISTER	

**** CODES FOR Q.7A**

1 = MARRIED/LIVING TOGETHER
2 = DIVORCED/SEPARATED
3 = WIDOWED
4 = NEVER MARRIED/NEVER LIVED WITH
A PARTNER

LINE NO	USUAL RESIDENTS AND VISITORS Please give me the names of the persons who usually live in your household and guests of the household who stayed here last night, starting with the head of household	RELATION SHIP TO HEAD OF HH What is the rela- tionship of [NAME] to the head of the HH?*	SEX Is [NAME] male or female?	RESIDENCE Does [NAME] usually live here?		AGE Did [NAME] stay here last night?		How old is [NAME]? IF AGE 95 YEARS AND OVER, RECORD '95'	MARITAL STATUS IF AGE 15 AND OVER What is [NAME] current marital status	ELIGIBLE FOR INDIV. SURVEY CIRCLE LINE NUMBE R OF ALL MEN AND WOME N AGE 15-49	IF AGE 5 YEARS OR OLDER			IF AGE 5-17 YEARS		
											EDUCATION			BASIC MATERIAL NEEDS		
											Has [NAME] ever attended school?	What is the highest level of school [NAME] has attended? ** What is the highest grade [NAME] completed at that level? **	IF AGE 5- 24 YEARS Did [NAME] attend school at any time during the current school year?	Does [NAME] have anything to cover him/her at night when sleeping?	Does [NAME] have a pair of shoes?	Does [NAME] have at least two sets of clothing?
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(7A)	(8)	(9)	(10)	(11)	(13)	(14)	(15)		
01			M F 1 2	Y N 1 2	Y N 1 2	IN YRS 1 2			01	Y N 1 2 Q13	LVL GRADE 1 2 3	Y N 1 2	Y N DK 1 2 8	Y N DK 1 2 8	Y N DK 1 2 8	
02			1 2	1 2	1 2	1 2			02	1 2 Q13	1 2 3	1 2	1 2 8	1 2 8	1 2 8	
03			1 2	1 2	1 2	1 2			03	1 2 Q13	1 2 3	1 2	1 2 8	1 2 8	1 2 8	
04			1 2	1 2	1 2	1 2			04	1 2 Q13	1 2 3	1 2	1 2 8	1 2 8	1 2 8	
05			1 2	1 2	1 2	1 2			05	1 2 Q13	1 2 3	1 2	1 2 8	1 2 8	1 2 8	
06			1 2	1 2	1 2	1 2			06	1 2 Q13	1 2 3	1 2	1 2 8	1 2 8	1 2 8	
07			1 2	1 2	1 2	1 2			07	1 2 Q13	1 2 3	1 2	1 2 8	1 2 8	1 2 8	
08			1 2	1 2	1 2	1 2			08	1 2 Q13	1 2 3	1 2	1 2 8	1 2 8	1 2 8	
09			1 2	1 2	1 2	1 2			09	1 2 Q13	1 2 3	1 2	1 2 8	1 2 8	1 2 8	
10			1 2	1 2	1 2	1 2			10	1 2 Q13	1 2 3	1 2	1 2 8	1 2 8	1 2 8	
11			1 2	1 2	1 2	1 2			11	1 2 Q13	1 2 3	1 2	1 2 8	1 2 8	1 2 8	
12			1 2	1 2	1 2	1 2			12	1 2 Q13	1 2 3	1 2	1 2 8	1 2 8	1 2 8	
13			1 2	1 2	1 2	1 2			13	1 2 Q13	1 2 3	1 2	1 2 8	1 2 8	1 2 8	
14			1 2	1 2	1 2	1 2			14	1 2 Q13	1 2 3	1 2	1 2 8	1 2 8	1 2 8	

TICK HERE IF CONTINUATION SHEET USED ☐

Just to make sure that I have a complete listing:

- 1) Are there any other persons such as small children or infants that we have not listed?
2) In addition, are there any other people who may not be members of your family, such
as domestic servants, lodgers or friends who usually live here?
3) Are there any guests or temporary visitors staying here, or anyone else who stayed
here last night, who have not been listed?

YES ☐ → (ENTER EACH IN TABLE) NO ☐
YES ☐ → (ENTER EACH IN TABLE) NO ☐
YES ☐ → (ENTER EACH IN TABLE) NO ☐

** CODES FOR Q.10 EDUCATION LEVEL: 1 = PRIMARY 2 = LOWER SECOND. 3 = UPPER SECOND. 4 = HIGHER 8 = DON'T KNOW EDUCATION GRADE: GRADES = 0, 1, 2, ..., 12 (LEVEL 1-3) YEARS = 0, 1, 2, 3, 4, 5+ (LEVEL 4) DON'T KNOW = 98	*** CODES FOR Q.16 THROUGH Q.20 THESE QUESTIONS REFER TO BIOLOGICAL PARENTS OF THE CHILD. IN Q.17 AND Q.20, RECORD '00' IF PARENT NOT LISTED IN THE HOUSEHOLD SCHEDULE.	**** CODES FOR Q.27 1 = CERTIFICATE 2 = REGISTRATION 3 = NEITHER 8 = DON'T KNOW
---	--	--

IF AGE 0-17 YEARS									IF AGE 0-4 YEARS
SURVIVORSHIP AND RESIDENCE OF BIOLOGICAL PARENTS***				PARENTS ALIVE	BROTHERS 0-17 YEARS		SISTERS 0-17 YEARS		BIRTH REGISTRATION
Is [NAME]'s natural mother alive?	IF MOTHER ALIVE Does [NAME]'s natural mother live in this household? IF YES: What is her name? RECORD MOTHER'S LINE NUMBER. IF NO, RECORD '00'	Is [NAME]'s natural father alive?	IF FATHER ALIVE Does [NAME]'s natural father live in this household? IF YES: What is his name? RECORD FATHER'S LINE NUMBER. IF NO, RECORD '00'	CHECK Q.16 AND Q.19: IF YES TO Q.16 AND Q.19 (BOTH PARENTS ALIVE), CIRCLE '1', OTHERWISE CIRCLE '2'	Does [NAME] have any natural brothers under the age of 18? By natural brothers, I mean of the same mother and same father.	Do all of [NAME] natural brother live in this HH?	Does [NAME] have any natural sisters under the age of 18? By natural sisters, I mean of the same mother and same father.	Do all of [NAME] natural sisters live in this HH?	Does [NAME] have a birth certificate? IF NO, PROBE: Has [NAME]'s birth ever been registered with the civil authority?
(16)	(17)	(19)	(20)	(22)	(23)	(24)	(25)	(26)	(27)
Y N DK 1 2 8	<div><div></div><div></div></div>	Y N DK 1 2 8	<div><div></div><div></div></div>	Y N 1 2 ↳ Q27	Y N DK 1 2 8 ↳ Q25	Y N 1 2	Y N DK 1 2 8 ↳ Q27	Y N 1 2	C R N DK 1 2 3 8
1 2 8	<div><div></div><div></div></div>	1 2 8	<div><div></div><div></div></div>	1 2 ↳ Q27	1 2 8 ↳ Q25	1 2	1 2 8 ↳ Q27	1 2	1 2 3 8
1 2 8	<div><div></div><div></div></div>	1 2 8	<div><div></div><div></div></div>	1 2 ↳ Q27	1 2 8 ↳ Q25	1 2	1 2 8 ↳ Q27	1 2	1 2 3 8
1 2 8	<div><div></div><div></div></div>	1 2 8	<div><div></div><div></div></div>	1 2 ↳ Q27	1 2 8 ↳ Q25	1 2	1 2 8 ↳ Q27	1 2	1 2 3 8
1 2 8	<div><div></div><div></div></div>	1 2 8	<div><div></div><div></div></div>	1 2 ↳ Q27	1 2 8 ↳ Q25	1 2	1 2 8 ↳ Q27	1 2	1 2 3 8
1 2 8	<div><div></div><div></div></div>	1 2 8	<div><div></div><div></div></div>	1 2 ↳ Q27	1 2 8 ↳ Q25	1 2	1 2 8 ↳ Q27	1 2	1 2 3 8
1 2 8	<div><div></div><div></div></div>	1 2 8	<div><div></div><div></div></div>	1 2 ↳ Q27	1 2 8 ↳ Q25	1 2	1 2 8 ↳ Q27	1 2	1 2 3 8
1 2 8	<div><div></div><div></div></div>	1 2 8	<div><div></div><div></div></div>	1 2 ↳ Q27	1 2 8 ↳ Q25	1 2	1 2 8 ↳ Q27	1 2	1 2 3 8
1 2 8	<div><div></div><div></div></div>	1 2 8	<div><div></div><div></div></div>	1 2 ↳ Q27	1 2 8 ↳ Q25	1 2	1 2 8 ↳ Q27	1 2	1 2 3 8
1 2 8	<div><div></div><div></div></div>	1 2 8	<div><div></div><div></div></div>	1 2 ↳ Q27	1 2 8 ↳ Q25	1 2	1 2 8 ↳ Q27	1 2	1 2 3 8
1 2 8	<div><div></div><div></div></div>	1 2 8	<div><div></div><div></div></div>	1 2 ↳ Q27	1 2 8 ↳ Q25	1 2	1 2 8 ↳ Q27	1 2	1 2 3 8
1 2 8	<div><div></div><div></div></div>	1 2 8	<div><div></div><div></div></div>	1 2 ↳ Q27	1 2 8 ↳ Q25	1 2	1 2 8 ↳ Q27	1 2	1 2 3 8
1 2 8	<div><div></div><div></div></div>	1 2 8	<div><div></div><div></div></div>	1 2 ↳ Q27	1 2 8 ↳ Q25	1 2	1 2 8 ↳ Q27	1 2	1 2 3 8
1 2 8	<div><div></div><div></div></div>	1 2 8	<div><div></div><div></div></div>	1 2 ↳ Q27	1 2 8 ↳ Q25	1 2	1 2 8 ↳ Q27	1 2	1 2 3 8
1 2 8	<div><div></div><div></div></div>	1 2 8	<div><div></div><div></div></div>	1 2 ↳ Q27	1 2 8 ↳ Q25	1 2	1 2 8 ↳ Q27	1 2	1 2 3 8
1 2 8	<div><div></div><div></div></div>	1 2 8	<div><div></div><div></div></div>	1 2 ↳ Q27	1 2 8 ↳ Q25	1 2	1 2 8 ↳ Q27	1 2	1 2 3 8

NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																														
41	What is the main source of drinking water for members of your household?	PIPED WATER PIPED INTO RESIDENCE/PLOT..... 11 PIPED TO PUBLIC TAP 12 WELL WELL INTO RESIDENCE/PLOT..... 31 PUBLIC WELL..... 32 SURFACE WATER SPRING..... 41 RIVER/STREAM..... 42 POND/LAKE 43 DAM 44 RAIN WATER 51 TANKER TRUCK 61 BOTTLED WATER..... 71 OTHER..... 96 _____ (SPECIFY)																															
42	What kind of toilet facility do members of your household usually use?	FLUSH TOILET..... 11 PIT LATRINE VENTILATED IMPROVED PIT TOILET/LATRINE..... 21 TRADITIONAL PIT TOILET/LATRINE 22 NO FACILITY/BUSH/FIELD 31 OTHER..... 96 _____ (SPECIFY)	→ 44																														
43	Do you share this toilet facility with other households?	YES 1 NO 2																															
44	Does your household have: Electricity? A radio/radio cassette? A television? A telephone (any kind)? A refrigerator? A washing machine? A water pump? A cupboard? A table and chairs?	<table><tr><td></td><td>YES</td><td>NO</td></tr><tr><td>ELECTRICITY</td><td>1</td><td>2</td></tr><tr><td>RADIO</td><td>1</td><td>2</td></tr><tr><td>TELEVISION.....</td><td>1</td><td>2</td></tr><tr><td>TELEPHONE (ANY KIND)</td><td>1</td><td>2</td></tr><tr><td>REFRIGERATOR.....</td><td>1</td><td>2</td></tr><tr><td>WASHING MACHINE.....</td><td>1</td><td>2</td></tr><tr><td>WATER PUMP</td><td>1</td><td>2</td></tr><tr><td>CUPBOARD</td><td>1</td><td>2</td></tr><tr><td>TABLE AND CHAIRS</td><td>1</td><td>2</td></tr></table>		YES	NO	ELECTRICITY	1	2	RADIO	1	2	TELEVISION.....	1	2	TELEPHONE (ANY KIND)	1	2	REFRIGERATOR.....	1	2	WASHING MACHINE.....	1	2	WATER PUMP	1	2	CUPBOARD	1	2	TABLE AND CHAIRS	1	2	
	YES	NO																															
ELECTRICITY	1	2																															
RADIO	1	2																															
TELEVISION.....	1	2																															
TELEPHONE (ANY KIND)	1	2																															
REFRIGERATOR.....	1	2																															
WASHING MACHINE.....	1	2																															
WATER PUMP	1	2																															
CUPBOARD	1	2																															
TABLE AND CHAIRS	1	2																															
45	What type of fuel does your household mainly use for cooking?	ELECTRICITY 01 GAS..... 02 RANGER BOTH ELETRIC AND GAS 03 KEROSENE 04 COAL 05 WOOD..... 06 STRAW 07 OTHER..... 96 _____ (SPECIFY)																															

NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
46	<p>MAIN MATERIAL OF THE FLOOR</p> <p>RECORD OBSERVATION</p>	<p>NATURAL FLOOR</p> <p>EARTH/SAND.....11</p> <p>RUDIMENTARY FLOOR</p> <p>WOOD PLANKS21</p> <p>PALM/BAMBOO22</p> <p>FINISHED FLOOR</p> <p>PARQUET OR POLISHED WOOD.....31</p> <p>VINYL OR ASPHALT STRIP.....32</p> <p>CERAMIC TILES33</p> <p>CEMENT.....34</p> <p>CARPET.....35</p> <p>OTHER.....96</p> <p>_____</p> <p>(SPECIFY)</p>	
47	<p>MAIN MATERIAL OF THE ROOF</p> <p>RECORD OBSERVATION</p>	<p>NATURAL ROOFING</p> <p>THATCH/PALM LEAF11</p> <p>SOD12</p> <p>RUIDIMENTARY ROOFING</p> <p>RUSTIC MAT21</p> <p>PALM/BAMBOO22</p> <p>WOOD PLANKS23</p> <p>FINISHED ROOFING</p> <p>METAL31</p> <p>WOOD32</p> <p>CALAMINE/CEMENT FIBER33</p> <p>CERAMIC TILES34</p> <p>CEMENT.....35</p> <p>ROOFING SHINGLES36</p> <p>OTHER.....96</p> <p>_____</p> <p>(SPECIFY)</p>	

NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																					
48	MAIN MATERIAL OF THE WALLS RECORD OBSERVATION	NATURAL WALLS NO WALLS 11 CANE/PALM/TRUNKS 12 DIRT 13 RUDIMENTARY WALLS BAMBOO WITH MUD 21 STONE WITH MUD 22 UNCOVERED ADOBE 23 PLYWOOD 24 CARTON 25 REFUSED WOOD 26 FINISHED WALLS CEMENT 31 STONE WITH LIME/CEMENT 32 BRICKS 33 CEMENT BLOCKS 34 COVERED ADOBE 35 WOOD PLANKS/SHINGLES 36 OTHER 96 _____ (SPECIFY)	→ 50																					
49	How many rooms in this household are used for sleeping?	ROOMS <input type="text"/> <input type="text"/>																						
50	Does any member of your household own: A bicycle? A motorcycle or motor scooter? An animal-drawn cart? A car or truck? A boat with a motor? A boat without a motor?	<table border="0"> <thead> <tr> <th></th><th>YES</th><th>NO</th></tr> </thead> <tbody> <tr> <td>BICYCLE</td><td>1</td><td>2</td></tr> <tr> <td>MOTORCYCLE/SCOOTER</td><td>1</td><td>2</td></tr> <tr> <td>ANIMAL-DRAWN CART</td><td>1</td><td>2</td></tr> <tr> <td>CAR/TRUCK</td><td>1</td><td>2</td></tr> <tr> <td>BOAT WITH MOTOR</td><td>1</td><td>2</td></tr> <tr> <td>BOAT WITHOUT MOTOR</td><td>1</td><td>2</td></tr> </tbody> </table>		YES	NO	BICYCLE	1	2	MOTORCYCLE/SCOOTER	1	2	ANIMAL-DRAWN CART	1	2	CAR/TRUCK	1	2	BOAT WITH MOTOR	1	2	BOAT WITHOUT MOTOR	1	2	
	YES	NO																						
BICYCLE	1	2																						
MOTORCYCLE/SCOOTER	1	2																						
ANIMAL-DRAWN CART	1	2																						
CAR/TRUCK	1	2																						
BOAT WITH MOTOR	1	2																						
BOAT WITHOUT MOTOR	1	2																						
51	Does your household have any mosquito nets that can be used while sleeping?	YES 1 NO 2	→ 52																					
51A	Do you do anything to protect your household from mosquitos? Anything else?	YES, USE MOSQUITO SPRAY A YES, WINDOW SCREENS B OTHER X _____ (SPECIFY) NOTHING Y	→ END																					
52	How many mosquito nets does your household have? IF 7 OR MORE NETS, RECORD "7"	NUMBER OF NETS..... <input type="text"/>																						

		NET # 1	NET # 2	NET # 3	NET # 4
53	ASK RESPONDENT TO SHOW YOU THE NET(S) IN THE HOUSEHOLD. IF MORE THAN 4 NETS, USE ADDITIONAL QUESTIONNAIRE(S).	OBSERVED.....1 NOT OBSERVED.....2	OBSERVED1 NOT OBSERVED2	OBSERVED.....1 NOT OBSERVED2	OBSERVED 1 NOT OBSERVED 2
54	How long ago did your household obtain the mosquito net?	MONTHS AGO <input type="text"/> <input type="text"/> MORE THAN 3 YEARS AGO...95	MONTHS AGO <input type="text"/> <input type="text"/> MORE THAN 3 YEARS AGO ..95	MONTHS AGO..... <input type="text"/> <input type="text"/> MORE THAN 3 YEARS AGO.. 95	MONTHS AGO <input type="text"/> <input type="text"/> MORE THAN 3 YEARS AGO ..95
56	When you got the net, was it already treated with an insecticide to kill or repel mosquitoes?	YES.....1 NO.....2 NOT SURE8	YES.....1 NO2 NOT SURE.....8	YES1 NO2 NOT SURE.....8	YES.....1 NO2 NOT SURE.....8
57	Since you got the mosquito net, was it ever soaked or dipped in a liquid to repel mosquitoes or bugs?	YES.....1 NO.....2 NOT SURE8 Q59 ←	YES.....1 NO2 NOT SURE.....8 Q59 ←	YES1 NO2 NOT SURE.....8 Q59 ←	YES.....1 NO2 NOT SURE8 Q59 ←
58	How long ago was the net soaked or dipped? IF LESS THAN 1 MONTH, RECORD '00'	MONTHS AGO <input type="text"/> <input type="text"/> MORE THAN 2 YEARS AGO.....95 NOT SURE98	MONTHS AGO <input type="text"/> <input type="text"/> MORE THAN 2 YEARS AGO95 NOT SURE.....98	MONTHS AGO..... <input type="text"/> <input type="text"/> MORE THAN 2 YEARS AGO.....95 NOT SURE.....98	MONTHS AGO <input type="text"/> <input type="text"/> MORE THAN 2 YEARS AGO95 NOT SURE.....98
59	Did anyone sleep under this mosquito net last night?	YES.....1 NO.....2 NOT SURE8 Q61 ←	YES.....1 NO2 NOT SURE.....8 Q61 ←	YES1 NO2 NOT SURE.....8 Q61 ←	YES.....1 NO2 NOT SURE8 Q61 ←
60	Who slept under this mosquito net last night? RECORD NAME AND LINE NUMBER FROM THE HOUSEHOLD SCHEDULE	NAME_____ LINE NUMBER <input type="text"/> <input type="text"/> NAME_____ LINE NUMBER <input type="text"/> <input type="text"/> NAME_____ LINE NUMBER <input type="text"/> <input type="text"/> NAME_____ LINE NUMBER <input type="text"/> <input type="text"/> NAME_____ LINE NUMBER <input type="text"/> <input type="text"/>	NAME_____ LINE NUMBER <input type="text"/> <input type="text"/> NAME_____ LINE NUMBER <input type="text"/> <input type="text"/> NAME_____ LINE NUMBER <input type="text"/> <input type="text"/> NAME_____ LINE NUMBER <input type="text"/> <input type="text"/> NAME_____ LINE NUMBER <input type="text"/> <input type="text"/>	NAME_____ LINE NUMBER <input type="text"/> <input type="text"/> NAME_____ LINE NUMBER <input type="text"/> <input type="text"/> NAME_____ LINE NUMBER <input type="text"/> <input type="text"/> NAME_____ LINE NUMBER <input type="text"/> <input type="text"/> NAME_____ LINE NUMBER <input type="text"/> <input type="text"/>	NAME_____ LINE NUMBER <input type="text"/> <input type="text"/> NAME_____ LINE NUMBER <input type="text"/> <input type="text"/> NAME_____ LINE NUMBER <input type="text"/> <input type="text"/> NAME_____ LINE NUMBER <input type="text"/> <input type="text"/> NAME_____ LINE NUMBER <input type="text"/> <input type="text"/>
61	GO BACK TO Q.53 FOR NEXT NET. IF NO MORE NET, GO TO THE INDIVIDUAL QUESTIONNAIRE.				

VIETNAM POPULATION AND AIDS INDICATOR SURVEY (VPAIS)

INDIVIDUAL QUESTIONNAIRE

CONFIDENTIAL

IDENTIFICATION					
PROVINCE: _____ DISTRICT: _____ COMMUNE: _____ CLUSTER NUMBER: NAME OF HOUSEHOLD HEAD: _____ HOUSEHOLD NUMBER: URBAN/RURAL (Urban = 1; Rural = 2): LARGE CITY/SMALL CITY/TOWN/RURAL (*) (Large city = 1; Small city = 2; Town = 3; Rural = 4): NAME AND LINE NUMBER OF RESPONDENT: _____ SEX OF RESPONDENT (Male = 1; Female = 2):					<div style="display: flex; justify-content: center; align-items: center;"> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> </div> <div style="display: flex; justify-content: center; align-items: center; margin-top: 10px;"> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> </div> <div style="display: flex; justify-content: center; align-items: center; margin-top: 10px;"> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> </div> <div style="display: flex; justify-content: center; align-items: center; margin-top: 10px;"> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div> </div>
INTERVIEWER VISITS					
	1	2	3	FINAL VISIT	
DATE INTERVIEWER'S NAME RESULT (**)				DATE MONTH YEAR 2 0 0 5 INT. NUMBER RESULT	
NEXT VISIT - DATE - TIME				TOTAL NUMBER OF VISITS <div style="border: 1px solid black; width: 20px; height: 20px; display: inline-block;"></div>	
(**) RESULT CODES: <div style="display: flex; justify-content: space-between;"> <div> 1 = COMPLETED 2 = NOT AT HOME 3 = POSTPONED </div> <div> 4 = REFUSED 5 = PARTLY COMPLETED 6 = INCAPACITATED 7 = OTHER _____ <div style="text-align: right;">(SPECIFY)</div> </div> </div>					
SUPERVISOR NAME _____ <div style="border: 1px solid black; width: 20px; height: 20px; display: inline-block;"></div> DATE _____	FIELD EDITOR NAME _____ <div style="border: 1px solid black; width: 20px; height: 20px; display: inline-block;"></div> DATE _____	OFFICE EDITOR NAME _____ <div style="border: 1px solid black; width: 20px; height: 20px; display: inline-block;"></div> DATE _____	KEYED BY NAME _____ <div style="border: 1px solid black; width: 20px; height: 20px; display: inline-block;"></div> DATE _____		

(*) The following guidelines should be used to categorize urban sample points: 'Large cities' are national capitals and places with over 1 million population; 'small cities' are places between 50,000 and 1 million population; remaining urban sample points are 'towns'.

SECTION 1. RESPONDENT'S BACKGROUND

INTRODUCTION AND CONSENT

INFORMED CONSENT

Hello. My name is _____ and I am working with the Department of Population and Labour Statistics and the National Institute of Hygiene and Epidemiology. We are conducting a national health survey. We would very much appreciate your participation in this survey. I would like to ask you about some important health issues. This information will help the government to plan health services. The survey usually takes around 20 minutes to complete.

Whatever information you provide will be kept strictly confidential and will not be shown to other persons.

Participation in this survey is voluntary and you can choose not to answer any individual question or all of the questions. However, we hope that you will participate in this survey since your views are important.

At this time, do you want to ask me anything about the survey?
May I begin the interview now?

Signature of interviewer: _____ Date: _____

RESPONDENT AGREES TO BE



RESPONDENT DOES NOT AGREE TO BE INTERVIEWED
END INTERVIEWED

2 ↙

NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	RECORD THE TIME	HOUR..... MINUTES	
102	In what month and year were you born?	MONTH DON'T KNOW MONTH..... 98 YEAR DON'T KNOW YEAR..... 9998	
103	How old were you at your last birthday? COMPARE AND CORRECT 102 AND/OR 103 IF INCONSISTENT	AGE IN COMPLETED YEARS.....	
104	Have you ever attended school?	YES 1 NO 2	→ 107
105	What is the highest level of school you attended: primary, lower secondary, upper secondary or higher?	PRIMARY 1 LOWER SECONDARY 2 UPPER SECONDARY 3 HIGHER 4	
106	What is the highest (grade/form/year) you completed? GRADES = 0,1,2,...,12 (LEVEL 1-3) YEARS = 0,1,2,3,4,5* (LEVEL 4) DON'T KNOW = 98	GRADE.....	

NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
107	Do you read a newspaper or magazine almost everyday, at least once a week, less than once a week or not at all?	ALMOST EVERYDAY.....1 AT LEAST ONCE A WEEK.....2 LESS THAN ONCE A WEEK3 NOT AT ALL4 CANNOT READ5	
108	Do you listen to the radio almost everyday, at least once a week, less than once a week or not at all?	ALMOST EVERYDAY.....1 AT LEAST ONCE A WEEK.....2 LESS THAN ONCE A WEEK3 NOT AT ALL4	
109	Do you watch television almost everyday, at least once a week, less than once a week or not at all?	ALMOST EVERYDAY.....1 AT LEAST ONCE A WEEK.....2 LESS THAN ONCE A WEEK3 NOT AT ALL4	
110	<div style="display: flex; justify-content: space-around; align-items: center;"> FEMALE <input type="checkbox"/> MALE <input type="checkbox"/> </div>		→ 113
111	Aside from your own housework, have you done any work in the last seven days?	YES.....1 NO.....2	→ 116
112	As you know, some women take up jobs for which they are paid in cash or kind. Other sell things, have a small business or work on the family farm or in the family business. In the last seven days, have you done any of these things or any other work?	YES.....1 NO.....2	→ 116 → 114
113	Have you done any work in the last seven days?	YES.....1 NO.....2	→ 116
114	Although you did not work in the last seven days, do you have any job or business from which you were absent for leave, illness, vacation or any other such reason?	YES.....1 NO.....2	→ 116
115	Have you done any work in the last 12 months?	YES.....1 NO.....2	→ 117
116	What is your occupation, that is, what kind of work do you mainly do? INTERVIEWER: PROBE TO OBTAIN DETAILED INFORMATION ON THE KIND OF WORK RESPONDENT DOES	_____ _____ _____ <input type="checkbox"/> <input type="checkbox"/>	→ 118

NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
117	What have you been doing for most of the time over the last 12 months?	GOING TO SCHOOL/STUDYING 01 LOOKING FOR WORK..... 02 RETIRED..... 03 TOO ILL TO WORK..... 04 HANDICAPPED, CANNOT WORK..... 05 HOUSEWORK/CHILD CARE..... 06 OTHER 96 _____ (SPECIFY)	
118	How long have you been living continuously in [NAME OF CURRENT PLACE OF RESIDENCE]? IF LESS THAN ONE YEAR, RECORD '00' YEARS	YEARS..... <input type="text"/> <input type="text"/> ALWAYS..... 95 VISITOR..... 96	
119	In the last 12 months, on how many separate occasions have you traveled away from your home community and slept away? IF MORE THAN 95, RECORD '95'	NUMBER OF TRIPS..... <input type="text"/> <input type="text"/> NONE..... 00	→ 121
120	In the last 12 months, have you been away from your home community for more than one month at a time?	YES..... 1 NO..... 2	
121	What is your religion?	NO RELIGION 01 BUDDHIST..... 02 CATHOLIC..... 03 PROTESTANT 04 CAODAI 05 HOA HAO 06 ISLAM 07 OTHER 96 _____ (SPECIFY)	
122	What ethnic group do you belong to?	VIETNAMESE 01 TAY 02 THAI..... 03 CHINESE..... 04 KHMER 05 MUONG..... 06 NUNG 07 HRE..... 08 PHU LA 09 E DE..... 10 DAO 11 CO TU..... 12 CHAM..... 13 OTHER 96 _____ (SPECIFY)	

SECTION 2. REPRODUCTION

NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
201	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p style="text-align: center;">MALE <input style="width: 30px; height: 20px;" type="checkbox"/></p> <p style="text-align: center;">↓</p> <p>Now I would like to ask about all of the children you have had during your lifetime. I am interested only in the children that are biologically yours. Have you ever fathered any children with any woman?</p> </div> <div style="width: 45%;"> <p style="text-align: center;">FEMALE <input style="width: 30px; height: 20px;" type="checkbox"/></p> <p style="text-align: center;">↓</p> <p>Now I would like to ask about all the births you have had during your lifetime. Have you ever given birth?</p> </div> </div>	<p>YES 1</p> <p>NO 2 → 206</p>	
202	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>Do you have any sons or daughters whom you have fathered who are now living with you?</p> </div> <div style="width: 45%;"> <p>Do you have any sons or daughters to whom you have given birth who are now living with you?</p> </div> </div>	<p>YES 1</p> <p>NO 2 → 204</p>	
203	<p>How many sons live with you? And how many daughters live with you?</p> <p style="text-align: center;">IF NONE, RECORD '00'</p>	<p>SONS AT HOME <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table></p> <p>DAUGHTERS AT HOME <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table></p>	
204	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p style="text-align: center;">MALE <input style="width: 30px; height: 20px;" type="checkbox"/></p> <p style="text-align: center;">↓</p> <p>Do you have any sons or daughters whom you have fathered who are alive but do not live with you?</p> </div> <div style="width: 45%;"> <p style="text-align: center;">FEMALE <input style="width: 30px; height: 20px;" type="checkbox"/></p> <p style="text-align: center;">↓</p> <p>Do you have any sons or daughters to whom you have given birth who are alive but do not live with you?</p> </div> </div>	<p>YES 1</p> <p>NO 2 → 206</p>	
205	<p>How many sons are alive but do not live with you? And how many daughters are alive but do not live with you?</p> <p style="text-align: center;">IF NONE, RECORD '00'</p>	<p>SONS ELSEWHERE <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table></p> <p>DAUGHTERS ELSEWHERE <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table></p>	
206	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p style="text-align: center;">MALE <input style="width: 30px; height: 20px;" type="checkbox"/></p> <p style="text-align: center;">↓</p> <p>Have you ever fathered a boy or girl who was born alive but later died? And baby who cried or showed signs of life but did not survive?</p> </div> <div style="width: 45%;"> <p style="text-align: center;">FEMALE <input style="width: 30px; height: 20px;" type="checkbox"/></p> <p style="text-align: center;">↓</p> <p>Have you ever given birth to a boy or girl who was born alive but later died? And baby who cried or showed signs of life but did not survive?</p> </div> </div>	<p>YES 1</p> <p>NO 2 → 208</p>	
207	<p>How many boys have died? And how many girls have died?</p> <p style="text-align: center;">IF NONE, RECORD '00'</p>	<p>BOYS DEAD <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table></p> <p>GIRLS DEAD <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table></p>	
208	<p>SUM ANSWERS TO 203, 205 AND 207, AND ENTER TOTAL. IF NONE, RECORD '00'</p>	<p>TOTAL <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table></p>	

NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
209	<div> <div> MALE <input type="checkbox"/> ↓ Just to make sure that I have this right: you have fathered in TOTAL _____ children during your life. Is that correct? YES <input type="checkbox"/> </div> <div> FEMALE <input type="checkbox"/> ↓ Just to make sure that I have this right: you have had in TOTAL _____ births during your life. Is that correct? NO <input type="checkbox"/> → PROBE AND CORRECT 201-208 AS NECESSARY </div> </div>		
210	<div> FEMALE <input type="checkbox"/> ↓ </div> <div> MALE <input type="checkbox"/> → 215 </div>		
211	CHECK 208: ONE OR MORE BIRTHS <input type="checkbox"/>	NO BIRTHS <input type="checkbox"/> → 214	
212	Now I would like to ask you about your last birth, whether the child is still alive or not. In what month and year did you have your last birth?	MONTH <input type="text"/> <input type="text"/> DON'T KNOW MONTH..... 98 YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> → 214 DON'T KNOW YEAR.....9998	
213	About how many years ago was your last birth?	YEARS AGO <input type="text"/> <input type="text"/>	
214	Are you pregnant now?	YES 1 NO 2 UNSURE 8	
215	Are you the primary caregiver for any children whether or not these children are yours?	YES 1 NO 2 → 301	
216	Are any of these children for whom you are the primary caregiver under the age of 18?	YES 1 NO 2 → 301	
217	Now I would like to ask you about the children who are under the age of 18 and for whom you are the primary caregiver. Have you made arrangements for someone to care for these children in the event that you fall sick or are unable to care for them?	YES 1 NO 2 UNSURE 8	

SECTION 3. MARRIAGE AND SEXUAL ACTIVITY

NO	QUESTIONS AND FILTERS		CODING CATEGORIES	SKIP
301	<p style="text-align: center;">MALE <input style="display: inline-block; width: 20px; height: 15px;" type="checkbox"/></p> <p style="text-align: center;">↓</p> <p>Are you currently married or living together with a woman as if married?</p>	<p style="text-align: center;">FEMALE <input style="display: inline-block; width: 20px; height: 15px;" type="checkbox"/></p> <p style="text-align: center;">↓</p> <p>Are you currently married or living together with a man as if married?</p>	<p>YES, CURRENTLY MARRIED..... 1</p> <p>YES, LIVING WITH A MAN/WOMAN..... 2</p> <p>NO, NOT IN UNION 3</p>	} → 304
302	<p>Have you ever been married or lived together with a woman as if married?</p>	<p>Have you ever been married or lived together with a man as if married?</p>	<p>YES, FORMERLY MARRIED..... 1</p> <p>YES, LIVED WITH A MAN/WOMAN 2</p> <p>NO 3</p>	} → 320
303	<p>What is your marital status now: are you widowed, divorced, or separated?</p>	<p>What is your marital status now: are you widowed, divorced, or separated?</p>	<p>WIDOWED 1</p> <p>DIVORCED 2</p> <p>SEPARATED 3</p>	} → 310
304	<p>Is your wife/partner living with you now or is she staying elsewhere?</p>	<p>Is your husband/partner living with you now or is he staying elsewhere?</p>	<p>LIVING TOGETHER 1</p> <p>STAYING ELSEWHERE 2</p>	
307	<p>Please tell me the name of your wife (the woman you are living with as if married)</p> <p>RECORD THE NAME AND THE LINE NUMBER FROM THE HOUSEHOLD QUESTIONNAIRE FOR SPOUSE AND LIVE-IN PARTNER. IF THE PERSON IS NOT LISTED IN THE HOUSEHOLD, RECORD '00'</p>	<p>Please tell me the name of your husband (the man you are living together with as if married)</p>	<p>NAME LINE NUMBER</p> <p>_____ <input style="display: inline-block; width: 20px; height: 15px;" type="text"/> <input style="display: inline-block; width: 20px; height: 15px;" type="text"/></p>	
308	<p>How old was your wife/partner on her last birthday?</p> <p style="text-align: center;">95 AGE AND OVER, RECORD '95'</p>	<p>How old was your husband/partner on his last birthday ?</p>	<p>AGE..... <input style="display: inline-block; width: 20px; height: 15px;" type="text"/> <input style="display: inline-block; width: 20px; height: 15px;" type="text"/></p>	
310	<p>Have you been married or lived with a woman only once or more than once?</p>	<p>Have you been married or lived with a man only once or more than once?</p>	<p>ONLY ONCE 1</p> <p>MORE THAN ONCE..... 2</p>	} → 312

NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
311	<div> <div>MALE <input type="checkbox"/></div> <div>↓</div> <div>In what month and year did you start living with your wife/partner?</div> </div> <div> <div>FEMALE <input type="checkbox"/></div> <div>↓</div> <div>In what month and year did you start living with your husband/partner?</div> </div>	MONTH <input type="text"/> <input type="text"/> DON'T KNOW MONTH..... 98 YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> DON'T KNOW YEAR..... 9998	→ 314
312	<div>Now I would like to ask about when you started living with a woman as if married for the very first time.</div> <div>In what month and year was that?</div>	<div>Now I would like to ask about when you started living with your first husband/partner.</div> <div>In what month and year was that?</div>	
313	<div>How old were you when you (first) started living with her?</div> <div>How old were you when you (first) started living with him?</div>	AGE..... <input type="text"/> <input type="text"/>	
314	<div> <div>FEMALE <input type="checkbox"/></div> <div>↓</div> </div> <div> <div>MALE <input type="checkbox"/></div> <div>→</div> </div>		→ 320
315	CHECK 303: IS RESPONDENT CURRENTLY WIDOWED? <div> NOT ASKED OR <input type="checkbox"/> NOT WIDOWED </div>	<div>WIDOWED <input type="checkbox"/></div> <div>→</div>	→ 318
316	CHECK 310: <div> MARRIED MORE <input type="checkbox"/> THAN ONCE </div>	<div>MARRIED ONLY ONCE <input type="checkbox"/></div> <div>→</div>	→ 320
317	How did your previous marriage or union end?	DEATH/WIDOWHOOD..... 1 DIVORCE 2 SEPARATION 3	→ 320
318	Who did most of your late husband's property go to?	RESPONDENT 1 OTHER WIFE 2 SPOUSE'S CHILDREN..... 3 SPOUSE'S FAMILY..... 4 OTHER..... 5 (SPECIFY) NO PROPERTY 6	→ 320
319	Did you receive any of your late husband's assets or valuables?	YES 1 NO 2	
320	CHECK FOR THE PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.		

NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
321	Now I need to ask you some questions about sexual activity in order to gain a better understanding of some family life issues. How old were you when you had sexual intercourse for the very first time?	NEVER HAD SEXUAL INTERCOURSE00 AGE IN YEARS..... <input type="text"/> <input type="text"/> FIRST TIME WHEN STARTED LIVING WITH (FIRST) HUSBAND/WIFE/PARTNER.....95	→ 323
322	Do you intend to wait until you get married to have sexual intercourse for the first time?	YES 1 NO 2 DON'T KNOW/UNSURE 3	→ 352
323	CHECK 103: 15-24 YEARS OLD <input type="checkbox"/> 25-49 YEARS OLD <input type="checkbox"/>		→ 328
324	The first time you had sexual intercourse, was a condom used?	YES 1 NO 2 DON'T KNOW/DON'T REMEMBER 8	
325	How old was the person you first had sexual intercourse with?	AGE OF PARTNER..... <input type="text"/> <input type="text"/> DON'T KNOW98	→ 328
326	Was this person older than you, younger than you, or about the same age as you?	OLDER..... 1 YOUNGER..... 2 ABOUT THE SAME AGE..... 3 DON'T KNOW/DON'T REMEMBER 8	→ 328
327	Would you say this person was ten or more years older than you or less than ten years older than you?	TEN OR MORE YEARS OLDER 1 LESS THAN TEN YEARS OLDER..... 2 OLDER, UNSURE HOW MUCH..... 3	
328	When was the last time you had sexual intercourse? RECORD 'YEARS AGO' ONLY IF LAST INTERCOURSE WAS ONE OR MORE YEARS AGO. IF 12 MONTHS OR MORE, ANSWER MUST BE RECORDED IN YEARS.	DAYS AGO.....1 WEEKS AGO.....2 MONTHS AGO.....3 YEARS AGO4	→ 330 → 347

		LAST SEXUAL PARTNER	SECOND-TO-LAST SEXUAL PARTNER	THIRD-TO-LAST SEXUAL PARTNER																																																						
329	When was the last time you had sexual intercourse with this person?		DAYS..... 1 <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> WEEKS..... 2 <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> MONTHS..... 3 <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>																			DAYS..... 1 <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> WEEKS..... 2 <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> MONTHS..... 3 <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>																																				
330	The last time you had sexual intercourse with this (second/third) person, was a condom used?	YES..... 1 NO..... 2 Q332 ←	YES..... 1 NO..... 2 Q332 ←	YES..... 1 NO..... 2 Q332 ←																																																						
331	Did you use a condom every time you had sexual intercourse with this person in the last 12 months?	YES..... 1 NO..... 2	YES..... 1 NO..... 2	YES..... 1 NO..... 2																																																						
332	What was your relationship to this person with whom you had sexual intercourse? IF BOYFRIEND/GIRLFRIEND: Were you living together as if married? IF YES, CIRCLE '02' IF NO, CIRCLE '03'	HUSBAND/WIFE01 Q338 ← LIVE-IN PARTNER.....02 BOYFRIEND/GIRLFRIEND NOT LIVING WITH RESPONDENT03 CASUAL ACQUAINTANCE04 COMMERCIAL SEX WORKER05 OTHER96 _____ (SPECIFY)	HUSBAND/WIFE.....01 Q338 ← LIVE-IN PARTNER.....02 BOYFRIEND/GIRLFRIEND NOT LIVING WITH RESPONDENT03 CASUAL ACQUAINTANCE.....04 COMMERCIAL SEX WORKER05 OTHER96 _____ (SPECIFY)	HUSBAND/WIFE.....01 Q338 ← LIVE-IN PARTNER02 BOYFRIEND/GIRLFRIEND NOT LIVING WITH RESPONDENT03 CASUAL ACQUAINTANCE.....04 COMMERCIAL SEX WORKER05 OTHER96 _____ (SPECIFY)																																																						
332A		MAN <table border="1"><tr><td></td></tr></table> WOMEN <table border="1"><tr><td></td></tr></table> Q332C ←			MAN <table border="1"><tr><td></td></tr></table> WOMEN <table border="1"><tr><td></td></tr></table> Q332C ←			MAN <table border="1"><tr><td></td></tr></table> WOMEN <table border="1"><tr><td></td></tr></table> Q332C ←																																																		
332B	Is this person female or male?	FEMALE 1 MALE 2	FEMALE..... 1 MALE 2	FEMALE..... 1 MALE 2																																																						
332C	CHECK 332:	OTHER CODES <table border="1"><tr><td></td></tr></table> CODE 2 CIRCLED <table border="1"><tr><td></td></tr></table> Q338 ←			OTHER CODES <table border="1"><tr><td></td></tr></table> CODE 2 CIRCLED <table border="1"><tr><td></td></tr></table> Q338 ←			OTHER CODES <table border="1"><tr><td></td></tr></table> CODE 2 CIRCLED <table border="1"><tr><td></td></tr></table> Q338 ←																																																		
333	For how long (have you had/did you have) a sexual relationship with this person? IF ONLY HAD SEXUAL RELATIONS WITH THIS PERSON ONCE, RECORD '01' DAYS	DAYS 1 <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> MONTHS..... 2 <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> YEARS 3 <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>																			DAYS..... 1 <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> MONTHS..... 2 <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> YEARS 3 <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>																			DAYS..... 1 <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> MONTHS..... 2 <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> YEARS 3 <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>																		

		LAST SEXUAL PARTNER	SECOND-TO-LAST SEXUAL PARTNER	THIRD-TO-LAST SEXUAL PARTNER
334	CHECK 103:	<div> <div>MAN 15-49/ WOMAN</div> <div>15-24 <input type="checkbox"/></div> <div>25-49 <input type="checkbox"/></div> <div>Q338 ←</div> </div>	<div> <div>MAN 15-49/ WOMAN</div> <div>15-24 <input type="checkbox"/></div> <div>25-49 <input type="checkbox"/></div> <div>Q338 ←</div> </div>	<div> <div>MAN 15-49/ WOMAN</div> <div>15-24 <input type="checkbox"/></div> <div>25-49 <input type="checkbox"/></div> <div>Q338 ←</div> </div>
335	How old is this person?	<div>AGE OF PARTNER..... <input type="text"/></div> <div>Q338 ←</div> <div>DON'T KNOW98</div>	<div>AGE OF PARTNER..... <input type="text"/></div> <div>Q338 ←</div> <div>DON'T KNOW98</div>	<div>AGE OF PARTNER..... <input type="text"/></div> <div>Q338 ←</div> <div>DON'T KNOW98</div>
336	Is this person older than you, younger than you, or about the same age?	<div>OLDER 01</div> <div>YOUNGER 02</div> <div>SAME AGE 03</div> <div>DON'T KNOW 04</div> <div>Q338 ←</div>	<div>OLDER01</div> <div>YOUNGER02</div> <div>SAME AGE03</div> <div>DON'T KNOW04</div> <div>Q338 ←</div>	<div>OLDER 01</div> <div>YOUNGER 02</div> <div>SAME AGE 03</div> <div>DON'T KNOW 04</div> <div>Q338 ←</div>
337	Would you say this person is ten or more years older than you or less than ten years older than you?	<div>TEN OR MORE YEARS OLDER 1</div> <div>LESS THAN TEN YEARS OLDER 2</div> <div>OLDER, UNSURE HOW MUCH 3</div>	<div>TEN OR MORE YEARS OLDER 1</div> <div>LESS THAN TEN YEARS OLDER 2</div> <div>OLDER, UNSURE HOW MUCH 3</div>	<div>TEN OR MORE YEARS OLDER 1</div> <div>LESS THAN TEN YEARS OLDER 2</div> <div>OLDER, UNSURE HOW MUCH 3</div>
338	The last time you had sexual intercourse with this (second/third) person, did you or this person drink alcohol?	<div>YES 1</div> <div>NO 2</div> <div>Q340 ←</div>	<div>YES 1</div> <div>NO 2</div> <div>Q340 ←</div>	<div>YES 1</div> <div>NO 2</div> <div>Q341 ←</div>
339	Were you or your partner drunk at that time? IF YES: Who was drunk?	<div>RESPONDENT ONLY 1</div> <div>PARTNER ONLY 2</div> <div>RESPONDENT AND PARTNER BOTH 3</div> <div>NEITHER 4</div>	<div>RESPONDENT ONLY 1</div> <div>PARTNER ONLY 2</div> <div>RESPONDENT AND PARTNER BOTH 3</div> <div>NEITHER 4</div>	<div>RESPONDENT ONLY 1</div> <div>PARTNER ONLY 2</div> <div>RESPONDENT AND PARTNER BOTH 3</div> <div>NEITHER 4</div> <div>Q341 ←</div>
340	Apart from [this person/these two people], have you had sexual intercourse with any other person in the last 12 months?	<div>YES 1</div> <div>GO BACK TO 329 ←</div> <div>IN NEXT COLUMN</div> <div>NO 2</div> <div>Q341A ←</div>	<div>YES 1</div> <div>GO BACK TO 329 ←</div> <div>IN NEXT COLUMN</div> <div>NO 2</div> <div>Q341A ←</div>	
341	In total, with how many different people have you had sexual intercourse in the last 12 months? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF PARTNERS IS GREATER THAN 95, WRITE '95'			<div>NUMBER OF PARTNERS LAST 12 MONTHS.... <input type="text"/></div> <div>DON'T KNOW98</div>

NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
341A	Some people inject drugs for use other than medicine. In the last 12 months, have any of your partners injected drugs for use other than medicine?	YES 1 NO 2 DON'T KNOW 8	
342	MALE <input type="checkbox"/> FEMALE <input type="checkbox"/>		→ 347
343	CHECK 332: NO PARTNERS ARE COMMERCIAL SEX WORKERS <input type="checkbox"/>	AT LEAST ONE PARTNER A COMMERCIAL SEX WORKER <input type="checkbox"/>	→ 347
344	In the last 12 months, did you pay anyone in exchange for sex?	YES 1 NO 2	→ 347
345	The last time you paid someone in exchange for sex, was a condom used?	YES 1 NO 2	→ 347
346	Did you use a condom during every sexual intercourse every time you paid someone in exchange for sex in the last 12 months?	YES 1 NO 2 DK 8	
347	In total, with how many different people have you had sexual intercourse in your lifetime? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF PARTNERS IS GREATER THAN 95, WRITE '95'.	NUMBER OF PARTNERS IN LIFETIME..... <input type="text"/> <input type="text"/> DON'T KNOW98	
352	Do you know of a place where a person can get condoms?	YES 1 NO 2	→ 401
353	Where is that? IF SOURCE IS HOSPITAL, HEALTH CENTER, OR CLINIC, WRITE THE NAME OF PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE _____ (NAME OF PLACE) Any other place? RECORD ALL SOURCES MENTIONED	PUBLIC SECTOR GOVERNMENT HOSPITAL A DELIVERY HOUSE B COMMUNE HEALTH CENTER C VCT CENTER..... D FAMILY PLANNING CENTER E MOBILE CLINIC..... F COMMUNITY HEALTH WORKER G OTHER PUBLIC..... H _____ (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/ CLINIC I VCT CENTER..... J PHARMACY..... K PRIVATE DOCTOR L OTHER PRIVATE MEDICAL M _____ (SPECIFY) OTHER SOURCE SHOP N MARKET O BAR/HOTEL P FRIENDS/RELATIVES Q OTHER..... X _____ (SPECIFY)	

SECTION 4. HIV/AIDS

NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
401	Now I would like to talk about something else. Have you ever heard of an illness called AIDS?	YES 1 NO 2	→ 445
402	Can people reduce their chances of getting the AIDS virus by having just one sex partner who is not infected and who has no other partners?	YES 1 NO 2 DON'T KNOW 8	
403	Can people get the AIDS virus from mosquito bites?	YES 1 NO 2 DON'T KNOW 8	
404	Can people reduce their chances of getting the AIDS virus by using a condom every time they have sex?	YES 1 NO 2 DON'T KNOW 8	
405	Can people get the AIDS virus by sharing food with a person who has AIDS?	YES 1 NO 2 DON'T KNOW 8	
406	Can people reduce their chance of getting the AIDS virus by abstaining from sexual intercourse?	YES 1 NO 2 DON'T KNOW 8	
407A	Can people get the AIDS virus because of injections with needles already used by someone else?	YES 1 NO 2 DON'T KNOW 8	
408	Is there anything else a person can do to avoid or reduce the chances of getting the AIDS virus?	YES 1 NO 2 DON'T KNOW 3	→ 410

NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
414	Is there any special medication that people infected with the AIDS virus can get from a doctor or a nurse to make them feel better and help them to live longer?	YES..... 1 NO 2 DON'T KNOW 8	
415	FEMALE <input type="checkbox"/> ↓ MALE <input type="checkbox"/> →		→ 425
416	CHECK 212 AND 213: LAST BIRTH SINCE JANUARY 2003 <input type="checkbox"/> ↓ NO BIRTHS/ LAST BIRTH BEFORE JANUARY 2003 <input type="checkbox"/> →		→ 425
417	Now I would like to ask some questions about your last birth. Did you see anyone for antenatal care during that pregnancy?	YES..... 1 NO 2	→ 425
418	During any of the antenatal visits for that pregnancy, did anyone talk to you about: Babies getting the AIDS virus from their mother? Things that you can do to prevent getting the AIDS virus? Getting tested for the AIDS virus?	YES NO DK AIDS FROM MOTHER..... 1 2 8 THINGS TO DO..... 1 2 8 TESTED FOR AIDS 1 2 8	
419	Were you offered a test for the AIDS virus as part of your antenatal care?	YES..... 1 NO 2	
420	I don't want to know the results, but were you tested for the AIDS virus as part of your antenatal care?	YES..... 1 NO 2	→ 425
421	I don't want to know the results, but did you get the results of the test?	YES..... 1 NO 2	→ 422
421A	After you have received your results, did the doctor or the counselor give you any advice and answer any question you have?	YES..... 1 NO 2	

NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
422	<p>Where was the test done?</p> <p>IF SOURCE IS HOSPITAL, HEALTH CENTER, OR CLINIC, WRITE THE NAME OF THE SOURCE.</p> <p>PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.</p> <p>_____</p> <p>(NAME OF PLACE)</p>	<p>PUBLIC SECTOR</p> <p>GOVERNMENT HOSPITAL 11</p> <p>VCT CENTER..... 12</p> <p>FAMILY PLANNING CENTER 13</p> <p>OTHER PUBLIC..... 16</p> <p>_____</p> <p>(SPECIFY)</p> <p>PRIVATE MEDICAL SECTOR</p> <p>PRIVATE HOSPITAL/CLINIC 21</p> <p>VCT CENTER..... 22</p> <p>PRIVATE LABORATORY 23</p> <p>OTHER PRIVATE MEDICAL 26</p> <p>_____</p> <p>(SPECIFY)</p> <p>OTHER..... 96</p> <p>_____</p> <p>(SPECIFY)</p>	
423	Have you been tested for the AIDS virus since that time you were tested during your pregnancy?	<p>YES 1</p> <p>NO 2</p>	→ 426
424	When was the last time you were tested for the AIDS virus?	<p>LESS THAN 12 MONTHS AGO..... 1</p> <p>12-23 MONTHS AGO 2</p> <p>2 OR MORE YEARS AGO 3</p>	→ 432
425	I don't want to know the results, but have you ever been tested to see if you have the AIDS virus?	<p>YES 1</p> <p>NO 2</p>	→ 430
426	When was the last time you were tested?	<p>LESS THAN 12 MONTHS AGO..... 1</p> <p>12-23 MONTHS AGO 2</p> <p>2 OR MORE YEARS AGO 3</p>	
427	The last time you had the test, did you yourself ask for the test, was it offered to you and you accepted, or was it required?	<p>ASKED FOR THE TEST 1</p> <p>OFFERED AND ACCEPTED 2</p> <p>REQUIRED 3</p>	
428	I don't want to know the results, but did you get the results of the test?	<p>YES 1</p> <p>NO 2</p>	→ 429
428A	After you have received your results, did the doctor or the counselor give you any advice and answer any question you have?	<p>YES 1</p> <p>NO 2</p>	

NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
429	<p>Where was the test done?</p> <p>IF SOURCE IS HOSPITAL, HEALTH CENTER, OR CLINIC, WRITE THE NAME OF THE PLACE.</p> <p>PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.</p> <p>_____</p> <p>(NAME OF PLACE)</p>	<p>PUBLIC SECTOR</p> <p>GOVERNMENT HOSPITAL 11</p> <p>VCT CENTER..... 12</p> <p>FAMILY PLANNING CENTER 13</p> <p>OTHER PUBLIC..... 16</p> <p>_____</p> <p>(SPECIFY)</p> <p>PRIVATE MEDICAL SECTOR</p> <p>PRIVATE HOSPITAL/CLINIC 21</p> <p>VCT CENTER..... 22</p> <p>PRIVATE LABORATORY 23</p> <p>OTHER PRIVATE MEDICAL 26</p> <p>_____</p> <p>(SPECIFY)</p> <p>OTHER..... 96</p> <p>_____</p> <p>(SPECIFY)</p>	<p>→ 432</p>
430	<p>Do you know of a place where people can go to get tested for the AIDS virus?</p>	<p>YES 1</p> <p>NO 2</p>	<p>→ 432</p>
431	<p>Where is that?</p> <p>IF SOURCE IS HOSPITAL, HEALTH CENTER, OR CLINIC, WRITE THE NAME OF THE PLACE.</p> <p>PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.</p> <p>_____</p> <p>(NAME OF PLACE)</p> <p>Any other place?</p> <p>RECORD ALL SOURCES MENTIONED.</p>	<p>PUBLIC SECTOR</p> <p>GOVERNMENT HOSPITAL A</p> <p>VCT CENTER..... B</p> <p>FAMILY PLANNING CENTER C</p> <p>OTHER PUBLIC..... D</p> <p>_____</p> <p>(SPECIFY)</p> <p>PRIVATE MEDICAL SECTOR</p> <p>PRIVATE HOSPITAL/CLINIC E</p> <p>VCT CENTER..... F</p> <p>PRIVATE LABORATORY G</p> <p>OTHER PRIVATE MEDICAL H</p> <p>_____</p> <p>(SPECIFY)</p> <p>OTHER..... X</p> <p>_____</p> <p>(SPECIFY)</p>	
432	<p>Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had the AIDS virus?</p>	<p>YES 1</p> <p>NO 2</p> <p>DON'T KNOW 8</p>	

NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
433	If a member of your family got infected with the AIDS virus, would you want it to remain a secret or not?	YES, REMAIN A SECRET 1 NO 2 DK/NOT SURE/DEPENDS 8	
434	If a member of your family became sick with the virus that causes AIDS, would you be willing to care for her or him in your own household?	YES 1 NO 2 DK/NOT SURE/DEPENDS 8	
435	In your opinion, if a female teacher has the AIDS virus but is not sick, should she be allowed to continue teaching in the school?	SHOULD BE ALLOWED 1 SHOULD NOT BE ALLOWED 2 DK/NOT SURE/DEPENDS 8	
440	Do you personally know someone who is suspected to have the AIDS virus or who has the AIDS virus?	YES 1 NO 2	
441	Do you agree or disagree with the following statement: People with the AIDS virus should be ashamed of themselves?	AGREE..... 1 DISAGREE 2 DON'T KNOW/NO OPINION 8	
442	Do you agree or disagree with the following statement: People with the AIDS virus should be blamed for bringing the disease into the community.	AGREE..... 1 DISAGREE 2 DON'T KNOW/NO OPINION 8	
443	Should children age 12-14 be taught about using a condom to avoid AIDS?	YES 1 NO 2 DK/NOT SURE/DEPENDS 8	
444	Should children age 12-14 be taught to wait until they get married to have sexual intercourse in order to avoid AIDS?	YES 1 NO 2 DK/NOT SURE/DEPENDS 8	
445	Do you believe that young men should wait until they are married to have sexual intercourse?	YES 1 NO 2 DK/NOT SURE/DEPENDS 8	
447	Do you believe that men who are not married and are having sex should only have sex with one partner?	YES 1 NO 2 DK/NOT SURE/DEPENDS 8	
449	Do you believe that married man should only have sex with their wife?	YES 1 NO 2 DK/NOT SURE/DEPENDS 8	

NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
451	Do you believe that young women should wait until they are married to have sexual intercourse?	YES 1 NO 2 DK/NOT SURE/DEPENDS 8	
453	Do you believe that women who are not married and are having sex should only have sex with one partner?	YES 1 NO 2 DK/NOT SURE/DEPENDS 8	
455	Do you believe that married women should only have sex with their husbands?	YES 1 NO 2 DK/NOT SURE/DEPENDS 8	

SECTION 5. OTHER REPRODUCTIVE HEALTH ISSUES

NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP		
502	<p>CHECK 401:</p> <p>HEARD ABOUT AIDS <input type="checkbox"/></p> <p style="margin-left: 100px;">↓</p> <p style="margin-left: 40px;">Apart from AIDS, have you heard about other infections that can be transmitted through sexual contact?</p> <p>NOT HEARD ABOUT AIDS <input type="checkbox"/></p> <p style="margin-left: 100px;">↓</p> <p style="margin-left: 40px;">Have you heard about infections that can be transmitted through sexual contact?</p>	<p>YES 1</p> <p>NO 2</p>			
503	<p>CHECK 321:</p> <p style="text-align: center;">HAS HAD SEXUAL INTERCOURSE <input type="checkbox"/></p> <p style="text-align: center;">↓</p>	<p>HAS NOT HAD SEXUAL INTERCOURSE <input type="checkbox"/> → 511</p>			
504	<p>CHECK 502: HEARD ABOUT OTHER SEXUALLY TRANSMITTED INFECTIONS ?</p> <p>HEARD ABOUT INFECTION TRANSMITTED THROUGH SEXUAL CONTACT <input type="checkbox"/></p> <p style="text-align: center;">↓</p>	<p>NO <input type="checkbox"/> → 506</p>			
505	<p>Now I would like to ask you some questions about your health in the last 12 months. During the last 12 months, have you had a disease which you got through sexual contact?</p>	<p>YES 1</p> <p>NO 2</p> <p>DON'T KNOW 8</p>			
506	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; vertical-align: top;"> <p>MALE <input type="checkbox"/></p> <p style="text-align: center;">↓</p> <p>Sometimes men experience an abnormal discharge from their penis. During the last 12 months, have you had an abnormal discharge from your penis?</p> </td> <td style="width: 50%; vertical-align: top;"> <p>FEMALE <input type="checkbox"/></p> <p style="text-align: center;">↓</p> <p>Sometimes women experience a bad smelling abnormal genital discharge. During the last 12 months, have you had a bad smelling abnormal genital discharge?</p> </td> </tr> </table>	<p>MALE <input type="checkbox"/></p> <p style="text-align: center;">↓</p> <p>Sometimes men experience an abnormal discharge from their penis. During the last 12 months, have you had an abnormal discharge from your penis?</p>	<p>FEMALE <input type="checkbox"/></p> <p style="text-align: center;">↓</p> <p>Sometimes women experience a bad smelling abnormal genital discharge. During the last 12 months, have you had a bad smelling abnormal genital discharge?</p>	<p>YES 1</p> <p>NO 2</p> <p>DON'T KNOW 8</p>	
<p>MALE <input type="checkbox"/></p> <p style="text-align: center;">↓</p> <p>Sometimes men experience an abnormal discharge from their penis. During the last 12 months, have you had an abnormal discharge from your penis?</p>	<p>FEMALE <input type="checkbox"/></p> <p style="text-align: center;">↓</p> <p>Sometimes women experience a bad smelling abnormal genital discharge. During the last 12 months, have you had a bad smelling abnormal genital discharge?</p>				
507	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; vertical-align: top;"> <p>Sometimes men have a sore or ulcer on or their penis. During the last 12 months, have you had an ulcer or sore on or near your penis?</p> </td> <td style="width: 50%; vertical-align: top;"> <p>Sometimes women have a genital sore or ulcer. During the last 12 months, have you had a genital sore or ulcer</p> </td> </tr> </table>	<p>Sometimes men have a sore or ulcer on or their penis. During the last 12 months, have you had an ulcer or sore on or near your penis?</p>	<p>Sometimes women have a genital sore or ulcer. During the last 12 months, have you had a genital sore or ulcer</p>	<p>YES 1</p> <p>NO 2</p> <p>DON'T KNOW 8</p>	
<p>Sometimes men have a sore or ulcer on or their penis. During the last 12 months, have you had an ulcer or sore on or near your penis?</p>	<p>Sometimes women have a genital sore or ulcer. During the last 12 months, have you had a genital sore or ulcer</p>				
508	<p>CHECK 505, 506 AND 507:</p> <p style="text-align: center;">HAS HAD AN INFECTION (ANY 'YES') <input type="checkbox"/></p> <p style="text-align: center;">↓</p>	<p>HAS NOT HAD AN INFECTION OR DOES NOT KNOW <input type="checkbox"/> → 511</p>			

NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
509	The last time you had (PROBLEM FROM 505/506/507), did you seek any kind of advice or treatment?	YES 1 NO 2	→ 511
510	Where did you go? Any other place? RECORD ALL SOURCES MENTIONED	PUBLIC SECTOR GOVERNMENT HOSPITAL A DELIVERY HOUSE B COMMUNE HEALTH CENTER C VCT CENTER..... D FAMILY PLANNING CENTER E MOBILE CLINIC..... F COMMUNITY HEALTH WORKER G OTHER PUBLIC..... H _____ (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC I VCT CENTER..... J PHARMACY K PRIVATE DOCTOR L OTHER PRIVATE MEDICAL M _____ (SPECIFY) OTHER SOURCE SHOP N TRADITIONAL PRACTITIONER..... O OTHER..... X _____ (SPECIFY)	
511	Now I would like to ask you some questions about any injections you have had in the last twelve months. Have you had an injection for any reason in the last twelve months? IF YES: How many injections did you have? IF NUMBER OF INJECTIONS IS GREATER THAN 90 OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'. IF NON-NUMERIC ANSWER PROBE TO GET AN ESTIMATE.	NUMBER OF INJECTIONS..... <input type="text"/> <input type="text"/> NONE 00	→ 515

	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
512	<p>Among these injections, how many were administered by a doctor, a nurse, a dentist, or any other health workers?</p> <p>IF NUMBER OF INJECTIONS IS GREATER THAN 90 OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'.</p> <p>IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.</p>	<p>NUMBER OF INJECTIONS..... <input type="text"/> <input type="text"/></p> <p>NONE.....00 → 515</p>	
513	The last time you had an injection given to you by a health worker, where did you go to get the injection?	<p>PUBLIC SECTOR</p> <p>GOVERNMENT HOSPITAL 11</p> <p>DELIVERY HOUSE 12</p> <p>COMMUNE HEALTH CENTER 13</p> <p>VCT CENTER..... 14</p> <p>DENTIST..... 15</p> <p>FAMILY PLANNING CENTER 16</p> <p>MOBILE CLINIC..... 17</p> <p>COMMUNITY HEALTH WORKER</p> <p>OFFICE 18</p> <p>OTHER PUBLIC..... 19</p> <p>_____</p> <p>(SPECIFY)</p> <p>PRIVATE MEDICAL SECTOR</p> <p>PRIVATE HOSPITAL/CLINIC 20</p> <p>VCT CENTER..... 21</p> <p>DENTIST..... 22</p> <p>PHARMACY..... 23</p> <p>PRIVATE DOCTOR 24</p> <p>NURSE/HEALTH WORKER</p> <p>PRIVATE OFFICE/HOME 25</p> <p>OTHER PRIVATE MEDICAL 26</p> <p>_____</p> <p>(SPECIFY)</p> <p>OTHER PLACE</p> <p>AT HOME 31</p> <p>OTHER..... 96</p> <p>_____</p> <p>(SPECIFY)</p>	
514	Did the person who gave you that injection take the syringe and needle from a new, unopened package?	<p>YES 1</p> <p>NO 2</p> <p>DON'T KNOW 8</p>	
515	Husbands and wives do not always agree on everything. Please tell me if you think a wife is justified in refusing to have sex with her husband when she knows he has a disease that can be transmitted through sexual contact?	<p>YES 1</p> <p>NO 2</p> <p>DON'T KNOW 8</p>	

	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
516	When a wife knows her husband has a disease that can be transmitted through sexual contact, is she justified in asking that they use a condom when they have sex?	YES 1 NO 2 DON'T KNOW 8	
517	CHECK 301: FEMALE AND CODE 1 OR 2 <input type="checkbox"/> CIRCLED IN Q301	FEMALE AND CODE 3 <input type="checkbox"/> → 520 CIRCLED IN Q301 MALE <input type="checkbox"/> → 520	
518	Can you say no to your husband/partner if you do not want to have sexual intercourse?	YES 1 NO 2 DEPENDS/UNSURE 8	
519	Could you ask your husband/partner to use a condom if you wanted him to?	YES 1 NO 2 DEPENDS/UNSURE 8	
520	RECORD THE TIME	HOUR..... <input type="text"/> <input type="text"/> MINUTES <input type="text"/> <input type="text"/>	
521	CHECK COVER PAGE: HAIPHONG PROVINCE <input type="checkbox"/> ↓ GO TO THE COVER PAGE, RECORD RESULT OF THE INTERVIEW THEN, GO TO Q601	OTHER PROVINCE <input type="checkbox"/> ↓ GO TO THE COVER PAGE AND RECORD RESULT OF THE INTERVIEW	

SECTION 6. BLOOD SPOT COLLECTION

**THIS PAGE TO BE DESTROYED
BEFORE MERGING**

NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
601	CHECK Q 103: <div style="display: flex; justify-content: space-around; align-items: center;"> AGE 15-17 <input type="checkbox"/> AGE 18-49 <input type="checkbox"/> </div>		→ 604
602	FIND THE PARENT OR GUARDIAN OF THE YOUTH. WRITE NAME AND LINE NUMBER OF PARENT/GUARDIAN FROM THE HOUSEHOLD QUESTIONNAIRE. (IF YOUTH LIVES INDEPENDENTLY, WRITE A NOTE TO INDICATE THIS AT BOTTOM, CIRCLE '1' (YES) IN Q. 603, AND CONTINUE TO Q. 604)	NAME _____ LINE NO <input type="text"/> <input type="text"/>	
603	ASK PARENT/GUARDIAN: <p>As part of this survey, we are studying HIV/AIDS among women and men age 15 to 49 years. As you may know, HIV is the virus that causes AIDS, and AIDS is a serious illness that often leads to the death. We are conducting tests to measure the extent of the disease in Haiphong. The results of the survey will assist the government in developing programs for preventing HIV and AIDS.</p> <p>We request that (NAME) participate in the HIV testing part of this survey by permitting us to take a few drops of blood from her/his finger. Only disposable, sterile instruments that are clean and completely safe will be used. The blood sample will be sent to a laboratory to be analyzed. To ensure confidentiality, (NAME)'s name will not be attached to the blood sample.</p> <p>The results will be completely anonymous and for this reason we can not provide results of the test and no one will be able to trace the test back to (NAME). However, if (NAME) wants to know whether he/she has HIV, I can tell (NAME) where he/she can go to get tested.</p> <p>(NAME) can go to a Voluntary Counselling and Testing (VCT) Centre where he/she will receive free counselling and HIV test results. We will provide (NAME) with a voucher which he/she can use at the VCT Centre in the next 60 days. With the voucher, there will be no charge for this service.</p> <p>Do you have any questions about this? Please tell me if you allow _____ to take the test? (NAME OF 15 – 17 YEAR OLD)</p>	YES.....1 NO2 → GO TO Q.605, AND (CIRCLE '2' PARENT REFUSE) SIGNATURE OF INTERVIEWER DO NOT FORGET TO SIGN	
604	ASK RESPONDENT: <p>As part of this survey, we are studying HIV/AIDS among women and men age 15 to 49 years. As you may know, HIV is the virus that causes AIDS, and AIDS is a serious illness that often leads to the death. We are conducting tests to measure the extent of the disease in Haiphong. The results of the survey will assist the government in developing programs for preventing HIV and AIDS.</p> <p>We request that you participate in the HIV testing part of this survey by permitting us to take a few drops of blood from your finger. Only disposable, sterile instruments that are clean and completely safe will be used. The blood sample will be sent to a laboratory to be analyzed. To ensure confidentiality, your name will not be attached to the blood sample.</p> <p>The results will be completely anonymous and for this reason we cannot provide you with results of the test and no one will be able to trace the test back to you. However, if you want to know whether you have HIV, I can tell you where you can go to get tested.</p> <p>You can go to a Voluntary Counselling and Testing (VCT) Centre where you will receive free counselling and HIV test results. We will provide you with a voucher for yourself, and a voucher for your partner, which either of you can use at the VCT Centre in the next 60 days. With the voucher, there will be no charge for this service.</p> <p>I hope you will agree to participate in the testing. But if you decide not to have the test done, it is your right and I will respect your decision</p> <p>Do you have any questions about this? Please tell me if you agree to participate in the HIV test?</p>	YES.....1 NO2 → GO TO Q.605, AND CIRCLE '3' (RESPONDENT REFUSED) SIGNATURE OF INTERVIEWER DO NOT FORGET TO SIGN	
605	SAMPLE RESULTS	SAMPLE TAKEN 1 PARENT REFUSED 2 RESPONDENT REFUSED 3 NOT PRESENT 4 TECHNICAL PROBLEM 5 OTHER 6 _____ (SPECIFY)	→ END
606	BAR CODE LABEL PASTE 2 ND LABEL ON FILTER PAPER PASTE 3 RD LABEL ON BLOOD SAMPLE TRANSMITTAL FORM	PASTE FIRST BAR CODE LABEL HERE	

INTERVIEWER'S OBSERVATIONS
(TO BE FILLED IN AFTER COMPLETING INTERVIEW)

COMMENTS ABOUT
RESPONDENT :

COMMENTS ON SPECIFIC
QUESTIONS :

ANY OTHER COMMENTS:

SUPERVISOR'S OBSERVATIONS

NAME OF SUPERVISOR:
(SIGN AND WRITE CLEARLY
FULLNAME)

DATE MONTH YEAR 200