

GSHS COUNTRY REPORT

Global School-based Student Health Survey



TAJKISTAN



GSHS COUNTRY REPORT

Global School-based Student Health Survey

TAJKISTAN



ACKNOWLEDGEMENTS

We are grateful to the Ministry of Education of the Republic of Tajikistan for the successful organization and implementation of this survey. We extend special thanks to I.H. Karimova, Deputy Minister of Education and National Coordinator of the Global School-based Student Health Survey (GBHS).

We express our appreciation to the following persons and offices for their expert support: Leanne Riley, Department of Chronic Diseases and Health Promotion, World Health Organization (WHO); Laura Kann and Connie Lim, Division of Adolescent and School Health, U.S. Centers for Disease Control and Prevention (CDC); Diana Widdus, Chief Officer for Implementation of Youth, Health, Development and Participation Project, UNICEF Regional Office for Central and Eastern Europe and the Commonwealth of Independent States (CEE/CIS). We benefited greatly from their commitment and expertise during the execution of the survey and the preparation of this analytical report on the results. We also recognize the contribution of UNFPA in Tajikistan.

Coordination and supervision of the survey and preparation of this report was only possible due to the support of Ms. Yukie Mokuo, UNICEF Representative in Tajikistan and Nisso Kasymova, National Officer for Young People's Healthy Development, Participation and HIV/AIDS, UNICEF Tajikistan.

Members of the survey organization committee—including representatives of the Tajikistan ministries of education and health, other interested state structures, NGOs, and survey administrators—deserve the highest recognition.

Finally, we express our very special gratitude to the school principals and students who participated in the survey.

TABLE OF CONTENTS

- ACKNOWLEDGEMENTS4**
 - List of Tables7**
 - List of Acronyms7**
- RESULTS8**
 - TOBACCO USE.....8**
 - Alcohol and Drug Use8**
 - Alcohol use8
 - Drug use8
 - Mental Health8**
 - Loneliness and depression8
 - Suicidal behavior8
 - Violence and Unintentional Injury9**
 - Serious injuries9
 - Bullying9
 - Sexual behaviours that contribute to HIV Infection, other STIs or unintended pregnancy9**
 - Sexual relations9
 - Pregnancy among adolescents and children9
 - HIV/AIDS Awareness9
- PART 1. INTRODUCTION10**
 - Background10**
 - Purpose10**
 - About GSHS10**
 - Methods11**
 - Sampling11
 - Weighting11
 - Response rates11
 - Administering the survey12
 - GSHS Questionnaire12
- PART 2. RESULTS13**
 - Demographics13**
 - Introduction13
 - Results13
 - Tobacco use13**
 - Background13
 - Results13
 - Alcohol and Other Drug Use14**
 - Background14
 - Results15
 - Prevalence of current alcohol use15
 - Access to alcohol products15
 - Drunkenness and consequences of drinking15
 - Prevalence of lifetime drug use16
 - Mental Health16**
 - Background16
 - Results16



Loneliness and depression	17
Suicidal behavior	17
Violence and Unintentional Injury	17
Background	17
Results	17
Serious injuries	18
Bullying	19
Sexual Behaviors that Contribute to HIV Infection, Other STIs, and Unintended Pregnancy ..	19
Background	19
Results	20
Sexual relations	20
Pregnancy among adolescents and children	20
HIV/AIDS Awareness	21



LIST OF TABLES

Table 1: Schools in Tajikistan by region, total number and number in GSHS survey.....	10
Table 2: Demographic characteristics of the sample in Tajikistan, by percentage.....	12
Table 3: Tobacco use among students by sex, Tajikistan, 2006.....	12
Table 4: Alcohol use and other drug use among students, by sex, Tajikistan, 2006	14
Table 5: Mental health issues among students, by sex, Tajikistan, 2006	16
Table 6: Violence and unintentional injury among students, by sex, Tajikistan, 2006	17
Table 7: Sexual behaviors of students in Tajikistan, by sex, 2006	20
Table 8: HIV-related knowledge, by sex, Tajikistan, 2006.....	21
Table 9 Information on HIV/AIDS taught during this school year	22

LIST OF ACRONYMS

AIDS	Acquired immunodeficiency syndrome
CDC	United States Centers for Disease Control and Prevention
GBAO	Gorno-Badakhshan Autonomous Oblast
GSHS	Global School-based Student Health Survey
HIV	Human immunodeficiency virus
MICI	Multiply Indicator Cluster Survey
NGO	Non-governmental organization
PLWH	Persons Living with HIV
STI	Sexually transmitted infection
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UNIFEM	United Nations Development Fund for Women
WHO	World Health Organization



RESULTS

TOBACCO USE

Overall, in Tajikistan, 2.5% of students reported that they had used any tobacco on one or more of the past 30 days. Male students were significantly more likely than female students to have smoked cigarettes (3.1% and 1.7% respectively).

ALCOHOL AND DRUG USE

Alcohol use

Survey results in Tajikistan showed that the share of students who drank alcohol on one or more of the past 30 days was 0.9%. In that period, male students were significantly more likely than female students to have consumed alcohol (1.3% and 0.4% respectively).

Overall, 4.4% of students were under age 14 when they first drank alcohol. Male students (5.6%) were significantly more likely than female students (2.9%) to have had a first drink at this age.

The share of students who reported being “really drunk” one or more times during their lives was 1.7%. Again, there was a significant difference between the responses of male and female students. Males were significantly more likely than female students to have been “really drunk”—2.3% compared to 0.7%.

Overall, 2.6% of students said they had experienced a hangover, felt sick, got into trouble, missed classes or got into fights one or more times as a result of drinking alcohol.

Drug use

In Tajikistan, 1.1% of students said they had used illicit drugs, e.g., marijuana, hashish, opium or heroin, one or more times. There was no significant difference in responses by sex, age or grade.

The share of students who were less than 14 years old when they first used drugs was 1.6%. There was no significant difference between male and female students.

The survey also showed that 1.6% of all students responding had shared a needle or syringe for drug injection one or more times.

MENTAL HEALTH

Loneliness and depression

In Tajikistan, 2.9% of students said that, during the past 12 months, they felt lonely all or most of the time. There was no significant gender difference in the responses.

Similarly, 3.0% of students reported that, during the past 12 months, they felt so worried about something all or most of the time that they could not sleep at night.

Almost one in four students (23.9%) said that, during the past 12 months, they had felt so sad or hopeless almost every day for two weeks in a row that they stopped doing their usual activities.

Suicidal behavior

Overall, 12.6% of students said that, in the past 12 months, they had seriously considered attempting suicide; and 12.0% of students had actually made a suicide plan.



VIOLENCE AND UNINTENTIONAL INJURY

Serious injuries

In Tajikistan, 21.5% of students reported that they had been in a physical fight one or more times in the past 12 months. Male students were more than twice as likely as female students to have been in a physical fight—28.8% and 12.5 % respectively.

Overall, 17.5% of students had been seriously injured one or more times in the past 12 months. Males were almost twice as likely as females to experience such injury—21.9% and 12.2 % respectively.

Among students who reported a serious injury, 25.0% hurt themselves by accident; 10.7% were injured in a fall; and 7.6% were engaged in playing or training for sports at the time. For 17.0% of students reporting serious injury, a broken bone or dislocated joint was the most serious injury.

Bullying

Overall, 7.4% students in Tajikistan reported being bullied on one and more days in the past 30 days. There was no gender difference in the responses.

Similarly, one in four students (24.7%) who did not attend school one and more days in the past 30 days said the main reason for missing school was the lack of safety at school and/or on the way to and from school.

SEXUAL BEHAVIOURS THAT CONTRIBUTE TO HIV INFECTION, OTHER STIS OR UNINTENDED PREGNANCY

Sexual relations

Overall, 3.0% of students had their first sexual intercourse before age 13; 2.1% of students had had sexual intercourse with two and more partners.

Male students were significantly more likely than female students to have had first-sex at a much younger age and to have had more sexual partners. The survey found: 2.2% of male students had had sexual intercourse, compared to 0.3% of female students; 4.1% of males had first-sex before age 13, compared to 1.5% of females; and 3.1% of males had had two or more sexual partners, compared to 0.7% of females.

Among all students who had sexual intercourse in the past 12 months, 56.0 % said they used a condom during their most recent sexual relation.

Pregnancy among adolescents and children

Overall, 0.3% of students reported that they were either pregnant or a sexual partner in a pregnancy. Males (0.5%) were more likely than females (0.1%) to answer 'yes' to this question.

HIV/AIDS Awareness

During the school year current with the survey, less than half of students said they were taught how HIV infection passes from one person to another; 55.5 % said they *were* taught at school what steps to take to prevent transmission of the disease. One in three students (33.3%) said they were taught the importance of kindness and support for persons living with HIV/AIDS (PLWH).

According to students, their parents seldom speak with them about issues such as sexual education, STIs and HIV/AIDS; 28.2% of students said that they have talked with their parents or guardians about these issues.

About one in four students (26.7%) said they were taught about the effectiveness of condoms. But, one in five students (19.9%) reported they were poorly taught about how to tell someone they do not want to have sexual intercourse unless a condom is used.



PART 1. INTRODUCTION

BACKGROUND

In 2001, WHO, in collaboration with UNAIDS, UNESCO and UNICEF and with technical assistance from the U.S. Centers for Disease Control and Prevention (CDC), initiated the Global School-based Student Health Survey (GSHS).

Since 2003, ministries of health and education around the world have used the GSHS to monitor the prevalence of risk-taking behaviors and protective factors among students. To date, 65 countries have completed or are undertaking the GSHS. This report describes the results of the first GSHS conducted in Tajikistan by the Ministry of Education. The survey took place between 30th May and 15th August, 2006.

PURPOSE

The purpose of the GSHS is to provide accurate data on health behaviors and protective factors among students in order to:

- help countries develop priorities, establish programmes and advocate for resources for school health programmes and policies;
- establish trends in health behaviors for use in the evaluation of health promotion among youth and in schools; and
- enable countries, international organizations and others to make comparisons within and between countries regarding the prevalence of healthy behaviors.

ABOUT GSHS

GSHS is a school-based survey conducted primarily among students aged 13-15 years. It is designed to measure behaviors that relate to the leading causes of mortality and morbidity among children and adults:

- alcohol, tobacco and other drug use
- mental health
- sexual behaviors that contribute to HIV infection, other STIs and unintended pregnancy
- violence and unintentional injury.

Prior to the GSHS, other surveys had been carried out in Tajikistan on the issues of the reproductive health of adolescents and their attitudes towards HIV/AIDS. For example, in 2003 the organization Gender and Development, with UNFPA support, conducted the survey "Awareness of adolescents in the field of reproductive health issues". The survey targeted adolescents and youth aged 15 to 19 years. The total number of respondents was 2,098.

In 2005, the NGO Panorama, with UNIFEM support, carried out a household survey on the gender aspects of HIV/AIDS in Tajikistan. The survey targeted those aged 15 to 49 years. There were 1,200 respondents, 40.8% of whom were aged 15-24 years.¹

In 2005, the second MICI Survey 2005 "Monitoring the Situation of children and women in Tajikistan" report was carried out. The survey targeted females aged 15 to 49 years and children under five years old. The total number of respondents was 10,243, of whom 2,445 persons (23.9%) were aged 15 to 19 years and 1,981 (19.3%) were aged 20-24 years.²

Still, there had been no comprehensive, nationwide assessment of health-related awareness, practices and behaviors in the age group 13 to 15 years. The GSHS is designed to be the first representative survey in Tajikistan of student health in the age group 13 to 15 years.



METHODS

Sampling

The 2006 Tajikistan GSHS used a two-stage cluster sample design to produce a representative sample of students in Grades 7-9.

The first-stage sampling framework, included all schools containing any of Grades 7-9. Schools were selected with probability proportional to school enrollment size; schools were selected to participate in the Tajikistan GSHS.

Table 1: Schools in Tajikistan by region, total number and number in GSHS survey

Region of Tajikistan	Total number of schools	Number of schools in GSHS survey
City of Dushanbe	84	7
GBAO	229	15
Sogd Oblast	791	29
Khatlon Oblast	1,090	34
RRS	739	15
Republic of Tajikistan	2,290	100

The second-stage sampling was drawn from Grades 7-9 in all schools that met the first-stage criteria. The sample consisted of randomly selecting intact classrooms (using a random start) from each school to participate. In schools with a small number of students, the classes have been consolidated into one single Primary Sampling Unit. All students in the sampled classrooms were eligible to participate in the GSHS.

Weighting

A weighting factor was applied to each student record to adjust for non-response and for the varying probabilities of selection.

The weighting formula used for calculation was:

$$W = W1 * W2 * f1 * f2 * f3$$

W1 = inversion of probability of school selection

W2 = inversion of probability of grade selection

f1 = adjustment factor for non-response at school level, calculated by size of school (small, middle, big) and by registered schools rather than quantity of schools.

f2 = adjustment factor for non-response at class level, calculated by class

f3 = adjustment factor after stratification, calculated by degrees

Weighting allows the results to be applied to the *whole* population of students in Grades 7-9 in Tajikistan.

Response rates

For the GSHS in Tajikistan, 9,714 questionnaires were completed in 99 schools in 2006. The school response rate was 99.0% (99 of 100 selected schools). The student response rate was 81.1% (9,714 of



11,973 students included in the sample). The overall response rate was 80.0%.

The data set was cleaned and edited for inconsistencies. Missing data were not statistically imputed. Software that takes into consideration the complex sample design was used to compute prevalence estimates and 95% confidence intervals. GSHS data are representative of all students attending Grades 7-9.

Administering the survey

The GSHS survey was administered by the Ministry of Education of the Republic of Tajikistan. The survey relied upon the efforts of a coordinator, organizational committee and administrators.

The organizational committee was composed of a coordinator, representatives of the ministries of education and health, other state stakeholders and NGOs. The committee participated in the development of tools for the survey, the sampling strategy and the involvement of schools. The survey administrators were responsible for the collection of data and school documentation.

Survey procedures were designed to protect student privacy by allowing voluntary and/or anonymous participation. The students completed the self-administered questionnaire during one classroom period and recorded their responses on a sheet that could be scanned by computer. Survey administrators were specially trained to conduct the GSHS.

GSHS Questionnaire

The Tajikistan GSHS Questionnaire comprised 79 questions that addressed the following topics:

- demographic data
- alcohol and other drug use
- mental health
- sexual behaviors that contribute to HIV infection, other STIs and unintended pregnancy
- tobacco smoking
- violence and unintended injury

The questionnaire was developed (see Appendix 1) by representatives of the Tajikistan ministries of education and health, UNICEF, UNFPA, and the NGO “Adolescents and Reproductive Health”.



PART 2. RESULTS

DEMOGRAPHICS

Introduction

Tajikistan is a country of children and youth. The average age of the population is 23.7 years old. Children and youth under age 15 make up 37.1% of the total population. Children and youth aged 13 to 15 number 529,976 individuals and make up 7.7% of the total population.

Results

The GSHS sample in Tajikistan was comprised of 9,714 persons: 4,805 respondents were boys and 4,796 were girls. The subset of respondents aged 13 to 15 years was 7,395 individuals, making up 76.3 % of the total sample. Respondents were spread equally across the three grades.

Table 2: Demographic characteristics of the sample in Tajikistan, by percentage

Sex	%	Age	%	Grade	%
Male	55.0	12 years and younger	1.7	7	33.0
Female	45.0	13 to 15 years	76.3	8	33.3
		16 years and over	22.0	9	32.7
				Other	0.9

TOBACCO USE

Background

About 1.1 billion people worldwide smoke tobacco and the number of smokers continues to increase. Some 84.0% of persons who smoke live in countries with developing or transitional economies. Currently, five million people around the world die every year from tobacco-related conditions, making tobacco consumption the second-leading cause of death worldwide. If present patterns continue, it is estimated that deaths from tobacco consumption will reach 10 million persons per year by 2020.³ The overwhelming majority of smokers begin tobacco use before they reach adulthood. Among young people who smoked, nearly one quarter first smoked tobacco before the age of 10.

Tobacco users have markedly increased risks of various cancers, particularly lung cancer, and are at far greater risk of heart disease, stroke, emphysema and many other fatal and non-fatal diseases. If users chew tobacco, they are at particular risk of cancer of the lips, tongue and mouth. Children, in particular, are at risk from the second-hand effects of adult smoking. Adverse health effects include pneumonia and bronchitis, coughing and wheezing, worsening of asthma, middle-ear disease, and possibly neurobehavioral impairment and cardiovascular diseases in adulthood. In addition, many studies show that parental smoking is associated with a greater chance that their children smoke.⁴

Results

The tobacco use characteristics of the sample are described in Table 3.



Table 3: Tobacco use among students by sex, Tajikistan, 2006.

Questions	Total %*	Sex	
		Male %*	Female %*
Percentage of students who used any form of tobacco on one or more days during the past 30 days	2.5 (1.9–3.0)	3.1 (2.3–3.8)	1.7 (1.1–2.3)
Among students who smoked cigarettes during the past 12 months, those who tried to stop	34.3 (25.1–43.4)	39.0 (28.5–49.5)	The number of respondents is not representative (<100 people)
Percentage of students who reported people smoking in their presence in the past 7 days	16.8 (13.4–20.2)	20.9 (17.0–24.7)	12.0 (8.6–15.5)
Percentage of students with a parent or guardian who uses any form of tobacco	16.7 (14.1–19.2)	17.7 (14.8–20.5)	15.4 (12.5–18.3)

* 95% confidence interval

Prevalence of tobacco use

In Tajikistan, the survey showed that 2.5% of students had used some form of tobacco on one or more days during the past 30 days. There was no statistical significance between male and female students use of tobacco.

Overall, 16.8% of students reported that persons had smoked in their presence on one or more days during the past seven days. Male students (20.9%) were significantly more likely than female students (12.0%) to say that persons had smoked in their presence in the past seven days.

Tobacco use by parents or guardians

The survey data also show that 16.7% of students responding had a parent or guardian who used tobacco. There was no statistical significance between male and female students.

Students' fathers were significantly more likely than their mothers to use tobacco.

ALCOHOL AND OTHER DRUG USE

Background

Worldwide, alcohol use causes 3.0% of deaths (1.8 million persons) every year, comprising 4.0% of the global disease burden. Proportionately, the alcohol-related disease burden is greatest in the Americas and Europe, accounting for 8% to 18% of the total disease burden for males and 2% to 4% of the total burden for females. Besides the direct effects of intoxication and addiction, alcohol-use causes between 20% and 30% of esophageal cancer, liver disease, homicide and other intentional injuries, epilepsy, and motor vehicle accidents worldwide.⁵ In addition, heavy alcohol use places the user at greater risk for cardiovascular disease.⁶

Unintentional injuries are the leading cause of death among 15 to 25 year-olds and many of these injuries are related to alcohol use.⁷ Both intentional and unintentional injuries are far more common among youth and young adults.

In most countries, alcohol-related mortality is highest among 45 to 54 year-olds, but the relationship



between the age of initiation of alcohol use and the pattern of its use and abuse in adulthood makes the study of alcohol consumption among adolescents important.⁸

Young people who drink alcohol are more likely to use tobacco and other drugs and engage in risky sexual behaviors than those who do not drink alcohol.^{9,10} Problems with alcohol can impair adolescents' psychological development and negatively influence both the school environment and leisure time.¹¹

Results

The alcohol and drug use characteristics of the sample are described in Table 4.

Table 4: Alcohol use and other drug use among students, by sex, Tajikistan, 2006

Questions	Total %*	Sex	
		Male %*	Female %*
Percentage of students who had one or more alcoholic drinks on one or more of the past 30 days.	0.9 (0.5–1.3)	1.3 (0.7–1.9)	0.4 (0.2–0.6)
Percentage of students who had several drinks of alcohol under age 14.	4.4 (3.4–5.3)	5.6 (4.3–7.0)	2.9 (2.2–3.6)
Percentage of students who had been “really drunk” one or more times during their life.	1.7 (1.2–2.2)	2.3 (1.5–3.0)	0.7 (0.4–1.1)
Percentage of students who had a hangover, felt sick, got into trouble, missed school or got into fights one or more times after drinking alcohol.	2.6 (1.8–3.3)	3.4 (2.4–4.5)	1.4 (0.8–1.9)
Percentage of students who had used drugs (e.g., hashish, marijuana, opium and heroin) one or more times.	1.1 (0.8–1.4)	1.3 (0.8–1.7)	0.8 (0.5–1.0)

*95% confidence interval

Prevalence of current alcohol use

In Tajikistan, the survey showed that the proportion of students who had at least one drink containing alcohol on one or more of the past 30 days was 0.9%. Male students (1.3%) were more likely to report current alcohol use than female students (0.4%).

Overall, 4.4% of students first drank alcohol at an age under 14 years old. Male students (5.6%) were significantly more likely than female students (2.9%) to first drink alcohol at this age.

Access to alcohol products

Overall, 0.4% of students reported that usually got the alcohol they drank by buying it in a shop, store, or from a street vendor. More than half of students (54.7%) who use alcohol drink with friends; an activity more common among boys (61.3%).

Drunkness and consequences of drinking

During their lives, 1.7% of students had drunk so much alcohol that they were “really drunk” one or more times. There is a statistically significant difference in the responses of male and female students. Males were more likely (2.3%) than females (0.7%) to drink so much alcohol that they had been “really drunk” one or more times. Overall, 2.6% of students had had a hangover, felt sick, got into trouble or



into fights—one or more times—after drinking alcohol. As in previous cases, male students (3.4%) were significantly more likely than female students (1.4%) to experience these consequences.

Prevalence of lifetime drug use

In Tajikistan, the prevalence of lifetime drug use (such as marijuana, hashish, opium or heroin one or more times) was 1.1%. No significant differences were found by sex, age or school grade.

The proportion of students who first used drugs at an age younger than 14 was 1.6%. There was no difference in the age of male and female students as to when they first used drugs. Among students who had used drugs, 93.8% reported that they first used drugs at an age younger than 14 and, even more disturbing, 52.7% first used drugs at age seven and younger.

The survey also captured risky behavior by students who use drugs. The nationwide proportion of students who shared needles or syringes for drug injection one or more times was 1.6%.

Almost two in three students (64.0%) said they had been taught in class during the school year about the dangers of using alcohol and/or drugs.

MENTAL HEALTH

Background

Worldwide, about 20.0% of children and adolescents suffer from a disabling mental illness.¹² These health problems include anxiety disorders, depression and other mood disorders, and behavioral and cognitive disorders. Half of all cases of mental disorders emerge by age 14.¹³

Every country and culture has children and adolescents struggling with mental health problems. Most of these young people suffer needlessly, unable to access appropriate resources for recognition, support and treatment. Ignored, these young people are at risk for abuse and neglect, suicide, alcohol and other drug use; school failure, violence and criminal activity; mental illness in adulthood and impulsive behaviors that jeopardize their health. Each year, some four million adolescents around the world attempt suicide. Suicide is the third-leading cause of death among adolescents.^{14, 15}

Results

The mental health indicators in the sample are described in the following table.

Table 5: Mental health issues among students, by sex, Tajikistan, 2006

Questions	Total % (CI)*	Sex	
		Male % (CI)	Female % (CI)
Percentage of students who felt lonely all or most of the time in the past 12 months.	2.9 (2.2–3.6)	3.3 (2.4–4.2)	2.4 (1.6–3.1)
Percentage of students who felt so worried all or most of the time in the past 12 months that they could not sleep.	3.0 (2.3–3.7)	3.3 (2.3–4.3)	2.5 (1.8–3.1)
Percentage of students who felt so sad or hopeless almost every day for two weeks or more in a row in the last 12 months that they stopped doing their usual activities.	23.9 (20.3–27.5)	25.5 (21.3–29.7)	21.3 (17.8–24.8)



Percentage of students who, in the past 12 months, seriously considered attempting suicide.	12.6 (10.4–14.8)	13.9 (11.0–16.9)	10.3 (8.2–12.4)
Percentage of students who, in the past 12 months, made a plan to attempt suicide.	12.0 (9.5–14.4)	12.6 (9.9–15.2)	10.4 (7.7–13.2)
Percentage of students who say they have no close friends.	10.2 (8.6–11.9)	9.1 (7.6–10.6)	11.0 (8.6–13.3)

*95% confidence interval

Loneliness and depression

In Tajikistan, 2.9% of students said they felt lonely most of the time or always during the past 12 months. There was no significant difference in this proportion between male and female students.

Overall, 3.0% of students most of the time or always felt so worried about something that they could not sleep at night during the past 12 months. There was no significant gender difference. Almost one in four students (23.9%) felt so sad or hopeless almost every day for two weeks in a row that they stopped doing their usual activities during the past 12 months.

Suicidal behavior

Overall, 12.6 % of students seriously considered attempting suicide during the past 12 months; and 12.0 % had made a plan about they would attempt suicide during the past 12 months. There was no significant difference in suicidal behavior between male and female students.

Overall, 10.2% of students said they have no close friends. There was no significant difference between male and female students in response to this question.

VIOLENCE AND UNINTENTIONAL INJURY

Background

Unintentional injuries are a major cause of death and disability among young children.¹⁶ Each year about 875,000 children under the age of 18 die from injuries worldwide and 10 to 30 million have their lives affected by injury. Injuries are highly associated with age and gender. Males aged 10 to 14 years have a death rate from injury that is 60% higher than for females. Teenagers aged 15 to 19 years have higher rates of fatal injury than those aged 10 to 14 years (64% deaths vs 29% per 100,000).

The global estimate of death rates from homicide for males aged 17 to 19 years is 9 per 100,000.¹⁷ For every youth homicide, approximately 20 to 40 victims of non-fatal youth violence receive hospital treatment.¹⁸ Many unintentional injuries lead to permanent disability and brain damage, depression, substance abuse, suicide attempts and risky health behaviors.

Even victims of bullying experience increased stress and a reduced ability to concentrate, and are at increased risk for substance abuse, aggressive behaviors and suicide attempts.¹⁹

Results

The results of the survey responses on violence and unintentional injury are presented in the following table.



Table 6: Violence and unintentional injury among students, by sex, Tajikistan, 2006

Questions	Total % (CI)*	Sex	
		Male % (CI)*	Female % (CI)*
Percentage of students in a physical fight once or more in the past 12 months	21.5 (18.6–24.4)	28.8 (25.3–32.2)	12.5 (9.5–15.5)
Percentage of students seriously injured one or more times in the past 12 months	17.5 (14.2–20.8)	21.9 (17.5–26.2)	12.2 (9.5–14.9)
Percentage of seriously injured students hurt while playing or training for a sport	7.6 (5.1–10.1)	9.6 (6.4–12.9)	3.4 (1.0–5.8)
Percentage of seriously injured students hurt as the result of a fall	10.7 (6.1–15.3)	10.8 (4.2–17.4)	8.8 (5.4–12.1)
Percentage of seriously injured students whose most serious injury was the result of hurting themselves by accident	25.0 (20.5–29.4)	24.3 (19.2–29.4)	26.3 (19.7–33.0)
Percentage of seriously injured students whose most serious injury was a broken bone or dislocated joint	17.0 (13.7–20.2)	19.0 (15.4–22.7)	12.9 (8.4–17.4)
Percentage of students bullied on one or more days in the past 30 days	7.4 (5.4–9.5)	6.8 (4.6–9.0)	8.1 (5.4–10.9)
Among students who had been bullied on one or more of the 30 days, the percentage who were most often hit, kicked, pushed, shoved or locked indoors	51.3 (41.0–61.7)	48.7 (36.0–61.5)	54.4 (40.2–68.5)
Percentage of students physically attacked once or more in past 12 months	24.8 (21.9–27.7)	26.3 (22.9–29.6)	22.3 (19.0–25.7)
Percentage of students who missed school one or more days because they felt unsafe at or on the way to school	24.7 (21.3–28.1)	25.9 (22.0–29.8)	23.0 (19.6–26.4)

*95% confidence interval

Serious injuries

In Tajikistan, 21.5% of students had been in a physical fight one or more times during the past 12 months. Male students (28.8%) were more than twice as likely as female students (12.5%) to have been in a physical fight.

Overall, 17.5% of students said they had been seriously injured one or more times during the past year 12 months. Male students (21.9 %) were more likely than female students (12.2 %) to have been seriously injured.

Those students who were seriously injured during the past 12 months sustained their most serious injury in different ways: 7.6% were playing or training for a sport; 10.7% took a fall; and 25.0% hurt



themselves by accident. For 17.0% of students, their most serious injury was a broken bone or dislocated joint. Male students (9.6%) were significantly more likely than female students (3.4%) to be playing or training for a sport when their most serious injury occurred. For all other causes, there were no significant gender differences.

Bullying

Overall, 7.4% of students had been bullied on one and more days during the past 30 days. The share was the same for male and female students. Among those bullied during the past 30 days, half (51.3%) most often experienced being hit, kicked, pushed, shoved around, or locked indoors. Boys and girls were equally exposed to such abuse.

In a related finding, among students who failed to attend school one and more days in the past 30 days, one in four (24.7%) reported that the main underlying reason for non-attendance was lack of safety at school or on the way to school.

Another finding that deserves special attention is that the younger the students, the more likely they had been subjected to bullying and physical attack. As Figure 5 shows, one in three students aged 12 and younger had been bullied on one and more days during the past 30 days and one in two students in this age group had been physically attacked one and more days during the past 12 months.

SEXUAL BEHAVIORS THAT CONTRIBUTE TO HIV INFECTION, OTHER STIS, AND UNINTENDED PREGNANCY

Background

Since 1981, more than 25 million people in the world have died from AIDS-related diseases. As of 2005, an estimated 40.3 million people in the world were living with HIV. In that year alone, roughly 3.1 million people died of AIDS-related causes and another 4.9 million people became infected with HIV.²⁰ Young people between 15 and 24 years old were the age group most threatened by HIV, accounting for more than half of those newly infected with the virus. At the end of 2003, an estimated 10 million young people aged 15 to 24 were living with HIV.

Studies show that adolescents who begin sexual activity early are more likely to have sexual relations with more partners and that these partners are less likely or unlikely to use condoms and are at greater risk of HIV exposure. In many countries, HIV infection and AIDS are reducing average life expectancy, threatening food security and nutrition, causing the breakdown of households, overloading health-care systems, reducing economic growth and development, and reducing school enrolment and the availability of teachers.²¹

STIs are among the most common causes of illness in the world and have far-reaching health consequences. They facilitate the transmission of HIV and, if left untreated, can lead to cervical cancer, pelvic inflammatory diseases, and ectopic pregnancies.²² Worldwide, the highest reported rates of STIs are found among persons between 15 and 24 years old; up to 60% of new infections and half of all people living with HIV (PLWH) are in this age group.²³

In Tajikistan, the first official case of HIV infection was registered in 1991. Over the last three years, the number of HIV cases in Tajikistan has increased 10-fold. As of 1st May, 2006, the total number of registered HIV infections was 544, of which 460 were males and 84 were females, including 33 persons who died from AIDS-related diseases. The prevalence of HIV infection in Tajikistan is 14.3 persons per 100,000 population between ages 15 and 49 years. The number of people living with HIV varies by region: at the end of 2005, the highest prevalence of HIV was in Dushanbe (50.5 per 100,000 population aged 15 to 49) followed by GBAO district (48.7 per 100,000 population aged 15 to 49 years).



Results

The survey results on sexual behaviors are presented in the following table. When interpreting these results, it is necessary to keep in mind that in Tajikistan today there persists a social taboo on discussing issues related to sex. This social silence helps explain why the responses of students to GSHS questions on sexual issues vary broadly.

Table 7: Sexual behaviors of students in Tajikistan, by sex, 2006

Questions	Total % (CI)*	Sex	
		Male % (CI)*	Female % (CI)*
Percentage of students who had sexual intercourse before age 13	3.0 (1.9–4.0)	4.1 (2.6–5.5)	1.5 (0.7–2.3)
Percentage of students who had sexual intercourse with two or more persons	2.1 (1.5–2.8)	3.1 (2.1–4.2)	0.7 (0.3–1.1)
Percentage of students who had sexual intercourse during the past 12 months	13.0 (10.7–15.3)	15.0 (12.2–17.8)	10.1 (7.6–12.6)
Of students who had sexual intercourse during the past 12 months, the percentage who used a condom during their most recent sexual intercourse	56.0 (48.5–63.4)	56.4 (47.2–65.5)	The number of respondents was not representative (<100 people)
Percentage of students who think most of their friends have had sex	1.9 (1.4–2.4)	2.5 (1.8–3.3)	1.0 (0.4–1.5)

*95% confidence interval

Sexual relations

Overall, 3.0% of students had their first sexual intercourse before the age of 13. Further, 2.1% of students had had sexual intercourse with two and more partners in their lives so far.

Male students were significantly more likely than female students to have had their first sexual relations at a much earlier age and to have had more sexual partners. Males (4.1%) were also much more likely than female students (1.5%) to have had first sex before age 13. Males (3.1%) were much more likely than females (0.7 %) to have had two or more sexual partners.

The share of students who had had sexual intercourse during the past 12 months was 13.0%. There was no difference between the share of males and females.

The proportion of students who had sexual intercourse two and more times was 0.3%. This group of students is represented only by males.

Among all students who had sexual intercourse during the past 12 months, more than half (56.0%) had used a condom during their most recent sexual intercourse.

The prevalence of early sexual intercourse was reinforced by the finding that 1.9% of adolescents think that most of their friends have had sexual intercourse. Male students (2.5%) were significantly more likely than female students (1.0%) to hold this perception.

Pregnancy among adolescents and children

Overall, in Tajikistan, 0.3% of students reported that they were or had been pregnant or a girl they had sexual intercourse with had become pregnant as a result. Male students (0.5%) were significantly more likely than female students (0.1%) to give a positive answer to this question.



HIV/AIDS Awareness

The level of HIV/AIDS awareness among adolescents is an important factor in shaping behaviors around both sexual activity and treatment of others. Drawing upon indicators used globally, the Tajikistan survey included questions designed to assess student awareness of HIV/AIDS. For example:

1. Can you protect yourself from HIV infection by having one faithful HIV-negative partner?
2. Can you protect yourself from HIV infection by using condoms?
3. Can a healthy-looking person be infected with HIV?
4. Can you contract HIV through a mosquito bite?
5. Can you contract HIV by sharing meals with someone who is infected with the virus?

As Table 8 shows, only one in four students (24.6%) knew that a healthy-looking person may be HIV-positive. One in three students (30.3%) believed that they can be protected from HIV or AIDS by having one faithful HIV-negative sexual partner. Many respondents also incorrectly agreed to some suggested means for HIV transmission: for example, one in four students (24.7%) said HIV can be transmitted by sharing meals with a person who is HIV-positive; and one in five students (20.8%) believed the virus can be passed through a mosquito bite.

Table 8: HIV-related knowledge, by sex, Tajikistan, 2006

Questions		Sex	
		Male % (CI)*	Female % (CI)*
Percentage of students who think that they can protect themselves from HIV or AIDS by correct use of condoms during sexual intercourse	26.6 (22.5–30.8)	29.5 (24.9–34.1)	22.6 (18.2–27.0)
Percentage of students who think that they can protect themselves from HIV or AIDS by having one faithful HIV-negative sexual partner	30.3 (25.8–34.8)	32.3 (27.5–37.0)	27.4 (22.8–31.9)
Percentage of students who think one can get HIV from a mosquito bite	20.8 (18.3–23.2)	23.0 (19.7–26.3)	17.4 (14.5–20.3)
Percentage of students who think that it is possible to get HIV by sharing meals with an HIV-infected person	24.7 (21.8–27.7)	27.6 (23.7–31.4)	20.6 (17.5–23.6)
Percentage of students who think that a healthy-looking person can be infected with HIV	24.6 (21.3–28.0)	25.3 (21.7–28.8)	23.3 (19.5–27.1)
Percentage of students that gave correct answers to all five survey questions on ways of HIV or AIDS transmission	3.7 (2.0–5.5)	4.5 (2.4–6.6)	3.1 (1.4–4.9)

*95% confidence interval



SOURCES OF INFORMATION ON HIV/AIDS, STIS AND PREGNANCY

The survey results presented in Table 9 expand on this finding. Just over half of students (55.5%) said that in the current school year they had been taught how to avoid contracting HIV. Less than half were taught about how HIV is transmitted (47.8%) and about the signs and symptoms of HIV/AIDS (47.9%). One third of students (33.3%) were taught about the importance of being kind and supportive to persons living with HIV/AIDS.

Table 9: HIV/AIDS awareness taught in class during current school year, Tajikistan, 2006.

Questions (events in current school year)	Total % (CI)*	Sex	
		Male % (CI)*	Female % (CI)*
Percentage of students who were taught how HIV passes from one person to another	47.8 (42.1–53.4)	47.3 (41.2–53.4)	48.1 (42.1–54.1)
Percentage of students who were taught about signs and symptoms of HIV/AIDS	47.9 (42.1–53.7)	47.0 (41.1–52.9)	48.9 (42.5–55.3)
Percentage of students who were taught about how to avoid contracting HIV	55.5 (50.9–60.1)	54.0 (49.1–58.8)	57.2 (52.1–62.4)
Percentage of students who were taught where to get tested for HIV/AIDS	37.0 (32.5 – 41.4)	37.1 (32.5–41.8)	36.6 (31.7–41.5)
Percentage of students who were taught the importance of being kind and supportive to persons living with HIV/AIDS	33.3 (28.7–37.9)	32.7 (28.0–37.4)	33.8 (28.8–38.8)
Percentage of students who have ever talked about HIV/AIDS with their parents or guardians	28.2 (24.7–31.6)	30.0 (26.6–33.4)	25.3 (21.2– 29.4)

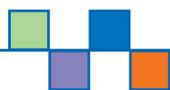
*95% confidence interval

Just one in four students (26.7%) of students was taught about the effectiveness of condoms in preventing the transmission of HIV, STIs and pregnancy. Students were also poorly taught about how to tell a potential sexual partner that they do not want to have sexual intercourse unless a condom is used; only one in five students (19.9%) received such instruction.

The survey also showed that most students are impacted by public attitudes towards condoms and they tried to conceal their early sexual contacts. Almost one in five students (18.0%) said if they wanted condoms they would get them from a pharmacy, clinic or hospital. There was no gender difference on this issue.

The need for more education in schools about HIV/AIDS awareness and prevention is reinforced by data on STI cases in Tajikistan. Overall, 14.8% of students reported that they have been told by a doctor or nurse that they had a sexually transmitted infection. In addition, 17.5% of students reported that they have been tested for HIV or AIDS.

The survey found that the family ranked last among significant sources of information on HIV/AIDS. Just 2.6% of students said the family was their primary source. More importantly, less than one in three students (28.2%) said they had ever talked with their parents or guardians about HIV infection or AIDS.



PART 3: CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

The GSHS survey showed that students in Tajikistan face a number of health problems related to behaviors, e.g. tobacco use. The survey also showed that such behaviors are not simply the actions of individuals but take place in a social context, e.g. prevention education in school. The survey both highlighted health issues that were known but insufficiently regarded, and also brought other problems to light.

For example, mental health problems had been acknowledged as an issue for adolescents in Tajikistan, but the survey indicated that more attention, more prevention and more support efforts are urgently required in this area. More specifically, the survey drew attention to suicide attempts as an area of critical concern. Students reported experiencing sexual abuse and some said this abuse had caused them to think of attempting suicide.

The survey drew further attention to the issue of violence against children and adolescents, including abuse by other students. Students reported that they have been abused inside schools, on school property, and on the way to and from school. Maltreatment included physical attack and assault, bullying, intimidation, mockery and other forms of psychological abuse.

Perhaps, the key message delivered by the survey is that large shares of students are involved in risk-taking behaviors related to their health. A substantial share of students in the age group 13 to 15 years used tobacco and alcohol. Many students first use tobacco, alcohol or drugs at the early age of 11 years old and younger. Children and adolescents get alcohol from friends or their own homes but are also able to buy alcohol in stores, shops and from street vendors.

The survey also showed that children and adolescents are vulnerable to early pregnancy and STIs, including HIV/AIDS. Many students had first sexual intercourse at a young age. Some had had casual sexual relations and/or two and more sexual partners. Some students had unsafe sexual contacts in terms of preventing pregnancy and the transmission of STIs.

Male students were significantly more likely than female students to have had sexual intercourse at a much younger age and to have more sexual contacts and with more sexual partners.

Knowledge about how HIV passes from one person to another is low among all students, irrespective of sex, age or grade. Only 3.7% of students in Grades 7 to 9 correctly answered a set of questions related to both the facts and falsehoods around HIV transmission.

TV and radio were by far the main source of information for students about HIV/AIDS, followed by school, and then newspapers and magazines. Parents were very seldom the main agents of their children's sexual education.

The GSHS survey added substantial data and significant analysis to existing knowledge about adolescent health in Tajikistan. These results are a convincing reason to conduct additional research, both with the aim of tracking trends—e.g., teen suicide and the role of mass media in student behaviors—and revealing new issues.

RECOMMENDATIONS

Analysis of GSHS Tajikistan results made it clear that there was a need to develop and support strategic interaction among education, health, family and community systems—with the common goal of pro-



moting and supporting healthy behaviors among adolescents.

This Report makes the following strategic recommendations:

1. Develop and promote adolescent-health goals and joint actions by schools, health facilities, community institutions, families and the general public.
2. Coordinate stakeholders in the implementation of programmes already adopted by the Government of Tajikistan, e.g., the National Program on Young people's healthy development 2006-2010.
3. Increase public financing of healthy-lifestyle programmes for children and adolescents.
4. Increase the human-resources capacity—e.g., design and implementation of training programmes—of agencies charged with promoting healthy lifestyles for children and adolescents.

Initiatives should take into account the fact that children engage in risk-taking behaviors such as tobacco, alcohol and drug use as young as seven years old. Health promotion efforts should then start as early as Grade 1.

Policies and programmes need also pay attention to the special capacity of schools to influence the health status of children and adolescents. In particular, school is an important environment and agent for providing information to students, shaping their attitudes towards health and, ultimately, contributing to the exercise of healthy behaviors. It is also important that school-based efforts address mental as well as physical health.

The "Healthy Lifestyle" programme needs to be reviewed and updated based on the evidence gathered in the GSHS survey. An improved "Healthy Lifestyle" programme could then be mainstreamed into schools with a coherent, integrated approach that ranges from the development of teaching guidelines to the inclusion of behavior-related health issues in subjects from science and the humanities to physical education.

Further, the "Healthy Lifestyle" programme could be incorporated into basic training and professional development for teachers, other educators and educational staff. There should also be a mechanism for developing a national team of "Healthy Lifestyle" trainers to instruct both educational and health-care workers. This training should cover the various aspects of "healthy lifestyles"—including hygiene, physical and psychological wellness, family relations, legal and ethical issues.

The content of the "Healthy Lifestyle" programme and related strategies to promote and shape the formation of healthy behaviors should focus not only on the dissemination of knowledge geared at prevention but also on changing *existing* high-risk attitudes and behaviors. The GSHS results show that significant shares of students—both boys and girls—already exhibit attitudes and behaviors that expose them to serious health risks. For example, only a very small share of students have adequate levels of knowledge about HIV/AIDS and, further, significant shares of students are already engaged in sexual relations and/or the use of tobacco, alcohol or drugs.

More broadly, it is important to engage the responsibilities of families for the development of health-conscious attitudes and behaviors among their children. For example, there is an opportunity to strengthen the role of Parent Teacher Associations in these areas.

The first focus of programmes being implemented should be to prevent students from engaging in risk-taking behaviors, both for the sake of protecting the health of individuals and of wider society. There should also be efforts to expand the range of services and supports—both inside and outside of schools—that provide students with opportunities to acquire constructive skills and positive behaviors. Initiatives might range from cessation ('quitting') programmes and rehabilitation facilities to



more organized sports and recreation as well as skills development programmes such as computer training. These initiatives can help prevent students from taking up or engaging in unhealthy behaviors like smoking, drinking, drug use and unsafe sex. They can also serve a therapeutic function, providing healthy alternatives to help heal students already involved in risky behaviors and activities.

One effective way to deliver a package of such services and programmes in a single setting is through the creation of more Social-Psychological Rehabilitation Centers for children and victims of violence. These centers provide free primary health care, supplementary health services, psychological counseling, organized recreation, communication skills development, as well as training and public information sessions on issues such as HIV/AIDS and drug use.

In terms of approaches, it is important that different types of information materials be prepared for students and for parents. Awareness, information and education for students can be effectively expressed through creative forms such as puppet shows, staged plays, cartoons, and musical performances. There is also an opportunity for the effective practice of “peer-to-peer” counseling where students with the right combination of characteristics and experience are trained to serve as a resource for other students.

Given the influential role of mass media, especially television and radio, in forming adolescent awareness of health issues, it is important to take advantage of these outlets. This effort can include both the creation and promotion of programming that addresses the mental and physical health issues that students face and experience. For example, besides regular programming, efforts can be made to support documentary films on student health issues and even to hold competitions for media projects that can then be broadcast through central and local media outlets.

Finally, it is necessary to monitor student health behaviors regularly, based on established indicators, in order to assess both the current state of student health and trends in student health. Specifically, it is recommended the “Healthy Lifestyle” programme be monitored and evaluated for performance. And, that the GSHS be carried out again in Tajikistan in three years (2009).



LIST OF PARTICIPANTS

Ministry of Education (ME)

1. I. Karimova, Deputy Minister of Education
2. M. Lutfulloev, President, Academy of Pedagogical Sciences (APS)
3. B. Kodyrov, Deputy Director, Pedagogical Research Institute (PRI)
4. M. Shaihov, Academic Secretary, APS
5. B. Boev, Head, Psychological Department, PRI
6. D. Amirov, specialist, Department of General Education, ME
7. Kh. Khojaev, specialist, Department of General Education, ME
8. B. Ashurova, specialist, Department of Attestation, Accreditation and Certification, ME
9. H. Mirzomatov, specialist on Curriculum, ME

Ministry of Health (MH)

10. S. Saifutdinov, Director, Republican Statistical Centre, MH
11. F. Khakimov, specialist, Republican Statistical Centre, MH
12. M. Atoev, specialist, Republican Healthy Lifestyle Centre
13. O. Elisova, specialist, Medical College
14. D. Abdieva, Associate Professor, STIs department, Tajik Medical University
15. R. Dadabaev, Associate Professor, STIs department, of Tajik Medical University
16. M. Rakhmanova, specialist, Republican AIDS Centre

NGOs

17. T. Bozrikova, Sociologist, Director, "Panorama"
18. G. Khasanova, Director, "Reproductive health and adolescents"
19. F. Nabieva, "Reproductive health and adolescents"
20. S. Saifulloev, Editor, "Omuzgor" newspaper

UN

21. N. Kasymova, Programme Officer, GSHS
22. G. Ibrohimova, UNICEF Project Assistant
23. M. Boltaeva, UNAIDS
24. B. Bobodjanov, UNFPA
25. R. Vohidov, Volunteer



ENDNOTES

- 1 Panorama. Report on the results of survey. Bozrikova T., Bazidova Z. Gender issues in HIV/AIDS in Tajikistan. Dushanbe, 2005.
- 2 MICI Survey 2005 "Monitoring the Situation of children and women in Tajikistan". Report October 2005.
- 3 WHO. World No Tobacco Day, 2006 Brochure: Tobacco: Deadly in any form or disguise. Geneva, Switzerland, 2006. Available online at: http://www.who.int/tobacco/communications/events/wntd/2006/Report_v8_4May06.pdf
- 4 WHO. The Tobacco Atlas. Geneva, Switzerland, 2002. Available online at: http://www.who.int/tobacco/resources/publications/tobacco_atlas/en/index.html
- 5 WHO. World Health Report 2002. Geneva, Switzerland: WHO, 2002.
- 6 WHO. Global Status Report on Alcohol. Geneva, Switzerland: WHO, 2004.
- 7 Facy F. La place de l'alcool dans la morbidite et mortalite des jeunes [The role of alcohol in the morbidity and mortality of young people] in Actes du colloque les jeunes et l'alcool en Europe. Navarro F, Godeau E, Vialas C. eds, Toulouse, France : Universitaires du Sud, Toulouse, 2000.
- 8 Poikolainen K, Tuulio-Henriksson A, Aalto-Setälä T, Marttunen M, Lonnqvist J. « Predictors of alcohol intake and heavy drinking in early adulthood: a 5-year follow-up of 15-19 year-old Finnish adolescents, Alcohol and Alcoholism. 36(1): 85-88, 2001.
- 9 Hibell B, Andersson B, Ahlstrom S, Balakireva O, Bjarnason T, Kokkevi A, Morgan M. The 1999 ESPAD Report: Alcohol and Other Drug Use Among Students in 30 European Countries. Stockholm, Sweden: Council of Europe, 2000.
- 10 Bonomo Y, Coffey C, Wolfe R, Lynskey M, Bowes G, Patton G. Adverse outcomes of alcohol use in adolescents. Addiction 96 (10): 1485-1496, 2001.
- 11 Health and Health Behaviour Among Young People. Currie C, Hurrelmann K, Settertobulte W, Smith R, Todd J, eds. Copenhagen, Denmark: WHO Regional Office for Europe, 2000.
- 12 WHO. Child Mental Health Atlas. Geneva, Switzerland: WHO, 2005. Available online at: http://www.who.int/mental_health/resources/Child_ado_atlas.pdf
- 13 Kessler RC, Berglund PMBA, Demler O, et al. Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Co-morbidity Study Replication. Arch Gen Psychiatry 62(6):593-602, 2005.
- 14 WHO. Mental Health Fact Sheet. Geneva, Switzerland: WHO, 2001. Available online at: http://www.who.int/child-adolescent-health/New_Publications/ADH/mental_health_factsheet.pdf
- 15 WHO. The World Health Report 2001 – Mental Health: New Understanding, New Hope. Geneva, Switzerland: WHO, 2001.
- 16 WHO and UNICEF. Child and adolescent injury prevention: a global call to action. Geneva: WHO, 2005.
- 17 WHO. Global Estimates of Health Consequences due to Violence against Children. 2005. Background paper to the UN Secretary-General's Study on Violence against Children. (unpublished)
- 18 WHO. World Report on Violence and Health. 2002. Chapter on youth violence.
- 19 Anti-Bullying Centre. School Bullying: Key Facts. Trinity College, Dublin: Anti-Bullying Centre, 2002. Available online at www.abc.tcd.ie/school.htm.



- 20 UNAIDS and WHO. 2005 AIDS Epidemic Update. Geneva, Switzerland, 2005. Available online at: http://www.who.int/hiv/epi-update2005_en.pdf
- 21 UNAIDS. Report on the Global HIV/AIDS Epidemic. Geneva, Switzerland, 2004. Available online at: http://www.unaids.org/bangkok2004/GAR2004_html/GAR2004_00_en.htm
- 22 WHO. Sexually transmitted and other reproductive tract infections. Geneva, Switzerland, 2005. Available online at: http://www.who.int/reproductive-health/publications/rtis_gep/index.htm
- 23 WHO. Sexually Transmitted Infections among Adolescents: The Need for Adequate Health Services. Geneva, Switzerland, 2004. Available online at: http://www.who.int/child-adolescent-health/New_Publications/ADH/ISBN_92_4_156288_9.pdf

