



# Tanzania Global School- based Student Health Survey Report

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# GSHS Country Report

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# Executive Summary

## *The purpose*

The Global School-based Health Survey (GSHS) is a questionnaire survey conducted in different countries primarily among students aged 13-15 years. It measures behaviours and protective factors related to the leading causes of mortality and morbidity among youth and adults: including alcohol and other drug use; dietary behaviours; hygiene; mental health; physical activity; protective factors; sexual behaviours, tobacco use; violence and unintentional injury. The data can help the countries to develop priorities, establish school health and youth health programmes, advocate for resources for implementing the programmes, evaluate the programmes, and to make comparisons with other countries.

## *Methodology*

In Tanzania the survey was organized and supervised by the national GSHS Coordinator, with financial and technical assistance from WHO and CDC. A two-stage cluster sampling was done to get a representative sample of grades (standards) V and VI pupils in the Dar es Salaam Region. The first-stage involved selection of 25 primary schools from a frame consisting all 275 primary schools in Dar es Salaam Region containing any of grades V and VI classes. The second stage involved random selection of Grade V and VI classrooms (streams) in each selected school. All students in the sampled streams were eligible and invited to participate in the GSHS. From the GSHS Standard English Questionnaire developed by the WHO with Partners, a Kiswahili Country Questionnaire containing 86 questions was produced, pre-tested and used in the Tanzania GSHS. Data collection was done during 16th-20th October 2006 by nine trained survey administrators who worked in 3 teams each visiting 2 schools daily, while the local school staff gave support. The principles of anonymous and voluntary participation were followed. The school response rate was 100%, and student response rate was 87%. Overall, 2176 pupils completed usable questionnaires. These included more girls (55.3%) than boys (44.7%). The majority (96.7%) were aged below 16 years, but 3.5% were 16 years or older. More pupils were in grade V (58.5%) than grade VI (39.3), and 2.2% indicated they were in grade VII. The data were cleaned, edited, and all prevalence estimates were computed with 95% confidence intervals.

## *Key results*

Alcohol use among students was not rare; the prevalence of current alcohol users was 5.1% (3.8-6.4), and 10.8% (8.8-12.8) had taken a drink before age of 14 years. Some students (13.9%, 11.9-15.8) had experienced hangover, sickness, missed school or fought as a result of alcohol use during their life. Some 26.2% (21.5-30.8) of students had a parent or guardian who drinks. Many students had been taught about harmful effects of drinking by parents (58.5%, 55.3-61.6) or in school (62.7%, 58.8-66.7). Similarly, 5.4% (3.4-7.3) of students used other drugs. Many students (63.9%, 58.8-69.0) had been taught in school about dangers of drug use.

Dietary practices of students were moderate; 59.7% (54.9-64.4) usually ate breakfast at home, and 21.6% (16.8-26.5) carried lunch to school. A few students (3.8%, 2.7-4.8) went hungry most of the time due to lack of food at home. The majority usually ate fruits (76.7%, 73.9-79.4) or vegetables (80.8%, 78.4-83.3) daily. Most students (86.9%, 84.3-89.4) were taught at school about healthy eating.

Hygiene practices were poor to some extent, 94.6% (92.4-96.8) cleaned or brushed teeth daily, 5.3% (3.9-6.7) did not always wash hands before meals, 11.3% (8.6-14.0) did not always wash hands after attending toilet, 14.9% (12.3-17.4) did not always wash hands with soap. Some 92.8% (90.1-95.5) of students reported that toilets at schools were easy to get at school, and 60.6% (52.6-68.6%) indicated there was no source of clean drinking water at school. There were 71.1% (66.9-75.2) of students who had been taught at school how to avoid worm infections, and 63.0% (58.2-67.9) who had been taught at school where to get treatment against worms.

Mental health problems were common in terms of loneliness/depression and suicidal behaviour. Overall 6.0% (5.1-7.0) of students most of the time or always felt lonely, 3.8% (2.9-4.8) felt so worried about something that they lacked sleep at night, and 23.6% (21.4-25.9) felt sad or hopeless, almost daily. Some 11.2% (9.8-12.7) of students had considered attempting suicide, 6.8% (5.5-8.1) had even planned how they would attempt it. Some 8.3% (7.1-9.5) reported they had no close friends.

Physical activity among students seems low; only 17.3% (15.6-18.9) were physically active 7 days during a typical or usual week for a total of at least 60 minutes per day, while the rest had insufficient physical activity. Sedentary behaviour was common, 29.0% (26.1-32.0) of students spent at least three hours per day doing sitting activities during a typical or usual day. The majority (75.3%, 71.8-78.8) of students usually took less than 30 minutes to travel to and from school. Many students (65.4%, 63.7-67.1) did not walk or use bicycle to and from school during the past 7 days, and

most (92.4%, 91.1-93.7) spent less than 2.5 hours walking or riding bicycle to and from school during the past seven days. However, 87.3% (84.6-90.0) of students were taught in class during the year the benefits of physical activity.

Protective factors to students were not adequate. Missing school or classes was common; 33.6% (31.2-36.0) of students missed classes or school without permission on one or more days during the past 30 days. Being kind and helpful was moderate, as 59.9% (54.6-65.1) reported that most of the students in their school were never or rarely kind and helpful during the past 30 days. On parents or guardians, 34.3% (29.9-38.7) of students reported their parents or guardians never or rarely checked to see if their homework was done, 54.6% (49.0-60.2) reported their parents or guardians never or rarely understood their problems and worries, and 50.6% (45.4-55.8) reported their parents or guardians never or rarely really knew what they were doing with their free time, during the past 30 days.

Sexual behaviours contributing to HIV Infection, Other STIs and Unintended Pregnancy were common. Overall, 7.9% (6.7-9.1) of students had sexual intercourse in their life, 9.9% (8.3-11.5) started before age 13 years, and 6.5% (4.7-8.3) had sexual intercourse with multiple partners. Overall, 12.7% (10.5-14.9) of students had sexual intercourse during the past 12 months, but only 4.9% of these students used a condom at their last sexual intercourse. Only 16.3% (13.9-18.6) of students reported they would most likely get a condom and 20.5% (18.3-22.7) reported they would most likely get a birth control method, from a pharmacy, clinic or hospital, if they wanted. However, awareness of HIV or AIDS among students was high; as 97.8% (96.5-99.1) had heard of HIV or AIDS, 87.8% (83.3-92.3) had been taught about HIV or AIDS at school during the year, and 53.6% (47.3-59.8) had talked about HIV or AIDS with their parents or guardians. Over half (66.1%, 59.6-72.6) believed that a healthy-looking person can be infected with HIV. Some 13.3% (10.7-16.0) of students believed that people could get HIV infection or AIDS from mosquito bites.

Tobacco use was low; only 2.7% (1.6-3.8) of students smoked cigarettes on one or more days during the past 30 days, among whom 23.3% tried their first cigarette at age 14 or younger. The 2.7% (1.9-3.4) students usually smoked at home, and 2.2% (1.1-3.3) usually got their own cigarettes by buying them in a store, shop, or from a street vendor, during the past 30 days. Of the students who smoked cigarettes during the past 12 months, 64.6% tried to stop smoking. Some 4.3% (2.2-6.4) of students used other form of tobacco on one or more days during the past 30 days. Some 8.2% (6.3-10.1) of students had a parent or guardian who used some form of tobacco, and 1.8% (0.9-2.6) had all or most of their friends smoking cigarettes. Some 59.0% (55.7-62.4) of students reported that people smoked in their presence on one or more days during the past seven days. Overall, 53.5% (51.1-55.8) of students reported their families discussed with them the harmful effects of smoking, and 71.7% (68.2-75.2) were taught in class in the year the dangers of smoking. As many as 82.8% (78.1-87.5) believed smoking cigarettes is definitely harmful to their health, and 71.4% (68.4-74.5) believed the smoke from other people's cigarettes is definitely harmful to their health.

Violence and unintentional injury among students were surprisingly high. Serious injury was common; 40.8% (36.7-44.9) of students were in a physical fight and 39.6% (36.5-42.7) were seriously injured, one or more times during the past 12 months. Among those students seriously injured, 28.5% (25.7-31.3) got their most serious injury while they were playing or training for a sport, 40.8% (37.4-44.1) due to a fall, 53.8% (50.4-57.1) due to hurting themselves by accident. Overall, 17.3% (15.3-19.3) experienced a broken bone or dislocated joint as their most serious injury. Bullying among students was also usual; 25.2% (21.5-28.9) of students were bullied on one or more days during the past 30 days, of whom 26.1% (21.2-31.1) were bullied most often by being hit, kicked, pushed, shoved around, or locked indoors. Furthermore 56.6% (53.5-59.6) of students were physically attacked one or more times during the past 12 months. However, 92.9% (91.4-94.3) of students reported they were taught in their classes during the year first aid skills in case of an injury to themselves or someone else.

### **Recommendations**

Based on these key findings, it is recommended that the GSHS results should be used to plan, implement and evaluate relevant school health interventions as part of the National School Health Programme, starting with Dar es Salaam Region. The Tanzania GSHS, if possible, should be extended to other Regions including the rural areas.

# Part 1: Introduction

## Background

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

Since 2003, Ministries of Health and Education around the world have been using the GSHS to periodically monitor the prevalence of important health risk behaviours and protective factors among students.

To date, several countries have completed a GSHS. This report describes results from the first GSHS conducted in Tanzania by the Ministry of Health and Social Welfare, in collaboration with the Ministry of Education and Vocational Training, during October 2006.

## Purpose

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

- Help countries develop priorities, establish programmes, and advocate for resources for school health and youth health programmes and policies;
- Establish trends in the prevalence of health behaviours and protective factors by country for use in evaluation of school health and youth health promotion programmes; and
- Allow countries, international agencies, and other partners to make comparisons across countries and within countries regarding the prevalence of health behaviours and protective factors.

## About GSHS

The GSHS is a school-based health survey conducted primarily among students aged 13-15 years. It measures behaviours and protective factors related to the leading causes of mortality and morbidity among youth and adults.

The GSHS Standard Questionnaire core modules are on the following topics:-

- Alcohol and other drug use
- Dietary behaviours
- Hygiene
- Mental health
- Physical activity
- Protective factors
- Sexual behaviours that contribute to HIV infection, other STI, and unintended pregnancy
- Tobacco use
- Violence and unintentional injury

This GSHS is the first source of published comprehensive data on health behaviours and protective factors among students in Tanzania.

The GSHS data may be used to improve the National School Health Programme that is implemented by the Ministries of Health and Education with Partners including NGOs in the country.

## **Methods**

### **Sampling**

The 2006 Tanzania GSHS employed a two-stage cluster sample design to get a representative sample of students in primary school grades (standards) V and VI. The first-stage sampling frame consisted of all primary schools in all 3 Municipalities (Ilala, Kinondoni, Temeke) in Dar es Salaam Region containing any of grades V and VI. Schools were selected with probability proportional to school enrolment size. 25 primary schools were selected to participate in the Tanzania GSHS.

The second stage of sampling consisted of randomly selecting intact classrooms/streams (using a random start) from each school to participate. The selected Grade V and VI classrooms in each selected school were included in the sampling frame. All students in the sampled streams 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.

### **Response rates**

In total 2176 questionnaires were completed in the 25 selected schools in Dar es Salaam Region. The school response rate was 100%, the student response rate was 87%, and the overall response rate was 87%. 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. The Tanzania GSHS data are representative of all students attending grades V and VI in Dar es Salaam Region.

### **Administering the survey**

Survey Administration occurred from 16th to 20th October 2006. Survey procedures used were designed to protect student privacy by allowing for anonymous and voluntary participation. Students completed the self-administered questionnaire usually during one classroom period and recorded their responses directly on a computer-scannable answer sheet. Nine Survey Administrators, actually the National School Health Programme Coordinators working at the national, regional and districts levels within Dar es Salaam, got trained to conduct the GSHS. Survey administration procedure took one week as the Survey Administrators worked in three teams each visiting two schools daily to collect data. Local school staff especially head teachers and classroom teachers helped to encourage and organize students to participate in the survey.

## **Tanzania GSHS Questionnaire**

The GSHS Country Questionnaire contained 86 questions addressing the same topics listed under the GSHS Standard Questionnaire. GSHS Standard (English) Questionnaire had been developed by WHO with Partners. Each Country Coordinator while attending GSHS training at Harare in 2003, got it for developing Country Questionnaires. Tanzania GSHS Coordinator, Dr. Ursuline Nyandindi, with some members of the Ministries of Health and Education produced the Country questionnaire that is included under section 4. The final Country Questionnaire was translated into the national language, Kiswahili, pre-tested and used in this survey that was conducted in 2006.



## Part 2: Results

### Overview

The results presented here are the key findings from the responses of the students who completed the Tanzania GSHS Questionnaire. They are organized according to the core modules in the questionnaire. Each core module is used as the topic heading, under which are given the relevant results starting with a general frequency table followed by subtopics with descriptive results, as shown here:-

#### Demographics

- Introduction
- Results
  - Table 1. Demographic characteristics of the sample

#### Alcohol and Other Drug Use

- Background
- Results
  - Table 2. Alcohol use and other drug use among students
  - Prevalence of current alcohol use
  - Access to alcohol products
  - Drunkenness and consequences of drinking
  - Prevalence of lifetime drug use
  - Other alcohol related behaviours

#### Dietary behaviours

- Background
- Results
  - Table 3. Dietary behaviours among students
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- Background
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#### Mental Health

- Background
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## Physical Activity

- Background
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  - Table 6. Physical activity among students
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  - Table 7. Protective factors
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- Background
- Results
  - Table 8. Sexual behaviours that contribute to HIV infection, other STI, and unintended pregnancy among students
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- Results
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- Background
- Results
  - Table 10. Tobacco use among students
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  - Parents or guardian tobacco use
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## Violence and Unintentional Injury

- Background
- Results
  - Table 11. Violence and unintentional injury among students
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  - Bullying
  - Other unintentional injury results

# Demographics

## Introduction

The Tanzania GSHS sample comprised a total of 2,176 students selected from 25 primary schools in all three Municipalities (Ilala, Kinondoni, Temeke) of Dar es Salaam Region. The sample included more girls (55.3%) than boys (44.7%). The majority were aged 13-15 years (49.6%), or 12 years or younger (46.9%), but 3.5% were 16 years or older. Most were in grade V (58.5%) or grade VI (39.3%). A few (2.2%) reported they were grade VII, thus their results are omitted from this report.

## Results

The demographic characteristics of the sample are described in the following table.

*Table 1. Demographic characteristics of the sample in Dar es Salaam, Tanzania, 2006.*

Total sample	Sex		Age			Grade		
	Males	Females	12 or younger	13-15	16 or older	V	VI	VII
2,176 students	44.7%	55.3%	46.9%	49.6%	3.5%	58.5%	39.3%	2.2%

## Alcohol and Other Drug Use

### Background

Worldwide, alcohol use causes 3% of deaths (1.8 million) annually, which is equal to 4% of the global disease burden. Across sub-regions of the world, the proportion of disease burden attributable to alcohol use is greatest in the Americas and Europe ranging from 8% to 18% of total burden for males and 2% to 4% of total burden for females. Besides the direct effects of intoxication and addiction, alcohol use causes about 20% to 30% of each of oesophageal cancer, liver disease, homicide and other intentional injuries, epilepsy, and motor vehicle accidents worldwide<sup>i</sup>, and heavy alcohol use places one at greater risk for cardiovascular disease.<sup>ii</sup>

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.<sup>iii</sup> Intentional and unintentional injuries are far more common among youth and young adults. Unintentional injuries are the leading cause of death among 15- to 25-year-olds and many of these injuries are related to alcohol use.<sup>iv</sup>

Young people who drink are more likely to use tobacco and other drugs and engage in risky sexual behaviour, than those who do not drink.<sup>v,vi</sup> Problems with alcohol can impair adolescents' psychological development and influence both the school environment and leisure time negatively.<sup>vii</sup>

## Results

The alcohol and drug use characteristics of the sample are described in the following table.

*Table 2. Alcohol use and other drug use among students, by sex, Dar es Salaam, Tanzania, 2006.*

Questions	Total % (CI)*	Sex	
		Male % (CI)	Female % (CI)
Percentage of students who had at least one drink containing alcohol on one or more days during the past 30	5.1 (3.8-6.4)	6.2 (4.1-8.2)	3.9 (2.7-5.2)
Percentage of students who drank so much alcohol that they were really drunk one or more times during their life	4.5 (2.2-6.1)	5.7 (3.3-8.1)	3.2 (2.2-4.3)
Percentage of students who had a hang-over, felt sick, got into trouble with their family or friends, missed school, or got into fights, as a result of drinking alcohol one or more times during their life	13.9 (11.9-15.8)	15.5 (12.4-18.5)	12.0 (10.0-14.0)
Percentage of students who used drugs, such as bang or cocaine one or more times during their life	5.4 (3.4-7.3)	6.5 (3.5-9.4)	4.4 (3.0-5.8)
Percentage of students who had their first drink of alcohol other than a few sips before age 14 years	10.8 (8.8-12.8)	12.1 (9.7-14.4)	9.7 (7.1-12.3)
Percentage of students who usually drink alcohol alone	1.4 (0.6-2.1)	1.7 (0.3-3.2)	0.9 (0.4-1.5)
Percentage of students who usually drink beer, lager, or stout	4.2 (3.2-5.1)	4.7 (3.0-6.4)	3.6 (2.8-4.4)
Percentage of students whose father or male guardian, mother or female guardian, or both parents or guardians drink alcohol	26.2 (21.5-30.8)	26.9 (23.3-30.5)	25.4 (18.9-31.8)
Percentage of students who have had someone in their family discuss the harmful effect of drinking alcohol with them	58.5 (55.3-61.6)	58.7 (55.1-62.3)	58.0 (53.0-63.0)
Percentage of students who were taught in any of their classes during this school year the dangers of alcohol use	62.7 (58.8-66.7)	64.5 (59.7-69.3)	61.2 (56.9-65.6)
Percentage of students who were taught in any of their classes during this school year the dangers of using drugs such as bang or cocaine	63.9 (58.8-69.0)	60.8 (54.0-67.6)	66.6 (61.9-71.2)

\*95% confidence interval.

### Prevalence of current alcohol use

In Dar es Salaam, Tanzania, the prevalence of current alcohol use among students (i.e., drinking at least one drink containing alcohol on one or more of the past 30 days) was 5.1% (3.8-6.4). Among males, 6.2% (4.1-8.2), and among females, 3.9% (2.7-5.2), reported current alcohol use. Among the current users, 37.9% of students drank one or more drinks per day on the days they drank alcohol during the past 30 days.

## **Access to alcohol products**

Among those current users, 10.3% of students usually got the alcohol they drank by buying it in a store, shop, or from a street vendor during the past 30 days.

## **Drunkenness and consequences of drinking**

During their life, 4.5% (2.9-6.1) of students drank so much alcohol that they were really drunk one or more times. Among males, 5.7% (3.3-8.1), and among females, 3.2% (2.2-4.3), reported to drink so much alcohol that they were really drunk. Overall, 13.9% (11.9-15.8) of students ever had a hang-over, felt sick, got into trouble, missed school, or got into fights one or more times as a result of drinking alcohol during their life. Among males, 15.5% (12.4-18.5), and among females, 12.0% (10.0-14.0), reported to have a hang-over, feel sick, get into trouble, miss school or get into fights as a result of drinking alcohol.

## **Prevalence of lifetime drug use**

The prevalence of lifetime drug use (using drugs, such as bang or cocaine, one or more times during their life) was 5.4% (3.4-7.3). Among males, 6.5% (3.5-9.4), and among females, 4.4% (3.0-5.8), reported lifetime drug use.

## **Other alcohol related behaviours**

Overall, 10.8% (8.8-12.8) of students had their first drink before age of 14 years. Among males, 12.1% (9.7-14.4), and among females, 9.7% (7.1-12.3), reported to have their first drink before age of 14 years. Overall, 4.2% (3.2-5.1) of students drink beer. Among males, 4.7% (3.0-6.4), and among females, 3.6% (2.8-4.4), reported to drink beer. Overall, 1.4% (0.6-2.1) of students reported they usually drank alcohol alone. Among males, 1.7% (0.3-3.2), and among females, 0.9% (0.4-1.5), reported they usually drank alcohol alone. Overall, 26.2% (21.5-30.8) of students reported their parents or guardians drink alcohol. Among males, 26.9% (23.3-30.5), and among females, 25.4% (18.9-31.8), reported their parents or guardians drink alcohol. Overall, 58.5% (55.3-61.6) of students reported their families discuss with them the harmful effects of drinking alcohol. Among males, 58.7% (55.1-62.3), and among females, 58.0% (53.0-63.0), reported their families discuss with them the harmful effects of drinking alcohol. Overall, 62.7% (58.8-66.7) of students reported they were taught in class the dangers of alcohol use, during the year. Among males, 64.5% (59.7-69.3), and among females, 61.2% (56.9-65.6), reported they are taught in class the dangers of alcohol use. Overall, 63.9% (58.8-69.0) of students were taught in class the dangers of using drugs, during the year. Among males, 60.8% (54.0-67.6), and among females, 66.6% (61.9-71.2), reported being taught in class about dangers of using drugs.

## **Dietary Behaviours**

### **Background**

During adolescence, overweight is associated with hyperlipidemia, raised blood pressure (hypertension), abnormal glucose tolerance, and adverse psychological and social consequences.

Overweight acquired during childhood or adolescence may persist into adulthood and increase risk later in life for coronary heart disease, diabetes, gallbladder disease, some types of cancer, and osteoarthritis of the weight-bearing joints. Nutritional deficiencies as a result of food insecurity

(protein-energy malnutrition, iron, Vitamin A, and iodine deficiency) affect school participation and learning.<sup>viii</sup>

Fruits and vegetables are good sources of complex carbohydrates, vitamins, minerals, and other substances important for good health. Dietary patterns that include higher intakes of fruits and vegetables are associated with several health benefits, including a decreased risk for some types of cancer.<sup>ix</sup>

## Results

*Table3. Dietary behaviours, by sex, Dar es Salaam, Tanzania, 2006.*

Question	Total % (CI)*	Sex	
		Male % (CI)	Female % (CI)
Percentage of students who went hungry most of the time or always during the past 30 days because there was not enough food in their home	3.8 (2.7-4.8)	4.2 (2.8-5.7)	3.1 (1.8-4.5)
Percentage of students who usually ate fruit, such as ripe bananas, oranges, pawpaws, mangoes, or pineapples one or more times per day during the past 30 days	76.7 (73.9-79.4)	74.7 (71.2-78.3)	78.7 (75.8-81.5)
Percentage of students who usually ate vegetables, such as amaranth, cassava leaves, pumpkin leaves, cabbage, spinach, okra, or carrots one or more times per day during the past 30 days	80.8 (78.4-83.3)	78.0 (74.3-81.7)	83.3 (81.3-85.3)
Percentage of students who ate fruits and vegetables five or more times per day during the past 30 days	44.6 (41.6-47.6)	41.7 (38.0-45.4)	47.2 (42.8-51.6)
Percentage of students who ate breakfast most of the time or always during the past 30 days	59.7 (54.9-64.4)	59.0 (53.0-65.0)	60.8 (56.2-65.4)
Percentage of students who brought their lunch to school most of the time or always during the past 30 days	21.6 (16.8-26.5)	20.5 (14.6-26.3)	22.8 (18.3-27.3)
Percentage of students who were taught in any of their classes during this school year the benefits of healthy eating	86.9 (84.3-89.4)	85.7 (82.5-88.9)	88.1 (85.4-90.9)

\*95% confidence interval.

## Prevalence of hunger

In Dar es Salaam, Tanzania, 3.8% (2.7-4.8) of students went hungry most of the time or always because there was not enough food in their home during the past 30 days. Males (4.2%, 2.8-5.7) are significantly more likely than females (3.1%, 1.8-4.5) reported to go hungry most of the time or always because there is not enough food in their home.

## Fruit and vegetable intake

Overall, 76.7% (73.9-79.4) of students usually ate fruit, such as ripe bananas, oranges, pawpaws, mangoes, or pineapples, one or more times per day during the past 30 days. Among males, 74.7% (71.2-78.3), and among females, 78.7% (75.8-81.5), reported to eat fruit one or more times per day. Overall, 80.8% (78.4-83.3) of students usually ate vegetables, such as amaranth, cassava leaves, pumpkin leaves, cabbage, spinach, okra, or carrots, one or more times per day during

the past 30 days. Among males, 78.0% (74.3-81.7), and among females, 83.3% (81.3-85.3), reported to eat vegetables one or more times per day. Overall, 44.6% (41.6-47.6) of students usually ate fruits and vegetables five or more times per day during the past 30 days. Among males, 41.7% (38.0-45.4), and among females, 47.2% (42.8-51.6), reported to eat fruits and vegetables five or more times per day.

### Other dietary behaviours

Overall, 59.7% (54.9-64.4) of students ate breakfast at home always or most of the time. Among males, 59.0% (53.0-65.0), and among females, 60.8% (56.2-65.4), reported to eat breakfast always or most of the time. Overall, 21.6% (16.8-26.5) of students brought their lunch to school always or most of the time. Among male students, 20.5% (14.6-26.3), and among females, 22.8% (18.3-27.3), reported to bring their lunch to school most of the time. Overall, 86.9% (84.3-89.4) of students reported they were taught in their classes benefits of healthy eating. Among males, 85.7% (82.5-88.9), and among females, 88.1% (85.4-90.9), reported they are taught in their classes the benefits of health.

## Hygiene

### Background

Dental caries affect between 60-90% of children in developing countries and is the most prevalent oral disease among children in several Asian and Latin American countries. In Africa, the incidence of dental caries is expected to rise drastically in the near future due to increased sugar consumption and inadequate fluoride exposure.<sup>x</sup> In addition to causing pain and discomfort, poor oral health can affect children's ability to communicate and learn. More than 50 million school hours are lost annually because of oral health problems.<sup>xi</sup> In both developed and developing countries, many children do not have access to water fluoridation or professional dental care. Daily tooth cleaning or brushing can help prevent some dental disease.<sup>xii</sup>

Diarrhoeal diseases kill nearly 2 million children every year. Hygiene education and the promotion of hand-washing can reduce the number of diarrhoeal cases by 45%.<sup>xiii</sup> About 400 million school-aged children are infected with worms worldwide. These parasites consume nutrients from children they infect, cause abdominal pain and malfunction, and can impair learning by slowing cognitive development.<sup>xiv</sup>

### Results

*Table 4. Hygiene-related behaviours, by sex, Dar es Salaam, Tanzania, 2006.*

Question	Total % (CI)*	Sex	
		Male % (CI)	Female % (CI)
Percentage of students who cleaned or brushed their teeth one time or more per day	94.6 (92.4-96.8)	94.0 (91.2-96.7)	95.4 (93.5-97.4)
Percentage of students who never or rarely washed their hands before eating during the past 30	5.3 (3.9-6.7)	5.3 (3.3-7.3)	5.2 (3.4-7.1)
Percentage of students who never or rarely washed their hands after using the toilet or latrine during the past 30 days	11.3 (8.6-14.0)	11.3 (8.9-13.6)	10.9 (7.4-14.4)

Percentage of students who never or rarely used soap when washing their hands during the past 30 days	14.9 (12.3-17.4)	16.5 (13.4-19.6)	13.0 (10.4-15.7)
Percentage of students who have toilets or latrines at school that are easy to get to	92.8 (90.1-95.5)	90.5 (87.1-93.8)	94.9 (92.0-97.8)
Percentage of students who do not have a source of clean water for drinking at school	60.6 (52.6-68.6)	59.7 (50.7-68.6)	61.2 (53.2-69.1)
Percentage of students who were taught in any of their classes during this school year the importance of hand washing	84.0 (81.5-86.5)	82.1 (78.2-85.9)	86.0 (83.0-89.0)
Percentage of students who were taught during this school year how to avoid worm infections	71.1 (66.9-75.2)	66.5 (60.5-72.4)	74.9 (71.9-77.9)
Percentage of students who were taught during this school year where to get treatment for worm infections	63.0 (58.2-67.9)	60.1 (54.7-65.5)	65.3 (60.5-70.2)

\*95% confidence interval.

## Personal hygiene

In Dar es Salaam, Tanzania, the percentage of students who cleaned or brushed their teeth one time or more per day during the past 30 days was 94.6% (92.4-96.8). Among males, 94.0% (91.2-96.7), and among females, 95.4% (93.5-97.4), reported to clean or brush their teeth. Overall, 5.3% (3.9-6.7) of students never or rarely washed their hands before eating during the past 30 days. Among males, 5.3% (3.3-7.3), and among females, 5.2% (3.4-7.1), reported to never or rarely wash their hands before eating. Overall, 11.3% (8.6-14.0) of students never or rarely washed their hands after using the toilet or latrine during the past 30 days. Among males, 11.3% (8.9-13.6), and among females, 10.9% (7.4-14.4), reported to never or rarely wash their hands after using the toilet or latrine. Overall, 14.9% (12.3-17.4) of students never or rarely used soap when washing their hands during the past 30 days. Among males, 16.5% (13.4-19.6), and among females, 13.0% (10.4-15.7), reported to never or rarely use soap when washing their hands.

## Other hygiene results

Overall, 92.8% (90.1-95.5) of students reported toilets or latrines at school were easy to get. Among males, 90.5% (87.1-93.8), and among females, 94.9% (92.0-97.8), reported toilets or latrines are easy to get at school. Overall, 60.6% (52.6-68.6) of students reported there is no source of clean drinking water at school. Among males, 59.7% (50.7-68.6), and among females, 61.2% (53.2-69.1), reported there is no source of clean drinking water at school. Overall, 84.0% (81.5-86.5) of students reported they were taught in their classes during the year the importance of hand washing. Among males, 82.1% (78.2-85.9), and among females, 86.0% (83.0-89.0), reported they were taught in their classes during the year the importance of hand washing. Overall, 71.1% (66.9-75.2) of students were taught in their classes during the year how to avoid worm infection. Among males, 66.5% (60.5-72.4), and among females, 74.9% (71.9-77.9), report they are taught in their classes during the year how to avoid worm infection. Overall, 63.0% (58.2-67.9) of students were taught in their classes during the year where to get treatment for a worm infection. Among males, 60.1% (54.7-65.5), and among females, 65.3% (60.5-70.2), reported they are taught in class where to get treatment for a worm infection.



# Mental Health

## Background

World-wide, approximately 20% of children and adolescents suffer from a disabling mental illness.<sup>xv</sup> Anxiety disorders, depression and other mood disorders, and behavioural and cognitive disorders are among the most common mental health problems among adolescents. Half of all lifetime cases of mental disorders start by age 14.<sup>xvi</sup>

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 high risk for abuse and neglect, suicide, alcohol and other drug use, school failure, violent and criminal activities, mental illness in adulthood, and health-jeopardizing impulsive behaviours. Each year, about 4 million adolescents world-wide attempt suicide. Suicide is the third leading cause of death among adolescents.<sup>xvii, xviii</sup>

## Results

*Table 5. Mental health issues among students, by sex, Dar es Salaam, Tanzania, 2006 .*

Question	Total % (CI)*	Sex	
		Male % (CI)	Female % (CI)
Percentage of students who felt lonely most of the time or always during the past 12 months	6.0 (5.1-7.0)	6.4 (4.5-8.2)	5.8 (4.6-7.0)
Percentage of students who most of the time or always felt so worried about something that they could not sleep at night during the past 12 months	3.8 (2.9-4.8)	4.5 (2.7-6.3)	3.1 (2.2-3.9)
Percentage of students who felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing their usual activities during the past 12 months	23.6 (21.4-25.9)	26.2 (23.1-29.2)	21.7 (18.4-25.0)
Percentage of students who seriously considered attempting suicide during the past 12 months	11.2 (9.8-12.7)	11.6 (9.1-14.1)	11.0 (9.7-12.4)
Percentage of students who made a plan about how they would attempt suicide during the past 12 months	6.8 (5.5-8.1)	7.2 (5.7-8.8)	6.4 (4.7-8.0)
Percentage of students who have no close friends	8.3 (7.1-9.5)	7.7 (6.3-9.1)	8.8 (6.7-11.0)

\*95% confidence interval.

## Loneliness/depression

In Dar es Salaam, Tanzania, 6.0% (5.1-7.0) of students most of the time or always felt lonely during the past 12 months. Among males, 6.4% (4.5-8.2), and among females, 5.8% (4.6-7.0), reported to feel lonely most of the time or always. Overall, 3.8% (2.9-4.8) 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. Among males, 4.5% (2.7-6.3), and among females, 3.1% (2.2-3.9), reported to most of the time or always feel so worried about something they cannot sleep at night. Overall, 23.6% (21.4-25.9) of students felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing their usual activities during the past 12 months. Among males, 26.2% (23.1-29.2), and among

females, 21.7% (18.4-25.0) reported to feel so sad or hopeless almost every day for two weeks or more in a row.

## Suicidal behaviour

Overall, 11.2% (9.8-12.7) of students seriously considered attempting suicide during the past 12 months. Among males, 11.6% (9.1-14.1), and among females, 11.0% (9.7-12.4), reported to seriously consider attempting suicide. Overall, 6.8% (5.5-8.1) of students made a plan about they would attempt suicide during the past 12 months. Among males, 7.2% (5.7-8.8), and among females, 6.4% (4.7-8.0), reported to seriously consider attempting suicide. Overall, 8.3% (7.1-9.5) of students have no close friends. Among males, 7.7% (6.3-9.1), and among females, 8.8% (6.7-11.0), reported to have no close friends.

## Physical Activity

### Background

Participating in adequate physical activity throughout the life span and maintaining normal weight are the most effective ways of preventing many chronic diseases, including cardiovascular disease and diabetes.<sup>xix</sup>

The prevalence of type 2 diabetes is increasing globally and now is occurring during adolescence and childhood.<sup>xx</sup> Participating in adequate physical activity also helps build and maintain healthy bones and muscles, control weight, reduce blood pressure, ensure a healthy blood profile, reduce fat, and promote psychological well-being.<sup>xxi</sup>

Roughly 60% of the world's population is estimated to not get enough physical activity. Patterns of physical activity acquired during childhood and adolescence are more likely to be maintained throughout the life span, thus sedentary behaviour adopted at a young age is likely to persist.<sup>xxii</sup>

### Results

*Table 6. Physical activity among students, by sex, Dar es Salaam, Tanzania, 2006.*

Question	Total % (CI)*	Sex	
		Male % (CI)	Female % (CI)
Percentage of students who were physically active for a total of at least 60 minutes per day on all 7 days during the past 7 days	23.1 (20.7-25.4)	27.6 (24.6-30.6)	19.6 (16.1-23.1)
Percentage of students who were physically active for a total of at least 60 minutes per day on all 7 days during a typical or usual week	17.3 (15.6-18.9)	22.2 (20.0-24.3)	13.4 (10.8-15.9)
Percentage of students who were physically active for at least 60 minutes per day on less than five days per week on average	75.3 (73.1-77.5)	71.0 (68.5-73.5)	78.6 (74.8-82.4)
Percentage of students who spent three or more hours per day during a typical or usual day sitting and watching television, playing computer games, talking with friends, or doing other sitting activities	29.0 (26.1-32.0)	28.5 (26.1-30.9)	29.3 (25.0-33.6)
Percentage of students who did not walk or ride a bicycle to and from school during the past seven days	65.4 (63.7-67.1)	62.0 (57.7-66.4)	68.2 (65.0-71.4)

Percentage of students who usually took 29 minutes or less each day to get to and from school during the past 7 days	75.3 (71.8-78.8)	73.9 (70.3-77.6)	76.7 (72.1-81.3)
Percentage of students who spent less than 2.5 hours total walking or riding a bicycle to and from school during the past seven days	92.4 (91.1-93.7)	92.1 (90.4-93.8)	92.6 (90.7-94.6)
Percentage of students who were taught in any of their classes during this school year the benefits of physical activity	87.3 (84.6-90.0)	86.3 (82.7-90.0)	88.3 (85.7-90.9)

\*95% confidence interval.

## Physical activity

In Dar es Salaam, Tanzania, 23.1% (20.7-25.4) of students were physically active all 7 days during the past 7 days for a total of at least 60 minutes per day. Males (27.6%, 24.6-30.6) are significantly more likely than females (19.6%, 16.1-23.1) to be physically active all 7 days during a week. Overall, 17.3% (15.6-18.8) of students were physically active 7 days during a typical or usual week for a total of at least 60 minutes per day. Males (22.2%, 20.0-24.3) are significantly more likely than females (13.4%, 10.8-15.9) to be physically active 7 days during a typical or usual week. Overall, 75.3% (73.1-77.5) of students participated in insufficient physical activity (i.e., participated in physical activity for a total of at least 60 minutes per day on five or fewer days on average). Males (71.0%, 68.5-73.5) are significantly less likely than females (78.6%, 74.8-82.4) to participate in insufficient physical activity.

## Sedentary behaviour

Overall, 29.0% (26.1-32.0) of students spent three or more hours per day doing sitting activities during a typical or usual day. Among males, 28.5% (26.1-30.9), and among females, 29.3% (25.0-33.6), reported to spend three or more hours per day doing sitting activities.

## Walk or bicycle to and from school

Overall, 65.4% (63.7-67.1) of students did not walk or bicycle to and from school during the past 7 days. Among males, 62.0% (57.7-66.4), and among females, 68.2% (65.0-71.4), reported to not walk or bicycle to and from school during a week. Overall, 75.3% (71.8-78.8) of students usually took less than 30 minutes to get to and from school each day during the past 7 days. Among males, 73.9% (70.3-77.6) and among females, 76.7% (72.1-81.3), reported to usually take less than 30 minutes to get to and from school each day. Overall, 92.4% (91.1-93.7) of students spent less than 2.5 hours walking or riding a bicycle to and from school during the past seven days. Among males, 92.1% (90.4-93.8), and among females, 92.6% (90.7-94.6), reported to spend less than 2.5 hours walking or riding a bicycle to and from school during a week.

## Other physical activity results

Overall, 87.3% (84.6-90.0) of students were taught in their classes during the year the benefits of physical activity. Among males, 86.3% (82.7-90.0), and among females, 88.3% (85.7-90.9), reported they are taught in their classes the benefits of physical activity.

## Protective Factors

### Background

For most adolescents, school is the most important setting outside of the family. School attendance is related to the prevalence of several health risk behaviours including violence and sexual risk behaviours.<sup>xxiii</sup>

Adolescents who have a positive relationship with teachers, and who have positive attitudes towards school are less likely to initiate sexual activity early, less likely to use substances, and less likely to experience depression. Adolescents who live in a social environment which provides meaningful relationships, encourages self-expression, and also provides structure and boundaries, are less likely to initiate sex at a young age, less likely to experience depression, and less likely to use substances.<sup>xxiv</sup>

Being liked and accepted by peers is crucial to young people's health development, and those who are not socially integrated are far more likely to exhibit difficulties with their physical and emotional health. Isolation from peers in adolescence can lead to feelings of loneliness and psychological symptoms. Interaction with friends tends to improve social skills and strengthen the ability to cope with stressful events.<sup>xxv</sup>

Parental bonding and connection is associated with lower levels of depression and suicidal ideation, alcohol use, sexual risk behaviours, and violence.<sup>xxvi</sup>

### Results

*Table 7. Protective factors among students, by sex, Dar es Salaam, Tanzania, 2006.*

Question	Total % (CI)*	Sex	
		Male % (CI)	Female % (CI)
Percentage of students who missed classes or school without permission on one or more days during the past 30 days	33.6 (31.2-36.0)	33.5 (29.4-37.5)	33.1 (30.7-35.4)
Percentage of students who reported that most of the students in their school were never or rarely kind and helpful during the past 30 days	59.9 (54.6-65.1)	62.5 (57.5-67.5)	57.7 (51.6-63.8)
Percentage of students whose parents or guardians never or rarely checked to see if their homework was done during the past 30 days	34.3 (29.9-38.7)	37.1 (32.0-42.2)	31.9 (26.8-37.0)
Percentage of students whose parents or guardians never or rarely understood their problems and worries during the past 30 days	54.6 (49.0-60.2)	56.5 (50.4-62.7)	53.3 (47.0-59.6)
Percentage of students whose parents or guardians never or rarely really knew what they were doing with their free time during the past 30 days	50.6 (45.4-55.8)	54.6 (48.5-60.8)	47.2 (41.0-53.4)

\*95% confidence interval.

## **Missing classes**

In Dar es Salaam, Tanzania, 33.6% (31.2-36.0) of students missed classes or school without permission on one or more of the past 30 days. Among males, 33.5% (29.4-37.5), and among females, 33.1% (30.7-35.4), reported to miss classes or school without permission.

## **Being kind and helpful**

Overall, 59.9% (54.6-65.1) of students reported that most of the students in their school were never or rarely kind and helpful during the past 30 days. Males (62.5%, 57.5-67.5) are significantly more likely than females (57.7%, 51.6-63.8) to report that most of the students in their school are rarely or never kind and helpful.

## **Parents or guardians**

Overall, 34.3% (29.9-38.7) of students reported their parents or guardians never or rarely checked to see if their homework was done during the past 30 days. Among males, 37.1% (32.0-42.2), and among females, 31.9% (26.8-37.0), reported their parents or guardians never or rarely check to see if their homework is done. Overall, 54.6% (49.0-60.2) of students reported their parents or guardians never or rarely understood their problems during the past 30 days. Among males, 56.5% (50.4-62.7), and among females, 53.3% (47.0-59.6), reported their parents or guardians never or rarely understand their problems and worries. Overall, 50.6% (45.4-55.8) of students reported their parents or guardians never or rarely really knew what they were doing with their free time during the past 30 days. Among males, 54.6% (48.5-60.8), and among females, 47.2% (41.0-53.4), reported their parents or guardians never or rarely really know what they are doing with their free time.

## **Sexual Behaviours that Contribute to HIV Infection, Other STI, and Unintended Pregnancy**

### **Background**

AIDS has killed more than 25 million people since 1981. As of 2005, an estimated 40.3 million people were living with HIV. In that year alone, roughly 3.1 million people died of HIV and another 4.9 million people became infected with HIV.<sup>xxvii</sup> Young people between the ages of 15 and 24 are the most threatened group, accounting for more than half of those newly infected with HIV. 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 likely to have sex with more partners and with partners who have been at risk of HIV exposure and are not likely to use condoms. In many countries, HIV infection and AIDS is reducing average life expectancy, threatening food security and nutrition, dissolving households, overloading the health care system, reducing economic growth and development, and reducing school enrolment and the availability of teachers.<sup>xxviii</sup>

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.<sup>xxix</sup> Worldwide, the highest reported rates of STIs are found among people between 15 and 24 years; up to 60% of the new infections and half of all people living with HIV globally are in this age group.<sup>xxx</sup>

## Results

*Table 8. Sexual behaviours that contribute to HIV infection, other STI, and unintended pregnancy among students, by sex, Dar es Salaam, Tanzania, 2006.*

Question	Total % (CI)*	Sex	
		Male % (CI)	Female % (CI)
Percentage of students who have ever had sexual intercourse	7.9 (6.7-9.1)	13.7 (11.7-15.8)	3.5 (2.6-4.5)
Percentage of students who had sexual intercourse for the first time before age 13	9.9 (8.3-11.5)	15.7 (13.2-18.2)	5.6 (3.7-7.4)
Percentage of students who have had sexual intercourse with two or more people during their life	6.5 (4.7-8.3)	10.8 (8.2-13.4)	2.6 (1.4-3.8)
Percentage of students who had sexual intercourse during the past 12 months	12.7 (10.5-14.9)	17.2 (14.7-19.8)	9.1 (7.0-11.2)
Among students who had sexual intercourse during the past 12 months, the percentage who used a condom the last time they had sexual intercourse	39.8 (27.3-52.4)	NA	NA
Percentage of students who would most likely get a condom from a pharmacy, clinic, or hospital if they wanted one	16.3 (13.9-18.6)	17.3 (14.0-20.5)	15.5 (12.8-18.3)
Percentage of students who would most likely get birth control from a pharmacy, clinic, or hospital if they wanted it	20.5 (18.3-22.7)	21.9 (19.0-24.7)	19.6 (17.0-22.2)

\*95% confidence interval.

NA = Data not available. Subgroup <100.

### Sexual intercourse

In Dar es Salaam, Tanzania, 7.9% (6.7-9.1) of students had had sexual intercourse during their life. Males (13.7%, 11.7-15.8) are significantly more likely than females (3.5%, 2.6-4.5) to have had sexual intercourse. Overall, 9.9% (8.3-11.5) of students initiated sexual intercourse before age 13 years. Males (15.7%, 13.2-18.2) are significantly more likely than females (5.6%, 3.7-7.4) to have initiated sexual intercourse before age 13 years. Overall, 6.5% (4.7-8.3) of students had sexual intercourse with multiple partners (i.e., two or more) during their life. Males (10.8%, 8.2-13.4) are significantly more likely than females (2.6%, 1.4-3.8) to have had multiple partners. Overall, 12.7% (10.5-14.9) of students had sexual intercourse during the past 12 months. Males (17.2%, 14.7-19.8) are significantly more likely than females (9.1%, 7.0-11.2) to have sexual intercourse within a year.

### Other HIV related results and Other sexual behaviours results

Among students who had sexual intercourse during the past 12 months, 39.8% used a condom at last sexual intercourse. Overall, 16.3% (13.9-18.6) of all students reported they would most likely get a condom from a pharmacy, clinic or hospital if they wanted. Among males, 17.3% (14.0-20.5), and among females, 15.5% (12.8-18.3), reported that they would be most likely to get a condom from a pharmacy, clinic or hospital if they want. Overall, 20.5% (18.3-22.7) of all students reported they would most likely get a birth control method from a pharmacy, clinic or hospital if they wanted it. Among males, 21.9% (19.0-24.7), and among females, 19.6% (17.0-22.2), would get a birth control method from a pharmacy, clinic or hospital if they wanted it.

## Results

Table 9. HIV-related knowledge, by sex, Dar es Salaam, Tanzania, 2006.

Question	Total % (CI)*	Sex	
		Male % (CI)	Female % (CI)
Percentage of students who have ever heard of HIV infection or the disease called AIDS	97.8 (96.5-99.1)	97.2 (95.7-98.6)	98.3 (97.1-99.6)
Percentage of students who were taught in any of their classes during this school year how to avoid HIV infection or AIDS	87.8 (83.3-92.3)	87.4 (82.7-92.0)	88.5 (83.5-93.4)
Percentage of students who believe people can get HIV infection or AIDS from mosquito bites	13.3 (10.7-16.0)	16.8 (13.1-20.6)	10.1 (8.1-12.2)
Percentage of students who believe a healthy-looking person can be infected with HIV	66.1 (59.6-72.6)	67.2 (61.4-72.9)	65.3 (57.4-73.1)
Percentage of students who have ever talked about HIV infection or AIDS with their parents or guardians	53.6 (47.3-59.8)	50.6 (44.3-56.9)	55.6 (48.9-62.3)

\*95% confidence interval

### Awareness of HIV or AIDS

In Dar es Salaam Region, Tanzania, 97.8% (96.5-99.1) of students had ever heard of HIV or the disease called AIDS. Among males 97.2% (95.7-98.6) and among females 98.3% (97.1-99.6) reported to have ever heard of HIV or the disease called AIDS. Overall, 87.8% (83.3-92.3) of students had been taught in any of their classes how to avoid HIV or AIDS during this school year. Among males 87.4% (82.7-92.0) and among females 88.5% (83.5-93.4) reported to have been taught in their classes how to avoid HIV or AIDS. Overall, 13.3% (10.7-16.0) of students believed that people can get HIV infection or AIDS from mosquito bites. Males (16.8%, 13.1-20.6) are significantly more likely than female students (10.1%, 8.1-12.2) to believe that people can get HIV infection or AIDS from mosquito bites. Overall, 66.1% (59.6-72.6) of students believed that a healthy-looking person can be infected with HIV. Among males 67.2% (61.4-72.9) and among females 65.3% (57.4-73.1) reported to believe that a healthy-looking person can be infected with HIV. Overall 53.6% (47.3-59.8) of students ever talked about HIV or AIDS with their parents or guardians. Among males 50.6% (44.3-56.9) and among females 55.6% (48.9-62.3) have talked about HIV or AIDS with their parents or guardians.

## Tobacco Use

### Background

About 1.1 billion people worldwide smoke and the number of smokers continue to increase. Among these, about 84% live in developing and transitional economy countries. Currently 5 million people die each year from tobacco consumption, the second leading cause of death worldwide. If present consumption patterns continue, it is estimated that deaths from tobacco consumption will be 10 million people per year by 2020.<sup>xxxi</sup> The overwhelming majority of smokers begin tobacco use before they reach adulthood. Among those young people who smoke, nearly one-quarter smoked their first cigarette before they reached the age of ten.

Smokers have markedly increased risks of multiple cancers, particularly lung cancer, and are at far greater risk of heart disease, strokes, emphysema and many other fatal and non-fatal diseases. If they chew tobacco, they risk cancer of the lip, tongue and mouth. Children are at particular risk from

adults' smoking. Adverse health effects include pneumonia and bronchitis, coughing and wheezing, worsening of asthma, middle ear disease, and possibly neuro-behavioural impairment and cardiovascular disease in adulthood. Many studies show that parental smoking is associated with higher youth smoking.<sup>xxxii</sup>

## Results

*Table 10. Tobacco use among students, by sex, Dar es Salaam, Tanzania, 2006.*

Question	Total % (CI)*	Sex	
		Male % (CI)	Female % (CI)
Percentage of students who smoked cigarettes on one or more days during the past 30 days	2.7 (1.6-3.8)	4.1 (2.2-6.0)	1.4 (0.7-2.0)
Percentage of students who used any other form of tobacco, such as tobacco roll, snuff, or chew tobacco on one or more days during the past 30 days	4.3 (2.2-6.4)	6.3 (2.4-10.1)	2.5 (1.6-3.4)
Percentage of students who reported people smoking in their presence on one or more days during the past 7 days	59.0 (55.7-62.4)	59.8 (55.8-63.8)	58.3 (54.4-62.2)
Percentage of students who have a parent or guardian who uses any form of tobacco	8.2 (6.3-10.1)	9.4 (7.1-11.7)	7.0 (5.0-9.0)
Percentage of students who all or most of their closest friends smoke cigarettes	1.8 (0.9-2.6)	1.8 (0.7-2.9)	1.3 (0.4-2.1)
Percentage of students who usually got their own cigarettes by buying them in a store, shop, or from a street vendor during the past 30 days	2.2 (1.1-3.3)	3.0 (1.3-4.7)	1.6 (0.7-2.5)
Percentage of students who usually smoke at home	2.7 (1.9-3.4)	4.0 (2.9-5.2)	1.6 (0.8-2.4)
Percentage of students who think smoking cigarettes is definitely harmful to their health	82.8 (78.1-87.5)	82.2 (76.1-88.2)	83.6 (79.7-87.6)
Percentage of students who think the smoke from other people's cigarettes is definitely harmful to them	71.4 (68.4-74.5)	71.5 (66.8-76.2)	71.7 (68.6-74.7)
Percentage of students who think once someone has started smoking it would definitely be difficult to quit	51.2 (48.0-54.4)	50.9 (47.0-54.9)	51.6 (47.6-55.7)
Percentage of students who had anyone in their family discuss the harmful effects of smoking with them	53.5 (51.1-55.8)	55.6 (51.8-59.4)	51.7 (48.5-55.0)
Percentage of students who were taught in any of their classes during this school year about the dangers of smoking	71.7 (68.2-75.2)	71.6 (67.3-76.0)	72.3 (68.4-76.2)

\*95% confidence interval.

## Prevalence of tobacco use

In Dar es Salaam, Tanzania, 2.7% (1.6-3.8) of students smoked cigarettes on one or more days during the past 30 days. Males (4.1%, 2.2-6.0) are significantly more likely than females (1.4%, 0.7-2.0) to have smoked cigarettes on one or more days. Overall, 4.3% (2.2-6.4) of students used any other form of tobacco on one or more days during the past 30 days. Among males, 6.3% (2.4-10.1), and among females, 2.5% (1.6-3.4), reported to use any other form of tobacco on one or more days.



## Parents or guardian tobacco use

Overall, 59.0% (55.7-62.4) of students reported that people smoked in their presence on one or more days during the past seven days. Among males, 59.8% (55.8-63.8), and among females, 58.3% (54.4-62.2), reported that people smoked in their presence on one or more days during the past seven days. Overall, 8.2% (6.3-10.1) of students had a parent or guardian who uses any form of tobacco. Among males, 9.4% (7.1-11.7), and among females, 7.0% (5.0-9.0), reported to have a parent or guardian who uses any form of tobacco. Overall, 1.8% (0.9-2.6) of students reported all or most of their friends smoked cigarettes. Among males, 1.8% (0.7-2.9), and among females, 1.3% (0.4-2.1), reported all or most of their friends smoked cigarettes.

## Other tobacco use results

Overall, 2.2% (1.1-3.3) of students usually got their own cigarettes by buying them in a store, shop, or from a street vendor, during the past 30 days. Among males, 3.0% (1.3-4.7), and among females, 1.6% (0.7-2.5), reported to get their own cigarettes by buying them in a store, shop, or from a street vendor. Overall, 2.7% (1.9-3.4) of students usually smoked at home. Male students (4.0%, 2.9-5.2) are significantly more likely than female students (1.6%, 0.7-2.5) to smoke at home. Overall, 82.8% (78.1-87.5) believe smoking cigarettes is definitely harmful to their health. Among males, 82.2% (76.1-88.2), and among females, 83.6% (79.7-87.6), reported to believe smoking cigarettes is definitely harmful to their health. Overall, 71.4% (68.4-74.5) of students believe the smoke from other people's cigarettes is definitely harmful to their health. Among males, 71.5% (66.8-76.2), and among females, 71.7% (68.6-74.7), reported to believe the smoke from other people's cigarettes is definitely harmful to their health. Overall, 51.2% (48.0-54.4) of students believe once someone has started smoking it would definitely be difficult to quit. Among males, 50.9% (47.0-54.9), and among females, 51.6% (47.6-55.7), reported to believe once someone has started smoking it would definitely be difficult to quit. Overall, 53.5% (51.1-55.8) of students reported their families discussed with them the harmful effects of smoking. Among males, 55.6% (51.8-59.4), and among females, 51.7% (48.5-55.0), reported to be taught in class the dangers of smoking. Overall, 71.7% (68.2-75.2) of students were taught in their classes during the year the dangers of smoking. Among males, 71.6% (67.3-76.0), and among females, 72.3% (68.4-76.2), report they are taught in their classes the dangers of smoking.

## Violence and Unintentional Injury

### Background

Unintentional injuries are a major cause of death and disability among young children.<sup>xxxiii</sup> Each year, about 875,000 children under the age of 18 die from injuries and 10 to 30 million have their lives affected by injury. Injury is highly associated with age and gender. Males aged 10-14 have 60% higher injury death rates than females. Teenagers aged 15-19 have higher rates than those aged 10-14 years (64 compared to 29 per 100,000).

Estimated global homicide death rate for males aged 15-17 is 9 per 100,000<sup>xxxiv</sup>. For every youth homicide, approximately 20 to 40 victims of non-fatal youth violence receive hospital treatment.<sup>xxxv</sup> Many unintentional injuries lead to permanent disability and brain damage, depression, substance abuse, suicide attempts, and the adoption of health risk behaviours. Victims of bullying have increased stress and a reduced ability to concentrate and are at increased risk for substance abuse, aggressive behaviour, and suicide attempts.<sup>xxxvi</sup>

## Results

*Table 11. Violence and unintentional injury among students, by sex, Dar es Salaam, Tanzania, 2006.*

Question	Total % (CI)*	Sex	
		Male % (CI)	Female % (CI)
Percentage of students who were in a physical fight one or more times during the past 12 months	40.8 (36.7-44.9)	45.4 (40.6-50.1)	36.7 (32.0-41.3)
Percentage of students who were seriously injured one or more times during the past 12 months	39.6 (36.5-42.7)	43.6 (40.3-46.9)	35.5 (31.1-39.8)
Among students who were seriously injured during the past 12 months, those whose most serious injury happened to them while they were playing or training for a sport	28.5 (25.7-31.3)	30.0 (25.1-34.9)	27.3 (23.4-31.3)
Among students who were seriously injured during the past 12 months, those whose most serious injury was the result of a fall	40.8 (37.4-44.1)	39.2 (34.9-43.4)	42.7 (36.0-49.5)
Among students who were seriously injured during the past 12 months, those who most serious injury was the result of them hurting themselves by accident	53.8 (50.4-57.1)	52.2 (48.1-56.4)	56.7 (53.1-60.4)
Among students who were seriously injured during the past 12 months, those who had a broken bone or dislocated joint as their most serious injury	17.3 (15.3-19.3)	16.6 (13.1-20.1)	18.3 (15.2-21.5)
Percentage of students who were bullied on one or more days during the past 30 days	25.2 (21.5-28.9)	25.6 (21.5-29.8)	24.6 (20.8-28.5)
Among students who were bullied during the past 30 days, the percentage who were bullied most often by being hit, kicked, pushed, shoved around, or locked indoors	26.1 (21.2-31.1)	27.0 (19.9-34.2)	25.9 (20.2-31.7)
Percentage of students who were physically attacked one or more times during the past 12 months	56.6 (53.5-59.6)	59.6 (51.1-63.2)	53.6 (49.8-57.5)
Percentage of students who were taught in any of their classes during this school year first aid skills in case of an injury to themselves or someone else	92.9 (91.4-94.3)	92.3 (90.1-94.6)	93.7 (91.9-95.4)

\*95% confidence interval.

### Serious Injury

In Dar es Salaam, Tanzania, 40.8% (36.7-44.9) of students were in a physical fight one or more times during the past 12 months. Among males, 45.4% (40.6-50.1), and among females, 36.7% (32.0-41.3), reported to be in a physical fight. Overall, 39.6% (36.5-42.7) of students were seriously injured one or more times during the past 12 months. Males (43.6%, 40.3-46.9) are significantly more likely than females (35.5%, 31.1-39.8) to be seriously injured. Among students who were seriously injured during the past 12 months; 28.5% (25.7-31.3) were playing or training for a sport when their most serious injury happened to them, 40.8% (37.4-44.1) had their most serious injury caused by a fall, 53.8% (50.4-57.1) had their most serious injury occur as a result of hurting themselves by accident, and 17.3% (15.3-19.3) experienced a broken bone or dislocated joint as their most serious injury. From the same subgroup; among males, 30.0% (25.1-34.9), and among females, 27.3% (23.4-31.3), were playing or training for a sport when their most serious injury

happen to them, among males, 39.2% (34.9-43.4), and among females, 42.7% (36.0-49.5), had their most serious injury be caused by a fall, among males, 52.2% (48.1-56.4), and among females, 56.7% (53.1-60.4), had their most serious injury as a result of hurting themselves by accident, among males, 16.6% (13.1-20.1), and among females, 18.3% (15.2-21.5), experienced a broken bone or dislocated joint as their most serious injury.

## **Bullying**

Overall, 25.2% (21.5-28.9) of students were bullied on one or more days during the past 30 days. Among males, 25.6% (21.5-29.8), and among females, 24.6% (20.8-28.5), reported to be bullied on one or more days. Among students who were bullied during the past 30 days, 26.1% (21.2-31.1) were bullied most often by being hit, kicked, pushed, shoved around, or locked indoors. Among males 27.0%, (19.9-34.2), and among females, 25.9% (20.2-31.7), reported to be bullied most often by being hit, kicked, pushed, shoved around, or locked indoors.

## **Other unintentional injury results**

Overall, 56.6% (53.5-59.6) of students were physically attacked one or more times during the past 12 months. Among males, 59.6% (51.1-63.2), and among females, 53.6% (49.8-57.5), reported to be physically attacked. Overall, 92.9% (91.4-94.3) of students were taught in their classes during the year first aid skills in case of an injury to themselves or someone else. Among males, 92.3% (90.1-94.6), and among females, 93.7% (91.9-95.4), were taught in class first aid skills in case of an injury to themselves or someone else.

## Part 3: Conclusions and Recommendations

### Overview

#### 1. The most important Tanzania GSHS results

The Tanzania GSHS results from Dar es Salaam region reveal that among primary school students serious injury is prevalent, especially among males. Unintentional injury including falls during a sport or hurting themselves by accident is prevalent. Violence in the form of a physical attack or a physical fight is also common among students. These often result in injury, sometimes serious injuries including a broken bone or dislocated joint. However, most students claim they are taught first aid skills on injury at school. Bullying by being hit, kicked, pushed, shoved around, or locked indoors is common. Mental health of some students is not stable in terms of loneliness/depression and suicidal behaviour. Some students most of the time or always lack close friends, feel lonely, are worried until they lack sleep at night, are sad or hopeless, or consider/plan to attempt suicide. Protective factors to students are not adequate; some students miss school or classes without permission, some students are not kind and helpful to others especially for boys, and some parents or guardians do not check student's homework, problems, worries or how they spend free time. Sexual behaviours contributing to HIV infection, other STIs and unintended pregnancy are common. Sexual intercourse is common; some students especially boys start sexual intercourse before 13 years, and some have multiple partners. Many do not use condoms or are uncertain to get a condom from a pharmacy, clinic or hospital. However, awareness of HIV or AIDS among students is high; having obtained the information from school or parents or guardians. The majority of students know that a healthy-looking person can get infected with HIV. Some students believe mosquitoes can spread HIV infection or AIDS. Use of alcohol and other drugs among students seem low; although some start drinking before 14 years and some have parents who drink. Many students claim to learn of harmful effects of alcohol and other drugs from school and a few from parents. Use of cigarettes and other form of tobacco also seem low, especially in girls; although some students have parents or guardians or friends who use tobacco. Students who smoke usually do so at home, and buy the cigarettes from a store, shop or a street vendor. For many students people smoke in their presence, while most students know that smoking cigarettes and the smoke from other people's cigarettes are definitely harmful to their health. Dietary practices of students are moderate; slightly over half usually eat breakfast at home, and less than a quarter carry lunch to school. However, a few students especially boys go hungry most of the time due to lack of food at home. Fruits and vegetables seem to be part of daily diet to the majority of students, and most students are taught at school about healthy eating. Hygiene practices are poor among few students; as some students do not clean teeth daily, some students do not always wash hands before meals or after attending toilet, and some do not always wash hands with soap. For some few students toilets at schools are not easy to access, and for many students there is no source of clean drinking water at school. Some students are not been taught at school how to avoid worm infections or where to get treatment against worms. Comparing boys and girls; boys more often than girls go hungry most of the time due to lack of food at home, are physically active, experience serious injury at school, practice sexual behaviours contributing to HIV infection and other STIs, believe that people can get HIV infection or AIDS from mosquito bites, use tobacco, and miss protective factors from other students in terms of kindness and helpfulness at school..

## **2. How do the Tanzania GSHS results compare with results in Tanzania or other countries among young people**

The Tanzania GSHS results generally support previous findings from Tanzania and other countries but not in some aspects. Alcohol and drug use among youths in the GSHS seemed common than in previous studies here. Worldwide, alcohol use among youths is common, and causes many deaths, intoxication and addiction, oesophageal cancer, liver disease, homicide and other intentional injuries, epilepsy, motor vehicle accidents, and cardiovascular diseases. Dietary behaviours among students in the GSHS were moderate; some lacked breakfast but majority usually took fruits and vegetables as shown in previous reports here and elsewhere, which has several health benefits including low risk of some types of cancers. In modern societies during adolescence overweight is a major problem, and is associated with high blood pressure, diabetes, psychological and social consequences. Hygiene practices of youths in the GSHS were poor to some extent especially regarding hand washing and sources of clean drinking water. This has remained common here and worldwide especially in Africa where many children lack access to clean and fluoridated water; thus get dental caries, diarrhoea diseases and worms. These impair their nutrition, cause abdominal pain and malfunction, and spoil their learning by reducing school attendance and cognitive development. Mental health problems among adolescents in the GSHS were common, as reported earlier here. World-wide, many children and adolescents suffer from mental illnesses, usually from 14 years of age, and these youths are at high risk to abuse and neglect, suicide, alcohol and drug use, school failure, violent and criminal acts, mental illnesses in adulthood, and other health-harmful practices. Physical activity among students in the GSHS was found insufficient and sedentary life common perhaps than recognized earlier here. This is a universal situation, and low physical activity and sedentary behaviour acquired in childhood and adolescence usually persist into adulthood, and are associated with many chronic diseases including heart diseases, diabetes and psychological disorders. Protective factors from parents/guardians to youths in the GSHS were inadequate, as reveal existing records on low upbringing and guidance of children by parents/guardians and communities here. Parental bonding and connection seem eroded everywhere, exposing children to depression, suicidal ideation, alcohol and drug use, sexual risky behaviours, and violence. Sexual behaviours contributing to HIV, other STIs and Unintended pregnancies among students in the GSHS seemed common than unveiled earlier; in particular low age of starting sexual intercourse, multiple sex partners, low use and knowledge of condoms, low knowledge that a healthy looking person can have AIDS, and a belief that AIDS can be transmitted by mosquitoes. As usual, GSHS found high awareness of HIV/AIDS among young people. Worldwide young people are the most threatened group and account for over half of people newly infected with HIV; and HIV/AIDS reduce life expectancy, reduce social and economic development, overload health care system, and reduce school enrolment and availability of teachers. Tobacco use among youths in the GSHS was less than previously reported in Tanzania, supporting existing information that smoking is on the decrease here, for whatever reason. Worldwide and especially in other developing countries the number of smokers continue to increase, with majority starting to smoke before reaching adulthood, hence markedly increasing their risk to cancer, heart diseases and other fatal and non-fatal diseases. Violence and unintentional injury among students in the GSHS were very prevalent but have hardly been previously documented here. Globally these problems are very common. Victims of violence e.g. bullying have increased stress, reduced ability to concentrate, and are increased risk to substance abuse, aggressive behaviour and suicide that is the third leading cause of death among adolescents. Unintentional injuries are a major cause of death and disability among children under 18 years, and many such injuries lead to permanent disability and brain damage, depression, substance abuse, suicidal attempts, and adoption of various health risk behaviours.

### **3. Implications of the Tanzania GSHS results on school health and youth health policies and programmes**

These results have direct implications for the existing National School Health Programme that is being implemented by the Ministry of Health and Social Welfare in collaboration with the Ministry of Education and Vocational Training, and with other Partners. The findings show there is great need to initiate anti-violence and injury education in the Dar es Salaam primary schools, in attempt to reduce physical attacks/fights and bullying among students. There is also need to support physical (sports) education and equip schools with appropriate sports facilities to increase physical activity among students and reduce unintentional injuries. It is also essential to improve first aid education and services by training teachers, health workers and community members on first aid including handling serious injuries including broken bones and joint dislocations in school. There is also a need to strengthen mental health promotion through regular mental health checkups and education to keep students stable, and creating school health clubs, to reduce depression and suicidal behaviour, increase kindness and helpfulness, and reduce loneliness, worries, sadness, hopelessness, or suicide attempts. It is essential to support family life education in school and its extension to communities to encourage parents to protect students by caring for their schooling, problems and social activities. It is mandatory to ensure HIV/AIDS education in school to reduce sexual behaviours contributing to HIV infection, other STIs and unintended pregnancy by reduced pre-mature sex and multiple sex partners, increased condom use or sexual abstinence. It is also important for schools to maintain health education against alcohol, tobacco and drug use to control use of these substances among students, but also to support the recently passed national law that ban public smoking, for example, to declare all schools as 'alcohol, tobacco and drug free environments'. Similarly, schools should maintain nutrition education and practice school feeding according to existing policies and local resources. The schools should also maintain education on hygiene and sanitation but need to provide the necessary facilities for hand-washing, construct adequate toilets, make source of clean drinking water, at school. Schools must also provide worm control education and where possible worm treatment to students in line with the national school deworming initiative. The proposed school-based interventions provide equal opportunities for both boys and girls to improve their health behaviours and get protective factors. It is also necessary to make sure to track how the results change over time, thus it is very important to repeat the GSHS in Tanzania in the future.

## **Conclusions**

Based on the key findings from the Tanzania GSHS, it can be concluded that among primary school children in Dar es Salaam unintentional injury, violence and mental health problems are common but protective factors are not adequate. Sexual behaviours contributing to HIV infection, other STIs and unintended pregnancy are also common among students and started at young age, though awareness of HIV or AIDS is high. Use of alcohol, tobacco and other drugs by students seem low, but exposure to other people's cigarettes smoke is common, though students are aware cigarettes are definitely harmful to health. Dietary practices of students are moderate among students. Hygiene practices are poor among few students. Physical activities are rather low among students. Comparatively, boys more often than girls experience hunger, are physically active, practice sexual behaviours contributing to HIV infection and other STIs, use tobacco, and miss protective factors from friends. Therefore, there is a need for initiating or strengthening school-based anti-violence and injury education; physical education and facilities; first aid education and services; mental health promotion; family life education; HIV/AIDS education; health education against alcohol, tobacco and drug use; nutrition education and school feeding; education on hygiene and sanitation; and worm control education and treatment.

## Recommendations

It is strongly recommended that the Tanzania GSHS results should be used to plan, implement and evaluate relevant school health interventions as part of the National School Health Programme. Implementation of the above proposed school-based health interventions are needed without delay, starting with Dar es Salaam Region where the survey was conducted. First step should be to conduct cascade training for implementers. This imply training School Health Coordinators (health and education officials) at the national, regional and district levels on the school health topics that need to be addressed, especially 'new topics' such as anti-violence and injury education. Trained District School Health then could give similar training to teachers and health workers in their areas. Secondly, the trained teachers, with the support of trained health workers, could consequently provide the proper health education to students and promote supportive school environments especially by encouraging community participation. Proper advocacy, social mobilization and resource mobilization are needed for successful implementation of the essential interventions. To evaluate those interventions, it will be necessary to repeat the GSHS in the Dar es Salaam region in the future. The GSHS survey, if possible, should be extended to other Regions in Tanzania.

## Part 4: Appendices

### Overview

This section include a copy of the GSHS Country questionnaires, and more details about sample selection and weighting procedures.

### Sample Description and Weighing procedures

#### Sample Description:

**School Level** - All schools containing Standards V and VI were included in the sampling frame. Schools were selected systematically with probability proportional to enrolment in Standards V and VI using a random start. 25 schools were sampled.

**Class Level** – All classes with the majority of students in Standards V and VI were included in the sampling frame. System equal probability sampling with a random start was used to select classes from each school that participated in the survey.

#### Response Rates:

**Schools** - 100% (25 of the 25 sampled schools participated).

**Students** - 87% (2,176 of the 2,492 sampled students completed usable questionnaire).

**Overall response rate** –  $100\% * 87\% = 87\%$

#### Weighting:

A weight has been associated with each questionnaire to reflect the likelihood of sampling each student and to reduce bias by compensating for differing patterns of nonresponse. The weight used for estimation is given by:

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

- W1 = the inverse of the probability of selecting the school;
- W2 = the inverse of the probability selecting the classroom within the school;
- f1 = a school-level nonresponse adjustment factor calculated by school size (small, medium, large). The factor was calculated in terms of school enrolment instead of number of schools.
- f1 = a student-level nonresponse adjustment factor calculated by class.
- f3 = a post stratification adjustment factor calculated by Standard.

#### Use of the Weighted Results:

The weighted results can be used to make important inferences about the priority health-risk behaviours and protective factors of all students in Standards V and VI.



## The GSHS Country Questionnaire

### 2006 TANZANIA Global school-based student health survey

This survey is about your health and the things you do that may affect your health. Students like you all over your country are doing this survey. Students in many other countries around the world also are doing this survey. The information you give will be used to develop better health programs for young people like yourself.

DO NOT write your name on this survey or the answer sheet. The answers you give will be kept private. No one will know how you answer. Answer the questions based on what you really know or do. There are no right or wrong answers.

Completing the survey is voluntary. Your grade or mark in this class will not be affected whether or not you answer the questions. If you do not want to answer a question, just leave it blank.

Make sure to read every question. Fill in the circles on your answer sheet that match your answer. Use only the pencil you are given. When you are done, do what the person who is giving you the survey says to do.

#### Here is an example of how to fill in the circles:

Fill in the circles like this



Not like this



or



#### Survey

1. Do fish live in water?
  - A. Yes
  - B. No

#### Answer sheet

1. ☒ (B) (C) (D) (E) (F) (G) (H)

Thank you very much for your help

1. How old are you?

- A. 11 years old or younger
- B. 12 years old
- C. 13 years old
- D. 14 years old
- E. 15 years old
- F. 16 years old or older

2. What is your sex?

- A. Male
- B. Female

3. In what standard are you?

- A. Standard V
- B. Standard VI
- C. Standard VII
- D. Some other standard

**The next 2 questions ask about your height and weight.**

























4. How tall are you without your shoes on? ON THE ANSWER SHEET, WRITE YOUR HEIGHT IN THE SHADED BOXES AT THE TOP OF THE GRID. THEN FILL IN THE OVAL BELOW EACH NUMBER.

**Example**

Height (cm)		
1	5	3
<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
<input checked="" type="radio"/>	<input type="text" value="1"/>	<input type="text" value="1"/>
<input type="text" value="2"/>	<input type="text" value="2"/>	<input type="text" value="2"/>
	<input type="text" value="3"/>	<input checked="" type="radio"/>
	<input type="text" value="4"/>	<input type="text" value="4"/>
	<input checked="" type="radio"/>	<input type="text" value="5"/>
	<input type="text" value="6"/>	<input type="text" value="6"/>
	<input type="text" value="7"/>	<input type="text" value="7"/>
	<input type="text" value="8"/>	<input type="text" value="8"/>
	<input type="text" value="9"/>	<input type="text" value="9"/>
<input type="text" value="9"/>	I do not know	

5. How much do you weigh without your shoes on?  
ON THE ANSWER SHEET, WRITE YOUR WEIGHT IN THE SHADED BOXES AT THE TOP OF THE GRID. THEN FILL IN THE OVAL BELOW EACH NUMBER.

**Example**

Weight (kg)		
0	5	2
		
		
		
		
		
		
		
		
		
		
	I do not know	

The next 3 questions ask about going hungry and meals you might eat.

6. During the past 30 days, how often did you go hungry because there was not enough food in your home?
- A. Never
  - B. Rarely
  - C. Sometimes
  - D. Most of the time
  - E. Always
7. During the past 30 days, how often did you eat breakfast?
- A. Never
  - B. Rarely
  - C. Sometimes
  - D. Most of the time
  - E. Always
8. During the past 30 days, how often did you eat lunch at school?
- A. Never
  - B. Rarely
  - C. Sometimes
  - D. Most of the time
  - E. Always
- The next 2 questions ask about foods you might eat.
9. During the past 30 days, how many times per day did you **usually** eat fruit, such as ripe bananas, oranges, pawpaws, mangoes, or pineapples?
- A. I did not eat fruit during the past 30 days
  - B. Less than one time per day
  - C. 1 time per day
  - D. 2 times per day
  - E. 3 times per day
  - F. 4 times per day
  - G. 5 or more times per day
10. During the past 30 days, how many times per day did you **usually** eat vegetables, such as amaranth, cassava leaves, pumpkin leaves, cabbage, spinach, okra, or carrots?
- A. I did not eat vegetables during the past 30 days
  - B. Less than one time per day
  - C. 1 time per day
  - D. 2 times per day
  - E. 3 times per day
  - F. 4 times per day
  - G. 5 or more times per day

**The next question asks about what you have learned at school.**

11. During this school year, were you taught in any of your classes the benefits of healthy eating?
- A. Yes
  - B. No
  - C. I do not know

**The next 7 questions ask about personal health activities.**

12. During the past 30 days, how many times per day did you **usually** clean or brush your teeth?
- A. I did not clean or brush my teeth during the past 30 days
  - B. 1 time per day
  - C. 2 times per day
  - D. 3 times per day
  - E. 4 or more times per day
13. During the past 30 days, how often did you wash your hands before eating?
- A. Never
  - B. Rarely
  - C. Sometimes
  - D. Most of the time
  - E. Always
14. During the past 30 days, how often did you wash your hands after using the toilet or latrine?
- A. Never
  - B. Rarely
  - C. Sometimes
  - D. Most of the time
  - E. Always

15. During the past 30 days, how often did you use soap when washing your hands?

- A. Never
- B. Rarely
- C. Sometimes
- D. Most of the time
- E. Always

16. Are the toilets or latrines easy to get to at school?

- A. There are no toilets or latrines at school
- B. Yes
- C. No

17. Is there a source of clean water for drinking at school?

- A. Yes
- B. No

18. During this school year, were you taught in any of your classes the importance of hand washing?

- A. Yes
- B. No
- C. I do not know

**The next 2 questions ask about worm infections.**

19. During this school year, were you taught in any of your classes how to avoid worm infections?

- A. Yes
- B. No
- C. I do not know

20. During this school year, were you taught in any of your classes where to get treatment for a worm infection?

- A. Yes
- B. No
- C. I do not know

The next question asks about physical attacks. A physical attack occurs when one or more people hit or strike someone, or when one or more people hurt another person with a weapon (such as a stick, knife, or gun). It is not a physical attack when two students of about the same strength or power choose to fight each other.

21. During the past 12 months, how many times were you physically attacked?
- A. 0 times
  - B. 1 time
  - C. 2 or 3 times
  - D. 4 or 5 times
  - E. 6 or 7 times
  - F. 8 or 9 times
  - G. 10 or 11 times
  - H. 12 or more times

The next question asks about physical fights. A physical fight occurs when two or more students of about the same strength or power choose to fight each other.

22. During the past 12 months, how many times were you in a physical fight?
- A. 0 times
  - B. 1 time
  - C. 2 or 3 times
  - D. 4 or 5 times
  - E. 6 or 7 times
  - F. 8 or 9 times
  - G. 10 or 11 times
  - H. 12 or more times

The next 5 questions ask about the most serious injury that happened to you during the past 12 months. An injury is serious when it makes you miss at least one full day of usual activities (such as school, sports, or a job) or requires treatment by a doctor or nurse.

23. During the past 12 months, how many times were you seriously injured?
- A. 0 times
  - B. 1 time
  - C. 2 or 3 times
  - D. 4 or 5 times
  - E. 6 or 7 times
  - F. 8 or 9 times
  - G. 10 or 11 times
  - H. 12 or more times
24. During the past 12 months, **what were you doing** when the most serious injury happened to you?
- A. I was not seriously injured during the past 12 months
  - B. Playing or training for a sport
  - C. Walking or running, but not as part of playing or training for a sport
  - D. Riding a bicycle, scooter, canoe, cart, trolley, or donkey
  - E. Riding or driving in a car or other motor vehicle
  - F. Doing any paid or unpaid work, including housework, yard work, or cooking
  - G. Nothing
  - H. Something else

25. During the past 12 months, **what was the major cause** of the most serious injury that happened to you?

- A. I was not seriously injured during the past 12 months
- B. I was in a motor vehicle accident or hit by a motor vehicle
- C. I fell
- D. Something fell on me or hit me
- E. I was fighting with someone
- F. I was attacked, assaulted, or abused by someone
- G. I was in a fire or too near a flame or something hot
- H. Something else caused my injury

26. During the past 12 months, **how** did the most serious injury happen to you?

- A. I was not seriously injured during the past 12 months
- B. I hurt myself by accident
- C. Someone else hurt me by accident
- D. I hurt myself on purpose
- E. Someone else hurt me on purpose

27. During the past 12 months, **what was** the most serious injury that happened to you?

- A. I was not seriously injured during the past 12 months
- B. I had a broken bone or a dislocated joint
- C. I had a cut, puncture, or stab wound
- D. I had a concussion or other head or neck injury, was knocked out, or could not breathe
- E. I had a gunshot wound
- F. I had a bad burn
- G. I lost all or part of a foot, leg, hand, or arm
- H. Something else happened to me

**The next 2 questions ask about bullying. Bullying occurs when a student or group of students say or do bad and unpleasant things to another student. It is also bullying when a student is teased a lot in an unpleasant way or when a student is left out of things on purpose. It is not bullying when two students of about the same strength or power argue or fight or when teasing is done in a friendly and fun way.**

28. During the past 30 days, on how many days were you bullied?

- A. 0 days
- B. 1 or 2 days
- C. 3 to 5 days
- D. 6 to 9 days
- E. 10 to 19 days
- F. 20 to 29 days
- G. All 30 days

29. During the past 30 days, how were you bullied **most often**?

- A. I was not bullied during the past 30 days
- B. I was hit, kicked, pushed, shoved around, or locked indoors
- C. I was made fun of because of my race or color
- D. I was made fun of because of my religion
- E. I was made fun of with sexual jokes, comments, or gestures
- F. I was left out of activities on purpose or completely ignored
- G. I was made fun of because of how my body or face looks
- H. I was bullied in some other way

**The next question asks about safety-related topics.**

30. During this school year, were you taught in any of your classes first aid skills in case of an injury to yourself or someone else?
- A. Yes
  - B. No
  - C. I do not know

**The next 6 questions ask about your feelings and friendships.**

31. During the past 12 months, how often have you felt lonely?
- A. Never
  - B. Rarely
  - C. Sometimes
  - D. Most of the time
  - E. Always
32. During the past 12 months, how often have you been so worried about something that you could not sleep at night?
- A. Never
  - B. Rarely
  - C. Sometimes
  - D. Most of the time
  - E. Always
33. During the past 12 months, did you ever feel so sad or hopeless almost every day for **two weeks or more in a row** that you stopped doing your usual activities?
- A. Yes
  - B. No
34. During the past 12 months, did you ever **seriously** consider attempting suicide?
- A. Yes
  - B. No

35. During the past 12 months, did you make a plan about how you would attempt suicide?

- A. Yes
- B. No

36. How many close friends do you have?

- A. 0
- B. 1
- C. 2
- D. 3 or more

**The next 14 questions ask about cigarette and other tobacco use.**

37. How old were you when you first tried a cigarette?

- A. I have never smoked cigarettes
- B. 7 years old or younger
- C. 8 or 9 years old
- D. 10 or 11 years old
- E. 12 or 13 years old
- F. 14 or 15 years old
- G. 16 years old or older

38. During the past 30 days, on how many days did you smoke cigarettes?

- A. 0 days
- B. 1 or 2 days
- C. 3 to 5 days
- D. 6 to 9 days
- E. 10 to 19 days
- F. 20 to 29 days
- G. All 30 days

39. During the past 30 days, on how many days did you use any other form of tobacco, such as tobacco roll, snuff, or chew tobacco?

- A. 0 days
- B. 1 or 2 days
- C. 3 to 5 days
- D. 6 to 9 days
- E. 10 to 19 days
- F. 20 to 29 days
- G. All 30 days

40. During the past 30 days, how did you **usually** get your own cigarettes? SELECT ONLY ONE RESPONSE.

- A. I did not smoke cigarettes during the past 30 days
- B. I bought them in a store, shop, or from a street vendor
- C. I bought them from a vending machine
- D. I gave someone else money to buy them for me
- E. I borrowed them from someone else
- F. I stole them
- G. An older person gave them to me
- H. I got them some other way

41. Where do you **usually** smoke? SELECT ONLY ONE RESPONSE.

- A. I have never smoked cigarettes
- B. At home
- C. At school
- D. At work
- E. At friends' houses
- F. At social events
- G. In public spaces, such as parks, shopping centres, and street corners
- H. Other

42. During the past 12 months, have you ever tried to stop smoking cigarettes?

- A. I have never smoked cigarettes
- B. I did not smoke cigarettes during the past 12 months
- C. Yes
- D. No

43. Do you think smoking cigarettes is harmful to your health?

- A. Definitely not
- B. Probably not
- C. Probably yes
- D. Definitely yes

44. Do you think the smoke from other people's cigarettes is harmful to you?

- A. Definitely not
- B. Probably not
- C. Probably yes
- D. Definitely yes

45. Once someone has started smoking, do you think it would be difficult to quit?

- A. Definitely not
- B. Probably not
- C. Probably yes
- D. Definitely yes

46. During the past 7 days, on how many days have people smoked in your presence?

- A. 0 days
- B. 1 or 2 days
- C. 3 or 4 days
- D. 5 or 6 days
- E. All 7 days



47. Which of your parents or guardians use any form of tobacco?

- A. Neither
- B. My father or male guardian
- C. My mother or female guardian
- D. Both
- E. I do not know

48. Do any of your closest friends smoke cigarettes?

- A. None of them
- B. Some of them
- C. Most of them
- D. All of them

49. Has anyone in your family discussed the harmful effects of smoking with you?

- A. Yes
- B. No

50. During this school year, were you taught in any of your classes about the dangers of smoking?

- A. Yes
- B. No
- C. I do not know

**The next 11 questions ask about drinking alcohol. This includes drinking mbege, kimpumu, mnazi, dengurua, or ulanzi. Drinking alcohol does not include drinking a few sips of wine for religious purposes.**

51. How old were you when you had your first drink of alcohol other than a few sips?

- A. I have never had a drink of alcohol other than a few sips
- B. 7 years old or younger
- C. 8 or 9 years old
- D. 10 or 11 years old
- E. 12 or 13 years old
- F. 14 or 15 years old
- G. 16 years old or older

52. During the past 30 days, on how many days did you have at least one drink containing alcohol?

- A. 0 days
- B. 1 or 2 days
- C. 3 to 5 days
- D. 6 to 9 days
- E. 10 to 19 days
- F. 20 to 29 days
- G. All 30 days

53. During the past 30 days, on the days you drank alcohol, how many drinks did you **usually** drink per day?

- A. I did not drink alcohol during the past 30 days
- B. Less than one drink
- C. 1 drink
- D. 2 drinks
- E. 3 drinks
- F. 4 drinks
- G. 5 or more drinks

54. During the past 30 days, how did you **usually** get the alcohol you drank? **SELECT ONLY ONE RESPONSE.**

- A. I did not drink alcohol during the past 30 days
- B. I bought it in a store, shop, or from a street vendor
- C. I gave someone else money to buy it for me
- D. I got it from my friends
- E. I got it from home
- F. I stole it
- G. I made it myself
- H. I got it some other way

55. With whom do you **usually** drink alcohol?

- A. I do not drink alcohol
- B. With my friends
- C. With my family
- D. With persons I have just met
- E. I usually drink alone

56. What type of alcohol do you **usually** drink?  
SELECT ONLY ONE RESPONSE.

- A. I do not drink alcohol
- B. Beer, lager, or stout
- C. Wine
- D. Spirits such as konyagi
- E. Home-brewed alcohol
- F. Home-distilled spirits
- G. Some other type

57. During your life, how many times did you drink so much alcohol that you were really drunk?

- A. 0 times
- B. 1 or 2 times
- C. 3 to 9 times
- D. 10 or more times

58. During your life, how many times have you ever had a hang-over, felt sick, got into trouble with your family or friends, missed school, or got into fights, as a result of drinking alcohol?

- A. 0 times
- B. 1 or 2 times
- C. 3 to 9 times
- D. 10 or more times

59. Which of your parents or guardians drink alcohol?

- A. Neither
- B. My father or male guardian
- C. My mother or female guardian
- D. Both
- E. I do not know

60. Has anyone in your family discussed with you the harmful effect of drinking alcohol?

- A. Yes
- B. No

61. During this school year, were you taught in any of your classes the dangers of alcohol use?

- A. Yes
- B. No
- C. I do not know

**The next 2 questions ask about drugs.**

62. During your life, how many times have you used drugs, such as bang or cocaine?

- A. 0 times
- B. 1 or 2 times
- C. 3 to 9 times
- D. 10 or more times

63. During this school year, were you taught in any of your classes the dangers of using drugs such as bang or cocaine?

- A. Yes
- B. No
- C. I do not know

**The next 12 questions ask about sexual intercourse and HIV or AIDS.**

64. Have you ever had sexual intercourse?

- A. Yes
- B. No

65. How old were you when you had sexual intercourse for the first time?

- A. I have never had sexual intercourse
- B. 11 years old or younger
- C. 12 years old
- D. 13 years old
- E. 14 years old
- F. 15 years old
- G. 16 years old or older

66. During your life, with how many people have you had sexual intercourse?

- A. I have never had sexual intercourse
- B. 1 person
- C. 2 people
- D. 3 people
- E. 4 people
- F. 5 people
- G. 6 or more people

67. During the past 12 months, have you had sexual intercourse?

- A. Yes
- B. No

68. The **last time** you had sexual intercourse, did you or your partner use a condom?

- A. I have never had sexual intercourse
- B. Yes
- C. No

69. **If** you wanted to get a condom, how would you most likely get it?

- A. I would get it from a vending machine
- B. I would get it in a store or shop or from a street vendor
- C. I would get it from a pharmacy, clinic, or hospital
- D. I would give someone else money to buy it for me
- E. I would get it some other way
- F. I do not know

70. **If** you wanted to get birth control, how would you most likely get it?

- A. I would get it from a vending machine
- B. I would get it in a store or shop or from a street vendor
- C. I would get it from a pharmacy, clinic, or hospital
- D. I would give someone else money to buy it for me
- E. I would borrow it from someone else
- F. I would get it some other way
- G. I do not know

71. Have you ever heard of HIV infection or AIDS?

- A. Yes
- B. No

72. Can people get HIV infection or AIDS from mosquito bites?

- A. Yes
- B. No
- C. I do not know

73. Can a healthy-looking person be infected with HIV?

- A. Yes
- B. No
- C. I do not know

74. During this school year, were you taught in any of your classes how to avoid HIV infection or AIDS?

- A. Yes
- B. No
- C. I do not know

75. Have you ever talked about HIV infection or AIDS with your parents or guardians?

- A. Yes
- B. No

**The next 3 questions ask about physical activity. Physical activity is any activity that increases your heart rate and makes you get out of breath some of the time. Physical activity can be done in sports, playing with friends, or walking to school. Some examples of physical activity are running, fast walking, biking, dancing, football, playing netball, rope jumping, and swimming.**

ADD UP ALL THE TIME YOU SPEND IN PHYSICAL ACTIVITY EACH DAY. DO **NOT** INCLUDE YOUR PHYSICAL EDUCATION OR GYM CLASS.

76. During the past **7 days**, on how many days were you physically active for a total of at least 60 minutes per day?

- A. 0 days
- B. 1 day
- C. 2 days
- D. 3 days
- E. 4 days
- F. 5 days
- G. 6 days
- H. 7 days

77. During a **typical or usual** week, on how many days are you physically active for a total of at least 60 minutes per day?

- A. 0 days
- B. 1 day
- C. 2 days
- D. 3 days
- E. 4 days
- F. 5 days
- G. 6 days
- H. 7 days

78. During this school year, were you taught in any of your classes the benefits of physical activity?

- A. Yes
- B. No
- C. I do not know

**The next question asks about the time you spend mostly sitting when you are not in school or doing homework.**

79. How much time do you spend during a **typical or usual** day sitting and watching television, playing computer games, talking with friends, or doing other sitting activities, such as playing cards, plaiting hair, or embroidery.

- A. Less than 1 hour per day
- B. 1 to 2 hours per day
- C. 3 to 4 hours per day
- D. 5 to 6 hours per day
- E. 7 to 8 hours per day
- F. More than 8 hours per day

**The next 2 questions ask about going to and coming home from school.**

80. During the past 7 days, on how many days did you walk or ride a bicycle to and from school?

- A. 0 days
- B. 1 day
- C. 2 days
- D. 3 days
- E. 4 days
- F. 5 days
- G. 6 days
- H. 7 days

81. During the past 7 days, how long did it **usually** take for you to get to and from school each day? **ADD UP THE TIME YOU SPEND GOING TO AND COMING HOME FROM SCHOOL.**

- A. Less than 10 minutes per day
- B. 10 to 19 minutes per day
- C. 20 to 29 minutes per day
- D. 30 to 39 minutes per day
- E. 40 to 49 minutes per day
- F. 50 to 59 minutes per day
- G. 60 or more minutes per day

**The next 5 questions ask about your experiences at school and at home.**

82. During the past 30 days, on how many days did you miss classes or school without permission?

- A. 0 days
- B. 1 or 2 days
- C. 3 to 5 days
- D. 6 to 9 days
- E. 10 or more days

83. During the past 30 days, how often were most of the students in your school kind and helpful?

- A. Never
- B. Rarely
- C. Sometimes
- D. Most of the time
- E. Always

84. During the past 30 days, how often did your parents or guardians check to see if your homework was done?

- A. Never
- B. Rarely
- C. Sometimes
- D. Most of the time
- E. Always

85. During the past 30 days, how often did your parents or guardians understand your problems and worries?

- A. Never
- B. Rarely
- C. Sometimes
- D. Most of the time
- E. Always

86. During the past 30 days, how often did your parents or guardians **really** know what you were doing with your free time?

- A. Never
- B. Rarely
- C. Sometimes
- D. Most of the time
- E. Always

## References

### International

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