



# Global School-based Student Health Survey Results: 2015

Timor-Leste



REGIONAL OFFICE FOR

**World Health  
Organization**  
**South-East Asia**



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Online repositories for Timor-Leste GSHS can be found at:

<https://nada.searo.who.int/index.php/catalog/27>

[http://www.searo.who.int/entity/noncommunicable\\_diseases/data/bhu\\_ncd\\_reports/en/](http://www.searo.who.int/entity/noncommunicable_diseases/data/bhu_ncd_reports/en/)

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# Abbreviations

BMI	body mass index
CDC	Centers for Disease Control and Prevention
GSHS	Global School-based Student Health Survey
GYTS	Global Youth Tobacco Survey
MoE	Ministry of Education
MoH	Ministry of Health
NCD	noncommunicable disease
OCR	optical character recognition
PTSD	post-traumatic stress disorder
SD	standard deviation
SHS	secondhand smoke
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Social and Cultural Organization
UNICEF	United Nations Children's Fund

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Several survey enumerators and administrators made arduous efforts in the field for data collection on time. Lastly, school principals, teachers and school committees provided substantial inputs and coordinated the data collection at the school level without which it would have been impossible to complete this survey. Last but not the least; the core survey team is thankful to all the students and their parents for their participation in this first survey.



# Foreword by the Health Minister



The Global School-based Student Health Survey (GSHS) 2015 is the first nationwide survey in Timor-Leste to provide comprehensive data on various behavioural risk factors, including dietary habits, physical activity, mental health, tobacco and substance use, and sexual behaviours among adolescents. Adolescents (10–19 years) constitute a very important demographic and social group in Timor-Leste, representing almost one quarter (23.3%) of the total population. It is estimated that nearly one third of the total burden of disease has its roots in adolescence. Preventing the initiation of risky health behaviours (such as unhealthy dietary practices, sedentary lifestyle or initiation of tobacco or alcohol use) in adolescents will be the key to stemming the growing epidemic of noncommunicable diseases, and to controlling other public health problems such as HIV/AIDS.

Periodic data on the lifestyle of adolescents and the psychosocial environment in schools will be crucial in informing adolescent health policies and programmes. This survey collected data from school students enrolled in classes 7 to 11 (lower and upper secondary school, excluding grade 12) and reports results for 13–17-year-old children from all over the country. The findings and recommendations of this study will help to prioritize issues and develop programmes and policies for the health of schoolchildren in Timor-Leste.

I expect that the officials of the Ministry of Health and Ministry of Education will continue to conduct these integrated adolescent risk-factor surveys every 3–5 years, and to use the data to advance the health and well-being of young people in Timor-Leste. On behalf of the Ministry of Health and Ministry of Education, I would like to acknowledge the technical assistance of, and financial support from the CDC and WHO in conducting this collaborative survey as part of the GSHS initiative, and welcome the continuation of this collaboration in future years.



**Dr Rui Maria de Araújo**

Minister of State and Minister of Health  
Ministry of Health, Democratic Republic of Timor-Leste

# Foreword by the WHO Regional Director



Adolescents constitute an important social and demographic group in the WHO South-East Asia Region accounting for almost one-fifth or 18.8% (362.2 million individuals) of the total population of the Region. Of this, 13–17-year-olds comprise 181 million or nearly one-tenth (9.4%) of the total population of the Region. Health of adolescents is not only important in its own right, but also because this is an important predictor of the overall adult disease burden in the future. Considering the importance of understanding the health risk behaviours among adolescents, WHO is actively supporting implementation of integrated adolescent risk factor surveys in all the Member States of the Region as part of the Global School Health Survey (GSHS) initiative.

The purpose of integrated adolescent risk factor survey such as GSHS is to generate comprehensive nationally-representative data on major health risk factors among adolescents ranging from nutritional status and dietary habits to mental health issues to violence and unintentional injuries and risky sexual behaviours. Using the school as the venue for selection of students and for the interviews results in substantial cost savings compared with household surveys and provides better privacy to students. If implemented regularly every 3–5 years, these surveys will provide valuable data to not only track the health of adolescents but also predict the overall future disease burden, as nearly 35% of the global burden of disease has its roots in adolescence.

I congratulate the Ministry of Health and the Ministry of Education in completing the first GSHS survey in Timor-Leste. The findings are worrying, and reveal one of the highest rates of tobacco and alcohol use among adolescents along with high levels of undernutrition, interpersonal violence and mental health problems.

The survey findings suggest action required at the national and school level to ensure physical, mental and social well-being of adolescents and youths. I sincerely hope that the ministries of health and education will institutionalize the adolescent risk factor surveillance as part of their overall health information system and will conduct this survey every 3–5 years to enable monitoring of these risk factors over time and evaluation of policies and programmes put in place to control these risk factors.

A handwritten signature in black ink, which appears to read 'P. Khetrapal'.

**Dr Poonam Khetrapal Singh**  
Regional Director,  
WHO South-East Asia Region

## Foreword by the WHO Representative



Timor-Leste is facing a double burden of diseases: communicable diseases as well as noncommunicable diseases (NCDs). Cardiovascular diseases and chronic obstructive pulmonary disease are among the top ten causes of mortality.

While Timor-Leste has done youth tobacco surveys as part of the Global Youth Tobacco Survey initiative, this is the first ever integrated youth risk factor survey done as part of the GSHS initiative that provides nationally representative data – not only on tobacco use (which is a major NCD risk factor) but also on other important health behaviours, such as nutritional status, dietary habits, physical activity, violence and injuries, as well as on mental health among secondary school students aged 13–17 years. The survey has shed light on the critical health issues facing adolescents, which constitute almost one quarter of the total population in Timor-Leste.

However, the current survey provides just a snapshot of risk factor prevalence among adolescents in 2015. As Timor-Leste implements various programmes and policies to improve nutritional status or curb various risk factors such as tobacco and alcohol use, these results will provide the baseline for evaluating the impact of those policies. I sincerely hope that the next survey can be implemented in 2019–2020 and that this will show that much progress has been made in reducing risky health behaviours among adolescents. I congratulate the Ministry of Health and Ministry of Education for initiating this important surveillance activity focusing on adolescents, and can assure them of continued WHO technical support for adolescent health activities, including the continuation of this survey at regular intervals in the future.

**Dr Rajesh Pandav**  
WHO Representative to the  
Democratic Republic of Timor-Leste

## Executive summary

The first Global School-based Student Health Survey (GSHS) 2015 in Timor-Leste was conducted among schoolchildren aged 13–17 years attending class 7–11 (lower and upper secondary school, excluding grade 12) to assess trends in the prevalence of key health behaviours and protective factors among adolescents. A two-stage cluster sampling method was used to select a nationally representative sample of 38 schools and 4691 students. Of these, 3704 students completed the questionnaire, giving an overall response rate of 79%. Students anonymously self-administered a 70-item questionnaire covering demographics (age, Sex); nutritional status; dietary behaviours and physical activity; violence and unintentional injuries; mental health; tobacco, alcohol and substance use; sexual behaviours (including HIV/AIDS knowledge); and personal hygiene habits. Out of 3704 students who completed the questionnaire, 50.7% were male and 49.3% were female – with 6.2% being younger than 12 years of age and 16.8% being 18 years or older. The main report presents findings mainly for the 13–17 years age group ( $N=2853$  – 1228 male and 1533 female students).

The key findings from the survey include the following:

- *Nutritional status.* Undernutrition still dominates, with 21.8% of students found to be underweight; 11.1% of students reported going hungry most of the time or always because of lack of sufficient food in their homes. However, obesity also seems to be emerging, with 4.4% of students found to be overweight or obese.
- *Risky dietary behaviours and limited physical activity.* Of the students, 43.2% reported drinking carbonated soft drinks one or more times per day and 27.2% reported eating fast food two or more days per week. In addition, only 18.9% of students reported usually eating fruit two or more times per day and 32.5% reported usually eating vegetables two or more times per day. Only 12.8% of students reported being physically active for at least 60 minutes per day on 5 or more days during the 7 days before the survey. These emerging unhealthy dietary habits (with increasing consumption of sugary beverages and fast food) combined with low physical activity levels can lead to an obesity epidemic, and the double burden of undernutrition and obesity, and may further fuel an increase in NCDs.
- *Tobacco, alcohol and substance abuse.* Adolescents in Timor-Leste have one of the highest current tobacco use rates (27.6% of students – 39.6% boys and 15.6% girls) in the world, with very high rates of secondhand smoke

exposure (80%), including from parents at home. They also initiate tobacco use very early in life (45.2% of current users started before the age of 14 years). The country also has one of the highest prevalence of current alcohol use (15.7%) and drug use (5.4%), as well as early initiation of use – all of which are major health and social concerns for Timor-Leste. As of now, Timor-Leste has neither a national legal minimum age for off- or on-premise sales of alcoholic beverages, nor any legally binding regulations for alcohol advertising/production placement/sponsorship/sales promotion.

- *Mental health.* The survey shows that adolescent mental health is an important public health issue in Timor-Leste, with almost one in ten students (9.5%) reporting that they had attempted suicide one or more times during the 12 months before the survey. Few students (1 out of 10 students) felt that their parents or guardians most of the time or always understood their problems and worries.
- *Violence and injuries.* Accidents and injuries are common among students in Timor-Leste. The survey indicates a high incidence of physical violence in Timor-Leste schools; 38.4% students reported being physically assaulted at least once in the past year (with no significant difference between Sexs) and more 28.3% reported being bullied on one or more days during the 30 days before the survey.
- *Sexual experience and HIV/AIDS knowledge.* Almost one quarter (23%) of students reported ever having had sexual intercourse, with 44.5% reporting first sexual intercourse before the age of 14 years; 5.9% of students reported having sexual intercourse with two or more people in their lifetime. Knowledge of HIV/AIDS was relatively low, with only 64.7% reporting having ever heard about HIV/AIDS.
- *Personal hygiene.* A significant number of students (22.2%) reported never or rarely washing their hands after using a toilet or latrine, while 16.8% reported never or rarely washing their hands before eating. Worryingly, only about one half of students reported having access to clean drinking water at school.

The survey results indicate a high prevalence of risky health behaviours, including unhealthy dietary practices, tobacco and alcohol use, risky sexual behaviours and poor personal hygiene. Holistic policy and programmatic measures need to be developed to support early intervention, as these behaviours may be maintained into adult life, thus fueling an NCD epidemic, mental health problems and an HIV/AIDS epidemic. Action may be needed at both the upstream policy level and the downstream programmatic level at community and school level to ensure the physical, mental and social well-being of adolescents and youth.



# Introduction

Nearly 35% of the global burden of disease has its roots in adolescence (1). Health status in adults is mostly an outcome of health behaviours initiated at younger ages such as during adolescence. Several behavioural risk factors such as an unhealthy diet, lack of physical activity, poor personal hygiene and sanitation, stress/depression, drug abuse and tobacco/alcohol consumption warrant special attention among adolescents. Many of these risk factors (tobacco use, physical inactivity, harmful use of alcohol, unhealthy diet, etc.) are initiated in adolescence leading to full-blown noncommunicable diseases (NCDs) in adulthood, eventually contributing to premature mortality. Preventing or controlling these risk factors later in life becomes extremely difficult because over time, these become an integral part of peoples' lifestyle. The primary prevention of risk factors in children and adolescents is therefore crucially important.

Timor-Leste is one of the world's newest nations and became a democracy in 2002. Ranked 150 out of 177 in the 2007 United Nations Development Programme (UNDP) Human Development Index, the country's health indicators are quite poor. Situated in the eastern half of the island of Timor, which lies between Indonesia and Australia, the total population of Timor-Leste in 2015 was 1 167 242 – 28% of which lived in urban areas (2). Administratively, Timor-Leste is divided into 13 districts, 65 subdistricts, 442 *sucos* and 2225 *aldeias*. As per Census 2015, adolescents (10–19 years) represented a large proportion (23.3%) of the total population, making it an important demographic group in Timor-Leste. In addition, the 13–17 years adolescent subpopulation accounted for 11.7% of the total population (3). The majority of 13–17 year olds are enrolled in secondary schools.

National authorities need to understand lifestyle risk factors in adolescents in order to develop appropriate programmes and policies. There are, however, only limited nationally representative data on behavioural risk factors among adolescents in Timor-Leste, though some surveys have previously explored selected behavioural risk factors among adolescents. For example, three rounds of Global Youth Tobacco Surveys (GYTS) were conducted in 2006, 2009 and 2013, and generated data on tobacco use among the 13–15-year-old population (4). Timor-Leste's national NCD Risk Factor Survey (5) explored the risk factors for NCDs, including tobacco and

alcohol use among the 18–69-year-old population. However, the survey sample size was not designed to provide reliable estimates for the 18–19-year-old population included in the survey.

Timor-Leste’s population, including its adolescent population, is facing a double burden of both communicable and noncommunicable diseases. Considering the crucial public health importance of health behaviours during adolescence, WHO, the Centers for Disease Control and Prevention (CDC), United Nations Children’s Fund (UNICEF), United Nations Educational, Social and Cultural Organization (UNESCO) and Joint United Nations Programme on HIV/AIDS (UNAIDS) undertook a joint Global School-based Student Health Survey (GSHS) to generate representative data on adolescents (6). GSHS data can be used to develop policies, determine priorities, and establish and evaluate programmes to protect and promote the health of young people and future generations.

The current report presents the results of the first-ever GSHS conducted in Timor-Leste in 2015. The survey aimed to generate nationally representative data on various health issues, such as dietary habits, hygiene behaviours, interpersonal violence, mental health and substance abuse (including tobacco, alcohol and drug use) among secondary school students aged 13–17 years.

## 1.1 Objectives

The goal of the GSHS in Timor-Leste was to obtain systemic information on selected risk behaviours among adolescents by using schools as the sampling units to support youth health programmes and policies.

Specifically, the purpose of the GSHS in Timor-Leste was to provide accurate data on health behaviours and protective factors among students:

- (1) to help Timor-Leste develop priorities, establish programmes and advocate for resources for school health, and youth health programmes and policies;
- (2) to establish trends in the prevalence of health behaviours and protective factors to evaluate school- and youth-health programmes and policies;
- (3) to allow the Government of Timor-Leste, international agencies and others to make comparisons with other countries and within the country over-time.



The GSHS is a school-based cross-sectional survey conducted primarily among students aged 13–17 years. It measures behaviours and protective factors related to the leading causes of mortality and morbidity among adolescents. The GSHS Initiative developed a standardized scientific sample-selection process; common school-based methodology; and standardized questionnaire modules with core and expanded questions, and country-specific questions that can be administered during one regular class period. The GSHS uses anonymous reporting in a self-administered questionnaire by respondents in a representative sample of schools. It is difficult to obtain accurate data from adolescents during in-person household surveys, as adolescents may not respond accurately in relation to certain behaviours considered social taboos. Hence, anonymous self-reported surveys may provide better results. In addition, using schools as the sampling unit rather than households reduces the survey costs substantially and offers more privacy for accurate reporting, though this strategy does miss the “out-of-school” youth. In 2015, 23% of children of secondary school age (12–17 years) were estimated to be out of school in Timor-Leste (7).

## 2.1 Sampling of schools

The general pattern of formal school education in Timor-Leste follows five stages: (a) pre-primary, which is largely offered only in private schools; (b) primary, 6 years (ages 6–11 years) with an official entry age of 6 years; (c) lower secondary, 3 years (ages 12–14 years, grades 7–9); (d) upper secondary, 3 years (ages 15–17 years, grades 10–12);<sup>1</sup> and (e) higher education which, like upper secondary, is also organized in two modalities: polytechnic education (duration 1–2 years) and university education (duration 3–4 years). The Timor-Leste GSHS was done among students enrolled in grades 7–11 (lower and upper secondary school, excluding grade 12). The Ministry of Education (MoE) provided a complete list of schools, classes and number of students.

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<sup>1</sup> Upper secondary education consists of two modalities: general secondary and technical/vocational secondary.

The Timor-Leste survey employed a two-stage cluster-sample design to produce a nationally representative sample of all students enrolled in grades 7 to 11, which are typically attended by students aged 13–17 years, though some students might be younger or older than this age group. In the first stage, schools were selected with probability proportional to enrolment size using a random start. Thirty-eight schools were sampled. At the second stage, systematic equal probability sampling with a random start was used to select classes from each of the sampled schools. All the students in the selected classes were eligible to participate.

### *Selection of students*

All of the 38 sampled schools participated in the survey, giving a 100% school response rate. Of the 4691 sampled students, 3704 completed the questionnaires, giving an overall student response rate of 79%.

## **2.2 Questionnaire and its administration**

The questionnaire (Annex 1) had 70 questions comprising core, expanded and country-specific questions. These questions were developed in collaboration with WHO and CDC as part of the GSHS initiative. The Tetum language version of the questionnaire was used in the survey. Several different recall periods (such as 7 days, 30 days, past year and “within the school year”) were used for the different questions. The questionnaire addressed the following topics:

- (1) *Lifestyle behaviours*: dietary behaviours and physical activity;
- (2) *Substance and drug use*: tobacco use, alcohol use and drug use;
- (3) *Sexual behaviour*: sexual behaviours, knowledge of HIV infection or AIDS; and
- (4) *mental health and social relationships*: mental health, relationship with parents, friends and schoolteachers,
- (5) *Physical violence and injuries*: Physical violence, bullying , serious injuries
- (6) *Personal hygiene*: oral hygiene and hand-washing behaviors

Questionnaire administration and other survey procedures were designed to protect the privacy of students by allowing for anonymous and voluntary participation. Students self-administered the questionnaire in an anonymous manner. The field work for data collection was carried out between September and December 2015.

## 2.3 Data management and analyses

Students were asked to fill in the intended circles on the answer sheets (optical character recognition [OCR] form). After completion of the survey, the OCR answer sheets were sent to CDC where they were scanned and the responses imported into a database. CDC carried out the necessary data cleaning (for inconsistencies and missing responses). A weight was applied to each question/response to reflect the likelihood of sampling each student and to reduce bias by compensating for differing patterns of non-response. 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 of selecting the classroom within the school;

f1 = a school-level non-response adjustment factor calculated by school size category (small, medium, large). The factor was calculated in terms of school enrolment instead of number of schools.

f2 = a student-level non-response adjustment factor calculated by class.

f3 = a post-stratification adjustment factor calculated by grade.

A complex sample analysis was done to obtain weighted estimates of prevalence and 95% confidence intervals for key indicators. Ninety-five per cent confidence intervals were used to assess the significance of differences in the key indicators by age, sex and school class of students.

Table 1 gives the sample characteristics in terms of age, sex and school class of the students who participated in the survey.

**Table1. Demographic characteristics of the respondent population, Timor-Leste, GSHS, 2015**

	Males		Females		Total	
Age (years)	N	(%)	N	(%)	N	(%)
12 or younger	92	2.4	144	2.9	280	6.2
13–15	603	16.2	821	18.2	1478	34.4
16–17	625	21.4	712	21.7	1375	42.5
18 and older	294	10.7	194	6.6	497	16.8
Missing	11	–	6	–	74	–
Grade						
Class 7	451	10.4	539	10.1	1029	20.6
Class 8	406	9.9	468	9.4	910	19.4
Class 9	209	10.1	274	10.1	502	20.2
Class 10	279	10.4	308	10.3	603	20.4
Class 11	239	9.1	265	9.4	517	18.3
Class 12	21	0.7	8	0.2	35	1.1
Missing	20	–	15	–	108	–
<b>Total (all age groups)</b>	<b>1625 (50.7%)</b>		<b>1877 (49.3%)</b>		<b>3704 (100%)</b>	
<b>Total (13–17 years)</b>	<b>1228 (37.6%)</b>		<b>1533 (39.9%)</b>		<b>2853 (76.9%)</b>	

The detailed tabulations that provide information on the sample/denominator used in computation of the key indicators under each domain are presented in the tables in Annex 2. Results are presented by sex (male and female), class and age. As the sampling-inclusion criteria were based on class level and not on age, the age of sampled students varied from under 12 to over 18 years. For the sake of uniformity and comparison, the results in the following section are presented for the age group 13–17 years ( $N=2853$ ) only; though the tables in Annex 2 also provide results for under 12- and over 18 year olds.

The results are presented according to five key domains:

### 3.1 Diet and physical activity

#### 3.1.1 Diet and nutrition

Nutritional deficiencies as a result of food insecurity and poor quality diets (protein malnutrition, vitamins and different micronutrients deficiency) affect students and their learning. In addition, changing dietary habits (e.g. increased consumption of sugary drinks, fast food, etc.) are leading to problems of overweight and other

associated NCD risk factors. Hence, assessment of the dietary behaviours of adolescents is important to inform appropriate youth- and school-health policies, and to check the rising prevalence of NCDs. The survey assessed the prevalence of hunger, consumption of fruits and vegetables, carbonated drinks and fast food.

<b>Dietary lifestyle and nutritional status at a glance:</b>	
Percentage of students (13–17 years old) who:	
▪ reported going hungry:	11.1
▪ were underweight	21.8
▪ were overweight:	4.4
▪ were obese:	0.8
▪ did not eat any fruit during 7 days :	10.4
▪ did not eat any vegetable during 7 days:	5.9
▪ took carbonated drinks $\geq 1$ time per day:	43.2
▪ ate fast food $\geq 2$ days a week:	27.2

In addition, anthropometry (measurement of height and weight) was done for all students to measure the body mass index (BMI).

### ***Nutritional status***

Nutritional status was assessed by measuring BMI (kg/m<sup>2</sup>) based on measured weight (in kilograms) and height (in meters). Students who had less than –2 standard deviation (SD) of the median BMI for their age and sex were classified as underweight. Students who had more than +1 SD from median for BMI by age and sex were defined as overweight, whereas students with more than +2 SD from median for BMI by age and sex were defined as obese.

Timor-Leste has high rates of undernutrition, with almost 22% of students found to be underweight, though problems of overweight/obesity also seem to be emerging, with 4.4% and 0.8% of 13–17-year-old students found to be overweight and obese, respectively. Significant differences between boys and girls and between age groups were observed only for underweight students (male 28% versus female 16.3%)<sup>2</sup> and less so for overweight and obese students.

Overall, in Timor-Leste, 11.1 % of students (13–17 years old) reported going hungry most of the time or always because there was not enough food in their home during the past 30 days, with no significant differences by Sex (male 11.7% versus female 10.1%). This corroborates with the high prevalence of underweight (based on actual measurement reported earlier).

### ***Fruit and vegetable intake***

This survey found a very low consumption of fruits and vegetables among the students. More than one in 10 (10.4%) and one in 20 (5.9%) students reported not eating any fruit and vegetables, respectively, during the 30 days preceding the survey. Only 18.9% of students reported usually eating fruit two or more times per day with no significant differences by sex (Table 2). Similarly, less than one fifth (18.6%) of students reported usually eating vegetables three or more times per day, with no significant differences by sex.

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2 Significant only at 90% significance level; not significant at 95% significance level

### ***Consumption of carbonated soft drinks***

The survey explored students' drinking habits regarding carbonated soft drinks such as Coca Cola, Sprite, Fanta, Big Cola, Gress, Fruitamin, Dellos, Sagiko, and Springvalle. Only 13.2% of students reported not drinking any carbonated soft drinks during the 30 days before the survey. Almost half (43.2%) the students reported drinking carbonated soft drinks one or more times per day, and 17.2% of students reported usually drinking carbonated soft drinks two or more times per day; there were no significant differences by sex.

### ***Eating from a fast food restaurant***

Of the students, 66.3% reported eating food from fast food restaurants on one or more days during the 7 days before the survey, with 27.2% of students reporting such eating on two or more days, with no significant difference by sex.

The results of the survey show that Timor-Leste is in a transition state with the coexistence of both underweight and over-weight. The latter may be due to emerging changes in dietary habits, as shown in the survey (e.g. increase in consumption of fast food and carbonated soft drinks) and limited physical activity (see section 3.1.2 of this report). Overweight acquired during childhood or adolescence may persist into adulthood and increase the risk later in life of hypertension, coronary heart disease, diabetes, and gallbladder disease, some types of cancer and osteoarthritis of the weight-bearing joints (8).

<b>Physical activity at a glance:</b> Percentage of students (13–17 years old) who:	
■ are not physically active for at least 60 min per day on any day during the week:	28.3
■ are physically active for at least 60 min on 5 or more days per week:	12.8
■ spent ≥3 hours per day doing sitting activities:	15.0

**Table 2. Nutritional status and key dietary behaviours among students 13–17 years of age in Timor-Leste, GSHS, 2015**

	Underweight (%)	Overweight (%)	Obese (%)	Went hungry (%)	Fruits $\geq 2$ times/day (%)	Veg $\geq 3$ times/day (%)	Carbonated drinks $\geq 1$ times/day (%)	Fast food $\geq 2$ days/week (%)
<b>Sex</b>								
Male	28.0	3.9	0.7	11.7	19.0	16.4	44.3	25.5
Female	16.3	4.9	0.9	10.1	18.3	20.1	41.9	28.0
<b>Age (years)</b>								
13–15	23.5	4.9	0.8	11.2	20.1	17.9	44.3	27.1
16–17	20.5	4.1	0.8	11	17.9	19.1	42.3	27.2
<b>Total (13–17 years)</b>	<b>21.8</b>	<b>4.4</b>	<b>0.8</b>	<b>11.1</b>	<b>18.9</b>	<b>18.6</b>	<b>43.2</b>	<b>27.2</b>



### 3.1.2 Physical activity

Adequate physical activity helps to build healthy bones and muscles, reduces blood pressure and obesity, and promotes psychological well-being (9). Participating in adequate physical activity throughout the lifespan and maintaining a normal body weight are the most effective ways of preventing many chronic diseases, including cardiovascular disease and diabetes. Therefore, regular physical activity should be encouraged right from childhood, as patterns of physical activity acquired during childhood and adolescence are more likely to be maintained throughout the lifespan (10).

In GSHS 2015, a significant proportion of students reported being physically inactive,<sup>3</sup> with 28.3% students reporting not being physically active for at least 60 minutes per day on any day during the 7 days before the survey. Significantly more females reported physical inactivity (31.4%) than male students (24.7%) (Table 3).

Only 12.8% of students reported being physically active for at least 60 minutes per day on 5 or more days during the 7 days before the survey. A significantly lower percentage of female students reported being physically active (8.2%) than male students (17.5%).

#### ***Sedentary behaviours***

Integrating physical activity into the commute to the workplace or school may be an effective strategy for increasing physical activity. However, most of the students (60.1%) in Timor-Leste do not walk or ride a bicycle to or from the school; a significantly larger number of female students are sedentary (66.8% female students versus 53.5% male students).

In addition, a substantial proportion of students (15%) spent three or more hours per day doing sitting activities (sitting and watching television, playing computer games, talking with friends when not in school or doing homework during a typical or usual day). Significantly more males than females (17.6% versus 12.4%) reported engaging in such sedentary behaviours (Table 3).

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3 Physical activity is any activity that increases the heart rate and makes you get out of breath some of the time. Physical activity can take the form of sports, playing with friends or walking to school. Examples of physical activity include running, fast walking, biking, dancing, football, volleyball, basketball and taekwondo.

### *Participation in physical education classes*

Only about 26.1% of students reported attending physical education classes on three or more days (each week during the current school year); there were no differences by sex.

**Table 3. Patterns of physical activity among students 13–17 years old in Timor-Leste, GSHS, 2015**

	Not physically active for at least 60 min per day on any day during one week (%)	Did not walk/ride a bicycle (%)	Spent ≥3 hours sitting (%)	Attended physical education classes ≥3 days each week (%)
Sex				
Male	24.7*	53.5*	17.6*	26.0
Female	31.4	66.8	12.4	26.1
Age (years)				
13–15	30.0	59.8	15.9	26.4
16–17	26.9	60.2	14.3	25.9
<b>Total (13–17 years)</b>	<b>28.3</b>	<b>60.1</b>	<b>15.0</b>	<b>26.1</b>

Note: \*differences across groups are statistically significant at 95% level.

## **3.2 Tobacco, alcohol and substance abuse**

Most of the current users of tobacco, alcohol and drugs often initiate use in the early adolescent years, sometimes just out of curiosity or under peer pressure, and then go on to become regular users.

Smokers have markedly increased risks of multiple cancers, particularly lung cancer, and are at a far greater risk of heart disease, stroke, emphysema and many other fatal and non-fatal diseases. Similarly, cancer of the lip, tongue and mouth are highly associated with tobacco chewing.

<b>Patterns of substance abuse:</b> Percentage of students (13–17 years) who:	
▪ Currently use any tobacco product:	27.6
▪ Currently smoke cigarettes:	20.2
▪ Currently drink alcohol:	15.7
▪ Got drunk one or more times:	10.5
▪ Currently use marijuana:	5.0
▪ Ever used amphetamines:	5.0

Nationwide youth tobacco surveys done in Timor-Leste in 2006, 2009 and 2013 as part of the GYTS among students of grades 7–11, aged between 13 and 15 years, reported a very high prevalence of tobacco use, ranging from 41% in 2006 to 42.4% in 2013, with much higher use among males. This is one the highest rates of tobacco use among adolescents in the WHO South-East Asia Region. Timor-Leste (11) reported a prevalence of 35% and 8.4% of smoked and smokeless tobacco use, respectively, among students 13–15 years of age.

The use of tobacco, alcohol and drugs not only has an adverse impact on the users, but also on their families and communities. It is important to prevent adolescents from initiating use as quitting later is much more difficult and resource intensive. GSHS uses eight questions on cigarettes and tobacco use, seven questions on alcohol use and four questions on drug use to assess the prevalence and patterns of use, age of initiation and other contextual circumstances around the use. The following sections describe the results from GSHS 2015 on tobacco, alcohol and drug use.

### 3.2.1 Tobacco use

#### *Age of initiation and prevalence of tobacco use*

Among the students, 27.6% reported currently using any tobacco product<sup>4</sup> on at least 1 day during the 30 days before the survey, with significant differences by Sex (39.6% in males versus 15.6% in females). Significant differences by Sex were also observed among those who reported currently smoking *cigarettes* (20.2%; 34.9% males versus 6.5% females) (Table 4). The self-reported prevalence in the 2015 GSHS survey is much lower than the self-reported prevalence estimated from GYTS 2013 survey, which primarily reports the prevalence among 13–15 year olds. For example, the prevalence of any tobacco use and cigarette smoking is only 23.4% and 15.7%, respectively, among 13–15 year olds in this survey compared to 42.4% and 28.9%, respectively, in the GYTS. This large fluctuation over just two years in the absence of any dramatic policy or programmatic changes raises concerns about the validity of these self-reports and must be investigated further in the next round of the survey.

Almost half of the students (45.2%) who ever smoked cigarettes tried them before the age of 14 years. A significantly higher proportion of female students (61.9%) reported trying a cigarette before the age of 14 years than male students (38.4%). This

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4 This included cigarettes and any product other than cigarettes (such as Joker, LA, Gudang garam, Sigaru 23, Surya, snuff, chewing tobacco, or betel).

shows that adolescents start tobacco use very early, and any programme to reduce the tobacco epidemic has to focus on young adolescents.

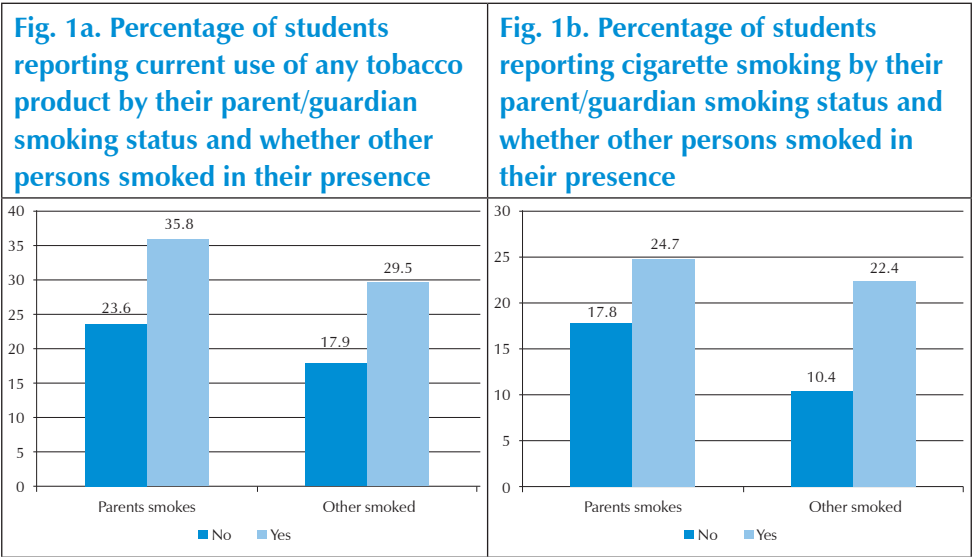
**Parents’ or guardians’ tobacco use**

Among the respondents, 31.7% reported parents or guardians who used any form of tobacco. There was no significant difference by age or class level.

Many studies show that parental smoking is associated with higher youth smoking (12). A similar relationship has been observed in this survey, with both parental/guardian tobacco use being strongly associated with self-reported tobacco use among the students (Fig. 1a and 1b).

**Exposure to secondhand smoke (SHS)**

About 8 in 10 respondents (80%) reported that people smoked in their presence (on one or more days during the 7 days before the survey) with no significant differences by Sex. A much higher proportion of older students reported this exposure – 82.5% of students 16–17 years of age compared to 77.1% of students 13–15 years of age. SHS exposure was strongly associated with both cigarette smoking and any tobacco-product use (Fig. 1a and 1b).



### ***Desire to quit and temptation to initiate***

Among students who reported smoking cigarettes during the 12 months before the survey, 77.8% of students reported that they had tried to quit smoking cigarettes.

However, when asked whether they would smoke a cigarette at any time during the next 12 months, 88.6% students reported they definitely or probably would not smoke a cigarette at any time during the next 12 months, with significant differences by Sex and sex (Table 4).

Despite the very high reported use of tobacco and SHS exposure, a large majority of the students (86.9%) reported that they definitely or probably would not smoke a cigarette if one of their best friends offered one. Significant differences were noted by Sex and age. A much higher percentage of female students (95.7%) said so than male students (77.5%). Similarly, a much higher proportion of younger students (91.3%) said they would definitely or probably not smoke a cigarette if one of their best friends offered it compared to older students (86.9%) (Table 4).

**Table 4. Patterns of tobacco use among students 13–17 years of age in Timor-Leste, GSHS, 2015**

	Currently use any tobacco product <sup>a</sup> (%)	Currently smoke cigarettes <sup>a</sup> (%)	Tried a cigarette before age 14 <sup>b</sup> (%)	Tried to quit cigarette smoking <sup>c</sup> (%)	Exposure to secondhand smoke <sup>d</sup> (%)	Parents use any form of tobacco (%)	Won't smoke if friends offer <sup>e</sup> (%)	Won't smoke any time in next 12 months <sup>e</sup> (%)
<b>Sex</b>								
Male	39.6*	34.9*	38.4*	80.6	82.0	31.1	77.5*	81.6*
Female	15.6	6.5	61.9	Small number	79.2	31.0	95.7	95.5
<b>Age (years)</b>								
13–15	23.4*	15.7*	66.2*	76.4	77.1	29.2	91.3*	92.1*
16–17	31.0	23.8	33.8	78.4	82.5	33.6	83.3	85.9
<b>Total</b> (13–17 years)	27.6	20.2	45.2	77.8	80.0	31.7	86.9	88.6

Note: \*differences across groups are statistically significant at 95% level.

<sup>a</sup> On at least 1 day during the 30 days before the survey, and includes use of cigarettes and other tobacco products (loker, LA, Cudang garam, Sigaru 23, Surya, snuff, chewing tobacco or betel) ; <sup>b</sup> For the first time among students who ever smoked cigarettes; <sup>c</sup> Among students who smoked cigarettes during the 12 months before the survey; <sup>d</sup> On one of more days during the 7 days before the survey; <sup>e</sup> Includes respondents who said “definitely” not and “probably” not.

To summarize, adolescents have very high rates of SHS exposure, including from parents at home, and start with tobacco use very early in life with very high current rates of use.

### 3.2.2 Alcohol use

Worldwide, harmful use of alcohol causes 3% of all deaths (1.8 million) each year. Besides the direct effects of intoxication and addiction, alcohol use is estimated to cause about 20–30% of each of the following diseases worldwide: oesophageal cancer, liver disease, homicide and other intentional injuries, epilepsy and motor vehicle accidents (13). Heavy alcohol use also places one at greater risk for cardiovascular disease (14). In most countries, alcohol-related mortality is highest among those aged 45–54 years, but the relationship between the age at initiation of alcohol use and the pattern of its use and abuse in adulthood makes the study of alcohol consumption among adolescents important (15).

Intentional and unintentional injuries are far more common among youth and young adults. Unintentional injuries are the leading cause of death among persons aged 15–25 years and many of these injuries are related to alcohol use (16). Young people who drink alcohol are more likely to use tobacco and other drugs, and engage in risky sexual behaviour than those who do not drink (17, 18). Problems with alcohol can impair adolescents' psychological development and negatively influence both the school environment and leisure time (19). GSHS 2015 used a set of seven questions to assess the alcohol use patterns among surveyed students.

#### ***Age of initiation and prevalence of alcohol use***

Among respondents, 15.7% reported currently drinking alcohol, defined as taking at least one drink of alcohol on at least 1 day during the 30 days before the survey. Significant differences were observed by age (significantly higher use among 16–17 year olds (18.6%) than among 13–15 year olds (12.0%)) and by sex (21.5% of males versus 9.3% of females). Among students who reported current alcohol use, 12.7% reported that they usually had two or more drinks per day on the days that they drank alcohol.

Students reported started drinking very early. Among students who had ever had a drink of alcohol<sup>5</sup> other than a few sips, 59.7% of students reported that they

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5 Drinking alcohol includes drinking TuaSabu and TuaMutin. Drinking alcohol does not include drinking a few sips of wine for religious purposes. A “drink” is a glass of wine, a bottle of beer, a small glass of liquor or a mixed drink.

drank alcohol before the age of 14 years. A much higher proportion of younger students (13–15 years) reported initiating alcohol use before 14 years of age than 16–17-year-old students – a pattern similar to that observed for reported age at initiation of tobacco (Table 5).

### ***Peer pressure, underage buying of alcohol and alcohol advertisements***

About one in 12 students (7.8%) reported that they had seen alcohol advertisements almost daily or daily during the 30 days before the survey, with significant differences by sex (9.7% of males versus 5.9% of females) and by age. A significantly higher proportion of 16–17 year olds reported viewing the advertisements (Table 5).

Buying from a store, shop/street vendors, getting it from friend and from family were reported as the three most common sources of alcohol, in that order, among students who currently drank alcohol (Table 6). About one in four (25.8%) students who currently drank alcohol reported that they usually obtained the alcohol they drank from friends.

### ***Drunkenness and consequences of drinking***

A substantial proportion of students drinks and indulges in the harmful use of alcohol, as shown by the incidence of getting drunk or exhibiting other troublesome behaviour. More than one in 10 students (10.5%) reported that they ever drank so much alcohol that they were really drunk (one or more times in their life), with significant differences by Sex (16.4% of males versus 4.8% of females). About one in 10 students (9.1%) reported that they 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) (Table 5). This behaviour is significantly more common among males than females (13.2% versus 4.6%).

As of now, Timor-Leste neither has any national legal minimum age for off- or on-premise sales of alcoholic beverages, nor any legally binding regulations for alcohol advertising /production placement/sponsorship/sales promotion. However, given the current high level of alcohol use among adolescents and the early age of initiation, alcohol control policies and plans will help to reduce the public health burden resulting from the harmful use of alcohol.



**Table 5. Patterns of alcohol use among students 13–17 years of age in Timor-Leste, GSHS, 2015**

<b>Sex</b>									
Male	21.5*	11.1	53.2	16.4*	13.2*	28.0			9.7*
Female	9.3	12.3	70.1	4.8	4.6	23.9			5.9
<b>Age (years)</b>									
13–15	12.0*	14.2	78.7*	7.9*	7.9	20.7			6.2*
16–17	18.6	11.6	49.4	12.6	10.0	28.8			9.1
<b>Total</b> (13–17 years)	15.7	12.7	59.7	10.5	9.1	25.8			7.8

Note: \*differences across groups are statistically significant at 95% level.

<sup>a</sup> At least one drink of alcohol on at least one day during the 30 days before the survey; <sup>b</sup> On the days they drank alcohol among students who drank alcohol during the 30 days before the survey; <sup>c</sup> For the first time among students who ever had a drink of alcohol other than a few sips; <sup>d</sup> One or more times during their life; <sup>e</sup> Among students who drank alcohol during the 30 days before the survey; <sup>f</sup> During the 30 days before the survey.

**Table 6. Sources from where 13–17-year-old students usually got the alcohol they drank in the past 30 days in Timor-Leste, GSHS, 2015**

	Males (n = 1086) %	Females (n = 1344) %	Total (N = 2504) %
Did not drink alcohol	78.0	90.9	84.2
Bought it from store	8.4	2.4	5.6
Got it from friends	6.2	2.2	4.1
Got it from family	4.4	2.9	3.7
Gave someone else money to buy it for me	1.9	0.7	1.4
Stole it	0.1	0.2	0.2
Got it some other way	0.9	0.6	0.8

### 3.2.3 Drug use

With the help of four questions, the survey assessed the current use of marijuana (*ganja*), lifetime use of marijuana and amphetamines (or methamphetamines), and age at initiation of use of drugs.

#### *Prevalence of drug use and age of initiation*

Overall, 5.4% of students said that they had ever used marijuana one or more times in their lives: 6% of male and 3.8% of female students had used marijuana at least once in their lifetimes. The current-use prevalence of marijuana was almost similar to ever-use of marijuana (overall 5%; 6.0% of male and 3.4% of female students reported that they had currently used marijuana one or more times during the 30 days before the survey). In addition, 5% of students said that they had ever used amphetamines or methamphetamines (Table 7).

Among all the students who had ever used drugs,<sup>6</sup> 82.2% had used the drugs for the first time before the age of 14 years (Table 7).

**Table 7. Patterns of drug use among students 13–17 years of age in Timor-Leste, GSHS, 2015**

	Currently use marijuana <sup>a</sup> (%)	Ever used marijuana <sup>b</sup> (%)	Ever used amphetamine <sup>b</sup> (%)	Used drugs first time before age 14 years <sup>c</sup> (%)
<b>Sex</b>				
Male	6.0	6.0	5.9	79.2
Female	3.4	3.8	3.1	88.5
<b>Age (years)</b>				
13–15	5.7	6.7	6.0	90.9
16–17	4.4	4.3	4.2	74.4
<b>Total (13–17 years)</b>	5.0	5.4	5.0	82.2

Note: \*differences across groups are statistically significant at 95% level. <sup>a</sup> One or more times during the 30 days before the survey; <sup>b</sup> One or more times during their life <sup>c</sup> Among students who ever used drugs.

<sup>6</sup> Drug use includes using marijuana, amphetamines, cocaine, inhalants and ganja.

### 3.3 Mental health

Worldwide, approximately 20% of children and adolescents suffer from a disabling mental illness and about 4 million adolescents attempt suicide each year. Globally, suicide accounts for 8.5% of all deaths among young adults (aged 15–29 years) and is ranked as the second leading cause of death, after road traffic injuries (20). Some of the most common mental health problems among adolescents include anxiety disorders, depression and other mood disorders; and behavioural and cognitive disorders. Half of all lifetime cases start by age 14 years and three fourths by age 24 years (21).

**Mental health profile:** Percentage of students (13–17 years old) who reported:

■ feeling lonely:	14.2
■ feeling always worried:	11.8
■ attempted suicide:	9.5
■ having no close friends:	4.4

Most of the young people suffer needlessly from various mental health issues, unable to get diagnosed, and receive support and treatment. These young people are at risk for abuse and neglect, alcohol and other drug use, suicide, school failure, engagement in violent and criminal activities, and continuing mental illness in adulthood.

Mental illness has also been identified as an important public health issue among children and adolescents in Timor-Leste. Many of the people of Timor-Leste have experienced violence, torture and persecution, death or disappearance of family members and friends, as well as loss of home and property. Post-conflict-related mental health disorders will continue to influence mental health needs (22). A population wide survey undertaken in 2000 in Timor-Leste found a prevalence rate of 34% for post-traumatic stress disorder (PTSD) (23). The current survey elicited a feeling of loneliness, worry, contemplation/attempted suicide and social relationships to assess the overall mental health status of adolescents.

#### 3.3.1 Suicidal behaviour

According to the WHO report *Preventing suicide: a global imperative* published in 2014, suicide deaths in Timor-Leste reached 60 or 12.1% of total deaths (24). In 2012, the estimated age-standardized suicide rate was 8 per 100 000 population.

In the current survey, almost one in 10 (9.5%) students reported attempting suicide one or more times during the 12 months before the survey, with no significant

difference by age or Sex. A similar proportion of students reported that they seriously considered attempting suicide (9.3%) and made a plan about how they would attempt suicide (9.6%) during the 12 months before the survey, with no significant differences by age or Sex (Table 8).

In addition, 11.8% of students reported feeling so worried most of the time or always about something that they could not sleep at night (Table 8). No significant differences were observed by sex, age or class level.

### **3.3.2 Loneliness**

Being liked and accepted by peers is crucial to young people's mental health development, and those who are not socially integrated are more likely to have 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. Hence, the study elicited the feeling of loneliness/worry, and having friends among the adolescents.

In this survey, 14.2% of students reported that they felt lonely most of the time or always during the 12 months before the survey, with no significant difference by Sex or age (Table 8). Only 4.4% of students reported that they did not have any close friends.

### **3.3.3 Missing classes and school experience**

Adolescents who have a positive relationship with teachers and who have positive attitudes towards school are less likely to indulge in substance use, and less likely to experience depression.

Missing classes is a signal of an unfavourable environment in the school, dislike or illness of students. This may imply that the student needs more care and support. Overall, 34.7% of students had missed classes or school without permission on one or more days during the 30 days before the survey, with no significant difference by age and grade level. A significantly higher proportion of male students (40.9%) reported missing classes than female students (28.8%).

In addition, only 27.7% of students reported that most of the students in their school were helpful and kind most of the time or always during the 30 days before the survey, with no significant differences by Sex or age.

**Table 8. Mental health of students 13–17 years of age in Timor-Leste, GSHS, 2015**

	Attempted suicide <sup>a</sup> (%)	Seriously considered attempting suicide <sup>a</sup> (%)	Planned to attempt suicide <sup>a</sup> (%)	Worried so much that could not sleep <sup>b</sup>	Felt lonely <sup>b</sup> (%)	Did not have any close friends (%)	Missed classes without permission <sup>c</sup> (%)	Reported most students in their school kind and helpful <sup>d</sup> (%)
<b>Sex</b>								
Male	9.6	9.9	10.5	12.1	15.5	3.7	40.9*	25.4
Female	8.0	7.7	7.9	10.9	12.6	4.9	28.8	29.9
<b>Age (years)</b>								
13–15	10.1	9.4	9.9	8.6*	11.9	4.5	32.5	25.7
16–17	9.0	9.3	9.5	14.4	16.0	4.3	36.5	29.2
<b>Total (13–17 years)</b>	9.5	9.3	9.6	11.8	14.2	4.4	34.7	27.7

Note: \*differences across groups are statistically significant at 95% level.

<sup>a</sup> One of more times during the 12 months before the survey; <sup>b</sup> Most of the times or always during the 12 months before the survey; <sup>c</sup> On one of more days during the 30 days before the survey; <sup>d</sup> Most of the time or always during the 30 days before the survey

### 3.3.4 Parental engagement

Adolescents who live in a social environment that provides meaningful relationships, encourages self-expression, and provides structure and boundaries are less likely to initiate sex at a young age, less likely to experience depression and less likely to indulge in substance abuse. Parental bonding and connection is associated with lower levels of depression and suicidal ideation, alcohol use, sexual risk behaviours and violence (25). The survey assessed the perceived parental engagement with students using a series of four questions with a recall period of 30 days before the survey.

**Parental engagement:** Percentage of students (13–17 years) who reported that their parents for most of the time or always:

- understood their problems & worries: 11.4
- really knew what they were doing with their free time: 23.5
- checked to see if their homework was done: 29.5

A healthy parental engagement with adolescents seems to be a concern in Timor-Leste. Only 11.4% reported that their parents or guardians, most of the time or always, understood their problems and worries. Similarly, 23.5% reported that their parents and guardians most of the times or always really knew what they were doing. Only 29.5% reported that their parents or guardians most of the time or always checked to see if their homework was done. No significant differences were observed by age, sex or grade (Table 9).

**Table 9. Levels of parental engagement among students 13–17 years of age in Timor-Leste, GSHS, 2015**

	Parents knew what they doing with their free time <sup>a</sup> (%)	Parents understood their problems and worries <sup>a</sup> (%)	Parents checked to see if their homework was done <sup>a</sup> (%)	Parents went through their things without their approval <sup>b</sup> (%)
<b>Sex</b>				
Male	22.0	11.2	28.7	72.4
Female	25.0	11.6	30.1	72.9
<b>Age (years)</b>				
13–15	20.0*	9.3	29.8	77.2
16–17	26.4	13.1	29.2	69.1
<b>Total (13–17 years)</b>	23.5	11.4	29.5	72.8

Note: \*differences across groups are statistically significant at 95% level.

<sup>a</sup> Most of the time or always during the 30 days before the survey ; <sup>b</sup> Never or rarely during the 30 days before the survey

## 3.4 Violence and injury

Injuries, intentional or unintentional, have become a major health concern in Timor-Leste. Adolescents are more prone to injury, intentional or unintentional, than older people (26). Unintentional injuries are a major cause of death and disability among young children. Each year, globally, about 875 000 children under the age of 18 years die from injuries and 10–30 million have their lives affected by injury. Many injuries lead to permanent disability and brain damage, depression, substance abuse, suicide attempts, and the adoption of health risk behaviours (27). A hospital-based study from Timor-Leste reported that 44% of injuries recorded in emergency departments in Dili and Baucau hospitals from 2006 to 2008 were the result of violence, while 53% were due to traffic accidents (28).

### 3.4.1 Physical violence

Physical violence in schools reflects a deteriorating psychosocial environment. The survey asked two questions to assess this aspect: in the past 12 months, how many times was a student physically attacked; and how many times were they in a physical fight? In addition, a question was asked if the student belonged to any group that indulged in violence.

Of the students, 8.7% reported that they belonged to any violent group. A much higher proportion of male students (11%) reported belonging to such a group than female students (6%).

Regarding being physically attacked, 38.4% of students reported that they had been physically attacked one or more times during the 12 months before the survey, with no significant differences by age or Sex. Nearly 29% (28.9%) of students reported being in a physical fight with other student(s) during the last 12 months. A significantly lower proportion of females (23%) reported being in physical fights than males (34%). The proportion of those in physical fights was higher among 13–15 year olds (33.7%) than those 16–17 years (25%) (Table 10).

### 3.4.2 Bullying in schools

Victims of bullying have increased stress and a reduced ability to concentrate. They are also at increased risk for substance abuse, aggressive behaviour and suicide attempts. The survey included two specific questions that assessed the reported prevalence of bullying<sup>7</sup> and how the students were bullied in the past 30 days.

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<sup>7</sup> Bullying occurs when a student or group of students say or do bad and unpleasant things to another student. Bullying includes being 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.

Among students, 28.3% reported being bullied on one or more days during the 30 days before the survey. A significantly larger proportion of males (33.4%) reported being bullied compared to females (22.6%) (Table 10). In addition, a significantly larger proportion of children in the lower grades reported being bullied than in the higher grades (36.8% in grade 7 versus 23.9% in grade 11) (Annex 2).

Among students who were bullied during the 30 days before the survey, 26.7% were bullied most often by being hit, kicked, pushed, shoved around or locked indoors.

Among students who most or all of the time had been so worried about something that they could not sleep at night during 12 months before the survey, and on one or more days during the 30 days before the survey, 43.6% of students reported being bullied and could not sleep at night (Table 10).

**Table 10. Violence and injuries among students 13–17 years of age in Timor-Leste, GSHS, 2015**

	Students who belonged to a violent group (%)	Students who were physically attacked <sup>a</sup> (%)	Students who were in a physical fight <sup>a</sup> (%)	Students who were bullied <sup>c</sup> (%)	Students who were bullied most often by being hit, kicked, pushed, shoved around or locked indoors <sup>d</sup> (%)	Students who were bullied and could not sleep at night <sup>e</sup> (%)
<b>Sex</b>						
Male	11.0*	40.5	34.0*	33.4*	31.2	45.7
Female	6.0	36.0	23.0	22.6	21.9	40.0
<b>Age (years)</b>						
13–15	10.1	41.6	33.7*	31.3	27.9	50.4
16–17	7.6	35.9	25.0	25.9	25.6	40.7
<b>Total (13–17 years)</b>	8.7	38.4	28.9	28.3	26.7	43.6

Note: \*differences across groups are statistically significant at 95% level.

<sup>a</sup>One or more times during the 12 months before the survey ; <sup>b</sup> Among students who were seriously injured during the 12 months before the survey ; <sup>c</sup> On one or more days during the 30 days before the survey ; <sup>d</sup> Among students who were bullied during the 30 days before the survey ; <sup>e</sup> Among students who most of the time or always had been so worried about something that they could not sleep at night during 12 months before the survey, and on one or more days during the 30 days before the survey)



## 3.5 Sexual behaviours and HIV/AIDS

School health programmes can help youth adopt lifelong attitudes and behaviours that support overall health and well-being, including behaviours that can reduce unwanted pregnancy and other sexually transmitted infections (STIs). Inclusion of health education in the school curriculum can prevent teenage pregnancy and STIs. Encouragingly, the age-specific

fertility rate among teenage women (15–19 years old) has shown a declining trend since 2002 (80 per 1000 women in 2002 to 51 births per 1000 women in 2009) (29, 30). However, the number of reported HIV/AIDS cases continues to increase, even though it still continues to be a low HIV-prevalence country with less than 0.2% of the adult population estimated to be HIV-positive. According to the MoH, the first reported case of HIV in Timor-Leste was in 2003, but since then number of HIV cases reported in the country continues to increase.

The survey assessed the current sexual practices (sexual intercourse, number of partners and use of condom or other method of contraception) with the help of five questions. In addition, the survey asked another four questions to assess students' knowledge of HIV infection and whether they were taught about it in school.

### Sexual experience and HIV/AIDS knowledge in Timor-Leste:

■ Had experience of sexual intercourse:	23.0%
■ Heard about HIV infection/AIDS:	64.7%
■ Taught about HIV infection AIDS:	45.2%
■ Taught on how to avoid HIV infection/ AIDS:	52.3%
■ Could talk with parents about HIV/ AIDS:	36.6%

### 3.5.1 Sexual practices

Among students, 23% reported ever having had sexual intercourse. Paradoxically, the percentage of female students who reported ever having had sexual intercourse was significantly higher for students in lower grades (e.g. grade 7) (24.5%) compared to students in class 9 (11.1%) (Annex 2). These findings are difficult to explain and may need to be interpreted cautiously and may have problems of validity, as this proportion should conceptually increase with the grade.

Of those who reported ever having had sexual intercourse, 44.5% reported having the first sexual intercourse before the age 14 years. Of these, 5.9% reported that they had had sexual intercourse with two or more persons in their lives (Table 11).

### ***Contraceptive usage***

Among students who had ever had sexual intercourse, 77.5% had used a method of birth control (such as condoms, withdrawal, rhythm or birth control pills to prevent pregnancy during the last sexual intercourse). Of these, 52.7% reported using a condom during the last sexual intercourse, and 38.4% reported using a birth control method other than a condom. Male students reported using contraceptive measures more often than females (condom or other contraceptive methods or both) (Table 11 and Annex 2).

### **3.5.2 Knowledge of HIV infection or AIDS**

AIDS is a modern day plague causing a large number of deaths and predisposing millions to other diseases such as tuberculosis. Millions of people are living with HIV. Young people between the ages of 15 and 24 years are the most threatened group, accounting for more than half of those newly infected 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.

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 disease and ectopic pregnancies (31). Worldwide, the highest reported rates of STIs are found among people between 15 and 24 years; up to 60% of new infections and half of all people living with HIV globally are in this age group (32).

Overall, 64.7% of students reported that they had heard of HIV infection or the disease called AIDS. There was no significant difference by Sex. The proportion of students who reported having heard about AIDS increased with age and class level of the students, for both male and female students. For example, students 16–17 years of age (71%) were significantly more likely to have heard of HIV infection or AIDS than students 13–15 years of age (56.8%). A much higher percentage of class 11 students (80.7%) had heard of AIDS compared to class 7 (50.2%) and class 8 students (58.1%) (Table 11 and Annex 2).

Less than half the students (45.2%) reported being taught in any of their classes about HIV infection or AIDS during the current school year. This indicator improved with class level and age among both male and female students. A significantly higher proportion (50.7%) of students 16–17 years of age reported being taught about HIV than students 13–15 years of age (38.4%).

Similarly, only 52.3% reported being taught in any of their classes on how to avoid HIV infection or AIDS during the current school year. This indicator also improved with age and class level. Compared to 41% of students in class 7, 64.4% of students in class 11 reported being taught. A larger proportion of male students reported being taught how to avoid HIV infection (57.6%) compared to female students (48%), but the difference was not statistically significant.

Only 36.6% reported that they could talk about HIV/AIDS with their parents. No significant differences were observed by age or Sex of the respondents (Table 11 and Annex 2).

### 3.6 Personal hygiene

Clean hands, faces, bodies and teeth can significantly improve the health status and reduce the risk of infections such as skin infections, trachoma and diarrhoea. Dental hygiene reduces the risk of dental caries and periodontal disease, as well as that of respiratory tract infections. Hygiene behaviours may also be linked to mental health status, as psychological distress, low self-esteem and unhappiness may be associated with poor personal hygiene.

Oral and hand hygiene in Timor-Leste:	
▪ Clean or brush teeth ≥1 time/day:	85.4%
▪ Never/rarely washed hands before eating:	16.8%
▪ Never/rarely washed hands after toilet:	22.2%
▪ Never/rarely used soap when washing hands:	16.0%
▪ No access to source of clean water at school:	49.6%

The GSHS assessed oral hygiene and hand hygiene with the help of one and five questions, respectively. It also elicited information about the source of clean drinking water at school.

#### 3.6.1 Oral hygiene

Worldwide, more than 50 million school hours are lost annually because of oral health problems (33). Dental caries affects between 60% and 90% of children in developing countries and is the most prevalent oral disease among children in several Asian countries. The incidence of dental caries may increase in the near future due to increased sugar consumption and inadequate fluoride exposure (34). In addition to causing pain and discomfort, poor oral health can affect children’s ability to communicate and learn. In both developed and developing countries, many children do not have access to water fluoridation or professional dental care. Daily cleaning and brushing the teeth can help prevent some cases of dental disease.

**Table 11. Sexual behaviours and HIV/AIDS knowledge among students 13–17 years of age in Timor-Leste, GSHS, 2015**

	Ever had sexual intercourse	First sexual intercourse before age 14 <sup>a</sup> (%)	Had sexual intercourse with two or more persons in their life (%)	Used condom <sup>a</sup> (%)	Ever heard of HIV infection or AIDS (%)	Taught about HIV infection or AIDS (%)	Taught how to avoid HIV infection or AIDS (%)	Could talk with parents about HIV/AIDS (%)
<b>Sex</b>								
Male	31.2*	42.3	9.3*	59.3	68.0	47.8	57.6	38.2
Female	14.9	Small number	2.5	Small number	62.0	43.2	48.0	34.9
<b>Age (years)</b>								
13–15	19.2	71.9*	4.4	54.8	56.8*	38.4*	45.3*	32.3
16–17	25.9	31.8	7.1	51.7	71.0	50.7	57.9	40.1
<b>Total (13–17 years)</b>	<b>23.0</b>	<b>44.5</b>	<b>5.9</b>	<b>52.7</b>	<b>64.7</b>	<b>45.2</b>	<b>52.3</b>	<b>36.6</b>

Note: \*differences across groups are statistically significant at 95% level.

<sup>a</sup> For the first time among whoever had sexual intercourse

In the GSHS 2015, 85.4% of students reported that they usually cleaned or brushed their teeth (one or more times per day during the 30 days before the survey), with no significant differences by Sex.

### **3.6.2 Handwashing behaviours**

Handwashing is an effective primary prevention method for reducing the incidence of diarrhoea and respiratory infections, including influenza. An estimated 1 million annual infectious disease deaths worldwide could be averted by improved hand hygiene practices.

In the GSHS 2015, 16.8% students reported never or rarely washing their hands before eating (during the 30 days before the survey) with a significant difference by Sex (20.5% among males versus 13.2% of female students) and by age (20.5% among those 13–15 years versus 13.9% among those 16–17 years of age).

After using the toilet or latrine (during the 30 days before the survey), 22.2% of students never or rarely washed their hands. There were no significant differences by Sex. Significant differences were noted by age, with a much higher proportion of younger students reporting that they did not wash their hands (Table 12). In addition, 16% of students (18.8% of boys and 12.8% of girls) never or rarely used soap when washing their hands during the 30 days before the survey.

Access to clean water for drinking seems to be problem in schools, as 49.6% reported that they had no source of clean water for drinking at school.

**Table 12. Oral hygiene and oral health among students 13–17 years of age in Timor-Leste, GSHS, 2015**

<b>Sex</b>					
Male	84.1	20.5*	25.2	18.8*	49.0
Female	87.3	13.2	18.8	12.8	50.2
<b>Age (years)</b>					
13–15	82.3	20.5*	27.0*	18.7	44.3
16–17	87.9	13.9	18.4	13.8	53.9
<b>Total (13–17 years)</b>	85.4	16.8	22.2	16.0	49.6

Note: \*differences across groups are statistically significant at 95% level.

<sup>a</sup> One or more times during the 30 days before the survey

## Discussion

As a relatively young nation, Timor-Leste is still in the process of building and strengthening its health and educational infrastructure and systems. The results of GSHS 2015 provide nationally representative information on behavioural risk factors among 13–17-year-old students in Timor-Leste.

### 4.1 Nutrition status

The GSHS 2015 findings confirm those of previous studies that undernutrition is still the dominant nutritional problem in Timor-Leste, with more than one in five students found to be underweight. Previously, the Food and Nutrition Survey (2013) (35) revealed a 38% prevalence of underweight and 50.2% prevalence of stunting, one of the highest in the world among children under 5 years of age. Worryingly, while undernutrition is still pervasive, the problem of overweight and obesity also seems to be emerging slowly, with 4.4% of 13–17-year-old students found to be overweight. This may lead to a double burden of malnutrition and over-nutrition over time. Interestingly, the prevalence of underweight in GSHS 2015 is significantly higher among boys than girls (28% versus 16.3%); this finding needs to be investigated further and corroborated with findings from other studies. Food security seems to be a major determinant of the problem of undernutrition, as more than one in ten students in GSHS reported going hungry most of the time or always, mainly because of insufficient food in their homes. Nutritional policy development in Timor-Leste should consider these findings and may use schools to provide additional supplementary nutrition.

### 4.2 Dietary behaviours and physical activity

WHO recommends that a healthy diet should include fruits, vegetables, legumes, nuts and whole grains, and at least 400 g (5 portions) of fruits and vegetables a day. However, only 18.9% of adolescents in Timor-Leste reported usually eating fruits two or more times per day and only 18.6% of students reporting eating vegetables three or more times a day. More worryingly, 43.2% reported consuming carbonated soft drinks one or more times per day and 66.3% students reported eating food from

fast food restaurants on one of more days in the past 7 days. WHO recommends limiting free sugar to less than 10% of total energy intake as part of a healthy diet, or further limiting it to 5% for additional health benefits. Sugary sweetened beverages such as carbonated drinks are the leading sources of free sugars consumed by young people. Fast food outlets too often provide food and beverages high in fat, sugar, salt and energy. In addition, the majority of youth in Timor-Leste fail to meet the WHO recommendation on physical activity, i.e. 60 minutes of moderate-to-vigorous intensity physical activity daily. Only 13.1% of students reported being physically active for at least 60 minutes per day on 5 or more days a week. These changing dietary habits and limited physical activity can fuel an epidemic of overweight and obesity, which may increase the prevalence of hypertension and diabetes, among other conditions, in Timor-Leste. School canteens and school health programmes could play a major role in promoting healthy dietary habits and physical activity among the youth.

### 4.3 Tobacco, alcohol and substance use

Adolescents in Timor-Leste have very high rates of secondhand smoke (SHS) exposure (80%), including from parents at home, and 45.2% start using tobacco before age of 14 years. The country has one of the highest current-use rates (27.6% of students – 39.6% of boys and 15.6% of girls) in the world. However, a substantial proportion of adolescent users want to quit and four out of five users had tried quitting. If Timor-Leste wants to achieve the NCD goal of 30% relative reduction in tobacco use prevalence by 2030, it must develop programmes to reduce initiation of tobacco use in adolescents. Measures to achieve this could include raising the legal age for purchase of tobacco, increasing taxation, and increasing awareness through school health programmes.

Similar to tobacco consumption, a 15.7% prevalence of current alcohol use and early initiation of use (more than half of those who drank started before the age of 14 years) are major health and social concerns for Timor-Leste. As of now, Timor-Leste neither has any national legal minimum age for off- or on-premise sales of alcoholic beverages, nor any legally binding regulations for alcohol advertising/production, placement/sponsorship/sales promotion.

The WHO *Global status report on alcohol and health 2014* (36) recommended that Timor-Leste should fill these policy gaps, in particular, introduction of the



minimum purchasing age and banning the marketing of alcohol, in order to curb this worrisome trend in youth alcohol consumption.

The United Nations Populations Fund's 2012 drug use assessment report in Timor-Leste (37) highlighted the easy availability of marijuana, magic mushrooms and amphetamine to youth in Timor-Leste. A 5.4% prevalence of current drug use and an early age of initiation (80.6% started before the age of 14 years) among students in Timor-Leste is an important public health issue, and must be addressed with appropriate policies and programmes.

## 4.4 Mental health

The GSHS results confirm the previous finding that mental health is an important public health problem in Timor-Leste, with 9.5% of students reporting that they had attempted suicide one or more times during the 12 months before the survey. Mental health problems have complex multidirectional interactions with many other risks among youth, including interpersonal violence, tobacco and alcohol use, substance abuse and many others. Bullying others and being bullied by others are common among adolescents with mental health problems.

Adolescents need protection and support from parents, schools and their peers for their physical, mental and social well-being. WHO's report on balancing protection and risks for adolescents shows that depression is less common among students who have a positive relationship with teachers and positive attitudes towards school (38). The results showed that only about 1 out of 10 students felt that their parents or guardians most of the time or always understood their problems and worries. In addition, school attendance is an important indicator that can show the tendency of adolescents to engage in risky behaviours. WHO's report on protective factors that affect adolescents' reproductive health in developing countries showed that school attendance is related to the prevalence of several health risk behaviours, including violence and sexual risk behaviours (39). In Timor-Leste, about 1 in 3 students missed classes (on one or more days during the 30 days before the survey). This showed that guardians and the school should pay more attention to the school attendance rate and explore the reasons for missing classes.

Survey results showed that 1 out of 4 students perceived other students in their school as helpful most of the time or always. Interaction with peers and support from friends is always important for adolescents. Isolation leads to loneliness and other mental health problems. Young people who are socially isolated have more difficulties

with their physical and emotional health. Therefore, school authorities and teachers should encourage supportive and respectful relationships among students to ensure the physical, mental and social well-being of adolescents in schools.

## **4.5 Violence and bullying**

Injuries and violence, in particular, road traffic injuries and physical violence, are a leading cause of death among adolescents and young people, and should be an important subject for the development of school health programmes. Adolescents are more prone to involvement in violence and physical attacks and fights. The survey, however, indicates a high incidence of physical violence in Timor-Leste schools; 38.4% students were physically assaulted at least once in the past year, with no significant Sex difference, and 28.3% of students reported being bullied on one or more days during the 30 days before the survey. Apart from physical injuries, bullying can also lead to mental health problems, including stress, education ability, high risk of substance abuse, aggressive behaviour and suicide attempts. As shown in the survey, almost half of the bullied victims could not sleep at night.

## **4.6 Sexual behaviours and HIV/AIDS knowledge**

Among the students, 23% reported ever having had sexual intercourse, with 44.5% reporting that they had had the first sexual intercourse before the age of 14 years. This may be contributing to high levels of teen pregnancies and unwanted pregnancies, and a high prevalence of STIs.

The survey also revealed inadequate knowledge of HIV/AIDS, with 64.7% reporting that they had ever heard of HIV/AIDS. Only 45.2% reported being taught about HIV/AIDS in school. These findings are aligned with the UNESCO report (40), which states that curriculum and teaching materials for HIV/AIDS appear to be limited in scope and availability in Timor-Leste. The lack of specific education modules, manuals or guidelines on HIV and AIDS, the separation between drugs and sexual education, and the current curriculum modules are major challenges that call for collaboration between the health and education sectors.

## **4.7 Hygiene**

Sanitation and basic hygiene are necessary for adolescent health. Globally, almost 2 million children and adolescents die of diarrhoeal diseases every year, although half the

cases can be easily reduced through effective hygiene education and handwashing. Inadequate oral health care, such as not brushing the teeth, can lead to dental caries, which is prevalent in 60–90% of children in developing countries. Lack of personal hygiene can lead to worm infestations, prevalent in 400 million school-age children globally, which is also related to nutrition, growth and development problems.

The survey results show that handwashing behaviours are still poor with a significant proportion of students not washing their hands after using the toilet and before eating. This may be related to the lack of availability of clean water, as almost half of the students reported that safe drinking water is not available in schools. The poor hygiene habits and lack of availability of clean water may be contributing to or further exacerbating the high level of undernutrition observed in Timor-Leste.

# 5

## Conclusion

The results of the GSHS 2015 provide nationally representative findings on specific health behaviours and risk factors among 13–17-year-old schoolgoing adolescents in Timor-Leste. The results may be used to prioritize and inform policies, programmes and develop services targeted at adolescents.

While policy development may be required at the national level, such as policies for the minimal legal age for sale of alcohol or raising the minimum legal age for tobacco purchase, or limiting the marketing and advertising of tobacco and alcohol, programmes and services may be required at the school and community levels. These may include school health programmes that include health education on personal hygiene, healthy dietary habits, or sex education on safe sex practices. The results of survey are important to programs and policies development and implanted by multiple departments in the health ministry and education department.

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# Annex 1: GSHS Timor-Leste

## Questionnaire 2015

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
  - G. 17 years old
  - H. 18 years old or older

2. What is your sex?
  - A. Male
  - B. Female

3. In what class are you?
  - A. Class 7 (EBC. 3 Ciclo)
  - B. Class 8 (EBC. 3 Ciclo)
  - C. Class 9 (EBC. 3 Ciclo)
  - D. Class 10 (ES)
  - E. Class 11 (ES)
  - F. Class 12 (ES)

**The next 4 questions ask about your height, weight, and going hungry.**

4. How tall are you without your shoes on in centimeters?
5. How much do you weigh without your shoes on in kg?
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 12 months, have you been weighed and measured?
  - A. Yes
  - B. No

**The next 4 questions ask about what you might eat and drink.**

8. During the past 30 days, how many times per day did you **usually** eat fruit, such as banana, papaya, manga, guava, apple, pineapple, watermelon, coconut, or grape?
  - 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
9. During the past 30 days, how many times per day did you usually eat vegetables, such as cole/cabbage, spinach, Kankung, Bayam, mostarda, brinjela, lakeru okir, or lakeru mutin?
  - 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



10. During the past 30 days, how many times per day did you usually drink carbonated soft drinks, such as coca cola, sprite, Fanta, Big cola, Gress, Fruitamin, Dellos, Sagiko, or springvalle? (Do not include diet soft drinks.)
    - A. I did not drink carbonated soft drinks 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
  11. During the past 7 days, on how many days did you eat food from a fast food restaurant, such as hamburger restaurant, school canteen, mini supermarket, mini market (KIOS), district market or mini restaurant?
    - A. 0 days
    - B. 1 day
    - C. 2 days
    - D. 3 days
    - E. 4 days
    - F. 5 days
    - G. 6 days
    - H. 7 days
- The next 6 questions ask about cleaning your teeth and washing your hands.**
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. Less than 1 time per day
    - C. 1 time per day
    - D. 2 times per day
    - E. 3 times per day
    - F. 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 did you usually wash your hands before eating?
    - A. I did not wash my hands before eating during the past 30 days
    - B. In a dish of water used by others
    - C. In a dish of water used only by me
    - D. Under running water
    - E. Some other way
  15. 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
  16. 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
  17. Is there a source of clean water for drinking at school?
    - A. Yes
    - B. No

**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.**

18. 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 students of about the same strength or power choose to fight each other.**

19. 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 3 questions ask about serious injuries that happened to you. 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.**

20. 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
21. 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 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 was poisoned or took too much of a drug
  - H. Something else happened to me
22. 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 attacked or abused or was fighting with someone
  - F. I was in a fire or too near a flame or something hot
  - G. I inhaled or swallowed something bad for me
  - H. Something else caused my injury

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.

23. 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
24. 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, nationality, 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 violent groups. Violence occurs when a person or a group of people attack other people or a group of people with insults, bullying,

hits, assault, robbery, or rape.

25. Do you belong to any violent group?
  - A. Yes
  - B. No

The next 6 questions ask about your feelings and friendships.

26. During the past 12 months, how often have you felt lonely?
  - A. Never
  - B. Rarely
  - C. Sometimes
  - D. Most of the time
  - E. Always
27. 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
28. During the past 12 months, did you ever **seriously** consider attempting suicide?
  - A. Yes
  - B. No
29. During the past 12 months, did you make a plan about how you would attempt suicide?
  - A. Yes
  - B. No
30. During the past 12 months, how many times did you actually attempt suicide?
  - A. 0 times
  - B. 1 time
  - C. 2 or 3 times
  - D. 4 or 5 times
  - E. 6 or more times

31. How many close friends do you have?

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

**The next 8 questions ask about cigarette and other tobacco use.**

32. 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 or 17 years old
- H. 18 years old or older

33. 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

34. During the past 30 days, on how many days did you use any tobacco products other than cigarettes, such as Joker, LA, Gudang garam, Sigaru 23, Surya, snuff, chewing tobacco, or betel?

- 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

35. 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

36. 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

37. 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

38. At any time during the next 12 months, do you think you will smoke a cigarette?

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

39. If one of your best friends offered you a cigarette, would you smoke it?

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

**The next 7 questions ask about drinking alcohol. This includes drinking Tua Sabu and Tua mutin. Drinking alcohol does not include drinking a few sips of wine for religious purposes. A “drink” is a glass of wine, a bottle of beer, a small glass of liquor, or a mixed drink.**

40. 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 or 17 years old
  - H. 18 years old or older
41. 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
42. 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
43. 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 my family
  - F. I stole it or got it without permission
  - G. I got it some other way
44. 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. TUA Sabu
  - E. Tua Mutin
  - F. Some other type
- Staggering when walking, not being able to speak right, and throwing up are some signs of being really drunk.**
45. 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
46. During your life, how many times have you 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
- The next question asks about how often you see alcohol advertisements on videos, magazines, or the internet or at movie theaters, sports events, or music concerts.**
47. During the past 30 days, how often did you see any alcohol advertisements?
- A. Never
  - B. Rarely
  - C. Sometimes
  - D. Almost daily
  - E. Daily

**The next 4 questions ask about drug use. This includes using marijuana, amphetamines, cocaine, inhalants, and Ganja.**

48. How old were you when you first used drugs?
  - A. I have never used drugs
  - 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 or 17 years old
  - H. 18 years old or older
49. During your life, how many times have you used marijuana (also called Ganja)?
  - A. 0 times
  - B. 1 or 2 times
  - C. 3 to 9 times
  - D. 10 to 19 times
  - E. 20 or more times
50. During the past 30 days, how many times have you used marijuana (also called Ganja)?
  - A. 0 times
  - B. 1 or 2 times
  - C. 3 to 9 times
  - D. 10 to 19 times
  - E. 20 or more times
51. During your life, how many times have you used amphetamines or methamphetamines?
  - A. 0 times
  - B. 1 or 2 times
  - C. 3 to 9 times
  - D. 10 to 19 times
  - E. 20 or more times

The next 5 questions ask about sexual intercourse.

52. Have you ever had sexual intercourse?
  - A. Yes
  - B. No
53. 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 or 17 years old
  - H. 18 year old or older
54. 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
55. The **last time** you had sexual intercourse; did you or your partner use a condom or preservative?
  - A. I have never had sexual intercourse
  - B. Yes
  - C. No
56. The **last time** you had sexual intercourse, did you or your partner use any other method of birth control, such as withdrawal, rhythm (safe time), birth control pills, or any other method to prevent pregnancy?
  - A. I have never had sexual intercourse
  - B. Yes
  - C. No
  - D. I do not know

**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, volleyball, basketball, and taekwondo.**

57. During the past **7 days**, on how many days were you physically active for a total of at least 60 minutes per day? **ADD UP ALL THE TIME YOU SPENT IN ANY KIND OF PHYSICAL ACTIVITY EACH 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
58. During the past 7 days, on how many days did you walk or ride a bicycle to or 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
59. During this school year, on how many days did you go to physical education (PE) class each week?
- A. 0 days
  - B. 1 day
  - C. 2 days
  - D. 3 days
  - E. 4 days
  - F. 5 or more days

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

60. 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.
- 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 6 questions ask about your experiences at school and at home.**

61. 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
62. 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
63. 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

64. 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
65. 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
66. During the past 30 days, how often did your parents or guardians go through your things without your approval?
- A. Never
  - B. Rarely
  - C. Sometimes
  - D. Most of the time
  - E. Always

**The next 4 questions ask about HIV infection or AIDS.**

67. Have you ever heard of HIV infection or the disease called AIDS?
- A. Yes
  - B. No
68. During this school year, were you taught in any of your classes about HIV infection or AIDS?
- A. Yes
  - B. No
  - C. I do not know
69. 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
70. Have you ever talked about HIV infection or AIDS with your parents or guardians?
- A. Yes
  - B. No



## Annex 2: GSHS Timor-Leste key findings factsheet 2015

	Students Aged 13-15 Years			Students Aged 16-17 Years			Students Aged 13-17 Years		
	Total % (CI)	Males % (CI)	Females % (CI)	Total % (CI)	Males % (CI)	Females % (CI)	Total % (CI)	Males % (CI)	Females % (CI)
Number of students in this subgroup <sup>a</sup>	1478	603	821	1375	625	712	2853	1228	1533
<b>1. Nutritional status</b>									
Underweight <sup>a</sup>	23.5 (17.0-31.6)	27.1 (18.1-38.5)	20.7 (15.2-27.4)	20.5 (14.3-28.5)	28.5 (20.3-38.5)	12.8 (7.5-20.9)	21.8 (15.7-29.4)	28.0 (20.2-37.4)	16.3 (11.1-23.1)
Overweight <sup>b</sup>	4.9 (3.4-6.9)	3.8 (2.1-6.7)	5.7 (3.4-9.5)	4.1 (2.1-7.8)	3.9 (1.7-9.0)	4.2 (2.2-7.7)	4.4 (2.8-6.8)	3.9 (2.0-7.3)	4.9 (3.2-7.3)
Obese <sup>c</sup>	0.8 (0.4-1.8)	0.6 (0.2-1.8)	1.0 (0.4-2.7)	0.8 (0.4-1.8)	0.8 (0.3-2.2)	0.8 (0.4-2.0)	0.8 (0.5-1.3)	0.7 (0.3-1.6)	0.9 (0.6-1.5)
went hungry most of the time or always because there was not enough food during the last 30 days	11.2 (8.9-14.1)	11.9 (9.3-15.3)	9.8 (7.2-13.3)	11.0 (9.1-13.3)	11.5 (9.4-13.9)	10.3 (7.9-13.4)	11.1 (9.5-12.9)	11.7 (10.0-13.6)	10.1 (8.0-12.5)
<b>2. Life style behaviours</b>									
<b>2.1 Dietary behaviour</b>									
Ate fruit two or more times per day during the last 30 days	20.1 (16.9-23.8)	19.8 (15.9-24.3)	20.9 (16.9-25.6)	17.9 (15.0-21.2)	18.5 (15.4-22.1)	16.1 (12.3-20.9)	18.9 (16.6-21.4)	19.0 (16.5-21.9)	18.3 (15.4-21.6)
Ate vegetables three or more times per day during the last 30 days	17.9 (14.3-22.2)	17.1 (13.0-22.1)	19.5 (15.5-24.4)	19.1 (16.5-21.9)	16.0 (12.6-20.2)	20.5 (17.1-24.3)	18.6 (16.3-21.1)	16.4 (13.4-20.2)	20.1 (17.5-22.9)
Drank carbonated soft drinks one or more times per day during the last 30 days	44.3 (39.7-49.0)	44.8 (38.8-51.0)	43.8 (38.8-48.9)	42.3 (38.9-45.7)	43.9 (38.4-49.6)	40.3 (36.3-44.5)	43.2 (40.5-45.9)	44.3 (40.8-47.8)	41.9 (38.5-45.4)
Food from a fast food restaurant three or more days during the last 7 days	18.4 (14.7-22.8)	15.8 (11.2-21.6)	19.5 (15.5-24.1)	17.1 (15.1-19.2)	17.3 (14.2-20.8)	16.8 (13.5-20.9)	17.6 (15.5-20.2)	16.6 (13.9-19.8)	18.0 (15.3-21.1)
<b>2.2 Physical activity</b>									
Physically active at least 60 minutes per day on all 7 days during the last 7 days	8.4 (6.6-10.6)	11.3 (8.5-14.8)	5.6 (4.0-7.8)	11.0 (8.8-13.6)	16.9 (13.3-21.2)	5.1 (3.4-7.5)	9.8 (8.5-11.3)	14.5 (11.9-17.4)	5.3 (4.3-6.5)
Did not walk or ride a bicycle to or from school during the last 7 days	59.8 (55.3-64.3)	54.0 (47.7-60.2)	66.6 (62.4-70.6)	60.2 (56.3-64.0)	53.1 (47.5-58.5)	67.0 (63.1-70.6)	60.1 (56.9-63.2)	53.5 (49.1-57.8)	66.8 (63.7-69.8)

	Students Aged 13-15 Years				Students Aged 16-17 Years				Students Aged 13-17 Years			
	Total % (CI)	Males % (CI)	Females % (CI)	Total % (CI)	Males % (CI)	Females % (CI)	Total % (CI)	Males % (CI)	Females % (CI)	Total % (CI)	Males % (CI)	Females % (CI)
Spent three or more hours per day <b>sitting and watching</b> television, playing computer games, or talking with friends, when not in school or homework during a typical or usual day doing	15.9 (13.3-18.9)	16.5 (13.1-20.5)	15.3 (12.1-19.1)	14.3 (11.6-17.5)	18.4 (13.9-24.1)	10.0 (8.3-12.1)	15.0 (13.0-17.3)	17.6 (14.1-21.7)	12.4 (11.0-14.0)			
<b>Attended physical education classes</b> on three or more days each week during this school year	26.4 (22.7-30.4)	26.0 (22.0-30.4)	26.4 (21.8-31.6)	25.9 (22.7-29.4)	26.0 (23.0-29.2)	25.8 (20.9-31.4)	26.1 (23.5-29.0)	26.0 (23.3-28.9)	26.1 (22.6-29.9)			
<b>Missed classes</b> or school without permission on one or more days during the last 30 days	32.5 (27.9-37.5)	36.9 (31.7-42.4)	28.0 (23.0-33.5)	36.5 (32.8-40.4)	44.0 (37.6-50.6)	29.4 (25.4-33.8)	34.7 (31.5-38.0)	40.9 (36.7-45.2)	28.8 (25.0-32.9)			
<b>3. Tobacco, alcohol &amp; substance abuse</b>												
<b>3.1 Tobacco use</b>												
<b>Currently used any tobacco products</b> (used any tobacco products on at least 1 day during the last 30 days)	23.4 (20.6-26.4)	31.8 (27.0-37.1)	14.1 (11.4-17.3)	31.0 (27.0-35.3)	45.4 (39.3-51.7)	16.9 (14.1-20.3)	27.6 (25.4-29.9)	39.6 (34.8-44.6)	15.6 (14.1-17.3)			
<b>Currently smoked cigarettes</b> (smoked cigarettes on at least 1 day during the last 30 days)	15.7 (13.3-18.4)	25.9 (21.7-30.5)	5.8 (4.1-8.3)	23.8 (20.1-27.9)	41.6 (35.8-47.7)	7.1 (5.8-8.6)	20.2 (17.9-22.7)	34.9 (29.9-40.1)	6.5 (5.6-7.5)			
Currently used <b>any tobacco products other than cigarettes</b> (on at least 1 day during the last 30 days)	15.4 (13.2-17.8)	17.5 (14.0-21.7)	11.9 (9.6-14.6)	19.3 (16.5-22.4)	23.2 (19.6-27.3)	14.9 (12.0-18.3)	17.5 (16.2-18.9)	20.8 (18.3-23.5)	13.5 (12.0-15.1)			
<b>Tried a cigarette before age 14 years</b> for the first time (among students who ever smoked cigarettes)	66.2 (58.4-73.3)	60.6 (53.8-67.0)	*	33.8 (28.1-39.9)	28.2 (23.6-33.5)	*	45.2 (37.4-53.3)	38.4 (32.0-45.2)	61.9 (49.3-73.0)			
<b>Tried to quit smoking cigarettes</b> (among students who smoked cigarettes during the 12 months before the survey)	76.4 (66.5-84.1)	82.6 (72.5-89.6)	*	78.4 (73.5-82.7)	79.8 (74.5-84.2)	*	77.8 (72.3-82.4)	80.6 (75.4-85.0)	*			
Students who reported that people <b>smoked in their presence</b> on one or more days during the last 7 days	77.1 (72.6-81.0)	78.8 (72.8-83.9)	76.7 (72.3-80.6)	82.5 (78.7-85.7)	84.4 (80.8-87.4)	81.3 (76.6-85.3)	80.0 (76.4-83.3)	82.0 (77.9-85.4)	79.2 (75.2-82.7)			
Students who had <b>parents or guardians who used any form of tobacco</b>	29.2 (25.5-33.3)	27.8 (23.7-32.4)	28.5 (23.8-33.8)	33.6 (28.9-38.7)	33.6 (28.0-39.6)	33.1 (27.6-39.1)	31.7 (28.1-35.5)	31.1 (26.9-35.7)	31.0 (26.9-35.5)			

	Students Aged 13-15 Years			Students Aged 16-17 Years			Students Aged 13-17 Years		
	Total % (CI)	Males % (CI)	Females % (CI)	Total % (CI)	Males % (CI)	Females % (CI)	Total % (CI)	Males % (CI)	Females % (CI)
<b>3.2 Alcohol use</b>									
<b>Currently drank alcohol</b> (at least one drink of alcohol on at least one day during the last 30 days)	12.0 (10.0-14.3)	14.1 (11.5-17.3)	8.3 (5.6-12.1)	18.6 (15.0-23.0)	27.2 (20.8-34.7)	10.0 (7.5-13.4)	15.7 (13.1-18.6)	21.5 (16.7-27.3)	9.3 (7.5-11.4)
Students who ever drank so much alcohol that they were <b>really drunk</b> one or more times during their life	7.9 (6.5-9.7)	10.1 (7.7-13.0)	4.9 (3.2-7.5)	12.6 (9.8-16.1)	21.5 (16.6-27.4)	4.7 (3.2-6.9)	10.5 (8.5-12.9)	16.4 (12.4-21.5)	4.8 (3.9-5.9)
Students who drank alcohol <b>before age 14 years for the first time</b> , among students who ever had a drink of alcohol other than a few sips	78.7 (71.6-84.3)	73.1 (62.9-81.3)	*	49.4 (41.4-57.5)	44.8 (38.0-51.9)	*	59.7 (81.1-67.8)	53.2 (45.5-60.7)	70.1 (55.7-81.4)
<b>Ever got into trouble</b> with their family or friends, missed school, or got into fights as a <b>result of drinking alcohol</b> (one or more times during their life)	7.9 (5.9-10.4)	10.7 (8.0-14.1)	4.6 (3.0-7.0)	10.0 (7.7-12.8)	15.1 (11.9-19.1)	4.6 (2.9-7.3)	9.1 (7.4-11.0)	13.2 (10.8-16.1)	4.6 (3.5-6.1)
<b>3.3 Drug use</b>									
<b>Currently used marijuana</b> (one or more times during the last 30 days)	5.7 (4.0-8.2)	5.4 (3.5-8.1)	5.3 (3.4-8.2)	4.4 (3.3-5.9)	6.4 (4.3-9.3)	1.8 (1.0-3.1)	5.0 (3.7-6.6)	6.0 (4.2-8.4)	3.4 (2.4-4.7)
Percentage of students who <b>ever used marijuana</b> one or more times during their life	6.7 (4.9-9.1)	6.2 (4.3-8.9)	5.8 (3.9-8.5)	4.3 (3.3-5.7)	5.8 (4.1-8.1)	2.2 (1.5-3.2)	5.4 (4.0-7.1)	6.0 (4.4-8.1)	3.8 (2.7-5.4)
<b>Ever used amphetamines or methamphetamines</b> (one or more times during their life)	6.0 (4.1-8.6)	5.5 (3.8-7.9)	5.0 (2.9-8.4)	4.2 (3.0-5.8)	6.2 (4.1-9.3)	1.6 (1.0-2.7)	5.0 (3.6-6.8)	5.9 (4.3-8.1)	3.1 (2.1-4.6)
Students who <b>used drugs before age 14 years</b> for the first time, among students who ever used drugs	90.9 (84.6-94.7)	*	*	74.4 (60.0-84.9)	*	*	82.2 (72.7-89.0)	79.2 (65.4-88.5)	88.5 (79.6-93.8)
<b>4. Mental health</b>									
Most of the time or always <b>felt lonely</b> during the last 12 months	11.9 (9.6-14.7)	12.9 (9.6-17.2)	10.5 (8.5-12.9)	16.0 (13.7-18.6)	17.4 (13.8-21.7)	14.3 (11.7-17.4)	14.2 (11.8-16.9)	15.5 (12.3-19.4)	12.6 (10.3-15.2)
Who did <b>not have any close friends</b>	4.5 (3.2-6.3)	4.3 (2.4-7.6)	4.6 (3.3-6.4)	4.3 (3.2-5.7)	3.3 (2.0-5.4)	5.2 (3.6-7.3)	4.4 (3.6-5.4)	3.7 (2.7-5.1)	4.9 (3.8-6.3)
Most of the time or always were so <b>worried</b> about something that they <b>could not sleep at night</b> during the last 12 months	8.6 (6.3-11.8)	7.9 (5.4-11.4)	7.8 (5.6-10.8)	14.4 (11.9-17.2)	15.4 (12.0-19.5)	13.4 (10.6-16.8)	11.8 (9.9-14.0)	12.1 (9.4-15.5)	10.9 (8.8-13.4)

	Students Aged 13-15 Years			Students Aged 16-17 Years			Students Aged 13-17 Years		
	Total % (CI)	Males % (CI)	Females % (CI)	Total % (CI)	Males % (CI)	Females % (CI)	Total % (CI)	Males % (CI)	Females % (CI)
Seriously <b>considered attempting suicide</b> during the last 12 months	9.4 (6.7-12.9)	9.8 (7.0-13.7)	7.5 (5.0-11.1)	9.3 (7.7-11.3)	9.9 (7.3-13.2)	7.9 (6.4-9.8)	9.3 (8.0-10.9)	9.9 (8.1-11.9)	7.7 (6.4-9.3)
<b>Made a plan</b> about how they would <b>attempt suicide</b> during the last 12 months	9.9 (7.1-13.6)	11.5 (7.6-17.0)	7.6 (5.0-11.4)	9.5 (7.7-11.6)	9.7 (7.4-12.6)	8.2 (6.1-10.8)	9.6 (8.0-11.6)	10.5 (8.7-12.6)	7.9 (6.1-10.1)
<b>Attempted suicide</b> one or more times during the last 12 months	10.1 (7.1-14.0)	9.6 (6.2-14.5)	8.2 (5.5-12.1)	9.0 (7.0-11.5)	9.5 (7.1-12.7)	7.8 (5.8-10.3)	9.5 (7.4-12.1)	9.6 (7.2-12.6)	8.0 (6.0-10.5)
<b>5. Social and parental relationships</b>									
Most of the students in their school were <b>most of the time or always kind and helpful</b> during the last 30 days	25.7 (22.0-29.9)	22.3 (17.9-27.4)	29.0 (24.1-34.5)	29.2 (26.3-32.3)	27.6 (24.4-31.1)	30.7 (26.2-35.5)	27.7 (24.6-30.9)	25.4 (22.6-28.3)	29.9 (26.1-34.1)
Parents or guardians most of the time or always checked to see if their <b>homework was done</b> during the last 30 days	29.8 (26.7-33.1)	30.7 (25.9-35.9)	29.2 (26.3-32.4)	29.2 (25.8-32.8)	27.1 (24.2-30.3)	30.9 (26.5-35.6)	29.5 (26.8-32.2)	28.7 (25.9-31.5)	30.1 (27.1-33.4)
Parents or guardians most of the time or always <b>understood their problems and worries</b> during the last 30 days	9.3 (7.7-11.2)	9.1 (6.5-12.7)	9.0 (7.8-10.4)	13.1 (10.8-15.7)	12.8 (10.7-15.2)	13.7 (10.3-18.1)	11.4 (9.7-13.4)	11.2 (9.3-13.5)	11.6 (9.3-14.3)
Parents or guardians never or rarely went through their things <b>without their approval</b> during the last 30 days	77.2 (73.6-80.5)	76.8 (72.6-80.6)	77.9 (73.2-81.9)	69.1 (66.1-72.0)	69.1 (64.3-73.5)	68.7 (64.8-72.3)	72.8 (69.8-75.6)	72.4 (68.3-76.2)	72.9 (70.0-75.6)
Parents or guardians most of the time or <b>always really knew</b> what they were doing with their <b>free time</b> during the last 30 days	20.0 (17.2-23.1)	18.4 (14.7-22.9)	20.3 (16.9-24.2)	26.4 (23.5-29.5)	24.8 (20.6-29.5)	28.9 (24.9-33.3)	23.5 (20.6-26.8)	22.0 (18.5-26.0)	25.0 (21.1-29.4)
<b>6. Violence and injury</b>									
<b>Who were physically attacked</b> (one or more times during the last 12 months)	41.6 (37.6-45.7)	44.0 (38.9-49.1)	38.6 (33.9-43.4)	35.9 (33.1-38.8)	37.9 (33.5-42.6)	33.9 (30.6-37.4)	38.4 (35.7-41.2)	40.5 (37.1-44.0)	36.0 (33.3-38.9)
<b>Who were in a physical fight</b> one or more times during the last 12 months	33.7 (29.3-38.4)	39.8 (33.8-46.1)	26.9 (21.8-32.8)	25.0 (22.5-27.6)	29.7 (26.6-33.0)	19.7 (16.2-23.7)	28.9 (25.6-32.4)	34.0 (29.9-38.5)	23.0 (19.9-26.5)
Who were <b>bullied</b> on one or more days during the last 30 days	31.3 (27.4-35.4)	38.5 (32.6-44.9)	24.7 (20.5-29.4)	25.9 (22.8-29.3)	29.7 (25.1-34.8)	20.8 (18.0-24.0)	28.3 (25.5-31.2)	33.4 (29.3-37.8)	22.6 (20.1-25.2)

	Students Aged 13-15 Years			Students Aged 16-17 Years			Students Aged 13-17 Years		
	Total % (CI)	Males % (CI)	Females % (CI)	Total % (CI)	Males % (CI)	Females % (CI)	Total % (CI)	Males % (CI)	Females % (CI)
<b>7. Sexual behaviors &amp; knowledge of HIV/AIDS</b>									
<b>Ever had sexual intercourse</b>	19.2 (15.0-24.3)	21.7 (16.3-28.4)	16.0 (11.5-21.7)	25.9 (21.8-30.3)	37.8 (30.9-45.2)	14.1 (10.4-18.9)	23.0 (19.5-26.9)	31.2 (25.0-38.1)	14.9 (11.9-18.5)
Who had sexual intercourse with two or more persons (during their life)	4.4 (3.3-5.8)	5.2 (3.1-8.6)	3.0 (1.7-5.3)	7.1 (5.2-9.6)	12.4 (8.9-17.1)	2.1 (1.1-4.1)	5.9 (4.3-7.9)	9.3 (6.5-13.3)	2.5 (1.7-3.8)
Had sexual intercourse before age 14 years (for the first time among students who ever had sexual intercourse)	71.9 (58.5-82.2)	*	*	31.8 (23.0-42.0)	34.0 (25.6-43.7)	*	44.5 (34.3-55.2)	42.3 (32.5-52.7)	*
Used a condom during last sexual intercourse, among students who ever had sexual intercourse	54.8 (45.7-63.7)	*	*	51.7 (43.1-60.2)	59.5 (50.1-68.2)	*	52.7 (46.4-58.9)	59.3 (50.8-67.4)	*
<b>Ever heard of HIV infection or AIDS</b>	56.8 (52.1-61.4)	61.9 (56.1-67.3)	52.7 (47.3-58.1)	71.0 (65.9-75.6)	72.7 (68.4-76.6)	69.8 (62.5-76.1)	64.7 (60.2-68.9)	68.0 (64.1-71.7)	62.0 (55.7-67.9)
Who were taught in any of their classes about HIV infection or AIDS during this school year	38.4 (34.1-43.0)	41.3 (35.0-48.0)	35.7 (30.3-41.5)	50.7 (44.4-57.0)	52.7 (46.6-58.7)	49.4 (41.4-57.6)	45.2 (40.2-50.4)	47.8 (42.8-52.9)	43.2 (36.7-49.9)
Who were taught in any of their classes how to avoid HIV infection or AIDS during this school year	45.3 (42.0-48.6)	51.0 (46.3-55.7)	40.6 (37.0-44.2)	57.9 (52.3-63.3)	62.6 (58.3-66.7)	54.3 (45.6-62.7)	52.3 (47.8-56.7)	57.6 (53.5-61.6)	48.0 (42.0-54.1)
Who ever talked about HIV infection or AIDS with their parents or guardians	32.3 (28.6-36.3)	33.3 (28.1-39.0)	30.7 (25.2-36.9)	40.1 (35.6-44.7)	41.9 (36.5-47.5)	38.5 (33.2-44.1)	36.6 (33.8-39.6)	38.2 (34.7-41.9)	34.9 (30.8-39.3)
<b>8. Hygiene habits</b>									
Cleaned or brushed their teeth one or more times per day during the last 30 days	82.3 (78.7-85.4)	80.9 (76.0-84.9)	84.7 (81.5-87.4)	87.9 (85.3-90.0)	86.5 (82.1-90.0)	89.5 (86.7-91.7)	85.4 (82.7-87.7)	84.1 (80.3-87.3)	87.3 (84.7-89.5)
Never or rarely washed their hands before eating during the last 30 days	20.5 (18.0-23.1)	24.4 (20.5-28.8)	16.6 (13.8-19.8)	13.9 (11.6-16.5)	17.5 (15.0-20.4)	10.3 (7.8-13.6)	16.8 (14.6-19.3)	20.5 (18.0-23.2)	13.2 (10.6-16.2)
Never or rarely washed their hands after using the toilet or latrine during the last 30 days	27.0 (24.1-30.2)	28.8 (24.5-33.6)	24.3 (20.3-28.8)	18.4 (14.8-22.7)	22.5 (17.3-28.6)	14.2 (10.9-18.3)	22.2 (18.9-26.0)	25.2 (21.2-29.6)	18.8 (15.2-23.0)
Never or rarely used soap when washing their hands during the last 30 days	18.7 (16.1-21.6)	22.5 (17.8-27.9)	14.7 (12.4-17.3)	13.8 (11.1-16.9)	16.0 (12.2-20.8)	11.3 (8.6-14.7)	16.0 (13.8-18.4)	18.8 (16.2-21.8)	12.8 (10.5-15.6)



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