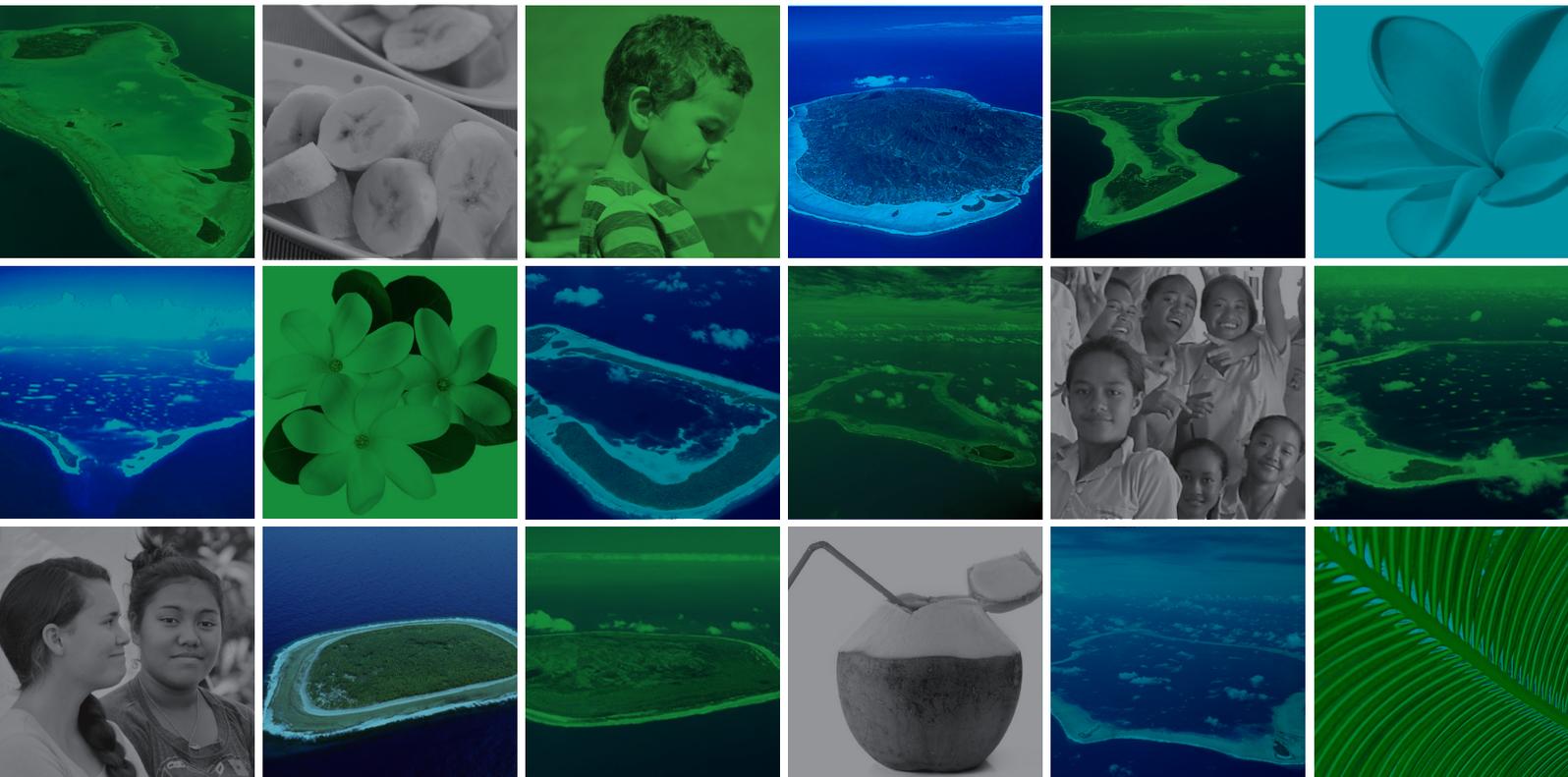


# Cook Islands Global Health Survey 2010 Report





**COOK ISLANDS**

**GLOBAL HEALTH SURVEY**

**2010 REPORT**

Supported by:



**November 2014**



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## **Acknowledgments**

Heartfelt thanks are expressed to all who contributed in any way to the planning and execution of this survey.

The successful completion of this first Global School-Based Student Health Survey (GSHS) conducted in the Cook Islands would not have been possible without the invaluable contribution and support of international agencies, local ministries and other key stakeholders.

Thank you for the invaluable technical support provided for this survey by personnel from the WHO Western Pacific Regional Office (Division of Pacific Technical Support and Samoa Office), the WHO country representative and the Centers for Disease Control (CDC Atlanta), in data analysis and facilitating training in report writing.

Special acknowledgement is extended to Ministry of Health and Ministry of Education personnel for their cooperation and support.

Gratitude and appreciation is conveyed to the school principals, teachers, and especially to the students from the twenty three (23) schools who participated in this study.

Finally, meitaki maata to the Health Promotion Team for coordinating and participating in data collection.

## Foreword



Kia Orana,

With the Ministry of Health and Ministry of Education mandates to provide health and education to the highest quality for the children of the Cook Islands, this first Global School-based Student Health Survey gives us a valuable snap-shot of the health of our young people.

From this census survey over 1200 form 2 to form 7 students from 23 schools across the Cook Islands, information was collected using scientifically rigorous methods on alcohol and other drug use, weight status and dietary behaviors, hygiene-related behaviors, mental health issues, physical activity, protective factors, HIV infection knowledge, tobacco use, and violence and unintentional injury. Some key findings were:

- 37.2 % of all students drank at least one drink containing alcohol on one or more of the 30 days prior to the survey and among these 48.5% usually drank two or more drinks per day on the days they drank alcohol;
- 15.2% of male students and 7.9% of female students had used marijuana one or more times;
- 31.6% of male students and 23.0% of female students were obese;
- Only 40.4% of children had 5 or more serves of fruit and vegetables per day in the past 30 days compared to 60.2% who usually and daily on one or more carbonated soft drinks;
- The majority of children in the Cook Islands have oral hygiene cleaning. Only 13.4% of male students and 6.0% of female students cleaned or brushed their teeth less than one time per day and 7.1% of male students and 2.9% of female students never or rarely washed their hands before eating during the 30 days prior to the survey;
- A small proportion (7.6%) of students reported that they felt lonely most of the time or always during the past 12 months. However, 13.8% of female students and 8.7% of male students 'most of the time' or 'always 'were worried about something that they could not sleep at night during the past 12 months;
- Male students (37.7%) more than female students (32.3%) were more likely to miss class or school without asking permission on one or more of the past 30 days;
- Physical activity was more common among male students. Male students (44.6%) were more likely than female students (32.3%) to do physical activity for at least 60 minutes per day on five or more days during the past seven days;
- Knowledge of HIV was generally high with more female students (85.6%) than male students (79.4%) who had heard of HIV infection or the disease called AIDS. 58.9% of male students and 61.7% of female students had been taught on how to avoid HIV and AIDS;

- 21.4% of male students and 20.7% of female students smoked cigarettes or used other tobacco products on one or more days during the past 30 days;
- Of concern was that 41.2% of male students and 35.1% of female students were physically attacked one or more times in the past 12 months.

I appreciate that the survey was able to cover such a wide range of important health behaviors and caused minimal disruption to our students. This type of multi-risk factor survey is the way forward for future assessments of student health behavior and protective factors. I support the recommendations outlined in this report, noting in particular the recommendations to strengthen health education and promotion through schools, to implement a National School Health Policy and establish Adolescent Health Services.

There is an existing health policy in most schools as it is a requirement from the Ministry of Education to include health in the curriculum. The policy is often focusing on HEALTH and WELL BEING of the student. However, I believe the Ministry of Education as well as Health should work collaboratively together to ensure the success and delivery of the Health curriculum. I also recommend that any survey done should be target at an earlier age as from experience numerous students have either been physically or sexually abuse. A clear clarification on the words physically attacked should be considered as some may or may not be too clear about it.

I congratulate our technical teams for the quality of their work and for having the foresight to expand the survey to include all children from forms 2 to 7. We also gratefully acknowledge the support of the World Health Organization and the Centers for Disease Control (CDC Atlanta).

Kia Rangatira

A handwritten signature in black ink, appearing to read 'N. Glassie', written in a cursive style.

Honourable Nandi Glassie  
Minister of Health  
Cook Islands

## Foreword



Non-communicable diseases (NCDs) in Pacific island countries and areas (PICs) account for approximately 75% of all deaths and contribute to significant long term illness and disability, hampering social and economic development. Of growing concern throughout the Pacific is the increasing prevalence of NCD risk factors such as overweight and obesity, unhealthy diets and physical inactivity, tobacco and alcohol use among children. For these reasons and because oral health, hygiene and mental health behaviors were also assessed, we welcome this report on the first Global School-based Student

Health Survey in the Cook Islands.

From the Cook Islands GSHS survey, it is clear that across the health behavior and protective factors measured, most children have adopted healthy behaviors. For example, the majority of children did not smoke, take drugs or drink alcohol. Most had good teeth cleaning and hand washing habits, did not usually feel lonely or miss school and were not physically attacked in the last year. However, more than half of the children were overweight and less than half had sufficient fruit and vegetable intakes or engaged in sufficient levels of physical activity. Population-wide school and community-based programs are needed to reverse these figures. Also, a significant minority of students reported being physically attacked, feeling lonely and for many, protective factors were not particularly strong either at home or at school. For these students targeted programs are warranted.

WHO is pleased to have been a part of the collaboration that led to the publication of this report and will continue to work with the Ministry of Health in the Cook Islands and other key stakeholders to prioritize children's health.

A handwritten signature in black ink, appearing to read 'Baoping Yang'.

Dr. Baoping Yang  
WHO Representative  
For American Samoa, Cook Islands, Niue, Samoa and Tokelau

## **Executive Summary**

This report describes the results from the first Global School-based Student Health Survey (GSHS) conducted in the Cook Islands by the Ministry of Health and Ministry of Education from 27 July – 5<sup>th</sup> November 2010.

The Cook Islands is a nation comprise of 15 islands spread over 2 million square kilometer in the Polynesian Triangle of the South Pacific, with an estimated population of 17,794 (Cook Islands Census 2011). The population is dispersed across the islands but concentrated on Rarotonga (73.65), the centre of governance and commerce. The Cook Islands has been a self-governing nation in free association with New Zealand since 1965. The Cook Islands is governed by a Prime Minister who is the leader of the majority party in the legislature, the legislature is elected by popular vote.

Since 2003, Ministries of Health and Education around the world have been using the GSHS to periodically monitor the prevalence of important health risk behaviors and protective factors among students. To date over 45 countries have completed the GSHS.

### **Purpose**

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

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

Prior to this Global School-based Student Health Survey, the Global Youth Tobacco Survey (2004) and (2007) was conducted.

### **Methodology**

The 2010 Cook Islands GSHS conducted a census survey to collect data from students in Forms 2 to 7. Students completed self-administered questionnaires during one classroom period and recorded their responses directly on a computer scanable answer sheet. Twenty three schools were identified to participate in the Cook Islands GSHS.

The questionnaire addressed the following areas: respondent demographics; alcohol and other drug use; BMI and dietary behaviors; hygiene-related behaviors; mental health issues; physical activity; protective factors; HIV infection knowledge; tobacco use; and violence and unintentional injury. Survey procedures were designed to protect

students' privacy by allowing for anonymous and confidential participation. Answer sheets were sent to CDC for analysis the data.

## **Key Results**

The schools response rate was 100% and the overall study response rate was 84%. Of the 23 schools included in this study, a total of 1,274 students were surveyed during the period of 27 July to 5 November 2010. About 8.9% of these students are under the age of 12 years, 56.1% aged 13-15 years, and 35.1% aged 16 years and above. The weighted results gathered were used to make important inferences about the priority health risk behaviors and protective factors of all students.

**Alcohol use among students by sex:** In Cook Islands, students who ever had a drink of alcohol and those who had their first drink of alcohol before the age of 14 are 66.3%. Students who drank alcohol during the past 30 days, male students (49.5%) and female students (47.3%) reported similar rates of drinking, two or more drinks per day on the days they drank alcohol. Female students (46.9%) are more likely than male students (36.8%) to usually get their alcohol they drank from their friends.

The patterns of problem drinking were similar in boys and girls, with around 31.9% having drunk so much alcohol on one or more times, that they were really drunk, and with older children more likely to have been drunk. Findings were similar for alcohol having led to a fight to other trouble, with 20.6% reporting this.

**Drug-use Behavior:** The study found that 66.0% of male students used drugs such as marijuana and amphetamines before the age of 14 years old.

**Dietary Behaviors:** There were no differences in the underweight and overweight measures between female and male students. However, for obesity, male students (31.6%) were more likely to be obese than female students (23.9%). Only 40.4% students reported eating enough fruits and vegetables but 60.2% consumed soft drinks at least once a day in the last 30 days.

**Hygiene Behaviors:** While the majority of the participants were cleaning their teeth daily, male students (13.4%) were more likely than female students (6.0%) to usually clean or brush their teeth less than one time per day during the past 30 days.

**Mental health issues:** From this survey, 7.6% students reported spending most of their time feeling lonely during the past 12 months. Within the same period, female students (13.8%) were more likely than male students (8.7%) to report, most of the time or always worried about something that they could not sleep at nighttime. Very few students reported that they had no close friends (4.4%) with any differences noted amongst male and female students.

**Protective Factors:** Male students (37.7%) compared to female students (32.3%) are more likely to miss class or leave school without asking permission on one or more days

within the past 30 days. More female students (48.7%) than male students (40.1%) reported that most of the students in their school were kind and helpful. Also female students (38.7%) more than male students (33.7%) reported that their parents and guardians knew what they were doing with their free time.

**Physical Activity:** Male students (44.6%) are more likely than female students (32.3%) do physical activity for at least 60 minutes per day **on five or more** days during the past seven days. Also male students (24.1%) are more likely than female students (15.2%) spend 60 minutes per day on **all seven days** doing physical activity during the past seven days. There is no difference among male (50.1%) and female (52.2%) students who did not walk or ride a bicycle to or from school during the past seven days. Male students (34.8%) are more likely than female students (28.0%) to go to physical education class on **three or more days** each week during the school year. Also male students (24.7%) are more likely than female students (18.6%) to go to physical education class on **five or more days** each week during the school year. Female students (41.6%) are more likely than male students (35.9%) to spend three or more hours per day during a typical or usual day, doing sitting activities.

**HIV-Related Knowledge:** The study found that more female students (85.6%) than male students (79.4%) had heard of HIV infection or the disease called AIDS. There is no difference among male (59.3%) and female students (63.6%) who were taught in any of their classes during the school year about HIV infection or AIDS. Also there is no difference between male (58.9%) students and female students (61.7%) who were taught on how to avoid HIV and AIDS. Interestingly results from this study revealed that more female students (36.9%) than male students (28.9%) talk about HIV infection or AIDS with their parents or guardians.

**Tobacco Use:** Male students (85.1%) are slightly more likely than female students (83.8%) to smoke cigarettes before the age of 14. There is no significant difference between male students (21.4%) and female students (20.7%) who smoke cigarettes on one or more days and the use of any other tobacco products during the past 30 days. But a high proportion reflects the need to develop smoking cessation program in the schools. There are a high proportion of both male students (83.7%) and female students (84.4%) who has tried to stop smoking cigarettes during the past 12 months. Both male students (70.5%) and female students (69.9%) reported that they are exposed to cigarette smoke, and their parents or guardians smoking may have contributed to their exposure.

**Violence and unintentional injury:** The study also found that physical attack, physical fights and seriously injured are slightly more male dominated: 59.4% of male students compared to 51.6% of female students reported that they were seriously injured. Among those seriously injured, the most dominant cause of this is motor vehicle related injuries. There were more female students (19.9%) than male students (7.8%) who reported this. There is no significant difference between male (28.4%) and female students (29.1%) who were bullied in the past 30 days. Male students (30.2%) were more likely than

female students (12.8%) to be bullied most often by being kicked, pushed, shoved around, or locked indoors.

## **Recommendations**

- The findings from this Global School Health Survey (GSHS) provide evidences that there is a need to strengthen Health Education and Health Promotion, in the school curriculum Schools;
- Implement a National School Health Policy and establish Adolescent Health Services;
- Mental health issues and other coping skills should be taught as of part of the curriculum;
- Parents/guardians must be actively involved and supported to maintain students' healthy behaviors, through the strengthening of Parent Teachers Associations and other support groups;
- Create a supportive environment for students to seek and receive counseling for substance abuse, mental health issues and other personal / social problems without fear of exposure and or discrimination;
- Health and Family Life Education must be placed on the curriculum and taught in all schools;
- Emphasis on adopting healthy lifestyles, including eating balanced meals, conflict management, and avoidance of alcohol, drugs, and other illicit substances must be stressed during teaching sessions;
- Reinforce the benefits of exercise and encourage students to participate in some type of structured physical activity;
- A follow up GSHS is recommended to be conducted every five years to obtain data on adolescent health behaviors, to determine trends, compare findings, and use the results to develop new and evaluate existing policies and programs;
- Support the enforcement of legislation relating to the sale and use of alcohol and tobacco;
- Educate the parent the importance of Health education as some mind set are still in the old system especially the belief that teaching students about reproductive health specifically the contraceptive is promoting students to have sex.
- Implement the legislation on sexual relationship with a minor although it is consensual among students.
- Efforts to improve dietary behavior in particular low intake of fruits and vegetables and relatively high consumption of sugar-sweetened beverages should be prioritized. These should be linked with efforts to tackle obesity in adolescents through awareness raising of risks, ongoing screening and advice, and promotion of healthy foods in all schools.
- Tackling bullying in schools will require a concerted effort by all stakeholders to ensure that bullying becomes unacceptable.

## Introduction

The Cook Islands is a nation comprise of 15 islands spread over 2 million square kilometer in the Polynesian Triangle of the South Pacific, with an estimated population of 17,794 (Cook Islands Census 2011). The population is dispersed across the islands but concentrated on Rarotonga (73.65), the centre of governance and commerce. The Cook Islands has been a self-governing nation in free association with New Zealand since 1965. The Cook Islands is governed by a Prime Minister who is the leader of the majority party in the legislature, the legislature is elected by popular vote.

The Global Youth Tobacco Survey implemented in 2003 and 2008 gave a significant smoking rate among young people aged 13 to 15 years old at 46% in 2003 and 30% in 2004. These figures indicate that young Cook Islanders are vulnerable to future negative health effects of cigarette smoking.

In 2001, WHO, in collaboration with UNAIDS, UNESCO, and UNICEF, and with technical assistance from the U.S. Centers for Disease Control and Prevention (CDC), initiated development of the Global School-based Student Health Survey (GSHS). Since 2003, Ministries of Health and Education around the world have been using the GSHS to periodically monitor the prevalence of important health risk behaviours and protective factors among students.

To date, more than 80 countries have completed the GSHS. This report describes results from the first GSHS conducted in the Cook Islands by the Ministry of Health and Ministry of Education during 29 July to 5 November 2010.

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

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

The GSHS is a school-based survey conducted primarily among students aged 13 to 15 years. This GSHS is the first survey conducted in the Cook Islands which included Forms 2 to Form 7 (ages 12 years and under to 17 years or older). It measures behaviors and protective factors related to the leading causes of mortality and morbidity among youth and adults in the Cook Islands under the following health topics:

- Alcohol use and Drug Use
- Dietary behaviors
- Hygiene
- Mental health

- Physical activity
- Protective factors
- HIV knowledge
- Tobacco use
- Violence and unintentional injury

## Methods

### Census

The 2010 Cook Islands GSHS conducted a census survey from forms 2 to form 7. It included all the schools containing form 2 to form 7 in the Cook Islands.

### Weighting

A weighting factor was applied to each student record to adjust for non-response. The weighing formula used for calculation was

$f_2$  = a student-level non-response adjustment factor calculated by classroom, and

$f_3$  = a post stratification adjustment factor calculated by sex within grade.

### Use of the weighted Results

The weighted results can be used to make important inferences about the priority health-risk behaviors and protective factors of all students in forms 2, 3, 4, 5, 6 and 7. In addition, weighting allows the results to be applied to the whole population of students in forms 2 – 7 in Cook Islands.

### Response Rate

For the 2010 Cook Islands GSHS, 23 schools participated. There are 30 schools in the Cook Islands but seven schools were excluded from this survey as they only have classes up to form one. As a result of the schools participating in this study, a total of 1,265 questionnaires were completed. An overall response rate of 84% was received and 100% from the schools and 84% from the students.

Answer sheets were sent to CDC, where they were scanned for data entry. The data set was cleaned and edited for inconsistencies. Missing data were not statistically imputed. Software that takes into consideration the complex sample design was used to compute prevalence estimates. GSHS data are representative of all students aged 11-16 years attending forms 2 – 7 schools in Cook Islands. Only estimates differing by at least 5 percentage points were considered different.

Survey administration occurred from 29 July to 5 November 2010. Survey procedures were designed to protect student privacy by allowing for anonymous and voluntary participation. Students completed the self-administered questionnaire during one classroom period and recorded their responses directly on a computer-scannable answer sheet. Approximately, five (5) Survey Administrators were specially trained to conduct the GSHS.

The Cook Islands GSHS questionnaire contained 56 core questions only addressing the following health topics:

- Alcohol and Drug use
- Dietary behaviors
- Hygiene
- Mental health
- Physical activity
- Protective factors
- HIV knowledge
- Tobacco use
- Violence and unintentional injury

The questionnaire was developed by CDC, no expanded questionnaires added to the core modules. Finalization of the questionnaire before sending back to CDC was negotiated between the Ministry of Education and Ministry of Health Senior Personnel. (Questionnaire attached in appendix)

## Results

In the Cook Islands, 23 schools participated in the GSHS survey and 1,274 students from Forms 2 to 7 completed the questionnaire. Males comprised 615(50.5%) and females 657(49.5%) of the sample.

## Demographics

The demographic characteristics of the sample are described in table 1. The results are representative of all students in Forms 2 to 7.

Results showed that females comprised 49.5% and 50.0% were male students. 20.8% were in Form 2, 20.1% in form 3, 16.8% in form 4, 22.1% were in form 5 and for form 6 & 7 is 20.2%.

Table 1 Demographic characteristics of the 12 – 16 years old sample Cook Islands 2010

	Sex		Age			Form				
	Males	Females	12 or younger	13-15	16 or older	2	3	4	5	6 & 7
<b>Number</b>	615	657	115	744	412	274	270	229	256	242
<b>Percentage (%)</b>	50.0	49.5	8.9	56.1	35.1	20.8	20.1	16.8	22.1	20.2

## Alcohol and Drug Use

Worldwide, alcohol use causes 3% of deaths (1.8million) annually, which is equal to 4% of the global disease burden. Across sub-regions of the world, the proportion of disease burden attribute to alcohol use is greatest in the American and Europe ranging from 8% to 18% of total burden for males and 2% to 4% of total burden for females. Besides the direct of effects of intoxication and addiction, alcohol use causes about 20% to 30% of each of esophageal cancer, liver disease, homicide and other intentional injuries, epilepsy, and motor vehicle accidents worldwide (1), and heavy alcohol use places one at greater risk for cardiovascular disease (2).

In most countries, alcohol-related mortality is highest among 45-to-54-year-olds, but the relationship between the age of initiation of alcohol use and the pattern of its use and abuse in adulthood makes the study of alcohol consumption among adolescents important (3).

Unintentional injuries are the leading cause of death among 15-to 25-year-olds and many of these injuries are related to alcohol use (4).

Young people who drink are more likely to use tobacco and other drugs and engage in risky sexual behavior, than those who do not drink (5, 6). Problems with alcohol can impair adolescents' psychological development and influence both the school environment and leisure time negatively (7).

*Table 2. Alcohol and Drug use among students, by sex, Cook Islands, 2010*

Behavior	Total %	Sex		Males Different Than Females (Yes or No)
		Male %	Female %	
Among students who ever had a drink of alcohol, those who had their first drink of alcohol before age 14 years	66.3	68.6	64.0	No
Drank at least one drink containing alcohol on one or more of the past 30 days	37.2	37.4	37.2	No
Among students who drank alcohol during the past 30 days, those who usually drank two or more drinks per day on the days they drank alcohol	48.5	49.5	47.3	No
Among students who drank alcohol during the past 30 days, the percentage who usually got the alcohol they drank from their friends	42.1	36.8	46.9	Yes
Drank so much alcohol that they were really drunk one or more times during their life	31.9	32.5	31.3	No
Got into trouble with their family or friends, missed school, or got into fights one or more times during their life as a result of drinking alcohol.	19.9	21.4	18.6	No
Among students who ever used drugs, those who first used drugs before age 14 years	58.9	66.0	-	No
Used marijuana one or more times during their life	11.5	15.2	7.9	Yes
Used marijuana one or more times during the past 30 days	7.1	10.4	3.7	Yes
Used amphetamines or methamphetamines one or more times during their life	2.7	3.7	1.7	No

In Cook Islands, students among who had ever drunk alcohol, 66.3% students reported that they had their first drink of alcohol before the age of 14 years.

Overall, the prevalence of current alcohol use among students (i.e., drinking at least one drink containing alcohol on one or more of the past 30 days) is 37.2%. Of the students who drank alcohol during the past 30 days, 48.5% students usually drank two or more drinks per day on the days they drank alcohol.

Of the students who drank alcohol during the past 30 days, those who usually got the alcohol they drunk from their friends is 42.1%.

During their lifetime, 31.9% of students drank so much alcohol they were really drunk one or more times. Overall, 19.9% of students had got into trouble with their family or friends, missed school, or got into fights one or more times as a result of drinking alcohol.

Overall, 15.4% among students who ever used drugs, 58.9% students reported that they use drugs first before age 14 years. Overall, 11.5% students reported that they use marijuana one or more times during their life. Male students (15.2%) are more likely than female students (7.9%) to have used marijuana one or more times during their life. Overall 7.1% students reported they used marijuana one or more times during the past 30 days. Males (10.4%) are more likely than female students (3.7%) to have used marijuana during the past 30 days. Overall, 2.7% students reported that they use amphetamines or methamphetamines one or more times during their life.

## **Dietary Behaviors**

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

Overweight acquired during childhood or adolescence may persist into adulthood and increase risk later in life for coronary heart disease, diabetes, gallbladder disease, some types of cancer, and osteoarthritis of the weight-bearing joints. Nutritional deficiencies as a result of food insecurity (protein-energy malnutrition, iron, Vitamin A, and iodine deficiency) affect school participation and learning (8).

Fruits and vegetables are good sources of complex carbohydrates, vitamins, minerals, and other substances important for good health. Dietary patterns that include higher intakes of fruits and vegetables are associated with several health benefits, including a decreased risk for some types of cancer (9).

Table 3. BMI and dietary behaviours, by sex, Cook Islands, 2010.

Behavior or Health Outcome	Total %	Sex		Males Different Than Females (Yes or No)
		Male %	Female %	
Underweight <sup>1</sup>	0.3	0.3	0.4	No
Overweight <sup>2</sup>	59.1	58.3	60.0	No
Obese <sup>3</sup>	27.8	31.6	23.9	Yes
Went hungry most of the time or always because there was not enough food in their home during the past 30 days	7.8	7.7	8.1	No
Usually ate fruit two or more times per day during the past 30 days	56.2	54.4	57.9	No
Usually ate vegetables three or more times per day during the past 30 days	31.9	31.2	32.6	No
Usually ate fruits and vegetables five or more times per day during the past 30 days	40.4	40.3	40.4	No
Usually drank carbonated soft drinks one or more times per day during the past 30 days	60.2	58.0	62.3	No
Ate food from a fast food restaurant on three or more days during the past 7 days	19.6	18.5	20.9	No

<sup>1</sup><2SD from median for BMI by age and sex.

<sup>2</sup>≥1SD from median for BMI by age and sex.

<sup>3</sup>≥2SD from median for BMI by age and sex.

In Cook Islands, 0.3% students were underweight, 59.1% students were overweight, and 27.8% students were obese.

Overall, 7.8% of students went hungry most of the time or always because there was not enough food in their home during the past 30 days. Overall, 56.2% of students usually ate fruit, such as pawpaw, banana, passion fruit, and quava, water melon, caramabora-raparapa, pineapple, guava, uto, two or more times per day during the past 30 days.

Overall, 31.9% of students usually ate vegetables, such as taro leaves, cabbages, cucumber, lettuce, bele-pota viti, tomatoes, spinach, or water cress, three or more times per day during the past 30 days. Overall, 40.4% of students usually ate fruits and vegetables five or more times per day during the past 30 days.

Overall, 60.2% of students drank carbonated soft drinks, such as Sprite, Coke, lemonade, L&P, Sparkling duet and Fanta, one or more times per day during the past 30 days. Overall, 19.6% of students ate food from a fast food restaurant (chicken magic, Palace Take away, Fried Chicken, or Super Brown) on three or more days during the past 7 days.

## Hygiene

Dental caries affect between 60-90% of children in developing countries and is the most prevalent oral disease among children in several Asian and Latin America countries. In Africa, the incidence of dental caries is expected to rise drastically in the near future due to increase sugar consumption and inadequate fluoride exposure (10). In addition to causing pain and discomfort, poor oral health can affect children's ability to communicate and learn. More than 50 million school hours are lost annually because of oral health problems (11). In both developed and developing countries, many children do not have access to water fluoridation or professional dental care. Daily tooth cleaning or brushing can help prevent some dental disease (12). Diarrhoea diseases kill nearly 2 million children every year. Hygiene education and the promotion of hand-washing can reduce the number of diarrhoea cases 45% (13). About 400 million school-aged children are infected with worms worldwide. These parasites consume nutrients from children they infect, cause abdominal pain and malfunction, and can impair learning by slowing cognitive development (14).

*Table 5. Hygiene behaviors by sex Cook Islands, 2010.*

Question	Total %	Sex		Males Different Than Females (Yes or No)
		Male %	Female %	
Usually cleaned or brushed their teeth less than one time per day during the past 30 days	9.7	13.4	6.0	Yes
Never or rarely washed their hands before eating during the past 30 days	5.0	7.1	2.9	No
Never or rarely washed their hands after using the toilet or latrine during the past 30 days	3.2	4.1	2.2	No
Never or rarely used soap when washing their hands during the past 30 days	5.9	8.2	3.7	No

In Cook Islands, the percentage of students who cleaned or brushed their teeth less than one time per day during the past 30 days was 9.7%. Males (13.4%) were more likely than females (6.0%) to report this behavior. Overall, 5.0% of students never or rarely washed their hands before eating during the past 30 days. Overall, 3.2% of students never or rarely washed their hands after using the toilet or latrine during the past 30 days. Overall, 5.9% of students never or rarely used soap when washing their hands during the past 30 days.

## Mental Health

World-wide, approximately 20% of children and adolescents suffer from a disabling mental illness (15). Anxiety disorders, depression and other mood disorders, and behavioural and cognitive disorders are among the most common mental health problems among adolescents. Half of all students lifetime are among the most disorders start by the age 14 (16).

Every country and culture has children and adolescents struggling with mental health problems. Most of these young people suffer needlessly, unable to access appropriate resources for recognition, support, and treatment. Ignored, these young people are at high risk for abuse and neglect, suicide, alcohol and other drug use, school failure, violent and criminal activities, mental illness in adulthood, and health-jeopardizing impulsive behaviors. (17, 18)

*Table 6. Mental health issues among students, by sex, Cook Islands, 2011.*

Behavior	Total %	Sex		Males Different Than Females (Yes or No)
		Male %	Female %	
Most of the time or always felt lonely during the past 12 months	7.6	6.9	8.3	No
Most of the time or always were so worried about something that they could not sleep at night during the past 12 months	11.2	8.7	13.8	Yes
Had no close friends	4.4	5.7	3.1	No

In Cook Islands, 7.6% of students most of the time or always felt lonely during the past 12 months. Female students (8.3%) were more likely than male students (6.9%) to have felt lonely during the past 12 months. Overall, 11.2% of students indicated that most of the time or always were so worried about something that they could not sleep at night during the past 12 months. Female students (13.8%) were more likely than male students (8.7%) to report this. Overall, 4.4% of students had no close friends.

## Physical Activity

Participating in adequate physical activity throughout the life span and maintaining normal weight are the most effective ways of preventing many chronic diseases, including cardiovascular disease and diabetes (19).

The prevalence of type 2 diabetes is increasing globally and now is occurring during adolescence and childhood (20). Participating in adequate physical activity also helps

build and maintain healthy bones and muscles, control weight, reduce blood pressure, ensure a healthy blood profile, reduce fat, and promote psychological well-being (21). Roughly 60% of the world's population is estimated to not get enough physical activity. Patterns of physical activity acquired during childhood and adolescence are more likely to be maintained throughout the life span, thus sedentary behavior adopted at a young age is likely to persist (22)

*Table 7, Physical activity among students by sex, Cook Islands, 2011*

Behavior	Total %	Sex		Males Different Than Females (Yes or No)
		Male %	Female %	
Were physically active for a total of at least 60 minutes per day on <b>five or more</b> days during the past seven days	39.0	44.6	33.2	Yes
Were physically active for a total of at least 60 minutes per day on <b>all seven</b> days during the past seven days	19.7	24.1	15.2	Yes
Did not walk or ride a bicycle to or from school during the past seven days	51.1	50.1	52.2	No
Went to physical education class on <b>three or more</b> days each week during this school year	31.5	34.8	28.0	Yes
Went to physical education class on <b>five or more</b> days each week during this school year	21.6	24.7	18.6	Yes
Spent three or more hours per day during a typical or usual day doing sitting activities	38.8	35.9	41.6	Yes

In Cook Islands, 39.0% of students were physically active for a total of at least 60 minutes per day on five or more days during the past seven days. Male students (44.6%) were more likely than female students (33.2%) to be physically active for a total of at least 60 minutes per day on five or more days during the past seven days. Overall, 19.7% of students were physically active for a total of at least 60 minutes on all seven days during the past 7 days. Male students (24.1%) were more likely than female students (15.2%) to be physically active for a total of at least 60 minutes on all 7 days during the past 7 days.

Overall, 51.1% of students did not walk or ride a bicycle to or from school during the past seven days. Overall, 31.5% of students went to physical education class on three or more days each week during this school year. Male students (34.8%) were more

likely than female students (28%) to attend physical education class on three or more days each week during the school year.

Overall, 21.6% of students went to physical education class on five or more days each week during this school year. Male students (24.7%) were more likely than female students (18.6%) to attend physical education on five or more days each week during the school year.

Overall, 38.8% of students spent three or more hours per day during a typical or usual day doing sitting activities, such as video games, watching TV. Female students (41.6%) were more likely than male students (35.9%) to spend three or more hours per day during a typical or usual day doing sitting activities, such as video games and watching TV.

## Protective Factors

For most adolescents, school is the most important setting outside of the family. School attendance is related to the prevalence of several health risk behaviors including violence and sexual risk behaviors (23).

Adolescents who have a positive relationship with teachers, and who have positive attitudes towards school are less likely to initiate sexual activity early, less likely to use substances, and less likely to experience depression. Adolescents who live in an social environment which provides meaningful relationships, encourage self-expression, and also provides structure and boundaries, are less likely to initiate sex at a young age, less likely to experience depression, and less likely to use substances (24).

Being liked and accepted by peers is crucial to young people’s health development, and those who are not socially integrated are far more likely to exhibit difficulties with their physical and emotional health. Isolation from peers in adolescence can lead to feelings of loneliness and psychological symptoms. Interaction with friends tends to improve social skills and strengthen the ability to cope with stressful events (25).

Parental bonding and connection is associated with lower levels of depression and suicidal ideation alcohol use, sexual risk behaviors, and violence (26).

*Table 8. Protective factors among students by sex, Cook Islands, 2011.*

Protective Factor	Total %	Sex		Males Different Than Females (Yes or No)
		Male %	Female %	
Missed classes or school without permission on one or more of the past 30 days	35.0	37.7	32.3	Yes
Reported most of the students in their school were kind and helpful most of the time or always during the past 30 days	44.4	40.1	48.7	Yes

Parents or guardians checked to see if their homework was done most of the time or always during the past 30 days	29.6	29.7	29.7	No
Parents or guardians understood their problems and worries most of the time or always during the past 30 days	26.9	25.1	28.8	No
Parents or guardians really knew what they were doing with their free time most of the time or always during the past 30 days	36.2	33.7	38.7	Yes
Parents or guardians went through their things without their approval never or rarely during the past 30 days	59.5	58.7	60.3	No

In Cook Islands, 35.0% of students missed classes or leave school without permission on one or more of the past 30 days. Male students (37.7%) were more likely than female students (32.3%) to miss classes or school without permission on one or more of the past 30 days.

Overall, 44.4% of students reported that most of the students in their school were kind and helpful most of the time or always during the past 30 days. Female students (48.7%) were more likely than male students (40.1%) to report that most of the students in their school were kind and helpful most of the time or always during the past 30 days.

Overall, 29.6% of students reported their parents or guardians checked to see if their homework was done most of the time or always during the past 30 days. Overall, 26.9% of students reported their parents or guardians understood their problems and worries most of the time or always during the past 30 days. Overall, 36.2% of students reported their parents or guardians really knew what they were doing with their free time most of the time or always during the past 30 days. Female students (38.7%) are more likely than male students (33.7%) to report that their parents or guardians really knew what they were doing with their free time.

Overall, 59.5% of students reported their parents or guardians went through their things without their approval never or rarely during the past 30 days.

## **HIV-Related Knowledge**

AIDS has killed more than 25 million people since 1981. In 2005, an estimate of 40.3 million people was living with HIV. In that year alone, roughly 3.1 million people died of HIV and another 4.9 million people infected with HIV (27).

Young people remains at the centre of the HIV/AIDS epidemic in terms of rates of infection, vulnerability, impact, and potential for change. They have grown up in a world

changed by AIDS but many still lack comprehensive and correct knowledge about how to prevent HIV infection (28). Lacking the necessary knowledge and skills, young adolescents are less likely to protect themselves from HIV and the disease AIDS. Whatever their circumstances, in order to protect themselves against HIV, young people need information, skills, youth-friendly health services and a safe and supportive environment.

*Table 9, HIV-related knowledge, by sex. Cook Islands. 2011.*

HIV-Related Knowledge	Total %	Sex		Males Different Than Females (Yes or No)
		Male %	Female %	
Ever heard of HIV infection or the disease called AIDS	82.4	79.4	85.6	Yes
Taught in any of their classes during this school year about HIV infection or AIDS	61.5	59.3	63.6	No
Taught in any of their classes during this school year how to avoid HIV infection or AIDS	60.2	58.9	61.7	No
Ever talked about HIV infection or AIDS with their parents or guardians	33.0	28.9	36.9	Yes

In Cook Islands, 82.4% of students had ever heard of HIV infection or the disease called AIDS. Female students (85.6%) were more likely than male students (79.4%) to have ever heard of HIV infection or the disease called AIDS. Overall, 61.5% of students were taught in any of their classes during this school year about HIV infection or AIDS.

Overall, 60.2% of students had been taught in any of their classes during this school year how to avoid HIV infection or AIDS. Overall, 33.0% of students ever talked about HIV infection or AIDS with their parents or guardians. Female students ((36.9%) were more likely than male students (28.9%) to have ever talked about HIV infection or AIDS with their parents or guardian.

## **Tobacco Use**

About 1.1 billion people worldwide smoke and the number of smokers continue to increase. Among these, about 84% live in developing and transitional economy countries. Currently 5 million people die each year from tobacco consumption, the second leading cause of death worldwide. If present consumption patterns continue, it is estimated that deaths from tobacco consumption will be 10 million people per year by 2020 (29). The overwhelming majority of smokers begin tobacco use before they reach adulthood. Among those young people who smoke, nearly one-quarter smoked their first cigarette before they reached the age of ten.

Smokers have markedly increased risks of multiple cancers, particularly lung cancer, and are at far greater risk of heart disease, stroke, emphysema and many other fatal and non-fatal diseases. If they chew tobacco, they risk cancer of the lip, tongue and mouth. Children are at particularly risk from adults' smoking. Adverse health effects include pneumonia and bronchitis, coughing and wheezing, cardiovascular disease in adulthood. Many studies show that parental smoking is associated with higher youth smoking (30).

*Table 10. Tobacco use among students, by sex, Cook Islands, 2011.*

Behavior	Total %	Sex		Males Different Than Females (Yes or No)
		Male %	Female %	
Among students who ever smoked cigarettes, those who first tried a cigarette before age 14 years	84.4	85.1	83.8	No
Smoked cigarettes on one or more days during the past 30 days	21.1	21.4	20.7	No
Used any tobacco products other than cigarettes on one or more days during the past 30 days	15.4	16.9	14.0	No
Used any tobacco on one or more days during the past 30 days	22.5	23.6	21.3	No
Among students who smoked cigarettes during the past 12 months, those who tried to stop smoking cigarettes during the past 12 months	84.1	83.7	84.4	No
Reported people smoked in their presence on one or more days during the past seven days	70.2	70.5	69.9	No
Had parents or guardians who used any form of tobacco	40.2	39.2	41.2	No

In Cook Islands, students who ever smoked cigarettes, 84.4% first tried a cigarette before age 14 years. Overall, 21.1% of students smoked cigarettes on one or more days during the past 30 days. Overall, 15.4% of students used any tobacco products other than cigarettes on one or more days during the past 30 days.

Overall, 22.5% of students used any tobacco on one or more days during the past 30 days. Among students who smoked cigarettes during the past 12 months, 84.1% tried to stop smoking cigarettes during the past 12 months.

Overall, 70.2% of students reported people smoked in their presence on one or more days during the past seven days. Overall, 40.2% of students had parents or guardians who used any form of tobacco.

## Violence and Unintentional Injury

Unintentional injuries are a major cause of death and disability among young children (31). Each year, about 875,000 children under the age of 18 die from injuries and 10 to 30 million have their lives affected by injury. Injury is highly associated with age and gender. Males aged 10-14 have 60% higher injury death rates than females. Teenagers aged 15-19 have higher rates than those aged 10-14 years (64 compared to 29 per 100,000).

Estimated global homicide death rate for males aged 15-17 is 9 per 100,000 (32). For every youth homicide, approximately 20 to 40 victims of non-fatal youth violence receive hospital treatment (33). Many unintentional injuries lead to permanent disability and brain damage, depression, substance abuse, suicide attempts, and the adoption of health risk behaviors. Victims of bullying have increased stress and a reduced ability to concentrate and are at increased risk for substance abuse, aggressive behavior and suicide attempts (34).

*Table 11. Violence and unintentional injury among students by sex Cook Islands, 2010*

Behavior	Total %	Sex		Males Different Than Females (Yes or No)
		Male %	Female %	
Were physically attacked one or more times during the past 12 months	38.4	41.2	35.7	Yes
Were in a physical fight one or more times during the past 12 months	35.0	42.0	28.0	Yes
Were seriously injured one or more times during the past 12 months	55.5	59.4	51.6	Yes
Among students who were seriously injured during the past 12 months, those whose most serious injury was a broken bone or dislocated joint	22.4	27.5	16.0	Yes
Among students who were seriously injured during the past 12 months, those whose most serious injury was caused by a motor vehicle accident or being hit by a motor vehicle	13.3	7.8	19.9	Yes

Were bullied on one or more days during the past 30 days	28.7	28.4	29.1	No
Among students who were bullied during the past 30 days, those who were bullied most often by being hit, kicked, pushed, shoved around, or locked indoors	21.3	30.2	12.8	Yes

In Cook Islands, 38.4% of students were physically attacked one or more times during the past 12 months. Male students (41.2%) were more likely than female students (35.7%) to have been physically attacked one or more time during the past 12 months. Overall, 35.0% of students were in a physical fight one or more times during the past 12 months. Male students (42.0%) were more likely than female students (28%) to have been in a physical fight.

Overall, 55.5% of students were seriously injured one or more times during the past 12 months. Male students (59.4%) were more likely than female students (51.6%) to be involved in serious injury one or more times during the past 12 months.

Among students who were seriously injured during the past 12 months, the most serious injury was a broken bone or dislocated joint among 22.4% and, a motor vehicle accident or being hit by a motor vehicle was the most serious injury among 13.3%.

Overall, 28.7% of students were bullied on one or more days during the past 30 days. Among students who were bullied during the past 30 days, 21.3% were bullied most often by being hit, kicked, pushed, shoved around or locked indoors. Males (30.2%) were more likely than females (12.8%) to report being hit, kicked, pushed, shoved around, or locked in doors.

## CONCLUSION

In the Cook Islands, students today are faced with a number of challenges, such as substance abuse, violence in schools, peer pressure, media advertisements, and interpersonal relationships just to name a few. The GSHS revealed that significant numbers of students in Cook Islands are engaged in unhealthy practices and therefore were at risk of a number of health problems related to lifestyle choices and behaviors. The study highlighted some interesting but troubling findings on some health issues among the study population. This was the first of many of these issues in this age group in Cook Islands and therefore provides important data.

It is imperative that the high and low levels in the respective areas be addressed urgently by the policy makers, parents, adolescent, and other stakeholders to reverse these unhealthy situations.

**Alcohol Use:** The high consumption of alcohol used by students, apparent easy access to the substance is a cause for serious concern. Notable from this survey, 66.3% first tried a drink of alcohol before the age of 14 years old indicating the need for early health promotion interventions. Accessing alcohol is a critical point of intervention, and with over 40% of students getting their alcohol from friends and others getting from family and stores, efforts to reduce access are needed.

And overall, 19.9% students got into trouble with their family or friends, missed school, or got into fights one or more times during their life as a result of drinking alcohol. Serious effort must be made to discourage students from having easy access to and consumption of alcohol, even though they got their alcohol from their friends. There is a need to put in place strict enforcement of the legislation which deals with the sale of alcohol to adolescents.

**Drug-use Behavior:** Overall, 7.1% students reported marijuana use one or more times during the past 30 days. Male students (10.4%) are more likely than females (3.7%) to use marijuana one or more times during the past 30 days. Overall, 2.7% students used amphetamines one or more times during their life. Among students who ever used drugs, 58.9% used drugs first before the age of 14 years. Males (15.2%) were more likely than females (7.9%) to use marijuana one or more times during their life.

**Mental health issues:** There is no difference between male and female students in the percentage who most of their time or always felt lonely during the past 12 months, with rates low overall. Female students (13.8%) were more likely than male students (8.7%) to most of the time or always be so worried about something that they could not sleep at night during the past 12 months.

**Protective Factors:** In Cook Islands 35% of students missed classes or school without permission on one or more of the past 30 days, which indicates that this is an important issue. Male students (37.7%) were more likely than female students (32.3%) to miss class or school without asking permission. They could become involved in deviant behaviors, therefore it is important for parents to know where they are and who they are

with, so that their activities and behavior can be monitored. Female students (48.7%) were more likely than male students (40.1%) to report that most of the students in their school were kind and helpful. Overall, 29.6% students reported that their parents or guardian checked to see if their homework was done most of the time or always during the past 30 days. The study reveals that 26.9 % students reported that their parents or guardian understood their problems and worries most of the time or always during the past 30 days.

Overall, 36.2% students reported that their parents or guardian really knew what they were doing with free time most of the time or always during the past 30 days. Therefore the majority of parents do not know about their children's activities frequently. Female students (38.7%) were more likely than male students (33.7%) to report that their parents and guardian knew what their daughters were doing with their free time. The study found female student's parents are more aware about their daughter's safety.

**Physical Activity:** Physical activity among the study population was higher for the males: 44.6% compared to 33.2% of the females who were reported they were physically active for a total of at least 60 minutes per day on five or more days during the past seven days. The majority therefore are insufficiently active. Overall, 19.7% students were physically active for a total of at least 60 minutes per day on all seven days during the past seven days. Males (24.1%) were more likely than female students (15.2%) were more likely to be physically active for at least 60 minutes per day on all 7 of the past 7 days. Overall, 51.1% students reported that they did not walk or ride a bicycle to or from school during the past seven days.

Overall, 31.5% students reported that they went to physical education class on three or more days each week during the school year. Male students (34.8%) compared to female students (28.0%) were more likely to report that they went to physical education class on three or more days during the week during the school year. 21.6% students reported that they went to physical education class on five or more days each week during the school year. Male students (24.7%) compared to female students (18.6%) were more likely to report that they went to physical education class on five or more days each week during the school year. Overall, 38.8% students reported that they spend three or more hours per day during a typical or usual day doing sitting activities. Female students (41.6%) are more likely than male students (35.9%) to report that they have spent three or more hours per day during a typical or usual day doing sitting activities.

The advantage of physical activity on good health and the consequences of inactivity and non communicable diseases in the future must be explained to students. Along with school policy which should clearly state the minimum period of time all students should engage in some type of planned physical activity.

**Violence and unintentional injury:** The study found that violence, unintentional injury and belonging to a violent group were male dominant. In fact, 41.2% of male students compared to 35.7% of female students reported to have been physically attacked one or

more times during the past 12 months. In addition, 42.0% of male students in comparison to 28.0% of female students indicated they have been in a physical fight and 59.4% of male students reported they have been seriously injured compared to 51.6% of female students. This is a worrying trend which requires urgent action.

Although in this study few significant differences between male and female students were identified in the dietary behavior, hygiene, HIV knowledge, tobacco use areas; policies and programmes must be established to address these areas also.

## **RECOMMENDATIONS**

- The finding from this Global School Health Survey (GSHS) provides evidences that there is an urgent need to include in the school curriculum, Health Education and Health Promotion and eventually established Health Promotion Schools.
- Implement a National School Health Policy and establish Adolescent Health Services
- Enforce legislation relating to the sale and use of alcohol and tobacco
- Mental health issues and other coping skill should be taught as of part of the curriculum
- Parents/guardians must be actively involved and supported to maintain students' healthy behaviors, through the strengthening of Parent Teachers Associations and other support groups.
- Create a supportive environment for student to seek and receive counseling for substance abuse, mental health issues and other personal / social problems without fear of exposure and or discrimination.
- Health and Family Life Education must be placed on the curriculum and taught in all schools.
- Emphasis on adopting healthy lifestyles, including eating balanced meals, conflict management, and avoidance of alcohol, drugs, and other illicit substances must be stressed during teaching sessions.
- Students must be taught and strengthen the benefit of exercise and they must be encouraged to participate in some type of structured physical activity.
- A follow up GSHS is recommended to be conducted in four years (2014) to obtain data on adolescent health behaviors, to determine trends, compare findings, and use to develop policies, programmes, and evaluate school and adolescent health.
- Educate the parent the importance of Health education as some mind set are still in the old system especially the belief that teaching students about reproductive health specifically the contraceptive is promoting students to have sex.
- Implement the legislation on sexual relationship with a minor although it is consensual among students.
- Efforts to improve dietary behavior in particular low intake of fruits and vegetables and relatively high consumption of sugar-sweetened beverages should be prioritized. These should be linked with efforts to tackle obesity in adolescents through awareness raising of risks, ongoing screening and advice, and promotion of healthy foods in all schools.

- Tackling bullying in schools will require a concerted effort by all stakeholders to ensure that bullying becomes unacceptable.

## References

1. WHO. *World Health Report 2002*. Geneva, Switzerland: WHO 2002.
2. WHO. *Global Status Report on Alcohol*. Geneva. Switzerland: WHO, 2004
3. Poikolainen K, Tuulio-Henriksson A, Aalto-Setälä T, Marttunen M, Lonnqvist J. Predictors of alcohol intake and heavy drinking in early adulthood: a 5-year follow-up of 15-19 year-old Finnish adolescent, *Alcohol and Alcoholism*. 36(1): 85-88, 2001.
4. Facy F. *Place of alcohol morbidity and mortality of young people*. Navarado F, Godeau E, Vialas C. eds, Toulouse, France: Universitaires du Sud, Toulouse, 2000.
5. Hibell B, Andersson B, Ahlstrom S, Balakireva O, Bjarnason T, Kokkevi A, Morgan M, The 1999 ESPAD Report: Alcohol and Other Drug Use Among Students in 30 European Countries. Stockholm, Sweden: Council of Europe, 2000.
6. Bonom Y, Coffey C, Wolfe R, Lynskey M, Bowes G, Patton G, Adverse outcomes of alcohol use in adolescents. *Addiction* 96 (10): 1485-1496, 2001.
7. *Health and Health Behaviour Among Young People*. Currie C, Hurrelmann K, Settertobulte W, Smith R, Todd J, eds. Copenhagen, Denmark: WHO Regional Officer for Europe, 2000.
8. Taras, H. Nutrition and student performance at school. *Journal of School health* 75 (6): 199-213, 2006.
9. CDC. Nutrition for Everyone: Fruits and Vegetables. Atlanta, Georgia: CDC, 2006. Available on-line at: [http://www.cdc.gov/nccdphp/dnpa/nutrition/nutrition\\_for\\_everyone/fruits\)vegetables/index.htm](http://www.cdc.gov/nccdphp/dnpa/nutrition/nutrition_for_everyone/fruits)vegetables/index.htm)
10. Petersen EP, Bourgeois D, Ogawa H, Estupinan-Day S, Ndiaye C. The Global burden of oral diseases and risks to oral health. *Bulletin of the World Health Organization* 83: 661-669, 2005.

11. Kwan SYL, Petersen PE, Pine CM, Borutta A. Health-promotion schools” an opportunity for oral health promotion. *Bulletin of the World Health Organization* 83: 677-685, 2005.
12. Jones S, Burt BA, Petersen PE, Lennon MA, The effective use of fluorides in public health. *Bulletin of the World Health Organization* 83: 670-676, 2005.
13. WHO. Water, Sanitation, and Hygiene Links to Health. Fast Facts. Geneva, Switzerland: WHO, 2004. Available online at: [http://www.who.int/water\\_sanitation\\_health/factsfigures2005.pdf](http://www.who.int/water_sanitation_health/factsfigures2005.pdf)
14. Luong TV, De-worming school children and hygiene intervention. *International Journal of Environment Health Research* 13; S153-S159, 2003.
15. WHO. Child Mental Health Atlas. Geneva, Switzerland: WHO, 2005. Available on-line at: [http://www.who.int/mental\\_health/resources/Child\\_ad\\_atlas.pdf](http://www.who.int/mental_health/resources/Child_ad_atlas.pdf)
16. Kessler RC, Berglund PMBA, Demler O, et al. Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Study Replication. *Arch Gen Psychiatry* 62(6):593-602, 2005.
17. WHO. Mental Health Fact Sheet. Geneva, Switzerland: WHO, 2001. Available on-line at: [http://www.who.int/child-adolescent-health/New\\_Publications/ADH/mental\\_health\\_factsheet.pdf](http://www.who.int/child-adolescent-health/New_Publications/ADH/mental_health_factsheet.pdf)
18. WHO. *The World Health Report 2001 \_ Mental Health: New Understanding, New Hope*. Geneva, Switzerland: WHO, 2001.
19. WHO. *Diet, Physical Activity and Health: Report by Secretariat*. Fifty-fifth World Health Assembly, Provisional agenda item 13.11, 2002.
20. Pinhas-Hamiel O, Zeitler P. The Global Spread of Type 2 Diabetes Mellitus in Children and Adolescents. *The Journal of Pediatrics* 146 (5): 693-700, 2005.
21. Warbuton DER Nicol CW, Bredin SSD> Health benefits of physical activity: the evidence. *Canadian Medical Association Journal* 174 (6): 801-809, 2006.
22. WHO. Information Sheet on Physical Activity. Geneva, Switzerland, 2003. Available on-line at: [http://www.who.int/dietphysicalactivity/media/en/gsfs\\_pa/pdf](http://www.who.int/dietphysicalactivity/media/en/gsfs_pa/pdf)
23. WHO. Protective Factors Affecting Adolescent Reproductive Health in Developing Countries. Geneva, Switzerland, 2004. Available on-line at: [http://www.who.int/child-adolescent-health/New\\_Publications/ADH/ISBN\\_92\\_4\\_159227\\_3.pdf](http://www.who.int/child-adolescent-health/New_Publications/ADH/ISBN_92_4_159227_3.pdf)

24. WHO. Broadening the horizon: Balancing protection and risk for adolescent. Geneva, Switzerland, 2002. Available on-line at: [http://www.who.int-adolescent-health/New\\_Publications/ADH/WHO\\_FCH\\_CAH\\_01\\_20.pdf](http://www.who.int-adolescent-health/New_Publications/ADH/WHO_FCH_CAH_01_20.pdf)
25. WHO Regional Office for Europe. Young people's health in context Health Behavior in School-aged Children (HBSC) study: international report from the 2001/2002 survey. Copenhagen, Denmark, 2004. Available on-line at: <http://www.hbsc.org/publications/reports.htm/>
26. Barber BK. *Regulation, connection, and psychological autonomy: Evidence from the Cross-National Adolescent Project (C-NAP)*. Paper presented at the WHO-sponsored meeting Regulation as a Concept and Construct for Adolescent Health and Development. WHO Headquarters, Geneva, Switzerland, April 16-18, 2002.
27. UNAIDS & WHO. 2005 AIDS Epidemic Update. Geneva, Switzerland, 2005. Available on-line at: [http://www.who.int/hiv/epi-update2005\\_en.pdf](http://www.who.int/hiv/epi-update2005_en.pdf)
28. UNAIDS. Report on the Global HIV/AIDS Epidemic. Geneva, Switzerland, 2004. Available on-line at: [http://www.unaids.org/bangkok2004/GAR2004\\_html/GAR2004\\_00\\_en.html](http://www.unaids.org/bangkok2004/GAR2004_html/GAR2004_00_en.html)
29. WHO. World No Tobacco Day, 2006 Brochure: Tobacco: deadly in any form or disguise. Geneva, Switzerland, 2006. Available on-line at: [http://www.who.int/tobacco/communications/events/wntd/2006/Report\\_v8\\_4May06.pdf](http://www.who.int/tobacco/communications/events/wntd/2006/Report_v8_4May06.pdf)
30. WHO. The Tobacco Atlas. Geneva, Switzerland, 2002. Available on-line at: [http://www.who.int/tobacco/resources/publications/tobacco\\_atlas/en/index.html](http://www.who.int/tobacco/resources/publications/tobacco_atlas/en/index.html)
31. WHO and UNICEF. Child and adolescent injury prevention: a global call to action. Geneva: WHO, 2005.
32. WHO. Global Estimates of Health Consequences due to Violence against Children. 2005. Background paper to the UN Secretary-General's Study on Violence against Children.
33. WHO. World Report on Violence and Health. 2002. Chapter on youth violence.
34. Anti-Bullying Centre. School Bullying: Key Facts. Trinity College, Dublin: Anti-Bullying Centre, 2002. Available on-line at: [www.abc.tcd.ie/school.htm](http://www.abc.tcd.ie/school.htm)

## APPENDIX

### 2010 Cook Islands GSHS Questionnaire

## Appendix Two: Graphs of some key findings

Figure one: Percentage of students who were overweight ( $>+1SD$  from median for BMI by age and sex)

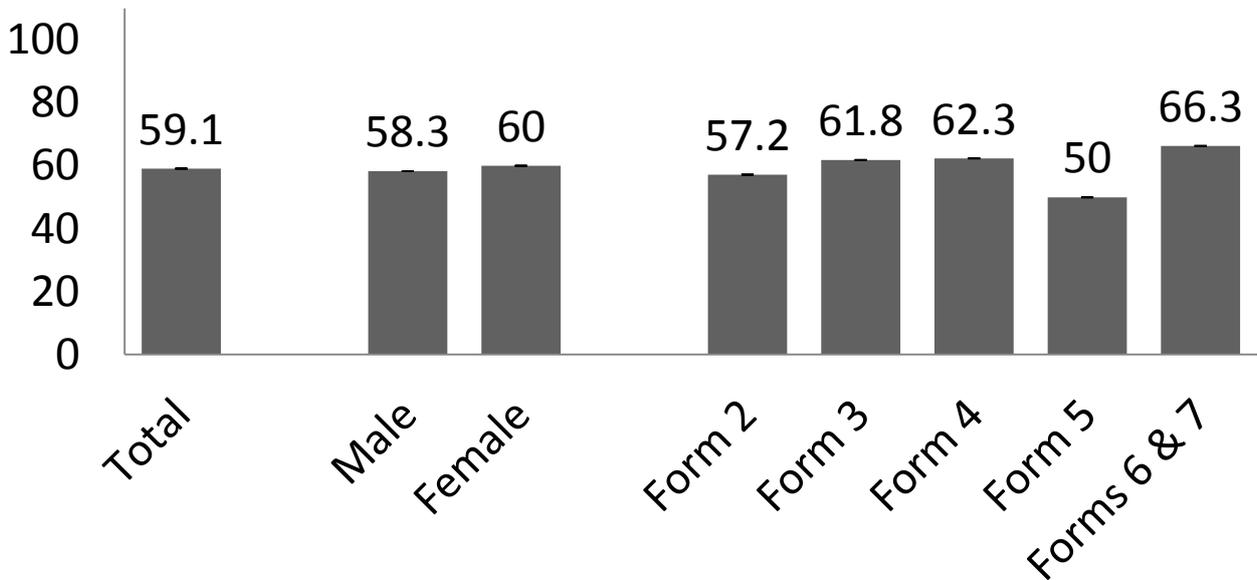
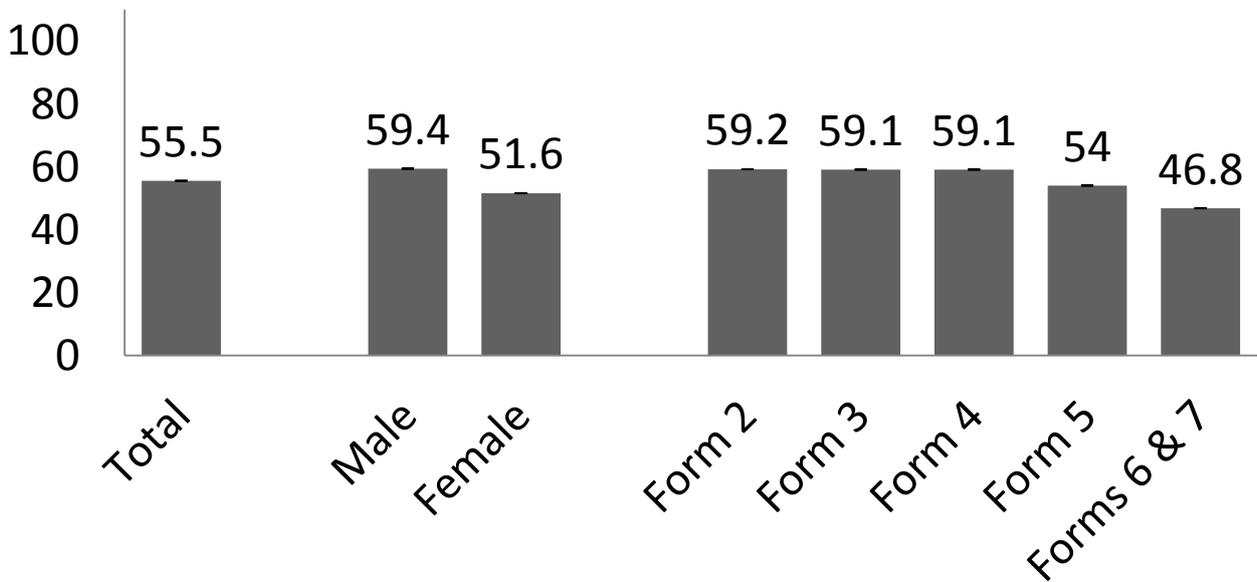
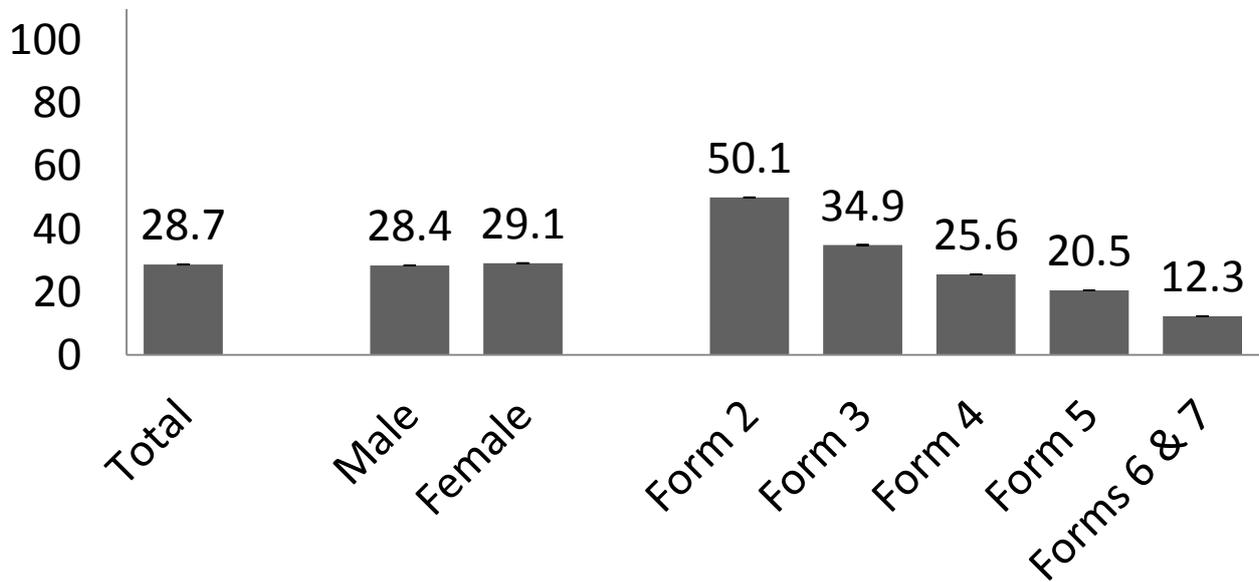


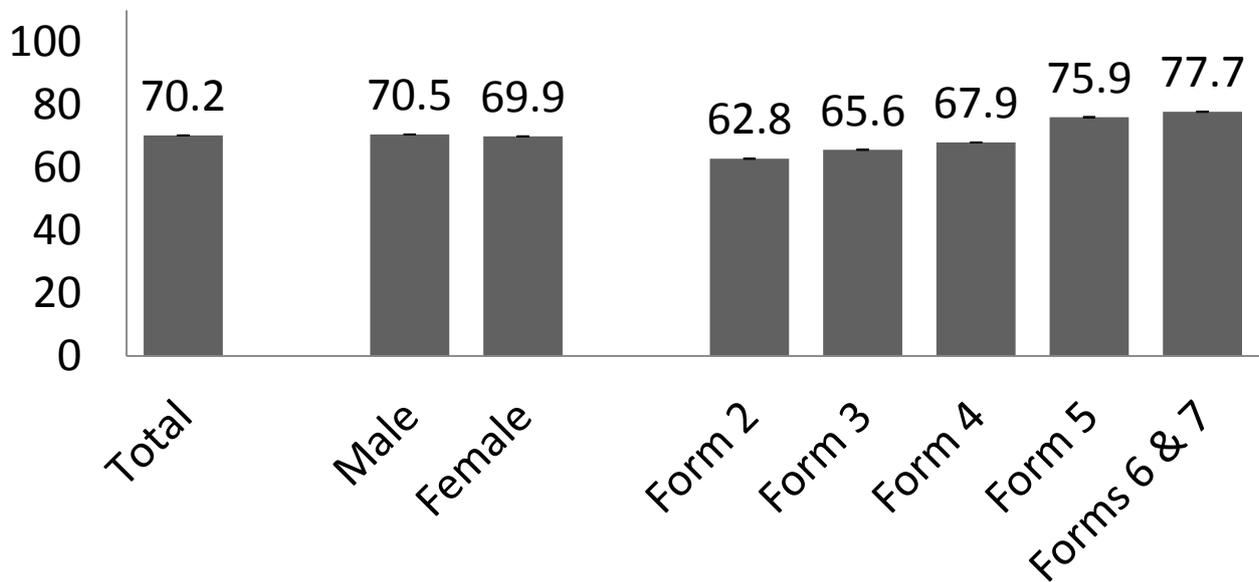
Figure two: Percentage of students who were seriously injured one or more times during the past 12 months



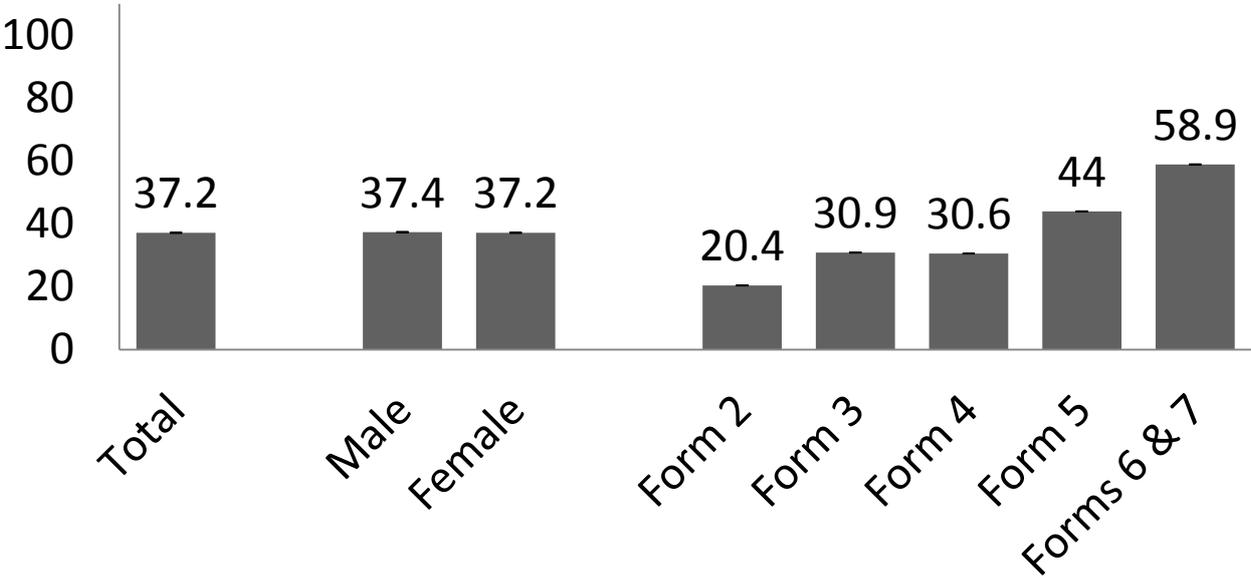
**Figure Three: Percentage of students who were bullied on one or more days during the past 30 days**



**Figure Four: Percentage of students who reported people smoked in their presence on one or more days during the past seven days**



**Figure Five: Percentage of students who drank at least one drink containing alcohol on one or more of the past 30 days**



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Global School-based Student Health Survey (GSHS)

# 2010 Cook Islands GSHS Questionnaire

For more information:

[www.cdc.gov/gshs](http://www.cdc.gov/gshs) or  
[www.who.int/chp/gshs/en/](http://www.who.int/chp/gshs/en/)



## 2010 COOK ISLANDS GLOBAL SCHOOL-BASED STUDENT HEALTH SURVEY

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

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

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

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

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

Fill in the circles like this  Not like this  or 

Survey

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

Answer sheet

1.   B  C  D  E  F  G  H

Thank you very much for your help.

1. How old are you?
  - A. 11 years old or younger
  - B. 12 years old
  - C. 13 years old
  - D. 14 years old
  - E. 15 years old
  - F. 16 years old or older

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

3. In what form are you?
  - A. Form 2
  - B. Form 3
  - C. Form 4
  - D. Form 5
  - E. Form 6
  - F. Form 7

The next 3 questions ask about your height, weight, and going hungry.

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

**Example**

Height (cm)		
1	5	3
0	0	0
	1	1
2	2	2
	3	
	4	4
		5
	6	6
	7	7
	8	8
	9	9
9	I do not know	

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

**Example**

Weight (kg)		
0	5	2
<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
	<input type="radio"/>	<input type="radio"/>
	<input type="radio"/>	<input type="radio"/>
	<input checked="" type="radio"/>	<input type="radio"/>
	<input type="radio"/>	<input type="radio"/>
	<input type="radio"/>	<input type="radio"/>
	<input type="radio"/>	<input type="radio"/>
	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	I do not know	

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

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

7. During the past 30 days, how many times per day did you **usually** eat **fruit**, such as bananas, pawpaw, water melon, oranges, passion fruit, carambola-raparapa, pineapple, guava, uto, or aratai?

- 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

8. During the past 30 days, how many times per day did you **usually** eat **vegetables**, such as taro leaves (rukau/pota), lettuce, cucumber, cabbage, bele-pota viti, tomatoes, spinach, or water cress-toatoa?

- 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

9. During the past 30 days, how many times per day did you **usually** drink carbonated soft drinks, such as Fanta, Sprite, Coke, Lemonade, L&P, or sparkling Duet? (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

10. During the past 7 days, on how many days did you eat food from a fast food restaurant, such as Chicken Magic, Palace Takeaway, Country Fried Takeaways, or Superbrown?
- 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 4 questions ask about cleaning your teeth and washing your hands.**

11. 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
12. 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
13. 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

14. 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

**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.**

15. 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.**

16. 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.**

17. 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

18. 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

19. 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.**

20. 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

21. During the past 30 days, how were you bullied **most often**?
- A. I was not bullied during the past 30 days
  - B. I was hit, kicked, pushed, shoved around, or locked indoors
  - C. I was made fun of because of my race, or nationality
  - 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 6 questions ask about your feelings and friendships.**

22. During the past 12 months, how often have you felt lonely?
- A. Never
  - B. Rarely
  - C. Sometimes
  - D. Most of the time
  - E. Always
23. 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

24. How many close friends do you have?
- A. 0
  - B. 1
  - C. 2
  - D. 3 or more

**The next 6 questions ask about cigarette and other tobacco use.**

25. How old were you when you first tried a cigarette?
- A. I have never smoked cigarettes
  - B. 7 years old or younger
  - C. 8 or 9 years old
  - D. 10 or 11 years old
  - E. 12 or 13 years old
  - F. 14 or 15 years old
  - G. 16 years old or older
26. 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
27. During the past 30 days, on how many days did you use any tobacco products other than cigarettes, such as Greys, Port Royal, or Horizon?
- 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

28. 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

29. 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

30. 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

**The next 6 questions ask about drinking alcohol.**

**This includes drinking beer, Heineken , VB, Steinlager, Lion Red, Gin, Vodka, Rum, RTDs, Cruiser, Woodstock, Pulse, and Tattoos.**

**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.**

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

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

32. 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

33. 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

34. 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

**Staggering when walking, not being able to speak right, and vomiting are some signs of being really drunk.**

35. 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

36. 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 5 questions ask about drug use. This includes using marijuana and inhalants (such as glue, petrol, or asthma inhalers).**

37. 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 years old or older

38. During your life, how many times have you used marijuana?

- A. 0 times
- B. 1 or 2 times
- C. 3 to 9 times
- D. 10 to 19 times
- E. 20 or more times

39. During the past 30 days, how many times have you used marijuana?

- A. 0 times
- B. 1 or 2 times
- C. 3 to 9 times
- D. 10 to 19 times
- E. 20 or more times

40. 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

41. During your life, how many times have you used inhalants (such as glue, petrol, or asthma inhalers)?

- A. 0 times
- B. 1 or 2 times
- C. 3 to 9 times
- D. 10 to 19 times
- E. 20 or more times

42. During the past 30 days, how many times have you used inhalants (such as glue, petrol, or asthma inhalers)?

- 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 4 questions ask about HIV infection or AIDS.**

43. Have you ever heard of HIV infection or the disease called AIDS?

- A. Yes
- B. No

44. 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

45. 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

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

- A. Yes
- B. No

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

47. 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

48. 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

49. 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.**

50. 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.**

51. 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

52. 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

53. 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

54. 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

55. 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

56. 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