Healthy Futures

2014 Toronto Public Health Student Survey

416.338.7600 toronto.ca/health | Toronto Public Health

Reference:
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- Toronto District School Board (TDSB)
- Toronto Catholic District School Board (TCDSB)
- Conseil scolaire de district catholique Centre-Sud (CSDCCS)
- Conseil scolaire Viamonde (Viamonde)

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Copies of this report can be downloaded at: www.toronto.ca/health

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Executive Summary and Key Findings

The current health and health behaviours of young people create a foundation for health throughout the life course. Despite the importance of this age group, information on the health of Toronto's youth has been limited. To fill this gap, Toronto Public Health (TPH) conducted a school-based student survey in 2014 to assess the health and health behaviours of adolescent students in Toronto.

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This report highlights some initial findings from the TPH Student Survey including selected examples of differences in health between groups of students. These differences are based on grade, sex, ethno-racial identity, home language, immigration status, and sexual orientation. The health indicators resulting from the data often point towards better or poorer results for certain students within these groups and in many cases, represent health inequities.

About nine out of ten grade 7 to 12 students in Toronto report that their health is good or better. On the surface, this looks like good news. But a closer look at the data shows that students are facing many issues that can affect their health now and later in life. It also becomes clear that the picture is worse for particular groups of students. The following key findings highlight some of these issues.

Students are facing many issues that can affect their health now and later in life.

Students may be smoking less tobacco than in the past, but the use of alcohol and other drugs is worrisome. Twenty-six percent (26%) of secondary students reported risky drinking behaviours like binge-drinking or mixing alcohol with caffeinated energy drinks, and one in four students had used a drug other than alcohol in the past 12 months. In addition to marijuana, new problems are emerging, such as the use of pain medication without a prescription. Each of these drugs were used by more than 10% of students in the past 12 months. These behaviours can increase the risk of injury and have negative effects on the development of the adolescent brain.

Self-harm, bullying, and violence are major concerns. While students commonly reported traits associated with positive mental health, such as high self-esteem and infrequent symptoms of emotional anxiety, one in ten students reported cutting, burning or otherwise hurting themselves. The same number seriously considered suicide. These are symptoms of poor mental health and a lack of social support. One in five students reported being bullied in the past 12 months, and 6% had been threatened or injured with a weapon on school property. Beyond physical trauma, these actions can leave emotional scars on victims, witnesses, and perpetrators.

Many students are not getting enough physical activity or eating well and too many are overweight or obese. While walking and cycling are the most commonly used transport to and/or from school for four in ten students, only one in ten meet Canada's physical activity guidelines. In addition, students are spending too much sedentary time, with only one in four reporting less than two hours of screen

time outside school every day of the past week. Student nutrition could also be improved, with only 13% of students meeting the guidelines for daily vegetable and fruit intake. Almost one in three are overweight or obese, putting them at higher risk for heart disease, diabetes and some cancers later in life.

Many older students are having unsafe sex. By grade 12, one in three students reported having had sex. One in three sexually active students had more than one partner in the last 12 months. Only 60% had used a condom or other barrier the last time they had sex, increasing the likelihood of a sexually transmitted infection or pregnancy. Just 37% reported that their school sexual health class was very useful or essential.

For many important indicators, particularly those related to mental health, girls are faring worse than boys. Compared to boys, girls reported lower levels of self-rated health and self-esteem. Girls reported feeling "too fat" more often than boys, and reported higher levels of emotional anxiety, self-harm, suicidal thoughts, and having been bullied. Girls were also less likely to be physically active and were more susceptible to trying smoking.

Photo submitted by student for the Toronto Public Health Student Photo Project.

Students who reported their sexual orientation as gay, lesbian, bisexual, pansexual, other, or unsure reported poorer self-rated health and were more likely to be bullied than heterosexual students. Students with lower socio-economic access also reported poorer general health, less frequent visits to the dentist, and were more likely to be overweight or obese compared to students with higher socio-economic access. Additional health inequities exist based on immigrant status and ethno-racial identity.

These results are some of the initial concerns emerging from the 2014 data. Subsequent reports will present more detailed findings for the subject areas assessed by the 2014 survey. Future surveys will be carried out in order to monitor trends and identify emerging issues.

More information on the TPH Student Survey can be found at: tph.to/studentsurvey

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Introduction

Toronto Public Health (TPH) regularly assesses and reports on the health of the city's population. Youth are an important group to monitor because the current health and health behaviours of young people create a foundation for health throughout the life course. Despite the importance of this age group, information on the health of Toronto's youth has been limited. To fill this gap, TPH, with support from Toronto's public school boards, conducted a school-based student survey in 2014 to assess the health and health behaviours of adolescent students.

The purpose of the Student Survey is to:

1. Describe the health of Toronto students in grades 7 to 12
2. Identify factors related to good health among youth
3. Understand how the social determinants of health affect youth

Data were collected on issues related to:

- wellbeing and mental health
- bullying and violence
- physical activity and sedentary behaviour
- nutrition and body size
- tobacco, alcohol and other drugs
- sexual health
- dental and oral health

Toronto Public Health is interested in youth because:

Adolescence is a period of change. Developing minds and bodies are moving from childhood to adulthood. Youth face pressures from their peers, the media, and their families and communities that affect their choices about who they are and what they do. These pressures and the resulting decisions often impact physical and mental health and wellbeing.

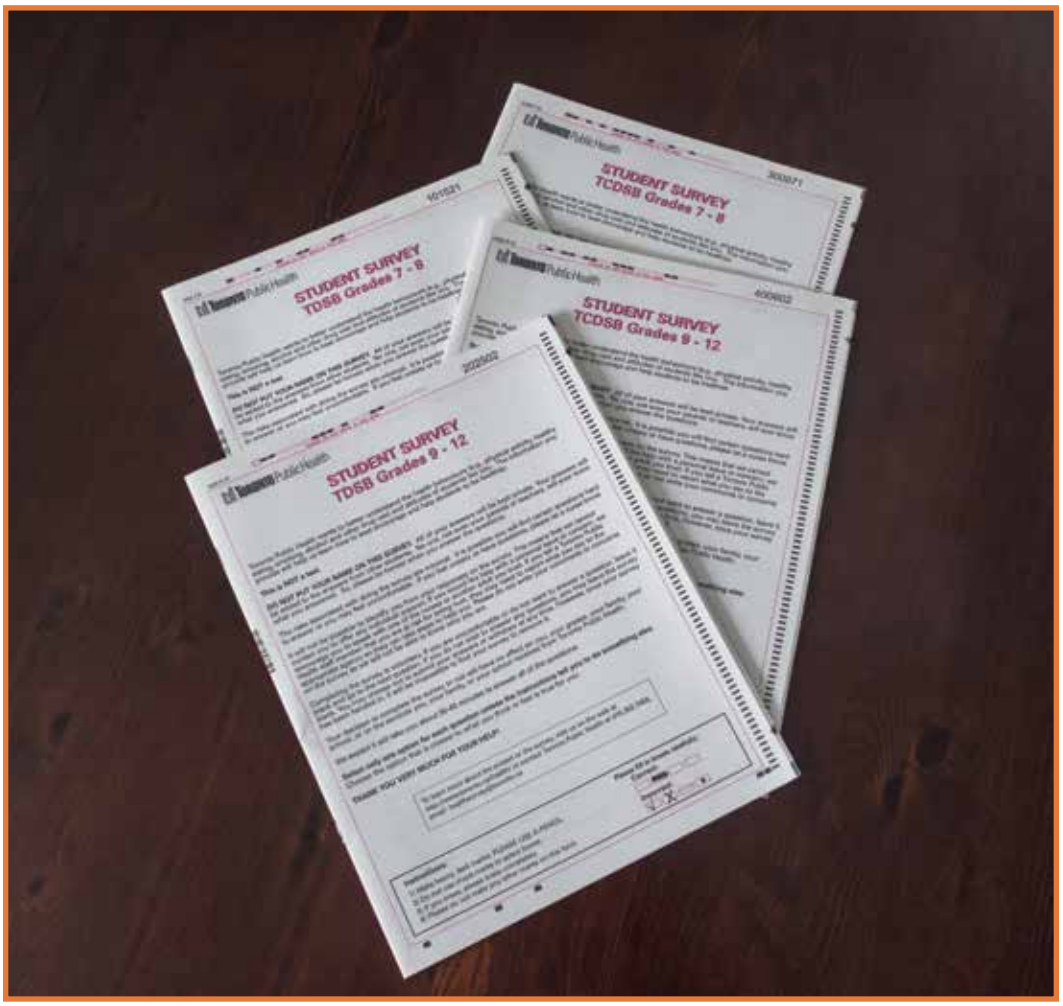
Many of the behaviours that impact health in the adult years start in youth. Behaviours developed during adolescence contribute to current health status and risk for developing chronic diseases in adulthood.[2] Addressing issues early can influence life-long change, and prevent health problems throughout the life course.

The social determinants of health are conditions of everyday life including where a person lives and works, education, income, gender, sexual orientation, ethno-racial background, immigration status, and experiences growing up. Social and economic circumstances such as these can result in health inequities, the unfair and avoidable differences in health.[1]

There are 282,000 youth aged 10 to 19 years living in Toronto, representing 11% of the city.[3]

Evidence informed policies and services support the health of youth.
Information on the health status of youth contributes to the effective delivery of public health services and policies to more effectively meet the needs of young people. Although there are studies on the health and well-being of Ontario youth, such as the Ontario Student Drug Use and Health Survey (OSDUHS), the TPH Student Survey is the first to consider the local context, collect information on a comprehensive range of indicators, and exclusively look at Toronto's youth.

The results will help TPH and other agencies provide the best services possible to Toronto youth by identifying priority issues, guiding services and policies, and creating a baseline against which future results can be compared.



Data Collection

The Student Survey collected health information from students through:

- A written questionnaire
- Measurement of students' height and weight
- An oral health check

Data collection occurred between January and March 2014, when TPH Public Health Nurses and Dental Hygienists and Assistants visited 466 classrooms at 165 schools during a 7-week period. The survey sample included 6,053 grade 7 to 12 students, representing just under 5% of students attending schools in the:

- Toronto District School Board (TDSB)
- Toronto Catholic District School Board (TCDSB)
- Conseil scolaire de district catholique Centre-Sud (CSDCCS)
- Conseil scolaire Viamonde (Viamonde)

The sample was designed to represent Toronto's diverse public school students, and took into account grade, school board, an average measure of students' socio-economic status within each school, and each school's location within Toronto.

Private schools and youth not attending school at the time of data collection were excluded from the sample. Under-schooled youth are often at higher risk for adverse health issues compared to their counterparts in school. TPH is exploring other research options aimed at capturing this important population.

Students needed written parental consent and had to personally agree to participate in each of the three data collection components (questionnaire, height and weight assessment, and oral health assessment). TPH staff data collectors were trained in data collection protocols and research ethics. Participants were informed of their right to withdraw their participation at any time.

All data are anonymous and confidential. No individual student, class or school will be identified in this report or future Student Survey analyses.

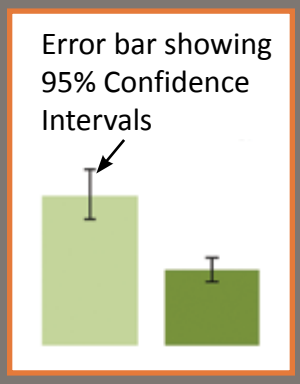
For more details on the methodology, including questionnaire development, consent, data collection protocols, sampling, data processing, and analysis, please visit tph.to/studentsurvey or contact Toronto Public Health at 416-338-7600.

Report Outline and Definitions

This report presents initial highlights from the rich information captured by the TPH Student Survey. Key indicators of adolescent health are presented, and where relevant, broken down by grade and sex. In addition, each chapter has a 'Spotlight on Inequity', showing important differences in health between groups of students, based on selected social determinants of health, including 'socio-economic access', sexual orientation, ethno-racial identity, and immigrant status.

'Socio-economic access' was assessed by asking students to rank their family's access to goods and services on a scale from one to ten. A family's ability to access goods and services is a reflection of a family's income level. At the highest point on the scale are the students who perceive their families as having the easiest access to housing, clothes, food, activities, and other possessions. At the lowest point on the scale are the people with the most difficult access. 'Low access' represents those students who ranked their families' access as five or less; 'Medium Access' is six or seven; and 'High Access' is eight, nine, or ten.

Ethno-racial identity was determined by asking students to identify as one of 13 identities that were then grouped into six categories to allow sufficient numbers for analysis. These categories are Black, East Asian, Southeast Asian, South Asian and Middle Eastern, White, and 'Other'. The 'Other' category includes Latin American and Mixed background. The number of Aboriginal students was too small to analyze as a separate group. They were not included in the 'Other' category because of their unique identity, history and experiences. For these reasons, Aboriginal students were not included in any analyses by ethno-racial identity but were included in the other findings as part of the overall sample.



Throughout the document, the values reported represent estimates based on survey data. Where graphs are shown, error bars represent 95% confidence intervals (CI's). This is the range within which the true value lies, 19 times out of 20. When CI's for different groups of students (eg. males and females) do not overlap, the difference between those groups is statistically significant meaning that the difference is likely to be real and not due to chance. In this report, differences are reported when they are statistically significant.

The Student Survey data allow for more detailed exploration of associations between health determinants, behaviours, and outcomes than is presented in this report. These will be explored in subsequent analyses and reports.

Overview of Survey Participants

Response Rates

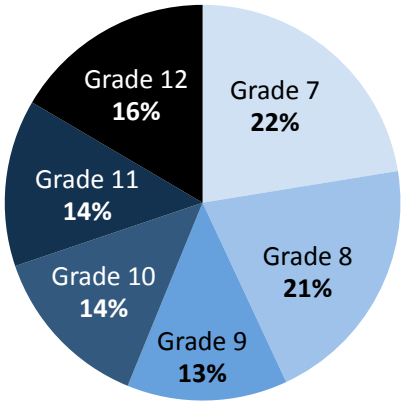
- 61% of all students selected for participation returned their consent form
- 81% of students who returned their consent form completed their questionnaire, 74% completed the height and weight measurement, and 70% completed the oral health check
- This means that of all students selected for participation, 50% completed the questionnaire, 45% completed the height and weight measurement, and 42% completed the oral health check

Sample Breakdown

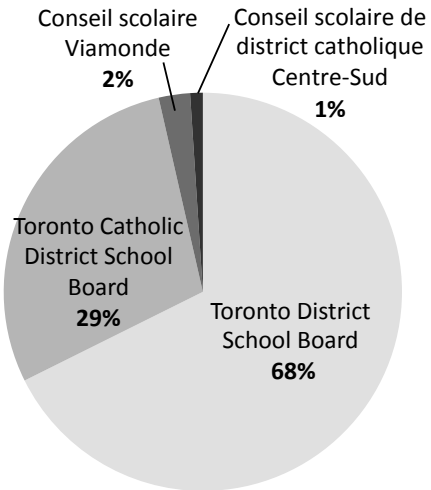
Survey participants were asked various questions to gauge how well the survey sample represents all grade 7 to 12 students and to help measure differences in the survey data between different groups of students based on grade, sex, immigrant status, home language, ethno-racial identity, and sexual orientation. The charts below and on the following page show the breakdowns for these and other characteristics of the sample.

Based on comparison with TDSB and/or TCDSB data, the survey sample is representative of all Toronto students in grades 7 to 12. The breakdown of the sample by school board reflects the enrollment in each board for grade 7 to 12 students.

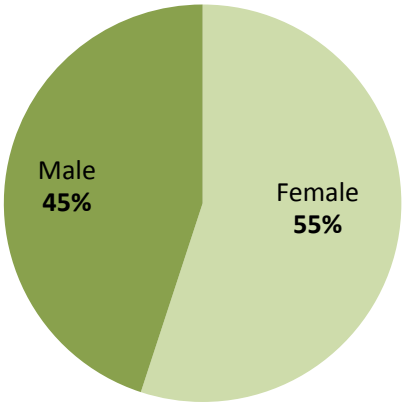
It should be noted that students who did not participate in the study may differ in their health status and health behaviours from those who are included. Although the sample reflects the general student population based on some of the key social determinants of health shown above, the estimates in the following chapters should be interpreted in this context.



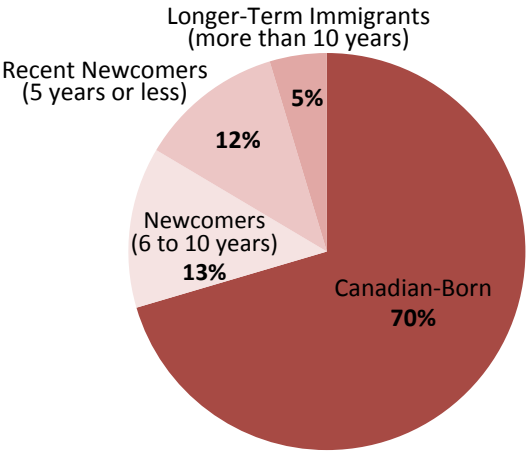
Grade



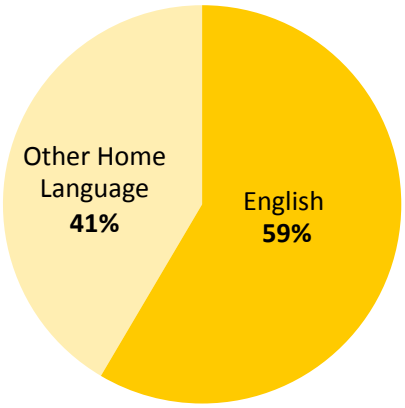
School Board



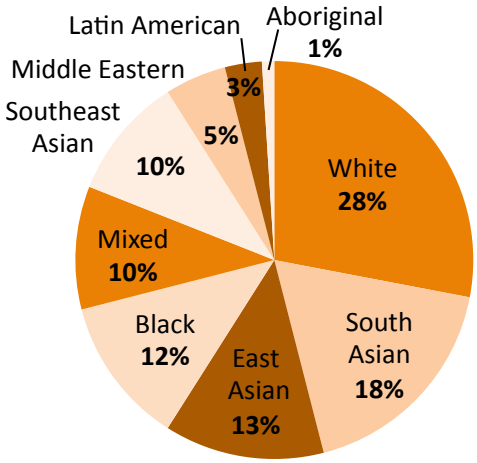
Sex



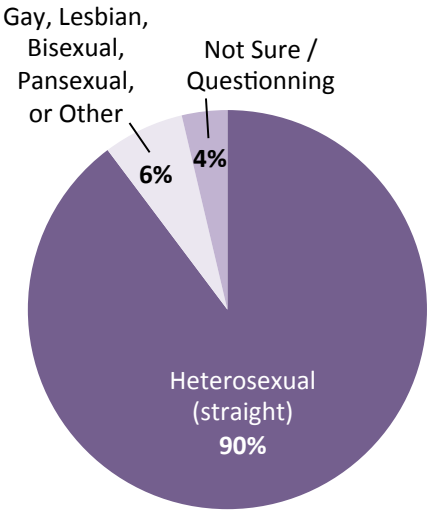
Immigrant Status



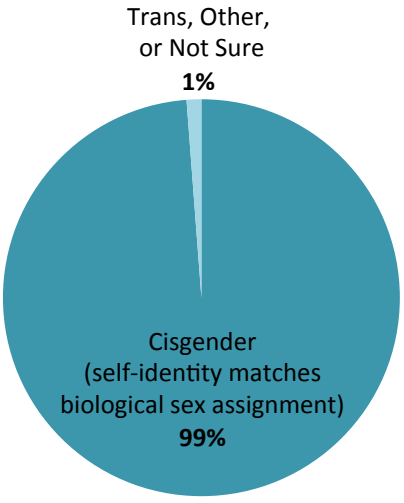
Home Language



Ethno-racial Identity



Sexual Orientation*



Gender Identity*

* Only Grade 9 to 12 TDSB and Viamonde students participated in the questions on sexual orientation and gender identity (sample size of 2,361 students).

Well-being and Mental Health

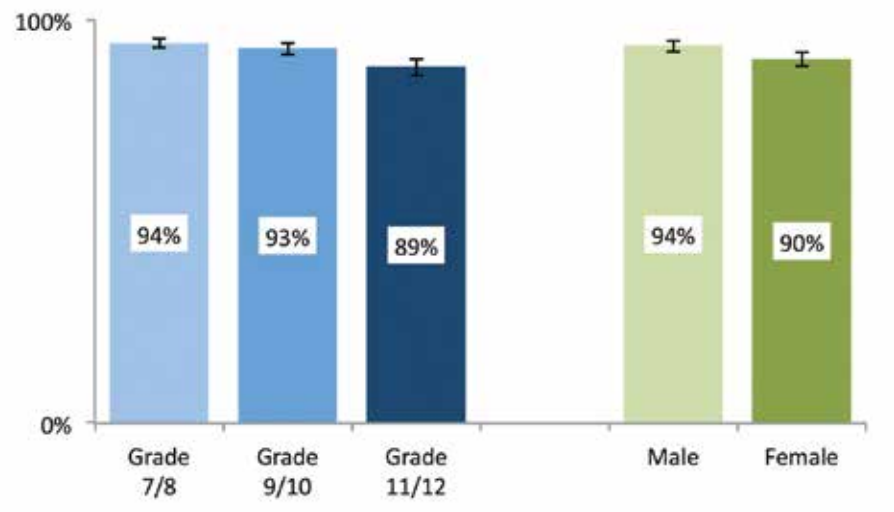
One in five people experience mental health challenges in their lifetime, and two thirds report the first appearance of symptoms during adolescence.[4] Furthermore, 45% of individuals suffering from mental health problems will experience other difficulties such as learning and school-related problems, substance use, risk-taking behaviour, and criminal behaviour.[4]

Adolescence can be a pivotal time for mental health, when cultural and social pressures put a strain on relationships and decision making. This chapter explores the prevalence of some protective factors for good mental health, such as self-esteem, school-connectedness, and positive body image. Some outcomes of poor mental health are also shown, such as emotional anxiety and self-harm.

Self-Reported General Health

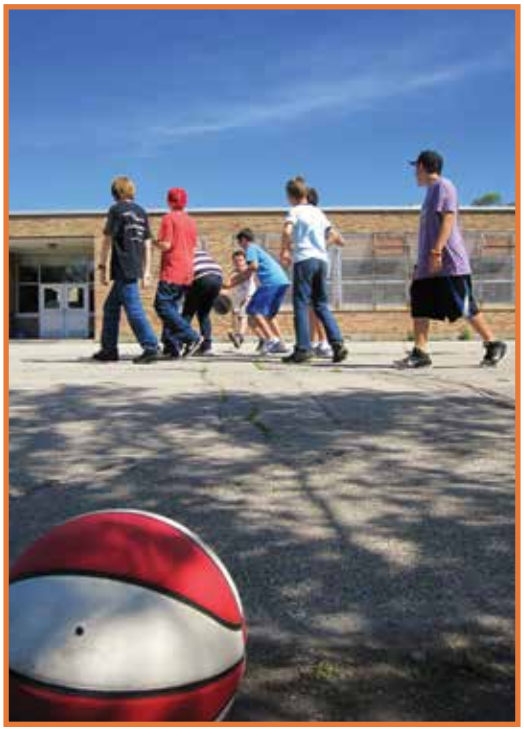
Ninety-two percent (92%) of students reported good health or better. Grade 7 to 10 students and male students were more likely to report better general health than grade 11/12 students and female students.

Good or Better General Health



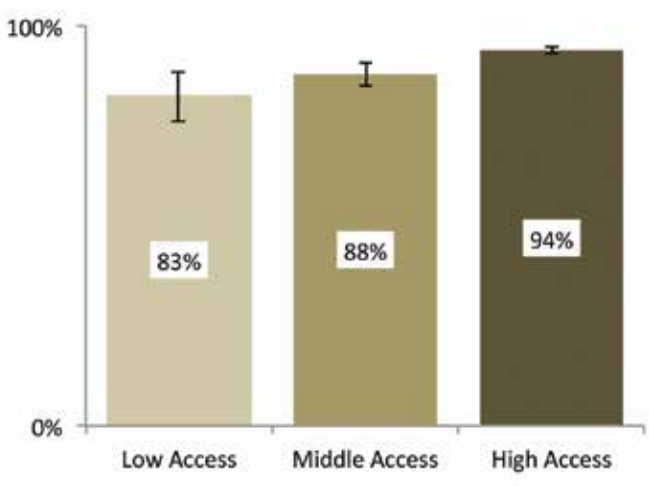
About nine out of ten students report that their health is good or better. On the surface, this is good news. But a closer look at the data shows that students are facing many issues that can affect health now and later in life.

A large majority of students (92%) rated their health as excellent, very good, or good. Less than 1% of students rated their health as poor.



Spotlight on Inequity

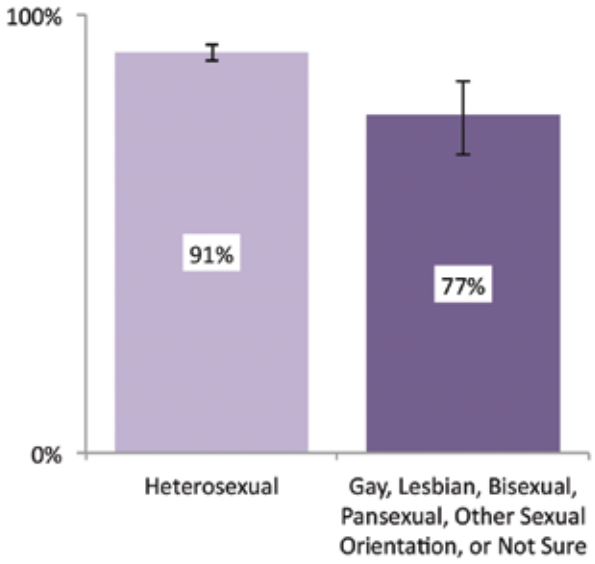
Good or Better General Health by 'Socio-Economic Access'



The proportion of students who rated their general health as excellent, good, or very good increased with 'socio-economic access'.

For a definition of 'socio-economic access' please see page 4.

Good or Better General Health by Sexual Orientation*



The proportion of students* who rated their general health as excellent, good, or very good was higher among heterosexual students compared to students who reported being gay, lesbian, bisexual, pansexual, another sexual orientation, or unsure of their sexual orientation.

* Only Grade 9 to 12 TDSB and Viamonde students participated in the question on sexual orientation.

School Connectedness

Most students felt connected to their schools. School connectedness was more common among grade 7/8 students compared to secondary students.

Students who feel connected to their school are less likely to engage in behaviours that are risky for their health, such as violence and early sexual initiation.[5]

There were no differences between males and females in school connectedness.

School connectedness was assessed using a scale comprised of six items. Students were asked if they 'strongly agree', 'agree', 'disagree', or 'strongly disagree' with the following statements:

- I feel close to people at my school (**85%** agreed or strongly agreed)
- I feel I am a part of my school (**86%** agreed or strongly agreed)
- I am happy to be at my school (**86%** agreed or strongly agreed)
- The adults at my school treat students fairly (**86%** agreed or strongly agreed)
- I feel safe in my school (**92%** agreed or strongly agreed)
- I feel getting good grades is important (**97%** agreed or strongly agreed)

Self-Esteem

Ninety percent (90%) of students agreed with the statement 'In general, I like the way I am'. Grade 7/8 school students had higher self-esteem than did secondary students. Males also had higher self-esteem than females.

Students with higher self-esteem are more likely to make positive choices for their health, such as participating in physical activity and avoiding drugs and alcohol.[6]

Self-esteem is also closely related to mental health.

Self-esteem was assessed using a scale comprised of five items. Students were asked if they 'strongly agree', 'agree', 'disagree', or 'strongly disagree' with the following statements:

- In general, I like the way I am (**90%** agreed or strongly agreed)
- Overall, I have a lot to be proud of (**87%** agreed or strongly agreed)
- A lot of things about me are good (**88%** agreed or strongly agreed)
- When I do something, I do it well (**89%** agreed or strongly agreed
- I like the way I look (**81%** agreed or strongly agreed)

Body Image

Forty-five percent (45%) of students considered their body to be 'the right size'. Negative body image was higher among secondary students than grade 7/8 students. Females were more likely to consider themselves 'too fat' compared to males, whereas males were more likely to consider themselves 'too thin'.

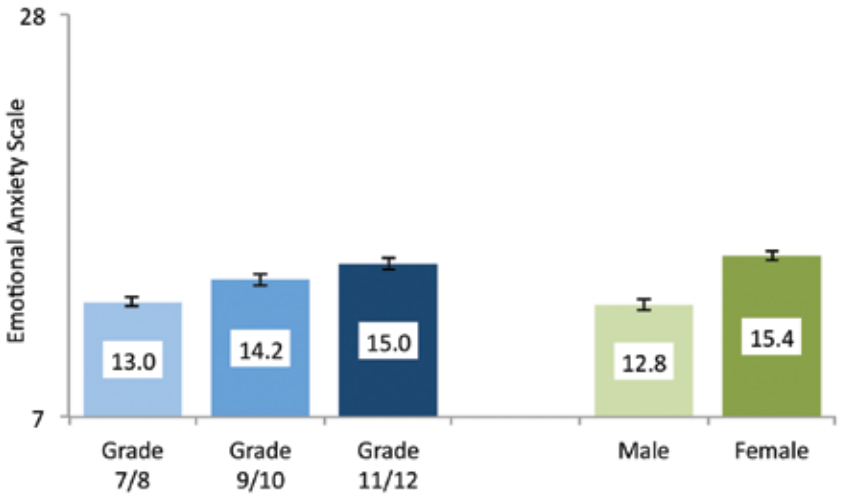
My body is…	Grade 7/8	Grade 9/10	Grade 11/12		Males	Females
A bit too thin or much too thin	15%	19%	20%		25%	13%
The right size	52%	45%	39%		47%	41%
A bit too fat or much too fat	33%	36%	41%		28%	46%

Body image is directly related to self-esteem, and is a component of mental health.

Emotional Anxiety

The majority of students did not report frequent symptoms of emotional anxiety. Emotional anxiety was more common in secondary students compared to grade 7/8 students. Females were more likely to experience higher levels of emotional anxiety than males.

Emotional Anxiety



Emotional anxiety was assessed by asking students if they frequently feel unhappy or sad, fearful or nervous, and if they worry or cry a lot. The answers to these questions placed students on a scale ranging from 7 to 28. A higher score on the emotional anxiety scale means that more possible symptoms of anxiety and depression were reported.

A high level of emotional anxiety is related to stress, low self-esteem and depression, and is a component of poor mental health and wellbeing.

Support for Personal Problems

When students are anxious, depressed, or experiencing personal problems, it is essential that they have people whom they can trust to confide in and ask for advice.

Eighteen percent (18%) of students reported that they did not feel comfortable talking to anyone about their personal problems.

Students reported that they felt comfortable talking to the following people:

1. Friends (62%)
2. Parents (52%)
3. Adults at school (12%)

Self-Harm*

Self-harm is a coping mechanism used by those suffering from poor mental health and a lack of social support. Self-harm is most often done without suicidal intentions.[7]

Eleven percent (11%) of students* reported hurting themselves on purpose, for example, self-cutting or burning.

Females were more likely than males to report self-harm. There were no differences in self-harm by grade.

Suicidal Thoughts*

Suicidal thoughts are a severe symptom of poor mental health and a lack of social support.

Twelve percent (12%) of students* reported to have seriously considered suicide in the past year.

Females were more likely than males to report having seriously considered suicide in the past year, and secondary students were more likely than grade 7/8 students.

Two percent (2%) of students reported attempting suicide in the past year.

* Only TDSB and Viamonde students participated in questions on self-harm and suicidal thoughts.

HELP IS AVAILABLE

If you or someone you know may be experiencing signs of suicide risk, seek help as soon as possible. There is always help available. You are not alone.

Crisis Lines (24/7):

Toronto Distress Centre: 416-408-HELP (4357)

Gerstein Centre: 416-929-5200

Kids Help Phone: 1-800-668-6868

If you are in crisis and require emergency assistance, please go to the nearest hospital or call 911.

In order to ensure the mental health and well-being of youth in Toronto as they transition into adulthood, it is vital that a foundation for healthy emotional and social development is established early in life.[8] The TPH Student Survey findings provide evidence that mental health is a significant health concern for Toronto youth, as it is for all Ontario youth, for whom many of the findings are similar.[9,10] There is a need for school and community based programming that focuses on factors that build positive mental health, including the development of healthy relationships, effective coping mechanisms, and protective factors.

Bullying and Violence

Bullying is a serious public health issue among youth that can result in both immediate and long term social, emotional and physical health problems. The negative health outcomes of bullying can affect both those who are bullied and those who participate in the act of bullying. These outcomes can include anxiety, depression and physical symptoms.[11] Bullying behaviors among youth that are left unaddressed can lead to more advanced forms of aggression later in adolescence and into adulthood.[12]

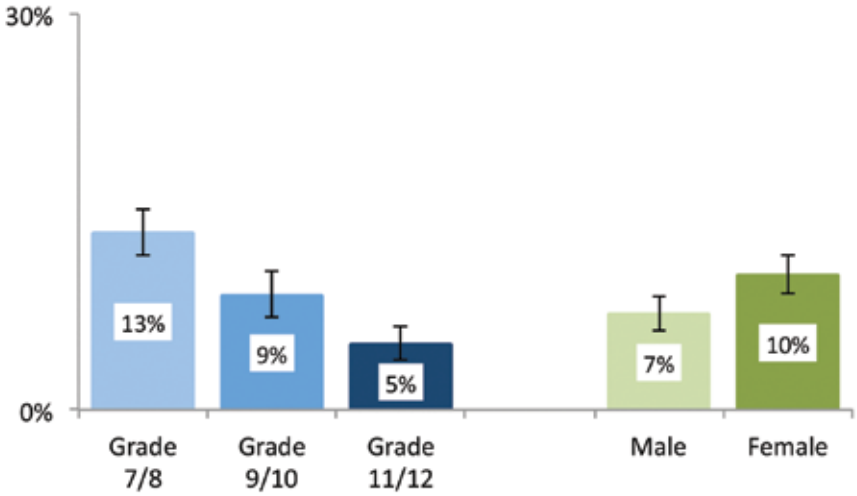
Physical fighting and violence are also related to bullying, and can compromise safety and result in serious harm.[13] This chapter explores the proportion of students affected by bullying and violent behaviour.

Photo submitted by student for the Toronto Public Health Student Photo Project.

Bullying

Twenty percent (20%) of students reported having been bullied in the past 12 months. The proportion of students bullied was higher in grade 7/8 students than in secondary students, and was higher in females compared to males.

Bullied Once per Month or More in the Past 12 Months



In this survey, the term 'bullying' was intentionally not defined and was left open to the interpretation of the student.

Bullying can damage self-esteem and can have long-term impacts on mental health.[14]

Five percent (5%) of students reported having been bullied once a week or more in the past 12 months. Eleven percent (11%) of students reported having been bullied electronically in the past 12 months. This did not differ by grade, but was more common among females than males. Students who had been bullied most frequently identified their bullies as:

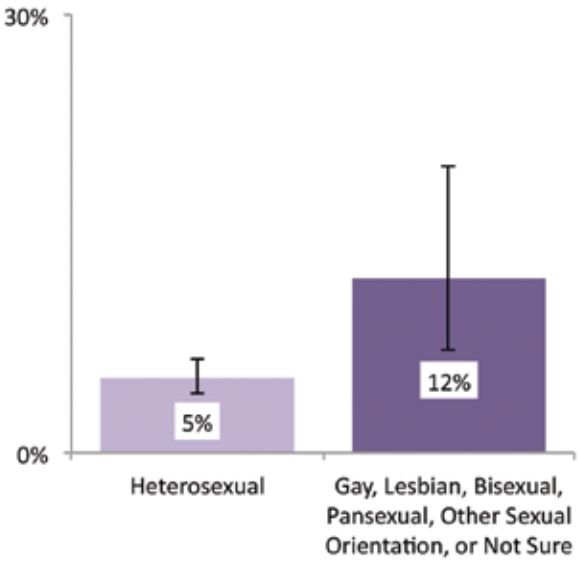
- Other students (50%)
- Friends (39%)
- Siblings (12%)
- Parents (8%)

Ten percent (10%) of students reported that they had taken part in bullying other students at school in the last 12 months. Among those who said they took part in bullying, the most commonly reported means were:

- Verbal attacks (76%)
- Electronic attacks (11%)
- Stealing or damaging property (5%)
- Physical attacks (11%)

Spotlight on Inequity

Bullied Once per Month or More in the Past 12 Months by Sexual Orientation*



The proportion of students* who reported being bullied once per month or more in the past 12 months was higher among students who reported being gay, lesbian, bisexual, pansexual, another sexual orientation or unsure about their sexual orientation compared to heterosexual students.

* Only Grade 9 to 12 TDSB and Viamonde students participated in the question on sexual orientation.

Violence

Twenty-two percent (22%) of students reported having been in a physical fight in the last 12 months. Physical fighting was more common among grade 7/8 students compared to secondary students and was more common among males compared to females. Six percent (6%) of students reported that they had been threatened or injured with a weapon on school property.

In the Last 12 Months…	Males	Females
Was in a physical fight	28%	15%
Needed treatment from a health care provider after a physical fight	3%	2%
Was threatened or injured with a weapon on school property	8%	4%

In addition to physical trauma, violence can leave emotional scars on victims, witnesses, as well as those who commit the violent act.

The percent of students in a physical fight, needing treatment after a physical fight, and threatened with a weapon on school property were all higher among males compared to females.

Bullying and violence can have immediate and long term negative impacts on social, emotional and physical health. While the TPH Student Survey findings on bullying prevalence presented here are slightly lower compared to Ontario-wide findings,[9] bullying and victimization remain important health issues for Toronto youth. A strong focus is needed for those groups of youth who report higher rates of bullying, including grade 7/8 students and those identifying their sexual orientation as gay, lesbian, bisexual, pansexual, other, or not sure.

Effective interventions must focus on the development of healthy relationships among peers as well as within families, schools and neighbourhoods. In addition, supporting the development of individual coping skills and supportive school environments have been shown to have positive outcomes.[11] These survey findings underscore the importance of more focused and intentional approaches to incorporate factors that enhance resiliency into programming delivered to youth and their communities.

Physical Activity, Eating Behaviours and Healthy Weights

Physical activity is extremely important for young students to reach their full potential and lead a healthy and productive life. Physical activity throughout the life course helps prevent overweight/obesity and the development of diabetes, heart disease, and some cancers. Youth who are physically active are also more likely to be active in adulthood.[15] The benefits of physical activity are not limited to physical health but also include improved academic achievement as well as positive mental health.

Nutrition is essential for good health and well-being. It is particularly important for youth who are experiencing rapid growth and development. Eating well can prevent health problems such as obesity, dental caries, iron deficiency and osteoporosis.[16] It is also associated with reducing the risk for many diseases such as heart disease, cancer, stroke, and diabetes.[17]

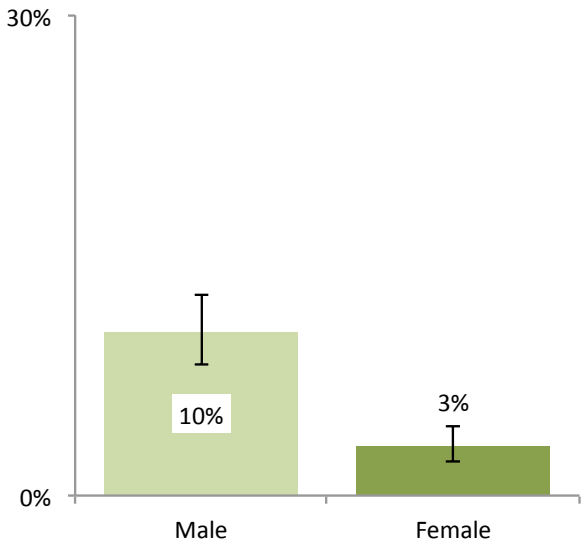
This chapter reports on the proportion of students meeting Canada's physical activity guidelines and using active transport including walking and biking to and from school. It also explores the prevalence of some healthy eating behaviours, such as eating enough vegetable and fruit, and some unhealthy behaviours, like frequent salty snacks and sweetened beverage consumption. Overweight and obesity, assessed by body mass index, is also addressed.

Photo submitted by student for the Toronto Public Health Student Photo Project.

Physical Activity

Seven percent (7%) of students were meeting Canada's physical activity guidelines for youth. Males were more likely to meet the guidelines than female students.

Meeting the Guidelines for Physical Activity



Canada's physical activity guidelines recommend that youth participate in at least one hour of physical activity every day.

There were no differences in the proportion of students meeting the guidelines by grade.

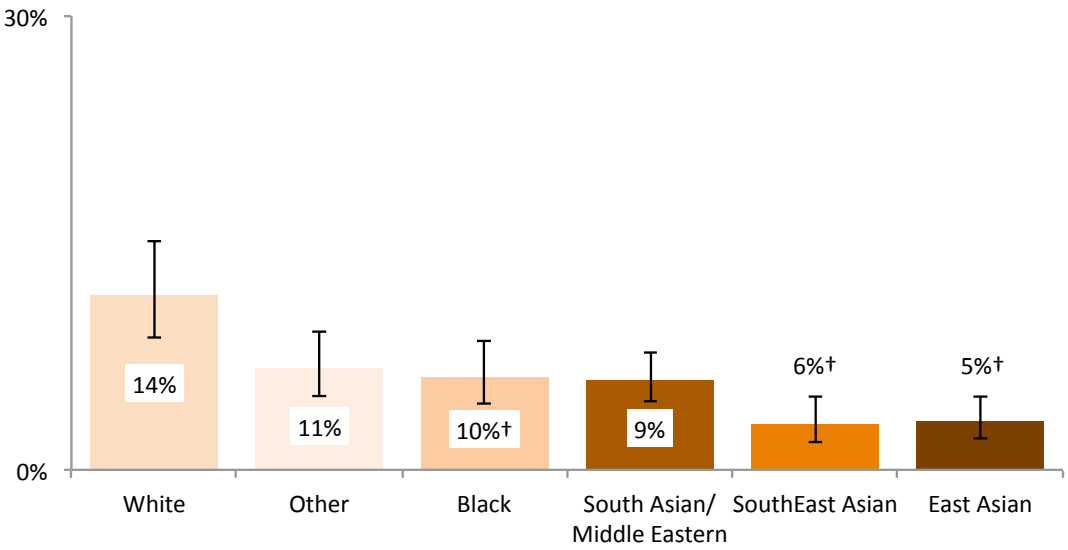
Physical activity was assessed by asking students, for each of the past 7 days, how much time they spent doing activities that made them sweat and breathe harder.

Physical activity has a positive effect on physical, mental, social and emotional health at a critical stage in development.

Youth who are physically active are more likely to be so in adulthood.[15]

Spotlight on Inequity

Meeting the Guidelines for Physical Activity by Ethno-Racial Identity Group



Note: † denotes high sampling variability; interpret with caution.

The proportion of students who were meeting the physical activity guidelines varied by ethno-racial identity.

For information on how ethno-racial identity group was created, please see page 4.

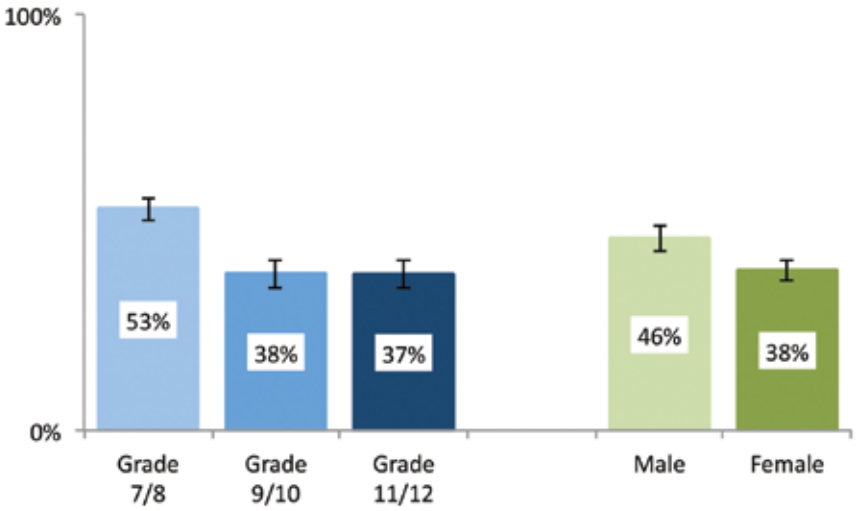
Photo submitted by student for the Toronto Public Health Student Photo Project.

Physical activity helps prevent overweight/ obesity, and the development of diabetes, heart disease, and some cancers.

Active Transport

More grade 7/8 students reported walking, cycling, or using another form of active transport to and/or from school compared to secondary school students. More male than female students reported active transport as well.

Using Active Transport Home from School



Forty-two percent (42%) of students reported walking, cycling, or using another form of active transport home from school. Thirty-six percent (36%) of students reported active transport to school.

The most commonly reported reasons for not walking, cycling, or using another method of active transport include

1. School is too far from home (46%)
2. There is not enough time (15%)
3. A ride is offered to the student (14%)
4. The commute is not considered safe by the students or parents (12%)
5. The student had after-school activities (8%)

Active transportation is an excellent way for youth to get physical activity and it is environmentally friendly. If youth walked for all trips less than 1 kilometre instead of being driven or driving, they would take an average of 2,238 additional steps per day (12,000 steps per day are required to meet physical activity guidelines).

Helmet Use

Forty-three percent (43%) of students who rode a bike in the past 12 months reported never wearing a helmet.

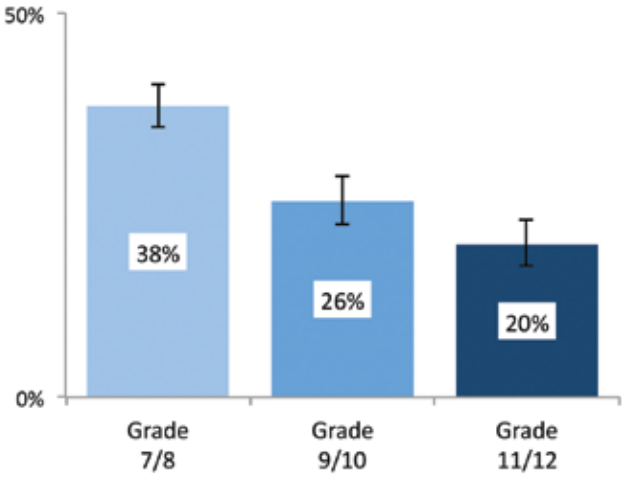
Of those students who reported riding a bike in the past 12 months, 32% wore a helmet always or most of the time.

A properly fitted helmet decreases the risk of traumatic brain injury by as much as 88% in the event of a crash.[18] Provincial legislation states that all cyclists 18 and under must wear a helmet.

Screen Time

Twenty-seven percent (27%) of students reported less than two hours of screen time outside of school every day of the past week. Grade 7/8 students reported better levels of screen time every day compared to secondary students.

Less than Two Hours of Screen Time Every Day



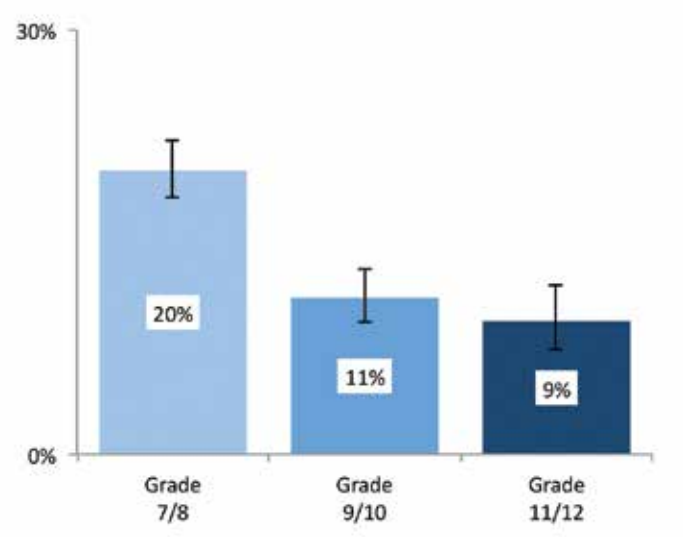
Over 70% of students had at least one day in the past week with more than two hours spent sitting or lying down, staring at a computer, phone, or TV screen. There were no differences between males and females in screen time.

Screen time and other sedentary behaviours are risk factors for obesity, diabetes, and heart disease, even when a person is getting adequate levels of physical activity.[19]

Vegetable and Fruit Consumption

Thirteen percent (13%) of students were meeting the guidelines for daily vegetable and fruit intake. Grade 7/8 students were more likely to eat enough produce than secondary students.

Meeting the Guidelines for Eating Vegetables and Fruit



Vegetables and fruit are the most important part of a healthy diet containing vitamins, minerals, and fibre.

The Canada Food Guide recommends that:

- youth under age 14 eat six servings per day
- female youth 14 and older eat seven servings per day
- male youth 14 and older eat eight servings per day[20]

There were no differences between males and females in the proportion of students meeting the vegetable and fruit consumption guidelines.

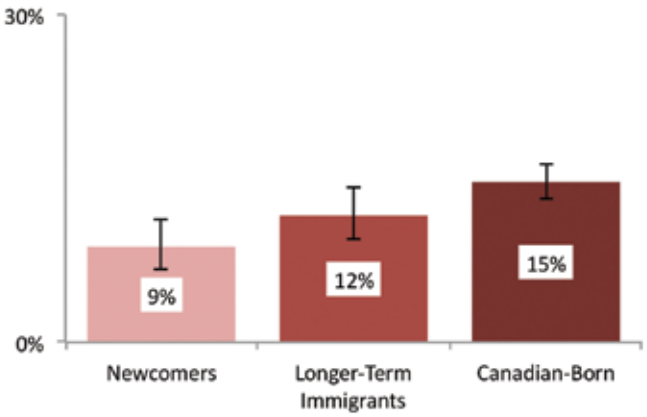
Vegetables and fruit can reduce the risk of heart disease as well as certain types of cancer.

Vegetable and fruit intake was assessed by asking students how many times per day they usually consume raw or cooked vegetables, and fresh, frozen, or canned fruit.

Photo submitted by student for the Toronto Public Health Student Photo Project.

Spotlight on Inequity

Meeting the Guidelines for Eating Vegetables and Fruit by Immigrant Status



Canadian-born students were more likely to meet the guidelines for vegetable and fruit consumption compared to newcomer students (5 years or less in Canada).

Sugar-Sweetened Beverages and Salty Snacks

Secondary students consumed more pop or sweetened beverages and salty snack foods than grade 7/8 students. Males consumed more pop than females.

More than three times per week	Grade 7/8	Grade 9/10	Grade 11/12		Males	Females
Pop/sweetened beverages	15%	21%	22%		24%	15%
Salty snacks	16%	19%	20%		17%	20%

Overall, 20% of students reported drinking non-diet pop or sweetened beverages such as 'Gatorade', 'Snapple', or fruit punch more than three times per week. Nine percent (9%) of students reported drinking pop every day, whereas 12% of students reported never drinking pop.

Overall, 19% of students reported eating salty snacks such as potato chips, nachos, or buttered popcorn more than three times per week. Six percent (6%) of students reported eating salty snacks every day, whereas five percent (5%) reported never eating salty snacks.

Sweetened beverages have high amounts of sugar that can lead to weight gain and dental caries.

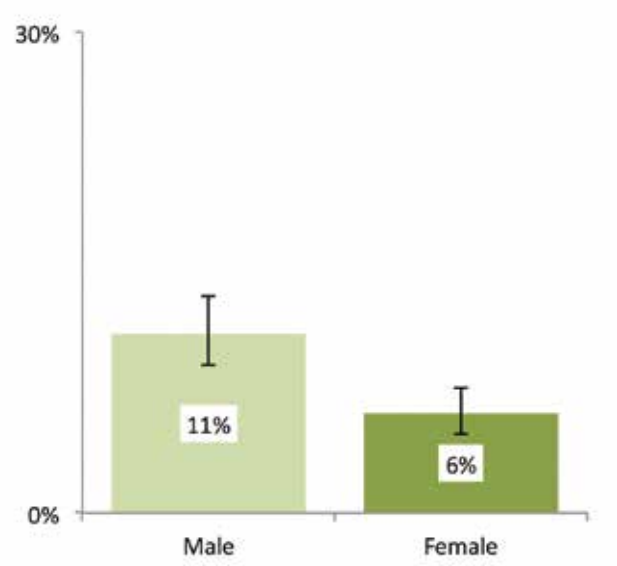
Salty snacks are usually high in fat, sodium and calories.

These foods are often chosen instead of healthier choices, which may lead to lower intake of nutrients.

Healthy Weights

Twenty-nine percent (29%) of students were overweight or obese. Males were more likely to be obese than females.

Obesity



Overall, 9% of students were obese, and 20% were overweight. Although obesity was more common among males than females, overweight did not differ by sex. There were no differences in overweight or obesity by grade.

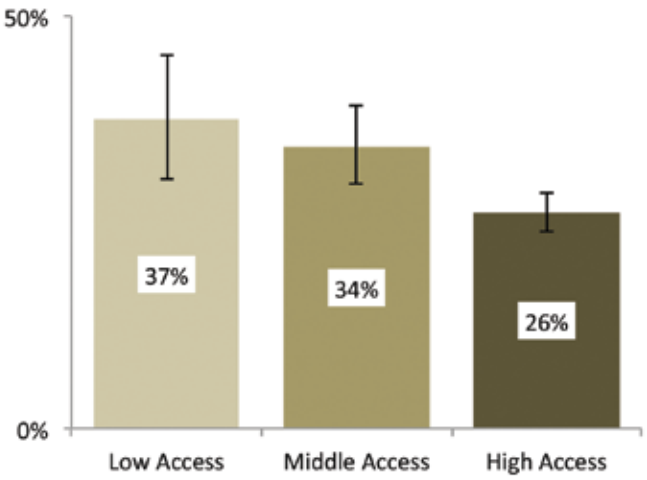
Two percent (2%) of students weighed less than what is appropriate for their age and height. This was slightly more common among grade 7/8 students compared to secondary students. There were no differences between males and females.

Weights were assessed by taking physical measurement of student height and weight. These measurements were used to calculate Body Mass Index (BMI) using the World Health Organization's Child Growth Standards.[21]

Overweight and obesity increase the risk for heart disease, diabetes, and some cancers.

Spotlight on Inequity

Overweight and Obesity by 'Socio-Economic Access'



Students in the 'Low' and 'Middle' socio-economic access groups were more likely to be overweight or obese compared to students in the 'High Access' group.

For a definition of 'socio-economic access' please see page 4.

Youth who are overweight or obese are more likely to be overweight or obese in adulthood.[22]

The TPH Student Survey suggests Toronto's students are not as physically active as students in Ontario as a whole.[23] In order to be active, youth must be supported by safe and well designed environments that promote leisure-time exercise and active transportation. For example, lower and better-enforced speed limits, speed bumps, and greater sidewalk coverage are all measures that improve safety and help youth walk or cycle more and help parents feel more comfortable allowing their children to do so.

Increasing physical activity among our youth is a shared responsibility for many stakeholders and sectors including: public health, schools, communities, families, peers and youth themselves. Co-ordinated action is needed to increase the number of students that meet the Canadian Physical Activity Guidelines.

The TPH Student Survey findings showing low vegetable and fruit consumption and increasing consumption of sugar sweetened beverages and snacks as youth age are also reflected in the literature.[24] There are however, no comparable Ontario data. Youth who have inadequate dietary intake show decreased readiness to learn and cognitive functioning.[25]

Poor food choices or not having healthy food available combined with inactivity can lead to overweight and obesity. Obesity is complex and prevention should address behaviours and the environment as well as the social determinants of health. Although the Student Survey data show that Toronto rates of obesity are lower than Canada as a whole,[26] it highlights the importance of focusing efforts on and engaging specific groups of youth, such as males and those with lower socio-economic access.

Photo submitted by student for the Toronto Public Health Student Photo Project.

Tobacco, Alcohol and Other Drugs

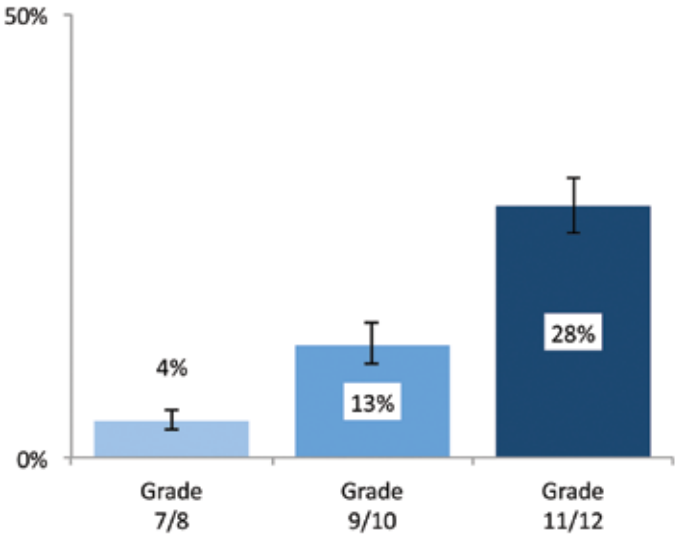
The use of tobacco, alcohol and other drugs commonly begins in early adolescence and increases with age, often into adulthood.[27] Early initiation of some substances can harm physical and cognitive development, and excessive use of these substances is associated with chronic diseases, such as cancer and heart disease. Misuse of alcohol and other drugs can also increase the risk for injury.

This chapter reports on the proportion of students using tobacco, alcohol, and other drugs, such as marijuana and pain medication without a prescription.

Tobacco

Sixteen percent (16%) of students reported having tried cigarette smoking. Cigarette smoking was higher among secondary students compared to grade 7/8 students. Five percent (5%) of students reported smoking in the last thirty days. Among those students who do not smoke, 30% are susceptible to starting smoking.

Tried a Cigarette



Smoking causes cancer, heart disease, and respiratory diseases.

There was no difference between males and females in the proportion of students having tried cigarette smoking or smoked in the last 30 days. Ten percent (10%) of grade 11/12 students had smoked in the last 30 days.

- 1% of students reported smoking every day in the last 30 days
- 3% of students reported using another type of tobacco, such as cigars or chew, in the last 30 days
- Of those students who had used tobacco in the last 30 days, 84% reported wanting to quit

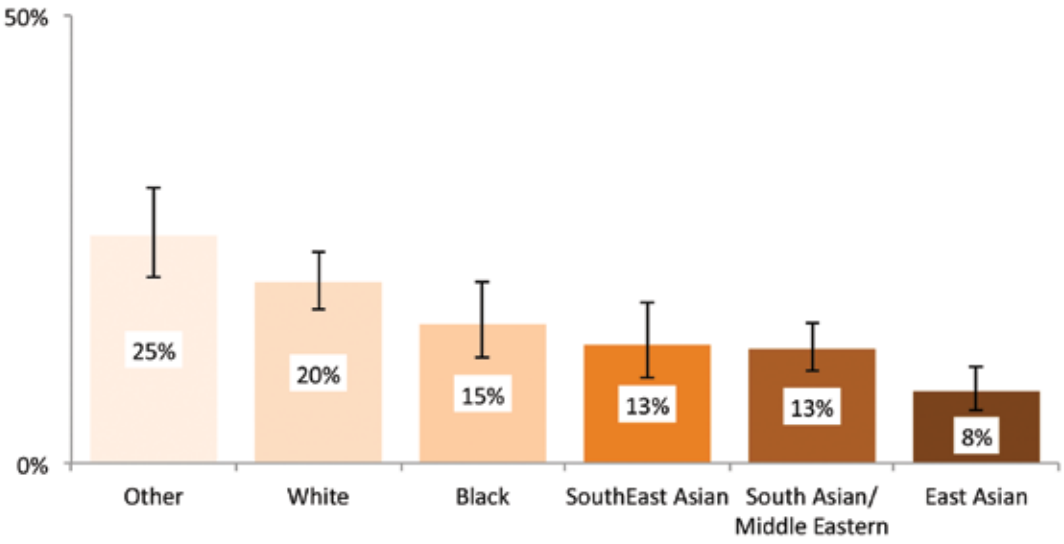
Of those students who had never tried smoking, 30% were deemed susceptible to smoking. Susceptibility did not differ by grade, but was slightly higher among females compared to males.

Susceptibility to smoking was assessed by asking students three questions:

1. At any time during the next year do you think you will smoke a cigarette?
2. Do you think in the future you might try smoking?
3. If one of your best friends was to offer you a cigarette, would you smoke it?

Spotlight on Inequity

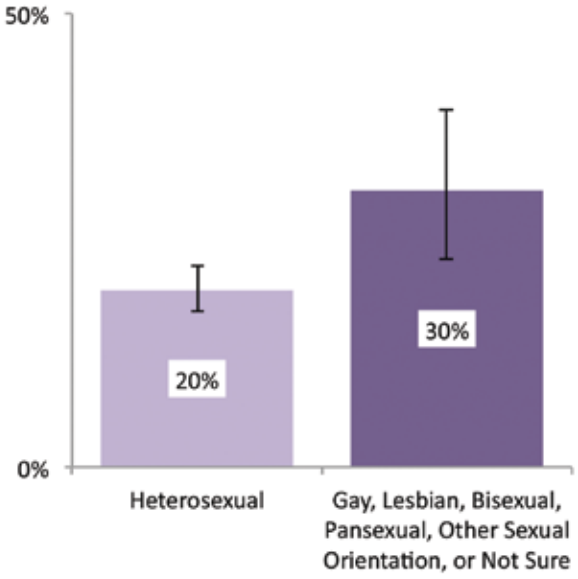
Tried a Cigarette by Ethno-Racial Identity Group



A higher proportion of students in some ethno-racial identity groups had tried smoking compared to others.

For information on how ethno-racial identity group was created, please see page 4.

Tried a Cigarette by Sexual Orientation*



The proportion of students* who tried a cigarette was higher among students who reported being gay, lesbian, bisexual, pansexual, another sexual orientation or unsure about their sexual orientation compared to heterosexual students.

* Only Grade 9 to 12 TDSB and Viamonde students participated in the question on sexual orientation.

Smokers who begin the habit in adolescence are more likely to smoke heavily, smoke for a long time, and have difficulties quitting compared to smokers who start later in life.[28]

Second-Hand Smoke Exposure

Second-hand smoke, or environmental tobacco smoke, often comes off the unfiltered end of a cigarette, and can include more toxins than filtered smoke.

Like smoking, second-hand smoke increases the risk of cancer, heart disease, and respiratory disease, and can worsen symptoms of existing conditions, such as asthma.

Sixty-six percent (66%) of students reported that they were exposed to second-hand smoke. Twenty percent (20%) of students reported being exposed every day or almost every day.

Exposed to Second-Hand Smoke in the Past 30 Days…	Percent
Where student lives	21%
On school grounds	28%
While at work or volunteering (of those who work or volunteer)	13%
Outdoors (e.g., park, restaurant patio, door entrances)	65%

Alcohol

Alcohol is the most commonly used drug among students. Potentially risky drinking behaviours, such as binge-drinking and/or mixing alcohol with caffeinated energy drinks, were reported by 26% of secondary students.

Potential risks associated with alcohol consumption include injuries, violence, and unsafe sexual behaviour. Long-term excessive consumption of alcohol can cause liver disease, heart disease, and cancer. Drinking alcohol in youth can also harm healthy brain development.[29]

Twenty-nine percent (29%) of students reported having more than just a sip of alcohol in the past 12 months, and 15% reported binge-drinking (five drinks or more on one occasion). There were no differences between males and females in alcohol consumption.

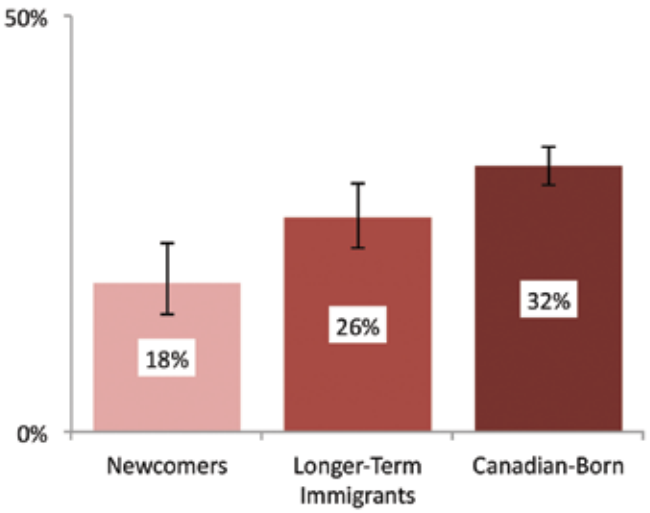
In the Last 12 Months…	Grade 7/8	Grade 9/10	Grade 11/12
Had more than a sip of alcohol	6%	26%	49%
Binge-drank (five drinks or more on one occasion)	2%	11%	29%

Among secondary students in the last 12 months:

- 6% reported drinking alcohol (more than a sip) once per week or more
- 9% reported binge drinking (five drinks or more on one occasion) once a month or more
- 12% reported mixing alcohol with caffeinated energy drinks

Spotlight on Inequity

Had More than a Sip of Alcohol in the Past 12 Months by Immigrant Status

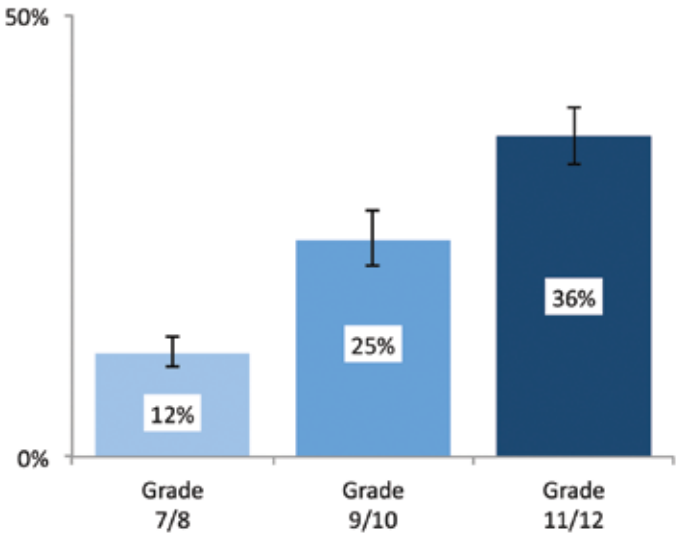


Canadian-born students were more likely to have tried more than just a sip of alcohol in the past 12 months than newcomer students (5 years or less in Canada).

Other Drugs

Twenty-five percent (25%) of students had used drugs other than alcohol in the past 12 months. Marijuana and pain medication (without a prescription) were the most commonly used drugs.

Used Any Drugs other than Alcohol in the Past 12 Months



The use of alcohol and other drugs has the potential for short-term and long-term harm, including injuries, motor vehicle collisions, alcohol poisoning, assault and violence and chronic diseases in later life.

There were no differences between males and females in this type of drug use in the past 12 months.

The most commonly reported drug other than alcohol used in the past 12 months was marijuana. Thirteen percent (13%) of students reported using marijuana in the past 12 months.

- The average age for trying marijuana was 14 years old
- 8% of students reported using marijuana once per month or more
- 16% of grade 11/12 students reported using marijuana once per month or more
- 6% of grade 11/12 students reported using marijuana 4 to 6 times per week or more

Use of other substances to get high in the past 12 months include:

- Pain medication, such as Percocet, Tylenol #3, or oxycontin - without a prescription (11%)
- Cough medicine (5%)
- Glue or other solvents (2%)

Driving Under the Influence of Alcohol or Other Drugs

Thirteen percent (13%) of students reported that they had ridden in a car or other vehicle driven by someone who had been using alcohol or other drugs in the past 30 days. This behaviour was higher among secondary school students. There were no differences between males and females.

Three percent (3%) of secondary students said that they had driven a car while under the influence of alcohol or other drugs in the past 30 days.

Findings from the TPH Student Survey on youth tobacco smoking support the development of programs and implementation of laws that:

1. reduce the risk of students who start smoking and

2. prevent students from being exposed to second-hand smoke.

Ensuring the Smoke Free Ontario Act[30] is consistently enforced on school properties and municipal bylaws are enforced in outdoor public places would decrease child/youth exposure, both to second-hand smoke and to the act of smoking. While the Student Survey shows the rate of trying smoking in Toronto is lower compared to Ontario,[31] 30% of non-smoking students are still identified at risk for taking up smoking in the future. This risk is higher for certain population groups, such as students with certain ethno-racial identities and those who report their sexual orientation as gay, lesbian, bisexual, pansexual, other, or unsure. This data supports strengthening efforts to engage students in the development of youth-led tobacco-use prevention programs and the important role that schools play in promoting and participating in these prevention initiatives.

Published research shows that use of alcohol and other drugs commonly begins in early adolescence and increases with age, often into adulthood.[27] Some of the findings presented here for Toronto students show lower levels of alcohol and drug use compared to Ontario as a whole.[23,31] However, the use of alcohol and other drugs still has the potential for short-term and long-term harm, including injuries, motor vehicle collisions, alcohol poisoning, assault and violence and chronic diseases in later life. Many of these can be prevented through a comprehensive approach that promotes emotional well-being and resiliency and supportive social environments.[32] There are opportunities for new strategies to be developed and enhanced in both the school and broader community setting. They can include but are not limited to, community-based interventions, peer leadership programs in schools, parenting initiatives, healthy public policies that modify drinking environments and developing evidence-informed initiatives in targeted communities.[32]

Sexual Health

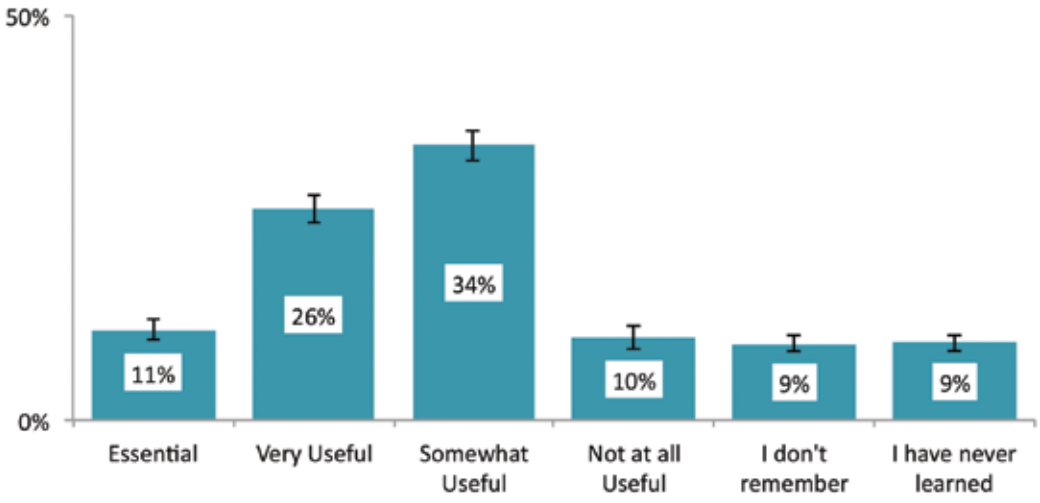
Accurate and well-explained sexual health information allows students to make better decisions about safe and consensual sex. An important place for students to learn about sexual health is in the classroom. It is also important for students to have trusted and knowledgeable persons with whom they can discuss their sexual health. Unsafe sexual behaviour can lead to unwanted pregnancy and sexually transmitted infection (STI) transmission. Using condoms and other barriers, reducing the number of sexual partners, and regular STI testing can reduce the risk of STIs.

This chapter reports on the usefulness of classroom sexual health education as well as to whom students are talking about their sexual health. It also shows the proportion of students who have had sex and who are participating in unsafe behaviours. In addition, the chapter addresses confidence in refusing unsafe and unwanted sexual activity.

Sexual Health Resources

Thirty-seven percent (37%) of students reported that their sexual health class was essential or very useful. Ten percent (10%) said it was not at all useful, and an additional 9% said they have never learned about sexual health in health class.

Usefulness of Sexual Health Class



Accurate knowledge and trusted guidance related to sexual health allows students to make informed decisions about their sexual behaviour.

The most commonly reported people with whom students felt comfortable talking about sexual health were:

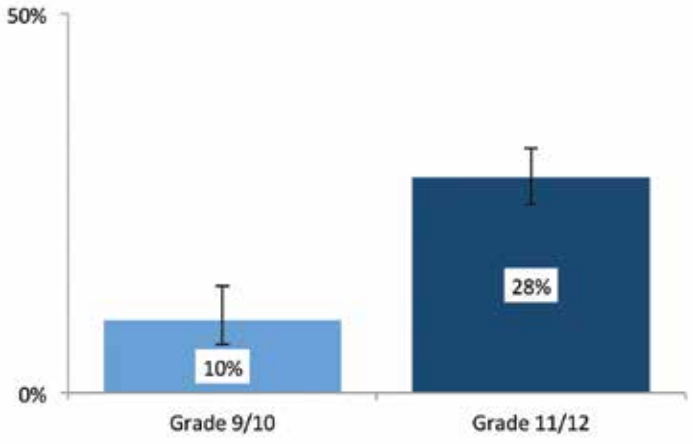
- Friends (45%)
- Parents (36%)
- Health professionals (20%)
- Girlfriend or boyfriend (19%)

Twenty-eight percent (28%) of students said that they don't feel comfortable talking to anyone about their sexual health.

Sexual Activity and Safer Sex Practices*

Twenty percent (20%) of students* reported having had sex. This was higher in grade 11/12 students compared to grade 9/10 students. Sixty percent (60%) of students who reported having had sex used a condom or other barrier the last time. Nineteen percent (19%) of sexually active students had been to a clinic for sexually transmitted infection (STI) testing.

Had Sex



In this survey, the term 'sex' was intentionally not defined and was left open to the interpretation of the student.

The proportion of students who reported having had sex ranged from 8% in grade 9 to 34% in grade 12. There were no differences between males and females in the proportion of students who reported having had sex.

Thirty-one percent (31%) of students who reported being sexually active said that they had been with more than one partner in the past 12 months. There were no differences between sexually active males and females in the proportion of students who had multiple partners or had been for STI testing.

Eighty percent (80%) of all students reported feeling extremely or very confident that they could use a condom or other barrier method with their partner. Eighty-five percent (85%) were confident that they could refuse sexual activity that they were not comfortable with.

Unsafe sexual behaviour can lead to unwanted pregnancy and sexually transmitted infection (STI) transmission. Using condoms and other barriers, reducing the number of sexual partners, and regular STI testing can reduce the risk of STIs.

* Only students in grades 9 to 12 in the TDSB and Viamonde were asked questions on sexual activity and safer sex practices.

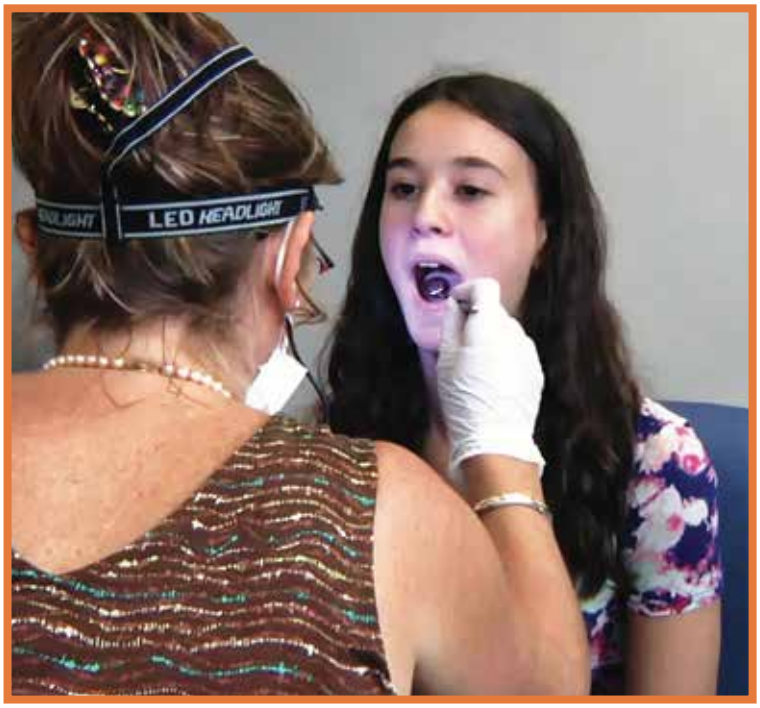
The TPH Student Survey findings on sexual health provide the context needed to plan programs specific to the experiences of Toronto youth. Knowing the approximate age of sexual initiation and protective behaviours such as condom use, clinic visits, as well as levels of confidence to refuse sexual activity will help frame sexual health messages relevant to this age group. There are however, no known Ontario data on these issues for comparison purposes.

Although school-based programs remain an important source for accurate sexual health education, Toronto youth identify their peers and parents as two important groups that they can talk to about sexual health. This provides further evidence for offering a multi strategy approach including teacher and parent resources, peer education, enhanced condom distribution, and increased accessibility to sexual health clinics.

Dental and Oral Health

Good dental and oral health contributes to physical, mental and social well-being and to the enjoyment of life. It allows people to speak, eat and socialize without pain or embarrassment. Dental caries can cause pain, infection, and difficulty with eating, drinking, and speaking, and can lead to further gum, mouth, and systemic health problems. Regular dental care, including regular brushing, flossing, and dentist visits can help prevent dental caries and keep the mouth and body healthy.

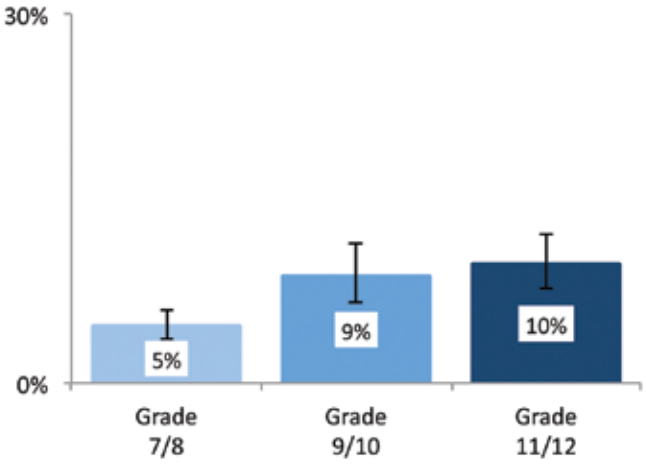
This chapter reports on the proportion of youth with dental caries, as well as those who practice good oral health care, including brushing, flossing, and dental visits.



Dental Caries

Eight percent (8%) of students had untreated dental caries. The percent of students who had dental caries was higher in secondary students compared to grade 7/8 students.

Untreated Dental Caries



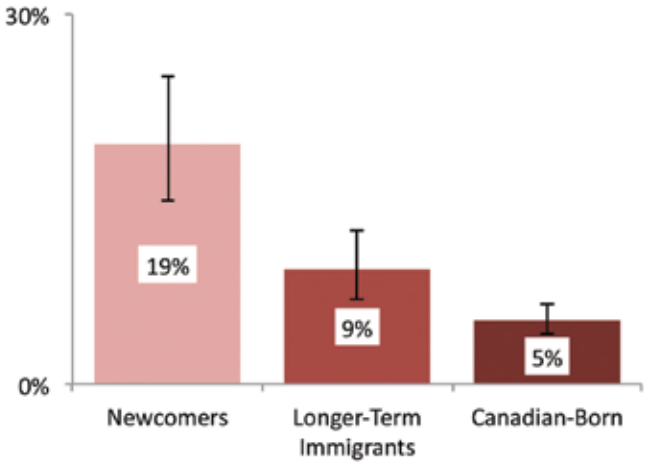
Dental caries can cause pain, infection, and difficulty with eating, drinking, and speaking.

There was no difference between males and females in the percent of students with dental caries. Forty-four percent (44%) of students had dental caries in their lifetime, including those that had been filled.

Dental caries include teeth that are decayed or missing due to decay. The presence of dental caries was assessed by a physical examination of the mouth by a Registered Dental Hygienist.

Spotlight on Inequity

Untreated Dental Caries by Immigrant Status



Newcomers were more likely to have untreated dental caries than longer-term immigrants (more than five years in Canada) and Canadian-born students.

Dental caries can lead to further gum, mouth, and systemic health problems.

Dental Care

Ninety-one percent (91%) of students reported brushing their teeth once a day or more, whereas 26% of students reported flossing once per day or more. Seventy-seven percent (77%) of students reported visiting the dentist once a year or more.

	Grade 7/8	Grade 9/10	Grade 11/12		Males	Females
Brushing once a day or more	89%	90%	92%		88%	93%
Flossing once a day or more	36%	23%	20%		24%	28%
Visiting the dentist once a year or more	83%	77%	71%		76%	78%

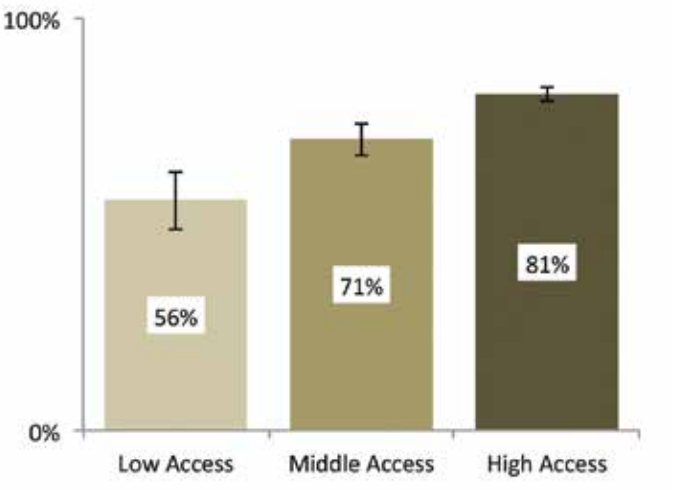
Regular dental care, including regular brushing, flossing, and dentist visits can help prevent dental caries and keep the mouth and body healthy.

A higher proportion of females than males regularly brushed and flossed. Flossing regularly was more common among grade 7/8 students compared to secondary students. The proportion of students who reported visiting the dentist once a year or more was also higher in grade 7/8 students than in secondary students. There were minimal differences by grade for brushing, and minimal differences between males and females for visiting the dentist.

- 23% of students reported flossing less than once per week
- 30% reported never flossing
- 8% reported only visiting the dentist for emergencies
- 6% reported never visiting the dentist

Spotlight on Inequity

Visiting the Dentist Once per Year or More by 'Socio-Economic Access'



Visiting the dentist once per year or more was more common among those with high 'socio-economic access' compared to those with low socio-economic access.

For a definition of 'Socio-Economic Access' please see page 4.

The TPH Student Survey findings establish a baseline for oral health indicators in youth. Thereare however, no Ontario data that can be used for comparison purposes. Toronto findings that highlight disadvantaged subgroups, such as newcomers and those with lower socio-economic access, can be used to develop targeted public health programs that will result in an overall improvement in oral health throughout the life course.

Conclusion and Future Steps

Photo submitted by student for the Toronto Public Health Student Photo Project.

Conclusion

Youth are a key population for initiatives aimed at preventing poor health outcomes and promoting healthy lifestyles. The Toronto Public Health Student Survey provides essential information on the health of Toronto's youth that can be used by public health, school communities, and other agencies to identify priority issues and populations, and guide services and policies that promote the health and well-being of Toronto's students.

Many of the findings in this report point to the need for strategies that build mental health and resiliency, as a part of a holistic and interdisciplinary approach to youth health. Effective interventions focus on the development of healthy relationships and social support at the family, school, and community level. The need is evident for an urban environment that promotes physical activity, provides healthy food options, and gives youth choices that enable them to avoid substance use. Maintaining and improving youth health is a shared responsibility for many stakeholders and sectors including government, schools, communities, families, and youth. Youth engagement and peer leadership are cornerstones of the healthy student community.

The social determinants of health also affect the youth population, pointing to the need for advocacy and policies that support opportunities for different groups of youth. The findings in this report illustrate inequities in many areas of health, particularly for female students, those who identify their sexual orientation as gay, lesbian, bisexual, pansexual, other, or not sure, and students with lower socio-economic access. These inequities identify priority populations for programs, services and advocacy in our schools and community.

The findings in this report illustrate inequities in many areas of health, particularly for female students, those who identify their sexual orientation as gay, lesbian, bisexual, pansexual, other, or not sure, and students with lower socio-economic access.

Future Steps

Following this report, data from the Student Survey will be explored in further detail. This richer information will be interpreted in the context of national and provincial data where available, published scientific evidence, policies, and community programs.

Student survey data will inform TPH services and policy advocacy, and will be shared with school boards and other organizations concerned about youth health. Future surveys will help monitor health trends over time.

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