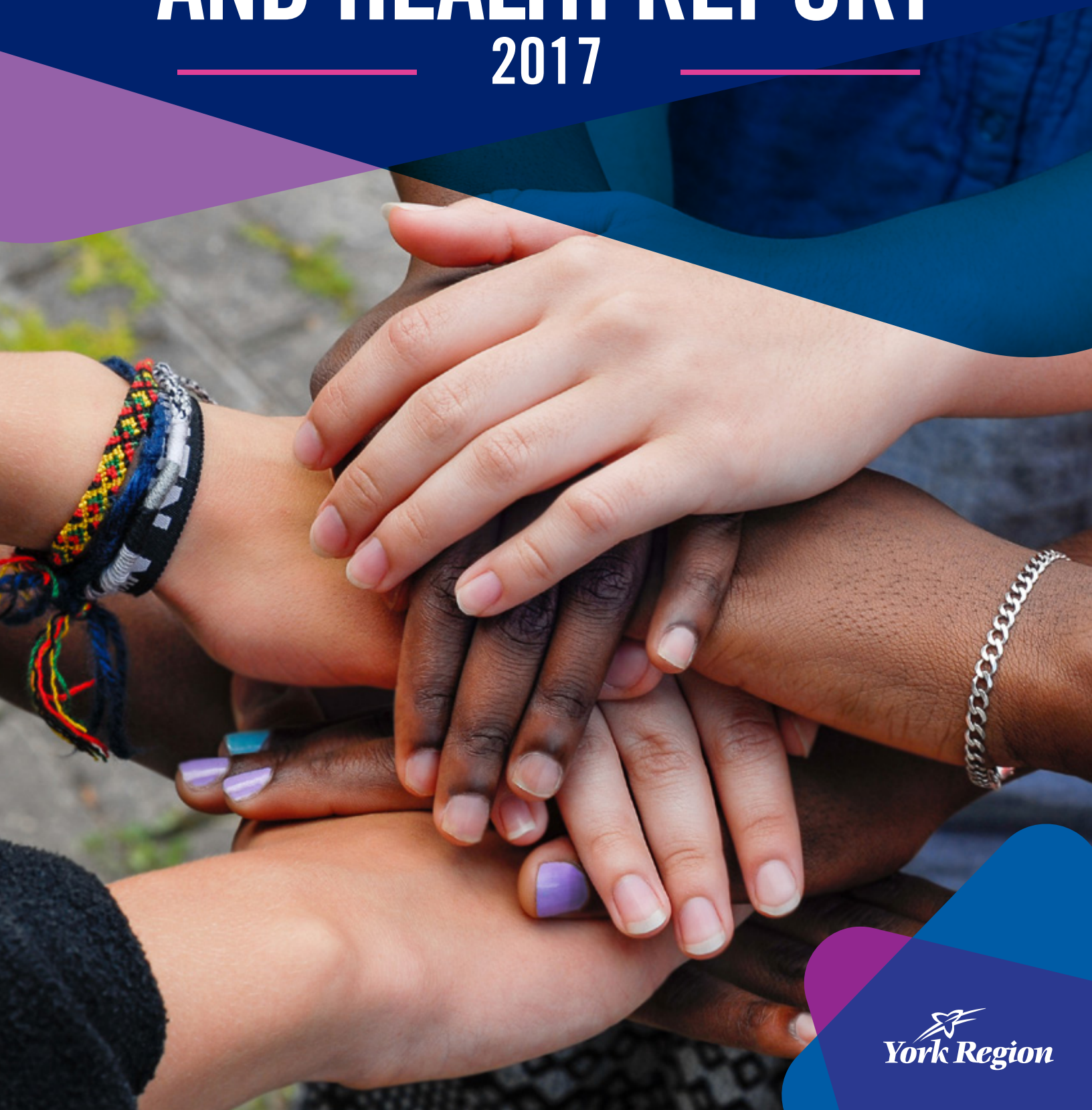


YORK REGION STUDENT DRUG USE AND HEALTH REPORT

2017



An accessible version of this document is available upon request.

Contents

- About the data 3
- A snapshot of health in York Region secondary students 4
- Background and home characteristics..... 5
- General health 9
- Lifestyle factors 12
- Body weight..... 13
- Risky behaviours and substance use 24
- Mental health, resiliency and developmental assets 35
- York Region Public Health supports and programs for students 49
- References 52

About the data

This report highlights York Region secondary school student substance use, mental health, physical health, risk behaviour and resiliency findings from the 2017 Ontario Student Drug Use and Health Survey (OSDUHS).

The Centre for Addiction and Mental Health's OSDUHS is an Ontario-wide survey of elementary/middle school students in grades 7 and 8 and secondary school students in grades 9 through 12. The OSDUHS, conducted by the Centre for Addiction and Mental Health (CAMH), is administered by York University's Institute for Social Research (ISR), on behalf of York Region Public Health. ISR ensures students independently complete survey questionnaires within a classroom setting.

York Region Public Health has sponsored a public health region oversample of secondary school students for York Region every two years since 2009. The 2017 OSDUHS collected information from 992 Grade 9 to 12 students from five York Catholic District School Board and nine York Region District School Board secondary schools. At the time of the 2017 OSDUHS design, there were 59,043 students enrolled in York Region's 48 publicly-funded secondary schools.

The findings summarized in this report are intended to assist York Region Public Health in planning and evaluating public health programs that meet the needs of youth. All percentages shown in this report are weighted estimates, representative of all students in Grades 9 to 12 enrolled in publicly-funded schools in York Region and Ontario. In each chart that follows, a vertical line with two short top and bottom horizontal lines represents the 95 per cent confidence interval, indicating that the results will fall into this range 19 times out of 20. In the text, an asterisk (*) denotes statistically significant sex, grade or socio-economic group differences.

A snapshot of health in York Region secondary students

In 2017:

- Sixteen (16) per cent of students reported at least 60 minutes of moderate to vigorous physical activity every day
- Twenty-four (24) per cent of students reported being overweight or obese
- Seventy-nine (79) per cent of students rated their mental health as good, very good or excellent in the past year
- Eighty-six (86) per cent of students reported they feel close to people at school
- Eighty-four (84) per cent of students reported they like going to school very much, quite a lot or to some degree
- Nine per cent of students reported drinking sugar sweetened beverages such as regular pop, sports drinks, tea or coffee once a day or more in the last seven days
- Fifty (50) per cent of students reported the use of alcohol in the past year
- Twenty-two (22) per cent of students reported the use of cannabis in the past year
- Ten (10) per cent of students reported using a water pipe or hookah in the past year
- Ten (10) per cent of students reported use of prescription pain relievers for non-medical reasons in the past year
- Eight (8) per cent of students reported use of tobacco cigarettes in the past year

Background and home characteristics

In 2017:

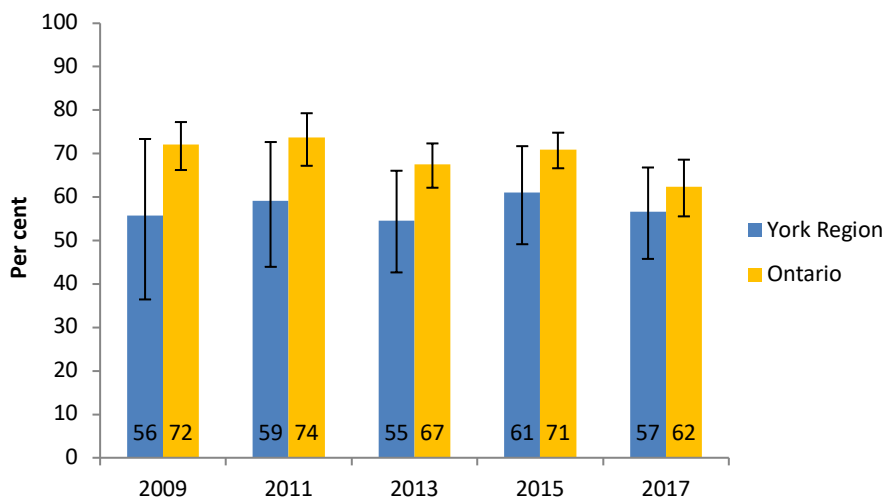
- Fifty-seven (57) per cent of students reported usually speaking English at home
- Seventy-three (73) per cent of students reported they have lived in Canada all of their life
- Ninety (90) per cent of students reported they live in one home
- Thirty-one (31) per cent of students reported both their parents were born in Canada
- Seventy-two (72) per cent of students reported high subjective socio-economic status
- Seventy-eight (78) per cent of students reported they never go to school or bed hungry

Home language

In 2017:

- Fifty-seven (57) per cent of students reported usually speaking English at home, 34 per cent spoke English and another language at home, and ten per cent reported speaking other languages at home. These percentages were similar to Ontario percentages
- There were no significant differences in the percentage of students who reported usually speaking English, English and another language or other languages at home by sex or grade

Figure 1: Usually speak English at home

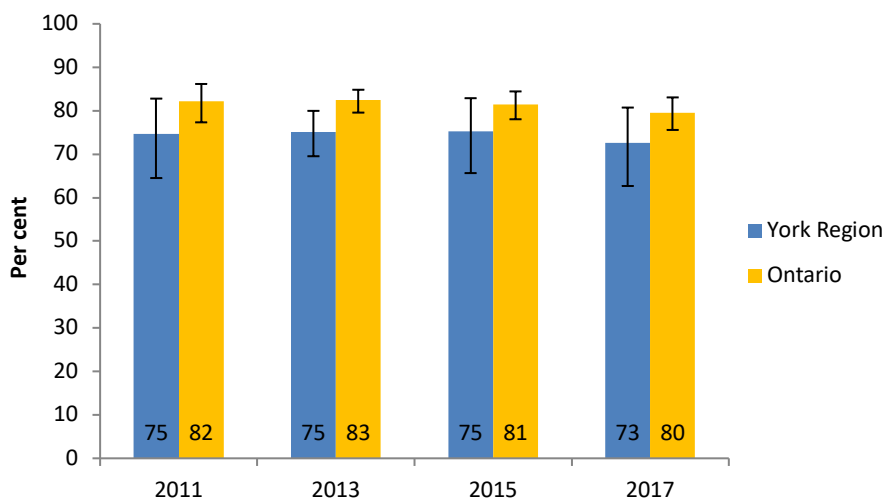


Length of time lived in Canada

In 2017:

- Seventy-three (73) per cent of students reported they have lived in Canada all of their life, 16 per cent reported living in Canada six or more years, and twelve per cent have lived in Canada five or less years. These percentages were similar to Ontario percentages
- There were no significant differences in the percentage of students who have lived in Canada all of their life by sex or grade

Figure 2: Lived in Canada all of their life



Home and parents

In 2017:

- About nine-in-ten (90 per cent) students reported they have lived in one home only. These percentages were similar to Ontario percentages
- Thirty-one (31) per cent of students reported both of their parents were born in Canada, 14 per cent reported one Canadian born parent and 55 per cent reported neither parent was born in Canada. The percentage of students with both parents born in Canada was significantly lower than the Ontario percentage

Figure 3: Live in one home only

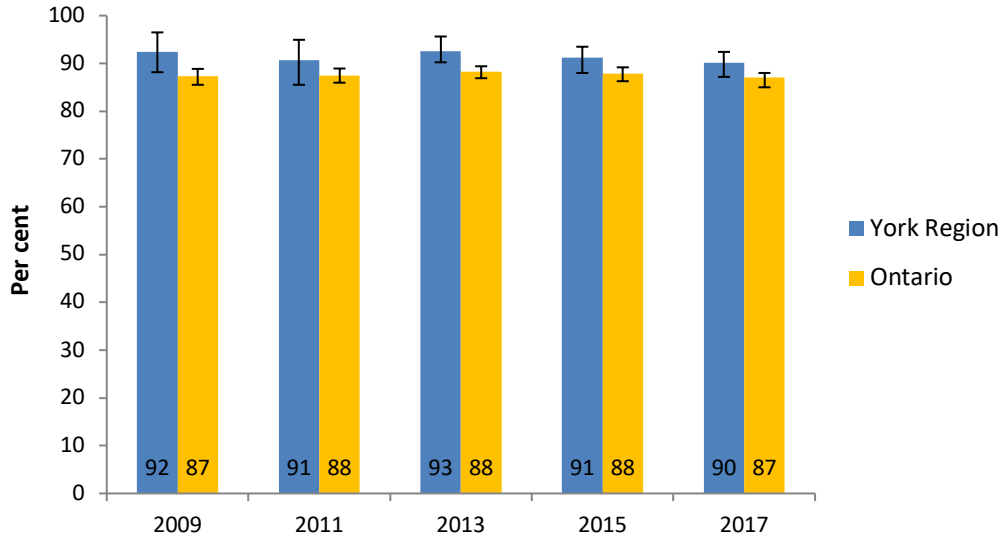
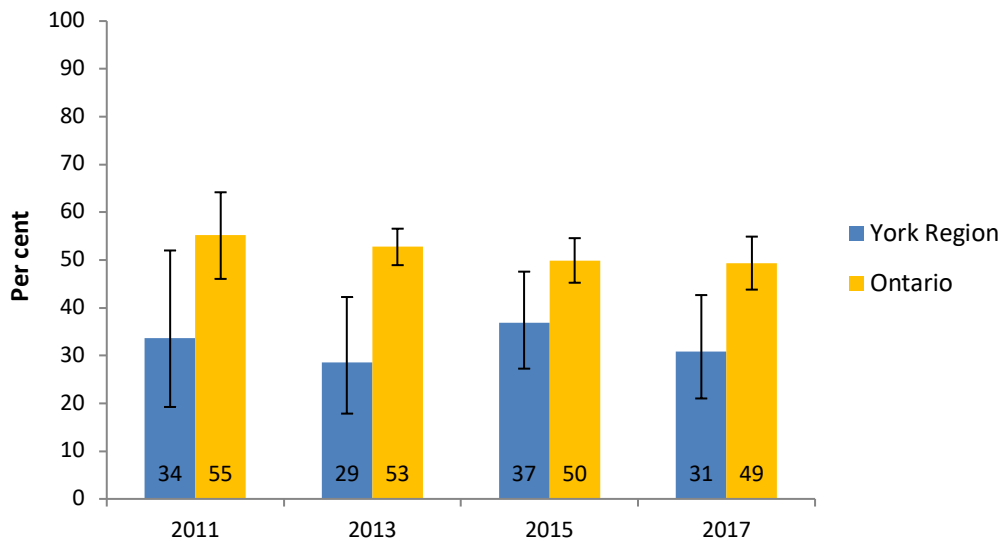


Figure 4: Both parents born in Canada



Family socio-economic status

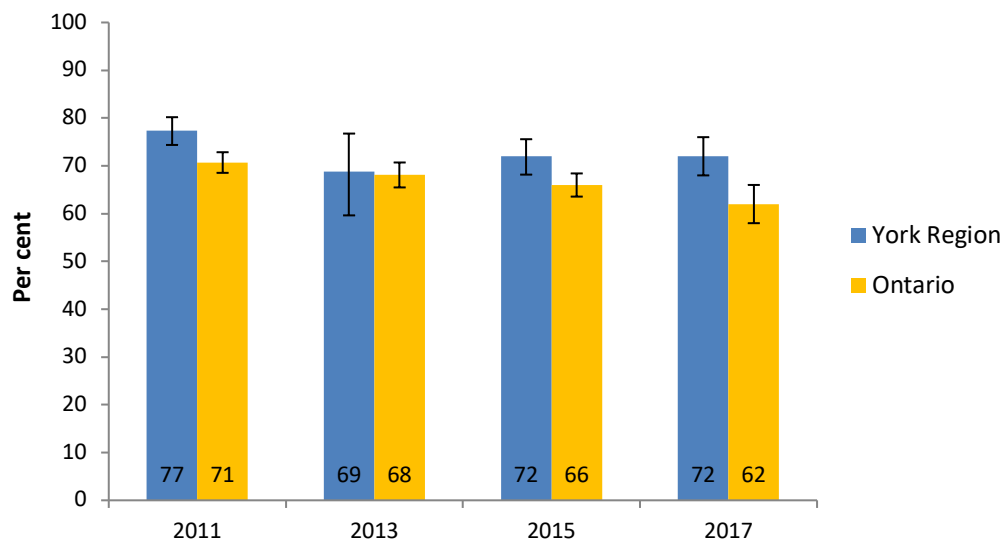
Starting in 2011, OSDUHS introduced a subjective measure of family socio-economic status (SES). Students were shown a ladder that was meant to represent Canadian society. They were asked to report where they thought their family belonged on a 10-step ladder based on their perception of their place in society. They were told that those at the top of the ladder are the “best off,” having the most money, most education and best jobs. Alternatively, those at the bottom of the ladder were the “worst off,” having little money, little education and no jobs or jobs that nobody wants. This family SES ladder was analyzed based on a median split defined as

high SES (where students ranked their family between seven and 10 on the ladder) and low SES (where students ranked their family between one and six on the ladder).

In 2017:

- Seventy-two (72) per cent of students reported high subjective socio-economic status as measured by the family SES ladder. This was higher than the Ontario percentage
- There were no significant differences in the percentage of students who reported high subjective socio-economic status by sex or grade

Figure 5: High subjective family socio-economic status

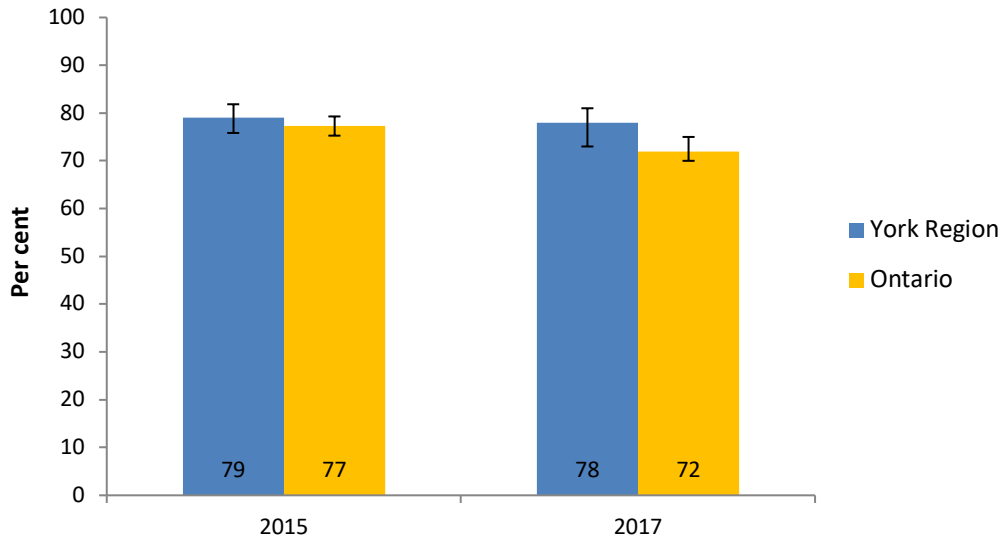


Students were asked about the frequency of going to school or to bed hungry because there was not enough food at home. The response options were 'always', 'often', 'sometimes' or 'never'.

In 2017:

- Seventy-eight (78) per cent of students reported that they never go to school or bed hungry
- There were no significant differences in the percentage of students who reported never going to school or bed hungry by sex
- There were no significant differences in the percentage of students who reported never going to school or bed hungry between York Region and Ontario
- Unfortunately, six per cent of students reported always or often going to school or to bed hungry, similar to the Ontario percentage

Figure 6: Never go to school or bed hungry



Gender Identity

Starting in 2017, OSDUHS introduced a measure of gender identity. Students were asked “How do you describe yourself?”. Response categories included “Male”, “Female”, “Transgender”, “None of the Above” and “Prefer not to answer”.

Of students who were born female, 98 per cent describe themselves as females. Of students who were born male, 99 per cent describe themselves as male.

Sexual Orientation or Physical Attraction

Students were also asked “Who are you physically attracted to?”. Response categories included “Males”, “Females”, “Both Males and Females”, “Not attracted to anyone” and “Prefer not to answer”.

Of students who were born female, 85 per cent are attracted to males, 10 per cent are attracted to both males and females and 2 per cent prefer not to answer. Of students who were born male, 91 per cent are attracted to females, 3 per cent are attracted to males, 2 per cent are attracted to both males and females and 3 per cent prefer not to answer.

General health

In 2017:

- Ninety (90) per cent of students reported good, very good or excellent physical health
- Nine per cent of students reported ever having a traumatic brain injury
- Eleven per cent of students reported having a mild head injury in the last 12 months

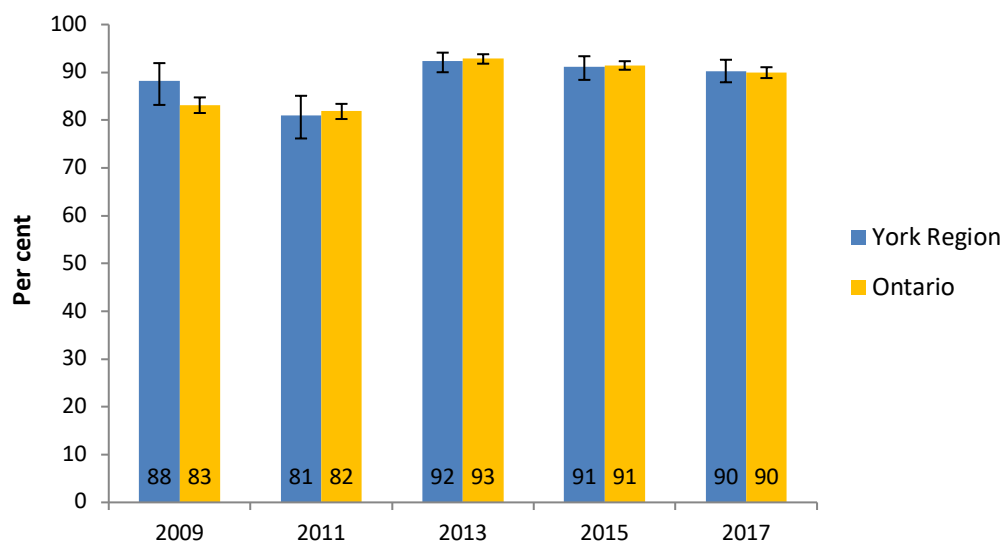
Self-rated physical health

Students were asked to rate their overall physical health. The response options were 'excellent', 'very good', 'good', 'fair' and 'poor'.

In 2017:

- Ninety (90) per cent of York Region students reported good, very good or excellent physical health, the same as the Ontario percentage
- There were no significant differences in the percentage of students who reported good, very good or excellent physical health by sex
- Students in grades 9 to 11 combined were more likely to report good, very good or excellent physical health than grade 12 students (92 per cent and 86 per cent respectively*)
- Students with high subjective family SES were more likely to report good, very good or excellent physical health than students with low family SES (92 per cent and 85 per cent respectively*)

Figure 7: Good, very good or excellent self-rated physical health



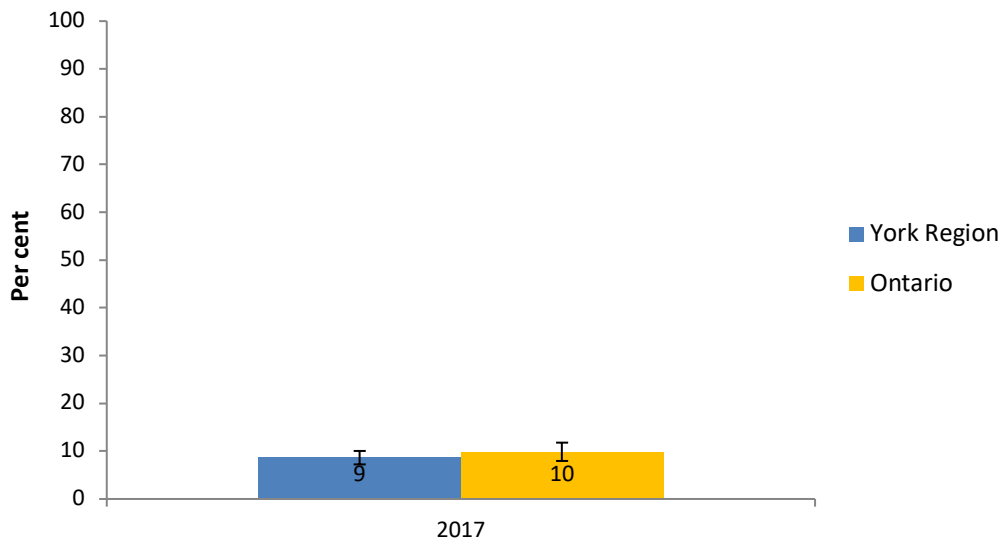
Head injuries

Head injuries can be described as damage to any of the structures of the head as a result of trauma. Students were asked about any head injuries that were serious enough to cause at least five minutes of unconsciousness or a stay in hospital for at least one night, also referred to as traumatic brain injuries.

In 2017:

- Nine per cent of students reported ever having a traumatic brain injury (6 per cent of females and 11 per cent of males*)
- There was no significant differences in the percentage of students who reported ever having a traumatic brain injury by grade or by family SES
- There were no significant differences in the percentage of students who reported ever having a traumatic brain injury between York Region and Ontario

Figure 8: Had a traumatic brain injury in lifetime

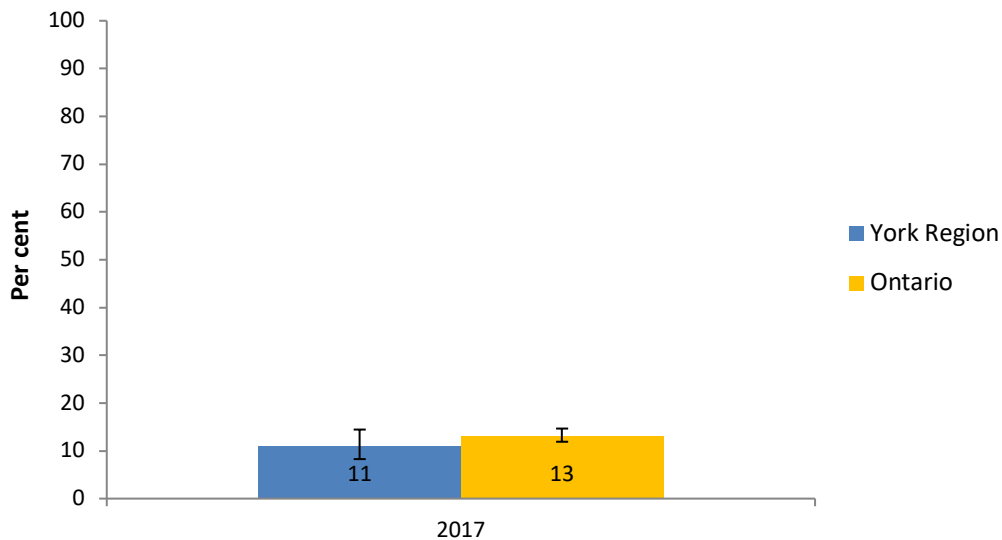


Students were also asked about any head injuries that they may have had in the last 12 months which resulted in a headache, dizziness, blurred vision, vomiting, feeling confused or “dazed”, or problems remembering. If they had a mild head injury in the last 12 months, students were asked what was the cause and to choose only one answer. Response categories included “Car/truck/motor cycle accident”, “Other motor vehicle accident (such as snowmobile, ATV, tractor)”, “Bicycle accident”, “Playing hockey”, “Playing soccer”, “Playing another team sport (such as football, rugby, basketball)”, “Other sports injury (such as skate boarding, skiing, snowboarding)”, “Fell down by accident”, “Was in a fight with someone”, “Bullied (pushed) by someone”, “Someone threw an object at me on purpose (such as a rock, phone)” and “An object hit me by accident”.

In 2017:

- Eleven per cent of students reported having a mild head injury in the last 12 months
- About eighteen per cent of 9th graders had a mild head injury in the last 12 months and the prevalence decreases significantly with grade, reaching seven per cent among 12th graders
- There were no significant differences in the percentage of students who reported having a mild head injury between York Region and Ontario
- Of students who had a mild head injury in the last 12 months, the most frequently reported causes included playing another team sport (20 per cent), an object hit me by accident (11 per cent), playing soccer (9 per cent), other sports injury (8 per cent) and fell down by accident (7 per cent)

Figure 9: Had a mild head injury in the last 12 months



Lifestyle factors

In 2017:

- Thirteen per cent of students ate fruits and vegetables five times or more a day, no change from 2015
- Nine per cent of students drank sugar sweetened beverages once a day or more
- Twenty-four (24) per cent of students reported being overweight or obese
- Sixty per cent of students were satisfied with their weight
- Thirteen per cent of students reported drinking a high caffeine energy drink at least one time in the last seven days
- Fifty-six (56) per cent of students reported drinking coffee or coffee drinks at least one time in the last seven days
- Sixteen per cent of students met the *Canadian Physical Activity Guidelines for Youth* of at least 60 minutes of vigorous physical activity every day
- Twenty-nine (29) per cent of students reported two hours or less of screen time a day, slight decrease from 2015
- Twenty-four (24) per cent of students reported eight hours or more of sleep on school nights

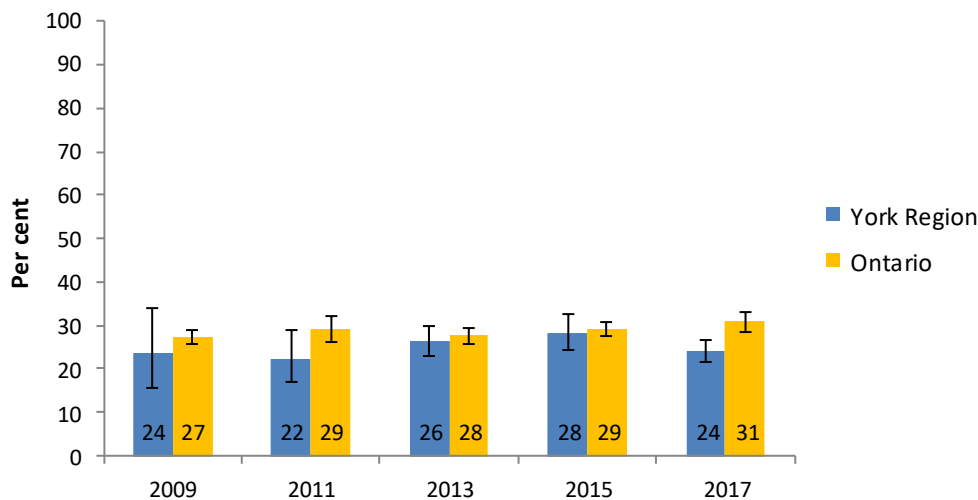
Body weight

Excess body weight has been found to have a negative impact on adolescent self-esteem, social and cognitive development and is associated with the risk of developing co-morbidities.¹ Body Mass Index (BMI) is a commonly used indicator to measure body fat composition. Students were asked to report their current height and weight. From these responses, BMI was calculated as weight in kilograms divided by height in meters squared. Definitions for overweight and obesity in children and youth have been identified in updated World Health Organization growth charts adapted for Canada.²

In 2017:

- Twenty-four (24) per cent of students were reported to be overweight or obese (18 per cent of females and 30 per cent of males*)
- There were no significant differences in the percentage of students who were overweight or obese by grade or by family SES
- The percentage of York Region students who were overweight or obese was significantly lower than the Ontario percentage

Figure 10: Overweight or obese



- In terms of body image, six-in-ten (60 per cent) of students were satisfied with their weight in 2017. About a quarter (25 per cent) think they are too fat and about one-in-seven (15 per cent) think they are too thin
- Males are more likely than females to believe they are too thin (25 per cent and 4 per cent, respectively*)
- Thirty-two (32) per cent of students are not trying to alter their weight. Another 28 per cent are trying to lose weight, 23 per cent are trying to keep from gaining weight and 17 per cent are trying to gain weight
- Of students who were overweight or obese based on their reported BMI, 30 per cent were satisfied with their weight and 68 per cent think they are too fat

Healthy eating and drinks

In 2017:

- Thirteen (13) per cent of students ate fruits and vegetables five times or more a day
- Forty-six (46) per cent of students reported eating fruits and vegetables two times a day or less, while another 26 per cent reported consumption three times a day and 14 per cent reported eating fruits and vegetables four times a day
- There were no significant differences in the percentage of students who reported eating fruits and vegetables five or more times a day by sex or grade or by family SES
- There were no significant differences in the percentage of students who reported eating fruits and vegetables five or more times a day between York Region and Ontario

Figure 11: Ate fruits and vegetables five or more times per day

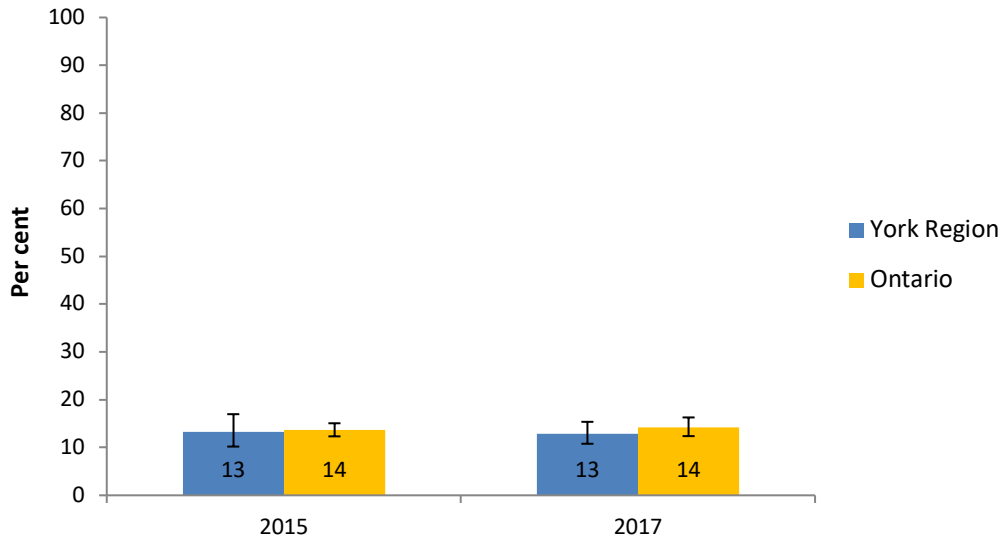
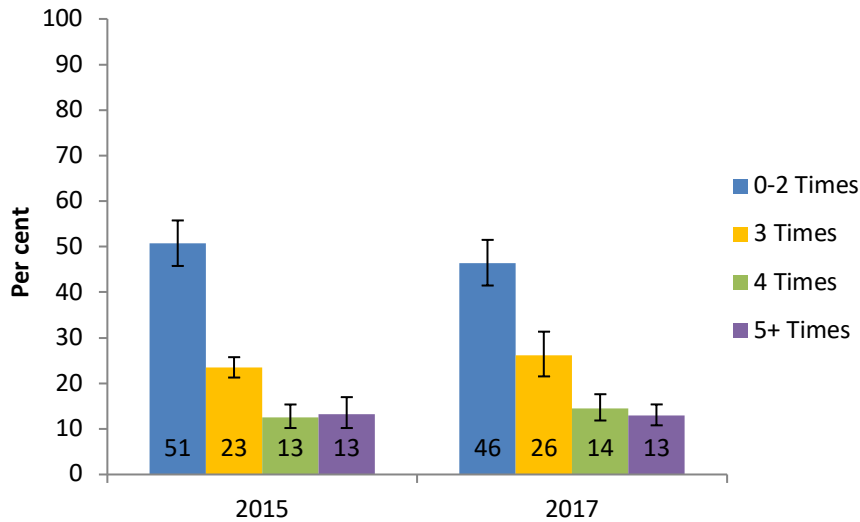


Figure 12: Frequency of eating fruits and vegetables



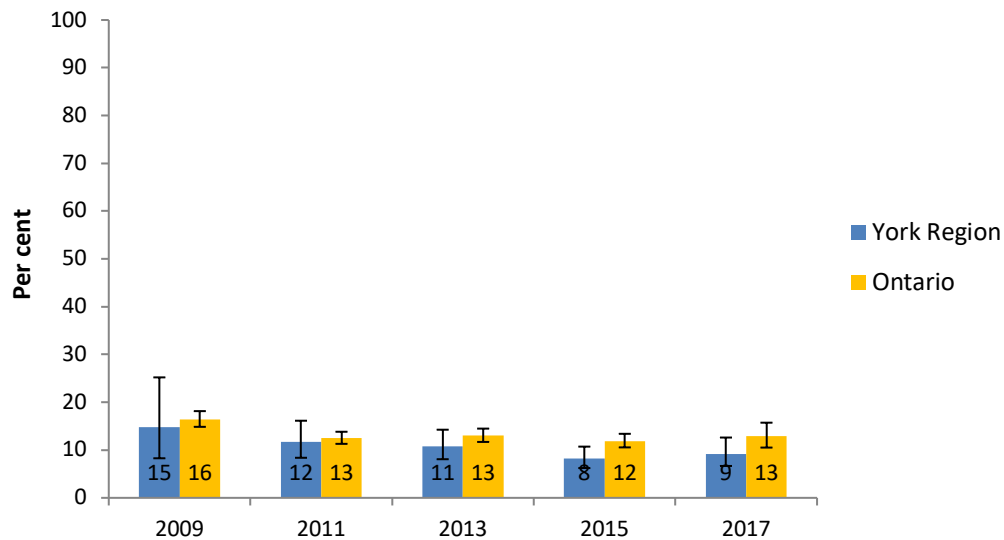
Students were asked how often they drank sugar sweetened pop, sport drinks, fruit cocktails or lemonades, or pre-sweetened tea or coffee in the last seven days.

In 2017:

- Nine per cent of students drank sugar sweetened beverages once a day or more, similar to 2015
- There were no significant differences in the percentage of students who reported drinking sugar sweetened beverages once a day or more by sex or grade

- There were no significant differences in the percentage of students who reported drinking sugar sweetened beverages once a day or more between York Region and Ontario
- Students with low family SES were significantly more likely than students with high family SES to drink sugar sweetened beverages once a day or more (15 per cent and 7 per cent, respectively)

Figure 13: Drank sugar sweetened beverages once a day or more



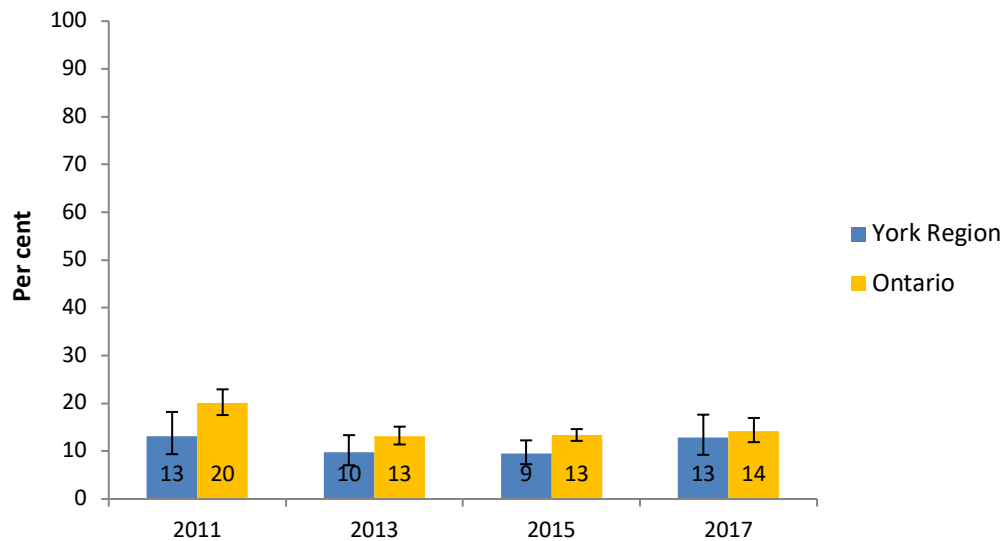
Energy drinks are beverages with high levels of caffeine and sometimes other stimulants. These drinks claim to give the consumer more energy than a typical soft drink.³ Frequently containing unregulated amounts of caffeine, these energy drinks have been reported to be associated with harmful effects, especially in children, adolescents, young adults and those who are taking certain medications.^{4,5} Effects include seizures, cardiac abnormalities, or mood and behavioural disorders. Students were asked about how often they drank high-energy caffeine drinks, such as Red Bull, Rockstar, Amp, Full Throttle, or Monster in the last seven days.

In 2017:

- Thirteen per cent of students reported drinking a high-energy caffeine drink at least one time in the last seven days (7 per cent of females and 19 per cent of males*), up from 9 per cent in 2015
- There were no significant differences in the percentage of students who reported drinking a high caffeine energy drink at least one time in the last seven days by grade or by family SES

- There were no significant differences in the percentage of students who reported drinking a high caffeine energy drink at least one time in the last seven days between York Region and Ontario
- Almost one-in-four (36 per cent) students drank high caffeine energy drinks in the past year

Figure 14: Drank a high caffeine energy drink at least one time in last seven days

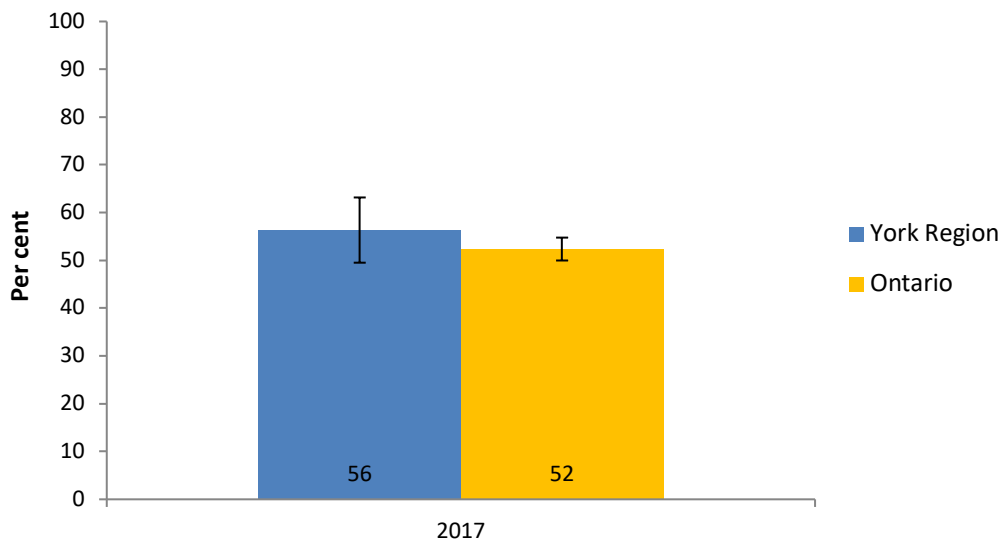


Students were also asked about how often they drink coffee or coffee drinks such as lattes or cappuccinos (hot or cold) which contain caffeine.

In 2017:

- Fifty-six per cent of students reported drinking coffee or coffee drinks in the last seven days (45 per cent of 9th graders and 64 per cent of 12th graders)
- There were no significant differences in the percentage of students who reported drinking coffee or coffee drinks in the last seven days by sex or by family SES
- There were no significant differences in the percentage of students who reported drinking coffee or coffee drinks in the last seven days between York Region and Ontario

Figure 15: Drank a coffee or coffee drink at least one time in last seven days



Physical activity

Research suggests levels of physical activity may affect academic performance in math and reading. Physical education may also have a positive impact on student academic achievement.⁶ Other studies suggest that youth with at least 60 minutes per day of moderate to vigorous physical activity are at less risk of having excess body fat, or being overweight or obese.⁷ Students were asked to report any kind of physical activity that increased their heart rate and made them breathe hard some of the time for a total of at least 60 minutes each day in the last seven days before the survey.

In 2017:

- Sixteen (16) per cent of students met the *Canadian Physical Activity Guidelines for Youth* of at least 60 minutes of moderate or vigorous physical activity every day (11 per cent of females and 21 per cent of males)⁸, decreasing significantly since 2009
- Daily physical activity that met the Guidelines significantly decreased between Grade 9 (26 per cent) and Grade 12 (8 per cent)
- Daily physical activity among Grade 12 students was markedly lower than the percentage reported by students back in 2009 (24 per cent)
- There were no significant differences in the percentage of students who reported at least 60 minutes of moderate or vigorous physical activity every day between York Region and Ontario

Figure 16: At least 60 minutes of moderate to vigorous physical activity every day

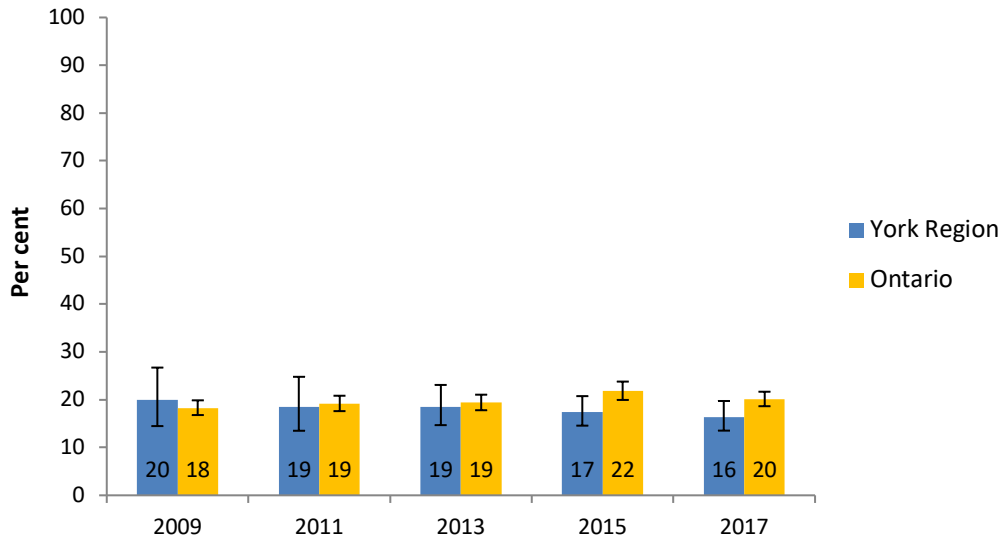
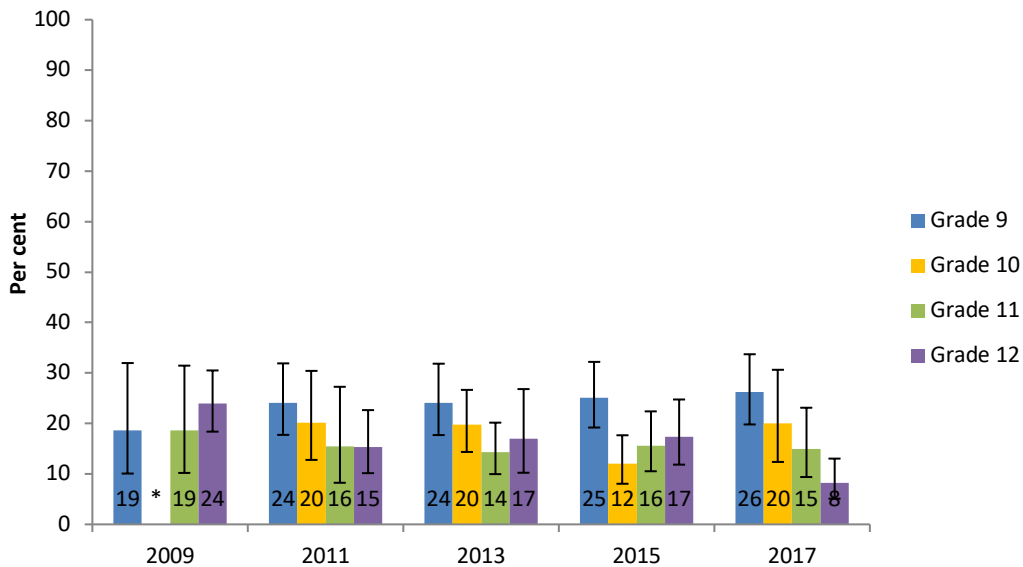


Figure 17: At least 60 minutes of moderate to vigorous physical activity every day by grade



*Percentage does not meet release standards

In 2017:

- Thirty-three per cent of students were physically active in physical education class for 20 minutes on at least one school day in the past five school days
- The percentage of students who were physically active in physical education class at on least one school day in the past five school days significantly decreased between Grade 9 (51 per cent) and Grade 12 (19 per cent)

- There were no significant differences in the percentage of students who were physically active in physical education class on at least one school day in the past five school days between York Region and Ontario

Students were asked about frequency of being physically active outside after school playing games or sports in the past five school days.

In 2017:

- Thirteen per cent of students were physically active outside after school in the past five school days (8 per cent of females and 18 per cent of males*)
- Daily physical activity outside after school significantly decreased between Grade 9 (20 per cent) and Grade 12 (8 per cent)
- The daily physical activity outside after school percentage (13 per cent) was significantly lower than the Ontario percentage (18 per cent)

Students were also asked about how they usually travelled to school.

In 2017:

- Seventeen per cent of students were reported that they usually walk school
- The percentage of students who usually walk to school significantly decreased between Grade 9 (25 per cent) and Grade 12 (14 per cent)
- There were no significant differences in the percentage of students who usually walk to school between York Region and Ontario
- About one percent of students usually bicycled to school
- Most students usually travelled to school by car either as a passenger (48 per cent) or driver (7 per cent)

Screen Time

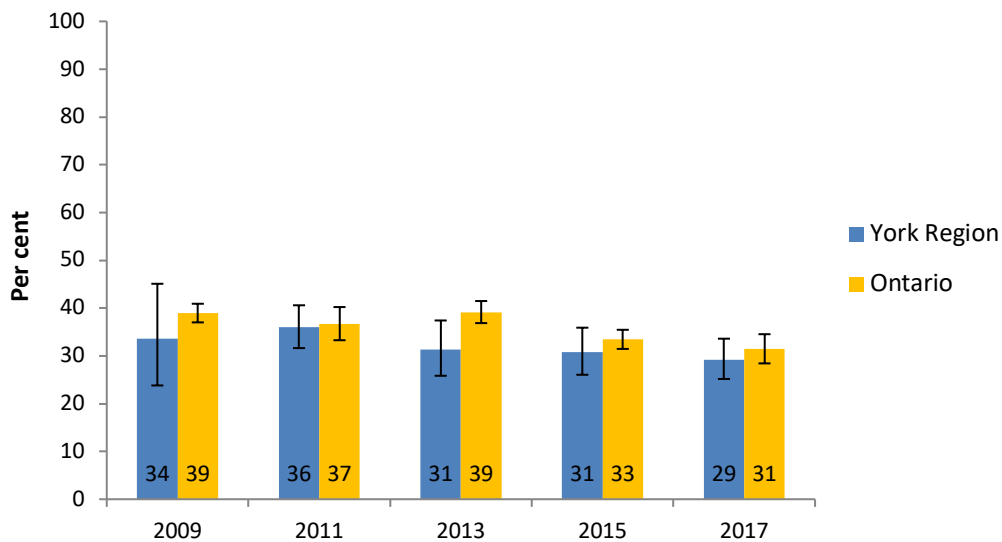
Increased screen time is related to greater psychological difficulties regardless of age, gender and physical activity levels. It has been suggested that children and youth who spend more than two hours per day in front of a television or computer are at higher risk of related health issues.⁹ Students were asked about how many hours a day they spent watching TV/movies, playing video/computer games, chatting on a computer/tablet, emailing or surfing the Internet in their free time. The *Canadian 24-Hour Movement Guidelines for Children and Youth*, introduced in 2016, address all movement behaviours that occur over a whole day (light, moderate, and vigorous physical activity, sedentary behaviour and sleep).¹⁰ For optimal health, according to the *Canadian 24-Hour Movement Guidelines for Children and Youth*, a healthy 24 hours includes eight to 10 hours of sleep per night for 14 to 17 year olds, and no more than two

hours per day of recreational screen time, as well as 60 minutes per day of moderate to vigorous physical activity, several hours of a variety of structured and unstructured light physical activities and limited sitting for extended periods.¹⁰

In 2017:

- Twenty-nine (29) per cent of students reported two hours or less recreational screen time a day (26 per cent of females and 32 per cent of males*)
- There were no significant differences in the percentage of students who reported two hours or more of screen time a day by grade
- There were no significant differences in the percentage of students who reported two hours or more of screen time a day between York Region and Ontario

Figure 18: Two hours or less recreational screen time a day



Students were asked how many hours of sleep they got on an average school night.

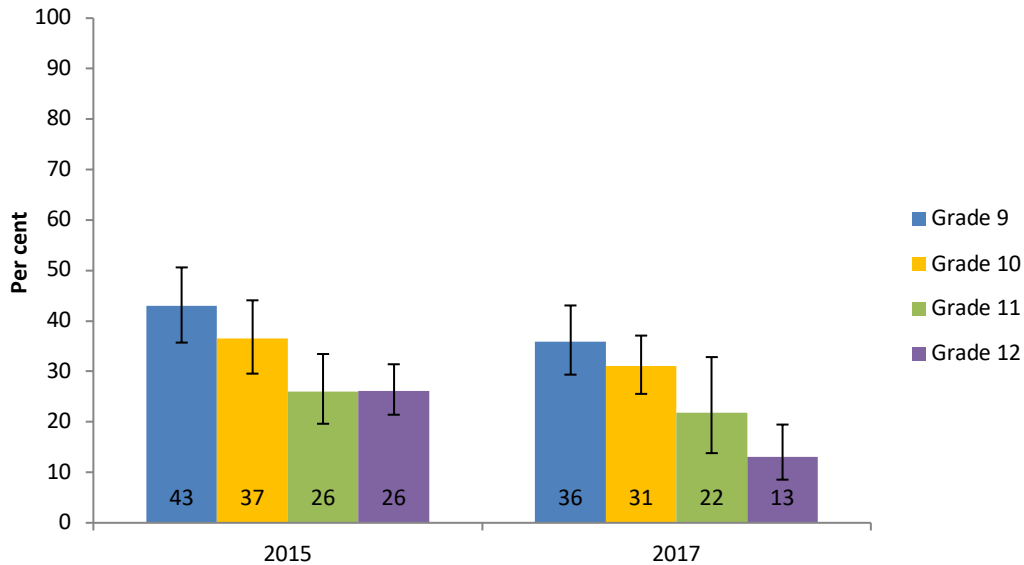
In 2017:

- Twenty-four (24) per cent students reported eight hours or more of sleep on school nights, a statistically significant decrease from thirty-two (32) per cent in 2015
- There were no significant differences in the percentage of students who reported eight hours or more hours of sleep a day by sex
- The percentage of students who reported daily hours of sleep that would meet the new *Canadian 24-Hour Movement Guidelines for Children and Youth* significantly decreased

by grade from 36 per cent of Grade 9 students to 13 per cent of Grade 12 students. Some possible reasons for adolescents not getting enough sleep on school nights include increased Internet, video gaming and social media use, homework, sport and part-time work¹¹

- There were no significant differences in the percentage of students who reported eight hours or more hours of sleep a day between York Region and Ontario

Figure 19: Eight hours or more of sleep on school nights by grade

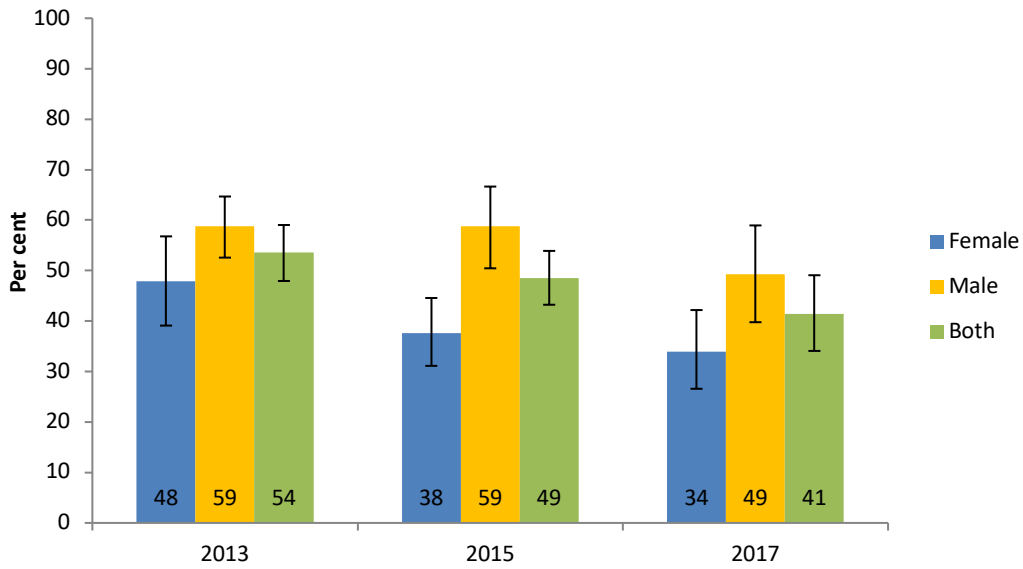


Students were asked about how many hours a day they usually spend on social media websites.

In 2017:

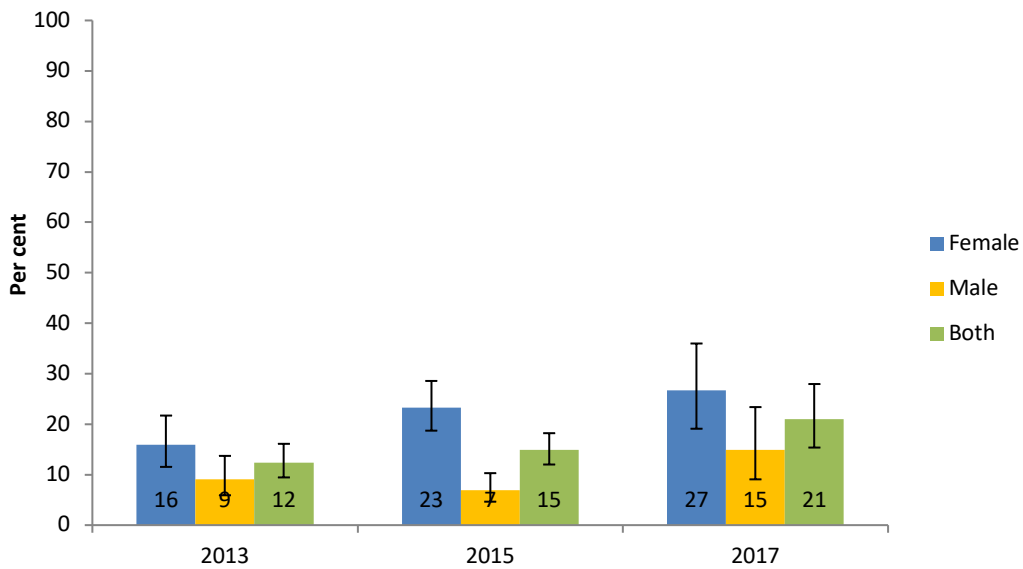
- Ninety-three (93) per cent of students reported that they visit social media sites daily
- About four-in-ten (41 per cent) students reported two hours or less of social media use a day (34 per cent of females and 49 of males*)
- There were no significant differences in the percentage of students who reported two hours or more of social media use a day by grade
- There were no significant differences in the percentage of students who reported two hours or more of social media use a day between York Region and Ontario

Figure 20: Two hours or less of social media use per day by sex



- Regarding heavy use, more than one-in-five (21 per cent) students reported five hours or more of social media use a day
- Females were more likely than males to report five hours or more of social media use a day (27 per cent and 15 per cent, respectively*), steady increase since 2013

Figure 21: Five hours or more of social media use per day by sex



Risky behaviours and substance use

In 2017:

- Fifty (50) per cent of students reported drinking alcohol in the last 12 months
- Twenty-three (23) per cent of students reported first drinking alcohol in Grade 8 or before
- Sixteen (16) per cent of students reported drinking enough alcohol to feel drunk at least once in the past four weeks
- Eight (8) per cent of students reported smoking cigarettes in the last 12 months
- Ten (10) per cent of students reported using a water pipe in the last 12 months
- Eleven (11) per cent of students reported using electronic cigarettes in the last 12 months
- Twenty-two (22) per cent of students reported using cannabis in the last 12 months
- Ten (10) per cent of students reported prescription pain reliever use for non-medical reasons in the past 12 months

Alcohol

Studies suggest that alcohol consumption during adolescence may adversely affect brain development and maturation, which may lead to brain damage, structural alterations and cognitive defects.¹² Other studies have found that early initiation of alcohol consumption affects important developmental processes, potentially leading to heavier and more frequent drinking and impacts healthy functioning in later life.¹³ Students were asked when (if ever) they first drank more than just a few sips of alcohol.

In 2017:

- Fifty per cent of students reported drinking alcohol in the last 12 months
- There were no significant differences in the percentage of students who reported drinking alcohol in the last 12 months by sex
- The percentage of students who used alcohol in the last 12 months significantly increased by grade, from 28 per cent of Grade 9 students to 64 per cent Grade 12 students
- There were no significant differences in the percentage of students who reported drinking alcohol in the last 12 months between York Region and Ontario

Figure 22: Drank alcohol in the last 12 months

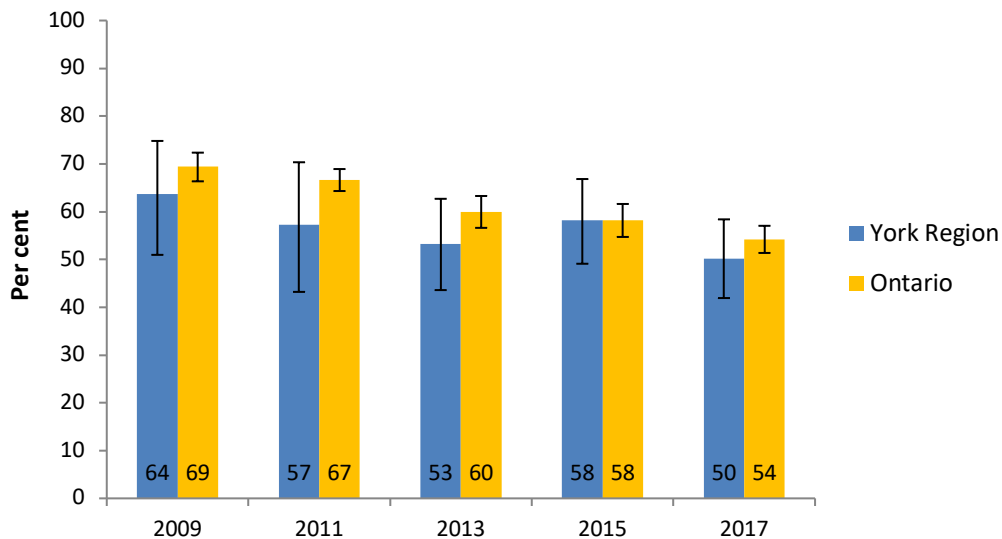
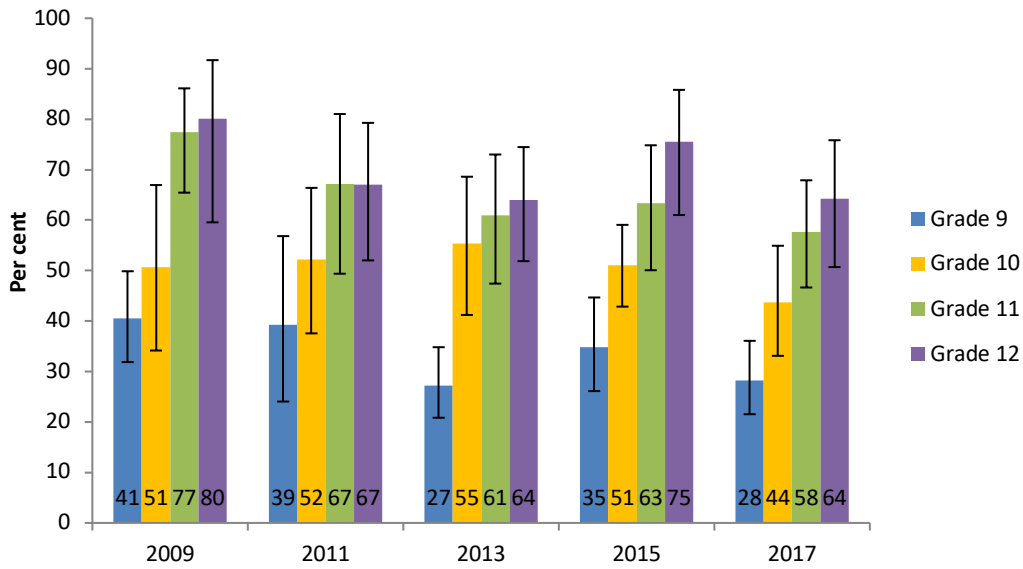


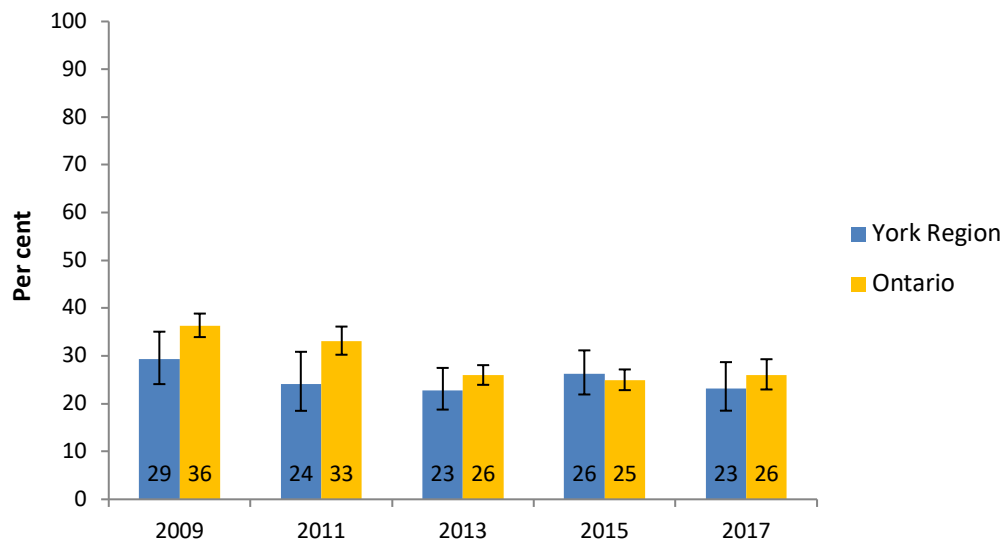
Figure 23: Drank alcohol in the last 12 months by grade



In 2017:

- Twenty-three (23) per cent of students reported first drinking alcohol in Grade 8 or before (18 per cent of females and 28 per cent of males*)
- There were no significant differences in the percentage of students who reported first drinking alcohol in Grade 8 or before between York Region and Ontario

Figure 24: First drink of alcohol in Grade 8 or before



In 2017:

- Sixteen (16) per cent of students reported drinking enough alcohol to feel drunk at least once in the past four weeks (13 per cent of females and 18 per cent of males*)
- The percentage of students who reported feeling drunk in the last four weeks significantly increased by grade, from five per cent of Grade 9 students to 20 per cent of Grade 12 students
- There were no significant differences in the percentage of students who reported being drunk in the last four weeks between York Region and Ontario
- There was a significant downward trend in the percentage of students who reported getting drunk in the last four weeks between 2009 and 2017

Students were asked about how easy or difficult they thought it would be for them to get alcohol if they wanted some. The response options included 'probably impossible', 'very difficult', 'fairly difficult', 'fairly easy' and 'very easy'. Over two-thirds of students thought what it was easy to get alcohol (31 per cent said 'fairly easy' and 36 per cent said 'very easy') and 12 per cent 'don't know'. Of students who drank alcohol in the last 12 months, the most frequently reported usual sources of alcohol included a family member gave it to me (43 per cent), a friend gave it to me (32 per cent), I gave someone else money to buy it (11 per cent) and I took it from home (6 per cent).

Figure 25: Drunk in the last four weeks

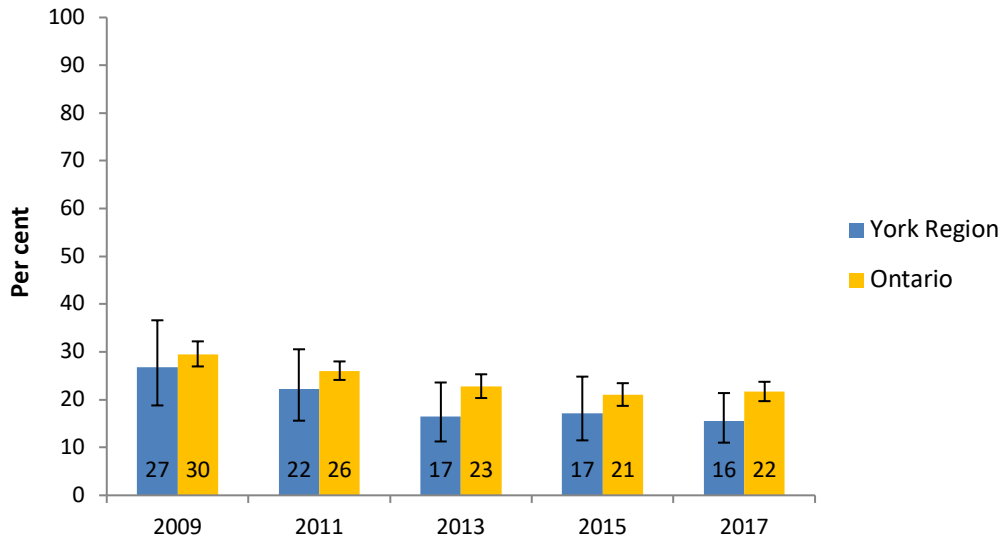
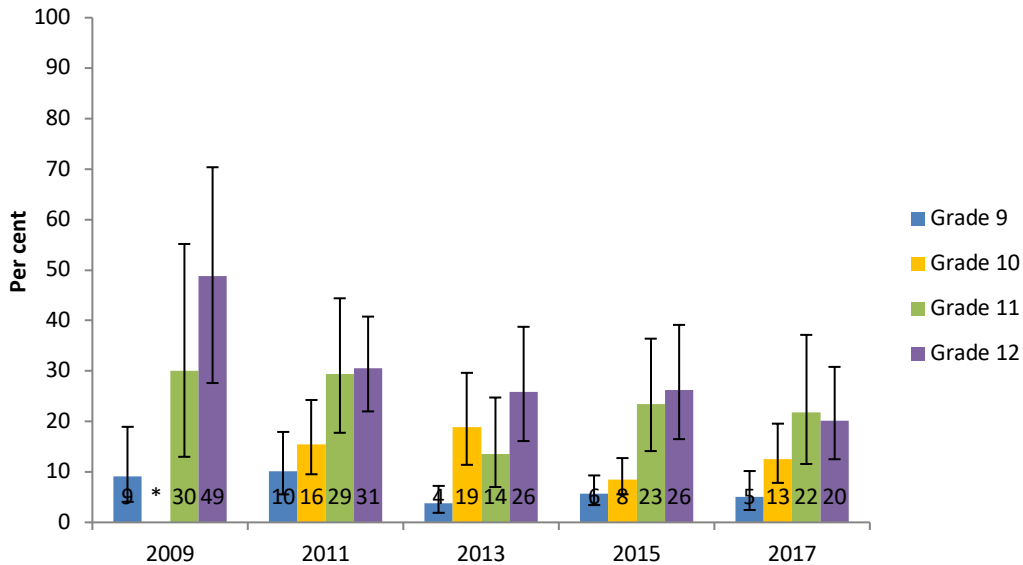


Figure 26: Drunk in the last four weeks by grade



* Percentage does not meet release standards

Tobacco and related products

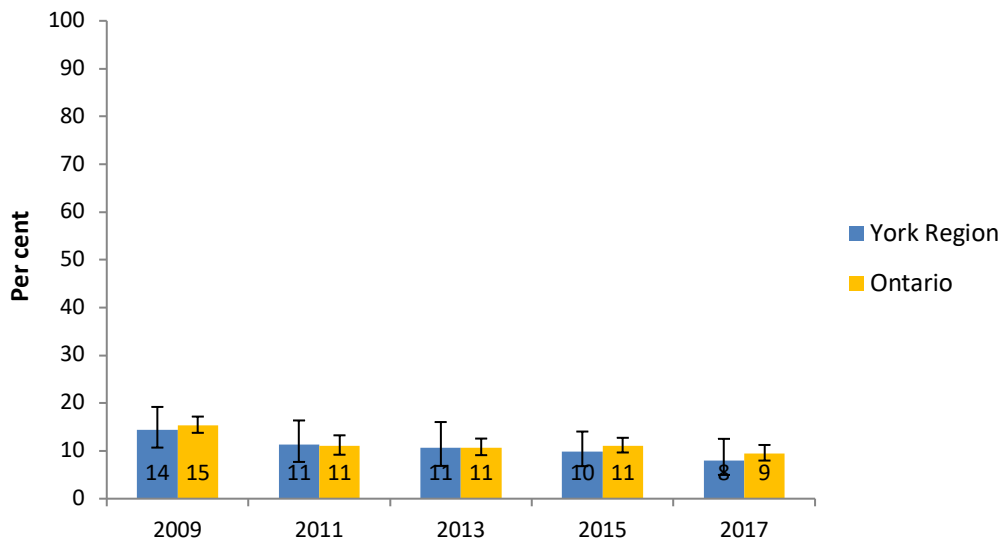
Smoking has been found to be significantly related to asthma and wheezing in teenagers.¹⁴ Symptoms of nicotine dependence can develop before adolescents start smoking daily, and teenage smokers can develop smoking-related diseases leading to premature death.¹³ Studies have shown that many teenage smokers would like to quit but have little knowledge about

quitting and/or lack the skills needed to quit.¹⁵ A higher perceived risk of harm from smoking is also associated with not starting to smoke.¹⁵

In 2017:

- Eight per cent of students reported smoking cigarettes in the last 12 months (4 per cent of females and 12 per cent of males*), steadily decreasing since 2009
- The percentage of students who reported smoking cigarettes in the last 12 months increased significantly with grade, from a combined three per cent of Grade 9 and 10 students to 14 per cent of students in Grade 12
- There were no significant differences in the percentage of students who reported smoking cigarettes in the last 12 months between York Region and Ontario
- In terms of risk perception, about seven-in-ten (67 per cent) students rate the risk of harm from smoking one or two cigarettes a day as either medium (35 per cent) or great (32 per cent)
- There were no significant differences in the percentage of students who believed the risk of harm from smoking daily was medium or great by sex or grade
- There were no significant differences in the percentage of students who believed the risk of harm from smoking daily was medium or great between York Region and Ontario
- In terms of smoke-free youth-rated movies, one-in-four (25 per cent) of students either somewhat agree (18 per cent) or strongly agree (7 per cent) that movies which show characters smoking cigarettes should be rated '18A'

Figure 27: Smoked cigarettes in the last 12 months



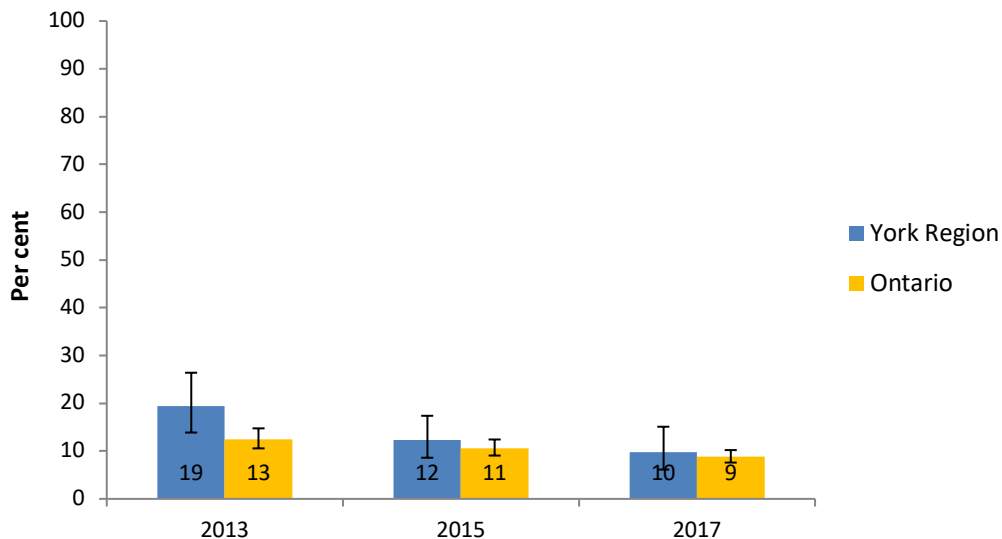
In 2017:

- The past year percentage estimate for smokeless (chewing) tobacco use among high school students, which was first tracked in 2011, is suppressed due to an extremely low value

In 2017:

- Ten per cent of students reported using a water pipe in the last 12 months
- There were no significant differences in the percentage of students who reported using a water pipe in the last 12 months by sex
- The percentage of students who reported using a water pipe in the last 12 months increased significantly with grade, from five per cent of Grade 9 and 10 students combined to 13 per cent of Grade 10 and 12 students combined
- There were no significant differences in the percentage of students who reported using a water pipe in the last 12 months between York Region and Ontario
- In comparison to water pipe use in the last 12 months, the percentage of students who reported using a water pipe in their lifetime was 18 per cent overall, and increased significantly by grade, from 11 per cent of Grade 9 students to 20 per cent of Grade 12 students

Figure 28: Used a water pipe or hookah in last 12 months

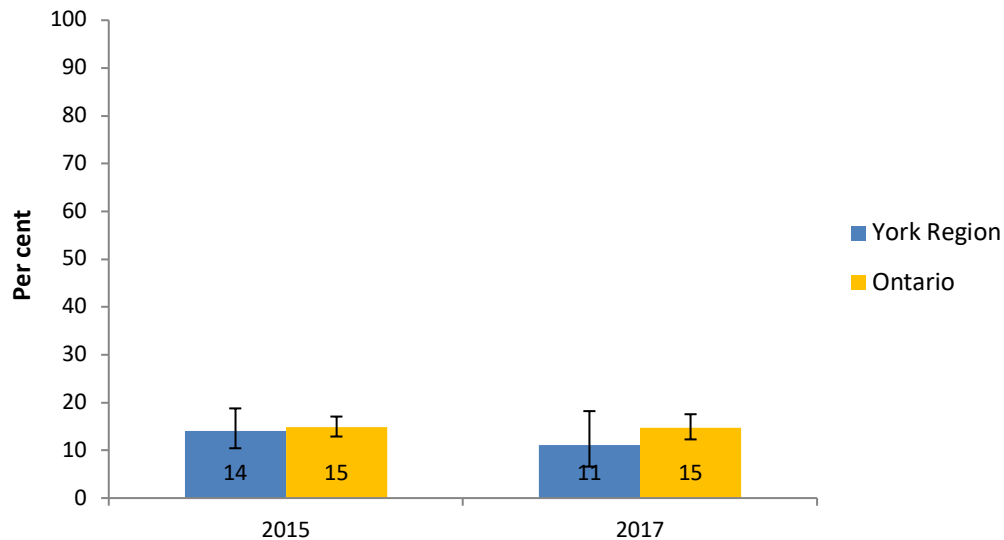


In 2017:

- Eleven (11) per cent of students reported using electronic cigarettes in the last 12 months—excluding few puffs (6 per cent of females and 15 per cent of males)

- There were no significant differences in the percentage of students who reported using electronic cigarettes in the last 12 months by grade
- There were no significant differences in the percentage of students who reported using electronic cigarettes in the last 12 months between York Region and Ontario

Figure 29: Used electronic cigarettes in last 12 months



Drug use

In 2017:

- Twenty-two (22) per cent of students reported using cannabis (also known as marijuana or “weed”) in the last 12 months
- There were no significant differences in the percentage of students who reported using cannabis in the last 12 months by sex
- The percentage of students who used cannabis in the last 12 months significantly increased by grade, from six per cent of Grade 9 students to 31 per cent of students in Grade 12
- There were no significant differences in the percentage of students who reported using cannabis in the last 12 months between York Region and Ontario
- Thirteen per cent of students reported using cannabis and alcohol on the same occasion at least once in the past 12 months
- Ten per cent of students in Grade 10 to Grade 12 with a G1, G2 or G driver’s licence reported driving a vehicle within an hour of using marijuana in the last 12 months

- Estimates for the percentage students who use crack in the past 12 months and the percentage who used crystal meth in the past 12 months were both suppressed due to unreliability

Figure 30: Smoked cannabis in the last 12 months

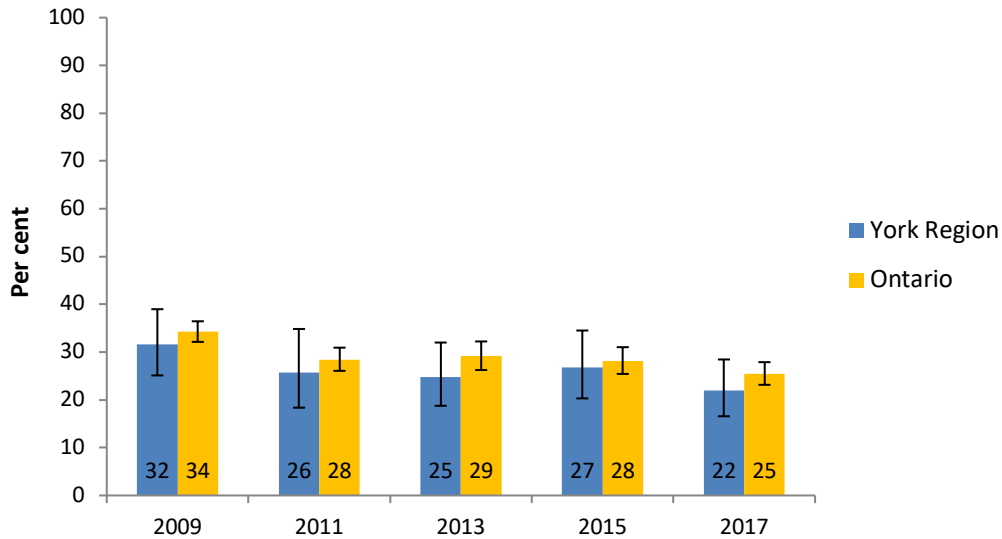
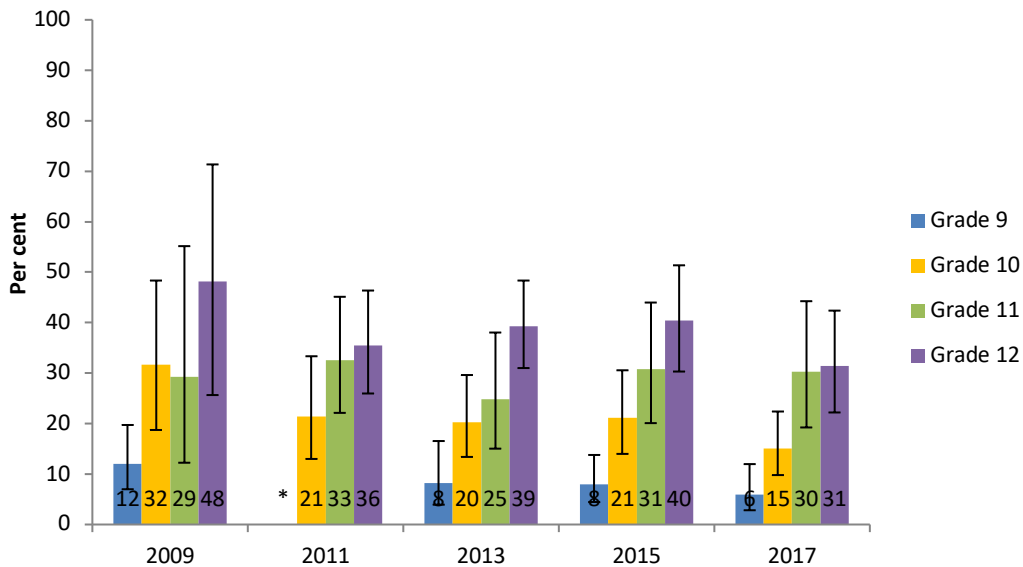


Figure 31: Smoked cannabis in the last 12 months by grade



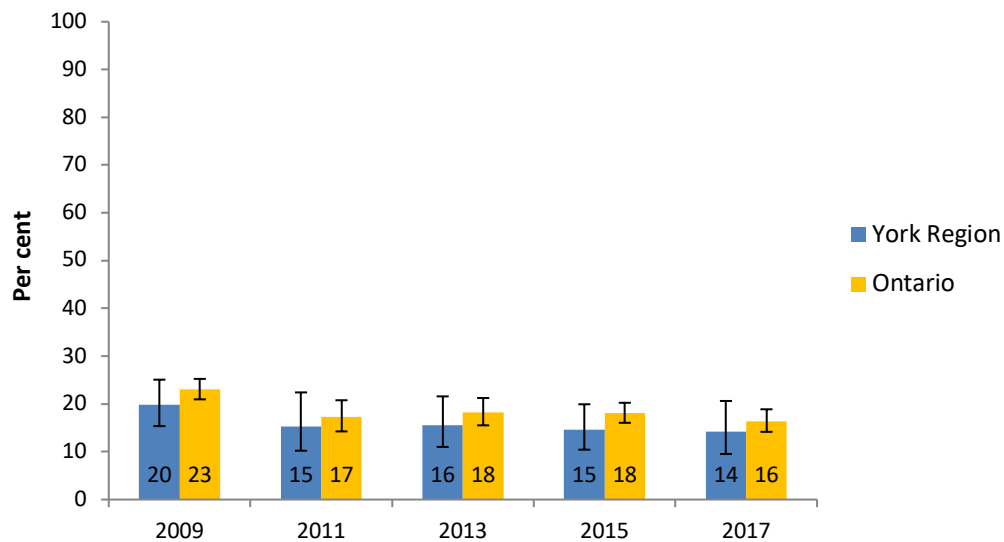
* Percentage does not meet release standards

In 2017:

- Fifteen (14) per cent of students reported using cannabis in the last four weeks (10 per cent of females and 18 per cent of males*)

- There were no significant differences in the percentage of students who reported using cannabis in the last four weeks between York Region and Ontario
- The percentage of students who used cannabis in the last four weeks significantly increased with grade, from seven per cent of Grade 9 and Grade 10 students combined to 22 per cent of Grade 12 students
- Two per cent of students who used cannabis smoked it daily or more in the last four weeks, the same as the Ontario percentage

Figure 32: Smoked cannabis in the last four weeks



In 2017:

- Five per cent of York Region students reported first using cannabis in Grade 8 or before, similar to the Ontario percentage
- Cannabis use in the last 12 months among students was 22 per cent, which was more common than the reported past year. Use of magic mushrooms (3 per cent), inhalants (3 per cent), tranquilizers (3 per cent), ecstasy (2 per cent) or cocaine (2 per cent) in the last 12 months was reported by students.

Prescription opioid pain reliever drug use for non-medical reasons

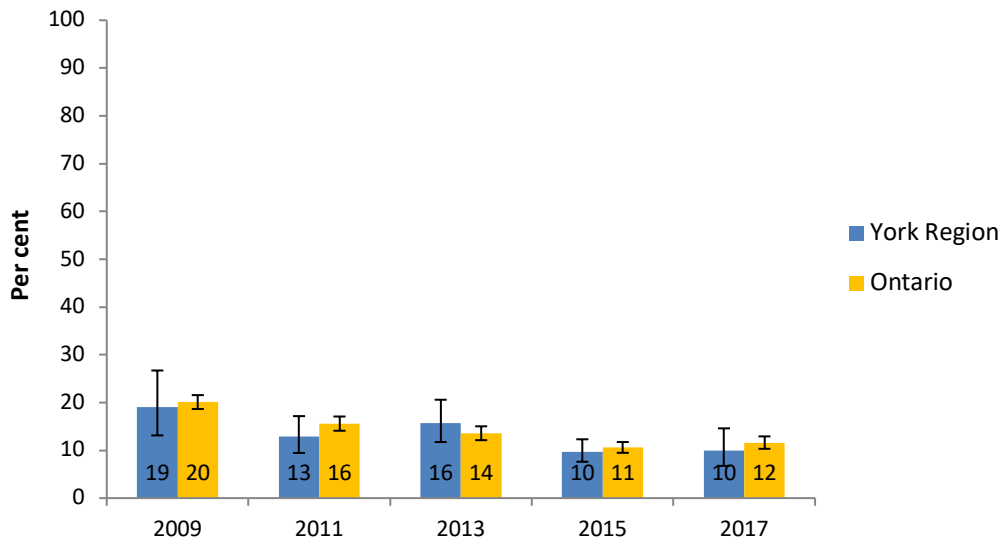
In certain populations, prescription medications are the most commonly misused drug among teenagers after cannabis. It has been suggested that this is due to the belief that medications are safe for the relief of pain or anxiety and help with concentration or to increase alertness in addition to getting high.¹⁶

Students were asked how often they used opioid pain relief pills without a prescription.

In 2017:

- Ten (10) per cent of York Region students reported prescription opioid pain reliever use for non-medical reasons in the past year
- There were no significant differences in the percentage of students who reported opioid prescription pain reliever use for non-medical reasons in the past year by sex or by grade
- There were no significant differences in the percentage of students who reported opioid prescription pain reliever use for non-medical reasons in the past year between York Region and Ontario
- Of students who used opioid pain relief pills without a prescription, the majority (58 per cent) said they usually got them from a parent or a brother/sister and about a quarter (26 per cent) don't remember who they got them from.

Figure 33: Prescription opioid pain reliever use for non-medical reasons in the past year



Mental health, resiliency and developmental assets

In 2017:

- Seventy-nine (79) per cent of students rated their mental or emotional health to be good, very good, or excellent
- Forty-nine (49) per cent students had a moderate to serious level of distress during the past four weeks, increasing from 36 per cent in 2015
- Thirty-eight (38) per cent of students reported that they did worked for pay outside the home during the school year
- Seventeen (17) per cent of students reported being a victim of some type of bullying at school
- Eight (8) per cent of students reported bullying others in some form at school
- Eighty-four (84) per cent of students reported that they like going to school to some degree, quite a lot, or very much
- Eighty-six (86) per cent of students reported that they feel close to people at school
- Sixty-four (64) per cent of students reported high perceived social status at school
- Thirteen (13) per cent of students reported that they seriously contemplated suicide in the last 12 months

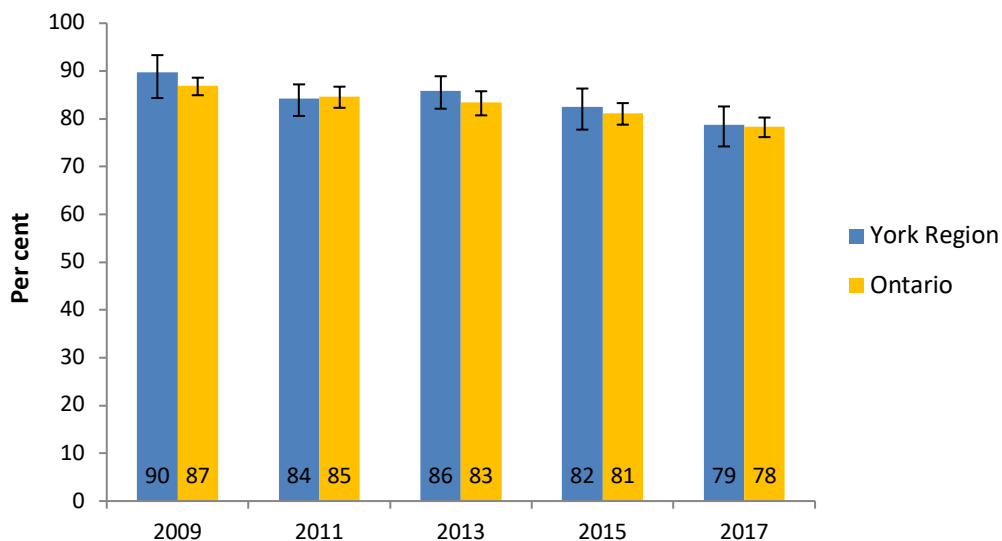
Self-rated mental health

Students were asked to rate their mental or emotional health. The response options included 'excellent', 'very good', 'good', 'fair' and 'poor'.

In 2017:

- Seventy-nine (79) per cent of students rated their mental or emotional health to be good, very good, or excellent (72 per cent of females and 86 per cent of males). This represents a significant decline since 2009.
- There were no significant differences in the percentage of students who rated their mental health as good, very good or excellent by grade
- There were no significant differences in the percentage of students who rated their mental health as good, very good or excellent between York Region and Ontario

Figure 34: Good, very good or excellent mental health



Positive identity

The set of internal developmental assets related to positive identity includes personal power (control over things), self-esteem, sense of purpose and positive view of personal future.¹⁷

Distress has been characterized by the following attributes: a perceived inability to cope effectively, change in emotion, discomfort, communication of discomfort and temporary or permanent harm to the individual as a result.¹⁸

Psychological distress was assessed using the Kessler 6-Item Psychological Distress Scale (K6).¹⁹

This tool measures unspecified psychological distress, defined as a state of emotional suffering

characterized by symptoms of depression and anxiety.²⁰ A score of eight or higher was used to indicate a moderate to serious level of distress experienced during the past four weeks.

In 2017:

- The percentage of students who experienced moderate to serious psychological distress increased significantly from 28 per cent in 2013 to 49 per cent in 2017
- Moderate to serious levels of distress was more common among female students (60 per cent) than male students (38 per cent)*
- There were no significant differences in the percentage of students who experienced moderate to serious distress by grade
- Students with low family SES were significantly more likely than students with high family SES to experience moderate to severe distress (67 per cent and 42 per cent, respectively)
- There were no significant differences in the percentage of students who experienced moderate to serious distress between York Region and Ontario
- Seventy-four (74) per cent of students agreed or strongly agreed with the statement, “On the whole, I am satisfied with myself.”
- Thirty-six (36) per cent of students always or usually talked to their parent(s) about problems or feelings (44 per cent of females and 29 per cent of males*)
- Students with low subjective family SES were less likely to talk to their parent(s) about problems than students with high family SES (29 per cent and 40 per cent, respectively*)

Figure 35: Experienced moderate to serious level of distress in past four weeks

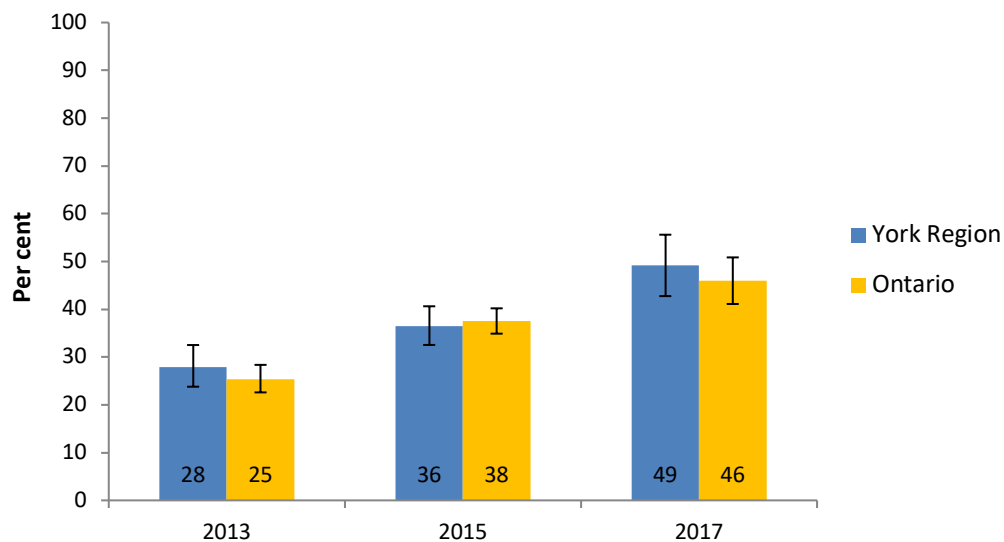


Figure 36: Experienced moderate to serious level of distress in past four weeks by sex

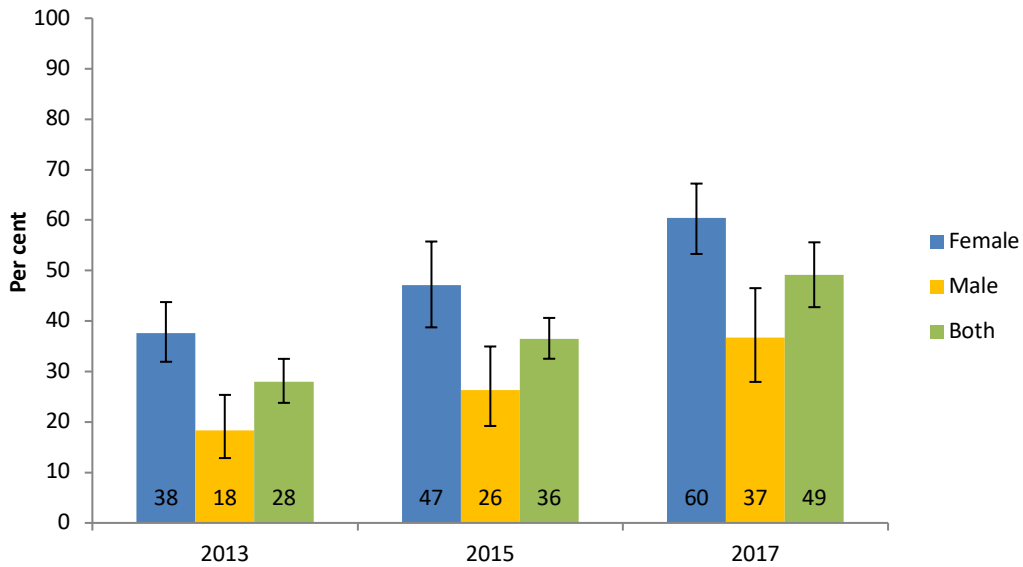
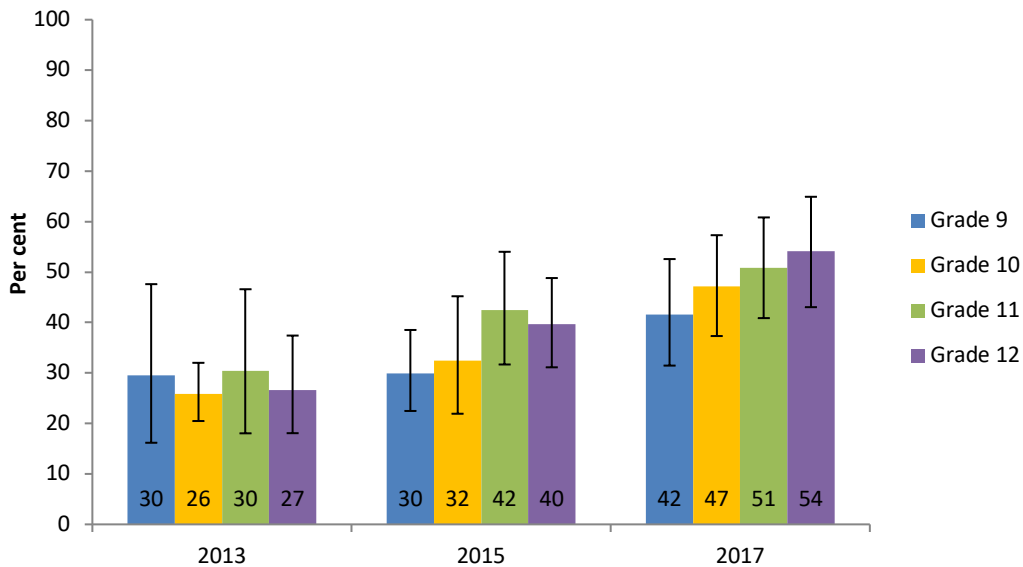


Figure 37: Experienced moderate to serious level of distress in past four weeks by grade



Seriously considered suicide

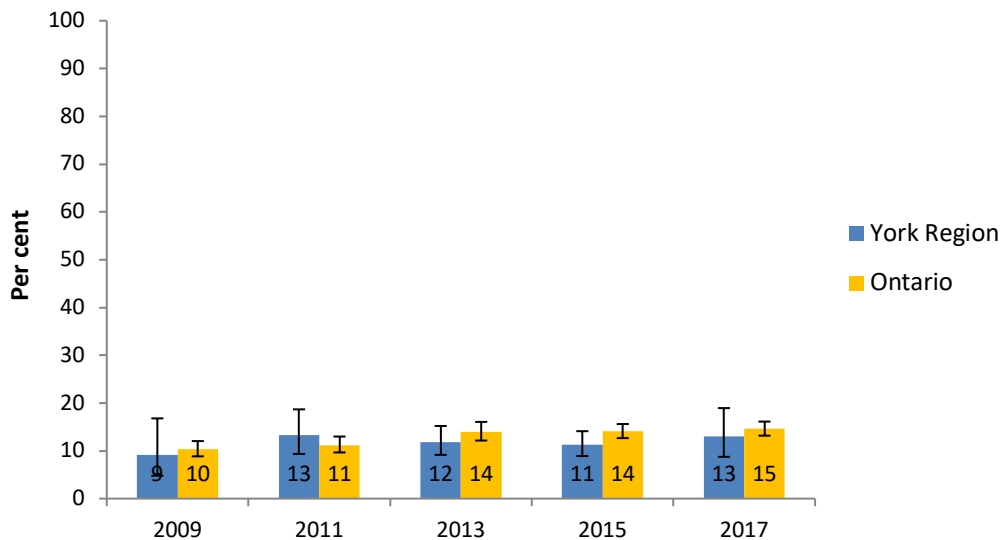
Students were asked if they ever seriously considered attempting suicide in the last 12 months.

In 2017:

- Thirteen (13) per cent of students reported that they seriously contemplated suicide in the last 12 months (16 per cent of females and 9 per cent of males*)

- There were no significant differences in the percentage of students who seriously contemplated suicide by grade
- There were no significant differences in the percentage of students who seriously contemplated suicide between York Region and Ontario
- Thirty-three per cent of students wanted to talk to someone about mental health problems in the last 12 months but didn't know where to turn (42 per cent of females and 24 per cent of males*)
- Three per cent of students phoned a telephone crisis helpline or gone to a website (such as "KidsHelpPhone.ca") because they needed to talk to a counsellor in the last 12 months

Figure 38: Seriously considered committing suicide in the last 12 months



Workforce participation

Adolescent employment is a complex issue that can have potential positive and negative effects for teens attempting to find an appropriate balance between school and work.²¹ Evidence from one American youth development survey suggests that work experience can promote the healthy development of some young people, especially when it is moderate in intensity and steady in duration, attributes that assure that employment does not interfere with other important elements in a teen's life. Participation in the paid workforce provides only a partial picture, as optimal career exploration and long-term benefits might also be realized through unpaid work experiences such as internships and volunteer jobs.

In 2017:

- Thirty-eight (38) per cent of students reported that they work for pay outside the home during the school year
- There were no significant differences in the percentage of students who reported that they work outside the home by sex
- The percentage of students who work outside the home increased by grade, from 18 per cent of Grade 9 students to 58 per cent of students in Grade 12*
- There were no significant differences in the percentage of students who reported that they work outside the home between York Region and Ontario
- Of the 38 per cent of students who indicated that they work for pay during the school year, 38 per cent reported working an average of 15 or fewer hours per week

Figure 39: Work for pay outside the home during the school year

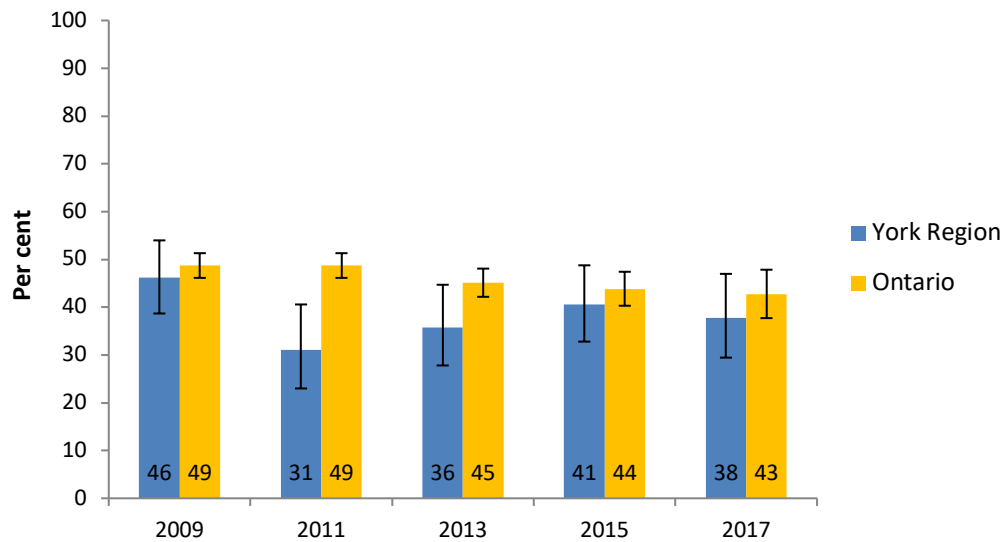
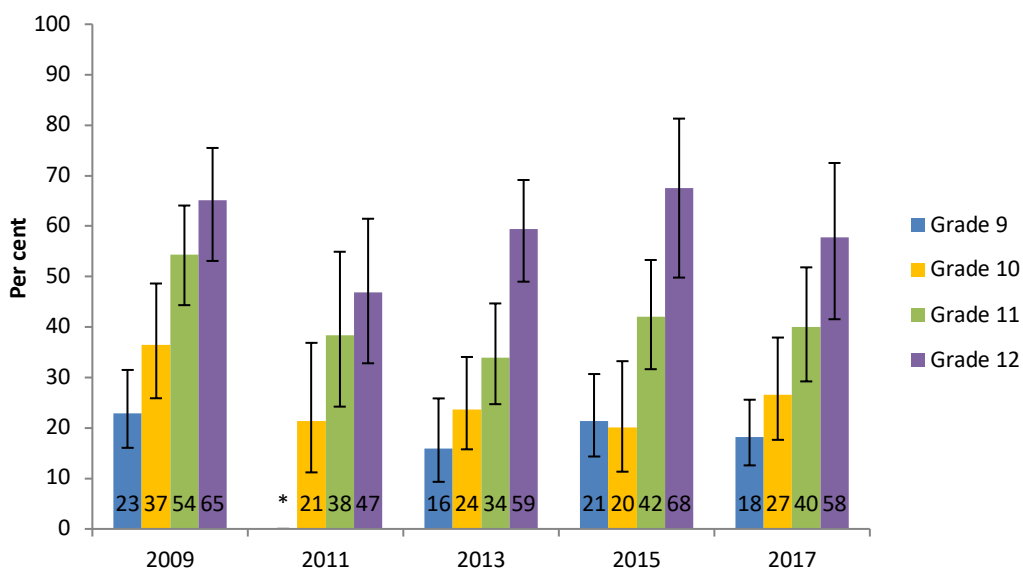


Figure 40: Work for pay outside the home during the school year by grade



*Percentage does not meet release standards

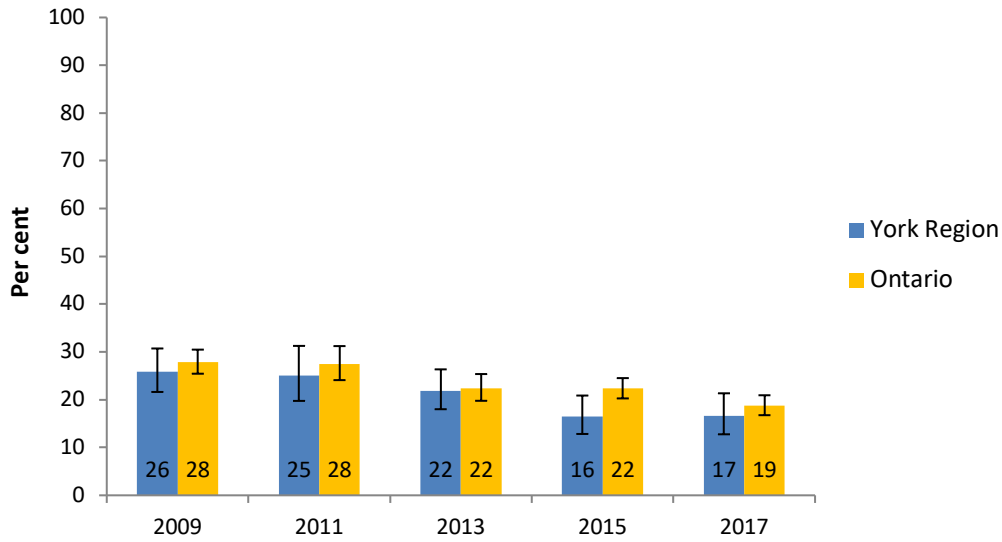
Bullying

Bullying is an aggressive and typically repeated behaviour intended to, or known to, cause harm, fear or distress, creating a negative environment at a school for another individual.²² In order to describe an aspect of school safety within a context of positive youth development, students were asked about the typical way they were bullied the most at school since September. The response options included 'not bullied', 'physical attacks', 'verbal attacks (teased, threatened, rumours)' and 'stole or damaged things'.

In 2017:

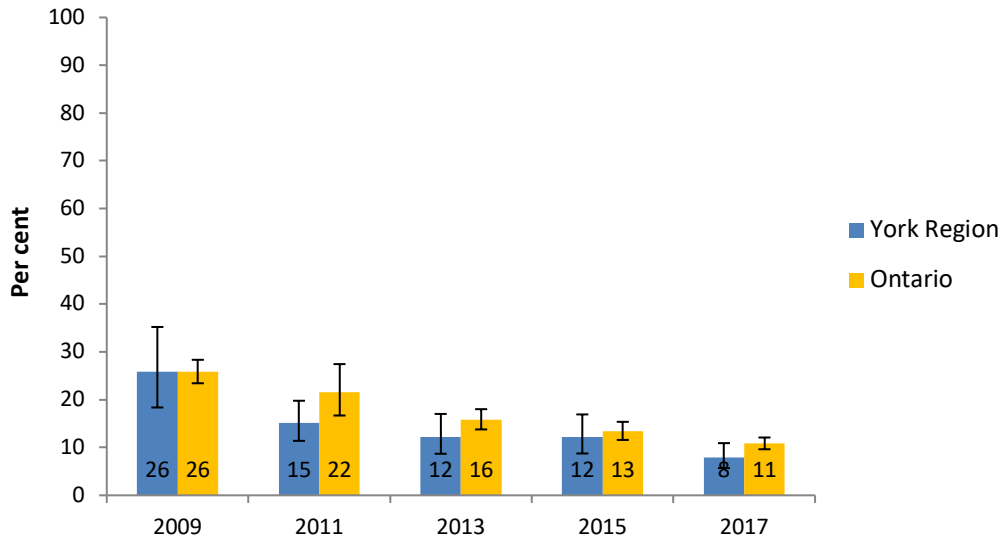
- Seventeen (17) per cent of students reported being a victim of some form of bullying at school, down significantly from 26 per cent of students in 2009
- Verbal attack was the most common form of bullying at school, reported by 15 per cent of students
- There were no significant differences in the percentage of students who reported being a victim of bullying at school by sex or by grade
- There were no significant differences in the percentage of students who reported being a victim of bullying between York Region and Ontario

Figure 41: Victim of bullying at school since September



- Eight (8) per cent of students reported bullying others in some form at school (5 per cent of females and 11 per cent of males*)
- There were no significant differences in the percentage of students who reported bullying others at school by grade
- There were no significant differences in the percentage of students who reported bullying others between York Region and Ontario
- Fifty-seven (57) per cent of bullies reported also being victims of bullying
- Five per cent of students reported having had a physical fight on school property at least once in the last 12 months of the survey year (data not shown)

Figure 42: Bullied others at school since September



- Seventeen (17) per cent of students reported being a victim of bullying through the internet in the past 12 months
- There were no significant differences in the percentage of students who reported being cyber bullied by sex or by grade
- There were no significant differences in the percentage of students who reported being a victim of cyber bullying between York Region and Ontario
- Eight (8) per cent of students reported that they bullied or picked on others electronically or through the internet in the past 12 months

Figure 43: Victim of bullying electronically or through the internet in past 12 months

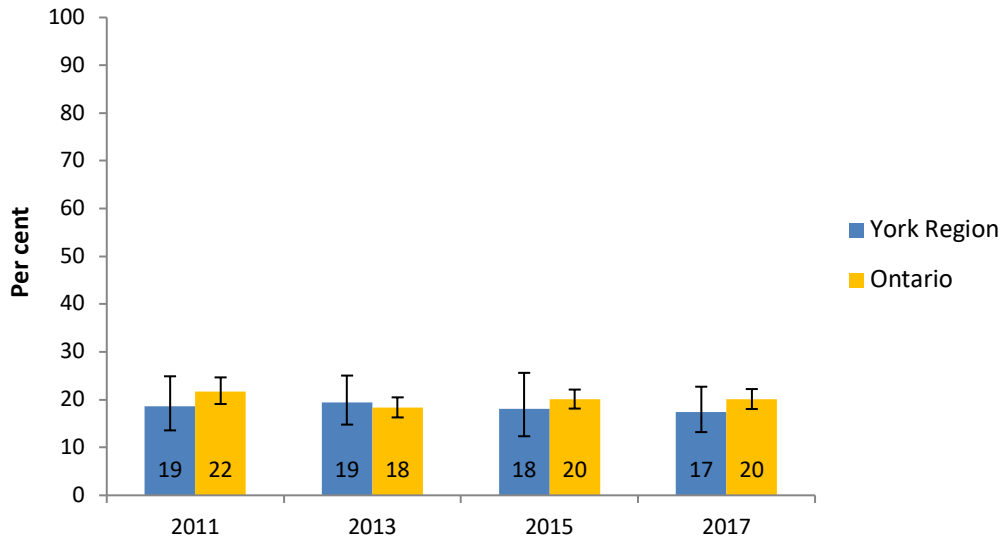
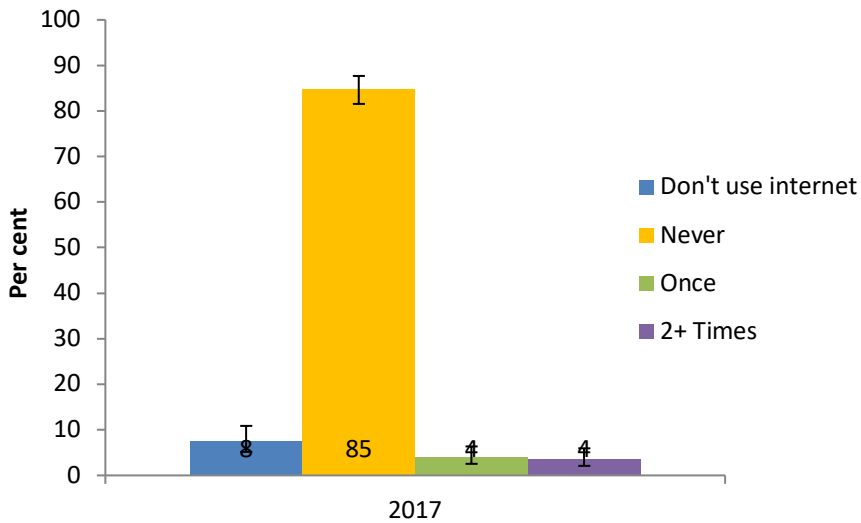


Figure 44: Frequency of bullying others electronically or through the internet in the past 12 months



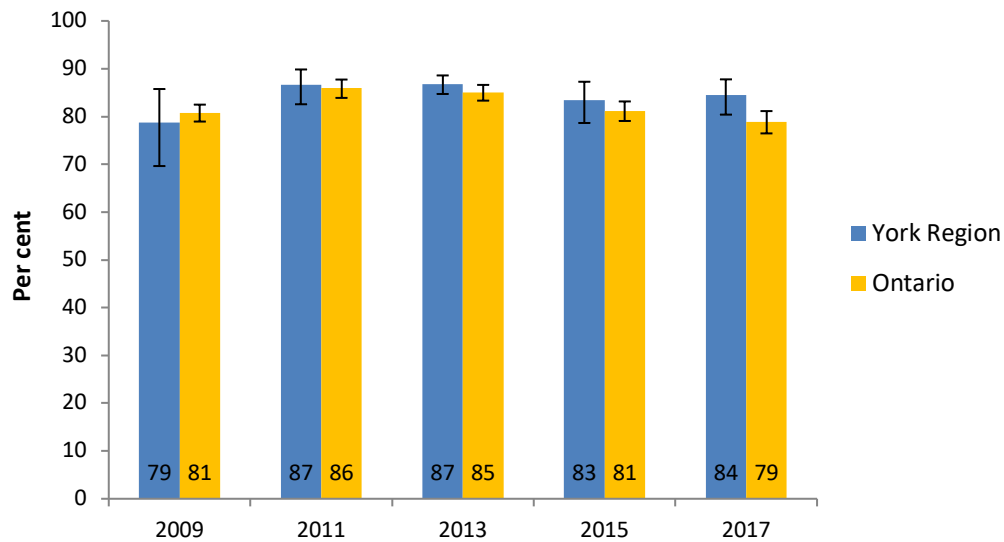
Commitment to learning

Commitment to learning is a set of developmental assets that includes valuing achievement, motivation, school engagement, regular completion of homework, bonding to school and reading for pleasure.¹⁷ The majority of students reported a positive school climate.

In 2017:

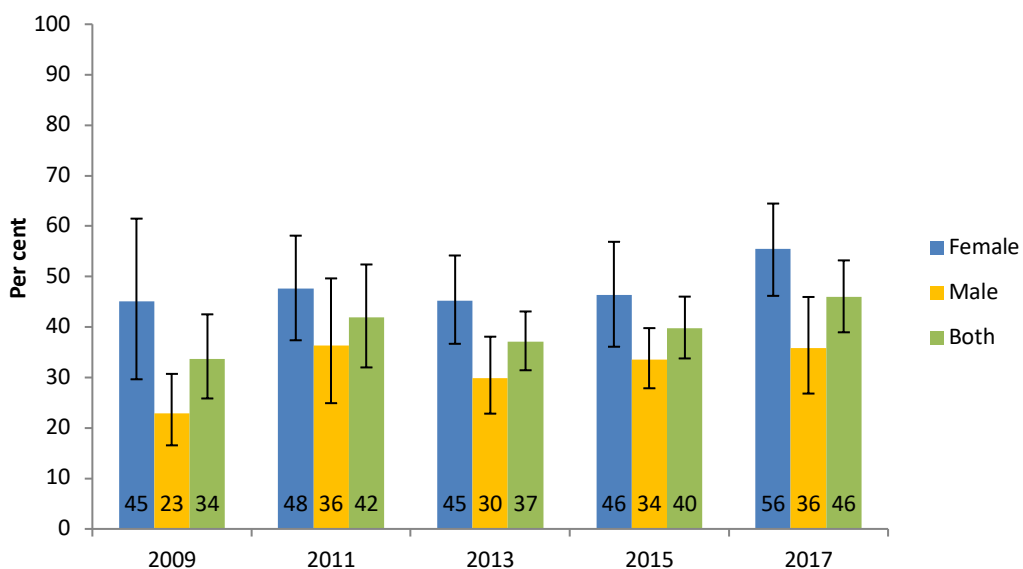
- Eighty-four (84) per cent of students reported that they like going to school to some degree, quite a lot or very much
- There were no significant differences in the percentage of students who reported that they like going to school by sex or by grade
- There were no significant differences in the percentage of students who reported that they like going to school between York Region and Ontario
- Students with low subjective family SES were less likely to report that they like going to school than students with high family SES (77 per cent and 88 per cent, respectively*)

Figure 45: Like going to school



- Forty-six (46) per cent of students reported spending, on average, five or more hours per week on homework outside of school hours (56 per cent of females and 36 per cent of males*)
- There were no significant differences in the percentage of students who reported five or more hours of homework by grade
- The percentage of York Region students who reported five or more hours of homework was significantly higher than the percentage for Ontario (32 per cent)

Figure 46: Five or more hours of homework each week outside of school hours



Social competencies

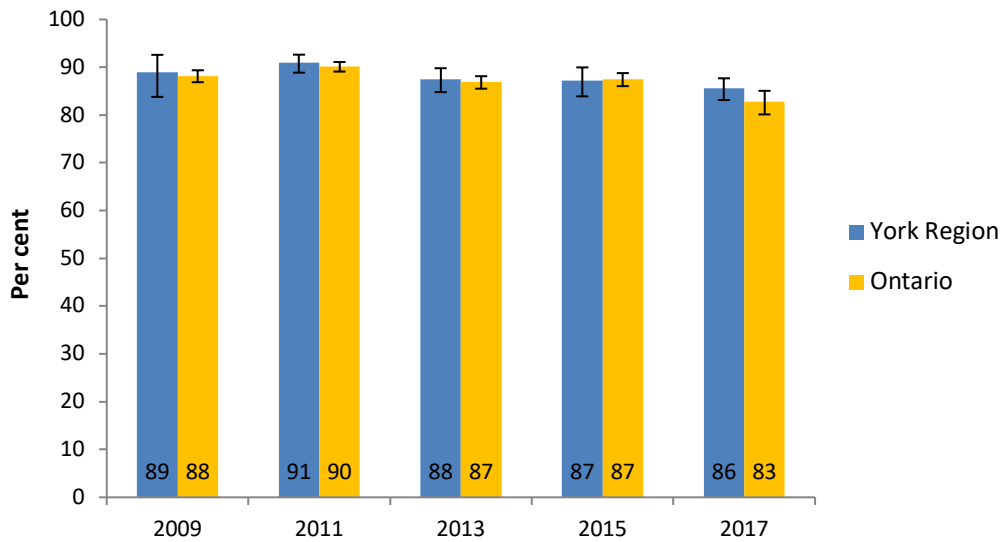
The set of internal developmental assets pertaining to social competencies in youth include planning and decision making, interpersonal competence (friendship skills), cultural competence (understand people of different backgrounds), resistance skills (ability to resist peer pressure) and peaceful conflict resolution.¹⁷

School connectedness is the belief among students that adults in the school care about their learning as well as about them as individuals, and it has been recognized as an important protective factor among young people.²³ Young people who feel connected to their school and have positive relationships with their teachers and classmates are more likely to develop self-confidence and emotional well-being. Connectedness to others is an OSDUHS measure that partially describes the interpersonal competence context of positive youth development.

In 2017:

- Eighty-six (86) per cent of students reported that they feel close to people at school
- There were no significant differences in the percentage of students that feel close to people at school by grade
- There were no significant differences in the percentage of students who reported they feel close to people at school between York Region and Ontario

Figure 47: Feel close to people at school



Social status at school

Students were also asked about social status at school. Students were shown a 10-step ladder representing their school and were asked to indicate where they would place themselves based on their perception of their standing at school. Those at the top of the ladder are the people in school with the most respect and the “highest standing.” Alternatively, those at the bottom of the ladder are the people who no one respects with whom no one wants to hang out. This school social standing ladder was analyzed based on a median split defined as high perceived social standing (where students ranked themselves between seven and 10 on the ladder) and low perceived social standing (where students ranked themselves between one and six on the ladder).

In 2017:

- Sixty-four (64) per cent of students reported high perceived social status at school (59 per cent of females and 69 per cent of males*)
- The percentage of students who reported high perceived social status at school increased from 59 per cent of Grade 9 students to 72 per cent of students in Grade 12*
- There were no significant differences in the percentage of students reporting high social status at school between York Region and Ontario

Figure 48: High perceived social status at school

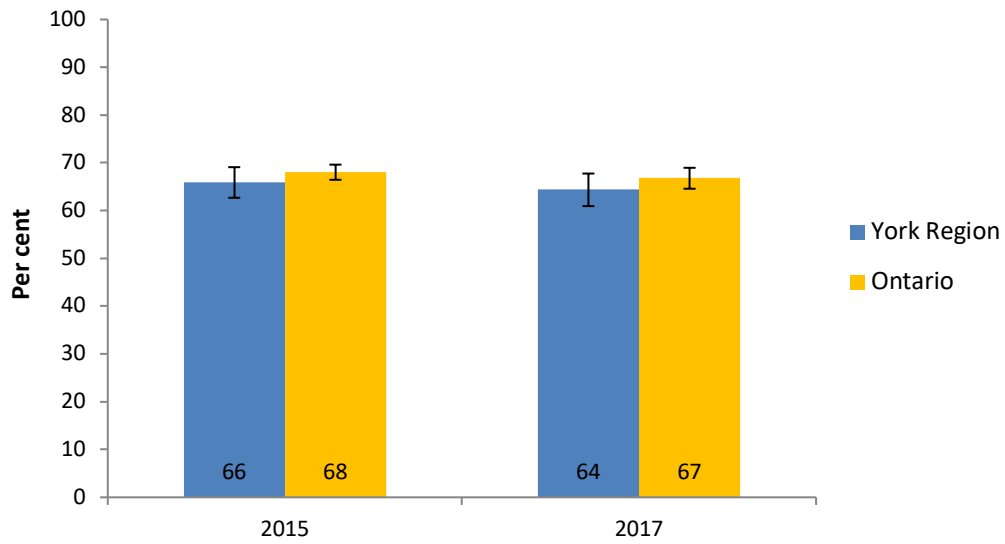
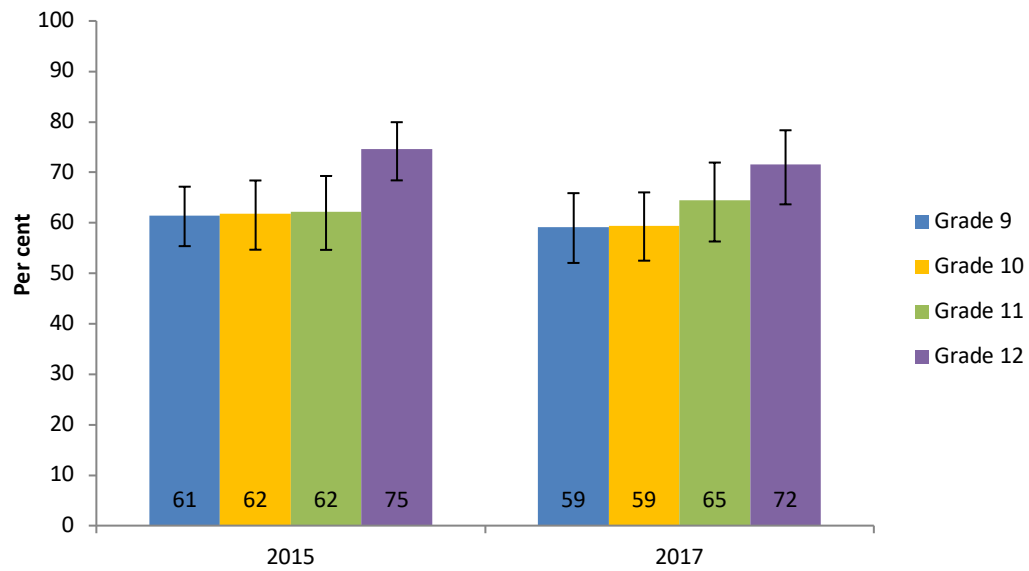


Figure 49: High perceived social status at school by grade



York Region Public Health supports and programs for students

York Region Public Health offers a variety of programs and services that support healthy child development and optimal youth and family health and well-being.

In accordance with the *Ontario Public Health Standards: Requirements for Programs, Services and Accountability*, York Region Public Health staff work with school boards and/or staff within elementary and secondary educational settings, using a comprehensive health promotion approach, to influence the development and implementation of healthy policies and creation or enhancement of supportive environments to address the following topics:

- Healthy eating
- Healthy weights
- Comprehensive tobacco control
- Physical activity
- Injury Prevention
- Mental Health
- Alcohol use and other substances

Working with the school community helps build learning environments where youth are supported and encouraged to make healthier choices.

The Healthy Schools program promotes the physical, mental, social and spiritual health of the whole school community, reduces the likelihood of risk-taking behaviour and increases student achievement, mental health and well-being.

York Region Public Health's **Healthy Schools program** that includes:

1. Forming a Healthy Schools committee (engaging parents, students and teachers)
2. Surveying the school to identify strengths, needs and topics of interest
3. Developing and implementing an action plan
4. Evaluating and celebrating achievements

Current initiatives implemented by the School Services program support physical activity, mental health, leadership and resiliency. These initiatives are based on research and best practices and address overall student well-being. Initiatives such as Healthy Schools Student Clubs, Lead On! and Peer Leadership for Active Youth (P.L.A.Y.) engage students in health promotion activities and develop leadership skills. Our Stress and Coping and Mental Health Awareness workshops focus on positive mental health while Active Tools for Schools, pause to Play and Active Play support physical activity. The Ready, Set, Create! Poster Contest engages youth to develop health messaging on current issues. These initiatives help youth build leadership, resiliency, decision making and communication skills, and promote the development of positive relationships, enhancing social connectedness, self-confidence and overall well-being.

In the area of substance misuse prevention, staff members offer programs and services including school staff training on current trends, harms and social issues associated with substance use, interactive displays, curriculum support and consultation for the development and implementation of school board-wide strategies that address substance misuse.

York Region Public Health's **Substance Misuse Prevention** program also offers peer-led youth programs to schools in York Region. Topics covered include strategies to deal with peer pressure, the importance of delaying substance use, harms related to using alcohol and other substances and making safer choices. The program includes training student leaders on messages that can be shared with peers during key transition periods. In addition, the Substance Misuse Prevention team offers school staff workshops that provide information on the latest trends and issues related to youth and substances. It also offers parent presentations and resources that consist of evidence-based messaging and strategies to guide parents in delaying the initiation of alcohol and substance use among youth. The team recognizes that working with York Region schools boards and community partners to address key issues related to substance misuse supports the creation of safe and healthy communities and encourages youth to make safer and healthier informed choices.

York Region Public Health's **Injury Prevention** program actively collaborates with York Region school boards to provide consultation and education to support the Concussion Policy (PPM 158). In schools, the program offers concussion and helmet safety workshops and interactive concussion and helmet safety displays for students. The Injury Prevention program also directly engages student leaders to increase their awareness of concussion and helmet safety and help facilitate the sharing of these important messages with their peers. Resources are also available for students, school staff, parents and health care providers on the topics of concussion and helmet safety.

The goal of York Region Public Health's **School Nutrition** program is to help schools create healthier school nutrition environments by using the Healthy Schools framework. Services include Healthy School consultations; teacher workshops; school council presentations; interactive displays; curriculum support for teachers; resources for parents and the school community; and nutrition programs.

These programs include *My Healthy Lunch Challenge*, a school-wide lunch promotion campaign; *You're the Chef*, a cooking skills train-the-trainer program; and *Bright Bites*, an awards-based nutrition promotion program. The **School Nutrition** Program also facilitates programs that emphasize a youth engagement approach. These include *Healthy Eating Ambassador* and *You're the Chef Ambassador*. These programs help students plan and implement school-wide healthy eating promotion programs and food-skill activities such as cooking clubs and taste-

testing events. These initiatives not only educate youth on healthy eating, but also help youth build leadership and facilitation skills; and can enhance self-efficacy and self-confidence.

The **School Nutrition** program also works closely with both Public and Catholic York Region school boards to provide consultation and education on the Ministry of education's School Food and Beverage Policy (PPM 150).

The benefits of healthy eating in youth on physical health are well documented. Diet is a modifiable risk factor for prevention of many chronic diseases such as obesity, cardiovascular diseases, cancer, type II diabetes, hypertension, and others.²⁴ Further, more and more research is showing a relationship between nutritional factors and effect on mental well-being.²⁵

References

1. Liang T, Kuhle S, Veugelers PJ. Nutrition and body weights of Canadian children watching television and eating while watching television. *Public Health Nutr.* 2009; 12(12): 2457-63.
2. BMI for children/teens [Internet]. Dietitians of Canada; 2016 [cited 2016 Jun 8]. Available from: <http://www.dietitians.ca/your-health/assess-yourself/assess-your-bmi/bmi-children.aspx>
3. High caffeine 'energy' drinks and other foods containing caffeine [Internet]. London: Food Standards Agency; [cited 2016 May 18]. Available from: <http://www.food.gov.uk/science/additives/energydrinks>
4. Seifert SM, Schaechter JL, Hershorin ER, Lipshultz SE. Health effects of energy drinks on children, adolescents, and young adults. *Pediatrics.* 2011; 127(3): 511-28.
5. Harris JL, Munsell CR. Energy drinks and adolescents: What's the harm? *Nutr Rev.* 2015; 73(4): 247-57.
6. Kristjansson AL, Sigfusdottir ID, Allegrante JP. Health behavior and academic achievement among adolescents: The relative contribution of dietary habits, physical activity, body mass index, and self-esteem. *Health Educ Behav.* 2010; 37(1): 51-64.
7. Martinez-Gomez D, Ruiz JR, Ortega FB, Veiga OL, Moliner-Urdiales D, Mauro B, et al. Recommended levels of physical activity to avoid an excess of body fat in European adolescents: The HELENA study. *Am J Prev Med.* 2010; 39(3): 203-11.
8. Canadian Society for Exercise Physiology. Canadian physical activity guidelines for youth 12-17. Ottawa, ON: CSEP; 2011.
9. Page AS, Cooper AR, Griew P, Jago R. Children's screen viewing is related to psychological difficulties irrespective of physical activity. *Pediatrics* [serial online]. 2010 [cited 2018 Jun 13]; 126(5): e1011-7. Available from: <http://pediatrics.aappublications.org/content/pediatrics/early/2010/10/11/peds.2010-1154.full.pdf>
10. Tremblay MS, Carson V, Chaput JP, Connor Gorber S, Dinh T, Duggan M, et al. Canadian 24-hour movement guidelines for children and youth: An integration of physical activity, sedentary behaviour, and sleep. *Appl Physiol Nutr Metab* [serial online]. 2016 [cited 2018 Jun 13];41(6 Suppl 3):S311-27. Available from: <http://www.nrcresearchpress.com/doi/abs/10.1139/apnm-2016-0151>
11. Keyes KM, Maslowsky J, Hamilton A, Schulenberg J. The great sleep recession: Changes in sleep duration among US adolescents, 1991-2012. *Pediatrics* [serial online]. 2015 [cited 2018 Jun 13]; 135(3): 460-8. Available from:

<http://pediatrics.aappublications.org/content/pediatrics/early/2015/02/10/peds.2014-2707.full.pdf>

12. Guerri C, Pascual M. Mechanisms involved in the neurotoxic, cognitive, and neurobehavioral effects of alcohol consumption during adolescence. *Alcohol*. 2010; 44(1): 15-26.
13. Buchmann AF, Schmid B, Blomeyer D, Becker K, Treutlein J, Zimmermann US, et al. Impact of age at first drink on vulnerability to alcohol-related problems: Testing the marker hypothesis in a prospective study of young adults. *J Psychiatr Res*. 2009; 43(15): 1205-12.
14. Hedman L, Bjerg A, Sundberg S, Forsberg B, Ronmark E. Both environmental tobacco smoke and personal smoking is related to asthma and wheeze in teenagers. *Thorax*. 2011; 66(1): 20-5.
15. Song AV, Morrell HE, Cornell JL, Ramos ME, Biehl M, Kropp RY, et al. Perceptions of smoking-related risks and benefits as predictors of adolescent smoking initiation. *Am J Public Health*. 2009; 99(3): 487-92.
16. Setlik J, Bond GR, Ho M. Adolescent prescription ADHD medication abuse is rising along with prescriptions for these medications. *Pediatrics*. 2009; 124(3): 875-80.
17. Developmental assets: Preparing young people for success [Internet]. Minneapolis, MN: Search Institute; [cited 2018 Jun 13]. Available from: <http://www.search-institute.org/what-we-study/developmental-assets>
18. Ridner SH. Psychological distress: Concept analysis. *J Adv Nurs*. 2004; 45(5): 536-45.
19. Boak A, Hamilton H, Adlaf E, Mann RE. Drug use among Ontario students, 1977-2017: Detailed Findings from the Ontario Student Drug Use and Health Survey. (CAMH research document series no. 46) [Internet]. Toronto, ON: Centre for Mental Health and Addiction; 2017 [cited 2018 May 16]. Available from: <https://www.camh.ca/-/media/files/pdf---osduhs/drug-use-among-ontario-students-1977-2017---detailed-findings-from-the-osduhs.pdf?la=en&hash=2B434CDAAD485834497E3B43F2264BDEB255F29F>
20. Drapeau A., Marchand A, Beaulieu-Prevost D. Epidemiology of psychological distress [Internet]. Rijeka, Croatia-European Union: InTech; 2012 [cited 2018 Jun 13]. Available from: <http://www.intechopen.com/books/mental-illnesses-understanding-prediction-andcontrol/epidemiology-of-psychological-distress>
21. Mortimer JT. The benefits and risks of adolescent employment. *Prev Res*. 2010; 17(2): 8-11.
22. York Region Bullying Prevention Partnership. York Region bullying prevention partnership brochure (YRBPP). [Internet]. [Place unknown]: YRBPP; [n.d.] [cited 2016 Jun 8]. Available from: http://charactercommunity.com/site/charactercommunity/assets/pdf/brochure_yrbpp_v6_at_feb_11-1.pdf

23. Centers for Disease Control and Prevention. School connectedness: Strategies for increasing protective factors among youth. [Government report online]. Atlanta, GA: U.S. Department of Health and Human Services; 2009 [cited 2018 June 13]. Available from: <http://www.cdc.gov/healthyouth/protective/pdf/connectedness.pdf>
24. Canadian Medical Association. Healthy behaviours - promoting physical activity and healthy eating [Internet]. Ottawa, ON: Canadian Medical Association; 2015 [cited 2018 Jul 10]. Available from: https://www.cma.ca/Assets/assets-library/document/en/policies/cma_policy_healthy_behaviours_promoting_Physical_Activity_and_Healthy_Eating_PD15-12-e.pdf
25. Clinical Nutrition Research. 2016 Jul;5(3):143-152. Nutritional Factors Affecting Mental Health. So Young Lim, Eun Jin Kim, Arang Kim, Hee Jae Lee, Hyun Jin Choi, Soo Jin Yang.