YORK REGION STUDENT DRUG USE AND HEALTH REPORT



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About the data

This report highlights York Region secondary school student substance use, mental health, physical health, risk behaviour and resiliency findings from the 2019 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 2019 OSDUHS collected information from 1,082 Grade 9 to 12 students from three York Catholic District School Board (204 students) and fifteen York Region District School Board (878 students) 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.

A snapshot of health in York Region secondary students

- Seventeen (17) per cent of students reported at least 60 minutes of moderate to vigorous physical activity every day
- Fifteen (15) per cent of students usually travelled to school by walking
- Twenty-three (23) per cent of students reported being overweight or obese
- Twenty-one (21) per cent of students reported two hours or less of recreational screen time a day
- Seventy-one (71) per cent of students rated their mental health as good, very good or excellent in the past year
- Eighty-three (83) per cent of students reported they feel close to people at school
- Seventy-nine (79) per cent of students reported they like going to school very much, quite a lot or a little bit
- Twenty-eight (28) per cent of students reported getting eight or more hours of sleep on school nights
- 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
- Forty-four (44) per cent of students reported the use of alcohol in the past year
- Twenty-four (24) per cent of students reported the use of electronic cigarettes in the past year
- Twenty-two (22) per cent of students reported the use of cannabis in the past year
- Five (5) per cent of students reported using a water pipe or hookah in the past year
- Nine (9) per cent of students reported use of prescription opioid pain relievers for non-medical reasons in the past year
- Six (6) per cent of students reported use of tobacco cigarettes in the past year

Background and home characteristics

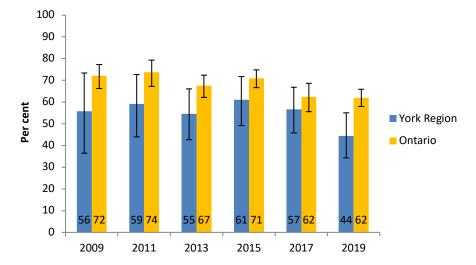
In 2019:

- Forty-four (44) per cent of students reported usually speaking English only at home
- Seventy (70) 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
- Twenty-five (25) per cent of students reported both their parents were born in Canada
- Sixty-four (64) per cent of students reported high subjective socio-economic status
- Seventy-nine (79) per cent of students reported they never go to school or bed hungry

Home language

- Forty-four (44) per cent of students reported usually speaking English only at home, 36
 per cent spoke English and another language at home, and 17 per cent reported
 speaking other languages at home. The percentage of York Region students who usually
 spoke English at home was 18 per cent lower than the corresponding Ontario
 percentage
- There were no significant differences in the percentage of students who reported usually speaking English at home by sex or grade

Figure 1: Usually speak English at home



Length of time lived in Canada

In 2019:

- Sixty-nine (69) per cent of students reported they have lived in Canada all of their life,
 14 per cent reported living in Canada six or more years, and 17 per cent have lived in
 Canada five or less years. The percentage of York Region students who lived in Canada all their life was 11 per cent lower than the corresponding Ontario percentage
- There were no significant differences in the percentage of students who have lived in Canada all of their life by sex or grade

100 90 80 70 60 Per cent ■ York Region 50 Ontario 40 30 20 10 75 83 75 81 73 80 69 80 0

2015

Figure 2: Lived in Canada all of their life

Home and parents

2011

2013

In 2019:

• About nine-in-ten (90 per cent) students reported they have lived in one home only.

2019

2017

 Twenty-five (25) per cent of students reported both of their parents were born in Canada, 11 per cent reported one Canadian born parent and 64 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

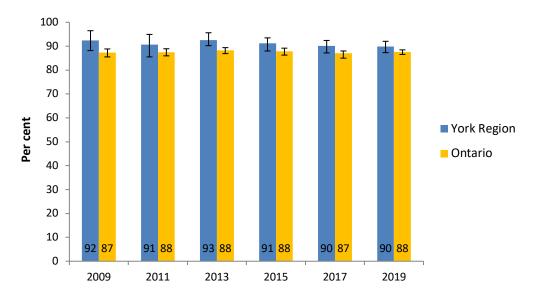
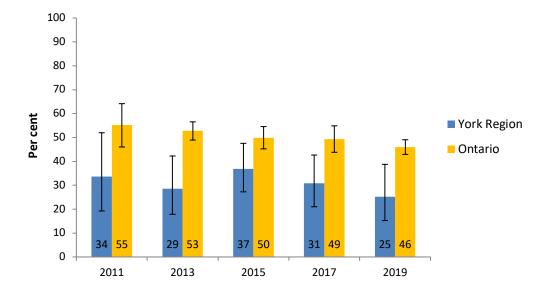


Figure 4: Both parents born in Canada



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 2019:

- Sixty-four (64) per cent of students reported high subjective socio-economic status as measured by the family SES ladder, a decrease from the 2011 percentage.
- There were no significant differences in the percentage of students who reported high subjective socio-economic status by sex or grade

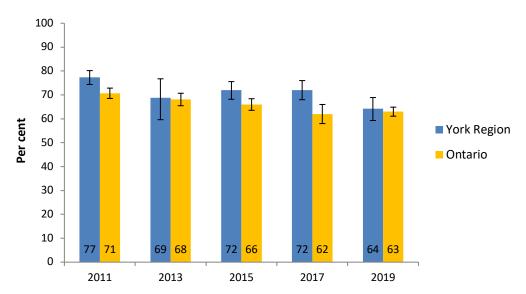


Figure 5: High subjective family socio-economic status

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'.

- Seventy-nine (79) 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 or by grade
- There were no significant differences in the percentage of students who reported never going to school or bed hungry between York Region and Ontario
- At the risk end, five per cent of students reported always or often going to school or to bed hungry, similar to the Ontario percentage

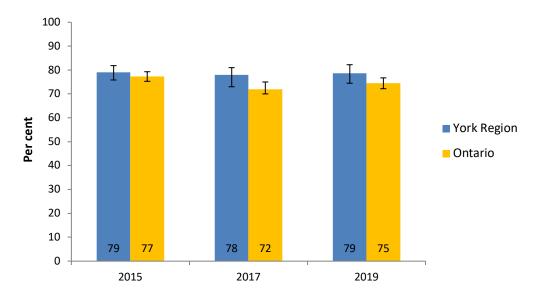


Figure 6: Never go to school or bed hungry

Gender Identity

In 2019, 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, 80 per cent are attracted to males, 11 per cent are attracted to both males and females and 5 per cent prefer not to answer. Of students who were born male, 90 per cent are attracted to females, 3 per cent are attracted to males, 4 per cent are attracted to both males and females and 2 per cent prefer not to answer.

General health

In 2019:

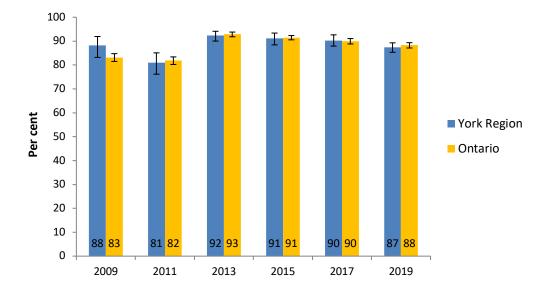
- Eighty-seven (87) per cent of students reported good, very good or excellent physical health
- Students with high subjective family SES were more likely to report good, very good or excellent physical health than students with low family SES
- Eleven (11) per cent of students reported having a mild 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'.

- Eighty-seven (87) per cent of York Region students reported good, very good or excellent physical health, similar to the Ontario percentage
- There were no significant differences in the percentage of students who reported good, very good or excellent physical health by sex or grade
- Students with high subjective family SES were more likely to report good, very good or excellent physical health than students with low family SES (91 per cent and 80 per cent respectively)

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

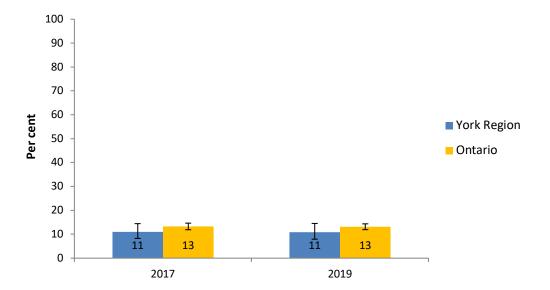


Head injuries

Students were 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", problems remembering or being unconscious (knocked out). This type of head injury is commonly referred to as a mild head injury or concussion. If a student had a mild head injury head injury in the last 12 months, they 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".

- Eleven per cent of students reported having a mild head injury in the last 12 months
- There were no significant differences in the percentage of students who reported having a mild head injury by sex or grade or family SES
- 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, such as football, rugby, basketball (24 per cent), fell down by accident (17 per cent), an object hit me by accident (8 per cent), playing soccer (4 per cent) and other sports injury such as skateboarding, skiing, snowboarding (10 per cent)

Figure 8: Had a mild head injury in the last 12 months



Lifestyle factors

In 2019:

- Twelve per cent of students ate fruits and vegetables five times or more a day, compared to 13 per cent in 2015 and 2017
- Nine per cent of students drank sugar sweetened beverages once a day or more, compared to 9 per cent in 2017 and 8 per cent in 2015
- Twenty-three (23) per cent of students reported being overweight or obese, compared to 24 per cent in 2017 and 28 per cent in 2015
- Sixty-two (62) per cent of students were satisfied with their weight, compared to 60 per cent in 2017 and 61 per cent in 2015
- Eight per cent of students reported drinking a high caffeine energy drink at least one time in the last seven days, compared to 13 per cent in 2017 and 9 per cent in 2015
- Seventeen per cent of students met the *Canadian Physical Activity Guidelines for Youth* of at least 60 minutes of vigorous physical activity every day, compared to 16 per cent in 2017 and 17 per cent in 2015
- Twenty-one (21) per cent of students reported two hours or less of recreational screen time a day, compared to 30 per cent in 2017 and 31 per cent in 2015
- Twenty-eight (28) per cent of students reported eight hours or more of sleep on school nights, compared to 24 per cent in 2017 and 32 per cent in 2015

From 2009 to 2019, there was a significant decrease in the percentage of students who met the Canadian Physical Activity Guidelines for Youth of at least 60 minutes of vigorous physical activity every day as well as the percentage of students who reported two hours or less of recreational screen time a day. From 2011 to 2019, there was a significant decrease in the percentage of students who were satisfied with their weight. There were no other significant inreases or decreases in the prevalence of the other healthy living factors.

Body weight

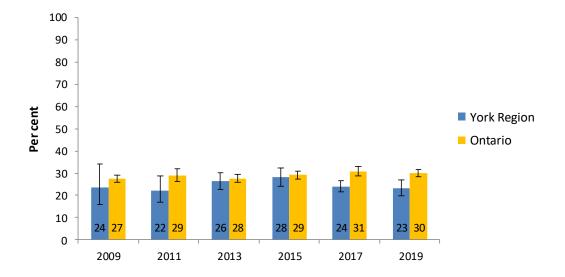
Excess body weight has been found to have a negative impact on adolescent self-esteem, social and cognitive development and is associated with the risk of developing co-morbidities.^{1,2} Body Mass Index (BMI) is a commonly used indicator to measure body fat composition. Students were asked to report 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.³

In 2019:

- Twenty-three (23) per cent of students were reported to be overweight or obese (19 per cent of females and 27 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 9: Overweight or obese



- In terms of body image, six-in-ten (62 per cent) of students were satisfied with their weight in 2019. About a quarter (25 per cent) think they are too fat and about one-in-seven (14 per cent) think they are too thin
- Males are more likely than females to believe they are too thin (20 per cent and 10 per cent, respectively)
- Thirty (30) per cent of students are not trying to alter their weight. Another 34 per cent are trying to lose weight, 22 per cent are trying to keep from gaining weight and 15 per cent are trying to gain weight
- Of students who were overweight or obese based on their reported BMI, 38 per cent were satisfied with their weight and 59 per cent think they are too fat

Healthy eating and drinks

- Twelve (12) per cent of students ate fruits and vegetables five times or more a day
- Fifty-one (51) per cent of students reported eating fruits and vegetables two times a day or less, while another 25 per cent reported consumption three times a day and 12 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 10: Ate fruits and vegetables five or more times per day

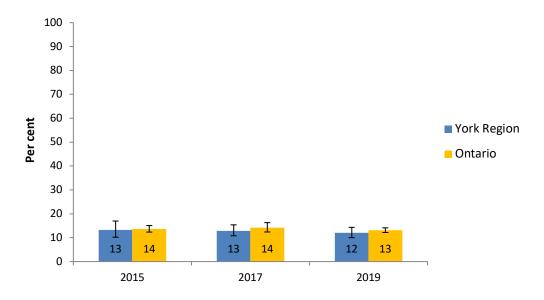
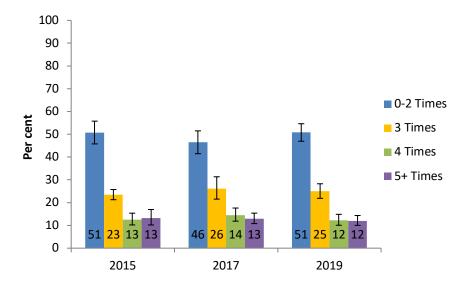
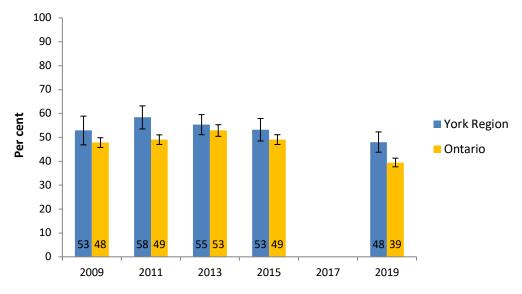


Figure 11: Frequency of eating fruits and vegetables



- Forty-eight per cent of students ate breakfast every day in the past five school days (43 per cent of females and 53 per cent of males)
- The percentage of students who ate breakfast every day in the past five school days was 52 per cent for 9th and 10th graders combined and 44 per cent for 11th and 12th graders combined
- There were no significant differences in the percentage of students who reported eating breakfast every day in the past five school days by family SES
- The percentage of students who reported eating breakfast every day in the past five school days was significantly higher than the Ontario percentage

• Figure 12: Ate breakfast every day in past five school days



Question not asked in 2017

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.

- Nine per cent of students drank sugar sweetened beverages once a day or more
- 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 or family SES

 The percentage of students who reported drinking sugar sweetened beverages once a day or more for York Region students was lower than the corresponding Ontario percentage

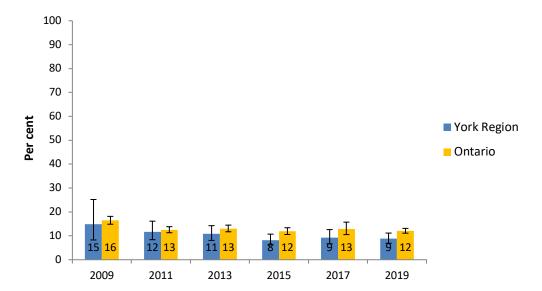
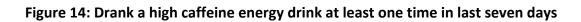
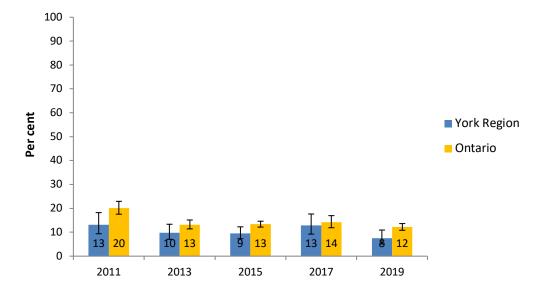


Figure 13: Drank sugar sweetened beverages once a day or more

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.⁴ 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.^{5,6} 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.

- Eight per cent of students reported drinking a high caffeine energy drink at least one time in the last seven days (4 per cent of females and 11 per cent of males)
- 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
- The percentage of students who reported drinking a high caffeine energy drink at least one time in the last seven days was lower than the corresponding Ontario percentage
- Almost one-in-three (30 per cent) students drank high caffeine energy drinks in the past year





Physical activity

Research suggests levels of physical activity may affect academic performance in math and reading. Physical activity may also have a positive impact on student academic achievement.⁷ 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.⁸ 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.

- Seventeen (17) 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 (10 per cent of females and 24 per cent of males)⁹
- Daily physical activity that met the Guidelines significantly decreased between Grade 9 (26 per cent) and Grade 12 (12 per cent)
- Daily physical activity among Grade 12 students was lower than the percentage reported by students back in 2009 (24 per cent)
- Students with high to highest school standing (7-10 on a standing ladder) were significantly more likely than students with lower school standing (1-6 on a standing ladder) to report levels of physical activity that meet the Guidelines (21 per cent and 13 per cent, respectively)
- 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 15: At least 60 minutes of moderate to vigorous physical activity every day

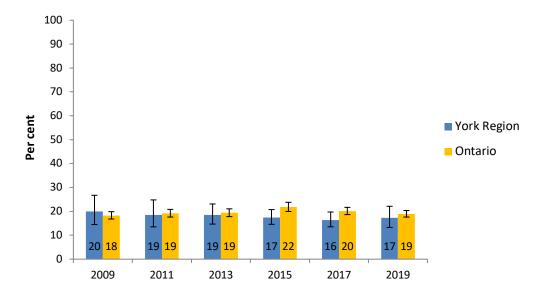
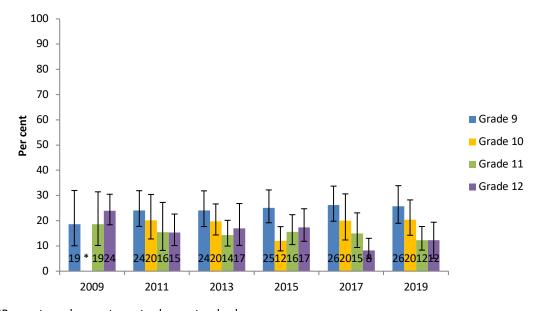


Figure 16: At least 60 minutes of moderate to vigorous physical activity every day by grade



^{*}Percentage does not meet release standards

100 90 80 70 60 Higher school Per cent standing (7-10) 50 40 Lower school 30 standing (1-6) 20 10 0 2015 2017 2019

Figure 17: At least 60 minutes of moderate to vigorous physical activity every day by selfrated school standing group

School status rated on a ladder from lowest standing (1) to highest standing (10)

In 2019:

- Thirty-six 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 (65 per cent) and Grade 12 (24 per cent)
- There were no significant differences in the percentage of students who were physically active in physical education class for 20 minutes on at least one school day in the past five school days by family SES
- 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 also asked about how they usually travelled to school.

- Fifteen per cent of students were reported that they usually walk school
- There were no significant differences in the percentage of students who usually walked to school by sex or grade

- Students with high family SES were significantly less likely than students with low family SES to report that they usually walk to school (13 per cent and 19 per cent, respectively)
- Students with higher school standing were significantly less likely than students with lower school standing to report that they usually walk to school (19 per cent and 12 per cent, respectively)
- There were no significant differences in the percentage of students who usually walk to school between York Region and Ontario
- Most students usually travelled to school by car either as a passenger (44 per cent) or driver (7 per cent), while 12 per cent travelled by public bus and 11 per cent travelled by school bus
- About two percent of students usually bicycled to school

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. Students were asked about how many hours a day they spent watching TV/movies, playing video/computer games on a computer/tablet chatting, emailing or surfing the Internet in their free time. The Canadian 24-Hour Movement Guidelines for Children and Youth, introduced in 2016, emphasize all movement behaviours that occur over a whole day (light, moderate, and vigorous physical activity, sedentary behaviour and sleep). 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 daily moderate to vigorous physical activity, several hours of a variety of structured and unstructured light physical activities and limited sitting for extended periods.

- Twenty-one (21) per cent of students reported two hours or less recreational screen time a day (25 per cent of 9th and 10th graders combined and 17 per cent of 11th and 12th combined)
- There were no significant differences in the percentage of students who reported two hours or more of screen time a day by sex or family SES
- There were no significant differences in the percentage of students who reported three hours or more of screen time a day between York Region and Ontario

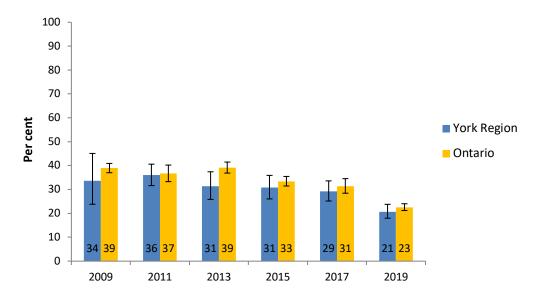


Figure 18: Two hours or less recreational screen time a day

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

- Twenty-eight (28) per cent of students reported eight hours or more of sleep on school nights
- There were no significant differences in the percentage of students who reported eight hours or more hours of sleep a day by sex or family SES
- 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 38 per cent of Grade 9 students to 22 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

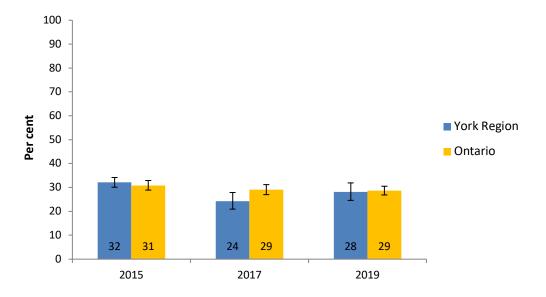
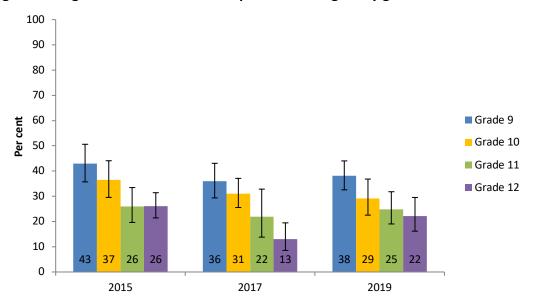


Figure 20: Eight hours or more of sleep on school nights by grade



Students were asked about how many hours a day they usually spend on social media websites. In 2019:

 About four-in-ten (41 per cent) students reported two hours or less of social media use a day (33 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 family SES
- 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

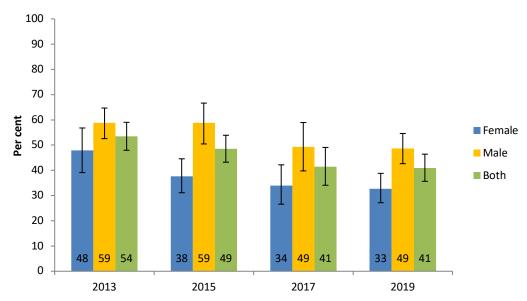
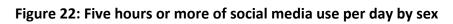
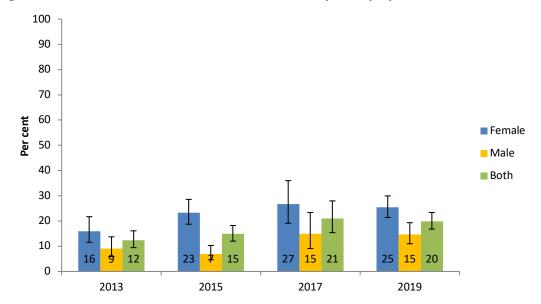


Figure 21: Two hours or less of social media use per day by sex

- At the risk end, more than one-in-five (20 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 (25 per cent and 15 per cent, respectively)





Risky behaviours and substance use

In 2019:

- Forty-four (44) per cent of students reported drinking alcohol in the last 12 months
- Thirteen (13) per cent of students reported drinking enough alcohol to feel drunk at least once in the past four weeks
- Six (6) per cent of students reported smoking cigarettes in the last 12 months
- Five (5) per cent of students reported using a water pipe in the last 12 months
- Twenty-four (24) 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
- Nine (9) per cent of students reported prescription pain reliever use for non-medical reasons in the past 12 months

Overall, from 2009 to 2019, there was a significant decrease (10 %) in the percentage of students who reported first drinking alcohol in Grade 8 or before as well as a significant decrease (20%) in the percentage of students who reported drinking alcohol in the last 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. 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. Students were asked when (if ever) they first drank more than just a few sips of alcohol.

In 2019:

- Forty-four 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 or family SES
- The percentage of students who used alcohol in the last 12 months significantly increased by grade, from 21 per cent of Grade 9 students to 61 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

Overall, from 2009 to 2019, there was a significant decrease (20 %) in the percentage of York Region students who reported drinking alcohol in the last 12 months.

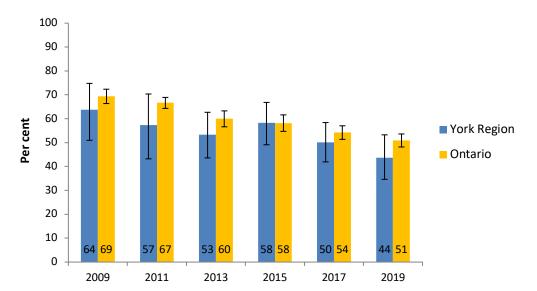


Figure 23: Drank alcohol in the last 12 months

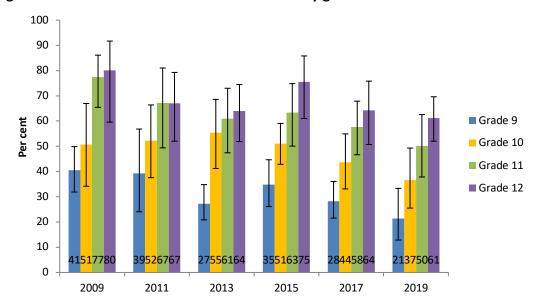


Figure 24: Drank alcohol in the last 12 months by grade

- Eighteen (18) per cent of students reported first drinking alcohol in Grade 8 or before
- There were no significant differences in the percentage of students who reported first drinking alcohol in Grade 8 or before by sex or family SES
- The percentage of York Region students who reported first drinking alcohol in Grade 8
 or before was significantly lower than the corresponding Ontario percentage

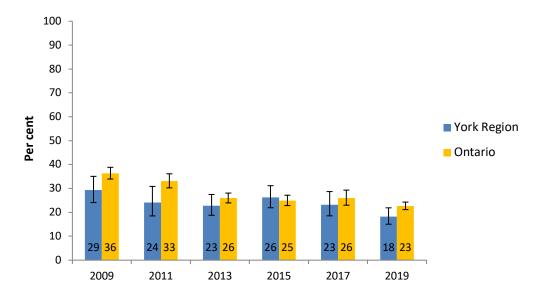


Figure 25: First drink of alcohol in Grade 8 or before

- Thirteen (13) per cent of students reported drinking enough alcohol to feel drunk at least once in the past four weeks (17 per cent of females and 9 per cent of males)
- The percentage of students who reported being drunk in the last four weeks significantly increased by grade, from five per cent of Grade 9 students to 18 per cent of Grade 12 students
- Students with high family SES were significantly more likely than students with low family SES to report that they got drunk in the past four weeks (18 per cent and 6 per cent, respectively)
- The percentage of York Region students who reported being drunk was significantly lower than the corresponding Ontario percentage
- There was a significant downward trend in the percentage of students who reported getting drunk in the last four weeks between 2009 and 2019

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'. Almost two-thirds of students thought what it was easy to get alcohol (35 per cent said 'fairly easy' and 29 per cent said 'very easy') and 17 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 (39 per

cent), a friend gave it to me (33 per cent), I gave someone else money to buy it (7 per cent) and I took it from home without permission (4 per cent).

Figure 26: Drunk in the last four weeks

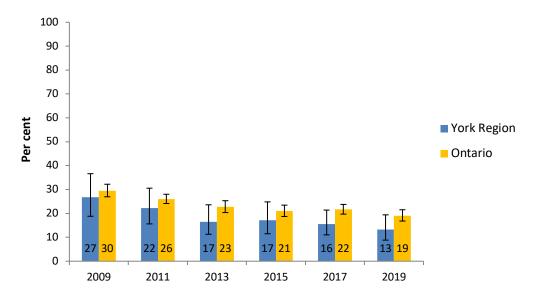
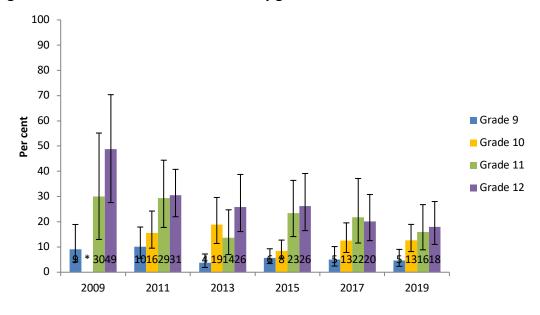


Figure 27: Drunk in the last four weeks by grade



^{*} Percentage does not meet release standards

Tobacco and related products

Smoking has been found to be significantly related to asthma and wheezing in teenagers.¹⁶ Symptoms of nicotine dependence can develop before adolescents start smoking daily, and teenage smokers can develop smoking-related diseases leading to premature death.¹⁴ 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.¹⁷ A higher perceived risk of harm from smoking is also associated with not starting to smoke.¹⁷

- Six per cent of students (equivalent to 3,800 students) reported smoking cigarettes in the last 12 months, steadily decreasing since 2009
- The percentage of students who reported smoking cigarettes in the last 12 months increased significantly with grade, from a combined two per cent of Grade 9 and 10 students to 10 per cent of students in Grade 12
- Students with high self-rated school status were significantly more likely than students with lower school status to report current smoking (7 per cent and 3 per cent, respectively)
- 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, almost two-thirds (64 per cent) students rate the risk of harm from smoking one or two cigarettes a day as either medium (29 per cent) or great (36 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, about one-in-four (26 per cent) of students either somewhat agree (19 per cent) or strongly agree (7 per cent) that movies which show characters smoking cigarettes should be rated '18A'

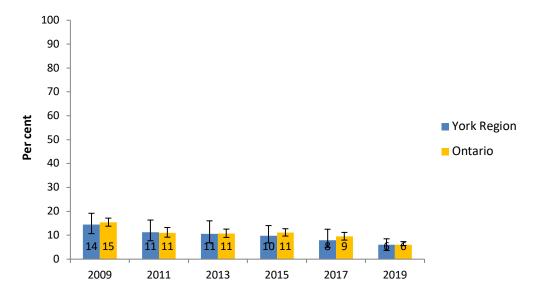


Figure 28: Smoked cigarettes in the last 12 months

- Five per cent of students reported using a water pipe in the last 12 months, which was significantly lower than the percentage reported in 2013
- There were no significant differences in the percentage of students who reported using a water pipe in the last 12 months by sex or by grade
- Students with high family SES were significantly more likely than students with low family SES to report using a water pipe in the last 12 months (7 per cent and 3 per cent, respectively)
- 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 10 per cent overall, and increased in
 the higher grades, from 6 per cent of Grade 9 and 10 students combined to 18 per cent
 of Grade 12 students

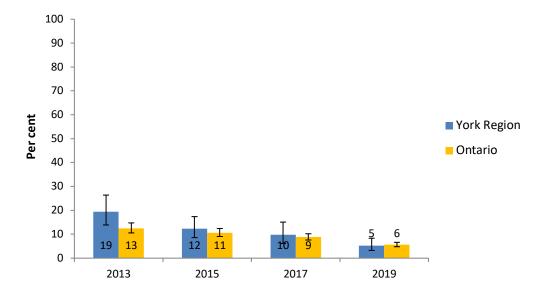


Figure 29: Used a water pipe or hookah in last 12 months

- Twenty-four (24) per cent of students reported using electronic cigarettes (also known as "vapes") in the last 12 months—excluding few puffs, which is more than double the 2017 findings of 11 per cent
- There were no significant differences in the percentage of students who reported using e-cigarettes in the last 12 months by sex
- Students with high family SES were significantly more likely than students with low family SES to report using e-cigarettes in the last 12 months (32 per cent and 12 per cent, respectively)
- The percentage of students who used e- cigarettes in the last 12 months increased by grade, from 18 per cent of Grade 9 students to 30 per cent of students in Grade 12
- There were no significant differences in the percentage of students who reported using e-cigarettes in the last 12 months between York Region and Ontario
- Thirteen (13) per cent of students reported weekly or daily e-cigarette use compared with too low to report in 2017 and 2015

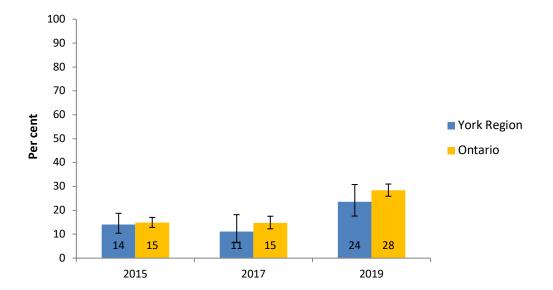


Figure 30: Used electronic cigarettes in last 12 months

Drug use

- 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 or family SES
- 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 34 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
- Twelve per cent of students reported using cannabis and alcohol on the same occasion at least once in the past 12 months
- Four 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 31: Smoked cannabis in the last 12 months

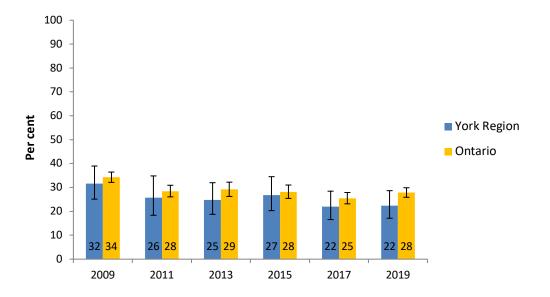
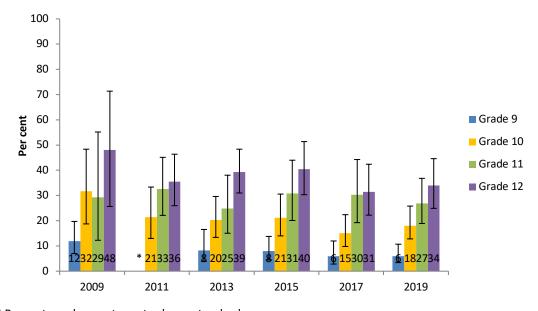


Figure 32: Smoked cannabis in the last 12 months by grade



^{*} Percentage does not meet release standards

- Fifteen (15) per cent of students reported using cannabis in the last four weeks
- There were no significant differences in the percentage of students who reported using cannabis in the last 4 weeks by sex
- 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 8 per cent of Grade 9 and Grade 10 students combined to 21 per cent of Grade 12 students

100 90 80 70 60 Per cent ■ York Region 50 Ontario 40 30 20 10 0 2009 2011 2013 2015 2017 2019

Figure 33: Smoked cannabis in the last four weeks

In 2019:

- Cannabis use in the last 12 months among students was 22 per cent, which was more common than the reported past year use of tranquilizers (3 per cent), magic mushrooms (2 per cent) or inhalants (2 per cent)
- Ten (10) per cent of students used cannabis in an e-cigarette, vape pen, or vaporizer

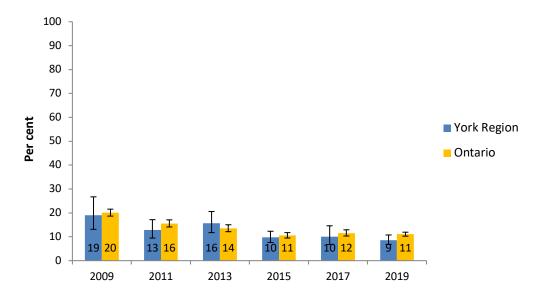
Prescription opioid pain reliever drug use for non-medical reasons

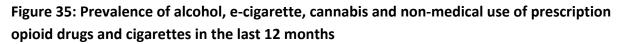
In certain populations, prescription medications are the most commonly misused drug among teenagers after cannabis. It has been suggested that this is due to the belief that medications are safe for the relief of pain or anxiety and help with concentration or to increase alertness in addition to getting high.¹⁸

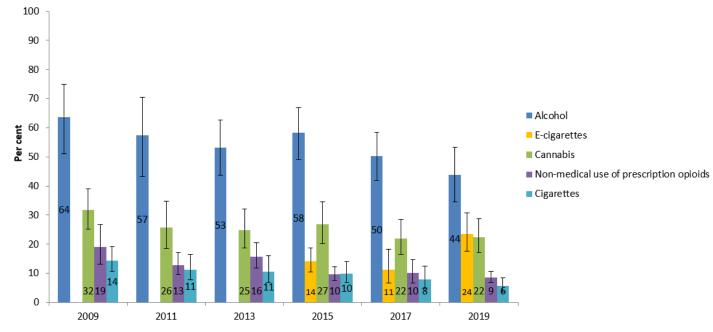
Students were asked how often they used opioid pain relief pills without a prescription.

- Nine (9) 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
- Students with high family SES were significantly more likely than students with low family SES to report prescription opioid pain reliever use for non-medical reasons in the past year (11 per cent and 6 per cent, respectively)
- The York Region percentage of students who reported opioid prescription pain reliever use for non-medical reasons in the past year was significantly lower than the corresponding Ontario percentage
- Of students who used opioid pain relief pills without a prescription, four-in-ten (43 per cent) said they usually were given the pills from a parent, 11 per cent took them from home without permission and about a quarter (25 per cent) don't remember how they got them.

Figure 34: Prescription opioid pain reliever use for non-medical reasons in the past year







Mental health, resiliency and developmental assets

In 2019:

- Seventy-one (71) per cent of students rated their mental or emotional health to be good, very good, or excellent
- Forty-six (46) per cent students had a moderate to serious level of distress during the past four weeks
- Thirty (30) per cent of students reported that they did work for pay outside the home during the school year
- Eighteen (18) per cent of students reported being a victim of some type of bullying at school
- Nine (9) per cent of students reported bullying others in some form at school
- Thirty-three (33) per cent of students reported that they like going to school a quite a lot, or very much
- Eighty-three (83) per cent of students reported that they feel close to people at school
- Fifty-eight (58) per cent of students reported high perceived social status at school
- Eighteen (18) per cent of students reported that they seriously contemplated suicide in the last 12 months

Overall, from 2009 to 2019, there was a significant increase (18 %) in the percentage of students who reported moderate or severe psychological distress

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 2019:

- Seventy-one (71) per cent of students rated their mental or emotional health to be good, very good, or excellent (63 per cent of females and 77 per cent of males)
- There were no significant differences in the percentage of students who rated their mental health as good, very good or excellent by grade
- Students with high school standing were significantly more likely than students with lower school standing to report good, very good or excellent mental health (81 per cent and 56 per cent, respectively)
- Students with high family SES were significantly more likely than students with low family SES to report good, very good or excellent mental health (77 per cent and 60 per cent, respectively)

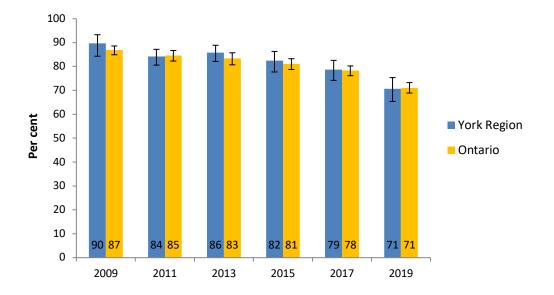
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 There were no significant differences in the percentage of students who rated their mental health as good, very good or excellent between York Region and Ontario

•

Overall from 2009 to 2019, there was a decrease (19%) in the percentage of students who rated their mental health as good, very good or excellent.

Figure 35: 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.¹⁹ 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.²⁰

Psychological distress was assessed using the Kessler 6-Item Psychological Distress Scale (K6).²¹ This tool measures unspecified psychological distress, defined as a state of emotional suffering characterized by symptoms of depression and anxiety.²² A score of eight or higher was used to indicate a moderate to serious level of distress experienced during the past four weeks.

- The percentage of students who experienced moderate to serious psychological distress was just under half (46 per cent) in 2019, up from 28 per cent in 2013
- Moderate to serious levels of distress was more common among female students (55 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 (57 per cent and 38 per cent, respectively)
- There were no significant differences in the percentage of students who experienced moderate to serious distress between York Region and Ontario
- Sixty-nine (69) per cent of students agreed or strongly agreed with the statement, "On the whole, I am satisfied with myself." (57 per cent of students with low family SES and 78 per cent of students with high family SES)
- Thirty-nine (39) per cent of students always or usually talked to their parent(s) about problems or feelings (46 per cent of females and 32 per cent of males)

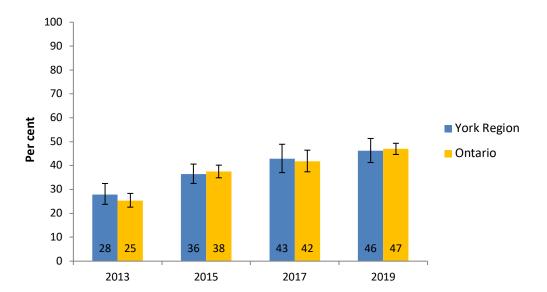


Figure 36: Experienced moderate to serious level of distress in past four weeks

Seriously considered suicide

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

- Eighteen (18) per cent of students reported that they seriously contemplated suicide in the last 12 months
- There were no significant differences in the percentage of students who seriously contemplated suicide by sex or by grade
- Students with low family SES were significantly more likely than students with high family SES to seriously contemplate suicide in the last 12 months (23 per cent and 13 per cent, respectively)
- There were no significant differences in the percentage of students who seriously contemplated suicide between York Region and Ontario
- Thirty-two 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 (40 per cent of females and 26 per cent of males)
- Four 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 about a problem in the last 12 months

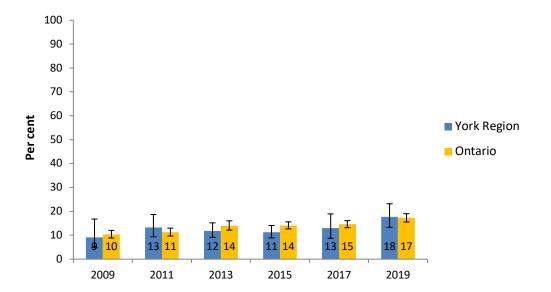


Figure 37: Seriously considered committing suicide in the last 12 months

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.²³ 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.

- Thirty (30) 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 12 per cent of Grade 9 students to 41 per cent of students in Grade 12
- The percentage of York Region students who reported that they work outside the home was lower than the corresponding Ontario percentage
- Of students who worked for pay outside the home during the school year, 57 per cent reported working an average of 10 or fewer hours per week

Figure 38: Work for pay outside the home during the school year

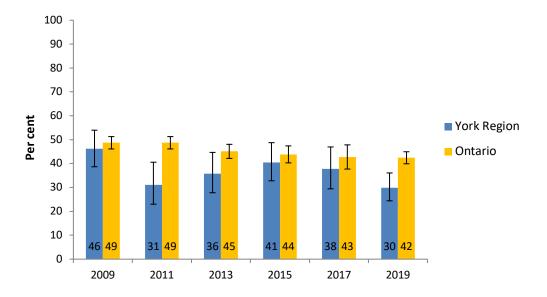
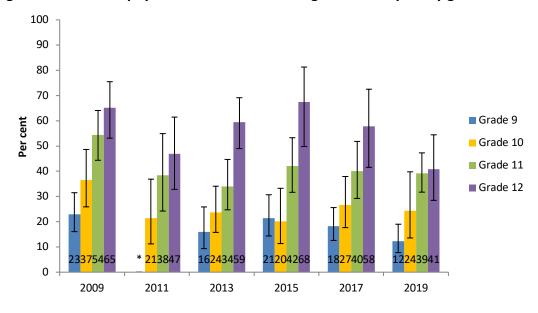


Figure 39: Work for pay outside the home during the school year by grade



^{*}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.²⁴ 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'.

- Eighteen (18) per cent of students reported being a victim of some form of bullying at school, down from 26 per cent of students in 2009
- Verbal attacks 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
- Students with low family SES were significantly more likely than students with high family SES to report being a victim of bullying at school (24 per cent and 14 per cent, respectively)
- There were no significant differences in the percentage of students who reported being a victim of bullying between York Region and Ontario

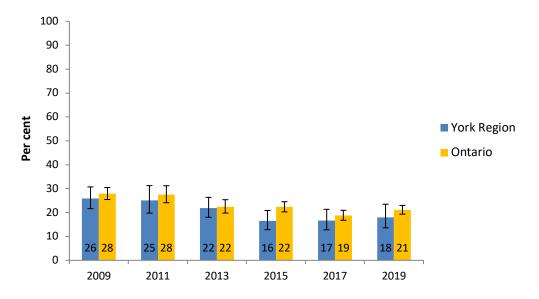


Figure 40: Victim of bullying at school since September

- Nine (9) per cent of students reported bullying others in some form at school (5 per cent of females and 12 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-five (55) per cent of students who bullied others reported being victims of bullying themselves

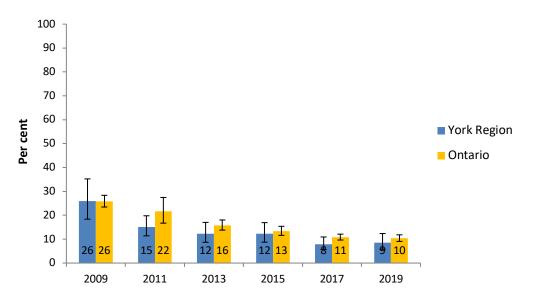


Figure 41: Bullied others at school since September

- Twenty-one (21) per cent of students reported being a victim of bullying electronically or 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
- Students with low family SES were significantly more likely than students with high family SES to report being a victim of cyber bullying (27 per cent and 15 per cent, respectively)
- There were no significant differences in the percentage of students who reported being a victim of cyber bullying between York Region and Ontario
- Thirteen (13) per cent of students reported that they bullied or picked on others electronically or through the internet in the past 12 months (19 per cent of males and 7 per cent of females)
- There were no significant differences in the percentage of students who cyber bullied others by grade

Figure 42: Victim of cyberbullying in past 12 months

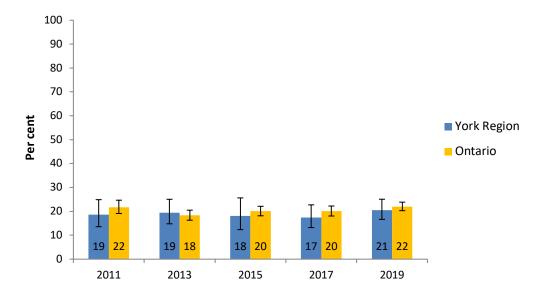
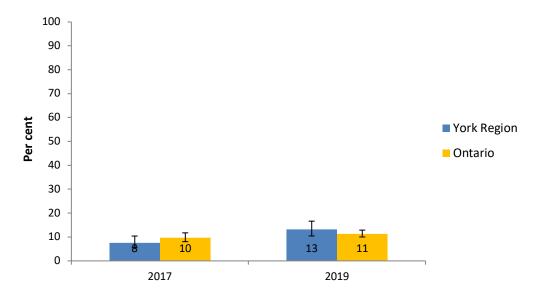


Figure 43: Cyberbullying perpetration in the past 12 months



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 2019:

- Thirty-three (33) per cent of students reported that they like going to school quite a lot or very much (other 3 response categories: 'I like school to some degree', 'I don't like school very much', 'I don't like school at all')
- There were no significant differences in the percentage of students who reported that they like going to school quite a lot or very much 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

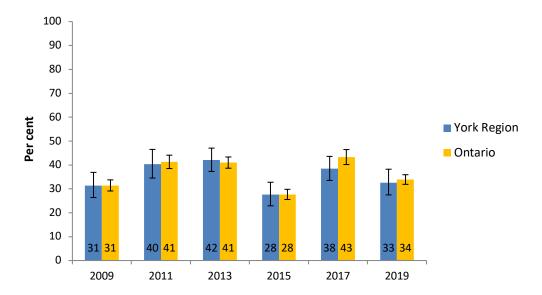


Figure 44: Like going to school, quite a lot or very much

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.¹⁹

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. ²⁵ 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. For adolescents today, digital interactions using smartphones and social media are the norm. ²⁶ Connectedness to others is an OSDUHS measure that partially describes the interpersonal competence context of positive youth development.

In 2019:

- Eighty-three (83) 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 sex or 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

100 90 80 70 60 Per cent York Region 50 Ontario 40 30 20 10 91 90 88 87 87 87 86 83 83 84 0 2009 2011 2013 2015 2017 2019

Figure 45: 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 2019:

• Fifty-eight (58) per cent of students reported high perceived social status at school (52 per cent of females and 64 per cent of males)

- The percentage of students who reported high perceived social status at school was highest among students in Grade 12 at 65 per cent
- The percentage of York Region students reporting high social status at school between York Region was significantly lower than the corresponding Ontario percentage

Figure 46: High perceived social status at school

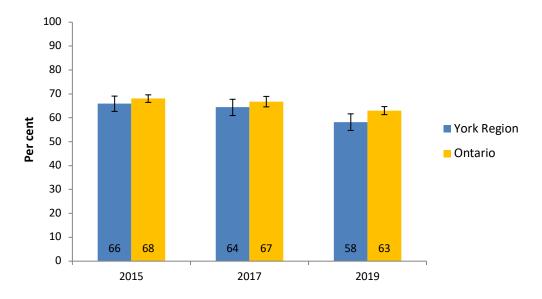
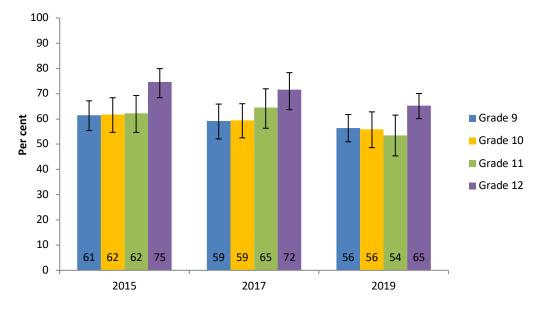


Figure 47: High perceived social status at school by grade



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. Identifying the school's 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 and well-being, healthy eating, 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!, Healthy Eating Ambassadors, and Peer Leadership for Active Youth (P.L.A.Y.) engage students in health promotion activities and develop leadership, resiliency, decision-making, and communication skills, while promoting social connectedness and positive relationships. Our Mental Health awareness workshops focus on positive mental health and well-being, while our walking, screen time reduction, and whole school physical

activity resources and programs support physical activity. Additionally, our school and student nutrition program consultations support healthy eating environments and the development of food literacy skills amongst children and youth.

In the area of prevention and 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 & Harm Reduction (SUPHR)** 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, positive ways to deal with stress, 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 SUPHR Program 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 fuse among youth. The team recognizes that working with York Region schools boards and community partners to address key issues related to substance use 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 training and consultation to student leaders and their teachers for peer-led concussion education and prevention activities focusing on the link between physical activity, mental health, and concussion awareness. 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 tastetesting 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.²⁷ Further, more and more research is showing a relationship between nutritional factors and effect on mental well-being.²⁸

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):2457–2463.

https://www.dietitians.ca/Advocacy/Interprofessional-Collaborations-(1)/WHO-Growth-Charts/WHO-Growth-Charts-Set-1.

² Williams EP, Mesidor M, Winters K, Dubbert PM, Wyatt SB. Overweight and Obesity: Prevalence, Consequences, and Causes of a Growing Public Health Problem. Curr Obes Rep. 2015;4(3):363–370.

³ Dietitians of Canada. WHO Growth Charts for Canada 2 to 19 Years: BMI. [Growth Charts online]. Toronto: Dietitians of Canada; 2014 [cited 2020 Jan 31]. Available from:

⁴ Sankararaman S, Syed W, Medici V, Sferra TJ. Impact of Energy Drinks on Health and Well-being. Curr Nutr Rep. 2018;7(3):121–130.

⁵ Seifert SM, Schaechter JL, Hershorin ER, Lipshultz SE. Health effects of energy drinks on children, adolescents, and young adults [published correction appears in Pediatrics. 2016 May;137(5):null]. Pediatrics. 2011;127(3):511–528.

⁶ Harris JL, Munsell CR. Energy drinks and adolescents: what's the harm?. Nutr Rev. 2015;73(4):247–257.

⁷ Rasberry CN, Lee SM, Robin L, Laris BA, Russell LA, Coyle KK, et al. The association between school-based physical activity, including physical education, and academic performance: a systematic review of the literature. Prev Med. 2011;52 Suppl 1:S10–S20.

⁸ Katzmarzyk PT, Staiano AE. Relationship Between Meeting 24-Hour Movement Guidelines and Cardiometabolic Risk Factors in Children. J Phys Act Health. 2017;14(10):779–784.

⁹ Tremblay MS, Carson V, Chaput JP, Carson V, Chaput P, 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. 2016;41(6 Suppl 3):S311–S327.

¹⁰ Saunders TJ, Vallance JK. Screen Time and Health Indicators Among Children and Youth: Current Evidence, Limitations and Future Directions. Appl Health Econ Health Policy. 2017;15(3):323–331.

¹¹ Keyes KM, Maslowsky J, Hamilton A, Schulenberg J. The great sleep recession: changes in sleep duration among US adolescents, 1991-2012. Pediatrics. 2015;135(3):460–468.

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 Saunders TJ, Vallance JK. Screen Time and Health Indicators Among Children and Youth: Current Evidence, Limitations and Future Directions. Appl Health Econ Health Policy. 2017;15(3):323–331.

¹⁴ Buchmann AF, Schmid B, Blomeyer D, Becker K, Treutlein J, Zimmermann US, Jennen-Steinmetz C, 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):1205–1212.

¹⁵ Yaeger JP, Moreno MA. The role of age and setting in adolescents' first drinking experience for predicting college problem drinking. J Am Coll Health. 2017;65(7):506–512.

¹⁶ Hedman L, Bjerg A, Sundberg S, Forsberg B, Rönmark E. Both environmental tobacco smoke and personal smoking is related to asthma and wheeze in teenagers. Thorax. 2011;66(1):20–25.

¹⁷ Song AV, Morrell HE, Cornell JL, Ramos, ME, Biehl, ME, Kropp, RY, Halpern-Felsher BL, et al. Perceptions of smoking-related risks and benefits as predictors of adolescent smoking initiation. Am J Public Health. 2009;99(3):487–492.

¹⁸ Setlik J, Bond GR, Ho M. Adolescent prescription ADHD medication abuse is rising along with prescriptions for these medications. Pediatrics. 2009;124(3):875–880.

¹⁹ Search Institute. User Guide for The Attitudes & Behaviours Survey. https://www.search-institute.org/sites/default/files/a/A&B-Survey-User-Guide.pdf. Published March 2016. Accessed March 23, 2022. ²⁰ Ridner SH. Psychological distress: concept analysis. J Adv Nurs. 2004;45(5):536–545.

²¹ Boak A, Hamilton HA, Adlaf AE, Henderson JL, Mann RE. The mental health and well-being of Ontario students, 1991-2017: Detailed findings from the Ontario Student Drug Use and Health Survey) (CAMH Research

Document Series No. 47). [Report online]. Toronto, ON: Centre for Addiction and Mental Health; 2018 [cited 2022 Mar 24]. Available from: https://www.camh.ca/-/media/files/pdf---osduhs/mental-health-and-well-being-of-ontario-students-1991-2017---detailed-osduhs-findings-pdf.

²² Drapeau A, Marchand A, Beaulieu-Prévost D. Epidemiology of Psychological Distress. In: LABate L, editor. Mental Illnesses Understanding, Prediction and Control. Croatia: Intech Open Access Publisher; 2012 [cited 2022 Mar 24].

Available from: https://www.intechopen.com/books/mental-illnesses-understanding-prediction-and-control/epidemiology-of-psychological-distress

- ²³ Graves JM, Mackelprang JL, Barbosa-Leiker C, Miller ME, Li AY. Quality of life among working and non-working adolescents. Qual Life Res. 2017;26(1):107–120.
- ²⁴ Accepting Schools Act, S.O. 2012, c. 5 Bill 13. Available from https://www.ontario.ca/laws/statute/s12005.
- ²⁵ Sieving RE, McRee AL, McMorris BJ, Shlafer RJ, Gower AL, Kapa HM, et al. Youth-Adult Connectedness:: A Key Protective Factor for Adolescent Health. Am J Prev Med. 2017;52(3 Suppl 3):S275–S278.
- ²⁶ Abi-Jaoude E, Naylor KT, Pignatiello A. Smartphones, social media use and youth mental health. CMAJ. 2020;192(6):E136–E141.
- ²⁷ Canadian Medical Association. Healthy behaviours promoting physical activity and healthy eating [Internet]. Ottawa, ON: Canadian Medical Association; 2015 [cited 2022 Mar 25]. Available from: https://policybase.cma.ca/en/permalink/policy11523
- ²⁸ Lim SY, Kim EJ, Kim A, Lee HJ, Choi HJ, Yang SJ. Nutritional Factors Affecting Mental Health. Clin Nutr Res. 2016;5(3):143–152.