The Mental Health and Well-Being of Ontario Students 1991–2019

Detailed Findings from the Ontario Student Drug Use and Health Survey

with French summary within | avec resumé en français à l'intérieur

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Ontario Student Drug Use and Health Survey

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OSDUHS
Ontario Student Drug Use and Health Survey

The 2019 OSDUHS Mental Health and Well-Being Report Summary

The Study

The Centre for Addiction and Mental Health's *Ontario Student Drug Use and Health Survey* (OSDUHS) has been conducted every two years since 1977, making it the longest ongoing school survey of adolescents in Canada, and one of the longest in the world. Between November 2018 and June 2019, a total of 14,142 students in grades 7 to 12 from 992 classes, in 263 schools, in 47 school boards participated in the 2019 cycle of the OSDUHS.

This report describes physical health indicators, mental health indicators, bullying, gambling and related problems, video gaming and related problems, and other risk behaviours among Ontario students in 2019 and changes since 1991, where available. Although the OSDUHS began in 1977, most mental health and physical health measures were introduced in the survey in the early 1990s. New indicators in this report include self-harm, coping ability, help-seeking preference for a mental health problem, virtual gambling while playing video games, and talking on a hand-held phone while driving. All data are based on students' self-reports derived from anonymous questionnaires completed in classrooms. The survey was administered in schools across Ontario by the Institute for Social Research (at York University) on CAMH's behalf.

Home Life

- About one-in-five (22%) Ontario students report living with a single parent or no parent (birth, adoptive, or step). About one-in-eight (13%) students report splitting their time between two or more homes.
- Over one-third (37%) of students report that they rarely or never talk to their parents about their problems or feelings.
- Nearly half (42%) of secondary school students have a part-time job. Five percent work more than 20 hours per week.

School Life

- About one-in-seven (15%) students report they are receiving special education, 78% report that they are not receiving special education, and about 8% are not sure.
- One-in-six (16%) students report being suspended or expelled from school at least once in their lifetime.
- Over one-third (36%) of students report they like school very much or quite a lot. About 42% like school to some degree, and 23% do not like school.

➢ The percentage of students who report that they like school very much or quite a lot has significantly increased since 1999 and the early 2000s (from about 27% to 36%).

- Most students feel close to people at their school (85%), and feel like they are part of their school (82%). Most students (73%) feel there is at least one caring adult at school that they can talk to if needed.

- Almost one-quarter (23%) of students report low subjective social status at school (i.e., feeling that other students exclude them and do not respect them).

- Although most students feel safe in their school, one-in-seven (14%) are worried about being harmed or threatened at school.

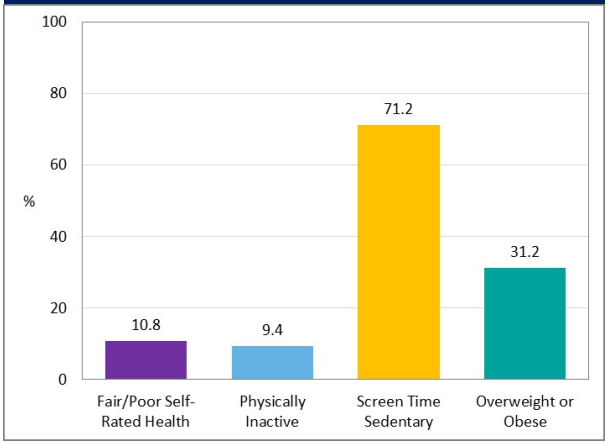
Physical Health

Self-Rated Physical Health

- Although the majority (58%) of students rate their health as excellent or very good, about 11% (an estimated 96,500 Ontario students in grades 7–12) report fair or poor physical health.

➢ Ratings of fair or poor physical health have increased in recent years (since 2013). The current estimate is also significantly higher than the early 1990s when the estimate was about 6%.

Percentage of students reporting selected physical health indicators, 2019 OSDUHS



Physical Activity, Weight, Sleep

- One-in-five (21%) students met the recommended daily physical activity guideline (defined as a total of at least 60 minutes of moderate-to-vigorous activity per day) during the past seven days. In contrast, about one-in-eleven (9%) students were physically inactive on each of the past seven days.

- Nearly half (47%) of students do not engage in physical activity in a physical education class at school.

- Almost three-quarters (71%) of students spend three hours or more per day in front of an electronic screen in their free time ("screen time" sedentary behaviour). This amount of screen time exceeds the *Canadian 24-Hour Movement Guidelines for Children and Youth*.

➢ The percentage of students who are screen time sedentary significantly increased between 2017 (60%) and 2019 (71%). The current estimate is the highest on record since monitoring began in 2009.

- Just under one-third (31%) of students are classified as overweight or obese (an estimated 265,400 Ontario students).

➢ The percentage of students classified as overweight or obese has remained stable in recent years, but there has been a significant increase since 2007, the first year of monitoring, from 26% to 31%.

- Only about one-third (37%) of students report they usually get eight hours or more of sleep on an average school night. Therefore, most students (63%) are not getting at least eight hours of sleep.

- The percentage of students who report at least eight hours of sleep on an average school night has significantly decreased since 2015, the first year of monitoring, from 41% to 37%.

- About 6% of students report always or often going to bed or school hungry. This percentage represents about 55,500 students in Ontario.

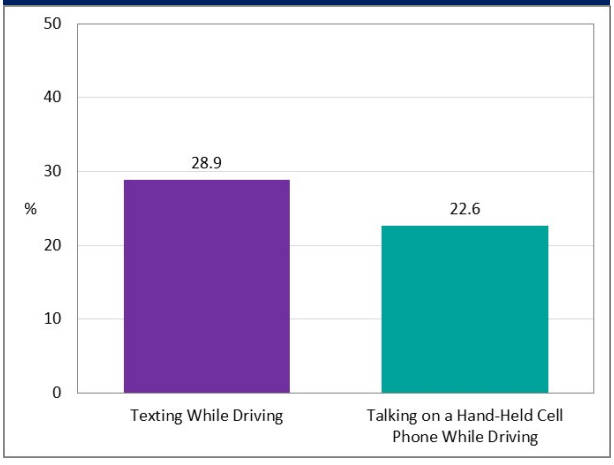
Body Image

- Well over half (59%) of students are satisfied with their weight. One-quarter (26%) believe they are "too fat," and one-in-seven (15%) believe they are "too thin."

- The perception of being "too fat" has remained stable during the past decade. However, there has been a significant increase since 2001, the first year of monitoring, from 19% to 26%. Of note, the increase in this perception over time is evident for females and males.

- One-third (32%) of students are not trying to change their weight. Another third (31%) are trying to lose weight, 21% want to keep from gaining weight, and 16% want to gain weight.

Percentage of drivers in grades 10-12 reporting risky driving behaviours (past year), 2019 OSDUHS



Injuries and Related Behaviours

- Almost half (44%) of students were treated for an injury at least once during the past year (representing about 349,800 students).

- The percentage of students reporting a medically treated injury has remained stable during the past decade, but has significantly increased since the early-to-mid 2000s (from about 34%-37% to 44%).

- Over one-third (39%) of students report experiencing a concussion in their lifetime. About one-in-seven (15%) report experiencing a concussion in the past year (about 128,500 students in Ontario). Of the specific causes asked about, falls and playing team sports (such as hockey, football, rugby) are among the most commonly reported causes of concussions.

- One-quarter (25%) of students report that they do not always wear a seatbelt when in a motor vehicle (about 198,500 Ontario students).

- Over one-quarter (29%) of drivers in grades 10–12 report texting while driving at least once in the past year. This percentage represents an estimated 73,300 adolescent drivers.

- The percentage of adolescent drivers reporting texting while driving did not significantly change between 2017 (33%) and 2019 (29%). However, there has been a significant decrease since 2013 (36%), the first year of monitoring.

- Just under one-quarter (23%) of drivers in grades 10–12 report talking on a hand-held cell phone while driving at least once in the past year. This percentage represents an estimated 57,200 adolescent drivers.

- About 9% of drivers in grades 10–12 (about 23,700 adolescent drivers) report being involved in a collision as a driver at least once in the past year.

Health Care Utilization

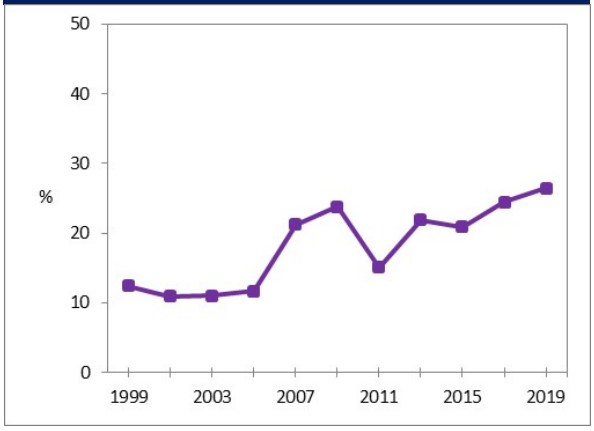
Mental Health Care

- One-quarter (27%) of students visited a mental health care professional (such as a doctor, nurse, or counsellor) for a mental health issue at least once in the past year. This estimate represents about 260,900 students in Ontario.

➢ The percentage of students reporting visiting a mental health professional has remained stable during the past few years, but has significantly increased since 1999 and the early 2000s (from about 11%-12% to 27%).

- About 5% of students report seeking counselling by either calling a telephone helpline or over the Internet (or both) at least once in the past year. This estimate represents about 44,600 Ontario students.

Percentage of students reporting visiting a mental health professional in the past year, 1999-2019 OSDUHS



➢ The percentage of students who report seeking counselling through a helpline or over the Internet has significantly increased compared to earlier this decade (2011-2015) when estimates were about 2%-3%.

Mental Health Support

- About one-third (35%) of students report that, in the past year, there was a time they wanted to talk to someone about a mental health problem, but did not know where to turn. This estimate represents about 348,700 Ontario students.

➢ The percentage reporting an unmet need for mental health support has significantly increased since 2013, the first year of monitoring, from 28% to 35%.

- Students were asked how they would prefer to receive professional help for a mental health problem, if needed. Less than half (43%) of students would prefer to receive help in person. About 7% would prefer to receive help over the Internet (website or chat), and 2% would prefer to receive help over the phone. About one-quarter (24%) of students would probably not look for professional help, and another quarter (25%) are not sure how they would prefer to receive help.

Use of Drugs for Medical Reasons

- One-in-five (20%) students report the medical use of prescription opioid pain relievers (e.g., Tylenol #3, Percocet) in the past year. About 4% of students used prescribed drugs for ADHD (e.g., Adderall, Ritalin, Concerta) in the past year. About 3% of secondary school students used prescribed tranquillizers/sedatives (e.g., Xanax, Valium, Ativan) in the past year.

- The percentage of students who report medical use of prescription opioid pain relievers has remained stable during this decade, but has significantly decreased since monitoring began in 2007 (from 41% to 20%). The percentage who report medical use of ADHD drugs has remained stable during the past few years, but has significantly increased since monitoring began in 2007 (from 2% to 4%). The percentage who report medical use of tranquillizers/sedatives has remained stable since the 1990s.

- About 7% of secondary school students report they were prescribed medication for anxiety, depression, or both conditions in the past year. This estimate represents about 54,000 secondary school students in Ontario.

- The percentage of secondary school students reporting having been prescribed medication to treat anxiety, depression, or both has been stable in recent years (since 2013), but has significantly increased since the early 2000s (from about 3% to 7%).

Mental Health

Self-Rated Mental Health

- Just under half (46%) of students rate their mental health as excellent or very good, while over one-quarter (27%) rate their mental health as fair or poor.

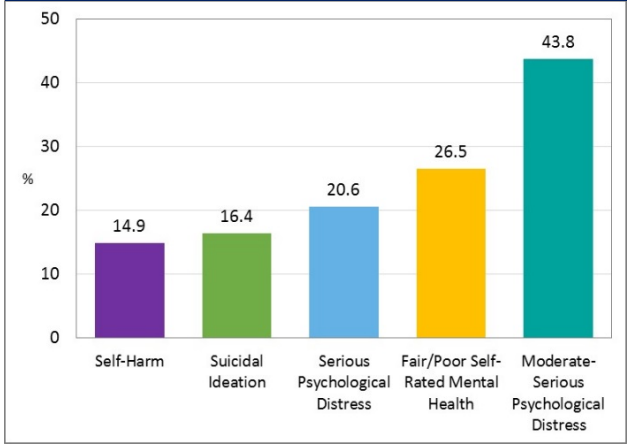
- The percentage of students who rate their mental health as fair or poor significantly increased between 2017 and 2019, from 19% to 27%. The current estimate is the highest level on record since monitoring began in 2007 (11%).

Low Self-Esteem

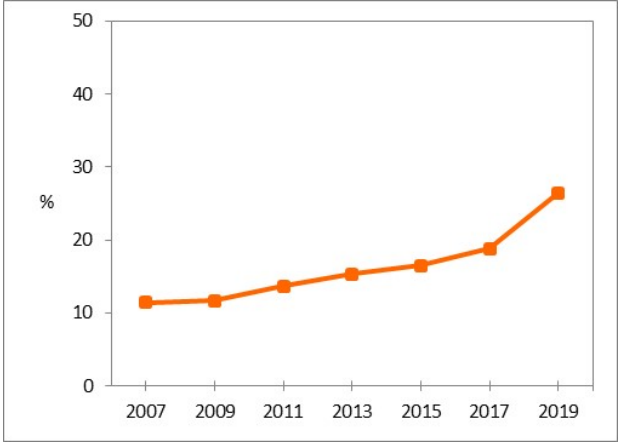
- About 9% of students indicate low self-esteem (feeling very unsatisfied with oneself).

- The percentage of students indicating low self-esteem has slightly, but significantly, increased since 2015, the first year of monitoring, from 7% to 9%.

Percentage of students reporting selected mental health indicators, 2019 OSDUHS



Percentage of students rating their mental health as fair or poor, 2007-2019 OSDUHS



Elevated Stress

- One-third (33%) of students report experiencing an elevated level of stress or pressure in their lives.

➢ The percentage of students reporting elevated stress has significantly increased since 2015, the first year of monitoring, from 29% to 33%.

Psychological Distress

- Just under half (44%) of students indicate a moderate-to-serious level of psychological distress (symptoms of anxiety and depression). This estimate represents about 417,600 Ontario students.

➢ Moderate-to-serious psychological distress remained stable between 2017 and 2019, but the percentage has increased almost two-fold since 2013 (24%), the first year of monitoring.

- One-in-five (21%) students indicate a serious level of psychological distress (representing about 196,000 Ontario students).

➢ The percentage indicating serious psychological distress significantly increased between 2017 and 2019, from 17% to 21%, reaching a record high since monitoring began in 2013 (11%).

Self-Harm and Suicide

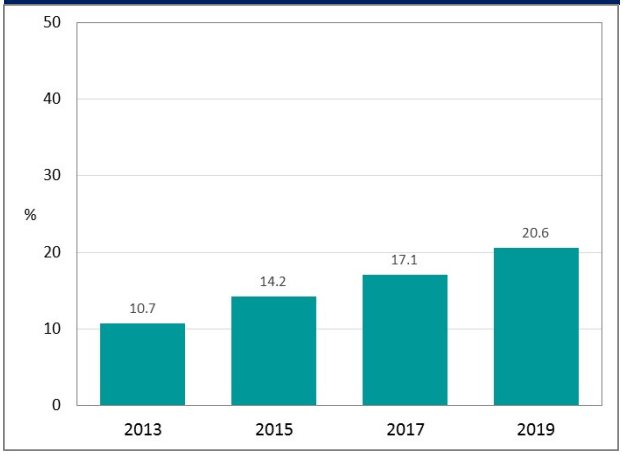
- About one-in-seven (15%) students report harming themselves on purpose in the past year. This estimate represents about 127,800 Ontario students.

- One-in-six (16%) students had serious thoughts about suicide in the past year (an estimated 140,300 Ontario students), and 5% report a suicide attempt in the past year (an estimated 40,900 students).

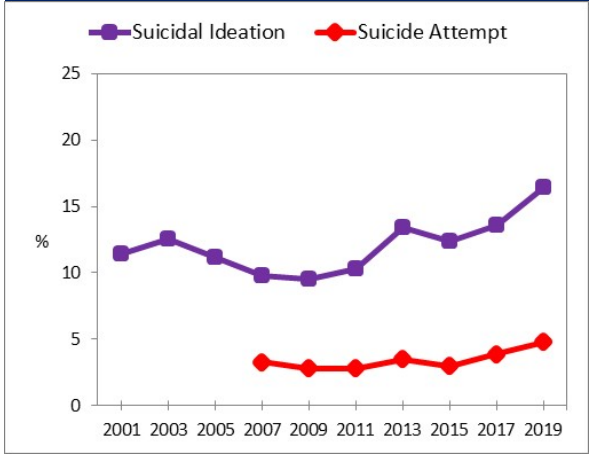
➢ The percentage of students reporting suicidal ideation in the past year significantly increased between 2017 and 2019, from 14% to 16%, reaching a record high since monitoring began in 2001 (12%).

➢ The percentage of students reporting a suicide attempt in the past year has remained relatively stable since 2007 (the first year of monitoring), fluctuating between 3% and 5%.

Percentage of students indicating serious psychological distress, 2013-2019 OSDUHS



Percentage of students reporting suicidal ideation and attempt in the past year, 2001-2019 OSDUHS



Traumatic Event

- Over one-third (39%) of secondary school students report experiencing a traumatic or negative event (nonspecific) in their lifetime. This estimate represents about 292,300 secondary school students.

Ability to Cope

- Over one-third (39%) of students rate their ability to cope with unexpected and difficult problems as excellent or very good. In contrast, almost one-quarter (23%) rate their ability as fair or poor.

Antisocial Behaviour and Bullying

Antisocial Behaviour

- About 8% of students report engaging in antisocial behaviour (defined as three or more of nine specific behaviours) during the past year (about 80,000 students).

➢ Antisocial behaviour significantly decreased between 1999 and 2015, followed by a small, but significant, increase (from 5% to 8%).

Violent Behaviour

- About 8% of students report that they assaulted someone at least once in the past year, and a similar percentage (6%) report carrying a weapon in the past year (about 60,100 students).

➢ The percentage of students reporting assaulting someone and the percentage reporting carrying a weapon have been stable during the past decade. However, over the long-term, both behaviours have shown significant declines since the early 1990s.

Bullying at School

- About one-quarter (23%) of students report being bullied at school since the beginning of the school year (representing about 222,400 students). The most prevalent form of bullying victimization at school is verbal (19%), while 2% report that they are primarily bullied physically, and 2% of students are victims of theft/vandalism.

- One-in-ten (10%) students report bullying others at school since September. The most prevalent form of bullying others at school is through verbal attacks (9%), followed by physical attacks (1%), and theft/vandalism (less than 1%).

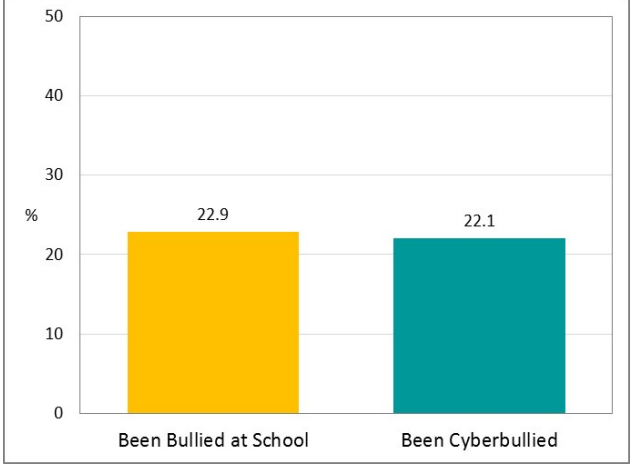
➢ The percentage of students reporting being bullied at school has remained stable during the past few years (since 2013), but the current estimate is significantly lower than all estimates between 2003 (the first year of monitoring) and 2011 (about 29%-33%).

➢ The percentage reporting bullying others at school remained stable between 2017 and 2019, but it is significantly lower than all estimates between 2003 and 2015.

Cyberbullying

- About one-in-five (22%) students report being bullied over the Internet in the past year. This estimate represents about 216,100 students.
- One-in-nine (11%) students report bullying others over the Internet in the past year.
- ➢ The percentage reporting being cyberbullied has remained stable since 2011, the first year of monitoring, at about 19%-22%.

Percentage of students reporting having been bullied at school and over the Internet (past year), 2019 OSDUHS



Gambling, Video Gaming, and Technology Use

Gambling Activities

- Of the gambling activities surveyed in 2019, the most prevalent is betting money on a dare or private bet (11%), followed by betting in card games (8%), and sports pools/fantasy sports (8%). The least prevalent activity is casino gambling (less than 1%).
- Gambling money on video games is reported by about 7% of students. Gambling money online (in any way) is reported by about 4% of students.
- One-third (32%) of students report gambling at one or more activities in the past year (about 302,800 Ontario students). About 4% of students gambled at five or more activities in the past year (about 36,200 students).
- ➢ The percentage of students reporting any gambling activity in the past year has remained stable in recent years (since 2013), but is significantly lower today compared to the early-to-mid 2000s (about 53%-57%).
- ➢ While gambling at five or more activities significantly increased between 2017 and 2019 (from 2% to 4%), the current estimate is significantly lower compared to the early-to-mid 2000s (about 6%).
- ➢ No individual gambling activity surveyed in 2019 showed an increase since the previous survey in 2017. In fact, most activities show significant downward trends over time, with one exception. Online gambling (any) is the only activity to show a significant increase since the early 2000s, when monitoring first began, from 2% to 4%.

Gambling Problem

- About 4% of secondary school students indicate symptoms of a low-to-moderately severe gambling problem. About 2% indicate symptoms of a high-severity gambling problem (representing about 12,200 Ontario secondary school students).

Video Gaming

- One-quarter (24%) of students play video games daily or almost daily. About one-in-nine (11%) students play video games for five hours or more per day.
- One-in-seven (14%) students (an estimated 137,000 in Ontario) report symptoms of a video gaming problem (preoccupation, tolerance, loss of control, withdrawal, escape, disregard for consequences, disruption to family or school).

➢ The percentage of students reporting symptoms of a video gaming problem remained stable between 2017 and 2019, but there has been a significant increase compared to a decade or so ago (from about 10% to 14%).

- The OSDUHS also asked students about betting virtual credits when playing a video game. Almost one-in-five (19%) students have ever bet virtual credits that they won or earned in a video game. One-in-eight (12%) students have bet virtual credits that they purchased with money.

Technology Use

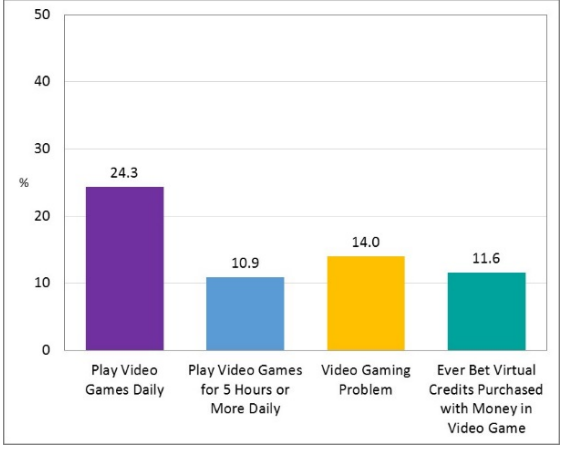
- The majority (87%) of students visit social media sites daily. About one-in-five (21%) students spend five hours or more on social media daily.

➢ The percentage of students who report spending five hours or more on social media daily remained stable between 2017 and 2019, but there has been a significant increase since 2013, the first year of monitoring (from 11% to 21%).

- About one-in-five (21%) students report posting something personal on social media that they wish they had not.
- Over one-third (35%) of secondary school students spend five hours or more daily on electronic devices (smartphones, tablets, laptops, computers, gaming consoles) in their free time.
- About one-in-five (19%) secondary school students report symptoms that may suggest a moderate-to-serious problem with technology use (preoccupation, loss of control, withdrawal, problem with family/friends). About 3% of secondary school students report symptoms that may suggest a serious problem with technology use (representing about 21,200 secondary school students).

➢ The percentage of students reporting symptoms of a moderate problem or a serious problem with technology use did not significantly change in 2019 compared to 2017, the first year of monitoring.

Percentage of students reporting video gaming related behaviours and problems, 2019 OSDUHS



Sex Differences

Males are more likely to:	Females are more likely to:
▪ engage in daily physical activity ▪ be classified as overweight or obese ▪ experience a concussion ▪ use ADHD drugs (medically) ▪ engage in antisocial behaviour ▪ carry a weapon ▪ bully others at school ▪ cyberbully others ▪ gamble (any) ▪ spend 5 hours or more video gaming daily ▪ indicate a video gaming problem ▪ bet virtual credits in a video game	▪ rate their physical health as fair or poor ▪ be physically inactive ▪ not get at least 8 hours of sleep on a school night ▪ use prescription opioids (medically) ▪ not always wear a seatbelt when in a vehicle ▪ visit a mental health care professional ▪ seek counselling over the phone or Internet ▪ report an unmet need for mental health support ▪ use prescription sedatives/tranquillizers (medically) ▪ be prescribed medication for anxiety/depression ▪ rate their mental health as fair or poor ▪ report low self-esteem ▪ report elevated stress ▪ indicate psychological distress ▪ report self-harm ▪ report suicidal ideation and attempt ▪ experience a traumatic life event ▪ rate their ability to cope with problems as fair/poor ▪ be bullied at school ▪ worry about being harmed/threatened at school ▪ be cyberbullied ▪ spend 5 hours or more on social media daily ▪ spend 5 hours or more on devices daily (free time) ▪ indicate a problem with technology use

Grade Differences

Increases with grade	Decreases with grade
▪ ratings of fair or poor physical health ▪ sedentary behaviour (3 hours or more screen time) ▪ going to school or bed hungry ▪ medical use of prescription opioids ▪ texting while driving ▪ talking on a hand-held cell phone while driving ▪ unmet need for mental health support ▪ being prescribed medication for anxiety/depression ▪ ratings of fair or poor mental health ▪ elevated stress ▪ psychological distress ▪ suicidal ideation ▪ antisocial behaviour ▪ carrying a weapon ▪ any gambling ▪ 5 hours or more on social media daily	▪ engaging in daily physical activity ▪ getting at least eight hours of sleep ▪ experiencing a concussion ▪ being bullied at school ▪ worry about being harmed/threatened at school

Regional Differences

The survey design divided the province into four regions: Greater Toronto Area (Toronto, Durham Region, York Region, Peel Region, and Halton Region); Northern Ontario (Parry Sound District, Nipissing District and farther north); Western Ontario (Dufferin County and farther west); and Eastern Ontario (Simcoe County and farther east). The following table shows significant regional differences.

Above provincial average	Below provincial average
Greater Toronto Area (GTA)	
▪ physical inactivity ▪ sedentary behaviour (3 hour or more of screen time) ▪ video gaming problem ▪ five hours or more on devices daily (in free time)	▪ experiencing a concussion ▪ medically treated injury ▪ texting or talking on cell phone while driving ▪ prescription for anxiety and/or depression ▪ use of ADHD drugs (medically) ▪ mental health care visit ▪ antisocial behaviour ▪ being cyberbullied ▪ any gambling
North	
▪ overweight or obese ▪ prescription for anxiety and/or depression ▪ any gambling	
West	
▪ prescription for anxiety and/or depression ▪ carry a weapon	
East	
▪ daily physical activity ▪ experiencing a concussion ▪ at least 8 hours of sleep on an average school night ▪ mental health care visit	▪ five hours or more on social media daily

Changes in 2019 vs. 2017

The following table summarizes the significant changes between 2017 and 2019 among the total sample of students.

	2017		2019
Fair or poor self-rated physical health	8.7%	↑	10.8%
Sedentary behaviour (3 hours or more of screen time)	60.0%	↑	71.2%
Fair or poor self-rated mental health	18.8%	↑	26.5%
Low self-esteem	6.5%	↑	9.2%
Serious psychological distress	17.1%	↑	20.6%
Suicidal ideation in the past year	13.6%	↑	16.4%
Five hours or more on electronic devices daily (in free time)	29.5%	↑	35.4%

Percentage Reporting Selected Mental Health and Well-Being Indicators by Sex, 2019 OSDUHS (Grades 7–12)

Indicator	Total %	(95% CI)	Estimated Number†	Males %	Females %	
fair or poor self-rated physical health	**10.8**	(9.9-11.7)	96,500	9.3	12.4	*
daily physical activity (60 mins. activity daily in past week)	**21.2**	(20.0-22.4)	188,900	26.4	15.7	*
physically inactive (no days of activity in past week)	**9.4**	(8.6-10.3)	83,800	8.1	10.8	*
sedentary behaviour (3 or more hours per day of screen time)	**71.2**	(70.0-72.4)	635,500	70.9	71.6	
overweight or obese	**31.2**	(30.0-32.6)	265,400	33.9	28.5	*
8 or more hours of sleep on an average school night	**36.9**	(35.3-38.5)	328,200	41.7	31.9	*
often or always go to school or bed hungry	**6.3**	(5.5-7.1)	55,500	6.1	6.5	
medically treated injury (past year)	**44.2**	(42.0-46.4)	349,800	46.0	42.2	
concussion (past year)	**14.5**	(13.5-15.5)	128,500	15.4	13.5	*
medical use of opioid pain relievers (past year)	**20.3**	(18.9-21.8)	163,300	18.7	22.0	*
not always wear a seatbelt when in motor vehicle	**24.6**	(23.0-26.4)	198,500	22.9	26.5	*
texting while driving (G10-12 with licence, past year)	**28.9**	(25.9-32.2)	73,300	29.7	28.0	
talking on phone while driving (G10-12 with licence, past year)	**22.6**	(19.8-25.8)	57,200	24.3	20.8	
mental health care visit (past year)	**26.5**	(24.9-28.2)	260,900	22.1	31.1	*
sought counselling over phone or Internet (past year)	**4.5**	(3.9-5.3)	44,600	2.6	6.6	*
unmet need for mental health support	**35.4**	(33.8-37.0)	348,700	23.9	47.4	*
medical use of tranquillizers/sedatives (past year)††	**2.7**	(2.3-3.2)	18,400	2.0	3.4	*
medical use of ADHD drugs (past year)	**3.9**	(3.2-4.8)	38,400	5.3	2.5	*
prescribed medication for depression/anxiety/both††	**7.2**	(6.2-8.4)	54,000	3.6	10.9	*
fair or poor self-rated mental health	**26.5**	(24.7-28.3)	260,500	17.9	35.4	*
low self-esteem	**9.2**	(8.3-10.3)	90,200	5.7	12.9	*
elevated stress	**32.8**	(31.1-34.5)	321,700	23.8	42.2	*
moderate-to-serious psychological distress (past month)	**43.8**	(41.9-45.7)	417,600	31.4	56.6	*
serious psychological distress (past month)	**20.6**	(19.2-22.0)	196,000	12.0	29.4	*
self-harm (past year)	**14.9**	(13.4-16.5)	127,800	7.9	21.9	*
suicidal ideation (past year)	**16.4**	(15.0-17.9)	140,300	11.3	21.5	*
suicide attempt (past year)	**4.8**	(3.9-5.8)	40,900	2.9	6.7	*
experienced a traumatic event (lifetime)††	**39.0**	(37.0-41.0)	292,300	32.7	45.6	*
fair or poor ability to cope with unexpected/difficult problems	**22.6**	(21.1-24.1)	220,500	16.2	29.1	*
antisocial behaviour (3 or more of 9 behaviours in past year)	**8.3**	(7.5-9.2)	80,000	10.0	6.6	*
carried a weapon (past year)	**6.3**	(5.6-7.1)	60,100	8.9	3.6	*
worried about being harmed or threatened at school	**14.3**	(12.9-15.8)	140,400	12.3	16.3	*
been bullied at school (since September)	**22.9**	(21.4-24.5)	222,400	20.5	25.4	*
bullied others at school (since September)	**10.4**	(9.3-11.6)	100,800	12.3	8.4	*
been cyberbullied (past year)	**22.1**	(20.7-23.6)	216,100	18.6	25.7	*
cyberbullied others (past year)	**11.0**	(9.9-12.2)	107,600	12.7	9.3	*
any gambling activity (past year)	**31.8**	(30.3-33.3)	302,800	39.5	23.9	*
any online gambling (past year)	**4.3**	(3.7-5.0)	41,100	6.9	1.7	*
multi-gambling activity (5 or more activities in past year)	**3.8**	(3.3-4.4)	36,200	6.0	1.6	*
high gambling problem severity (past 3 months)††	**1.7**	(1.2-2.3)	12,200	2.9	s	
video gaming problem (past year)	**14.0**	(12.8-15.4)	137,000	22.7	5.1	*
ever bet virtual credits in video game (purchased with money)	**11.6**	(10.4-12.8)	111,900	19.3	3.6	*
5 or more hours per day on social media	**20.5**	(19.4-21.8)	185,900	15.6	25.8	*
moderate-to-serious problem with technology use††	**18.6**	(17.0-20.2)	135,500	14.7	22.5	*
serious problem with technology use††	**2.9**	(2.3-3.7)	21,200	1.9	3.9	*

Notes: the total sample size is 14,142 students; some estimates based on a random half sample; CI=confidence interval; † the estimated number of students is based on a population of about 908,800 students in grades 7–12 in Ontario, and have been rounded down; 's' indicates estimate suppressed due to unreliability; * indicates a significant sex difference (p<.05) *not* controlling for other factors; †† among grades 9–12 only; medical drug use is defined as use with a prescription.

Percentage Reporting Selected Mental Health and Well-Being Indicators by Grade, 2019 OSDUHS (Grades 7–12)

Indicator	G7	G8	G9	G10	G11	G12	
fair or poor self-rated physical health	7.2	8.3	9.1	10.7	13.6	12.9	*
daily physical activity (60 mins. activity daily in past week)	28.6	28.6	24.8	21.0	18.9	12.9	*
physically inactive (no days of activity in past week)	5.2	5.1	5.7	10.0	12.2	13.8	*
sedentary behaviour (3 or more hours per day of screen time)	54.3	66.0	72.5	73.8	77.4	74.5	*
overweight or obese	34.2	32.5	32.0	31.0	30.5	29.5	
8 or more hours of sleep on an average school night	69.6	58.8	41.0	31.6	23.5	21.1	*
often or always go to school or bed hungry	3.7	5.5	6.2	6.1	5.8	8.5	*
medically treated injury (past year)	46.1	46.4	47.9	43.5	42.0	41.8	
concussion (past year)	19.0	19.0	13.6	13.5	12.1	13.2	*
medical use of opioid pain relievers (past year)	12.2	18.5	19.0	20.0	20.5	25.7	*
not always wear a seatbelt when in motor vehicle	20.2	22.3	25.4	24.8	26.7	25.5	
texting while driving (G10-12 with licence, past year)	--	--	--	11.1	16.3	38.8	*
talking on phone while driving (G10-12 with licence, past year)	--	--	--	s	13.4	30.2	*
mental health care visit (past year)	28.6	29.8	24.6	23.2	25.1	29.1	*
sought counselling over phone or Internet (past year)	2.7	2.6	4.3	4.8	6.2	5.1	
unmet need for mental health support	25.1	31.2	32.0	34.4	41.2	42.2	*
medical use of tranquillizers/sedatives (past year)††	--	--	2.2	1.7	3.2	3.4	*
medical use of ADHD drugs (past year)	4.5	4.4	3.2	4.4	3.2	4.2	
prescribed medication for depression/anxiety/both††	--	--	3.6	5.3	8.4	10.7	*
fair or poor self-rated mental health	17.3	20.2	24.9	25.6	31.4	32.7	*
low self-esteem	7.1	7.5	10.2	9.1	9.7	10.3	
elevated stress	18.3	20.1	29.7	34.1	39.6	43.6	*
moderate-to-serious psychological distress (past month)	31.0	35.3	40.1	45.6	50.0	51.3	*
serious psychological distress (past month)	13.5	16.5	19.6	19.2	24.3	25.2	*
self-harm (past year)	11.8	13.5	13.8	15.9	16.1	16.0	
suicidal ideation (past year)	12.2	14.8	14.2	16.8	18.9	18.7	*
suicide attempt (past year)	4.4	5.1	3.7	4.9	4.9	5.5	
experienced a traumatic event (lifetime)††	--	--	35.2	36.1	39.7	44.1	*
fair or poor ability to cope with unexpected/difficult problems	21.3	19.1	23.1	21.1	24.4	24.5	
antisocial behaviour (3 or more of 9 behaviours in past year)	4.8	6.7	8.3	7.3	8.1	12.1	*
carried a weapon (past year)	3.5	4.5	5.6	7.1	7.3	7.8	*
worried about being harmed or threatened at school	18.5	16.4	15.5	12.7	12.8	12.6	*
been bullied at school (since September)	29.2	28.2	22.0	22.2	19.7	20.1	*
bullied others at school (since September)	9.6	11.2	11.1	10.4	10.8	9.3	
been cyberbullied (past year)	22.9	22.1	24.0	21.2	23.9	19.5	
cyberbullied others (past year)	9.4	10.5	12.8	9.7	13.1	10.1	
any gambling activity (past year)	26.2	30.6	29.2	31.0	33.4	37.0	*
any online gambling (past year)	2.9	3.8	4.6	4.1	4.6	5.0	
multi-gambling activity (5 or more activities in past year)	2.8	1.7	3.6	4.1	4.7	4.6	
high gambling problem severity (past 3 months)††	--	--	s	s	s	s	
video gaming problem (past year)	14.3	14.9	17.2	12.8	13.9	12.0	*
ever bet virtual credits in video game (purchased with money)	11.8	8.8	12.2	10.7	11.0	13.7	
5 or more hours per day on social media	12.4	15.7	23.6	21.9	23.7	21.2	*
moderate-to-serious problem with technology use††	--	--	17.3	17.6	19.9	19.3	
serious problem with technology use††	--	--	2.8	3.0	2.7	3.1	

Notes: * indicates a significant grade difference (p<.05) *not* controlling for other factors; 's' indicates estimate suppressed due to unreliability; †† among grades 9–12 only; medical drug use is defined as use with a prescription.

Percentage Reporting Selected Mental Health and Well-Being Indicators by Region, 2019 OSDUHS (Grades 7–12)

Indicator	GTA	North	West	East	
fair or poor self-rated physical health	10.7	11.8	11.2	10.3	
daily physical activity (60 mins. activity daily in past week)	19.1	20.2	22.1	24.9	*
physically inactive (no days of activity in past week)	10.6	6.7	9.3	7.8	*
sedentary behaviour (3 or more hours per day of screen time)	73.3	67.8	71.0	67.9	*
overweight or obese	31.0	38.5	30.7	30.6	*
8 or more hours of sleep on an average school night	35.1	40.8	33.6	43.6	*
often or always go to school or bed hungry	6.4	7.4	5.4	6.8	
medically treated injury (past year)	40.6	53.0	44.7	50.7	*
concussion (past year)	12.9	16.4	14.1	17.7	*
medical use of opioid pain relievers (past year)	19.7	19.1	21.7	20.2	
not always wear a seatbelt when in motor vehicle	24.8	20.5	24.6	25.4	
texting while driving (G10-12 with licence, past year)	20.4	37.4	33.3	36.5	*
talking on phone while driving (G10-12 with licence, past year)	17.0	28.2	25.9	27.1	*
mental health care visit (past year)	23.6	27.6	27.1	30.9	*
sought counselling over phone or Internet (past year)	4.1	5.4	5.1	4.5	
unmet need for mental health support	36.2	33.7	36.6	33.3	
medical use of tranquillizers/sedatives (past year)††	2.3	4.0	2.9	2.9	
medical use of ADHD drugs (past year)	2.2	6.0	5.1	5.3	*
prescribed medication for depression/anxiety/both††	4.3	10.8	10.0	8.3	*
fair or poor self-rated mental health	26.8	27.0	28.1	24.1	
low self-esteem	9.1	11.6	9.3	8.8	
elevated stress	34.0	30.2	34.0	30.2	
moderate-to-serious psychological distress (past month)	44.6	43.7	43.3	42.9	
serious psychological distress (past month)	19.7	24.7	20.5	21.2	
self-harm (past year)	13.0	17.9	16.3	15.4	
suicidal ideation (past year)	15.4	18.5	16.4	17.3	
suicide attempt (past year)	3.5	5.7	5.4	5.8	
experienced a traumatic event (lifetime)††	34.3	45.1	43.5	40.9	*
fair or poor ability to cope with unexpected/difficult problems	23.3	22.5	22.7	21.2	
antisocial behaviour (3 or more of 9 behaviours in past year)	7.1	9.5	10.7	7.8	*
carried a weapon (past year)	5.4	6.4	9.0	5.2	*
worried about being harmed or threatened at school	16.1	13.4	12.8	12.8	
been bullied at school (since September)	21.5	24.3	23.5	24.3	
bullied others at school (since September)	9.7	8.5	11.0	10.9	
been cyberbullied (past year)	19.9	25.9	24.8	22.6	*
cyberbullied others (past year)	11.5	9.7	11.5	10.2	
any gambling activity (past year)	29.4	36.0	32.4	34.3	*
any online gambling (past year)	4.2	3.7	4.5	4.4	
multi-gambling activity (5 or more activities in past year)	3.5	3.4	5.0	3.3	
high gambling problem severity (past 3 months)††	s	s	s	s	
video gaming problem (past year)	16.7	12.5	12.7	11.0	*
ever bet virtual credits in video game (purchased with money)	11.4	10.8	11.2	12.4	
5 or more hours per day on social media	21.6	18.6	22.0	17.1	*
moderate-to-serious problem with technology use††	20.9	16.0	17.0	16.7	
serious problem with technology use††	2.4	s	4.0	2.5	

Notes: GTA=Greater Toronto Area; * indicates a significant regional difference (p<.05) *not* controlling for other factors; 's' indicates estimate suppressed due to unreliability; †† among grades 9–12 only; medical drug use is defined as use with a prescription.

Overview of Trends for Selected Mental Health and Well-Being Indicators Among the Total Sample of Students, OSDUHS

Indicator	Among Grades	Period	Change
% fair or poor self-rated physical health	7, 9, 11	1991–2019	Increased from 6% to 10%
% daily physical activity (60 minutes daily)	7–12	2009–2019	Stable
% sedentary behaviour (3 hours or more screen time daily)	7–12	2009–2019	Increased from 57% to 71%
% overweight or obese	7–12	2009–2019	Increased from 26% to 31%
% medically treated injury	7–12	2003–2019	Increased from 35% to 44%
% medical use of prescription opioid pain relievers	7–12	2007–2019	Decreased from 41% to 20%
% texting and driving (G10-12 with a driver's licence)	10–12	2013–2019	Decreased from 36% to 29%
% mental health care visit (past year)	7–12	1999–2019	Increased from 12% to 27%
% medical use of ADHD prescription drugs	7–12	2007–2019	Increased from 2% to 4%
% prescription for anxiety, depression, or both	9–12	2001–2019	Increased from 3% to 7%
% fair or poor self-rated mental health	7–12	2007–2019	Increased from 11% to 27%
% elevated level of stress	7–12	2015–2019	Increased from 29% to 33%
% moderate-to-serious psychological distress	7–12	2013–2019	Increased from 24% to 44%
% serious psychological distress	7–12	2013–2019	Increased from 11% to 21%
% suicidal ideation (past year)	7–12	2001–2019	Increased from 11% to 16%
% suicide attempt (past year)	7–12	2007–2019	Stable
% antisocial behaviour (past year)	7, 9, 11	1993–2019	Decreased from 16% to 8%
% carried a weapon (past year)	7, 9, 11	1993–2019	Decreased from 16% to 6%
% worried about being harmed/threatened at school	7–12	1999–2019	Stable
% been bullied at school (since September)	7–12	2003–2019	Decreased from 33% to 23%
% been cyberbullied (past year)	7–12	2011–2019	Stable
% any gambling activity (past year)	7–12	2003–2019	Decreased from 57% to 31%
% online gambling (past year)	7–12	2003–2019	Increased from 2% to 4%
% video gaming problem (past year)	7–12	2007–2019	Increased from 9% to 14%
% 5 hours or more on social media daily	7–12	2013–2019	Increased from 11% to 21%
% serious problem with technology use	9–12	2017–2019	Stable

Note: trend analyses are based on a p-value <0.01.

Methodology

The Centre for Addiction and Mental Health's Ontario Student Drug Use and Health Survey (OSDUHS) is an Ontario-wide health survey of elementary/middle school students in grades 7 and 8 and secondary school students in grades 9 through 12. This cross-sectional survey has been conducted every two years since 1977. The 2019 survey cycle, which used a stratified (region by school level) two-stage (school, class) cluster design, was based on 14,142 students in grades 7 to 12 from 992 classes, in 263 schools, in 47 English and French public and Catholic school boards. Excluded from selection were schools in First Nations communities, on military bases, in hospitals and other institutions, and private schools. Special Education classes and English as a Second Language (ESL) classes were excluded from selection.

Active parental consent procedures were used. Self-completed paper-and-pencil questionnaires, which promote anonymity, were group administered in classrooms during regular school hours by staff from the Institute for Social Research, York University between November 2018 and June 2019. Students in French-language schools completed questionnaires in French. Fifty-nine percent (59%) of eligible students in participating classes completed the survey. Data from the sample of 14,142 students were weighted to be representative of just under one million students in grades 7 to 12 enrolled in Ontario's publicly funded schools.

Please visit the OSDUHS webpage for reports and FAQs:

www.camh.ca/osduhs

Résumé du rapport du SCDSEO de 2019 sur la santé mentale et le bien-être

L'étude

Réalisé tous les deux ans, depuis 1977, pour le Centre de toxicomanie et de santé mentale, le Sondage sur la consommation de drogues et la santé des élèves de l'Ontario (SCDSEO) est la plus ancienne étude canadienne menée en milieu scolaire auprès d'adolescents et l'une des plus anciennes au monde. Au total, 14 142 élèves de la 7e à la 12e année, répartis dans 47 conseils scolaires, 263 écoles et 992 classes, ont participé au cycle 2019 du SCDSEO entre novembre 2018 et juin 2019.

Le rapport examine les indicateurs de santé physique et mentale et divers comportements à risque, dont l'intimidation, les jeux de hasard et d'argent et la pratique des jeux vidéo, ainsi que les problèmes associés chez les élèves ontariens en 2019. Il indique aussi les changements survenus depuis 1991, lorsque les données existent. Précisons que bien que le premier SCDSEO date de 1977, la plupart des indicateurs de santé mentale et physique ont été introduits au début des années 1990. Parmi les nouveaux indicateurs du rapport de 2019, citons l'automutilation, la capacité d'adaptation, l'aide privilégiée pour un problème de santé mentale, les paris virtuels en jouant à des jeux vidéo et l'utilisation d'un cellulaire au volant. Toutes les données découlent des réponses faites par les élèves à des questionnaires anonymes remplis en classe. Le sondage a été administré par l'Institut de recherche sociale de l'Université York pour le compte de CAMH.

Vie familiale

- Environ un élève ontarien sur cinq (22 %) a déclaré habiter avec un seul parent ou ne pas avoir de parent ou tuteur parental (parent biologique, adoptif ou par alliance). Environ un élève sur huit (13 %) a dit qu'il partageait son temps entre deux foyers ou plus.

- Plus d'un tiers (37 %) des élèves ont déclaré qu'ils parlaient rarement à leurs parents de leurs problèmes ou de leurs sentiments ou qu'ils ne leur en parlaient jamais.

- Près de la moitié (42 %) des élèves du secondaire avaient un emploi à temps partiel et 5 % travaillaient plus de 20 heures par semaine.

Vie scolaire

- Environ un élève sur sept (15 %) a déclaré suivre un programme d'éducation spécialisée, 78 % des élèves ont déclaré qu'ils n'en suivaient pas et environ 8 % étaient incertains.

- Un élève sur six (16 %) a déclaré avoir fait l'objet d'un renvoi temporaire ou définitif de l'école au moins une fois dans sa vie.

- Plus du tiers (36 %) des élèves ont déclaré aimer « beaucoup » ou « assez » l'école. Environ 42 % étaient plutôt tièdes envers l'école et 23 % ont dit qu'ils ne l'aimaient pas beaucoup.

➢ Le pourcentage d'élèves ayant déclaré aimer beaucoup ou assez l'école s'est considérablement accru depuis 1999 et le début des années 2000, passant d'environ 27 % à cette époque à 36 % en 2019.

- La plupart des élèves se sentent proches des personnes qu'ils côtoient à l'école (85 %) et ont un sentiment d'appartenance à leur école (82 %). La plupart des élèves (73 %) estiment qu'ils peuvent parler à au moins un adulte à l'école au besoin.

- Près du quart des élèves (23 %) a déclaré avoir un statut social subjectif bas à l'école (sentiment d'être exclu et de ne pas être respecté par les autres élèves).

- La majorité des élèves se sentent en sécurité à l'école, mais un élève sur sept (14 %) craint qu'on le menace ou qu'on lui fasse du mal.

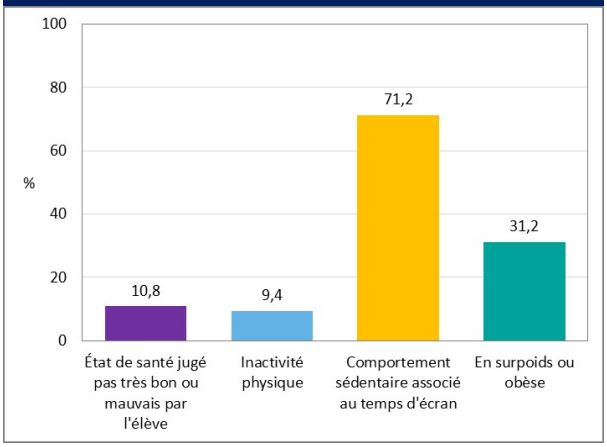
Santé physique

Santé physique autoévaluée

- La majorité des élèves (58 %) de la 7e à la 12e année se disent en excellente ou en très bonne santé, mais environ 11 % (ce qui correspond à un total estimatif de 96 500 élèves ontariens) jugent que leur état de santé n'est pas très bon ou qu'il est franchement mauvais.

➢ Les déclarations de santé physique « pas très bonne » ou « mauvaise » ont augmenté récemment, soit depuis 2013. L'estimation actuelle est nettement supérieure à celle du début des années 1990, qui était d'environ 6 %.

Pourcentages relatifs à certains indicateurs de la santé physique des élèves, SCDSEO 2019



Activité physique, poids et sommeil

- Un élève sur cinq seulement (21 %) a déclaré avoir suivi les lignes directrices relatives à l'activité physique quotidienne (définie comme au moins 60 minutes d'activité physique modérée à vigoureuse par jour) au cours des sept derniers jours. De plus, environ un élève sur onze (9 %) n'avait fait aucune activité physique lors des sept derniers jours.

- Près de la moitié (47 %) des élèves ne faisaient aucune activité physique dans un cours d'éducation physique à l'école.

- Près des trois quarts (71 %) des élèves passaient au moins trois heures par jour de leur temps libre devant un écran électronique (« comportement sédentaire associé au temps d'écran »). Ce temps passé devant un écran est supérieur aux *Directives canadiennes en matière de mouvement sur 24 heures pour les enfants et les jeunes*.

➢ Le pourcentage d'élèves ayant un comportement sédentaire associé au temps d'écran s'est accru considérablement, passant de 60 % en 2017 à 71 % en 2019. L'estimation actuelle est la plus élevée jamais enregistrée depuis que l'on a commencé à surveiller ce facteur en 2009.

- Un peu moins du tiers (31 %) des élèves entrent dans les catégories « en surpoids » ou « obèses » (total estimatif de 265 400 élèves ontariens).

➢ Le pourcentage d'élèves considérés comme étant en surpoids ou obèses est stable depuis les dernières années, mais on a noté une augmentation significative depuis 2007, année où cet indicateur a été introduit, puisqu'il est passé de 26 % cette année-là à 31 % en 2019.

- Environ le tiers (37 %) des élèves seulement ont déclaré dormir huit heures ou plus, en moyenne, la veille des jours d'école. La plupart des élèves (63 %) dorment donc moins de huit heures par nuit.

- Le pourcentage d'élèves ayant déclaré avoir dormi au moins huit heures la veille des jours d'école a diminué considérablement, passant de 41 % en 2015, année où cet indicateur a été introduit, à 37 % en 2019.

- Environ 6 % des élèves (total estimatif de 55 500 élèves ontariens) ont déclaré qu'ils avaient toujours ou souvent faim quand ils se mettaient au lit ou qu'ils arrivaient à l'école.

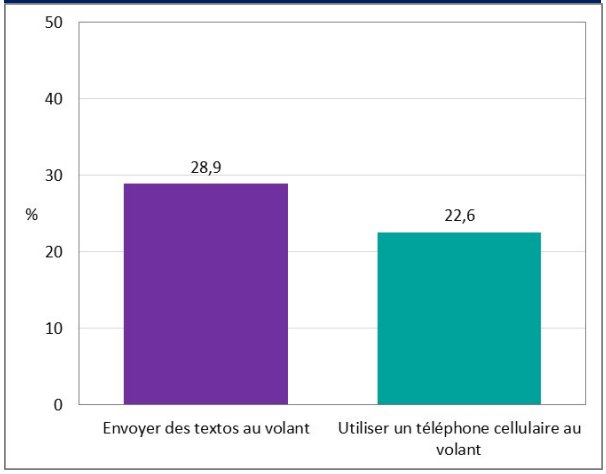
Image corporelle

- Plus de la moitié (59 %) des élèves se sont dits satisfaits de leur poids. Un quart des élèves (26 %) se trouvaient trop gros et un élève sur sept (15 %) se trouvait trop maigre.

- L'impression d'être en surpoids est resté stable au cours des dix dernières années, mais on a noté une augmentation significative depuis 2001, année où cet indicateur a été introduit, puisqu'il est passé de 19 % cette année-là à 26 % en 2019. Notons que ce sentiment a pris de l'ampleur tant chez les filles que chez les garçons.

- Un tiers des élèves (32 %) a déclaré ne pas chercher à changer de poids, tandis que 31 % ont déclaré qu'ils cherchaient à perdre du poids, que 21 % voulaient éviter de prendre du poids et que 16 % voulaient prendre du poids.

Pourcentage de conducteurs de la 10e à la 12e année ayant déclaré des comportements risqués au volant au cours de l'année écoulée, SCDSEO 2019



Blessures et comportements connexes

- Près de la moitié (44 %) des élèves ont été soignés pour une blessure au moins une fois durant l'année écoulée (total estimatif de 349 800 élèves ontariens).

- Le pourcentage d'élèves ayant déclaré avoir reçu des soins médicaux pour une blessure est demeuré stable au cours des dix dernières années, mais a augmenté de façon significative depuis le début ou le milieu des années 2000 puisqu'il est passé d'environ 34 %-37 % à cette époque à 44 % en 2019.

- Plus du tiers (39 %) des élèves ont déclaré avoir subi un traumatisme crânien au cours de leur vie et environ un élève sur sept (15 %) a déclaré en avoir subi un durant l'année écoulée (total estimatif de 128 500 élèves ontariens). Au nombre des causes précisées dans le questionnaire, les chutes et la pratique de sports d'équipe (comme le hockey, le football et le rugby) figurent parmi celles qui ont été le plus souvent signalées.

- Un quart (25 %) des élèves ont déclaré ne pas toujours porter de ceinture de sécurité lorsqu'ils étaient à bord d'un véhicule automobile (total estimatif de 198 500 élèves ontariens).

- Plus du quart (29 %) des élèves de la 10e à la 12e année qui conduisaient ont déclaré avoir, au moins une fois durant l'année écoulée, envoyé des textos lorsqu'ils étaient au volant. Ce pourcentage représente un total estimatif de 73 300 conducteurs adolescents en Ontario.

- Le pourcentage d'adolescents ayant déclaré avoir envoyé des textos lorsqu'ils étaient au volant n'a pas changé de façon significative entre 2017 (33 %) et 2019 (29 %), mais on a noté une diminution significative depuis 2013 (36 %), année où cet indicateur a été introduit.

- Un peu moins du quart (23 %) des élèves ontariens de la 10e à la 12e année qui conduisaient ont déclaré avoir utilisé leur cellulaire au volant au moins une fois au cours de l'année écoulée. Ce pourcentage représente un total estimatif de 57 200 conducteurs adolescents en Ontario.

- Environ 9 % des élèves ontariens de la 10e à la 12e année qui conduisaient (total estimatif de 23 700 conducteurs adolescents) ont déclaré que, durant l'année écoulée, ils avaient été impliqués au moins une fois dans une collision lorsqu'ils étaient au volant.

Recours aux services de santé

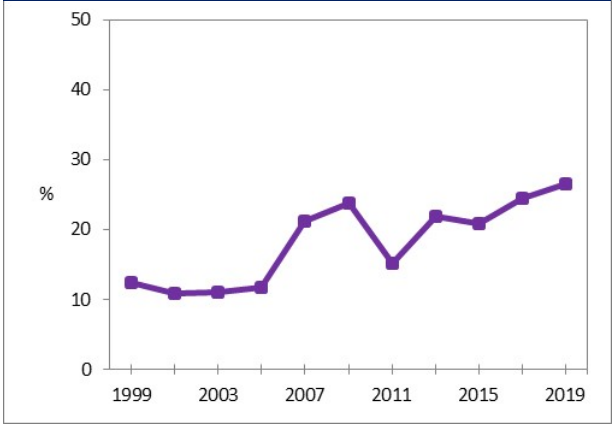
Soins en santé mentale

- Un quart (27 %) des élèves ont consulté un professionnel de la santé mentale (médecin, infirmière ou conseiller) au moins une fois durant l'année écoulée, ce qui représente un total estimatif de 260 900 élèves ontariens.

➢ Le pourcentage d'élèves ayant déclaré avoir consulté un professionnel de la santé mentale est demeuré stable au cours des dernières années, mais a augmenté considérablement depuis 1999 et le début des années 2000, passant de 11 % ou 12 % à cette époque à 27 % en 2019.

- Environ 5 % des élèves ont déclaré avoir, au moins une fois durant l'année écoulée, cherché du soutien en téléphonant à une ligne d'écoute ou en consultant Internet, ou en utilisant ces deux méthodes (total estimatif de 44 600 élèves ontariens).

Pourcentage d'élèves qui ont déclaré avoir consulté un professionnel de la santé mentale au cours de l'année écoulée, SCDSEO 1999–2019



- Le pourcentage d'élèves qui ont déclaré avoir cherché du soutien en téléphonant à une ligne d'écoute ou en consultant Internet a augmenté considérablement par rapport à la période 2011-2015, lorsqu'il était estimé à 2 %-3 %.

Soutien en santé mentale

- Environ le tiers des élèves (35 %) ont déclaré avoir voulu parler d'un problème de santé mentale à quelqu'un durant l'année écoulée, sans savoir à qui s'adresser (total estimatif de 348 700 élèves ontariens).

➢ Le pourcentage d'élèves qui ont déclaré que l'on n'avait pas répondu à leurs besoins en matière de santé mentale s'est accru de façon significative, passant de 28 % en 2013, année où cet indicateur a été introduit, à 35 % en 2019.

- On a demandé aux élèves comment ils préféreraient consulter un professionnel de la santé mentale. Moins de la moitié (43 %) des élèves ont déclaré qu'ils préféraient recevoir de l'aide en personne. Environ 7 % ont dit qu'ils préféraient en recevoir sur Internet (site Web ou clavardage) et 2 % ont déclaré qu'ils préféraient consulter au téléphone. Environ le quart des élèves (24 %) ne consulteraient pas un professionnel et un autre quart (25 %) ont dit qu'ils ne savaient pas comment ils préféreraient recevoir de l'aide.

Usage de médicaments à des fins médicales

- Un élève sur cinq (20 %) a déclaré avoir pris des analgésiques opioïdes sur ordonnance (p. ex. Tylenol 3, Percocet) à des fins médicales durant l'année écoulée. Pour cette même période, environ 4 % des élèves ont déclaré avoir pris un médicament qui leur avait été prescrit pour un TDAH (trouble du déficit de l'attention avec ou sans hyperactivité – p. ex. Adderall, Ritalin, Concerta). Et environ 3 % des élèves du secondaire ont dit avoir pris, en cours d'année, des calmants ou des tranquillisants sur ordonnance (p. ex. Xanax, Valium, Ativan).

- Le pourcentage d'élèves ayant déclaré avoir pris des analgésiques opioïdes qui leur avaient été prescrits par un médecin est demeuré stable au cours des dix dernières années, mais a significativement baissé depuis 2007, année où cet indicateur a été introduit, passant de 41 % cette année-là à 20 % en 2019. Le pourcentage d'élèves ayant déclaré avoir pris des médicaments pour le TDAH qui leur avaient été prescrits par un médecin est demeuré stable au cours des dernières années, mais a significativement augmenté depuis 2007, année où cet indicateur a été introduit, passant de 2 % cette année-là à 4 % en 2019. Le pourcentage d'élèves ayant déclaré avoir pris des calmants ou des tranquillisants sur ordonnance est demeuré stable depuis les années 1990.

- Environ 7 % des élèves du secondaire ont déclaré qu'on leur avait prescrit des médicaments pour l'anxiété, la dépression ou ces deux troubles durant l'année écoulée. Ce pourcentage représente un total estimatif de 54 000 élèves du secondaire en Ontario.

- Le pourcentage d'élèves du secondaire qui ont déclaré qu'on leur avait prescrit des médicaments pour traiter l'anxiété ou la dépression ou ces deux troubles est demeuré stable depuis 2013, mais a augmenté considérablement depuis le début des années 2000, passant d'environ 3 % à cette époque à 7 % en 2019.

Santé mentale

Autoévaluation de la santé mentale

- Un peu moins de la moitié (46 %) des élèves ont qualifié leur santé mentale d'excellente ou de très bonne, tandis que plus du quart (27 %) des élèves ont dit qu'elle n'était pas très bonne ou qu'elle était franchement mauvaise.

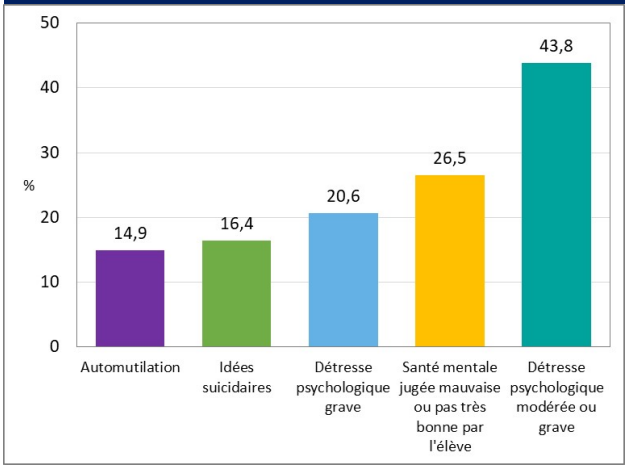
- Le pourcentage d'élèves qualifiant leur santé mentale de pas très bonne ou de mauvaise a augmenté considérablement entre 2017 et 2019, passant de 19 % à 27 %. L'estimation actuelle est la plus élevée jamais enregistrée depuis que l'on a commencé à surveiller ce facteur en 2007 (11 %).

Faible estime de soi

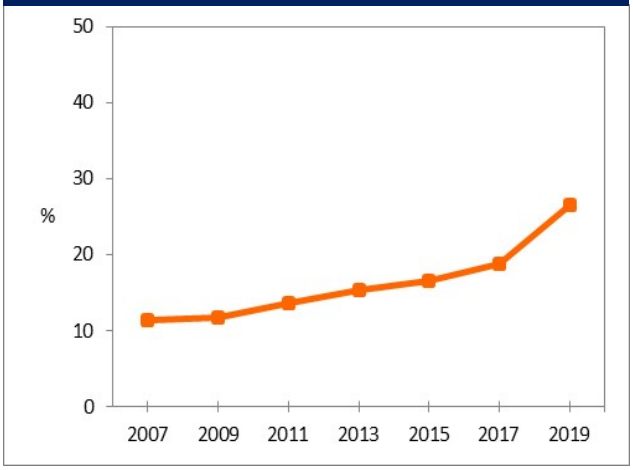
- Environ 9 % des élèves ont déclaré avoir une faible estime d'eux-mêmes (c.-à-d. être très insatisfaits d'eux-mêmes).

- Le pourcentage d'élèves dans cette situation s'est accru légèrement, mais de façon significative, passant de 7 % en 2015, année où cet indicateur a été introduit, à 9 % en 2019.

Pourcentages relatifs à certains indicateurs de la santé mentale, SCDSEO 2019



Pourcentage d'élèves qui estiment que leur santé mentale est mauvaise ou pas très bonne, SCDSEO 2007–2019



Niveau élevé de stress

- Le tiers (33 %) des élèves ont déclaré avoir éprouvé un niveau élevé de stress ou de pression à un moment de leur vie.

➢ Le pourcentage d'élèves dans cette situation s'est accru de façon significative, passant de 29 % en 2015, année où cet indicateur a été introduit, à 33 % en 2019.

Détresse psychologique

- Un peu moins de la moitié (44 %) des élèves ont dit éprouver des niveaux de détresse allant de modérée à grave (symptômes d'anxiété et de dépression). Cette estimation représente environ 417 600 élèves ontariens.

➢ Le pourcentage d'élèves ayant déclaré éprouver une détresse psychologique modérée ou grave est demeuré stable entre 2017 et 2019, mais a presque doublé depuis 2013 (24 %), année où cet indicateur a été introduit.

- Un élève sur cinq (21 %) a dit éprouver un niveau de détresse grave (total estimatif de 196 000 élèves ontariens).

➢ Le pourcentage d'élèves qui ont déclaré avoir souffert d'une détresse psychologique grave a augmenté de façon significative, passant de 17 % en 2017 à 21 % en 2019, et atteint un niveau record depuis que cet indicateur a été introduit en 2013 (11 %).

Automutilation et suicide

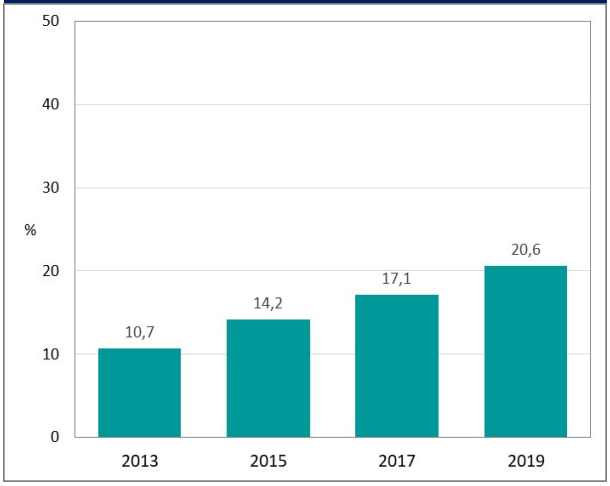
- Environ un élève sur sept (15 %) a déclaré s'être mutilé au cours de l'année écoulée. Cette estimation représente 127 800 élèves ontariens.

- Un élève sur six (16 %) a déclaré avoir sérieusement envisagé le suicide durant l'année écoulée (total estimatif de 140 300 élèves ontariens) et 5 % des élèves ont signalé avoir fait une tentative de suicide au cours de la même période (total estimatif de 40 900 élèves ontariens).

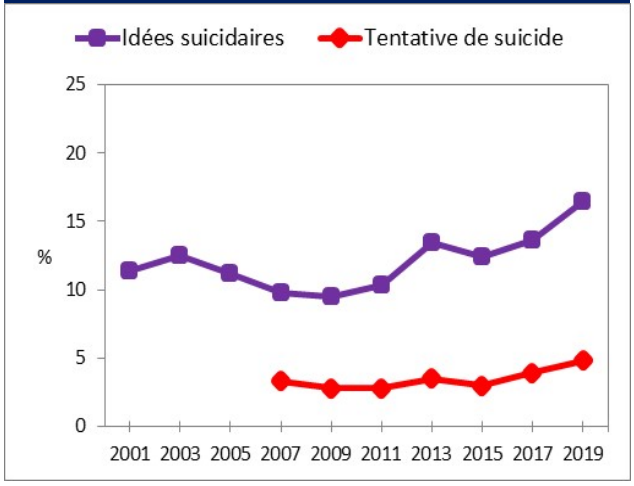
➢ Le pourcentage d'élèves ayant déclaré avoir eu des idées suicidaires au cours de l'année écoulée a augmenté de façon significative, passant de 14 % en 2017 à 16 % en 2019. Il a atteint un niveau record depuis 2001, année où cet indicateur a été introduit (12 %).

➢ Le pourcentage d'élèves qui ont dit avoir tenté de se suicider au cours de l'année écoulée est demeuré relativement stable depuis 2007, quand l'indicateur a été introduit, fluctuant entre 3 % et 5 %.

Pourcentage d'élèves qui ont déclaré souffrir d'une détresse psychologique grave, SCDSEO 2013–2019



Pourcentage d'élèves qui ont déclaré avoir eu des idées suicidaires et avoir tenté de se suicider au cours de l'année écoulée, SCDSEO 2001–2019



Évènement traumatique

- Plus du tiers (39 %) des élèves du secondaire ont déclaré avoir vécu un évènement traumatique ou négatif (non précisé) au cours de leur vie, un pourcentage qui représente un total estimatif de 292 300 élèves du secondaire en Ontario.

Capacité d'adaptation

- Plus du tiers (39 %) des élèves estiment que leur capacité d'adaptation aux difficultés et aux imprévus est excellente ou très bonne. Inversement, près du quart (23 %) des élèves estiment que cette capacité est moyenne ou faible.

Comportement antisocial et intimidation

Comportement antisocial

- Environ 8 % des élèves ont déclaré avoir eu un comportement antisocial (défini comme le fait de s'être livré à au moins trois comportements précisés sur neuf) durant l'année écoulée (total estimatif de 80 000 élèves ontariens).

➢ Le pourcentage d'élèves ayant un comportement antisocial a diminué considérablement entre 1999 et 2015, puis a connu une hausse légère, mais significative, passant de 5 % à 8 %.

Comportement violent

- Environ 8 % des élèves ont déclaré avoir agressé quelqu'un au moins une fois durant l'année écoulée, et un pourcentage similaire d'élèves (6 %) ont déclaré avoir porté une arme durant cette période (total estimatif de 60 100 élèves ontariens).

➢ Le pourcentage d'élèves ayant commis une agression et le pourcentage d'élèves ayant déclaré porter une arme ont été stables au cours des dix dernières années. Toutefois, à long terme, ces deux comportements ont accusé une baisse significative depuis le début des années 1990.

Intimidation à l'école

- Environ le quart (23 %) des élèves ont déclaré avoir été victimes d'intimidation à l'école depuis le début de l'année scolaire (total estimatif de 222 400 élèves ontariens). La principale forme d'intimidation subie à l'école est l'intimidation verbale (19 %), mais 2 % des élèves ont déclaré avoir surtout été victimes d'intimidation physique, et 2 % des élèves ont dit avoir été victimes de vol ou de vandalisme.

- Un élève sur dix (10 %) a déclaré avoir intimidé d'autres élèves à l'école depuis le mois de septembre. La principale forme d'intimidation infligée était l'intimidation verbale (9 %), mais il y a aussi eu des agressions physiques (1 %) ainsi que des vols et du vandalisme (moins de 1 %).

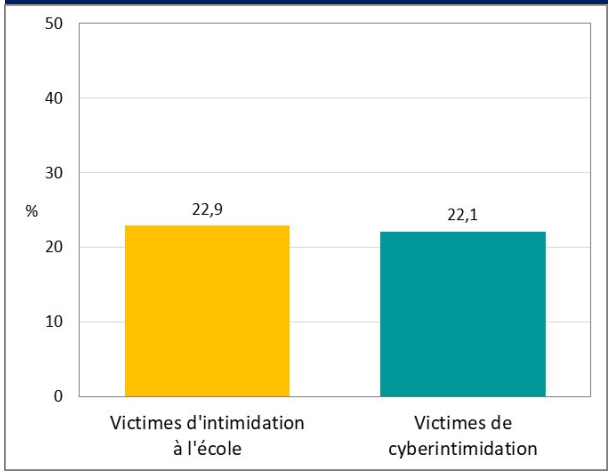
➢ Le pourcentage d'élèves ayant déclaré avoir été victimes d'intimidation à l'école est stable depuis 2013. Toutefois, l'estimation actuelle est significativement inférieure à toutes les estimations faites entre 2003 (année où l'indicateur a été introduit) et 2011, lorsqu'elles variaient de 29 % à 33 %.

➢ Le pourcentage d'élèves ayant déclaré avoir intimidé d'autres élèves à l'école a été stable entre 2017 et 2019, mais est significativement inférieur à toutes les estimations faites entre 2003 et 2015.

Cyberintimidation

- Environ un élève sur cinq (22 %) a déclaré avoir été victime d'intimidation sur Internet durant l'année écoulée, ce qui représente un total estimatif de 216 100 élèves ontariens.
- Un élève sur neuf (11 %) a déclaré avoir intimidé d'autres élèves sur Internet durant l'année écoulée.
- ➢ Le pourcentage d'élèves ayant déclaré avoir été victimes de cyberintimidation est demeuré stable depuis 2011, année où cet indicateur a été introduit, variant de 19 % à 22 %.

Pourcentage d'élèves qui ont déclaré avoir été victimes d'intimidation à l'école et sur Internet au cours de l'année écoulée, SCDSEO 2019



Jeux de hasard et d'argent, jeux vidéo et usage d'appareils électroniques

Jeux de hasard et d'argent

- Parmi les jeux de hasard et d'argent examinés lors du sondage de 2019, les plus courants étaient les paris relevant de la chance et les paris privés (11 %), suivis des paris sur des jeux de cartes (8 %) et des paris mutuels sportifs et des paris sur des ligues sportives imaginaires (8 %). Les jeux de casino arrivaient en queue (moins de 1 %).
- Environ 7 % des élèves ont déclaré avoir parié de l'argent sur les résultats de jeux vidéo et environ 4 % des élèves ont déclaré avoir parié de l'argent sur Internet, sous quelque forme que ce soit.
- Un tiers (32 %) des élèves ont déclaré avoir parié de l'argent dans le cadre d'une ou de plusieurs activités durant l'année écoulée (total estimatif de 302 800 élèves ontariens) et environ 4 % des élèves ont déclaré avoir parié de l'argent dans le cadre de cinq activités ou plus durant l'année écoulée (total estimatif de 36 200 élèves ontariens).
- ➢ Le pourcentage d'élèves ayant déclaré s'être adonnés à des jeux de hasard et d'argent durant l'année écoulée est demeuré stable depuis 2013, mais il est actuellement significativement inférieur à ce qu'il était au début et au milieu des années 2000, lorsqu'il variait de 53 % à 57 %.
- ➢ S'il est vrai que le pourcentage d'élèves qui ont déclaré avoir parié de l'argent dans le cadre de cinq activités ou plus a augmenté considérablement entre 2017 et 2019, passant de 2 % à 4 %, l'estimation actuelle est nettement inférieure à ce qu'elle était au début et au milieu des années 2000, lorsqu'elle se situait à 6 %.
- ➢ On n'a relevé aucune augmentation en ce qui concerne les jeux de hasard et d'argent entre 2017 et 2019. En fait, pour la plupart des activités, on a relevé une importante tendance à la baisse, à une exception près. Le pourcentage d'élèves qui s'adonnent à tout jeu de hasard et d'argent en ligne a augmenté considérablement depuis le début des années 2000, lorsque cet indicateur a été introduit, passant de 2 % cette année-là à 4 % en 2019.

Problèmes liés aux jeux de hasard et d'argent

- Environ 4 % des élèves du secondaire ont signalé des symptômes d'un problème de jeu modéré à modérément grave, tandis qu'environ 2 % ont signalé des symptômes d'un grave problème de jeu (total estimatif de 12 200 élèves du secondaire en Ontario).

Jeux vidéo

- Un quart (24 %) des élèves s'adonnent à des jeux vidéo tous les jours ou presque. Et un élève sur neuf (11 %) consacre au moins cinq heures par jour à la pratique des jeux vidéo.

- Un élève sur sept (14 %, soit un total estimatif de 137 000 élèves ontariens) a signalé des symptômes de jeu vidéo problématique (obsession, tolérance, perte de contrôle, symptômes de sevrage, fuite de la réalité, indifférence quant aux conséquences, ennuis au foyer et à l'école).

➢ Le pourcentage d'élèves ayant signalé des symptômes de jeu vidéo problématique est demeuré stable entre 2017 et 2019, mais est nettement supérieur à ce qu'il était il y a une dizaine d'années puisqu'il est passé de 10 % à cette époque à 14 % en 2019.

- On a également demandé aux élèves s'ils avaient parié des crédits virtuels en jouant à un jeu vidéo. Près d'un élève sur cinq (19 %) a déjà parié des crédits virtuels gagnés ou obtenus en jouant à un jeu vidéo. Un élève sur huit (12 %) a parié des crédits virtuels achetés avec de l'argent.

Usage des technologies

- La majorité (87 %) des élèves visitent tous les jours des sites de médias sociaux et environ un élève sur cinq (21 %) passe cinq heures par jour ou plus sur les médias sociaux.

➢ Le pourcentage d'élèves qui ont dit passer cinq heures par jour ou plus sur les médias sociaux a été stable entre 2017 et 2019, mais on a noté une augmentation significative depuis 2013, année où cet indicateur a été introduit, puisqu'il est passé de 11 % cette année-là à 21 % en 2019.

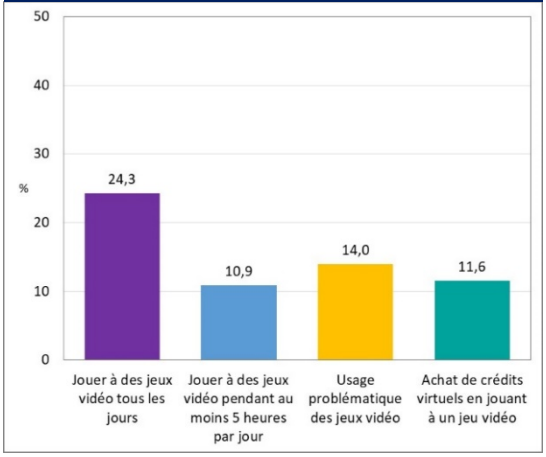
- Environ un élève sur cinq (21 %) a déclaré regretter d'avoir affiché du contenu personnel sur les médias sociaux.

- Plus d'un tiers (35 %) des élèves du secondaire passent cinq heures de leur temps libre ou plus par jour sur des appareils électroniques (téléphones intelligents, tablettes, ordinateurs ou ordinateurs portatifs, consoles de jeux).

- Environ un élève du secondaire sur cinq (19 %) a signalé des symptômes semblant indiquer un usage problématique des technologies modéré à grave (obsession, perte de contrôle, symptômes de sevrage, problèmes avec la famille ou les amis). Environ 3 % des élèves du secondaire signalent des symptômes semblant indiquer un grave problème d'usage des technologies (total estimatif de 21 200 élèves du secondaire en Ontario).

➢ Le pourcentage d'élèves qui ont signalé des symptômes semblant indiquer un usage problématique des technologies modéré à grave est demeuré stable en 2019 par rapport à celui enregistré en 2017, année où cet indicateur a été introduit.

Pourcentage d'élèves qui ont déclaré des comportements et des problèmes liés aux jeux vidéo, SCDSEO 2019



Variations selon le sexe

Plus probable chez les garçons :	Plus probable chez les filles :
▪ faire de l'activité physique tous les jours ▪ être considérés comme ayant un excès de poids ou comme étant obèses ▪ subir un traumatisme crânien ▪ prendre des médicaments pour le TDAH (usage médical) ▪ avoir un comportement antisocial ▪ porter une arme ▪ intimider des élèves ▪ faire de la cyberintimidation ▪ jouer à tout jeu de hasard et d'argent ▪ passer cinq heures ou plus par jour à jouer à des jeux vidéo ▪ déclarer un usage problématique des jeux vidéo ▪ acheter des crédits virtuels en jouant à un jeu vidéo	▪ qualifier leur santé physique de pas très bonne ou de mauvaise ▪ être physiquement inactives ▪ ne pas dormir au moins 8 heures par nuit la veille des jours d'école ▪ prendre des analgésiques opioïdes sur ordonnance (usage médical) ▪ usage non systématique de la ceinture en auto ▪ consulter un professionnel de la santé mentale ▪ demander du counseling par téléphone ou par Internet ▪ déclarer avoir un besoin de soutien non satisfait en santé mentale ▪ prendre des sédatifs ou des tranquillisants sur ordonnance (usage médical) ▪ se faire prescrire des médicaments pour traiter l'anxiété ou la dépression ▪ qualifier leur santé mentale de pas très bonne ou de mauvaise ▪ déclarer une faible estime de soi ▪ déclarer un niveau de stress élevé ▪ déclarer souffrir de détresse psychologique ▪ déclarer s'être automutilées ▪ déclarer avoir eu des idées suicidaires ou avoir tenté de se suicider ▪ avoir vécu une expérience traumatique ▪ évaluer que leur capacité de composer avec un problème est moyenne ou faible ▪ être victimes d'intimidation à l'école ▪ craindre d'être blessés ou menacés à l'école ▪ être victimes de cyberintimidation ▪ passer 5 heures ou plus par jour sur les médias sociaux ▪ consacrer 5 heures ou plus de leurs temps libre à utiliser des appareils électroniques ▪ déclarer un usage problématique des technologies

Variations selon l'année d'études

Hausse selon l'année d'études	Baisse selon l'année d'études
▪ qualifier leur santé physique de pas très bonne ou de mauvaise ▪ avoir un comportement sédentaire (3 heures ou plus devant un écran) ▪ avoir faim quand ils se mettent au lit ou quand ils arrivent à l'école ▪ prendre des opioïdes sur ordonnance (usage médical) ▪ envoyer des textos au volant ▪ utiliser un cellulaire au volant ▪ avoir un besoin de soutien non satisfait en matière de santé mentale ▪ se faire prescrire des médicaments pour traiter l'anxiété ou la dépression ▪ qualifier leur santé mentale de pas très bonne ou de mauvaise ▪ éprouver un niveau de stress élevé ▪ éprouver une détresse psychologique ▪ avoir des idées suicidaires ▪ avoir un comportement antisocial ▪ porter une arme ▪ jouer à tout jeu de hasard et d'argent ▪ passer 5 heures ou plus par jour sur les médias sociaux	▪ faire de l'activité physique tous les jours ▪ dormir au moins huit heures par nuit ▪ avoir subi un traumatisme crânien ▪ être victimes d'intimidation à l'école ▪ craindre d'être blessés ou menacés à l'école

Différences régionales

Aux fins du sondage, la province a été divisée en quatre régions : la région du grand Toronto (Toronto et régions de Durham, York, Peel et Halton), le Nord de l'Ontario (districts de Parry Sound et de Nipissing, et régions situées plus au nord), l'Ouest de l'Ontario (comté de Dufferin et régions situées plus à l'ouest) et l'Est de l'Ontario (comté de Simcoe et régions situées plus à l'est). Le tableau ci-dessous indique les différences régionales significatives.

Au-dessus de la moyenne provinciale	En dessous de la moyenne provinciale
Région du grand Toronto (RGT)	
▪ inactivité physique ▪ comportement sédentaire (3 heures ou plus devant un écran) ▪ pratique problématique des jeux vidéo ▪ cinq heures du temps libre ou plus par jour à utiliser des appareils électroniques	▪ avoir subi un traumatisme crânien ▪ soins médicaux pour une blessure ▪ envoyer un texto ou utiliser son cellulaire au volant ▪ prescription d'antidépresseurs ou d'anxiolytiques ▪ prendre des médicaments pour le TDAH (usage médical) ▪ consultation d'un professionnel de la santé mentale ▪ comportement antisocial ▪ être victimes de cyberintimidation ▪ tout jeu de hasard et d'argent
Nord	
▪ excès de poids ou obésité ▪ prescription d'antidépresseurs ou d'anxiolytiques ▪ tout jeu de hasard et d'argent	
Ouest	
▪ prescription d'antidépresseurs ou d'anxiolytiques ▪ porter une arme	
Est	
▪ activité physique tous les jours ▪ avoir subi un traumatisme crânien ▪ au moins 8 heures de sommeil en moyenne, la veille des jours d'école ▪ consultation d'un professionnel de la santé mentale	▪ passer cinq heures par jour ou plus sur les médias sociaux

Évolution de la situation de 2017 à 2019

Le tableau suivant résume les modifications importantes survenues entre 2017 et 2019 parmi l'échantillon total d'élèves.

	2017		2019
santé physique jugée pas très bonne ou mauvaise par l'élève	8,7 %	↑	10,8 %
comportement sédentaire (3 heures ou plus devant un écran)	60,0 %	↑	71,2 %
santé mentale jugée pas très bonne ou mauvaise par l'élève	18,8 %	↑	26,5 %
faible estime de soi	6,5 %	↑	9,2 %
détresse psychologique grave	17,1 %	↑	20,6 %
idées suicidaires au cours de l'année écoulée	13,6 %	↑	16,4 %
cinq heures du temps libre ou plus par jour à utiliser des appareils électroniques	29,5 %	↑	35,4 %

Pourcentages relatifs à certains indicateurs de la santé mentale et du bien-être des élèves de l'Ontario, ventilés par sexe – SCDSEO 2019 (7e à 12e année)

Indicateur	Total %	(IC à 95 %)	Nombre estimatif†	Garçons %	Filles %	
santé physique jugée pas très bonne ou mauvaise par l'élève	**10,8**	(9,9-11,7)	96 500	9,3	12,4	*
activité physique (60 min/jour durant les 7 derniers jours)	**21,2**	(20,0-22,4)	188 900	26,4	15,7	*
inactivité physique (durant chacun des 7 derniers jours)	**9,4**	(8,6-10,3)	83 800	8,1	10,8	*
comportement sédentaire (3 heures ou plus par jour devant un écran)	**71,2**	(70,0-72,4)	635 500	70,9	71,6	
excès de poids ou obésité	**31,2**	(30,0-32,6)	265 400	33,9	28,5	*
au moins 8 heures de sommeil en moyenne, la veille des jours d'école	**36,9**	(35,3-38,5)	328 200	41,7	31,9	*
toujours ou souvent se coucher ou arriver à l'école en ayant faim	**6,3**	(5,5-7,1)	55 500	6,1	6,5	
soins médicaux pour une blessure (an écoulé)	**44,2**	(42,0-46,4)	349 800	46,0	42,2	
traumatisme crânien (an écoulé)	**14,5**	(13,5-15,5)	128 500	15,4	13,5	*
usage médical d'analgésiques opioïdes (an écoulé)	**20,3**	(18,9-21,8)	163 300	18,7	22,0	*
usage non systématique de la ceinture en auto	**24,6**	(23,0-26,4)	198 500	22,9	26,5	*
textos au volant (avec permis, 10e-12e, an écoulé)	**28,9**	(25,9-32,2)	73 300	29,7	28,0	
parler au téléphone au volant (avec permis, 10e-12e, an écoulé)	**22,6**	(19,8-25,8)	57 200	24,3	20,8	
consultation de santé mentale (an écoulé)	**26,5**	(24,9-28,2)	260 900	22,1	31,1	*
recherche de counseling (téléphone/Internet, an écoulé)	**4,5**	(3,9-5,3)	44 600	2,6	6,6	*
besoin de soutien non satisfait en matière de santé mentale	**35,4**	(33,8-37,0)	348 700	23,9	47,4	*
usage médical de tranquillisants/sédatifs (an écoulé)††	**2,7**	(2,3-3,2)	18 400	2,0	3,4	*
usage médical de médicaments pour le TDAH (an écoulé)	**3,9**	(3,2-4,8)	38 400	5,3	2,5	*
prescription d'antidépresseurs/anxiolytiques/les deux††	**7,2**	(6,2-8,4)	54 000	3,6	10,9	*
santé mentale jugée pas très bonne ou mauvaise par l'élève	**26,5**	(24,7-28,3)	260 500	17,9	35,4	*
faible estime de soi	**9,2**	(8,3-10,3)	90 200	5,7	12,9	*
niveau de stress élevé	**32,8**	(31,1-34,5)	321 700	23,8	42,2	*
détresse psychologique modérée ou grave (mois écoulé)	**43,8**	(41,9-45,7)	417 600	31,4	56,6	*
détresse psychologique grave (mois écoulé)	**20,6**	(19,2-22,0)	196 000	12,0	29,4	*
automutilation (an écoulé)	**14,9**	(13,4-16,5)	127 800	7,9	21,9	*
idées suicidaires (an écoulé)	**16,4**	(15,0-17,9)	140 300	11,3	21,5	*
tentative de suicide (an écoulé)	**4,8**	(3,9-5,8)	40 900	2,9	6,7	*
subir un évènement traumatique (sur toute la vie)††	**39,0**	(37,0-41,0)	292 300	32,7	45,6	*
capacité moyenne ou faible de composer avec une difficulté ou un imprévu	**22,6**	(21,1-24,1)	220 500	16,2	29,1	*
comportement antisocial (≥ 3 actes / 9, an écoulé)	**8,3**	(7,5-9,2)	80 000	10,0	6,6	*
port d'arme (an écoulé)	**6,3**	(5,6-7,1)	60 100	8,9	3,6	*
crainte d'être blessé ou menacé à l'école	**14,3**	(12,9-15,8)	140 400	12,3	16,3	*
intimidation subie à l'école (depuis septembre)	**22,9**	(21,4-24,5)	222 400	20,5	25,4	*
intimidation infligée à l'école (depuis septembre)	**10,4**	(9,3-11,6)	100 800	12,3	8,4	*
cyberintimidation subie (an écoulé)	**22,1**	(20,7-23,6)	216 100	18,6	25,7	*
cyberintimidation infligée (an écoulé)	**11,0**	(9,9-12,2)	107 600	12,7	9,3	*
tout jeu de hasard et d'argent (an écoulé)	**31,8**	(30,3-33,3)	302 800	39,5	23,9	*
tout jeu de hasard et d'argent en ligne (an écoulé)	**4,3**	(3,7-5,0)	41 100	6,9	1,7	*
plusieurs jeux de hasard et d'argent (≥ 5 jeux, an écoulé)	**3,8**	(3,3-4,4)	36 200	6,0	1,6	*
grave problème lié aux jeux de hasard et d'argent (3 derniers mois)††	**1,7**	(1,2-2,3)	12 200	2,9	s	
pratique problématique de jeux vidéo (an écoulé)	**14,0**	(12,8-15,4)	137 000	22,7	5,1	*
parier des crédits virtuels achetés avec de l'argent en jouant à un jeu vidéo	**11,6**	(10,4-12,8)	111 900	19,3	3,6	*
≥ 5 h/jour passées sur les médias sociaux	**20,5**	(19,4-21,8)	185 900	15,6	25,8	*
usage problématique des technologies modéré à grave††	**18,6**	(17,0-20,2)	135 500	14,7	22,5	*
usage problématique des technologies grave††	**2,9**	(2,3-3,7)	21 200	1,9	3,9	*

Nota : échantillon de 14 142 élèves; certaines estimations reposant sur un demi-échantillon aléatoire; IC = intervalle de confiance; † nombre estimatif d'élèves, calculé à partir d'une population d'environ 908 800 élèves ontariens (arrondi au nombre entier inférieur, 7e - 12e année); « s » indique qu'une estimation a été supprimée parce que non fiable; * différence significative entre les sexes ($p < 0,05$) *sans égard* aux autres facteurs; †† 9e à 12e année uniquement; usage médical = médicaments prescrits et pris.

Pourcentages relatifs à certains indicateurs de la santé mentale et du bien-être des élèves de l'Ontario, ventilés par année d'études – SCDSEO 2019 (7e à 12e année)

Indicateur	7e	8e	9e	10e	11e	12e	
santé physique jugée pas très bonne ou mauvaise par l'élève	7,2	8,3	9,1	10,7	13,6	12,9	*
activité physique (60 min/jour durant les 7 derniers jours)	28,6	28,6	24,8	21,0	18,9	12,9	*
inactivité physique (durant chacun des 7 derniers jours)	5,2	5,1	5,7	10,0	12,2	13,8	*
comportement sédentaire (3 heures ou plus par jour devant un écran)	54,3	66,0	72,5	73,8	77,4	74,5	*
excès de poids ou obésité	34,2	32,5	32,0	31,0	30,5	29,5	
au moins 8 heures de sommeil en moyenne, la veille des jours d'école	69,6	58,8	41,0	31,6	23,5	21,1	*
toujours ou souvent se coucher ou arriver à l'école en ayant faim	3,7	5,5	6,2	6,1	5,8	8,5	*
soins médicaux pour une blessure (an écoulé)	46,1	46,4	47,9	43,5	42,0	41,8	
traumatisme crânien (an écoulé)	19,0	19,0	13,6	13,5	12,1	13,2	*
usage médical d'analgésiques opioïdes (an écoulé)	12,2	18,5	19,0	20,0	20,5	25,7	*
usage non systématique de la ceinture en auto	20,2	22,3	25,4	24,8	26,7	25,5	
textos au volant (avec permis, 10e-12e, an écoulé)	--	--	--	11,1	16,3	38,8	*
parler au téléphone au volant (avec permis, 10e-12e, an écoulé)	--	--	--	s	13,4	30,2	*
consultation de santé mentale (an écoulé)	28,6	29,8	24,6	23,2	25,1	29,1	*
recherche de counseling (téléphone/Internet, an écoulé)	2,7	2,6	4,3	4,8	6,2	5,1	
besoin de soutien non satisfait en matière de santé mentale	25,1	31,2	32,0	34,4	41,2	42,2	*
usage médical de tranquillisants/sédatifs (an écoulé)††	--	--	2,2	1,7	3,2	3,4	*
usage médical de médicaments pour le TDAH (an écoulé)	4,5	4,4	3,2	4,4	3,2	4,2	
prescription d'antidépresseurs/anxiolytiques/les deux††	--	--	3,6	5,3	8,4	10,7	*
santé mentale jugée pas très bonne ou mauvaise par l'élève	17,3	20,2	24,9	25,6	31,4	32,7	*
faible estime de soi	7,1	7,5	10,2	9,1	9,7	10,3	
niveau de stress élevé	18,3	20,1	29,7	34,1	39,6	43,6	*
détresse psychologique modérée ou grave (mois écoulé)	31,0	35,3	40,1	45,6	50,0	51,3	*
détresse psychologique grave (mois écoulé)	13,5	16,5	19,6	19,2	24,3	25,2	*
automutilation (an écoulé)	11,8	13,5	13,8	15,9	16,1	16,0	
idées suicidaires (an écoulé)	12,2	14,8	14,2	16,8	18,9	18,7	*
tentative de suicide (an écoulé)	4,4	5,1	3,7	4,9	4,9	5,5	
subir un évènement traumatique (sur toute la vie)††	--	--	35,2	36,1	39,7	44,1	*
capacité moyenne ou faible de composer avec une difficulté ou un imprévu	21,3	19,1	23,1	21,1	24,4	24,5	
comportement antisocial (≥ 3 actes / 9, an écoulé)	4,8	6,7	8,3	7,3	8,1	12,1	*
port d'arme (an écoulé)	3,5	4,5	5,6	7,1	7,3	7,8	*
crainte d'être blessé ou menacé à l'école	18,5	16,4	15,5	12,7	12,8	12,6	*
intimidation subie à l'école (depuis septembre)	29,2	28,2	22,0	22,2	19,7	20,1	*
intimidation infligée à l'école (depuis septembre)	9,6	11,2	11,1	10,4	10,8	9,3	
cyberintimidation subie (an écoulé)	22,9	22,1	24,0	21,2	23,9	19,5	
cyberintimidation infligée (an écoulé)	9,4	10,5	12,8	9,7	13,1	10,1	
tout jeu de hasard et d'argent (an écoulé)	26,2	30,6	29,2	31,0	33,4	37,0	*
tout jeu de hasard et d'argent en ligne (an écoulé)	2,9	3,8	4,6	4,1	4,6	5,0	
plusieurs jeux de hasard et d'argent (≥ 5 jeux, an écoulé)	2,8	1,7	3,6	4,1	4,7	4,6	
grave problème lié aux jeux de hasard et d'argent (3 derniers mois)††	--	--	s	s	s	s	
pratique problématique de jeux vidéo (an écoulé)	14,3	14,9	17,2	12,8	13,9	12,0	*
parier des crédits virtuels achetés avec de l'argent en jouant à un jeu vidéo	11,8	8,8	12,2	10,7	11,0	13,7	
≥ 5 h/jour passées sur les médias sociaux	12,4	15,7	23,6	21,9	23,7	21,2	*
usage problématique des technologies modéré à grave††	--	--	17,3	17,6	19,9	19,3	
usage problématique des technologies grave††	--	--	2,8	3,0	2,7	3,1	

Nota : * différence significative entre les années (p < 0,05) *sans égard* aux autres facteurs; « s » indique qu'une estimation a été supprimée parce que non fiable; †† élèves de la 9e à la 12e année uniquement; usage médical = médicaments prescrits et pris.

Pourcentages relatifs à certains indicateurs de la santé mentale et du bien-être des élèves de l'Ontario, ventilés par région – SCDSEO 2019 (7e à 12e année)

Indicateur	RGT	Nord	Ouest	Est	
santé physique jugée pas très bonne ou mauvaise par l'élève	10,7	11,8	11,2	10,3	
activité physique (60 min/jour durant les 7 derniers jours)	19,1	20,2	22,1	24,9	*
inactivité physique (durant chacun des 7 derniers jours)	10,6	6,7	9,3	7,8	*
comportement sédentaire (3 heures ou plus par jour devant un écran)	73,3	67,8	71,0	67,9	*
excès de poids ou obésité	31,0	38,5	30,7	30,6	*
au moins 8 heures de sommeil en moyenne, la veille des jours d'école	35,1	40,8	33,6	43,6	*
toujours ou souvent se coucher ou arriver à l'école en ayant faim	6,4	7,4	5,4	6,8	
soins médicaux pour une blessure (an écoulé)	40,6	53,0	44,7	50,7	*
traumatisme crânien (an écoulé)	12,9	16,4	14,1	17,7	*
usage médical d'analgésiques opioïdes (an écoulé)	19,7	19,1	21,7	20,2	
usage non systématique de la ceinture en auto	24,8	20,5	24,6	25,4	
textos au volant (avec permis, 10e-12e, an écoulé)	20,4	37,4	33,3	36,5	*
parler au téléphone au volant (avec permis, 10e-12e, an écoulé)	17,0	28,2	25,9	27,1	*
consultation de santé mentale (an écoulé)	23,6	27,6	27,1	30,9	*
recherche de counseling (téléphone/Internet, an écoulé)	4,1	5,4	5,1	4,5	
besoin de soutien non satisfait en matière de santé mentale	36,2	33,7	36,6	33,3	
usage médical de tranquillisants/sédatifs (an écoulé)††	2,3	4,0	2,9	2,9	
usage médical de médicaments pour le TDAH (an écoulé)	2,2	6,0	5,1	5,3	*
prescription d'antidépresseurs/anxiolytiques/les deux††	4,3	10,8	10,0	8,3	*
santé mentale jugée pas très bonne ou mauvaise par l'élève	26,8	27,0	28,1	24,1	
faible estime de soi	9,1	11,6	9,3	8,8	
niveau de stress élevé	34,0	30,2	34,0	30,2	
détresse psychologique modérée ou grave (mois écoulé)	44,6	43,7	43,3	42,9	
détresse psychologique grave (mois écoulé)	19,7	24,7	20,5	21,2	
automutilation (an écoulé)	13,0	17,9	16,3	15,4	
idées suicidaires (an écoulé)	15,4	18,5	16,4	17,3	
tentative de suicide (an écoulé)	3,5	5,7	5,4	5,8	
subir un évènement traumatique (sur toute la vie)††	34,3	45,1	43,5	40,9	*
capacité moyenne ou faible de composer avec une difficulté ou un imprévu	23,3	22,5	22,7	21,2	
comportement antisocial (≥ 3 actes / 9, an écoulé)	7,1	9,5	10,7	7,8	*
port d'arme (an écoulé)	5,4	6,4	9,0	5,2	*
crainte d'être blessé ou menacé à l'école	16,1	13,4	12,8	12,8	
intimidation subie à l'école (depuis septembre)	21,5	24,3	23,5	24,3	
intimidation infligée à l'école (depuis septembre)	9,7	8,5	11,0	10,9	
cyberintimidation subie (an écoulé)	19,9	25,9	24,8	22,6	*
cyberintimidation infligée (an écoulé)	11,5	9,7	11,5	10,2	
tout jeu de hasard et d'argent (an écoulé)	29,4	36,0	32,4	34,3	*
tout jeu de hasard et d'argent en ligne (an écoulé)	4,2	3,7	4,5	4,4	
plusieurs jeux de hasard et d'argent (≥ 5 jeux, an écoulé)	3,5	3,4	5,0	3,3	
grave problème lié aux jeux de hasard et d'argent (3 derniers mois)††	s	s	s	s	
pratique problématique de jeux vidéo (an écoulé)	16,7	12,5	12,7	11,0	*
parier des crédits virtuels achetés avec de l'argent en jouant à un jeu vidéo	11,4	10,8	11,2	12,4	
≥ 5 h/jour passées sur les médias sociaux	21,6	18,6	22,0	17,1	*
usage problématique des technologies modéré à grave††	20,9	16,0	17,0	16,7	
usage problématique des technologies grave††	2,4	s	4,0	2,5	

Nota : RGT = région du grand Toronto; * différence significative entre les régions ($p < 0,05$) *sans égard* aux autres facteurs; « s » indique qu'une estimation a été supprimée parce que non fiable; †† élèves de la 9e à la 12e année uniquement; usage médical = médicaments prescrits et pris.

Aperçu des tendances relativement à certains indicateurs de la santé mentale et du bien-être dans l'ensemble de l'échantillon d'élèves – SCDSEO

Indicateur	Années	Période	Changement
santé physique jugée pas très bonne ou mauvaise par l'élève	7e, 9e, 11e	1991-2019	En hausse : 6 % à 10 %
activité physique (60 min/jour)	7e à 12e	2009-2019	Stable
comportement sédentaire (≥ 3 h/jour devant un écran)	7e à 12e	2009-2019	En hausse : 57 % à 71 %
excès de poids ou obésité	7e à 12e	2009-2019	En hausse : 26 % à 31 %
soins médicaux pour une blessure	7e à 12e	2003-2019	En hausse : 35 % à 44 %
usage médical d'analgésiques opioïdes sur ordonnance	7e à 12e	2007-2019	En baisse : 41 % à 20 %
envoi de textos au volant (10e-12e, avec permis de conduire)	10e à 12e	2013-2019	En baisse : 36 % à 29 %
consultation de santé mentale (an écoulé)	7e à 12e	1999-2019	En hausse : 12 % à 27 %
usage médical de médicaments pour le TDAH	7e à 12e	2007-2019	En hausse : 2 % à 4 %
prescription d'antidépresseurs ou d'anxiolytiques ou les deux	9e à 12e	2001-2019	En hausse : 3 % à 7 %
santé mentale jugée pas très bonne ou mauvaise par l'élève	7e à 12e	2007-2019	En hausse : 11 % à 27 %
niveau de stress élevé	7e à 12e	2015-2019	En hausse : 29 % à 33 %
détresse psychologique modérée ou grave	7e à 12e	2013-2019	En hausse : 24 % à 44 %
détresse psychologique grave	7e à 12e	2013-2019	En hausse : 11 % à 21 %
idées suicidaires (an écoulé)	7e à 12e	2001-2019	En hausse : 11 % à 16 %
tentative de suicide (an écoulé)	7e à 12e	2007-2019	Stable
comportement antisocial (an écoulé)	7e, 9e, 11e	1993-2019	En baisse : 16 % à 8 %
port d'arme (an écoulé)	7e, 9e, 11e	1993-2019	En baisse : 16 % à 6 %
crainte d'être blessé ou menacé à l'école	7e à 12e	1999-2019	Stable
intimidation subie à l'école (depuis septembre)	7e à 12e	2003-2019	En baisse : 33 % à 23 %
cyberintimidation subie (an écoulé)	7e à 12e	2011-2019	Stable
tout jeu de hasard et d'argent (an écoulé)	7e à 12e	2003-2019	En baisse : 57 % à 31 %
jeux de hasard et d'argent en ligne (an écoulé)	7e à 12e	2003-2019	En hausse : 2 % à 4 %
pratique problématique de jeux vidéo (an écoulé)	7e à 12e	2007-2019	En hausse : 9 % à 14 %
5 heures par jour ou plus sur les médias sociaux	7e à 12e	2013-2019	En hausse : 11 % à 21 %
usage problématique des technologies (grave)	9e à 12e	2017-2019	Stable

Nota : l'analyse des tendances est fondée sur une valeur de $p < 0,01$.

Méthodologie

Réalisé par le Centre de toxicomanie et de santé mentale, le Sondage sur la consommation de drogues et la santé des élèves de l'Ontario (SCDSEO) est un sondage réalisé à la grandeur de l'Ontario auprès d'élèves de 7e et de 8e année, ainsi qu'auprès d'élèves de la 9e à la 12e année. Ce sondage transversal est réalisé tous les deux ans depuis sa création en 1977. Le sondage de 2019, qui fait appel à un plan d'échantillonnage en grappes stratifié (région par école) à deux degrés (école et classe), a été rempli par 14 142 élèves de la 7e à la 12e année répartis dans 992 classes, dans 263 écoles faisant partie de 47 conseils scolaires publics et catholiques anglophones et francophones. Étaient exclus de l'échantillonnage les écoles des Premières Nations, des bases militaires, des hôpitaux et autres établissements, ainsi que les écoles privées. Ont également été exclues les classes pour l'enfance en difficulté et les classes d'anglais langue seconde.

Avant la tenue du sondage, il a été demandé aux parents de remplir des formulaires de consentement éclairé. Afin de favoriser l'anonymat, des questionnaires crayon-papier ont été distribués aux élèves. Ces questionnaires, qui ont été administrés entre novembre 2018 et juin 2019 par du personnel de l'Institut de recherche sociale de l'Université York, ont été remplis en salle de classe durant les heures de cours. Les élèves des écoles de langue française ont rempli des questionnaires en français. Cinquante-neuf pour cent (59 %) des élèves admissibles des classes participantes ont rempli le sondage. Les données de l'échantillon de 14 142 élèves ont été pondérées afin qu'elles soient représentatives d'un peu moins d'un million d'élèves de la 7e à la 12e année inscrits dans une école publique de l'Ontario.

Pour les rapports et la FAQ, veuillez visiter la page Web du SCDSEO :

www.camh.ca/osduhs

Acknowledgements

A study of this magnitude requires the ongoing cooperation and support of many individuals and groups alike. Over the years, several people have provided invaluable input into this study. Current colleagues who provided support include Anca Ialomiteanu, Bruna Brands, Tony Ivanoff, Michel Bérubé, and Régine Bohar. Former colleagues include John Pollard, Anita Dubey, Frank Ivis, Margaret Sheppard, Carolyn Liban, Hau Lei, and Michael Goodstadt. The 1981–1997 sampling plan was designed by P. Peskun and C.M. Lamphier of York University. In 1999, the survey was redesigned by Michael Ornstein of York University. The sampling design, fieldwork, data entry, and data file preparation was conducted by the Institute for Social Research, York University, and we especially thank Stella Park, Hugh McCague, David Northrup, Richard Myles, and Tammy Chi for their input throughout the project, as well as the ISR field staff for their dedication and work in the schools. We would also like to extend our deepest thanks to the Ontario Tobacco Research Unit, Public Health Ontario, and the ten Ontario public health units/departments (Durham Region Health Department, York Region Public Health, Ottawa Public Health, Simcoe Muskoka District Health Unit, Peel Public Health, Toronto Public Health, City of Hamilton Public Health Services, Niagara Region Public Health, Middlesex-London Health Unit, and Southwestern Public Health) who collaborated with us during the 2019 OSDUHS.

We also owe a debt of gratitude to two pioneers. First, we would not be in the enviable position of having such rich historical data without the work and foresight of the late Dr. Reginald G. Smart, who began the survey many decades ago. Second, we are immensely grateful to Dr. Edward Adlaf whose expertise and innovations contributed significantly to the expansion and transformation of the survey into the influential and renowned study that it is today. We thank both researchers for leading the way and allowing us to continue in their footsteps.

Most importantly, the high level of cooperation by Ontario school boards, school board research review committees, school principals, parents, and students has played a major role in ensuring the representativeness and success of this project. We gratefully acknowledge the support of all.

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1. INTRODUCTION

The World Health Organization (WHO) defines optimum health as "*physical, mental, and social well-being, and not merely the absence of disease and infirmity*" (World Health Organization, 1948). Thus, well-being should convey not only the absence of impairments and disabilities, but also the presence of positive personal and interpersonal resources that foster a better quality of life. The physical, mental, and social well-being of youth are important for several reasons, not the least of which is their long-lasting effects over the life course. Childhood and adolescence are pivotal developmental stages during which many life-long health behaviours, beliefs, and attitudes become established. Therefore, healthy children have a good chance of becoming healthy adults.

The Ontario Student Drug Use and Health Survey (OSDUHS) is a biennial population health survey of students in grades 7 to 12 in Ontario's publicly funded school system. Although the OSDUHS began in 1977 as a drug use survey, it has evolved into a broader health surveillance study by including measures related to mental health and well-being. The OSDUHS espouses the WHO broad perspective that health encompasses physical, social, and emotional well-being and, as such, the survey covers a range of behaviours and factors related to health.

This report describes mental health indicators, physical health indicators, bullying, gambling and problem gambling, problematic video gaming, and other risk behaviours among Ontario students in 2019 and changes since 1991, where available.

History of the OSDUHS

The Centre for Addiction and Mental Health's OSDUHS is the longest ongoing survey of elementary and secondary school students in Canada. In 1967, several Toronto school boards approached the former Addiction Research Foundation (now CAMH) for assistance in determining the extent of drug use among their students. Four biennial surveys were conducted from 1968 through 1974 that monitored alcohol, tobacco and other drug use among Toronto students in grades 7, 9, 11 and 13.

In 1977, the scope of the study was expanded to include students across Ontario, and in 1999 it was expanded again to include students in grades 7 through 13/OAC. In 2003, 13th graders were excluded from the sampling plan (because this grade was eliminated by the Province of Ontario), and the number of classes surveyed in secondary schools was increased.

For over four decades the OSDUHS has surveyed thousands of students every two years, and to date over 125,000 students in Ontario have participated. The study's history is underscored by considering that most of the 12th graders studied in 1977 are approaching 60 years of age. Since its inception, the OSDUHS has not only been the source of data for numerous scientific and policy publications on an array of adolescent health issues, but has evolved into a well-recognized school survey globally.

The Institute for Social Research (ISR) at York University has administered the survey in schools on CAMH's behalf since 1981.

WHY MONITOR THE MENTAL HEALTH AND WELL-BEING OF STUDENTS?

Adolescent health is recognized as a priority for health researchers, health service providers, educators, and policy makers around the world (Gates, 2016; World Health Organization, 2014). As highlighted in the *Lancet Commission* on adolescent health and well-being: "Non-communicable diseases of adolescents including mental and substance use disorders, and chronic physical illnesses are becoming the dominant health problems of this age group. Substantial investment in the health-care system and approaches to prevention are required" (Patton et al., 2016, p. 2).

As a population health survey, the OSDUHS informs the "population health approach." The ultimate goal of this approach is to maintain and improve the health of an entire population. The approach is evidenced-based, and as such, necessitates the surveillance of a broad set of health indicators and determinants. In turn, the resulting knowledge is applied to identify impairments and disabilities, and to develop and implement policies and programs to improve the well-being of the population. Survey data are one source of knowledge about health indicators and determinants among the general population.

Some objectives of the OSDUHS are to:

- provide scientifically reliable estimates of the size of the adolescent student population currently experiencing physical and mental health problems, and engaging in risk behaviours;
- identify the factors that correlate with physical and mental health indicators, such as demographics;
- examine the developmental trajectory of health indicators from early to late adolescence;
- assess changes in physical and mental health indicators in the population over time;
- assess changes in the social determinants of health;
- provide a basis for program and policy evaluation and the assessment of health goals and targets established by governmental and nongovernmental agencies;
- provide scientific data that can confirm or challenge anecdotal and media reports; and
- provide surveillance data necessary for the development and monitoring of what we might call "sentinel population events" – population events that are likely to predict current or future impairment. For example, a possible sentinel event would be a recent increase in one or more problem indicators among 7th graders. This would require monitoring to assess if this behaviour moves with the cohort, or if it migrates to older or younger adolescents.

We should note that repeated cross-sectional surveys (repeated surveys of *different* students each cycle), such as the OSDUHS, can assess only specific types of change. Because the same students are not surveyed each cycle, repeated cross-sectional surveys cannot evaluate developmental patterns or individual change, nor can they fully resolve issues of causal order (e.g., whether excessive social media use causes depressive symptoms or vice versa). However, repeated cross-sectional surveys are especially efficient at identifying and measuring aggregate period trends (e.g., changes in the percentage of the population rating their health as poor). In comparison to longitudinal follow-up studies, the advantages of repeated cross-sectional studies are, firstly, that each survey takes into account population changes; and secondly, that estimates combine effects of changing beliefs and behaviours and changing populations, and therefore provide an efficient estimate of net (i.e., population) change.

Ultimately, we are hopeful that these data and the knowledge provided in this and subsequent research will enrich our ability to enhance the well-being of children and adolescents.

WHY USE A SCHOOL-BASED SURVEY TO MONITOR ADOLESCENT WELL-BEING?

There are important reasons for, and benefits to, monitoring physical health and mental health indicators among adolescents using a school-based survey:

- School-based surveys are cost efficient, having a low cost per respondent, and are relatively easy to administer. For example, numerous students in a class or school can be interviewed during a single visit.[1]

- Because administrative data on student enrolment and the number of schools are readily available, constructing a sampling frame is straightforward. Although school samples are not without their difficulties, they tend to have fewer sampling frame difficulties than do other methods (e.g., sampling frames for telephone surveys).

- In Ontario, adolescents without a secondary school diploma are legally required to attend school until age 18. Thus, the coverage of the total adolescent population is exceptionally good, especially for the lower grade students (grades 7–10), who represent the larger share of the population.

[1] Unfortunately, there is a price to pay for this efficiency – higher design effects and lower precision relative to a simple random sample (see the Methods section for a discussion on this issue).

Impact of the OSDUHS

Findings from the OSDUHS have informed public health monitoring, education and prevention, and health-related programs and policies in Ontario and beyond for over 40 years.

Public Health Monitoring

- Since 1977, the survey has monitored changes in alcohol, tobacco, cannabis and other drug use among students and raised awareness about several drug "epidemics" over the years, such as cigarette smoking in the late 1990s, and prescription opioid misuse in the early 2000s.
- Since 1991, the survey has monitored changes in mental health, physical health, and risk behaviours among students and raised awareness about problems, such as the elevated levels of poor mental health and bullying.
- Over the decades, the survey has provided the first Canadian adolescent population estimates for the use of several emerging drugs (e.g., crack, ecstasy, OxyContin), and risk behaviours (e.g., texting and driving, vaping cannabis).

Education and Prevention

- The findings have been used in various publications including CAMH brochures and other products designed for youth and parents, and Canadian psychology and sociology textbooks.
- The findings have been used to inform the development of mental health and gambling curriculum guides for Ontario educators.
- Public health units have used the findings to inform their program and service planning.
- Educators and other professionals have used the findings to facilitate outreach to parents and the wider community.
- The findings have sparked several media campaigns raising awareness about the risks of cannabis and driving, and the misuse of prescription medication.

Public Policy

- The findings have informed health-related policy initiatives in Ontario regarding smoking, vaping, drinking, prescription opioid misuse, impaired and distracted driving, and physical activity.
- The findings have informed school health policies in Ontario regarding cigarette smoking on school property, bullying and safe schools.

- A wide scope of developmental periods – early, middle, and late adolescence – is "captured" in a school setting. This wide age range allows one to capture the spectrum of problems experienced during adolescence.

- Response rates for school-based surveys tend to be higher than household face-to-face surveys or telephone surveys (Hibell et al., 2003).

- The school setting is conducive to eliciting truthful responses by adolescents (rather than in the home, for example). Adolescents feel more comfortable answering sensitive questions about drug use and other behaviours that may be considered stigmatizing or illegal in a school setting than in a less anonymous setting such as the home. Data collected through anonymous, self-administered, school-based surveys often demonstrate higher validity than do data collected through alternative methods (Brener et al., 2006; Harrison, 2001; Hibell et al., 2003).

- In addition to physical and mental health indicators, we can monitor exposure to school-based prevention education and other such program activities in schools.

- Schools themselves are social units worthy of examination. Schools are part of a fundamental hierarchical social structure: students are embedded, or nested, in classes, which, in turn, are nested in schools, nested in neighbourhoods, and nested in larger regional units. The character of these linkages can affect rates of drug use and their associated harms. OSDUHS research has shown that school characteristics, such as school size, policies, school climate, and connectedness are associated with student health behaviours (Allison, Adlaf, Irving, Schoueri-Mychasiw, & Rehm, 2016; Kairouz & Adlaf, 2003; Rehm et al., 2005).

WHAT SCHOOL SURVEYS DO NOT TELL US

Because school-based surveys comprise adolescents attending school, their data cannot fully measure the well-being of all adolescents in the population. Student surveys cannot address the extent of the health and risk behaviours among nonstudents and institutionalized adolescents, such as youth who are homeless or marginally housed, incarcerated, in group homes, or those leaving school prematurely. Further, cross-sectional surveys also cannot address the causes of individual changes over time.

THE 2019 OSDUHS MENTAL HEALTH AND WELL-BEING REPORT

This report presents physical and mental health indicators among Ontario students in grades 7 to 12 using data from the 2019 cycle of the OSDUHS, and trends since 1991, where possible. This report also presents findings from indicators new to OSDUHS, specifically self-harm, coping ability, help-seeking preference for a mental health problem, virtual gambling while playing video games, and talking on a hand-held phone while driving.

Mental health indicators in the OSDUHS generally assess moderate functional impairment, rather than psychiatric disorders based on clinical criteria and diagnostic interviews. Restricting attention to those experiencing current psychiatric disorders would understate the extent of poor mental health because a sizeable percentage of the population experiences distress or impaired functioning without meeting the clinical criteria for a psychiatric diagnosis. Moreover, restricting attention to psychiatric disorders would overlook the mental well-being continuum, ranging from optimum mental health to mental disorder. Further, broad mental health indicators are more sensitive in detecting period change, which can provide an early warning system for service planners and providers.

Readers should note that CAMH publishes a companion report describing the extent of drug use among Ontario students since 1977, which is available to download at www.camh.ca/osduhs.

2. METHODS

SAMPLING DESIGN

Target and Survey Population

For each of the 22 survey cycles, the target or in-scope population – the population we are attempting to draw conclusions about – comprised all 7th to 12th graders enrolled in Ontario's four publicly funded school sectors (i.e., English language public, English language Catholic, French language public, and French language Catholic). Students excluded from the survey's target population (out-of-scope) were those enrolled in private schools (which include non-Catholic faith-based schools), those who were home-schooled, those institutionalized for correctional or health reasons, those schooled in First Nation communities, on military bases, or in the remote northern region of Ontario. These out-of-scope groups who are not sampled represent a small proportion of the Ontario student population (about 6%). Therefore, although our target population represents students, it captures the vast majority (94%) of all Ontario children and adolescents aged 12–18 years, based on Statistics Canada's population estimate (Statistics Canada, n.d.).

Table 2.1 Forty-Three Years (22 Cycles) of the OSDUHS

	1977	1979	1981	1983	1985	1987	1989	1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013	2015	2017	2019
No. School Boards	20	20	31	31	20	24	25	27	25	20	22	38	41	37	42	43	47	40	42	43	52	47
No. Schools	104	87	182	227	193	170	171	179	165	137	168	111	106	126	137	119	181	181	198	220	214	263
No. Classes	196	195	198	261	205	215	224	221	233	223	234	285	272	383	445	385	573	581	671	750	764	992
No. Students	4687	4794	3270	4737	4154	4267	3915	3945	3571	3870	3990	4894	4211	6616	7726	6323	9112	9288	10272	10426	11435	14142
Student (Unweighted) Completion Rate	70	78	85	85	82	84	81	83	77	76	77	76	71	72	72	68	65	62	63	59	61	59
Design Features	3-stage selection (board; school; class), proportionately stratified by grade and region; Grades 7, 9, 11 and 13; self-weighted estimates		single-stage 2-per-stratum selection (board clusters), disproportionately stratified by grade and region; Grades 7, 9, 11 and 13 (OAC); weighted estimates									2-stage cluster selection (school, class), disproportionately stratified by region and school level; North oversampled; sponsored public health regions oversampled in 2009 (n=6), 2011 (n=5), 2013 (n=7), 2015 (n=7), 2017 (n=6), 2019 (n=10); weighted estimates										
												Grades 7–13 (OAC)		Grades 7–12								

Notes: (1) the unweighted student completion rates shown do not take into account the differing weights by regional strata; (2) the entries beginning in 2009 include public health regions' oversamples; (3) OAC (Ontario Academic Credits) – until 2003, Ontario students matriculating to postsecondary education were required to attend five years of secondary school (grades 9–13). This additional year of secondary school credits was eliminated in 2003.

The OSDUHS Surveillance Program

Data quality is achieved by the regular redesign of surveys (Biemer & Lyberg, 2003), and the OSDUHS program has strived to maintain its integrity in this regard. Sample design revisions are often required in organizational surveys such as the educational system to adapt to changing structure, policies, practices, and governmental change (e.g., removal of grade 13). As seen in Table 2.1, the OSDUHS program is the culmination of three data series spanning four decades: 1977–1979, 1981–1997,[2] and 1999 onward, of which each odd-year survey was based on a random probability design. The 1977 and 1979 surveys were based on a *stratified* (region by grade) *three-stage cluster design* (school board district, school, class).[3] The proportionate allocation of students by grade and region yielded self-weighted (i.e., unweighted) estimates.[4] In 1981, the design was modified to a *disproportionately stratified single-stage cluster design* with paired selection (two-per-stratum) of first-stage school board district clusters designed to improve the precision and efficiency of estimates.[5] This design entailed the selection of more schools and school boards.[6]

Since 1981, York University's Institute for Social Research (ISR) has produced, under contract, the OSDUHS data. ISR is responsible for the sample design and selection, questionnaire review and production, school recruitment, class selection, field operations, data capture, initial weighting and initial dataset preparation. The OSDUHS team is responsible for institutional and school board recruitment, questionnaire content, consent protocols, information material, and final dataset development (including any generation of poststratification adjustments to sampling weights), and variable creation.

Current Sampling Design[7]

In 1999, the OSDUHS transitioned to a *disproportionately stratified* [8] (region by school level[9]), *two-stage* (school, class) *cluster design*, which included the oversampling of students in Northern Ontario (to provide more precise estimates for that less populous region).[10] Further, rather than sampling students only in grades 7, 9, and 11 (and grade 13 before it was eliminated in 2003), the revised design samples students in grades 7 through 12, inclusive. This expansion yields greater age variation and more developmentally relevant detail on the relationship between health compromising behaviours and age. The revised design also allows for more direct grade comparisons to

[2] The initial two data series were conducted under the auspices of the Addiction Research Foundation (ARF) prior to the formation of CAMH in 1998.

[3] Sample preparation, fieldwork and data preparation for the 1977 and 1979 surveys were contracted to Ian Sone and Associates.

[4] The original design of every odd grade (grade 7, 9, 11, 13) in every odd year (1977, 1979, etc.) yielded population cohorts across time given that the 7th grade population in 1977 would be surveyed again in the 9th grade in 1979, in the 11th grade in 1981, and in the 13th grade in 1983. This earlier grade × year cohort design can also be constructed for later survey cycles.

[5] This major redesign was developed by Professors P. Peskun and C.M. Lanphier (Departments of Mathematics and Sociology, respectively), both of York University.

[6] For the 1977, 1981 and 1983 cycles, an additional stratum of 5th graders was also sampled. To ensure cross-time comparability, these data have been excluded. The 5th-grade stratum was eliminated in 1985, largely due to the reticence of school boards to allow surveying of this young cohort over concerns that surveying such young students would induce drug taking.

[7] In addition to the authors, the 2019 OSDUHS sample design team included Stella Park, Hugh McCague, and David Northrup all from the Institute for Social Research (ISR) at York University.

[8] The primary stage stratification of region is disproportionate to the enrolled population.

[9] In Ontario, 7th and 8th graders can be enrolled in elementary schools (K–G8), middle or senior public schools (G6–G8), or junior high schools (G7–G9).

[10] Prior to 1999, the allocation of students from Northern Ontario was proportionate to the population, resulting in smaller samples than the other regions. This smaller sample proved problematic because, despite the elevated rates of certain behaviours in the North, the regional comparison tests did not reach significance due to weak statistical power. This redesign was led by Professor Michael Ornstein, York University/ISR.

American and other international studies, thereby enhancing data quality by developing cross-national comparability (Biemer & Lyberg, 2003). Another design revision introduced in 1999 was the probability selection of schools in stage 1, rather than selection of school board clusters. In sum, the revised design yields more students per school and a wider geographical dispersion of schools (due to school selection being independent of school board) with more precise school-level estimates.[11]

OSDUHS Base Regions

The sample design first divided Ontario into four regional strata based on the following boundaries: (1) *Greater Toronto Area (GTA)*; (2) *Northern Ontario* (Parry Sound District, Nipissing District, and areas farther north); (3) *Western Ontario* (Dufferin County and areas farther west); and (4) *Eastern Ontario* (Simcoe County and areas farther east).[12]

Supplemental Oversamples Sponsored by Ontario Public Health Units/Departments in 2019

In addition to the four regional strata comprising the base design, the 2019 OSDUHS included 10 regional strata oversamples sponsored by the corresponding Ontario public health unit/department. The oversampling of students in these public health regions was conducted to provide more precise regional estimates for the health units/departments.[13] Schools in the following 10 regions of the province were oversampled: City of Ottawa, Simcoe Muskoka District, Durham Region, York Region, City of Toronto, Peel Region, City of Hamilton, Niagara Region, Middlesex-London District, and Southwestern District (Oxford County and Elgin County).[14]

School Selection (Stage 1)

Publicly funded schools represented by four school sectors in Ontario – English and French language schools in the public and Catholic school sectors – were eligible to participate.[15] Schools excluded as being out-of-scope were private schools, schools in First Nation communities, on Canadian Forces Bases, and schools in geographically inaccessible northern areas.[16]

[11] The disadvantages of wider school dispersion are that (1) it increases the number of school boards and therefore the resources needed for recruitment, and (2) it increases the school fieldwork coordination and travel costs. In contrast, wider school dispersion provides better estimation with more PSUs (schools) and richer, more precise school-level data necessary for multilevel analysis. OSDUHS examples of this type of analysis include Allison et al. (2016), Kariouz and Adlaf (2003), and Rehm et al. (2005).

[12] The base regional strata were redesigned in 2017. Between 1977 and 2015, the following four regions were used: *City of Toronto*; *Northern Ontario* (Parry Sound District, Nipissing District, and areas farther north); *Western Ontario* (Peel Region, Dufferin County and areas farther west); and *Eastern Ontario* (Simcoe County, York County and areas farther east). The regional estimates between 1999 and 2015 were recalculated to reflect the new base regional strata (trends prior to 1999 for the new region categories are not available). Due to this redesign, estimates for the City of Toronto are no longer provided.

[13] Since 2009, 15 public health units have sponsored supplemental oversamples of their jurisdictions for producing precise local estimates. Although such strategies serve to provide local data, the trade-off is variance inflation partly due to the increased variability in the inclusion weights.

[14] Although each oversample was an independent stratum, for our analyses and presentation in this report, the oversamples were assigned to one of the four base regions: Greater Toronto Area, North, West, or East.

[15] In Ontario, each regional county usually has schools under two public (English and French) and two Catholic (English and French) school boards.

[16] School exclusions are likely not equally distributed throughout the province. For example, geographically remote school exclusions are typically in the North. Thus, exclusions may differentially affect population coverage by region.

The 2019 OSDUHS school selection proceeded as follows:[17]

1) The Ontario Ministry of Education's 2015/2016 school enrolment database (most recently available at the time) was used as the sampling frame to randomly draw the school sample. This frame included all publicly funded schools in Ontario with grades in our target (grades 7–12). As noted earlier, this comprised schools in four sectors: English language public, English language Catholic, French language public, and French language Catholic. To reduce costs and estimation difficulties with sparse data, schools with low enrolment (i.e., fewer than 30 students in schools with grades 7 and 8, fewer than 80 students in secondary schools, or secondary schools without all four grades), and schools in the remote northern region of the province, were excluded from the sampling frame.

2) Within *each* of the region-by-school level primary-stage strata, a probability proportionate-to-size (PPS) selection of schools by means of systematic selection[18] was drawn (i.e., larger schools had a greater probability of being selected). Following a random start, schools were selected with systematic sampling (i.e., every nth school) without replacement (WOR). Mutually exclusive school samples were drawn for each of the strata.

3) If a selected school declined to participate, or if it had closed, a replacement school from the same region-by-school level stratum was randomly selected, again with PPS/WOR sampling.

Class Selection (Stage 2)

Within each recruited school, a grade-stratified list of all eligible classes (provided by the school) was used to randomly subsample one class per grade with equal probability and without replacement (WOR). In elementary/middle schools, two classes were randomly selected – one 7th-grade class and one 8th-grade class. In secondary schools, four classes were randomly selected, one in each grade from 9 through 12 from either a list of classes in a required subject (e.g., English, math) or a required period (e.g., homeroom).

For all public health region oversamples with elementary/middle school students, *two* 7th-grade and *two* 8th-grade classes were sampled to participate (or all students in these grades if there were fewer than two classes in each grade). For certain public health units with a smaller secondary school population, the number of classes selected in the secondary schools was doubled (i.e., *two* classes in each grade between 9 and 12).

If a selected class could not participate, a replacement class from the same school and same grade was randomly selected, time permitting (otherwise this loss was incorporated in the class nonresponse adjustments). Classes excluded (out-of-scope) were special education classes, English as a Second Language (ESL) classes, and classes with fewer than four students enrolled.[19] All students in the selected classes who could read English or French with a returned signed consent form were eligible to participate.

[17] Initially designed to enhance cross-time estimation, school selections for the 2003–2009 cycles were based on a longitudinal sample of schools initially drawn in 2001. Starting in 2011, the school selection reverted to a fully independent school sample.

[18] A systematic selection of schools is typically efficient. Firstly, such samples usually produce samples similar to SRSs. Secondly, systematic samples have been shown to perform well in sampling frames such as ours, wherein listings of schools show little periodic or cyclical ordering (Lohr, 1999, p. 43).

[19] Small classes are excluded because they impede the creation of weights and within-class estimates.

Sample Exclusions

School Exclusions

- private schools
- schools in First Nations communities
- schools on military bases
- geographically remote schools
- elementary/middle schools with fewer than 30 students enrolled in Grade 7 and Grade 8 (combined)
- secondary schools with fewer than 80 students enrolled in Grades 9–12 or schools without all four grades

Class Exclusions

- special education classes
- English as a Second Language (ESL) classes
- classes with fewer than four students

Student Exclusions

- institutionalized or home schooled
- students who cannot comprehend English or French

Selection of Units

School Selection

- PPS/WOR: probability-proportionate-to-school size via systematic sampling; sampled without replacement; stratified by region and school type

Class Selection

- EPSEM/WOR: equal probability selection of classes; sampled without replacement; stratified by grade

Student Selection

- None: All students in a class with a signed consent form (who could read English or French) were eligible to participate.

ADMINISTRATIVE AND RECRUITMENT PROCEDURES

The 2019 OSDUHS protocol was approved by the Research Ethics Boards (REBs) at CAMH and York University,[20] as well as 34 school board research review committees (RRC).[21]

Student participation required the consent/permission of several entities, including school boards, school principals, classroom teachers, parents, and students themselves. For each school board associated with the selected schools, permission to survey students was first requested from the Director of Education. For about half of the school boards contacted in 2019, the decision to participate was conditional upon approval from the board RRC. If a school board was unwilling to have their schools participate, replacement schools from the same stratum were randomly selected and the corresponding board(s) were contacted for permission to approach the replacement schools. Following board approval, school principals were sent an invitation letter and accompanying material describing the study and the purpose. Once a school was recruited, the principal provided ISR with a grade-stratified list of classes, from which random selections were drawn by ISR. The date of survey administration was typically selected by the school, and usually all selected classes were surveyed on the same day.

All recruited schools were provided with active (also known as explicit or opt-in) parental consent forms,[22] which were available in six

[20] A protocol review by York University's REB is required for all contractual projects administered by ISR.

[21] Not all school boards in Ontario have Research Review Committees, which accounts for fewer RRCs than sampled boards.

[22] The OSDUHS *active/explicit* parental consent requires a clear approval for their child to participate from at least one parent indicated by an "I approve" response with an accompanying signature. In contrast, *passive* consent allows a student to participate as long as a parent does not indicate objection (or opt-out) to their child participating. In practice, active consent results in fewer students participating (Courser, Shamblen, Lavrakas,

languages (English, French, Spanish, Portuguese, Russian, and Mandarin). Well in advance of the survey date, teachers of the selected classes distributed the consent forms to students, who, in turn, sought the signature of one parent/guardian if they were under age 18 (students aged 18 and older did not require parental consent). Students themselves were also required to provide a signature of assent. Those who did not return a dual-signed consent form on or before the survey date were precluded from participating. To limit costs, all selected classes in a school were surveyed in one day when possible. Thus, follow-up data collection was not rescheduled for absent students or those not returning a consent form. If a student did not participate, no substitution took place (because all students in the class were invited to participate). Instead, the inclusion weights were adjusted upward for this student unit nonresponse.

Administration procedures were designed to protect students' privacy by ensuring anonymous and voluntary participation. The survey was administered across the province by 43 trained ISR field staff in the sampled classrooms during regular class periods between November 2018 and June 2019.[23] The survey administrators read a standardized script to participating students explaining the history of the study, its purpose, and underscoring the anonymity of the survey.[24] Students were reminded that participation was voluntary and anonymous, and were instructed not to write their names on the questionnaires. They were also instructed to skip any question they did not understand, rather than risk disclosure by asking for assistance. Students recorded their answers directly on the paper-and-pencil instrument (PAPI), printed in a two-column booklet format. Although teachers were not required to remain in the classrooms during administration, most chose to do so, which added a beneficial climate of order during the administration. Teachers were asked to avoid walking around the room so that students would not feel their answers would be observed. Students were not compensated for their participation.[25]

The ISR field staff collected all completed questionnaires, which were then couriered to ISR for data capture by using the Computer-Assisted Survey Execution System (CASES) software. The quality of the data entry was verified by independently re-keying a random sample of 5% of all questionnaires.[26]

Collins, & Ditterline, 2009; Jelsma, Burgess, & Henley, 2012). It is the policy of almost all school boards in Ontario to require active consent for external research studies.

[23] While some data collection occurred in 2018, we retain the odd-year designation used in previous cycles for simplicity and to reduce possible confusion. The data collection period was expanded to allow schools more time to schedule an acceptable administration date.

[24] The survey administrators also recorded information pertinent to the classroom, such as the number of students enrolled, number absent, presence of teacher during administration, whether the class was randomly selected, and whether any unusual events occurred during administration.

[25] In most schools (board permitting), school principals and teachers of participating classes were given a $15 gift card for a national chain restaurant to thank them for their assistance.

[26] The verification rate was reduced from 100% after multiple cycles showed low rates of data entry errors.

THE OSDUHS QUESTIONNAIRE

In addition to alcohol and other drug use, the OSDUHS questionnaire covers an array of topics related to mental and physical well-being. The general outline of the questionnaire topics is as follows: demographics, family and school life, tobacco, alcohol, cannabis and other drug use, beliefs and attitudes about drug use, vehicle-related questions, mental health indicators (e.g., suicidality, symptoms of anxiety and depression), physical health indicators (e.g., physical activity, injuries), bullying, video game playing, gambling and gambling problems, problems, problem technology use, and aggressive and other problem behaviours.

The objective of the OSDUHS data collection system is to maximize the data to cost ratio – to maximize data usability while minimizing cost and questionnaire length (i.e., respondent burden). To include as many topics as possible in a fixed class period, while minimizing the burden on students, we employed four split ballot versions of the questionnaire,[27] depending on school level, in a paper booklet format. As in past cycles, we used split ballot modularized questionnaires whose item content was distributed according to questionnaire form (Form A vs. Form B).[28] To better tailor the instrument, we reduced the number of questions in the forms for elementary school students (i.e., the 7th and 8th graders). The elementary school questionnaires excluded the following topics: gender identity, sexual orientation, the use of cocaine, crack, heroin, fentanyl, methamphetamine, hallucinogens, club drugs, prescription tranquillizers, modes of cannabis use, alcohol and drug use problem screeners, gambling problem screener, problem technology use, and driving-related behaviours. See Table 2.2 for an overview of the questionnaire content in the four forms. The item count was 180 in Form A-SS, 149 in Form B-SS, 132 in Form A-ES, and 113 in Form B-ES. About half of the items in each form were designated as core, that is, items common to all four forms. Because not all questions were in all forms, the number of cases upon which an estimate is based may be less than the total sample size. French-translated versions of Form A-ES and Form A-SS were used in French-language schools.[29]

In each classroom, Form A and Form B were distributed alternately (i.e., A, B, A, B) to achieve two near-equal random samples completing each form.[30] The average completion time was 29 minutes for secondary school students, and 31 minutes for elementary school students. By design, item branching (i.e., designated question skips) was not used in the questionnaire to protect students' privacy by ensuring comparable time to completion, thereby reducing the risk of disclosure such as the likelihood of identifying drug-using students (or those reporting other sensitive behaviours or problems) who would take longer to complete additional questions.[31] This was achieved by having nonusers respond to all questions using the response categories of *never used, did not currently use,* or *did not know what a drug was* for the drug-related

[27] Customized questionnaire forms were developed for schools in two school boards that requested the removal of certain questions deemed too sensitive (suicide and self-harm), and a modification to the gender identity question.

[28] Split ballot methods cannot only expand the content coverage of the survey, but can also be used in an experimental or evaluative mode to assess methodological and questionnaire development. The disadvantage of the split ballot method is a reduced sample size for analyses based on questions that are not in all forms, and increased costs.

[29] Form B questionnaires were not translated into French.

[30] We must recognize that this distribution of questionnaire forms to students is not strictly random due to the absence of a random start, which would pose administration difficulties for field staff. Nonetheless, this alternating distribution strategy (essentially k=2 in systematic sampling) should result in two balanced samples of students. An assessment of this alternating distribution showed good characteristics, as there were few differences between the samples completing each form regarding demographics and drug use variables.

[31] A similar strategy is used in the CDC's national *Youth Risk Behavior Survey* (YRBS).

items. A further advantage of minimizing item branching is a reduced risk of navigational errors (i.e., students skipping ahead to the wrong question).

To maximize validity and to enhance cross-study comparability, many of the OSDUHS questionnaire items were derived from international guidelines (e.g., Hibell et al., 2003) and recognized student surveys such as NIDA's *Monitoring the Future* (MTF) survey,[32] the CDC's *Youth Risk Behavior Survey* (YRBS),[33] and the WHO's *Health Behaviour in School-aged Children* (HBSC) survey,[34] and have been shown to produce valid responses (Brener et al., 2002; Fosse & Haas, 2009; Inchly et al., 2016; Mawani & Gilmour, 2010; May & Klonsky, 2011; Miech, Johnston, O'Malley, Bachman, Schulenberg, & Patrick, 2019; O'Malley, Bachman, & Johnston, 1983). There are two principal advantages of employing existing survey questions: first, existing items have typically gone through field collection and testing for validity and reliability and have a demonstrated "fitness for use" (Biemer & Lyberg, 2003) and "usability" (Groves et al., 2009); and second, the capacity for interprovincial and cross-national comparisons extends the utility of the data. Such comparability of measurements is deemed an essential dimension of data quality by national statistical agencies (Biemer & Lyberg, 2003).

The 2019 OSDUHS questionnaire included validated scales and screeners such as the WHO's *Alcohol Use Disorders Identification Test* (AUDIT) assessing hazardous or harmful drinking (Saunders, Aasland, Babor, De La Fuente, & Grant, 1993), the *CRAFFT* screener assessing drug use problems (Knight et al., 1999), the cannabis subscale of the *Severity of Dependence Scale* (SDS) assessing cannabis dependence (Martin, Copeland, Gates, & Gilmour, 2006), the *Kessler 6-Item Psychological Distress Scale* (K6; Kessler et al., 2003) assessing nonspecific psychological distress, the *Canadian Adolescent Gambling Inventory's Gambling Problem Severity Subscale* (CAGI-GPSS) assessing gambling problems (Stinchfield, 2010; Tremblay, Stinchfield, Wiebe, & Wynne, 2010), the *Problem Video Game Playing* (PVP) scale assessing problems with video gaming (Tejeiro Salguero & Morán, 2002), and the *Short Problematic Internet Use Test* (SPIUT) assessing problem technology use (Siciliano et al., 2015).

All newly introduced items in the 2019 questionnaire were evaluated by both expert review (by ISR and CAMH staff) and pretested by ISR on a small convenience sample of young adolescents. The readability of the 2019 questionnaire showed a 7th-grade reading level according to the Flesch-Kincaid reading score.

At the end of the questionnaire students were asked to evaluate the comprehension and sensitive nature of the questionnaire. The majority of students indicated positive assessments: 96% of students (95% of 7th graders) indicated that the questionnaire was "fairly" or "very easy" to understand; only 8% of students (5% of 7th graders) indicated that the questionnaire was "much too long"; and only 6% of students (6% of 7th graders) indicated that questions in the survey would make most students "very uncomfortable." This latter finding provides some reassurance that social desirability should not greatly bias our estimates, even among the youngest students.

[32] See www.monitoringthefuture.org

[33] See www.cdc.gov/healthyyouth/data/yrbs

[34] See www.hbsc.org

Table 2.2 Topic Overview of the Four Questionnaire Forms Used in the 2019 OSDUHS

Grades 7 and 8 (ES)		Grades 9–12 (SS)	
Form A-ES	**Form B-ES**	**Form A-SS**	**Form B-SS**
Demographics			
age, sex, grade, how long lived in Canada, language spoken at home, living situation, ethno-racial identity, **social media use**	age, sex, grade, how long lived in Canada, language spoken at home, living situation, ethno-racial identity, **social media use**	age, sex, gender identity, grade, how long lived in Canada, language spoken at home, living situation, ethno-racial identity, sexual orientation, **social media use**, hours work at part-time job	age, sex, gender identity, grade, how long lived in Canada, language spoken at home, living situation, ethno-racial identity, sexual orientation, **social media use**
School Life			
usual marks, **special education**, days absent, ever been suspended, attitudes about school, **feel treated fairly at school**, **is there an adult at school can talk to,** subjective social status at school, school transportation	usual marks, **special education**, days absent, attitudes about school, **feel treated fairly at school**, **is there an adult at school can talk to**, subjective social status at school, school transportation	usual marks, **special education**, days absent, ever been suspended, attitudes about school, **feel treated fairly at school**, **is there an adult at school can talk to**, subjective social status at school, school transportation	usual marks, **special education,** days absent, attitudes about school, **feel treated fairly at school**, **is there an adult at school can talk to**, subjective social status at school, school transportation
Family Life			
parents' education, parents born in Canada, parental support, subjective socio-economic status		parents' education, parents born in Canada, parental support, subjective socio-economic status	
Drug Use in the Past Year			
alcohol, cigarettes, cannabis, inhalants, cough/cold medication, prescription opioid pain relievers, prescription ADHD drugs	alcohol, cigarettes, smokeless tobacco, waterpipe, electronic cigarettes, source of electronic cigarettes, cannabis, synthetic cannabis, inhalants, cough/cold medication, prescription opioid pain relievers, prescription ADHD drugs	alcohol, cigarettes, cannabis, inhalants, cough/cold medication, prescription opioid pain relievers, prescription ADHD drugs	alcohol, cigarettes, smokeless tobacco, waterpipe, content in waterpipe, electronic cigarettes, source of electronic cigarettes, cannabis, synthetic cannabis, inhalants, cough/cold medication, prescription opioid pain relievers, prescription ADHD drugs
More Drug Use in the Past Year			
		hallucinogens, cocaine, crack, ecstasy, methamphetamine, heroin, fentanyl, prescription tranquillizers, drug use (any) problem screener	hallucinogens, cocaine, crack, ecstasy, methamphetamine, heroin, fentanyl, prescription tranquillizers
Alcohol			
first use, past month use, heavy episodic drinking	first use, past month use, heavy episodic drinking, usual source of alcohol	first use, past month use, heavy episodic drinking, alcohol problem screener, received treatment	first use, past month use, heavy episodic drinking, received treatment, parental permission to drink at home with friends, usual source of alcohol, opinion about purchasing beer in grocery stores
Cannabis			
first use, past month use	first use, past month use, usual source of cannabis, **use cannabis with tobacco**	first use, past month use	first use, past month use, usual source of cannabis, **use cannabis with tobacco**, modes of cannabis use, received legal warning for cannabis use, **noticed change in friends' cannabis use since legalization**, cannabis dependence screener
Tobacco Cigarettes/Smoking			
	first use, source of cigarettes, contraband cigarettes, exposure to second-hand tobacco smoke and **cannabis smoke**, opinions		first use, source of cigarettes, contraband cigarettes, exposure to second-hand tobacco smoke and **cannabis smoke**, opinions

(continued)

Grades 7 and 8 (ES)		Grades 9–12 (SS)	
Form A-ES	**Form B-ES**	**Form A-SS**	**Form B-SS**
Vehicles			
been passenger with intoxicated driver	seatbelt use, been passenger with intoxicated driver	been passenger with intoxicated driver	seatbelt use, been passenger with intoxicated driver
Driving Behaviours			
		driver's licence, impaired driving	driver's licence, in-class driver training, impaired driving, **perceptions about impaired driving**, collisions, driving while texting, **driving while talking on hand-held cell phone**
Perceptions About Drugs, Education, and Exposure			
	availability and risk perceptions (alcohol, cigarettes, e-cigarettes, cannabis, prescription opioid pills), recall of drug education, intoxicated at school, exposure to drugs		availability and risk perceptions (alcohol, cigarettes, e-cigarettes, cannabis, prescription opioid pills, cocaine, ecstasy, LSD), recall of drug education, intoxicated at school, exposure to drugs
Physical Health			
self-rated health, physical activity, sedentary behaviour, healthy eating, **eating breakfast**, go to bed/school hungry, hours of sleep on school night, height and weight, head injury	self-rated health, physical activity, sedentary behaviour, healthy eating, **eating breakfast**, go to bed/school hungry, hours of sleep on school night, height and weight, body image, head injury	self-rated health, physical activity, sedentary behaviour, healthy eating, **eating breakfast**, go to bed/school hungry, hours of sleep on school night, height and weight, head injury	self-rated health, physical activity, sedentary behaviour, healthy eating, **eating breakfast**, go to bed/school hungry, hours of sleep on school night, height and weight, body image, head injury
Mental Health			
self-rated mental health, help-seeking behaviour, **help-seeking preference,** psychological distress, perceived stress, self-esteem, suicidal ideation and attempt, **self-harm**, **coping skills**, **personality traits**	**personality traits**	self-rated mental health, help-seeking behaviour, **help-seeking preference**, psychological distress, perceived stress, self-esteem, suicidal ideation and attempt, **self-harm**, traumatic life event, prescription medication for anxiety or depression, **coping skills**, **personality traits**	**personality traits**
Other Risk Behaviours			
bullying perpetration and victimization at school, cyberbullying victimization and perpetration, video gaming and problems, **video game gambling**, gambling activities, antisocial behaviours		bullying perpetration and victimization at school, cyberbullying victimization and perpetration, video gaming and problems, **video game gambling**, problematic technology use, gambling activities, problem gambling, antisocial behaviours	
questionnaire evaluation			

Notes: (1) **bolded text** in the table indicates a new topic in 2019; (2) Form A-ES and Form A-SS were translated into French for use in French-language schools.

DATA QUALITY

2019 Sample Participation and Characteristics

A key objective of the OSDUHS is to produce a representative, unbiased sample of Ontario students in grades 7 through 12 in publicly funded schools. The allocated sample size for the 2019 OSDUHS was set at 14,500 students.

Schools

In total, 526 schools were invited to participate. Of these, 264 schools from 47 school boards participated in the survey, resulting in a school participation rate of 50%.[35] However, due to data editing issues, the final data file is based on students from **263 schools** (99 elementary/ middle schools – of which 13 were French language – and 164 secondary schools – of which 11 were French language). The most cited reasons given by nonparticipating schools were that they were too busy or that they had already committed to other research projects.[36] We attempted to replace each school that was unable to participate with another school randomly selected from the same stratum using our standard procedures.

Although we could not conduct a systematic follow-up of students in the nonparticipating schools, we do not expect the school refusals to have produced appreciable bias. Our analysis showed that nonparticipating schools were more likely to be located in the West region of the province, more likely to be public rather than Catholic schools, and more likely to be English language rather than French language schools. Any distortions by region were corrected by selecting replacement schools or in the weighting process. A further analysis was conducted to examine whether replacement schools[37] differed from initially selected schools. Results showed no substantial differences in the drug use measures between students in these two groups of schools.

If schools substantially differ with regard to student behaviours, then which schools participate can greatly influence the survey findings. Some research suggests that school-level variables are important and show relationships between variables such as school type, size, and socioeconomic status, and aggregated student drug use (Kairouz & Adlaf, 2003; O'Malley, Johnston, Bachman, Schulenberg, & Kumar, 2006; Rehm et al., 2005). However, the majority of the variance in students' behaviour may lie within schools, not between schools (Kairouz & Adlaf, 2003; O'Malley et al. 2006). Further, much of the between-school variance can be attributed to differences in region/urbanicity (Miech et al., 2019) – a factor that is controlled for in the replacement sampling from within the same regional stratum. This would imply that which particular schools in the same region participate might not have an appreciable impact on estimates. Furthermore, a recent study using school survey data showed that school nonresponse does not introduce any considerable bias to student-level drug use estimates, suggesting that school attributes such as size or type have less influence than previously assumed (Thrul, Pabst, & Kraus, 2016).

Classes

The class participation rate was 92**%**. A total of 1,003 classes participated, but **992 classes** met the class inclusion criteria and are in the final data set (289 from elementary/middle schools, 703 from secondary schools). We must note that

[35] Initially, 286 schools approved (54%). However, the survey was cancelled in 22 schools due to low consent form returns by students.

[36] Another factor that decreased the school participation rate was restrictions imposed by some school boards on the number of times ISR could contact schools to invite them to participate. Some boards limited contact to only once, and one board completely prohibited ISR contact (only the board representative could invite the schools).

[37] 49 schools were replacement schools.

about 29% of classes were not randomly selected. In most of these cases, these classes were convenient same-grade replacements, typically identified by principals, for classes that were originally selected but declined to participate for logistical reasons.[38]

Students

A total of 23,997 eligible students[39] were enrolled in the 992 participating classes. Of these eligible students, 14,347 (60%) participated in the survey.[40] However, after the data quality criteria were applied, **14,142 cases were considered** "**completions**,"[41] resulting in a conditional student **completion rate of 59%**.[42] Twelve percent (12%) of students were lost due to absenteeism, and 29% were lost due to either unreturned consent forms or parental refusal. The sources of nonresponse varied by grade: the major source of nonresponse in the younger grades was unreturned consent or parental refusal (33% in grade 7 versus 25% in grade 12), whereas in the older grades absenteeism was higher than in the lower grades (19% in grade 12 versus 8% in grade 7).[43] The student completion rates according to the four base regions presented in this report were 62% in the Greater Toronto Area, 59% in the North, 54% in the West, and 61% in the East.[44]

Trends in Student Participation

Like many ongoing population surveys, student participation in the OSDUHS has trended downward over the long-term. Between 1977 and 2019, the student participation rate fell from 70% to 59%, with a peak in 1981–1983 at 85%. This decline is strongly associated with an increase in consent loss, which rose steeply from 4% to 29% during this period. In contrast, the loss due to absent students held steady (11%–15%). While the loss due to absenteeism has remained stable across cycles, the proportion not returning their consent form has been increasing across all grades and all regions. The reasons for this increase are unclear. One likely explanation is the increasing number of school board RRCs and institutional REBs that have mandated active parental consent/student assent procedures, which tend to increase loss. This problem of declining response rates is common to the survey research field and is not unique to the OSDUHS (Groves et al., 2009; Hendra & Hill, 2018; Kreuter, 2013).

Still, our student completion rate of 59% is acceptable for a school survey that uses full active parent-student consent/assent procedures (Courser, Shamblen, Lavrakas,

[38] Statistical tests comparing drug use estimates between students in randomly selected versus those in nonrandomly selected classes showed no significant differences. Further, prevalence estimates were also evaluated with and without the inclusion of the nonrandomly selected classes, and results did not significantly differ. Therefore, the non-random selection of a subset of classes does not appear to have biased estimates.

[39] Although students are neither a stage of selection nor a sampling unit, they are the unit of observation within clusters, from which data are collected. Consequently, their participation is a component of the overall participation rate.

[40] The participation rate (60%) is defined as the number of eligible students who participated/the total number of eligible students in the selected classes.

[41] An "incomplete" case (at the student level) met any one of the following criteria: (1) had a missing value for sex at birth, (2) reported using a fictitious drug, (3) reported using the core illicit drugs 40 or more times in the past year, (4) only completed the demographic questions in the questionnaire and nothing further, or (5) completed the questionnaire with assistance from the teacher. Cases that met any one of these criteria were excluded from the final data set. See the section on Data Editing.

[42] This shows the *unweighted* student completion rate. The ***weighted* rate** is based on the sum of the product of the regional weighted distribution and regional completion rate: Toronto (18.8×61) + Peel Region (14.3×60) + Durham Region (6.2×67) + York Region (7.6×62) + North (5.8×59) + Hamilton (3.3×48) + Niagara Region (3.6×64) + Middlesex-London District (4.0×48) + Southwestern District (1.6×53) + Other West (12.8×70) + Simcoe Muskoka District (4.6×65) + Ottawa (8.0×60) + Other East (9.2×60) = **61%.**

[43] The completion rate for secondary school students (grades 9–12 only) was 59% (14% absent, 27% no consent returned).

[44] For further details about the 2019 sample selection and completion rates for the regional strata, please see ISR's technical document by Park et al., 2019.

Collins, & Ditterline, 2009; Draugalis, Coons, & Plaza, 2008; Shaw, Cross, Thomas, & Zubrick, 2015; Tigges, 2003; White, Hill, & Effendi, 2004). For example, Health Canada's 2016/2017 *Canadian Student Tobacco, Alcohol, and Drugs Survey* (CSTADS), which uses a combination of passive and active parental consent procedures, achieved a national student response rate of 76%, yet the response rate in Ontario – where active consent for external research is required by most school boards – was 60% (Burkhalter, Thompson-Haile, Rynard, & Manske, 2017). The American *Monitoring the Future* (MTF) survey also employs a blend of active and passive consent procedures and typically reaches national student response rates around 80%.[45] Furthermore, the OSDUHS considers students who are absent from class on the day of the survey as part of the target population. Thus, absent students (about 12% in 2019) are considered eligible and therefore remain in the denominator in the calculation of the completion rate, thereby reducing the rate. This is a conservative approach compared with other student surveys that exclude absent students from their target population, which yields higher rates (e.g., ESPAD Group, 2016).

Nonresponse and Nonresponse Bias

The association between the magnitude of nonresponse and nonresponse *bias* is complex. A nonresponse rate is only an indicator of the *risk* of nonresponse bias. Although a high response rate is a necessary condition for valid data, a low response rate does not necessarily indicate the presence of significant nonresponse bias*,* as bias is a function of both the *size* of the nonresponse rate and the *differences* between respondents and nonrespondents on the measures of interest (Groves, 2006; Hendra & Hill, 2018; Johnson & Wislar, 2012; Peytcheva & Groves, 2009).[46] Moreover, Groves and colleagues (2009) have shown that a survey can have a high response rate, yet discernible nonresponse bias when in the presence of large differences between respondents and nonrespondents.[47]

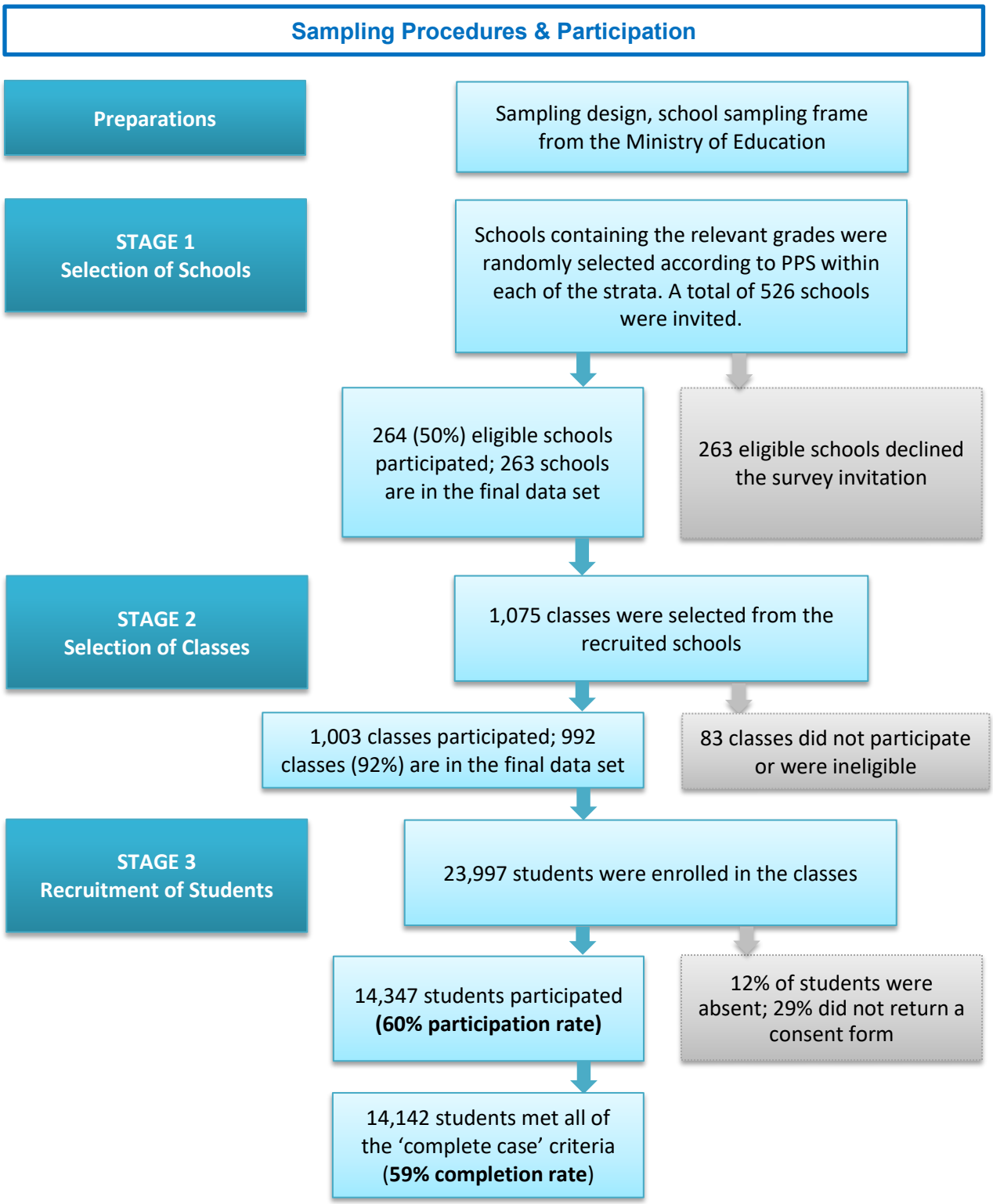
Existing research examining the impact of nonconsent (nonparticipation) on estimates of student drug use, mental health, and risk behaviours has not been conclusive. Some studies have found that students who do not return parental consent forms or do not choose to participate in research studies are more likely to use drugs, engage in risk behaviours, or have mental health problems than students who do participate (Anderman, Cheadle, Curry, & Diehr, 1995; Courser et al., 2009; Shaw et al., 2015; White et al., 2004), whereas others have found no such differences (de Winter et al., 2005; Eaton, Lowry, Brener, Grunbaum, & Kann, 2004; Jelsma et al., 2012).

[45] There are some important procedural differences between MTF and OSDUHS that may account for an exceptional MTF response rate. First, unlike Canada, research projects conducted in the U.S. can obtain confidentiality protection guaranteed in law. Second, when a school response rate is less than 70% a second "recoup" administration is conducted. Third, the default consent procedure for all students is passive consent (one that typically provides higher response rates), unless the school requires active consent. Fourth, information letters/consent forms are mailed directly to the parents. Fifth, participating schools in the MTF are given a relatively substantial monetary incentive to commit to the study for two cycles.

[46] Specifically, bias = nonresponse rate × ($\text{mean}_{\text{respondents}} - \text{mean}_{\text{nonrespondents}}$)

[47] An example would be a survey with a 90% response rate in which a large proportion underreported (or unreported) a given behaviour or state.

Figure 2.1 Sampling Procedures and Participation in the 2019 OSDUHS



Evaluation of Nonresponse Bias

While we are unable to compare students who returned a signed parental consent form with those who did not, we did compare demographics, drug use measures, and mental health measures in classes in which the class participation rate was below 70% (n=624 classes) with classes in which the rate was 70% or higher (n=368 classes). If students without consent are "high-risk" youth, then we would expect classes with low participation to have lower prevalence estimates (less likely) for risk behaviours and problem indicators due to the absence of the high-risk students compared with high participation classes. We found no significant sex or grade differences between classes with low versus high participation, however low participation classes were more likely to be in the West region. Of the over 50 drug-related, mental health-related, and school-related measures compared between the two groups only three showed a significant difference, with higher prevalence estimates in classes with low participation. This suggests that students who participated in the survey were not only "low-risk" youth. In sum, we have no compelling evidence that our nonparticipation rate produced appreciable bias.

By design, one group not represented by the OSDUHS sample is dropouts or early school leavers. We must recall, however, that our target population is *enrolled* students. Adolescents who have dropped out of secondary school are no longer enrolled and, therefore, are out of scope – unless they dropped out after the sampling frame was generated.[48] This should serve as a reminder that readers should not attempt to extrapolate the OSDUHS findings to groups outside the target population (e.g., early school leavers, homeless or institutionalized youth).

[48] Another source of sampling error would occur if school leavers are not removed from the enrolment list resulting in potential coverage errors of ineligible units, and deflating the class response rate and expansion estimates. We expect such error to be negligible.

School Leavers in Ontario

Although the *Ontario Education Act* (2006) stipulates that school attendance is compulsory to age 18 for those who have not graduated from high school,[49] there are some exceptions (e.g., illness, legal emancipation). One challenge in assessing the impact of school leavers (dropouts) on our sample lies with the differing methods of measurement and their corresponding estimates. The Ministry of Education reports that the high school graduation rate in 2017 was 86% (Ontario Ministry of Education, 2018, September). However, we cannot assume that the dropout rate was 14% because some students remain in school without graduating (i.e., take more years to graduate). Statistics Canada measures the dropout rate using the *Labour Force Survey* and found that about 5%-7% of 16-19 year-olds in Ontario were not attending high school (and did not already graduate) in 2009/2010 (McMullen & Gilmore, 2010). Similarly, the 2016 Census showed that about 7% of 20-24 years olds in Ontario did not complete high school (Statistics Canada, n.d.).

School leavers are more likely to be male, Canadian-born, and live outside of large urban centres (Gilmore, 2010; Uppal, 2017). The exclusion of school leavers from our sample does introduce some degree of bias in the estimation of drug use and risk behaviours if one wants to generalize to the wider adolescent population (rather than just students). This omission would not affect our trend findings if the proportion of school leavers remains constant from cycle to cycle. However, both the Ontario Ministry of Education and Statistics Canada indicate that the proportion of school leavers has declined over the past two decades, not only in Ontario but also in most of Canada. One would assume that because of this decline (and therefore retaining a greater number of older males in schools over time), our estimates would show increases in drug use and other risk behaviours over time, but this has not been the case. This suggests that the omission of school leavers does not substantially affect our trend estimates.

[49] Prior to 2006, the compulsory age of education in Ontario was 16 years.

POSTSURVEY PROCESSING

Data Editing

As mentioned earlier, data editing rules were established to enhance data quality. Cases that met any one of the following conditions were removed from the final data set: did not report their sex (at birth), answered only the demographic questions,[50] reported using a fictitious drug,[51] reported using all the core illicit drugs 40 or more times during the past year ("faking bad"),[52] received assistance from the teacher when completing the survey,[53] or belonged to a class with fewer than four students participating. This data editing process resulted in a **final dataset consisting of 14,142 minimally complete cases** used in the data analyses (Form A-ES n=2,344 students; Form B-ES n=1,874 students; Form A-SS n=5,273 students; Form B-SS n=4,651 students).

Item Missingness

Both the single item missing rate and the cumulated item missing rate were low, suggesting quality responding. Across the 62 core questions (i.e., items in all four questionnaire forms), the item missingness average was about 1.5%. In addition, there is no evidence that item nonresponse inflates with the transition from the demographic questions to the more sensitive drug use questions.[54] Missing responses to questions were not statistically imputed, and, furthermore, any inconsistent responses provided by respondents were not corrected.

Poststratification

We compared the 2019 OSDUHS sample with the most currently available school enrolment numbers from the Ministry of Education, which were from the 2017/2018 school year. Table 2.3 shows that there were slight discrepancies between the 2019 OSDUHS sex-by-grade weighted (preadjusted) total sample distribution and the provincial enrolment figures. However, larger discrepancies were found within certain regional strata when compared to the provincial distribution. For example, in certain regions older males were overrepresented, whereas in other regions younger females were overrepresented. To further improve the quality of estimates by reducing potential nonresponse and noncoverage bias, we calculated postsurvey adjustments for the sex-by-grade distributions within *each* of the regional strata separately to restore each region's demographic composition to the population composition.[55] The poststratified weighted sample distribution is shown in Table 2.3 (far-right columns). The OSDUHS adjusted-weighted sample corresponds well to the Ontario enrolment. Table 2.4 and Figure 2.2 show the demographic characteristics of the final weighted sample.

[50] We contend that if a student is unwilling to complete more than the demographics section, the utility of the data provided is limited.

[51] The fictitious drug was called "adrenochromes." One hundred and fourteen cases were removed due to reporting use of the fictitious drug, and the proportion is consistent with prior survey cycles.

[52] Note that this data editing rule and the fictitious drug rule both address the potential bias of overreporting drug use ("faking bad"). This bias should be minimal given the small number of cases dropped.

[53] Teacher assistance would likely compromise anonymity and affect the truthfulness of responses.

[54] For example, the demographic and background items immediately preceding the drug use items averaged an item missing rate of 0.9%. Transition to the subsequent module containing the drug use items did not alter this rate (1.0%).

[55] The sex-by-grade population distribution was not available for each individual regional stratum, thus the provincial distribution was used to calculate the poststratification weights for each region. The assumption is that each region's population sex-by-grade distribution does not substantially differ from the provincial distribution.

Table 2.3 The 2019 OSDUHS Sample vs. Ontario 2017/2018 School Enrolment

	OSDUHS Preadjusted		Population Enrolment		OSDUHS Postadjusted	
	% Male	% Female	% Male	% Female	% Male	% Female
Grade 7	5.3	6.1	7.9	7.5	6.0	5.7
Grade 8	5.3	6.1	8.0	7.5	6.1	5.8
Grade 9	7.7	10.2	8.1	7.8	9.0	8.6
Grade 10	8.4	9.5	8.1	7.8	9.0	8.6
Grade 11	8.4	10.0	8.5	8.1	9.4	9.0
Grade 12	10.3	12.8	11.0	9.8	12.1	10.8
Total	45.3	54.7	51.5	48.5	51.6	48.4

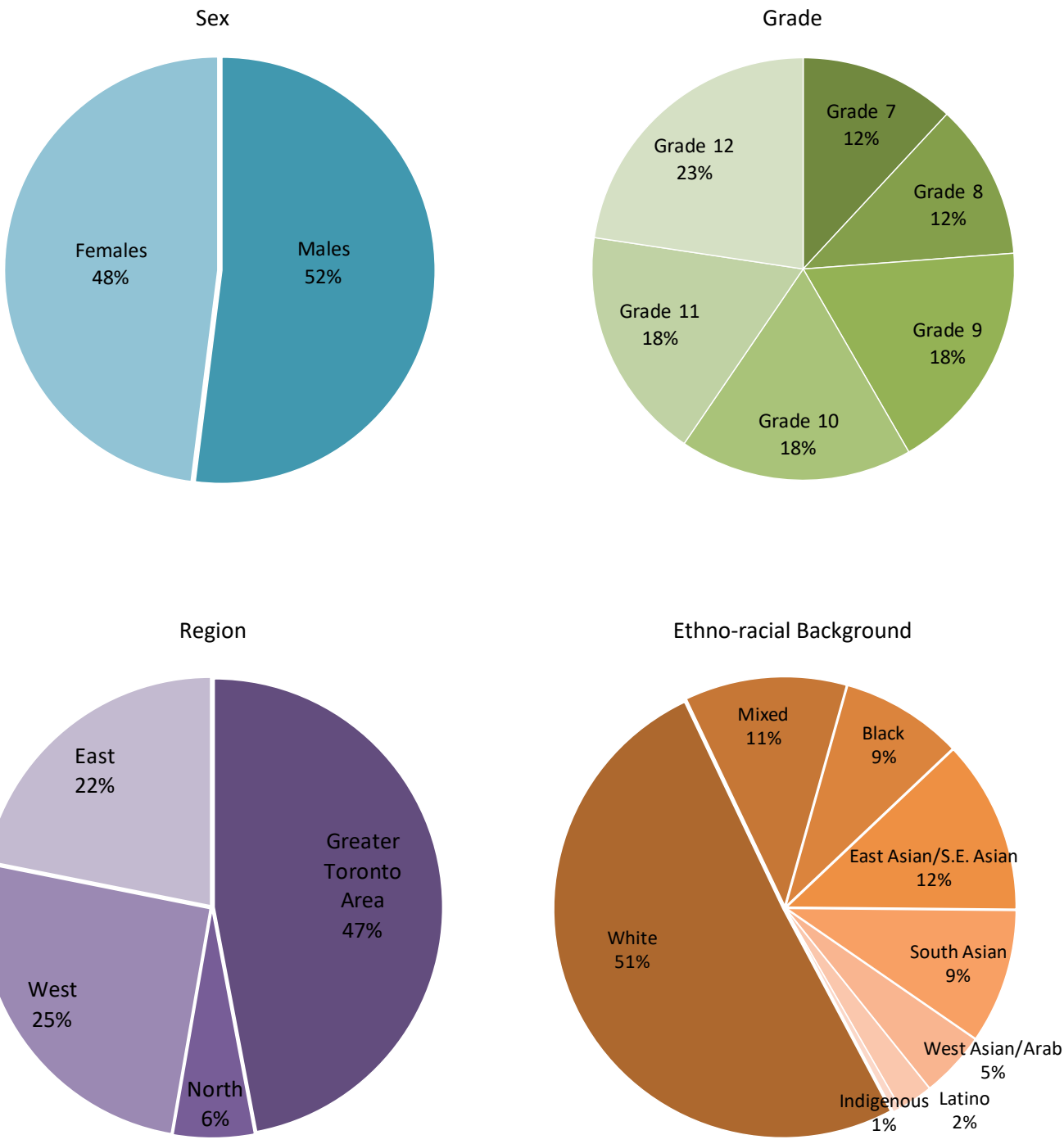
Notes: (1) OSDUHS cell entries are total sample percentages and are based on weighted data; (2) enrolment cell entries are total enrolment percentages and are based on 908,800 students in grades 7-12 enrolled in Ontario's publicly funded schools during the 2017/2018 school year.

Table 2.4 Final Sample Characteristics, 2019 OSDUHS

	Final Number (n)	Weighted %
Total	**14,142**	
Males	6,314	51.6
Females	7,828	48.4
Grade 7	2,044	11.7
Grade 8	2,174	11.8
Grade 9	2,596	17.6
Grade 10	2,534	17.6
Grade 11	2,419	18.3
Grade 12	2,375	23.0
Durham Region (OS)	1,143	6.2
York Region (OS)	1,082	7.6
Peel Region (OS)	1,436	14.3
Toronto (OS)	1,792	18.8
North	941	5.8
Hamilton (OS)	1,427	3.3
Niagara Region (OS)	1,101	3.6
Middlesex-London District (OS)	740	4.0
Southwestern District (OS)	698	1.6
Other West	615	12.8
Simcoe Muskoka District (OS)	1,181	4.6
Ottawa (OS)	1,126	8.0
Other East	860	9.2
Public School	7,636	51.0
Catholic School	6,506	49.0

Notes: (1) mean age=15.2 years (SD=1.8); (2) OS=regional oversample for the public health unit/department; (3) the 13 regional strata were mutually exclusive; (4) the initial design included 14 regions, but school boards in one region declined participation; (5) for the four regional estimates presented in this report, the **Greater Toronto Area** includes Durham Region, York Region, Peel Region, and Toronto (combined n=5,453), the **West** region includes Hamilton, Niagara Region, Middlesex-London District, Southwestern District, and Other West (combined n=4,581), and the **East** region includes the Simcoe-Muskoka District, Ottawa, and Other East (combined n=3,167).

Figure 2.2 Sample Demographics, 2019 OSDUHS (Weighted Percentages of Total Sample)



DATA ANALYSIS, INTERPRETATION, AND PRESENTATION

Data Weighting

Our deliberate oversampling of students in certain regions and our equal allocation of students within grade results in the oversampling and undersampling of students relative to their population share. Given that the objective of our analyses is to provide descriptive population estimates, our design-based analysis requires selection or case weights attached to each student to ensure the proper representation of students to the Ontario student population.[56]

For each student, the final case weight is based on the product of five components: (1) the probability of a school being selected; (2) the probability of a class being selected within a selected school (components 1 and 2 comprise the base weight); (3) a student unit nonresponse adjustment factor; (4) a regional poststratification adjustment to restore regional representation; and (5) a final poststratification adjustment to restore the sex-by-grade distribution, using the most currently available provincial enrolment numbers.

Our weighted estimates are representative of all students in grades 7 through 12 enrolled in publicly funded schools in Ontario. Our population-scaled case weights expand our sample from **14,142 students to represent about 908,800 Ontario students** in grades 7 through 12, while ensuring that the sample composition corresponds to the population.[57]

Sample Weights

One intuitive way of thinking of the sampling weight is that each student in the sample represents or "stands in" for 64 students in the province who share similar characteristics.

Survey Estimation

Before turning to the survey results, we must first discuss briefly the meaning, interpretation, and limitations of survey estimates as they pertain to our data. The main goal of sample surveys is to estimate the "true" value of a particular characteristic in the population – in our case, the percentage of Ontario students in grades 7–12 who use a specified drug. Because we do not conduct a census of all students in the province, this "true" population percentage is unknown and must be estimated from a single sample. Consequently, every sample estimate has associated with it some degree of sampling error, a type of "statistical noise." The accuracy of a percentage – the difference between the obtained sample percentage and the "true" population percentage – is determined by the degree of precision and bias. Consequently, our goal in sampling is to obtain accurate estimates – that is estimates with high precision and low bias while maintaining an acceptable cost.

Precision refers to the variance or sampling error surrounding an estimate; those summarized in the present report include a range, or confidence interval (CI), enclosing a percentage value. The reason for employing confidence intervals stems from the uncertainty, or sampling error, associated with using the results obtained from a single sample to draw conclusions about the entire population. If we had drawn another sample, using identical procedures, the results would probably have differed slightly from those we obtained from our present sample, although the CI would most likely enclose the true percentage in this sample as well. It is

[56] The use of selection weights are not straightforward for analytic analyses, where data users must choose between an unbiased weighted estimate with inflated variance versus a biased unweighted estimate with smaller variance (Korn & Graubard, 1999).

[57] The population-scaled weights range in value from 4.04 to 870.17 (mean=64.26, median=47.85) and inflates to the population count of 908,777. The sample-scaled weights range in value from 0.06 to 13.54 (mean=1.00, median=0.74).

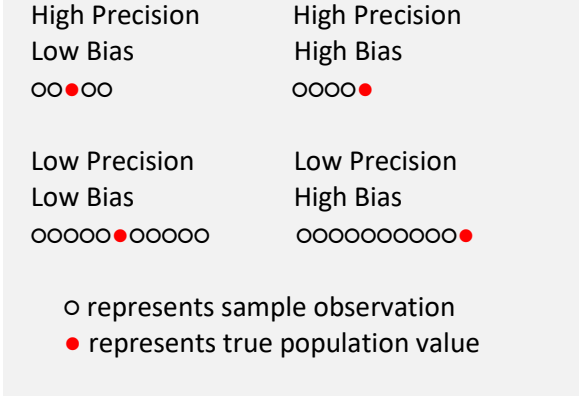
important to note that CIs do not include various errors of bias such as nonresponse and misreporting (e.g., unintentional errors of memory and recall, or intentional errors of underreporting or overreporting).

The confidence interval enclosing a percentage estimate indicates the likelihood of CIs from repeated samples containing the true population percentage (in our case, 95% of the CIs drawn from repeated samples). In reporting that the percentage of students who drink alcohol is 42% (40%–44%), we infer that with repeated sampling 95% of the CIs would contain the true population value (ignoring bias). Narrower confidence intervals indicate greater precision, or less sampling error; wider intervals indicate less precision, or greater sampling error.

In our case, the width of the interval depends on three factors: first, the number of students surveyed – other things being equal, the larger the sample size the narrower or more precise is the interval because sampling variance decreases as the sample size increases; second, the size of the percentage – other things being equal, percentages near 50% have the widest interval (i.e., maximum variance) while percentages approaching 0% and 100% have the narrowest interval;[58] and third, design effects (deff) – in our design, other things being equal, the greater the similarity (or correlation) among students within schools and classrooms the larger is the deff, which, in turn, widens the interval.[59] Changes in any of these three factors combine to affect the width of the confidence interval. All CIs shown in this report are design-adjusted, that is, accommodated for features of the complex sample design, and logit transformed to ensure that the lower and upper limits neither subceed 0% nor exceed 100%, a matter especially important to the estimation of rare or common behaviours (see Korn & Graubard, 1999, pp. 66-68).

Bias, in contrast to precision, refers to sources of error that may systematically inflate or deflate estimates from the true percentage. Such sources of nonsampling error include underreporting or overreporting of drug use, memory effects, nonresponse, noncoverage, and other sources of systematic error. Thus, a percentage may have a high degree of precision (a narrow confidence interval) and yet may still be biased (not close to the true population value). The margins of error, or confidence intervals, we present in this report include only sampling error. Confidence intervals do not include errors due to nonsampling factors such as the underreporting of drug use and other illegal behaviours or sensitive information, or errors of memory or recall.

Precision and Bias



[58] This is because very large and very small percentages have little variability, as most students are either in the "yes" category or in the "no" category.

[59] The design effect (deff), originated by Kish in 1965, represents the net effect of the combined influence of stratification, clustering and weighting, relative to a simple random sample. Deffs of 1.0 indicate a variable whose complex survey data has an equivalent precision to a simple random sample (SRS). Deffs larger than 1.0 indicate precision loss – precision less than an equivalent SRS. Deffs smaller than 1.0 indicate precision gain – precision greater than an equivalent SRS.

Validity of Self-Reports

The OSDUHS data collection features (i.e., in-class, self-completed, anonymous, voluntary, not administered by school staff) are the optimal conditions under which to survey adolescents about sensitive topics such as drug use, other illegal behaviours, and mental health problems (Brener et al., 2006; Gfroerer, Wright, & Kopstein, 1997; Griesler, Kandel, Schaffran, Hu, & Davies, 2008; Hibell et al., 2003; O'Malley, Johnston, Bachman, & Schulenberg, 2000; Tourangeau & Yan, 2007). We made full effort to elicit truthful responses by repeatedly ensuring students of complete anonymity and confidentiality of their responses. While the OSDUHS design does not include external, objective validation of students' self-reports of drug use (e.g., biomarkers) and mental health measures, we do have some inferential evidence to support their validity:

- The OSDUHS data have shown predictable relationships between self-reported drug use and demographics, problem behaviours, and school problems (for examples see Cook et al., 2017; Fischer et al., 2013; Hamilton et al., 2015; Hamilton, van der Maas, Boak, & Mann, 2014; Larsen et al., 2017). These various studies, including this descriptive report, provide empirical evidence of construct validity.
- As discussed earlier, the questionnaire includes several published, validated measures of problem-behaviour and mental health problems among adolescents.
- As discussed earlier, missing responses to the drug use questions are not substantially higher than nonsensitive questions (e.g., demographics) that immediately precede the drug use questions.
- A group of questions about a topic produce logical patterns of responses. For example, more students report ever using a drug than report past year use, or past month use. Another example is more students report suicidal ideation than a suicide attempt.
- The fictitious drug question elicited low levels of reported use indicating that intentional overreporting is likely minimal. Further, any cases reporting use of the fictitious drug or exaggerated drug use were removed from the dataset.

Still, there is research evidence to suggest that self-reported drug use, risk behaviours, and other problems are generally underreported to some extent due to the social stigma and sensitivity surrounding the (mostly) illegal behaviours being studied (Adlaf, 2005; Brener, Billy, & Grady, 2003; Delaney-Black et al., 2010; Hibell et al., 2003; McCambridge & Strang, 2006; Meiklejohn, Connor, & Kypri, 2012; Miech et al., 2019; Tourangeau & Yan, 2007). In addition to intentional misreporting, respondents may unintentionally misreport their responses due to various errors in the response process. Respondents may err in their reporting of a behaviour or event due to such factors as the event not being stored in memory; not understanding the question; being unable to retrieve the information; and difficulty in formatting a response based on provided categories (Biemer & Lyberg, 2003). Further, students absent from class have a greater propensity to engage in risk behaviours than students who are regularly present in class (Bovet, Viswanathan, Faeh, & Warren, 2006; Eaton, Brener, & Kann, 2008; Michaud, Delbos-Piot, & Narring, 1998; Weitzman, Guttmacher, Weinberg, & Kapadia, 2003). **Considering all this, our survey results should be viewed as conservative, tending toward underestimation.** Yet, understated estimates still provide important public health information by establishing the lower bounds of a population value. Assuming that underreporting, misreporting, and absenteeism remains rather constant across years (as our data show for absenteeism), then any biases in survey estimates should be consistent from cycle to cycle. Therefore, trend estimates should not be greatly affected by any such biases (Cochran, 1977; Groves et al., 2009). Indeed, the steady nature of our trend lines provides support for this notion.

2019 Estimation and Analysis

The OSDUHS design featuring stratification, clustering, and selection weights (due to unequal selection probabilities) requires the use of estimation methods that accommodate complex survey data. Unfortunately, many standard statistical software systems assume that data are derived from simple random samples (i.e., the sampling of independent units with equal probability). Such systems cannot correctly estimate variances and their associated confidence intervals and statistical tests from such complex sample data.[60]

All 2019 percentages, confidence intervals, and population count estimates in this report were design-based and statistical tests were design-adjusted, (i.e., accommodated for characteristics of the complex sampling, namely, stratification, clustering, and weighting) using Taylor series linearization (TSL) available in Stata 14.2 (StataCorp, 2015).[61]

The 2019 OSDUHS sampling design was comprised of **23 strata (**region by school level),[62] **263 primary sampling units** (schools), and **14,142 students**. The design-based degrees of freedom (*df*) for our complex sample was 240 (*df*=263 [# school PSUs] – 23 [# strata]). We restrict design specification to stage 1 primary sampling units (schools), given that stage 2 variances (classes) "roll-up" into stage 1 PSUs (Heeringa et al., 2017, p. 69).[63] In addition, our negligible sampling fraction allows us to ignore the finite population correction (fpc) in our estimation.[64]

The statistical significance of subgroup (i.e., sex, grade, region) differences in 2019 was tested using bivariate second-order design-adjusted Rao-Scott Pearson chi-square tests at the $p<.05$ level of significance (Heeringa et al., 2017).

Another unique feature of complex sample analysis is the estimation of subpopulations (e.g., drinking problems among drinkers or drinking-driving among drivers). If the analysis was to employ a simple selection filter command (e.g., "select if" drinker), the software would ignore the correct survey design elements and, consequently, miscalculate the degrees of freedom, and by doing so would overstate statistical tests leading to false positive findings. In this report, we employ unconditional subclass methods for all subgroup analyses by specifying a command (*subpop* in Stata) that properly retains the correct design structure information (clusters and strata) of the subpopulation and full sample.[65]

[60] Statistical systems assuming simple random samples (SRS) underestimate variances of complex sample data due to various violations of some key assumptions of SRS-based estimation, most notably being the independence of observations, which is readily violated by hierarchically clustered data and sampling with unequal probabilities. The consequence of this (and other) violations is underestimated variances and CIs resulting in overstated statistical inference (i.e., deflated probability levels). Another matter related to statistical testing is the calculation of degrees of freedom (*df*). In complex sampling the traditional calculation of the *df* no longer holds; instead, for stratified designs, fixed *df* are calculated based on the *sample design df* = N_{PSU} - N_{strata}. This correction typically reduces the *df*, which, in turn, results in lower statistical significance compared with the unadjusted *df*. Statistical systems that produce correct estimates now include general purpose software, including Stata's *svy* suite of survey commands, SPSS's Complex Samples module, SAS's SURVEY procedures, R's survey package, and dedicated systems including SUDAAN, WesVar, and Mplus.

[61] Estimation of percentages and other point parameters employed pseudo maximum likelihood estimation (PMLE) also known as weighted maximum likelihood estimation; estimation of variances and resulting confidence intervals employed first-order Taylor series linearization (TSL), a robust variance estimator, also known as the Huber White robust sandwich variance estimator.

[62] Elementary/middle schools were not included in three of the 13 regions, resulting in 23 rather than 26 strata.

[63] This restriction to stage 1 units has the added advantage of increasing the degrees of freedom by eliminating the stage 2 selection (classes).

[64] The fpc reflects the expected reduction in the sampling variance due to sampling without replacement and is used when the sampling fraction *n/N* exceeds 5%–10%. Given the negligible sampling fraction of the 2019 OSDUHS (n/N=.01) and the resulting fpc is ~ 1.0, we have employed the standard practice of ignoring the fpc in variance estimation (Biemer & Lymer, 2003; Korn & Graubard, 1999).

[65] Essentially, such a procedure assigns a weight of zero to all cases outside of the subclass and retains the original weight for subclass cases (Heeringa et al., 2017; Korn & Graubard, 1999).

Why do cluster samples "lose data"?

One way to understand the loss of data due to clustering is to consider a simple random sample (SRS) of students, each selected independently throughout the province. In this scenario, each student represents a simple case count of 1 because each provides unique, independent information. Because the sample is widely dispersed over a large area, there is wide variability in student characteristics. Students selected in this way would reside in different neighbourhoods, in families with differing incomes, ethnic backgrounds, parental occupations, and so on.

Now, consider a sample of students drawn from clusters of schools and classrooms. Because students in the same schools and classes share many of the same background characteristics and behaviours, they tend to be similar, resulting in extra-correlation. Because of this high similarity, each student is no longer providing unique, independent information, and so is no longer representing a student count of 1, but represents a count of less than 1.

Consequently, a SRS of 100 students would statistically represent 100 students. In contrast, a cluster sample of 100 students might effectively (statistically) represent only 70 SRS equivalent students, for example.

This reduction in effective sample size depends on the degree of similarity – greater similarity within clusters results in greater data loss due to a higher design effect.[66]

Trend Analysis

In this report, we describe three patterns of change in our data: the first describes changes between 2017 and 2019 (changes since the previous survey); the second describes trends from 1999 to 2019; and the third describes long-term trends from 1991 to 2019, where possible. To evaluate the time trends, a merged or "stacked" dataset was used.[67] All estimates were accommodated for the respective survey design effects.

2019 vs. 2017 and 1999–2019 Trends

We first evaluated changes since the previous survey (i.e., 2019 vs. 2017). Following that, we evaluated changes since 1999 because this was the year the survey first included all grades from 7 through 12. The tests contrasting 2019 and 2017 estimates and estimates since 1999 were based on grades 7 through 12.

For 1999–2019 trends, we assessed change with a binary-response logistic regression providing an appraisal of the cycle-to-cycle change (with 2019 contrasted to each prior survey, i.e., reference group contrasts) as well as assessing the presence of linear and nonlinear trends.[68] A linear trend indicates a constant straight-line increase or decrease over the entire period. A nonlinear trend indicates a levelling-off and/or a change in direction over time (one or more bends in the line). Both linear and nonlinear trends may be simultaneously present in a longitudinal data series.

Consequently, although observations are "removed," their strata and PSUs are not.

[66] This is why sample designers attempt to design clusters that are *internally heterogeneous* (i.e., highly dissimilar). This goal, however, is difficult to attain with some organizational populations such as schools where the composition of organizational-based clusters may be highly structured and less manageable to control.

[67] Trend analyses were conducted using a stacked dataset cumulating 22 cycles for the years 1977–2019. The dataset contains 129,256 students distributed among 305 strata. Cluster and stratum codes were created with unique values across cycles. The notion of a stacked dataset is descriptively accurate given that data from each cycle is sequentially stacked on top of one another. See Kish (1999) and Korn & Graubard (1999) for discussion on combining multiple surveys.

[68] Linear and nonlinear trends were evaluated with orthogonal polynomial contrasts that decompose linear from quadratic and higher order nonlinear contrasts.

1991–2019 Trends

The long-term trend analyses from 1991 through 2019 were based on an unconditional subpopulation consisting of only grades 7, 9 and 11, the three grades common to all survey cycles. Again, we assessed change with a binary-response logistic regression, providing an appraisal of the cycle-to-cycle change (with 2019 contrasted to each prior survey, i.e., reference group contrasts) and a joint test of the presence of any change between 1991 and 2019. We also assessed whether changes over time showed significant linear and nonlinear trends. Given the smaller long-term sample, we restricted our trend analyses to the total sample, and did not evaluate the long-term trends by subgroup.

For all statistical tests comparing percentages across time, we used the more conservative $p<.01$ significance level. As discussed earlier, absolute differences between two percentages do not necessarily signal meaningful differences. This more conservative significance level for temporal differences should reduce the problem of inflated false positive findings due to multiple testing – i.e., our large number of computed tests.

Reporting of Results

Readers should also note the following regarding our analyses and reporting:

- Statistical differences must be carefully interpreted. First, although we used methods to reduce the problem, our analysis does not fully resolve the problem of the large number of statistical tests performed. Indeed, for every 20 statistical tests, one "significant difference" could occur solely by chance, thus resulting in false positive findings. Second, outcomes that are statistically significant tell us only that the difference is probably not due to chance. Whether a statistically significant difference is a meaningful one of public health importance is a matter that requires both statistical and extra-statistical judgement.

- Readers should be mindful of the varying estimation sample sizes, even for the same subgroup. Although the modularized split ballot questionnaires (Form A vs. Form B) are efficient means to maximize data collection, sample sizes for the same subgroup of students (e.g., males) may vary widely depending on which questions from which questionnaire form are being assessed. Further, readers should note that only Form A was translated into French, therefore Form B was not completed in French-language schools.

- Visual inspection of overlapping CIs is a useful *approximation* of statistical findings, but each separate CI is a nominal 95% CI. Thus, when visually comparing two or more CIs for overlap, in some instances the visual difference may not perfectly correspond to a statistical test because the probability of two 95% CIs do not equal the probability of a single 95% statistical test.

- The scope of this report is limited to a select few epidemiologically relevant risk factors – sex,[69] grade, and region. It should be obvious that not all potentially relevant risk factors were assessed in this report. Such investigations will be a matter for future work.

- We intentionally emphasize the influence of grade when describing age-based associations because grade-related findings are more readily translated into school system programming. Nonetheless, readers should recognize that our findings concerning grade associations and health indicators would, of course, mirror age associations.

- Our report is descriptive. Associations found in these data do not imply causal relationships. For example, regarding regional differences, we can only determine if a difference exists and describe the pattern of differences. Because other factors may be the root cause of regional differences (e.g., socio-economic status differences or ethno-cultural differences), we cannot causally attribute such differences solely to the regional residence of students. Indeed, many socio-demographic characteristics are naturally "bundled" within region.

- Most estimates presented in this report are prevalence rates in percentages and population counts, the latter of which have been rounded downward.

- All analyses were based on casewise, or listwise, deletion of missing responses resulting in complete case analysis. In casewise deletion, if a student has at least one missing value for a set of items used in the analysis, *all* information from this student was temporarily removed from the specific analysis.

- Small percentages and estimates based on few students produce wide confidence intervals (i.e., large error) and ones that have a propensity toward being untrustworthy. In this report, estimates were suppressed due to unreliability (unstable) if they met any *one* of the following conditions:

  (1) an estimate less than 0.5%;

  (2) a base sample size (i.e., the denominator) of fewer than 50 students; or

  (3) a relative standard error, measured by the coefficient of variation[70] (CV), exceeding a value of 33.3. This suppression threshold for untrustworthy estimates is also used by Statistics Canada and other statistical agencies. Although the numerical value of a suppressed estimate is nonreportable, we may still draw useful interpretations of suppressed data. First, we can conclude that the estimate is too low to be discernible with our sample size. Second, a suppressed estimate can still establish that a behaviour has not measurably diffused into the student population.

[69] Sex at birth is the variable (binary) presented in this report. Gender identity was also measured in the survey among secondary school students using a separate question.

[70] The coefficient of variation is the ratio of the standard error to its estimate (i.e., CV = SE/estimate). Stata computes the CV as a percentage: CV = (SE/estimate) × 100%. This measure is especially useful when comparing the precision of measures with different percentage magnitudes and different sample sizes. Another important application of the CV is to flag potentially untrustworthy estimates requiring suppression.

Table 2.5 2019 OSDUHS Method and Sample Summary

Design	▪ Target sample consisted of 7th–12th graders enrolled in provincially funded English and French language schools (public and Catholic school sectors) in Ontario during the 2018/2019 school year. Students excluded as being out-of-scope were those in private schools, those schooled in correctional or health facilities, those schooled in First Nation communities, military bases, and remote areas, and those who were home-schooled. ▪ Sample selected by a disproportionately stratified (region by school level), two-stage cluster design. Stage 1: schools (stratified by region and school level) were selected by probability-proportionate-to-school size (PPS). Stage 2: classes (stratified by grade) were selected with equal probability. Both stages employed sampling without replacement (WOR). ▪ The primary stage stratification, which included both a base design sample and a sponsored public health oversample, resulted in a combined total of 23 region-by-school level strata. ▪ Within each stratum, schools were selected by systematic random sampling according to PPS using the 2015/2016 Ontario Ministry of Education's school enrolment database as the sampling frame. Within selected schools, one class per grade was randomly selected with equal probability of selection (EPSEM).
Participation	▪ 7th–12th graders sampled from 992 classes in 263 schools, and who provided active parental consent and student assent, completed questionnaires from November 2018 to June 2019. ▪ 50% of selected schools, 92% of selected classes, and 59% of students in participating classes completed the survey. ▪ Data based on the final sample of 14,142 students were weighted to be representative of the 908,800 7th–12th graders enrolled in Ontario's publicly funded public and Catholic schools.
Questionnaire	▪ Four split ballot versions (Form A-ES, Form B-ES, Form A-SS, Form B-SS) of the anonymous, self-completed, paper-and-pencil instrument (PAPI), which averaged 30 minutes to complete, were administered in classrooms by trained staff from the Institute for Social Research. Form A questionnaires were available in French and used in French-language schools.
Student Characteristics	▪ Males (n=6,314; 51.6% weighted); Females (n=7,828; 48.4% weighted). ▪ 7th graders (n=2,044; 11.7%); 8th graders (n=2,174; 11.8%;); 9th graders (n=2,596; 17.6%); 10th graders (n=2,534; 17.6%); 11th graders (n=2,419; 18.3%); 12th graders (n=2,375; 23.0%). ▪ GTA (n=5,453; 47.0%); North (n=941; 5.8%); West (n=4,581; 25.4%); East (n=3,167; 21.8%).
Data Quality	▪ Data editing rules were applied based on a definition of a "complete case," and untrustworthy cases were removed from the final data set. ▪ Nonresponse analysis comparing classes with participation rates of 70% or higher to classes with lower participation rates showed very few significant differences in drug-related and mental health-related measures.
Analysis	▪ Selection weights were used to account for differing sampling probabilities and to restore the sample to the corresponding population distribution. Poststratification adjustments were used to correspond to the Ministry of Education's 2017/2018 enrolment for sex-by-grade groupings. ▪ The complex sample analysis model is based on a design with 263 primary sampling unit clusters (schools), 992 secondary sampling unit clusters (classes) distributed among 23 region-by-school level strata. For analysis, only stage 1 primary sampling units (schools) and strata are necessary to approximate the 2-stage sampling design used to draw the sample.

Table 2.6 Definitions of Terms Used in the Report

Term	Definition
95% Confidence Interval (CI)	The 95% CI is interpreted as follows: the "true" population value would be expected within this range in 95 of 100 samples. Design-based CIs (presented here) also account for the characteristics of the complex sampling design.
Fair/Poor Self-Rated Physical Health	Rating one's physical health as either "fair" or "poor."
Daily Physical Activity	Reporting engaging in physical activity (defined as a total of at least 60 minutes of moderate-to-vigorous activity per day) on *each* of the seven days before the survey.
Physically Inactive	Reporting no days of physical activity (defined as a total of at least 60 minutes of activity per day) during the seven days before the survey.
Screen Time Sedentary Behaviour	Reporting watching TV and/or on a computer for recreational purposes for three hours or more per day, on average, during the seven days before the survey.
Overweight or Obese	Exceeding the age-and-sex-specific body mass index (BMI) cut-off values as established for children and adolescents and recommended by the World Health Organization, based on self-reported height and weight.
Concussion	Reporting experiencing any type of head injury that resulted in a headache, dizziness, blurred vision, vomiting, feeling confused, problems remembering, or unconsciousness.
Mental Health Care Visit	Reporting at least one visit to a doctor, nurse, or counsellor for emotional or mental health reasons during the 12 months before the survey.
Medical Drug Use	Reporting use of a prescription drug with a doctor's prescription at least once in the 12 months before the survey.
Unmet Need for Mental Health Support	Reporting not knowing where to turn when wanted to talk to someone about a mental health or emotional problem (during the 12 months before the survey).
Fair/Poor Self-Rated Mental Health	Rating one's mental or emotional health as either "fair" or "poor."
Psychological Distress	The *Kessler 6-Item Psychological Distress Scale* (K6) was used to measure unspecified psychological distress (symptoms of anxiety and/or depression). A score of at least 8 of 24 (Likert scoring) was used to indicate a moderate-to-serious level of distress experienced during the past four weeks. A score of 13 or higher was used to indicate serious psychological distress during the past four weeks.
Antisocial Behaviour (Index)	Reporting at least three of the following nine antisocial behaviours in the 12 months before the survey: vandalized property, theft of goods worth $50 or less, theft of goods worth more than $50, stole a car/joyriding, breaking and entering, sold cannabis, ran away from home, assaulted someone (not a sibling), and carried a weapon.
Bullying Victim (at School)	Reporting being bullied at school since September in any one of the following ways: verbally, physically, or being a victim of theft/vandalism.
Bully Perpetrator (at School)	Reporting bullying others at school since September in any one of the following ways: verbally, physically, or stealing/damaging something of theirs.
Cyberbullying Victimization and Perpetration	Reporting being bullied or bullying someone over the Internet at least once during the 12 months before the survey. Those who reported that they did not use the Internet were classified as "was not bullied" or "did not bully others" over the Internet.
Any Gambling Activity and Multi-Gambling Activity	Reporting gambling money (any amount) at any gambling activity during the 12 months before the survey, and at five or more gambling activities during the past 12 months.
Low-to-Moderate Gambling Problem Severity	Scoring 2 to 5 of 27 (Likert scoring) on the *Gambling Problem Severity Subscale* (GPSS) of the *Canadian Adolescent Gambling Inventory* (CAGI).
High Gambling Problem Severity	Scoring 6 or higher of 27 (Likert scoring) on the *Gambling Problem Severity Subscale* (GPSS) of the *Canadian Adolescent Gambling Inventory* (CAGI).
Video Gaming Problem	Reporting at least five of the nine symptoms on the *Problem Video Game Playing (PVP) Scale*, which measures symptoms such as preoccupation, tolerance, school and family problems due to video gaming during the 12 months before the survey.
Problematic Technology Use	Scoring 19 or higher of 24 (Likert scoring) on the *Short Problematic Internet Use Test* (SPIUT) was used to indicate a "serious" problem with technology use (e.g., smartphone, tablet). The SPIUT measures symptoms such as preoccupation, loss of control, lack of sleep, conflict with family or friends due to technology use.

Table 2.7 Outline of Topics Presented in the Report by Survey Year

	1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013	2015	2017	2019
3.1 Home & School Life															
Family Living Arrangement	•	•	•	•	•	•	•	•	•	•	•	•	•	•	✓
Family Subjective Social Status	•	•	•	•	•	•	•	•	•	•	•	•	•	•	✓
Parental Support	•	•	•	•	•	•	•	•	•	•	•	•	•	•	✓
Part-Time Employment±	•	•	•	•	•	•	•	•	•	•	•	•	•	•	✓A
School Performance	✓	✓	✓	✓	✓	✓B	✓B	✓B	✓B	✓B	✓B	✓B	✓	✓	✓
School Suspension or Expulsion	•	•	•	•	•	•	•	•	•	•	•	•	✓A	✓A	✓A
School Climate	•	•	•	•	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Subjective Social Status at School	•	•	•	•	•	•	•	•	•	•	•	•	•	•	✓
3.2 Physical Health															
Self-Rated Physical Health	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Physical Activity	•	•	•	•	•	•	•	•	•	✓	✓	✓	✓	✓	✓B
Physical Activity at School	•	•	•	•	✓A	✓A	✓	✓	✓	✓	✓	✓	✓	✓	✓
Screen Time Sedentary Behaviour	•	•	•	•	•	•	•	•	•	✓	✓	✓	✓	✓	✓
Overweight or Obese	•	•	•	•	•	•	•	•	✓	✓	✓	✓	✓	✓	✓
Body Image and Weight Control	•	•	•	✓A	•	✓B	✓B	✓B	✓B	✓B	✓B	✓B	✓B	✓B	✓B
Go to Bed or School Hungry	•	•	•	•	•	•	•	•	•	•	•	•	✓B	✓B	✓B
Hours of Sleep on a School Night	•	•	•	•	•	•	•	•	•	•	•	•	✓B	✓B	✓B
Medically Treated Injury	•	•	•	•	•	•	✓A	✓A	✓B	✓B	✓B	✓B	✓B	✓B	✓B
Concussion	•	•	•	•	•	•	•	•	•	•	•	•	•	✓B	✓B
Seatbelt Use	•	•	•	•	•	•	•	•	•	•	✓B	✓B	✓B	✓B	✓B
Texting While Driving±	•	•	•	•	•	•	•	•	•	•	•	✓B	✓B	✓B	✓B
Talking on Phone While Driving±	•	•	•	•	•	•	•	•	•	•	•	•	•	•	✓B
Vehicle Collision as a Driver±	•	•	•	•	•	•	•	•	•	•	✓B	✓B	✓B	✓B	✓B
3.3 Health Care Utilization															
Medical Tranquillizer/Sedative Use±	✓	✓	✓	✓	✓	✓	✓B	✓A	✓A	✓A	✓A	✓	✓	✓	✓
Medical ADHD Drug Use	•	•	•	•	•	•	•	•	✓	✓	✓	✓	✓A	✓A	✓A
Medical Opioid Pain Reliever Use	•	•	•	•	•	•	•	•	✓	✓	✓	✓	✓B	✓B	✓B
Prescription for Depression/Anxiety±	•	•	•	•	•	✓A	✓A	✓A	✓A	✓A	✓A	✓A	✓A	✓A	✓A
Mental Health Care Visit	•	•	•	•	✓	✓	✓	✓	✓	✓	✓A	✓A	✓A	✓A	✓A
Sought Counselling Over the Phone	•	•	•	•	•	•	•	✓A	✓A	✓A	✓A	✓A	✓A	✓A	✓A
Sought Counselling Over the Internet	•	•	•	•	•	•	•	•	•	•	✓A	✓A	✓A	✓A	✓A
Unmet Need for Mental Health Support	•	•	•	•	•	•	•	•	•	•	•	✓A	✓A	✓A	✓A
Help-Seeking Preference	•	•	•	•	•	•	•	•	•	•	•	•	•	•	✓A

(cont'd)

	1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013	2015	2017	2019
3.4 Mental Health															
Self-Rated Mental Health	•	•	•	•	•	•	•	•	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]
Low Self-Esteem	•	•	•	•	•	•	•	•	•	•	•	•	✓[A]	✓[A]	✓[A]
Elevated Stress	•	•	•	•	•	•	•	•	•	•	•	•	✓[A]	✓[A]	✓[A]
Psychological Distress (K6 scale)	•	•	•	•	•	•	•	•	•	•	•	✓[A]	✓[A]	✓[A]	✓[A]
Self-Harm	•	•	•	•	•	•	•	•	•	•	•	•	•	•	✓[A]
Suicidal Ideation	•	•	•	•	•	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]
Suicide Attempt	•	•	•	•	•	•	•	•	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]
Traumatic Event[±]	•	•	•	•	•	•	•	•	•	•	•	•	•	✓[A]	✓[A]
Ability to Cope	•	•	•	•	•	•	•	•	•	•	•	•	•	•	✓[A]
3.5 Antisocial Behaviour and Bullying															
Nonviolent Antisocial Behaviour	✓	✓	✓	✓[B]	✓[B]	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]
Violent/Aggressive Behaviour	✓	✓	✓	✓[B]	✓[B]	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]
Victim of Bullying at School	•	•	•	•	•	•	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]
Perpetrator of Bullying at School	•	•	•	•	•	•	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]
Victim of Cyberbullying	•	•	•	•	•	•	•	•	•	•	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]
Perpetrator of Cyberbullying	•	•	•	•	•	•	•	•	•	•	•	•	•	✓[A]	✓[A]
3.6 Gambling, Video Gaming, and Technology Use															
Gambling Activities	•	•	•	•	•	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]
Gambling Problems (GPSS subscale)[±]	•	•	•	•	•	•	•	•	•	•	•	•	✓[A]	✓[A]	✓[A]
Video Gaming Problems (PVP scale)	•	•	•	•	•	•	•	•	✓[B]	✓[B]	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]
Social Media Use	•	•	•	•	•	•	•	•	•	•	•	✓	✓[A]	✓[A]	✓
Problematic Technology Use (SPIUT)[±]	•	•	•	•	•	•	•	•	•	•	•	•	•	✓[A]	✓[A]

• not available; [A] Form A random half sample; [B] Form B random half sample; [±] based on Grades 9–12 only

3. RESULTS

3.1 HOME AND SCHOOL LIFE

3.1.1 Family Living Arrangement

Students were asked whether they lived in one home or divide their time between two or more homes. Students were also asked with whom they lived "in the home where you spend most of your time." They were instructed to check all that apply from the following list: birth mother, stepmother, adoptive mother, birth father, stepfather, adoptive father, brother/ stepbrother, sister/stepsister, grandparent(s), other adult relative(s), foster parent(s), others.

2019 (Grades 7–12):

- About one-in-eight (12.7%) students in grades 7 to 12 report that they divide their living between two or more homes.
- About one-in-five (22.4%) students in grades 7 to 12 report that they live with a single parent or with no parent (that is, neither a birth parent, nor an adoptive parent, nor a stepparent).

3.1.2 Family Subjective Social Status

The OSDUHS included the *MacArthur Scale of Subjective Social Status* to measure perceived family socioeconomic status (Goodman et al., 2001; Goodman, Huang, Schafer-Kalkhoff, & Adler, 2007; McLaughlin et al., 2012). The questionnaire showed a 10-rung ladder to represent the social hierarchy of Canadian society. Students were asked to choose the rung that best represents their family's place in Canadian society with respect to money, education, and occupation. The higher the rung, the higher the perceived family subjective social status (SSS) – more money, higher education, and highly respected occupations. For the purpose of this report, we constructed three categories to represent low family SSS (rungs 1–5 on the ladder), average SSS (rungs 6–8), and high SSS (rungs 9–10).

2019 (Grades 7–12):

- About one-in-five (19.5%) students rank their family SSS as low. About two-thirds (65.3%) rank their family SSS as average, and 15.2% rank their family SSS as high.

3.1.3 Parental Support

Students were asked how often they talk to a parent about their problems. The question was "*How often do you talk about your problems or feelings with at least one of your parents?*"

2019 (Grades 7–12):

- About one-in-seven (14.5%) students report that they "always" talk to a parent about their problems or feelings. Almost half (48.2%) report that they "usually" or "sometimes" talk to a parent about their problems or feelings, and over one-third (37.3%) report that they "rarely" or "never" talk to a parent about their problems or feelings.

- Males (42.8%) are significantly more likely than females (31.6%) to report that they rarely or never talk to a parent about their problems or feelings.

- Older students are significantly more likely than younger students to report that they rarely or never talk to a parent about their problems or feelings. This percentage increases from 30.6% among 7th graders up to 40.9% among 12th graders.

3.1.4 Part-Time Employment

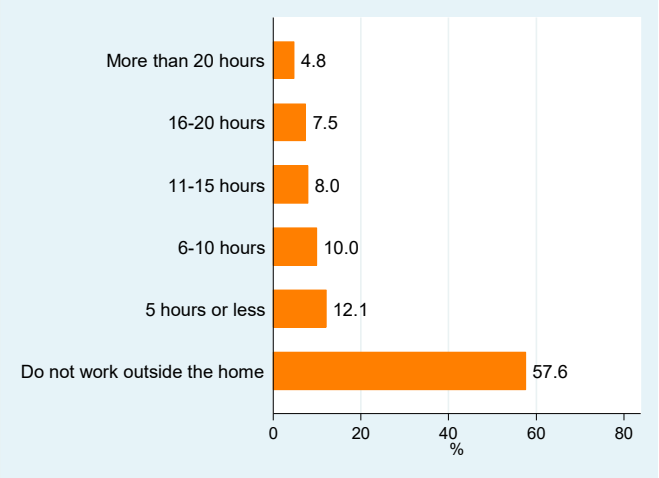
(Figure 3.1.1)

A random half sample of secondary students were asked how many hours per week they work for pay outside the home. The question was "*On average, how many hours a week do you spend working for pay outside the home, during the school year?*"

2019 (Grades 9–12):

- Over half (57.6%) of students in grades 9–12 do not work outside of the home. About 12.1% work five hours or less per week outside of the home, while 4.8% work more than 20 hours per week.

Figure 3.1.1
Hours per Week Work for Pay Outside the Home, 2019 OSDUHS (Grades 9–12)



3.1.5 School Performance
(Table A3.1.1)

School is one of the major socialization agents in adolescent development. In addition to academics, school fosters social skills, beliefs, and attitudes that can influence current and future mental and physical health. Starting in the early 1990s, the OSDUHS introduced a set of questions about students' school experiences including grades usually received.

2019 (Grades 7–12):

- Overall, 16% of students report usually receiving school grades of 90% or higher; 43% report grades between 80% and 89%; 35% report grades between 70% and 79%; 6% report grades between 60% and 69%; and about 1% report usually receiving grades below 60%.

1999–2019 (Grades 7–12):

- The percentage of students who report usually receiving grades of 80% or higher significantly increased between 1999 and 2019, from 37.8% to 58.2%.

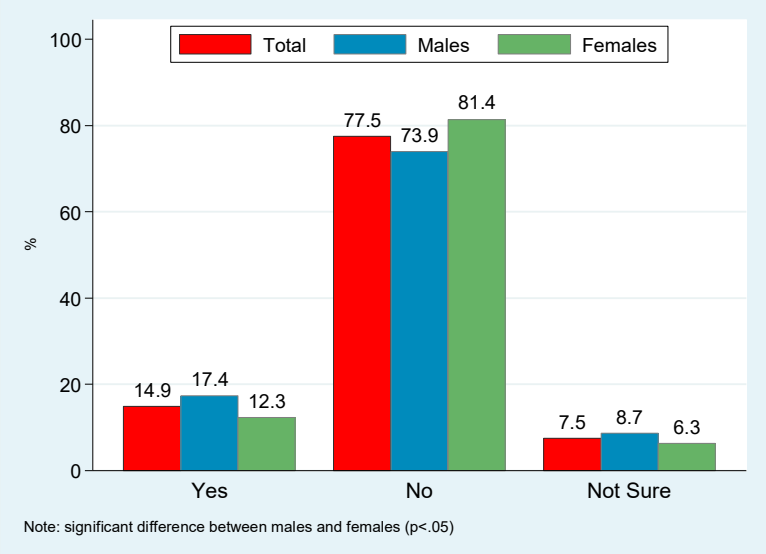
3.1.6 Special Education
(Figure 3.1.2)

The 2019 cycle included a question about special education, also known as an Individual Education Plan (IEP). The question was "*Are you in special education or do you have an Individual Education Plan (IEP*)?" The response options were *Yes*, *No*, or *Not sure*.

2019 (Grades 7–12):

- About one-in-seven (14.9%) students report they are receiving special education, 77.5% report that they are not receiving special education, and 7.5% are not sure.
- Males (17.4%) are significantly more likely than females (12.3%) to report receiving special education.
- There is significant grade variation with about 12% of 7th and 8th graders reporting receiving special education, increasing to about 17% of 11th and 12th graders.
- There is no significant regional variation.

Figure 3.1.2
Percentage Reporting Receiving Special Education or an Individual Education Plan (IEP) by Sex, 2019 OSDUHS (Grades 7–12)



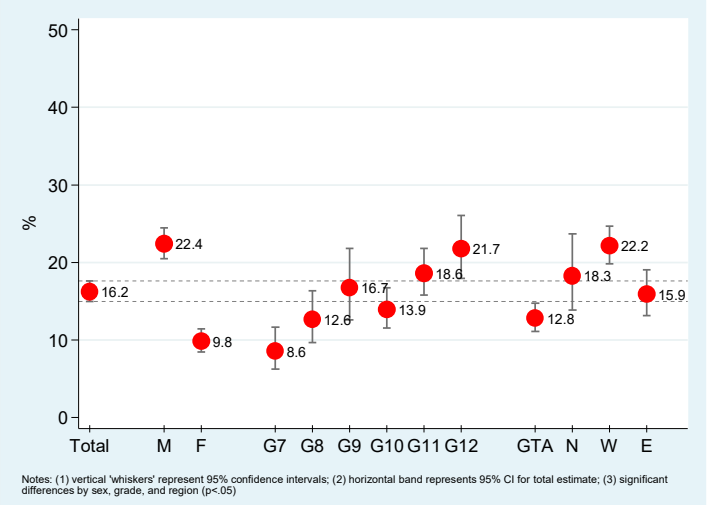
3.1.7 School Suspension or Expulsion
(Figure 3.1.3)

Starting in 2015, a random half sample of students were asked whether or not they have ever been "*suspended, expelled, or excluded from any school in your lifetime?*"

2019 (Grades 7–12):

- An estimated one-in-six (16.2%) students report being suspended or expelled from school at least once in their lifetime.
- Males (22.4%) are much more likely than females (9.8%) to report being suspended or expelled from school.
- There is significant grade variation showing that older students are significantly more likely than younger students to report being suspended or expelled from school.
- Among the four regions, students in the Greater Toronto Area (GTA) are the least likely, whereas students in the West are the most likely, to report being suspended or expelled from school.

Figure 3.1.3
Percentage Reporting Having Ever Been Suspended or Expelled from School by Sex, Grade, and Region, 2019 OSDUHS



3.1.8 School Climate
(Figures 3.1.4–3.1.5; Tables A3.1.1–A3.1.3)

School climate is a multidimensional construct, usually referring to the physical, organizational, social and cultural elements of a school. Examples of school climate characteristics include school policies and enforcement, perceptions of safety, equity, inclusion, student conduct, and connectedness.

Starting in 1993, students were asked how much they like school with the question: "*Some people like school very much while others don't. How do you feel about going to school?*" Starting in 1999, students were asked to indicate their agreement on a four-point scale (ranging from strongly agree to strongly disagree) with the following statements:

- *I feel close to people at this school.*
- *I feel like I am part of this school.*
- *I feel safe in my school.*

Starting in 1999, students were also asked "*At school, how worried are you that someone will harm you, threaten you, or take something from you*?" We present the percentage of students who are very worried or somewhat worried.

Starting in 2019, students were asked two additional questions about the adults at their school. The first question asked how much they agree or disagree with the statement: "*I feel that I am treated fairly by the adults at my school*." The second asked "*Do you feel that there is at least one adult in your school that cares about you and that you could talk to if you needed help?*" The response options were *Yes* or *No*.

2019 (Grades 7–12):

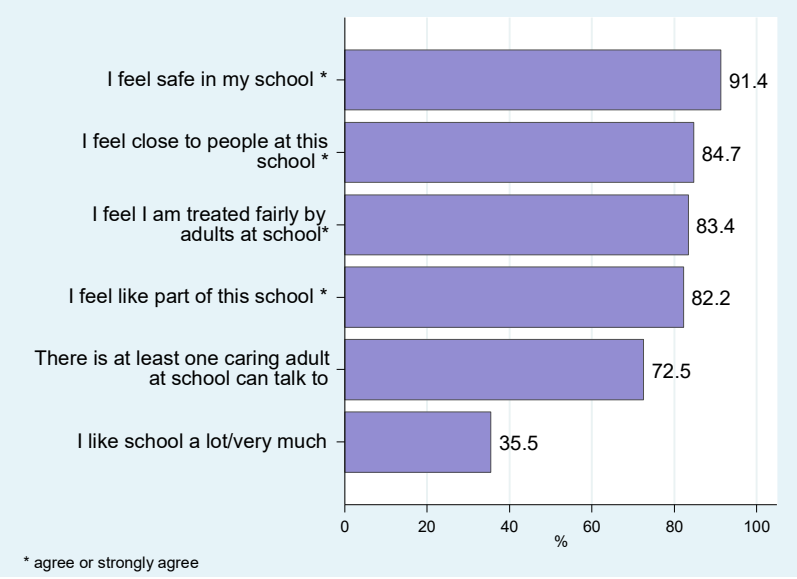
Liking School

- Over one-third (35.5%) of students report liking school very much or quite a lot. About 41.6% like school to some degree, and 22.9% report that they do not like school.
- Males (34.4%) and females (36.5%) are equally likely to report liking school very much or quite a lot.
- There is significant grade variation ranging from about 40% of students in grades 7 and 8 reporting that they like school very much or quite a lot down to about 30% of 11th and 12th graders.
- There is no significant regional variation.

School Connectedness

- Most students (84.7%) feel close to people at their school. Males (87.3%) are significantly more likely than females (82.0%) to feel close to people at school. Younger students are more likely to feel this way. There is no significant regional variation.
- Most students (82.2%) feel like they are part of their school. Males (84.1%) are significantly more likely than females (80.3%) to feel like they are part of their school. Younger students are more likely to feel this way. There is no significant regional variation.
- Most students (83.4%) feel that they are treated fairly by adults at their school. Males (84.5%) are significantly more likely than females (82.3%) to feel that they are treated fairly by adults at school. There is no significant grade or regional variation.
- Most students (72.5%) feel there is at least one caring adult at school that they can talk to if needed. Females (74.3%) are significantly more likely than males (70.8%) to feel there is a caring adult at school. This perception increases with grade, from 67.1% of 7th graders up to 77.4% of 12th graders. There is significant regional variation showing that students in the Greater Toronto Area (68.4%) are least likely to feel that there is a caring adult at school compared with students in the other three regions (about 75%).

Figure 3.1.4
School Climate Indicators, 2019 OSDUHS (Grades 7–12)



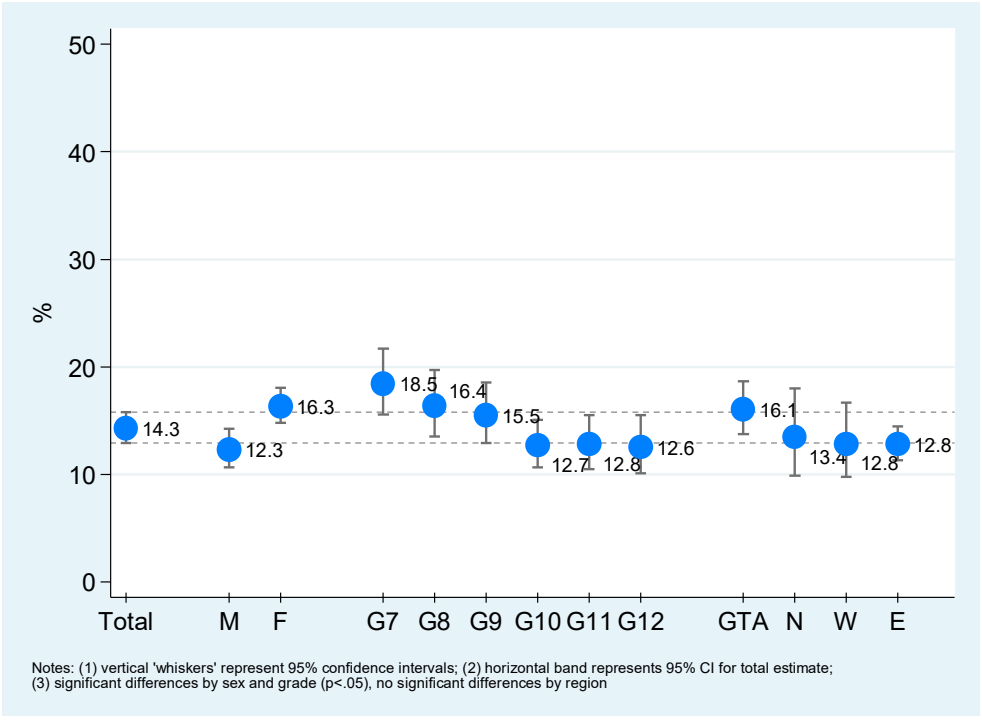
School Safety

- Although almost all students (91.4%) generally feel safe in their school, 14.3% are worried about being harmed, threatened, or being a victim of theft at school.
- Females (16.3%) are significantly more likely than males (12.3%) to be worried about being harmed or threatened at school.
- There are significant grade differences regarding feeling worried about being harmed or threatened at school, decreasing from 18.5% among 7th graders down to 12.6% among 12th graders.
- There is no significant regional variation.

1999–2019 (Grades 7–12):

- The percentage of students who report that they like school very much or quite a lot significantly decreased between 2017 (46.6%) and 2019 (35.5%), returning to a level seen in 2015 (32.3%). However, the 2019 estimate is higher than the estimates seen in 1999 and the early 2000s (27%-29%).
- The percentage of students reporting feeling close to people at school, and feeling like they are part of their school has remained elevated at about 80%-90% since monitoring first began in 1999.
- The percentage of students worried about being harmed or threatened at school did not significantly change between 2017 (13.0%) and 2019 (14.3%). The estimate has been relatively stable since 1999, the first year of monitoring.

Figure 3.1.5
Percentage Reporting Being Worried About Being Harmed, Threatened, or a Victim of Theft at School by Sex, Grade, and Region, 2019 OSDUHS



Notes: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal band represents 95% CI for total estimate; (3) significant differences by sex and grade (p<.05), no significant differences by region

3.1.9 School Subjective Social Status

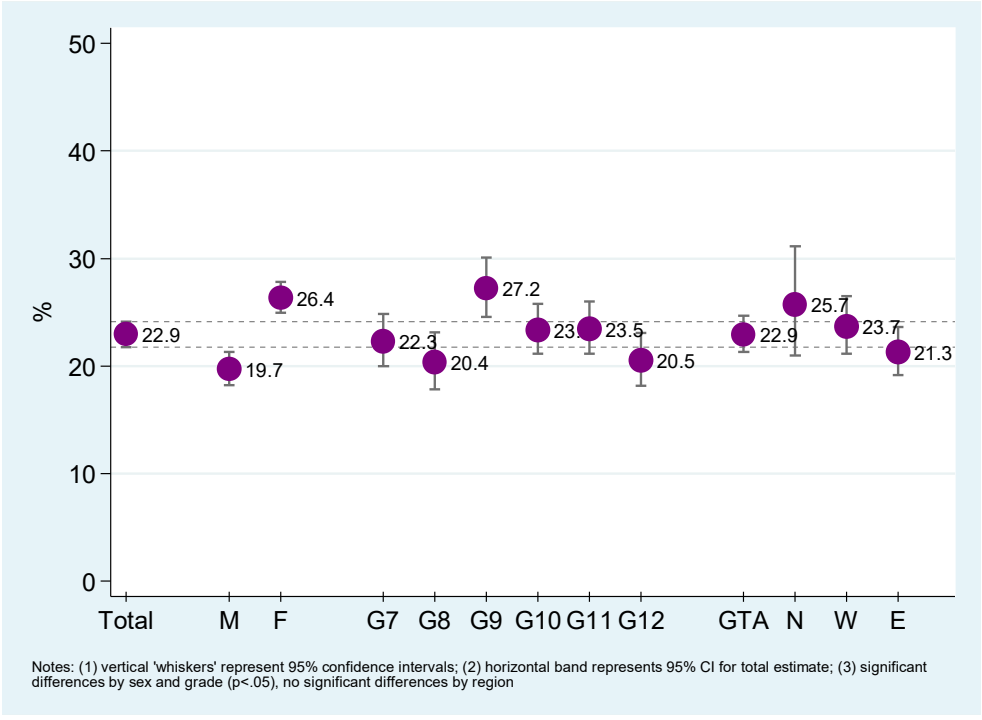
(Figure 3.1.6)

Starting in 2015, the OSDUHS included the *MacArthur Scale of Subjective Social Status* to measure perceived status at school (Goodman et al., 2001; Sweeting & Hunt, 2014). The questionnaire included a 10-rung ladder to represent the social hierarchy at school. The question was "*Imagine this ladder below is a way of picturing your school. At the top of the ladder are the people in school with the most respect and the 'highest standing.' At the bottom of the ladder are the people who no one respects and no one wants to hang out with. Please check off the numbered box that best shows where you would place yourself on this ladder.*" The higher the rung on the ladder, the higher the subjective social status (SSS) at school. For the purpose of this report, we constructed three categories to represent low school SSS (rungs 1–5 on the ladder), average SSS (rungs 6–8), and high SSS (rungs 9–10). We also look at subgroup differences regarding low school SSS.

2019 (Grades 7–12):

- Almost one-quarter (22.9%) of students report low SSS at school, almost two-thirds (60.2%) report average SSS, and one-in-six (16.9%) report high SSS at school.
- Females are significantly more likely than males to report low SSS at school (26.4% vs. 19.7%, respectively).
- There are significant grade differences showing an increase in low SSS at school between grades 8 and 9 (from 20.4% to 27.2%), followed by a decrease in the older grades.
- There is no significant regional variation.

Figure 3.1.6
Percentage Reporting Low Subjective Social Status (SSS) at School by Sex, Grade, and Region, 2019 OSDUHS



Notes: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal band represents 95% CI for total estimate; (3) significant differences by sex and grade (p<.05), no significant differences by region

3.2 PHYSICAL HEALTH

3.2.1 Self-Rated Physical Health

(Figures 3.2.1, 3.2.2; Table A3.2.1)

One of the more frequently used indicators of a person's current health status is perceived or self-rated health. Despite its simplicity, this global assessment of health status has been shown to be a reliable measure and a valid predictor of physical health and emotional well-being among adolescents (Fosse & Haas, 2009), and future morbidity and mortality (Idler & Benyamini, 1997).

Since 1991, self-rated physical health has been measured with the question "*How would you rate your physical health?"* The response options were *Poor, Fair, Good, Very good*, or *Excellent*. We present the percentage of students who rate their health as fair or poor.

2019 (Grades 7–12):

- Over half of Ontario students rate their health as either excellent (21.3%) or very good (36.9%). In contrast, about one-in-ten (10.8%) report fair or poor health, which represents roughly 96,500 Ontario students.
- Females (12.4%) are significantly more likely than males (9.3%) to report fair or poor health.
- There is significant grade variation, with self-rated fair or poor health increasing from 7.2% of 7th graders up to about 13%-14% of 11th and 12th graders.
- There are no significant differences among the four regions.

1999–2019 (Grades 7–12):

- The percentage of students who rate their physical health as fair or poor significantly increased between 2017 and 2019, from 8.7% to 10.8%, and remains higher than estimates seen in 2013 and 2015. However, the current estimate is significantly lower than the estimates from the late 2000s (about 13%-15%).
- Fair or poor self-rated health among males significantly increased between 2017 (6.6%) and 2019 (9.3%). Both males and females show significant increases during the past few years (since 2013).
- No grade shows a significant change between 2017 and 2019. Students in grades 9 to 12 show an increase in fair or poor self-rated health during the past few years.
- No region shows a significant change between 2017 and 2019. All four regions show an increase in fair or poor self-rated health during the past few years.

1991–2019 (Grades 7, 9, 11 only):

- Over the long-term, the percentage of students (7th, 9th, and 11th graders only) rating their physical health as fair or poor is significantly higher today compared to the early 1990s (about 6%-7%).

Figure 3.2.1
Self-Rated Physical Health, 2019 OSDUHS (Grades 7–12)

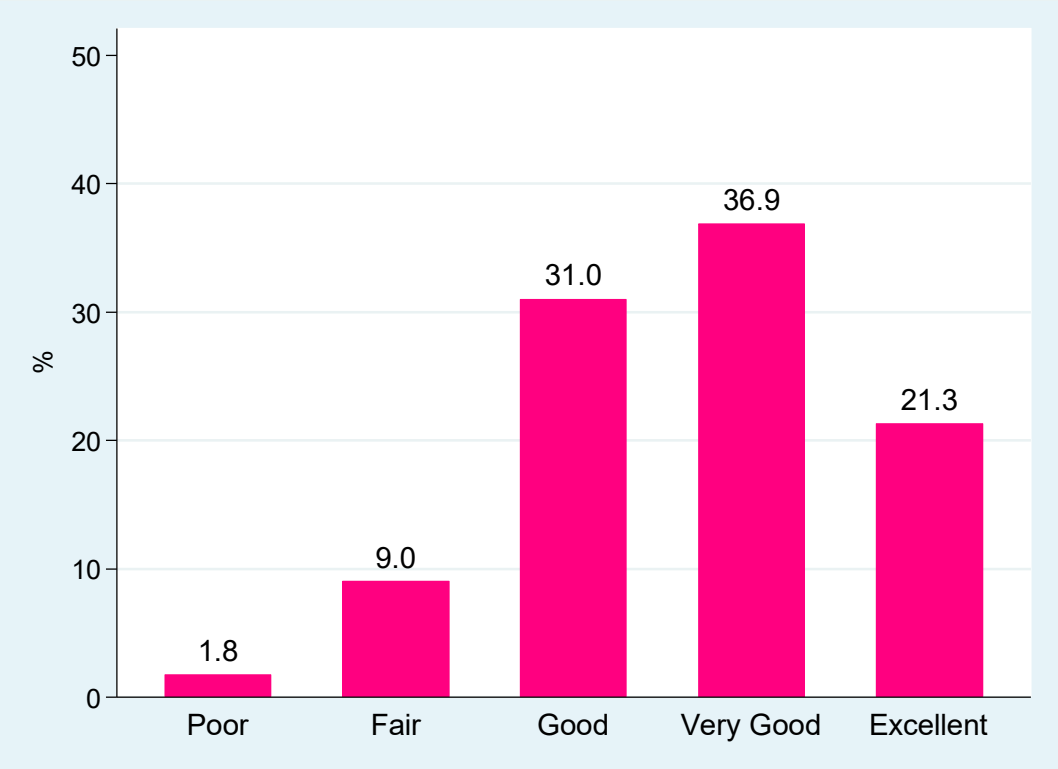
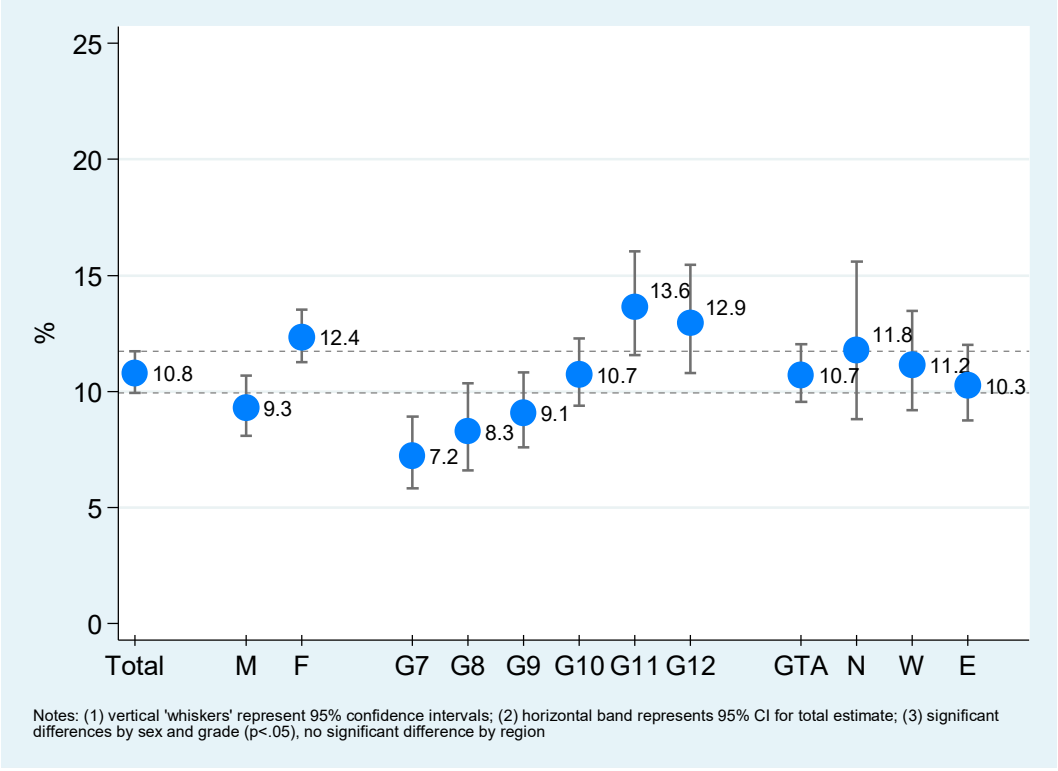
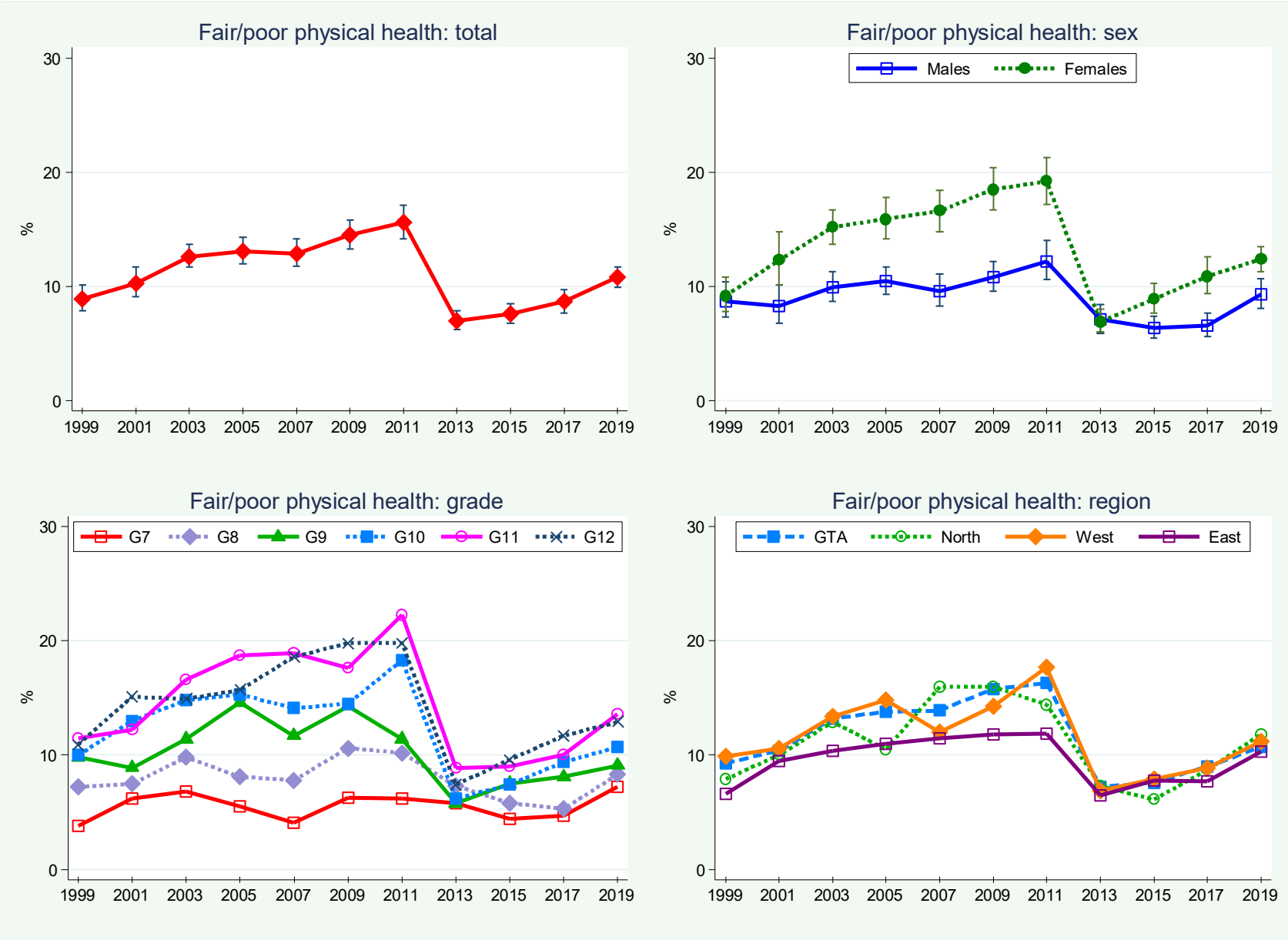


Figure 3.2.2
Percentage Reporting Fair or Poor Physical Health by Sex, Grade, and Region, 2019 OSDUHS



Notes: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal band represents 95% CI for total estimate; (3) significant differences by sex and grade (p<.05), no significant difference by region

Figure 3.2.3
Percentage Reporting Fair or Poor Physical Health, 1999–2019 OSDUHS (Grades 7–12)



3.2.2 Daily Physical Activity

(Figures 3.2.4, 3.2.5; Table A3.2.2)

Starting in 2009, students were asked to report the number of days of the past seven they were physically active "*for a total of **at least 60 minutes** each day. Please add up all the time you spent on any kind of physical activity that increased your heart rate and made you breathe hard some of the time. (Some examples are brisk walking, running, rollerblading, biking, dancing, skateboarding, swimming, soccer, basketball, football.) Please include both school and non-school activities.*" According to Canadian guidelines, an accumulation of at least 60 minutes of moderate-to-vigorous physical activity per day is recommended for children and youth (Tremblay et al., 2016). Therefore, here we describe the percentage of students who report meeting the 60-minute daily recommendation on each of the past seven days.

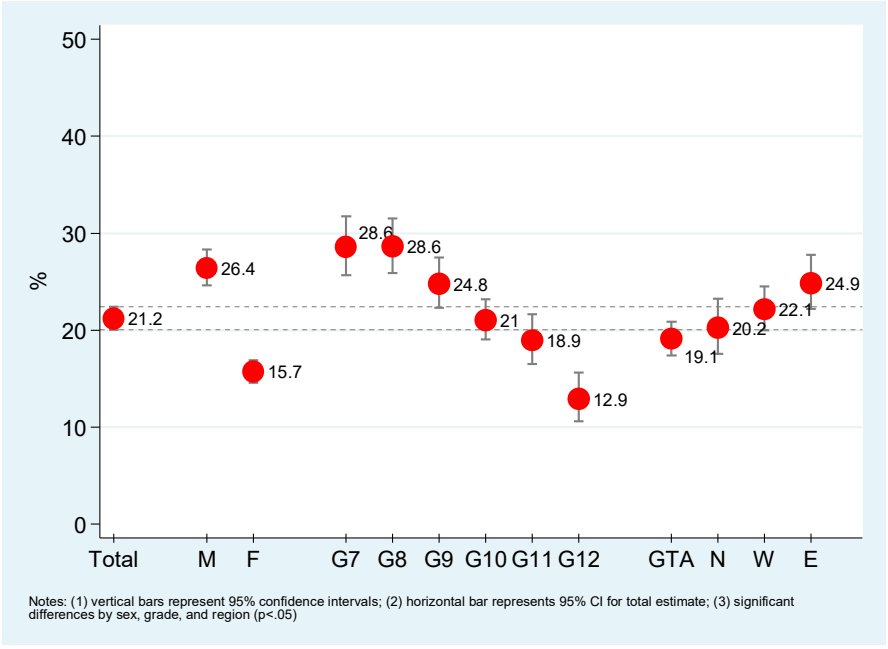
2019 (Grades 7–12):

- About one-fifth (21.2%) of students report meeting the 60-minute daily activity recommendation. This estimate represents about 188,900 Ontario students.
- Males (26.4%) are significantly more likely than females (15.7%) to be active daily.
- Daily physical activity significantly decreases with grade, from about 29% of 7th and 8th graders down to 12.9% of 12th graders.
- There is significant regional variation, with Greater Toronto Area students (19.1%) least likely to be active daily and students in the East (24.9%) region most likely.

2009–2019 (Grades 7–12):

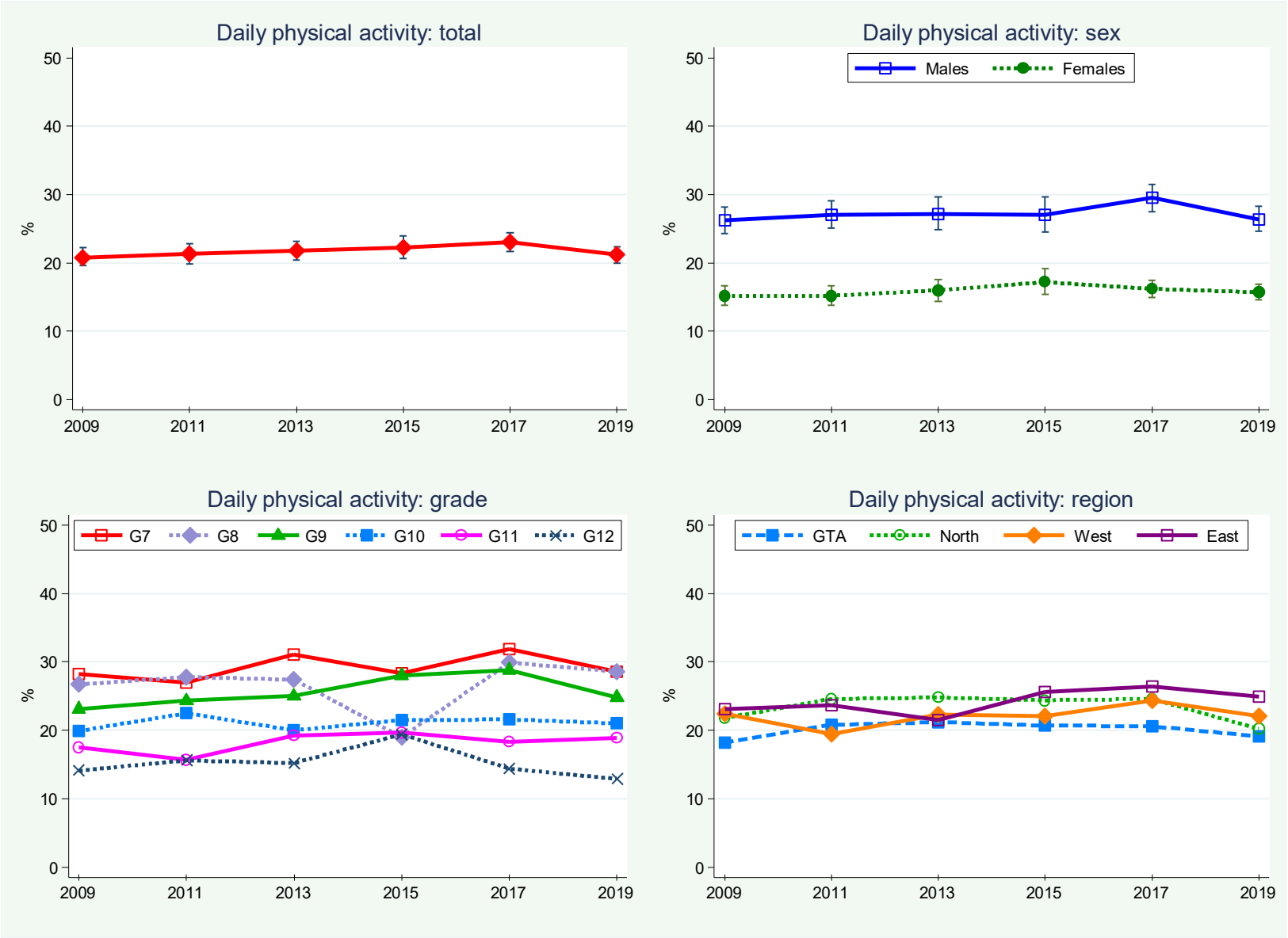
- There has been no significant change in the percentage of students who meet the daily physical activity recommendation between 2009 (20.8%) and 2019 (21.2%).
- All subgroups have remained relatively stable since 2009.

Figure 3.2.4
Percentage Meeting the 60-Minute Daily Physical Activity Recommendation on Each of the Past Seven Days by Sex, Grade, and Region, 2019 OSDUHS



Notes: (1) vertical bars represent 95% confidence intervals; (2) horizontal bar represents 95% CI for total estimate; (3) significant differences by sex, grade, and region (p<.05)

Figure 3.2.5
Percentage Reporting Daily Physical Activity on Each of the Past Seven Days, 2009–2019 OSDUHS (Grades 7–12)



3.2.3 Physical Inactivity

(Figure 3.2.6; Table A3.2.3)

This section describes the percentage of students who report *no* days of physical activity (defined as at least 60 minutes in total per day of moderate-to-vigorous activity) during the seven days before the survey.

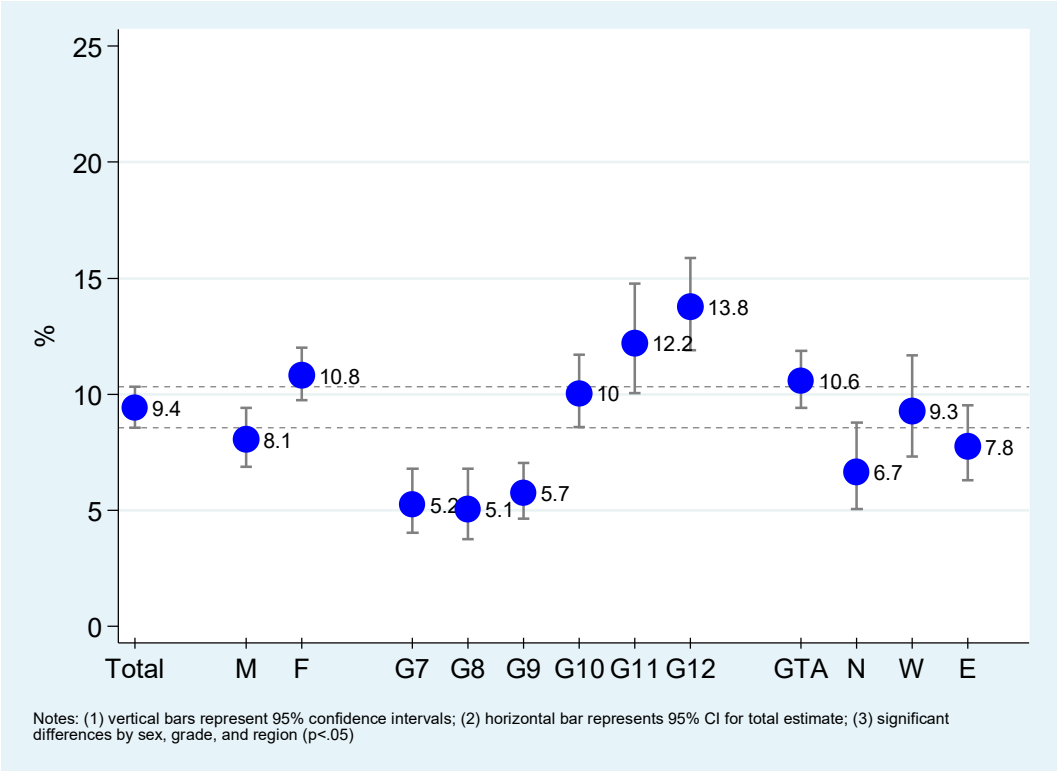
2019 (Grades 7–12):

- About one-in-eleven (9.4%) students were physically inactive on each of the seven days before the survey. This estimate represents about 83,800 Ontario students.
- Females (10.8%) are significantly more likely than males (8.1%) to be inactive.
- Inactivity significantly increases with grade, from 5%-6% among students in grades 7-9 up to 12%-14% among the oldest grades.
- There is a significant difference by region, showing that Greater Toronto Area students (10.6%) are most likely to be inactive compared with students in the other three regions (7%-9%).

2009–2019 (Grades 7–12):

- The percentage of students who report being inactive did not significantly change between 2017 (8.9%) and 2019 (9.4%). There has been relative stability since this was first monitored in 2009.
- There have been no major changes since 2009 among the subgroups.

Figure 3.2.6
Percentage Reporting No Physical Activity on Any of the Past Seven Days by Sex, Grade, and Region, 2019 OSDUHS



Notes: (1) vertical bars represent 95% confidence intervals; (2) horizontal bar represents 95% CI for total estimate; (3) significant differences by sex, grade, and region (p<.05)

3.2.4 Physical Inactivity at School

(Figures 3.2.7, 3.2.8; Table A3.2.4)

Starting in 1999, students were asked about physical activity at school, specifically in physical education (PE) class. The question was "*On how many of the last 5 school days did you participate in physical activity for **at least 20 minutes** that increased your heart rate and made you breathe hard some of the time in physical education class in your school?*" In this section, we describe the percentage of students who reported no days of physical activity in PE class. Note that this estimate includes those students who reported that they were not currently enrolled in a PE class (these students were assigned to the "no days of activity" group). Also note that we retained the previously used 20-minute guideline because the 60-minute recommendation is not feasible given the varying lengths of PE classes across the province.

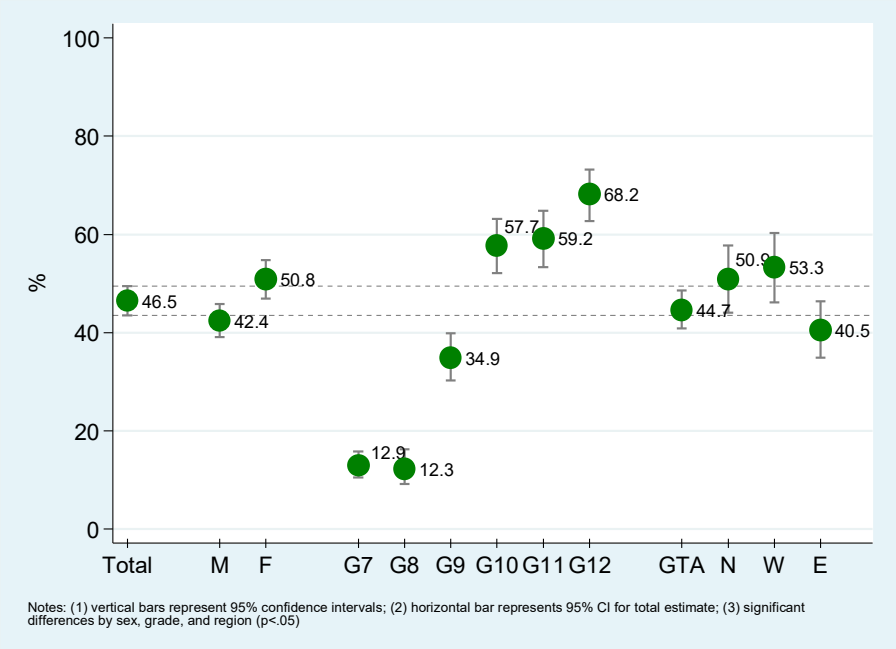
2019 (Grades 7–12):

- Less than half (46.5%) of all students do not engage in physical activity in a PE class.
- Females (50.8%) are significantly more likely than males (42.4%) to be inactive at school.
- Inactivity at school significantly increases with grade, from about 12%-13% among 7th and 8th graders to 68.2% among 12th graders.
- There is significant regional variation, with students in the East region (40.5%) least likely to be inactive at school.

1999–2019 (Grades 7–12):

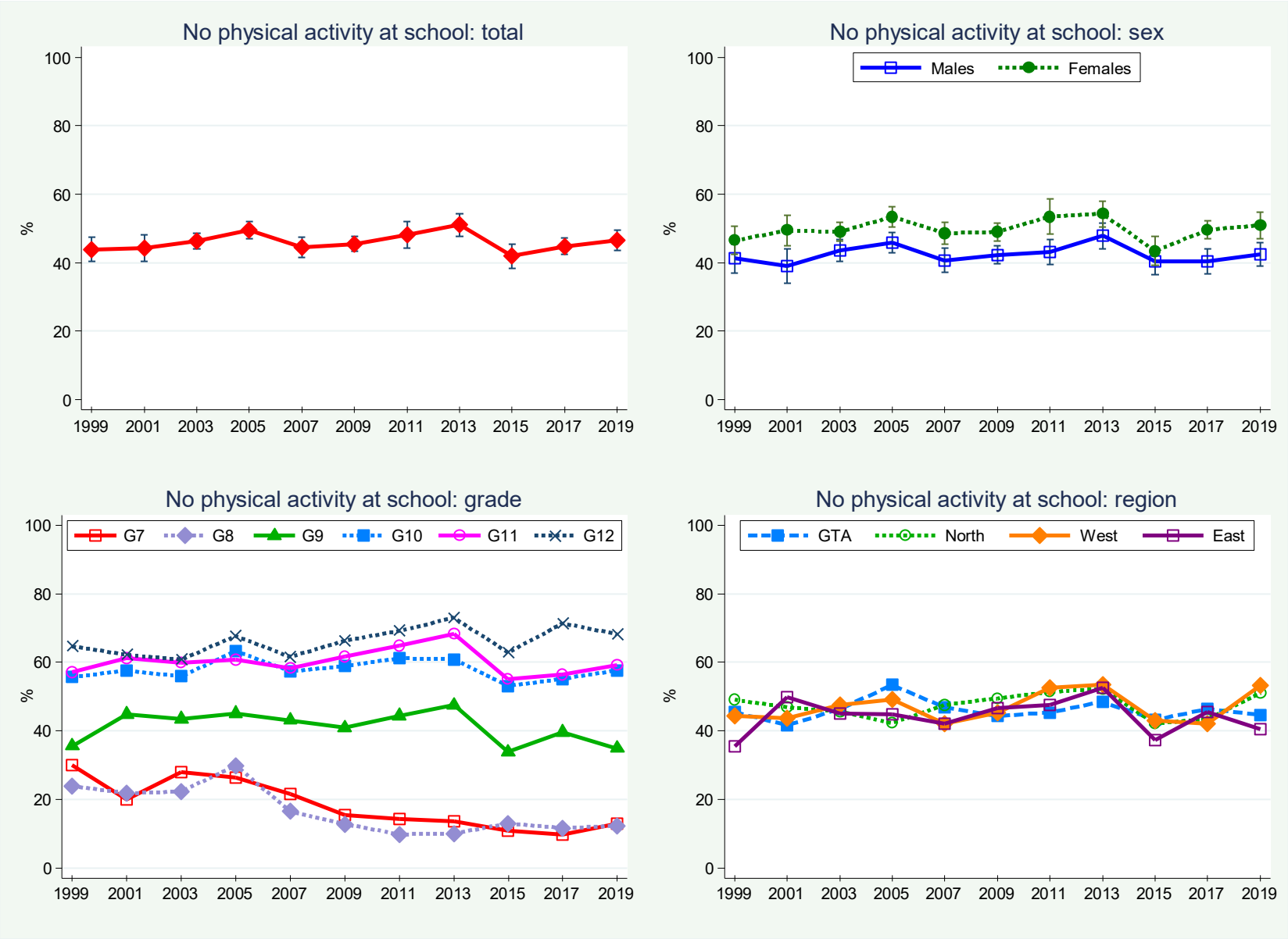
- The percentage of students who report being physically inactive at school in a PE class did not significantly change between 2017 (44.8%) and 2019 (46.5%), and has been relatively stable since 1999 (with the exception of a decrease between 2013 and 2015.)
- Among the subgroups, inactivity at school significantly increased since 2017 only for students in the West region. Grade 7 and 8 students show a significant decrease in inactivity at school since 1999, which became more prominent starting in 2005.

Figure 3.2.7
Percentage Reporting No Physical Activity at School in Physical Education Class on Any of the Past Five School Days by Sex, Grade, and Region, 2019 OSDUHS



Notes: (1) vertical bars represent 95% confidence intervals; (2) horizontal bar represents 95% CI for total estimate; (3) significant differences by sex, grade, and region (p<.05)

Figure 3.2.8
Percentage Reporting No Physical Activity at School in Physical Education Class on Any of the Past Five School Days, 1999–2019 OSDUHS (Grades 7–12)



3.2.5 Screen Time Sedentary Behaviour

(Figures 3.2.9, 3.2.10; Table A3.2.5)

Starting in 2009, students were asked about the usual amount of time they spend in front of a screen (i.e., "recreational screen time"). The question was *"In the last 7 days, about how many hours a day, on average, did you spend watching: TV/movies/videos, playing video games, texting, messaging, posting, or surfing the Internet in your free time? (Include time on any screen, such as a smartphone, tablet, TV, gaming device, computer, or wearable technology.)*" The *Canadian 24-Hour Movement Guidelines for Children and Youth* recommend that children and adolescents limit recreational screen time to no more than two hours per day (Tremblay et al., 2016). Here we present the percentage considered to be sedentary, based on reporting three or more hours per day of screen time. Responses of "not sure" remained in the denominator and, therefore, were included in the analysis.

2019 (Grades 7–12):

- Almost three-quarters (71.2%) of students spend at least three hours a day on recreational screen time. This estimate represents about 635,500 Ontario students in grades 7–12. At the extreme end, 14.9% report seven or more hours a day, representing about 132,600 students.
- Males (70.9%) and females (71.6%) are equally likely to spend three hours or more a day in front of a screen.
- There is significant grade variation ranging from 54.3% of 7th graders spending three hours or more a day in front of a screen up to about three-quarters of students in grades 9–12.
- There is significant regional variation showing that students in the Greater Toronto Area (73.3%) are most likely to spend three hours or more a day in front of a screen.

2009–2019 (Grades 7–12):

- The percentage of students who are screen time sedentary significantly increased between 2017 (60.0%) and 2019 (71.2%). The current estimate is the highest since monitoring began in 2009.
- All subgroups show a significant increase between 2017 and 2019, and all show an increase since 2009.

Figure 3.2.9
Percentage Reporting Three or More Hours per Day of Recreational Screen Time (Sedentary Behaviour) in the Past Seven Days by Sex, Grade, and Region, 2019 OSDUHS

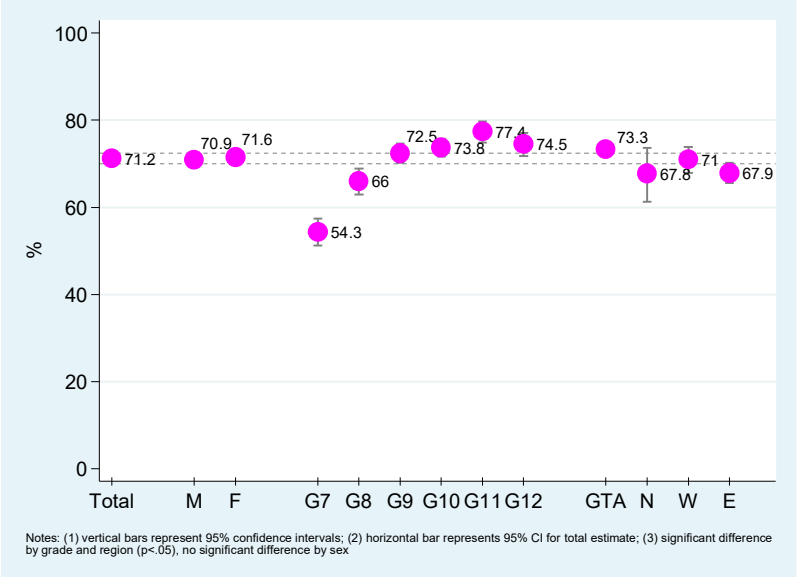
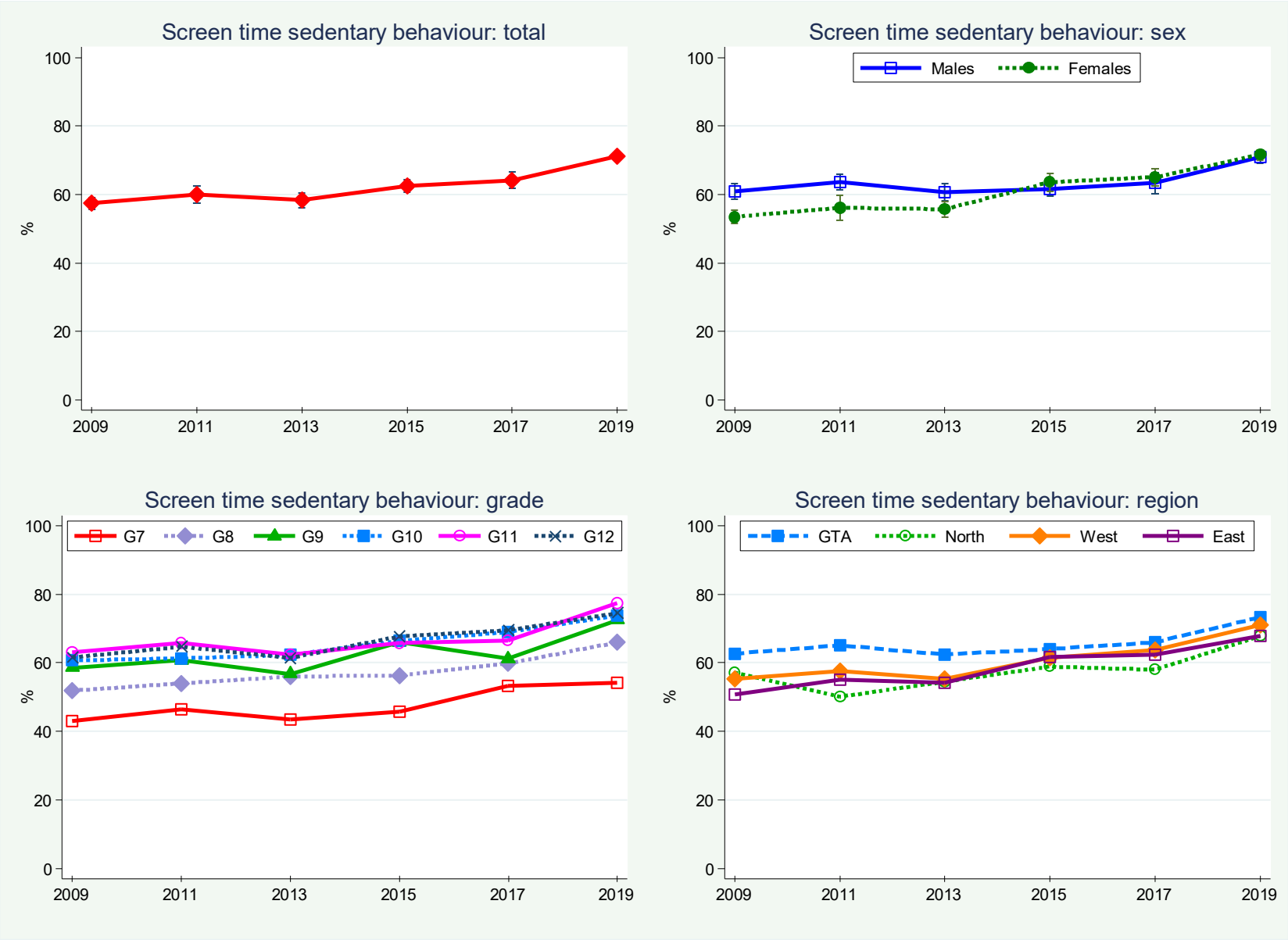


Figure 3.2.10
Percentage Reporting Three or More Hours per Day of Recreational Screen Time (Sedentary Behaviour) in the Past Seven Days, 2009–2019 OSDUHS (Grades 7–12)



3.2.6 Overweight or Obese

(Figures 3.2.11-3.2.13; Table A3.2.6)

Since 2007 the OSDUHS has asked students to report their current height and weight, using precoded response options.[71] Body mass index (BMI) was calculated as weight in kilograms divided by height in metres squared.[72] BMI is the most commonly used indicator to measure adiposity status among children and adolescents. The 2007 WHO BMI growth references for children and youth were used to classify students into weight categories (de Onis et al., 2007). Students without valid height and weight responses (7% of the total sample, *n*=953) were excluded from the analysis. It should be noted here that BMI based on self-reported height and weight usually underestimates the true percentage overweight and obese (Brener, McManus, Galuska, Lowry, & Wechsler, 2003; Elgar & Stewart, 2008; Sherry, Jefferds, & Grummer-Strawn, 2007; Tsigilis, 2006).

2019 (Grades 7–12):

- An estimated 3.0% (95% CI: 2.6%-3.5%%) of students are classified as thin, 65.7% (64.3%-67.1%) are classified as normal weight, 19.1% (18.3%-19.9%) are classified as overweight, and 12.1% (11.2%-13.2%) are classified as obese.
- Just under one-third (31.2%) of students are estimated to be either overweight or obese. This percentage represents about 265,400 7th–12th graders in Ontario.[73]
- Males (33.9%) are significantly more likely than females (28.5%) to be classified as overweight or obese.
- There are no significant grade differences.
- There is significant regional variation showing that students in the North (38.5%) are most likely to be classified as overweight or obese compared with students in the other three regions (about 31%).

2007–2019 (Grades 7–12):

- The percentage of Ontario students who are classified as overweight or obese has remained stable in recent years at about 30%–31%. However, the current estimate of 31.2% is significantly higher than the estimate from 2007 (26.2%), the first year of monitoring.
- No subgroup shows a significant change in recent years. However, females, students in grade 8, and students in the Greater Toronto Area and the North region show significantly higher estimates in 2019 compared to their respective 2007 estimates.

[71] Experimental work on the OSDUHS showed that the precoded format reduced missing value responses versus open-ended formats. The height question contained 27 precoded categories ranging from *4'4"/132 cm or less* to *6'6"/198 cm or more*. The weight question contained 42 precoded categories ranging from *80 lbs/36 kg or less* in 5 lb increments to *281 lbs/127 kgs or more* (the midpoints of these categories were used for the BMI calculation).

[72] Using the "zanthro" module in *Stata* 14.1.

[73] The estimate for overweight/obese using the age-by-sex specific BMI cut-points created by Cole and colleagues (2000) and recommended by the *International Obesity Task Force* is 27.9% (95% CI: 26.6%-29.3%).

Figure 3.2.11
Percentage Classified as Thin, Normal Weight, Overweight, and Obese, 2019 OSDUHS (Grades 7–12)

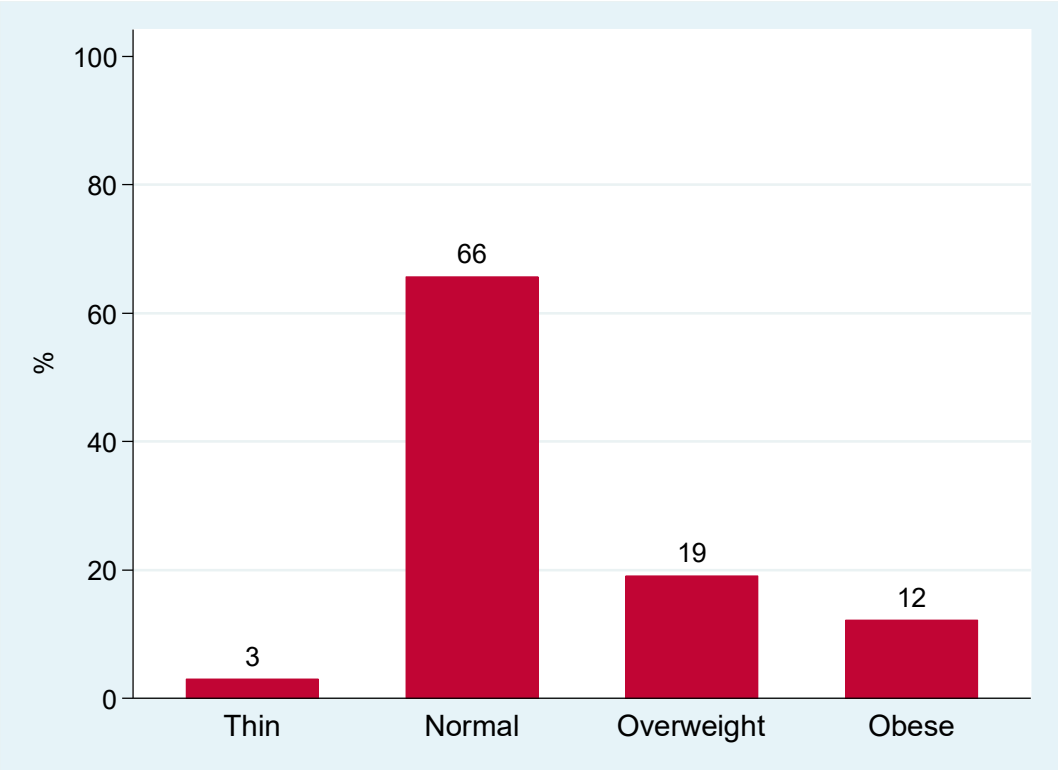
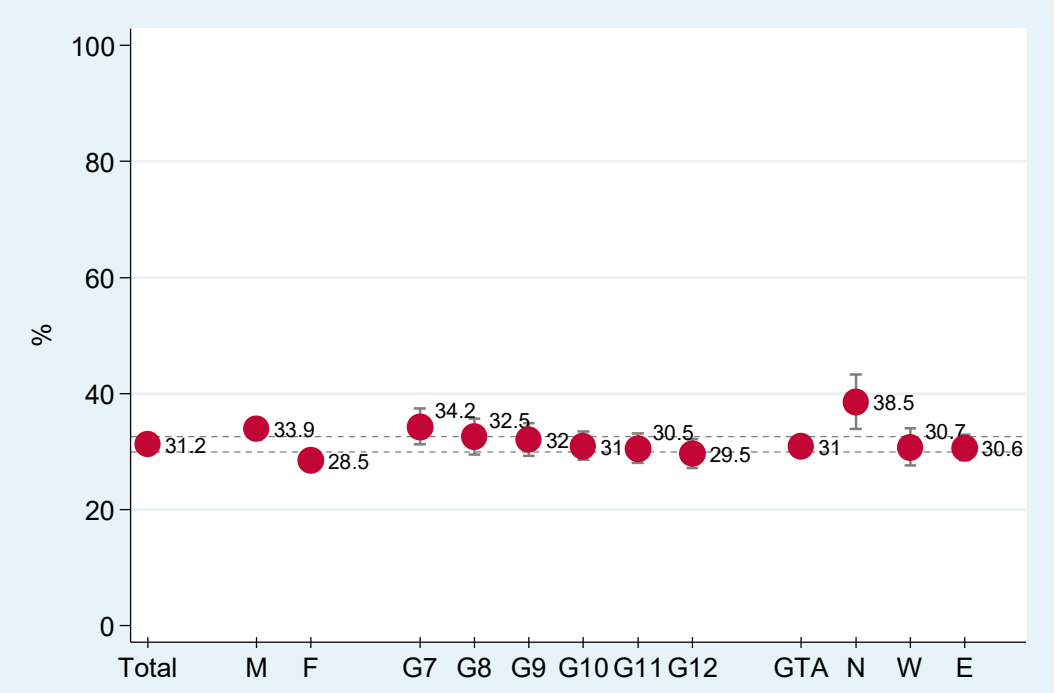
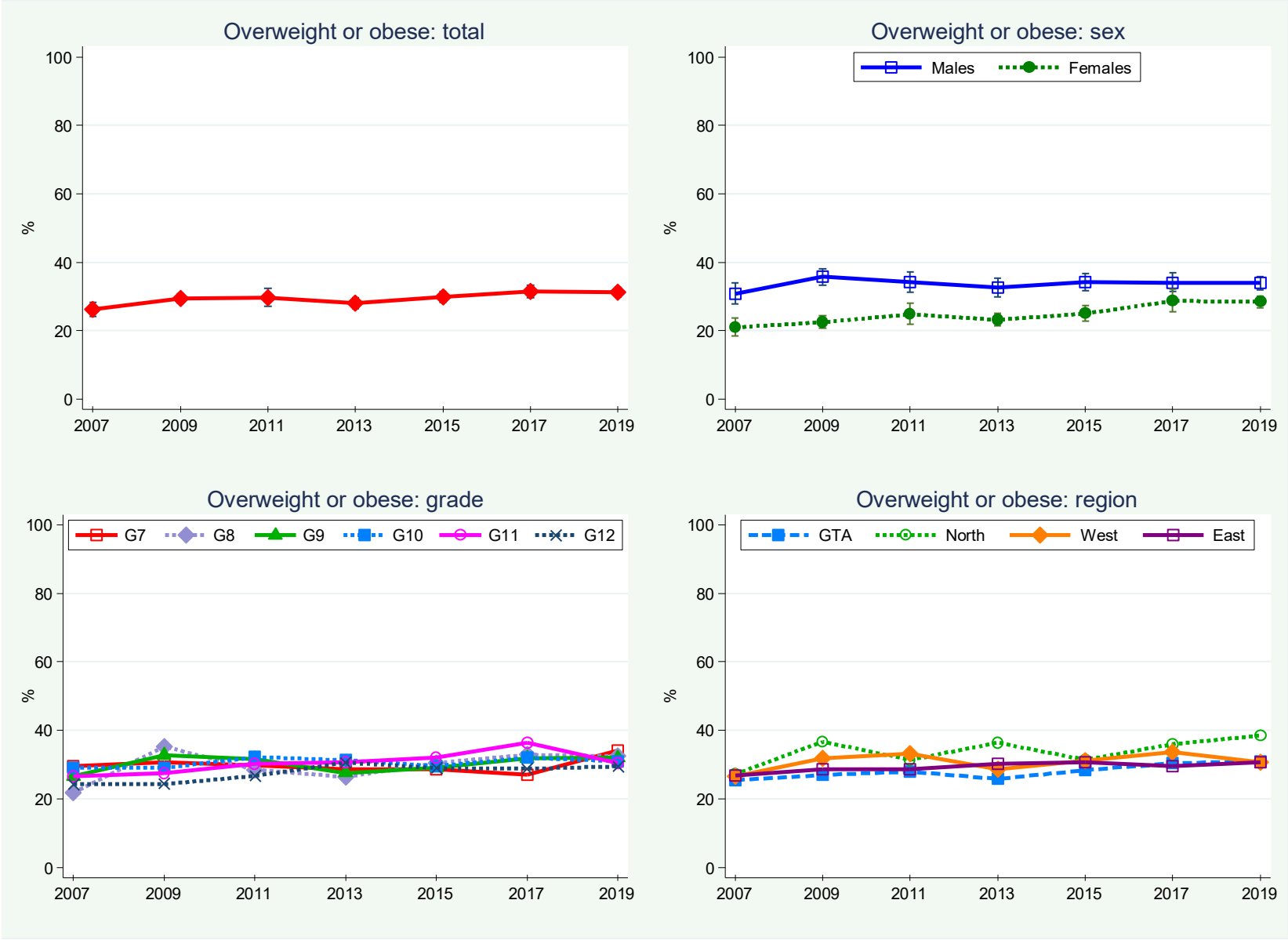


Figure 3.2.12
Percentage Classified as Overweight or Obese by Sex, Grade, and Region, 2019 OSDUHS



Notes: (1) vertical bars represent 95% confidence intervals; (2) horizontal bar represents 95% CI for total estimate; (3) significant differences by sex and region (p<.05), no significant difference by grade

Figure 3.2.13
Percentage Classified as Overweight or Obese, 2007–2019 OSDUHS (Grades 7–12)



3.2.7 Body Image and Weight Control

(Figures 3.2.14, 3.2.15; Table A3.2.7)

Since 2001, the OSDUHS included questions measuring beliefs about personal weight and desired change in weight. Two questions were asked of a random half sample: (1) "*Do you think of yourself as being too thin, about the right weight, or too fat?"* and (2) *"Which of the following are you doing about your weight: Not doing anything, Trying to lose weight, Trying to keep from gaining weight*, or *Trying to gain weight?"*

2019 (Grades 7–12):

- About 59.3% of students are satisfied with their weight. Over one-quarter (26.2%) believe they are too fat, and about one-in-seven (14.5%) believe they are too thin.
- Females are significantly more likely than males to perceive themselves as too fat, (32.1% vs. 20.6%, respectively), whereas males are significantly more likely than females to perceive themselves as too thin (18.7% vs. 10.2%, respectively).
- Satisfaction with weight significantly differs by grade. The perception of being too thin and perception of being too fat both increase with grade.
- There is no significant regional variation.
- About one-third (32.3%) of students are not trying to alter their weight. Another 30.6% are trying to lose weight, 21.2% want to keep from gaining weight, and 15.9% want to gain weight.
- Females are significantly more likely than males to report they are trying to lose weight (37.2% vs. 24.5%, respectively), whereas males are much more likely than females to report that they are trying to gain weight (22.8% vs. 8.7%, respectively).
- Weight control efforts significantly differ by grade, with reported attempts to gain weight increasing with grade. Examining grade differences by sex shows that among males attempts to gain weight increase with grade (from 12.4% of 7th graders to 29.5% of 12th graders), and attempts to lose weight decrease with grade (from 30.7% of 7th graders to 23.4% of 12th graders). In contrast, there are no significant grade differences regarding weight control efforts among females.
- There is no significant regional variation regarding weight control efforts.

2001–2019 (Grades 7–12):

- The percentage of students who perceive themselves to be too fat has remained stable during the past decade. However, the current estimate (26.2%) is significantly higher than the estimates seen in the 2000s (about 19%-20%). Both males and females today are more likely to perceive themselves to be too fat compared with their counterparts in the 2000s.
- There have been no significant changes over time regarding weight control efforts.

Figure 3.2.14
Body Image and Weight Control by Sex, 2019 OSDUHS (Grades 7–12)

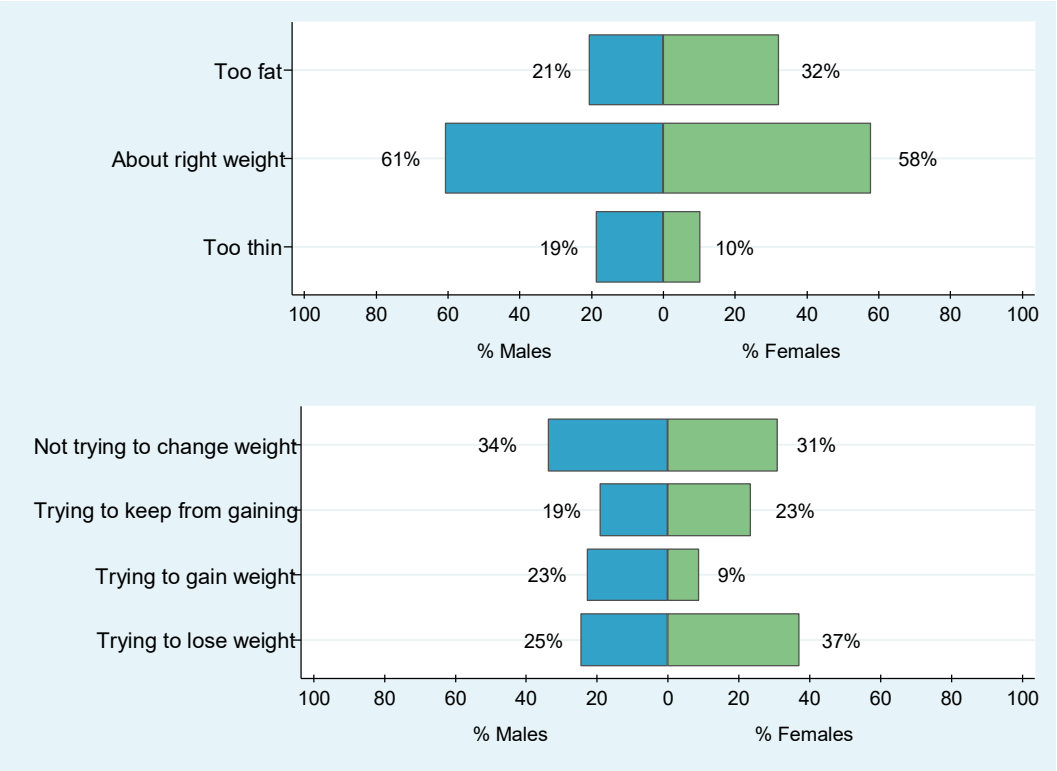
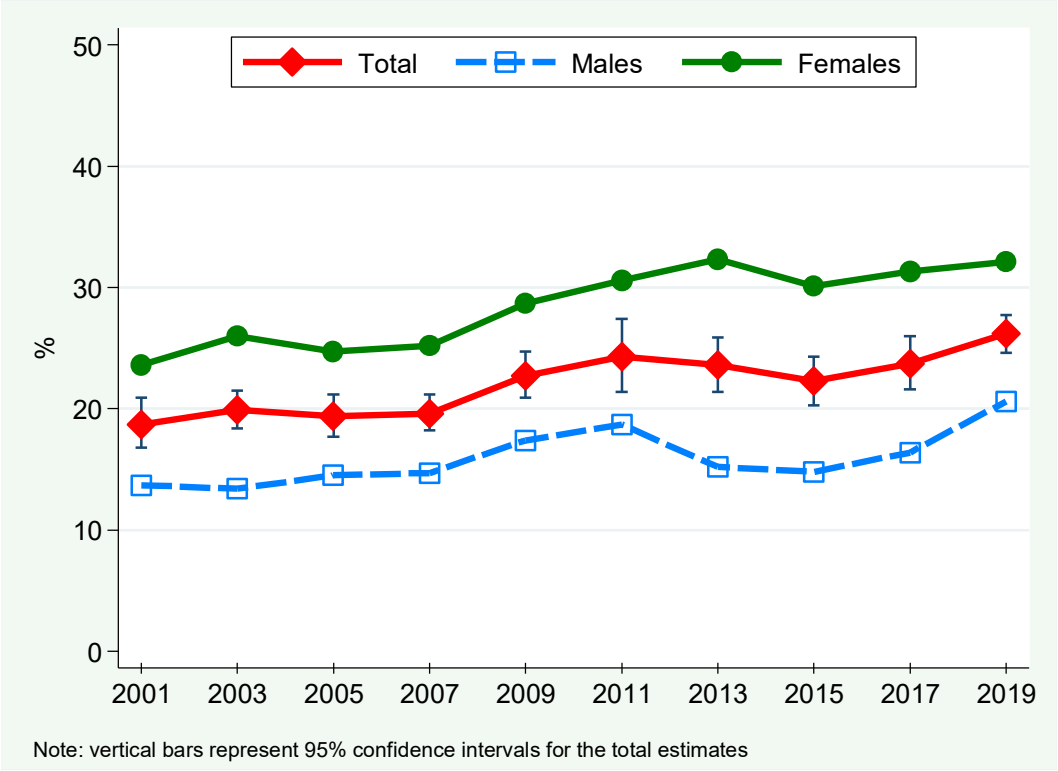


Figure 3.2.15
Percentage Reporting the Belief That They are "Too Fat" by Sex, 2001–2019 OSDUHS (Grades 7–12)



Note: vertical bars represent 95% confidence intervals for the total estimates

3.2.8 Hours of Sleep on an Average School Night

(Figure 3.2.16; Table A3.2.8)

Starting in 2015, the OSDUHS included a question about hours of sleep on school nights. Students were asked "*On an average school night, how many hours of sleep do you get?*" Response options ranged from *4 hours or less* up to *11 or more hours*. Here we present the percentage of students reporting getting eight or more hours of sleep.

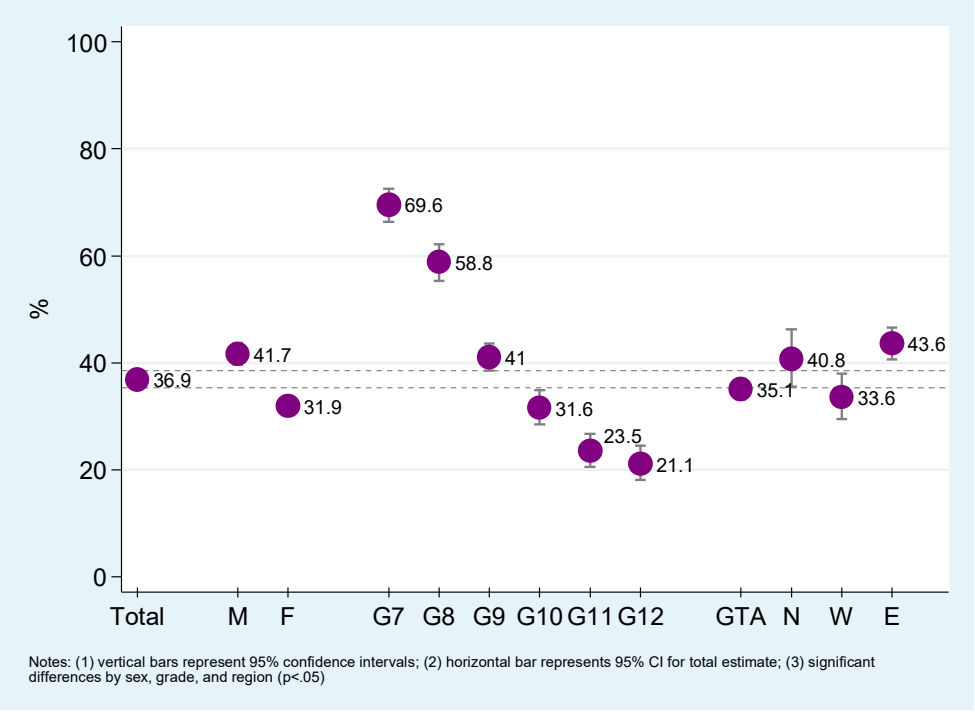
2019 (Grades 7–12):

- Over one-third (36.9%) of Ontario students report that they usually get eight hours or more of sleep on an average school night. Therefore, most students (63%) do not get at least eight hours of sleep.
- Males (41.7%) are significantly more likely than females (31.9%) to get at least eight hours of sleep on an average school night.
- Seventh graders (69.6%) are most likely to report at least eight hours of sleep on an average school night. Sufficient sleep decreases as grade increases, as only about one-in-five (21.1%) 12th graders report at least eight hours of sleep.
- There are significant regional differences showing that students in the East region (43.6%) are most likely to report at least eight hours of sleep on an average school night.

2015–2019 (Grades 7–12):

- The percentage of students reporting at least eight hours of sleep on school nights in 2019 (36.9%) is similar to 2017 (39.2%), but the percentage has significantly decreased since 2015 (41.0%).

Figure 3.2.16
Percentage Reporting Eight or More Hours of Sleep on School Nights by Sex, Grade, and Region, 2019 OSDUHS



Notes: (1) vertical bars represent 95% confidence intervals; (2) horizontal bar represents 95% CI for total estimate; (3) significant differences by sex, grade, and region (p<.05)

3.2.9 Go to School or Bed Hungry

(Figure 3.2.17; Table A3.2.9)

Starting in 2015, students were asked about going without food. The question was "*Some young people go to school or to bed hungry because there is not enough food at home. How often does this happen to you?*" The response options were: *Always*, *Often*, *Sometimes*, or *Never*. Here we present the percentage of students who report that they often or always go to school or bed hungry.

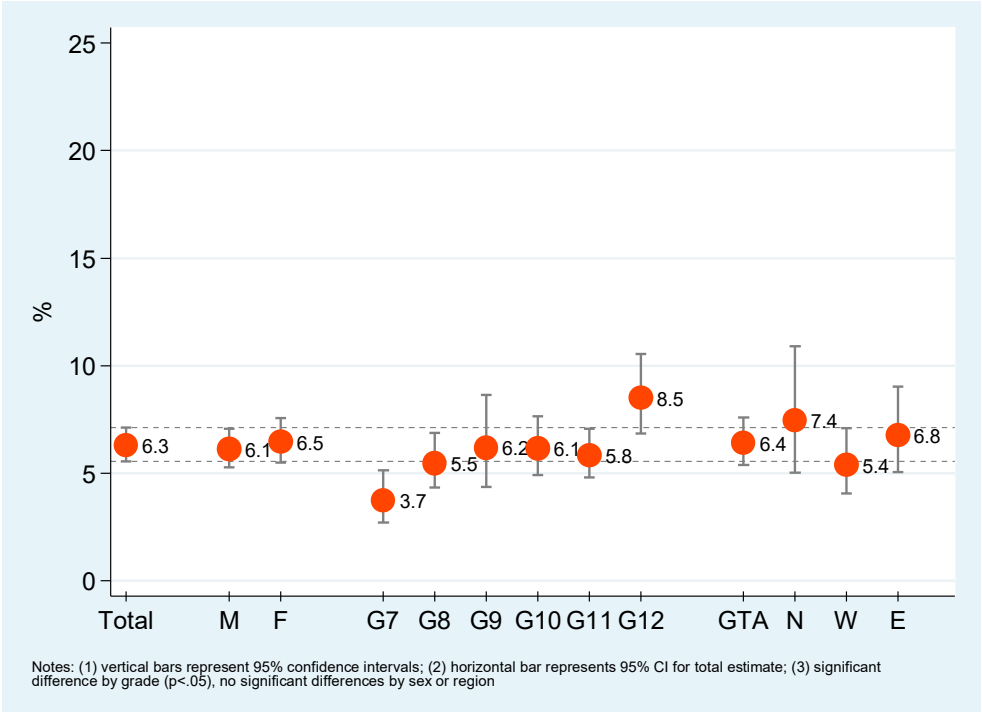
2019 (Grades 7–12):

- An estimated 6.3% of students report that they often or always go to school or bed hungry. This percentage represents about 55,500 students in Ontario.
- Males (6.1%) and females (6.5%) are equally likely to report often or always going to school or bed hungry.
- There is significant grade variation showing that 12th graders (8.5%) are more likely than younger students to report going to school or bed hungry.
- There is no significant regional variation.

2015–2019 (Grades 7–12):

- There was a small, but significant, increase in the percentage of students reporting going to school or bed hungry between 2015 (first year of monitoring) and 2019, from 4.6% to 6.3%.
- Among the subgroups, only females show a significant change since 2015, from 4.3% to 6.5%.

Figure 3.2.17
Percentage Reporting "Often" or "Always" Going to School or Bed Hungry by Sex, Grade, and Region, 2019 OSDUHS



Notes: (1) vertical bars represent 95% confidence intervals; (2) horizontal bar represents 95% CI for total estimate; (3) significant difference by grade (p<.05), no significant differences by sex or region

3.2.10 Medically Treated Injury

(Figures 3.2.18, 3.2.19; Table A3.2.10)

Starting in 2003, the OSDUHS asked a random half sample of students whether they experienced medically treated injuries during the past year. The question was *"In the last 12 months, how many times were you hurt or injured, and had to be treated by a doctor or nurse?"* The response options were: *Not treated for an injury in the last 12 months, One time, 2 times, 3 times,* or *4 or more times*.

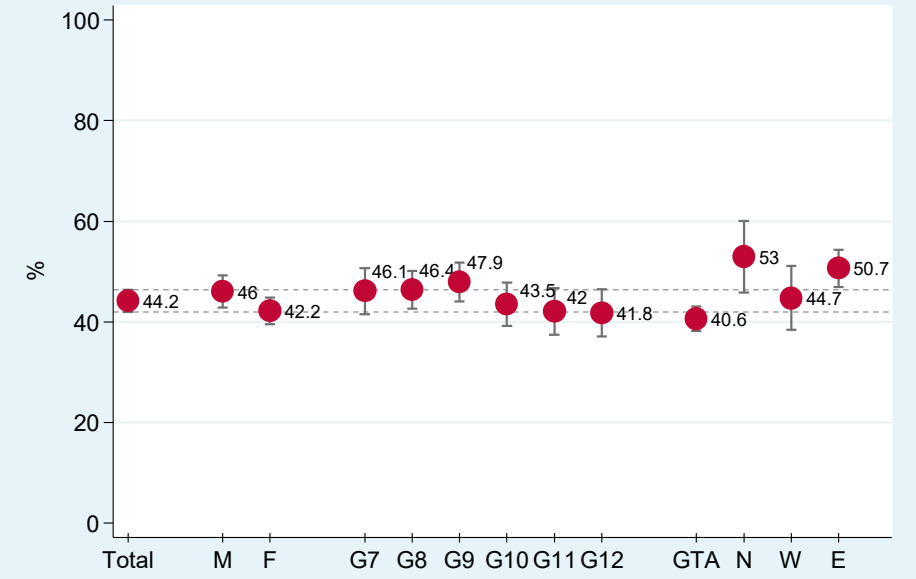
2019 (Grades 7–12):

- Just under half (44.2%) of students report that they were treated for an injury at least once in the 12 months before the survey. This percentage represents about 349,800 students in Ontario. More specifically, 21.5% were treated for an injury once in the past year, 12.6% were treated twice, 5.2% were treated three times, and 4.9% four or more times.
- Males (46.0%) and females (42.2%) are equally likely to report experiencing an injury that needed treatment at least once in the past year.
- There are no significant grade differences.
- There is significant regional variation showing that students in the Greater Toronto Area (40.6%) are least likely to report a medically treated injury in the past year.

2003–2019 (Grades 7–12):

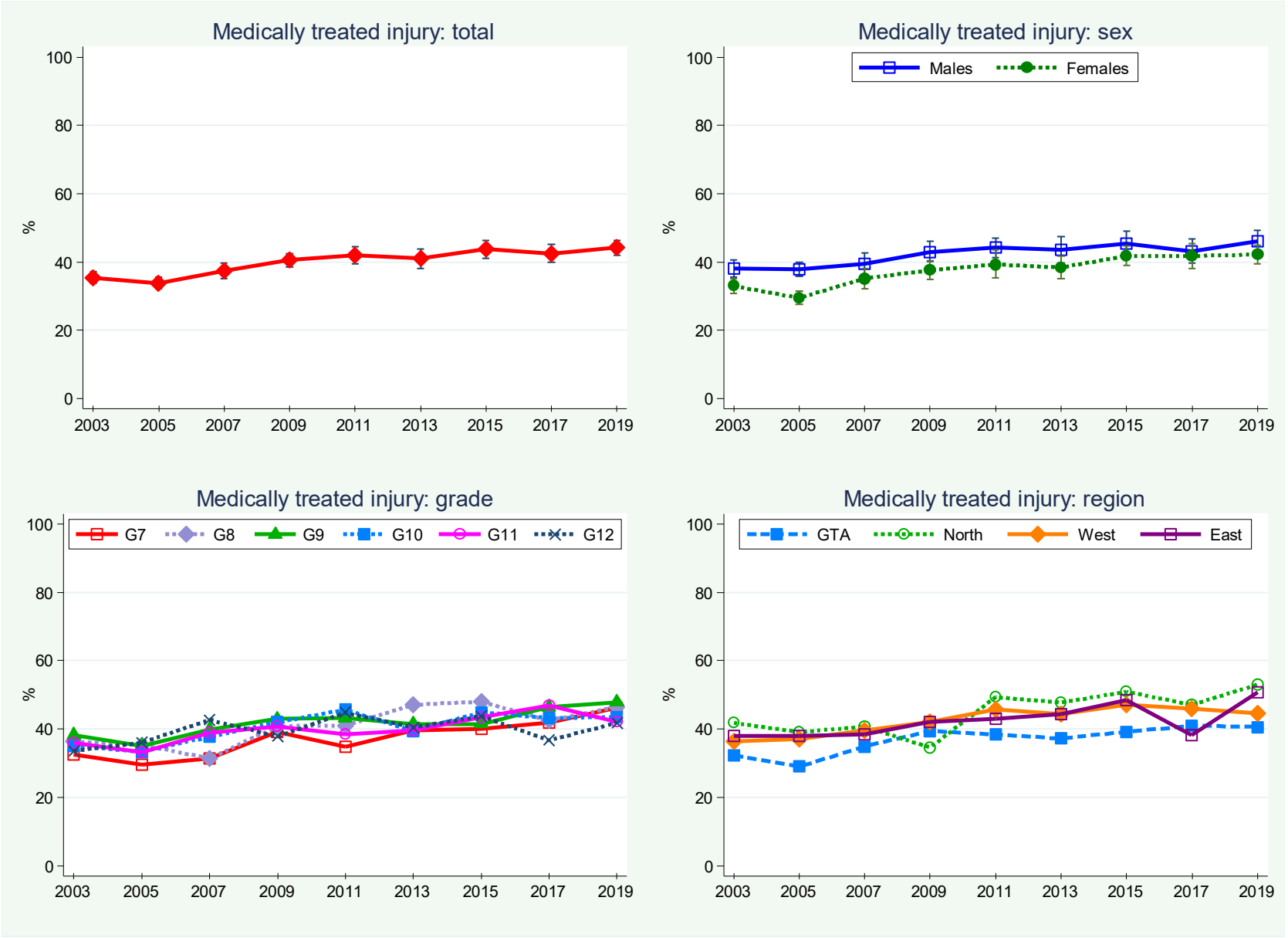
- The percentage of students experiencing a medically treated injury in the past year has been stable since 2009 at about 41%-44%. However, there has been an increase since the early-to-mid 2000s (about 34%-37%).
- Among the subgroups, males, females, most grades, and most regions show significant increases since the early-to-mid 2000s.

Figure 3.2.18
Percentage Reporting a Medically Treated Injury in the Past Year by Sex, Grade, and Region, 2019 OSDUHS



Notes: (1) vertical bars represent 95% confidence intervals; (2) horizontal bar represents 95% CI for total estimate; (3) significant difference by region (p<.05), no significant differences by sex or grade

Figure 3.2.19
Percentage Reporting a Medically Treated Injury in the Past Year, 2003–2019 OSDUHS (Grades 7–12)



3.2.11 Concussion

(Figures 3.2.20, 3.2.21)

Starting in 2017, students were asked whether they had a concussion (head injury) in their lifetime and in the past year. A concussion was defined as "*any head injury that resulted in a headache, dizziness, blurred vision, vomiting, feeling confused or "dazed," problems remembering, or being unconscious (knocked out).*" A random half sample of students was asked about the cause of their previous head injury using a list of possible causes.

2019 (Grades 7–12):

- Over one-third (38.7%) of students report having a concussion in their lifetime (representing about 345,400 students in Ontario). One-in-seven (14.5%) students report having a concussion in the past year. This estimate represents about 128,500 students in Ontario.
- Males (15.4%) are significantly more likely than females (13.5%) to report having a concussion in the past year.
- There is significant grade variation showing that 7th and 8th graders (about 19%) are most likely to report a concussion in the past year.
- There is significant regional variation showing that students in the Greater Toronto Area (12.9%) are least likely to report a concussion in the past year, while students in the East (17.7%) are most likely.
- Falls and playing team sports (such as hockey, football, rugby) are among the most common causes of concussions. The least common causes include being bullied/pushed by someone and "other vehicle" accidents (such as snowmobile, ATV).

2019 vs. 2017 (Grades 7–12):

- The percentage of students reporting experiencing a concussion in the past year did not significantly change between 2017 (14.8%) and 2019 (14.5%). No subgroup shows a significant change between these two survey cycles.

Figure 3.2.20
Percentage Reporting Experiencing a Concussion in the Past Year by Sex, Grade, and Region, 2019 OSDUHS

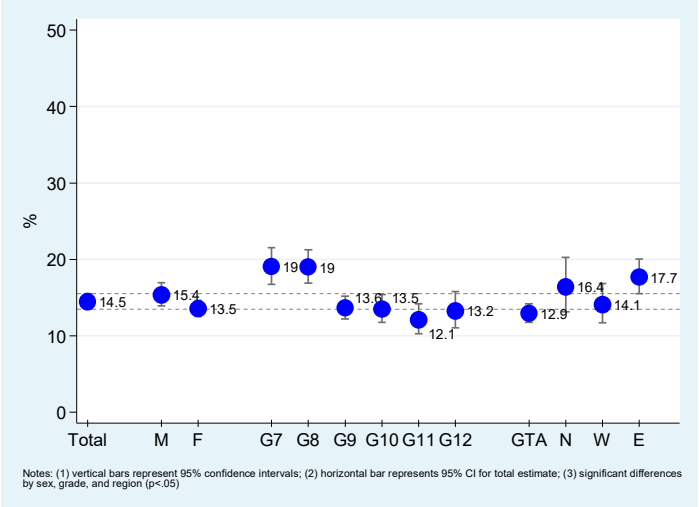
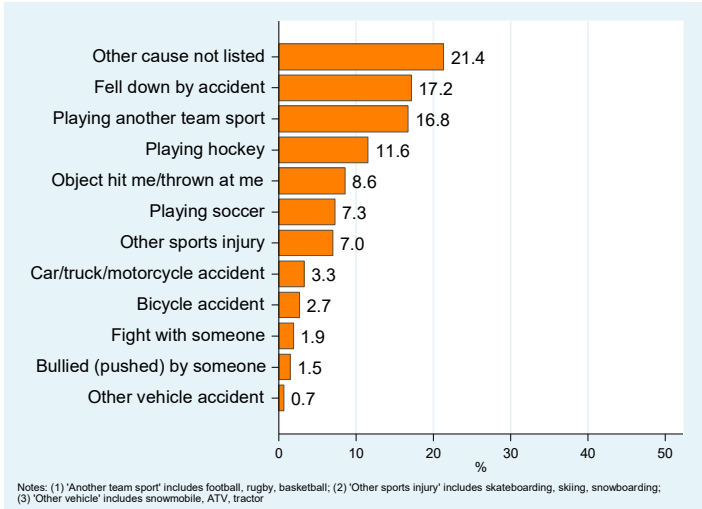


Figure 3.2.21
Cause of Previous Concussion (in Lifetime or Past Year), 2019 OSDUHS



3.2.12 Seatbelt Use

(Figure 3.2.22; Table A3.2.11)

Starting in 2011, the OSDUHS asked a random half sample of students how often they wear a seatbelt when they ride in a vehicle. The question was "*How often do you wear a seat belt when you are in a vehicle?*" The response options were: *Never travel by vehicle, All of the time, Most of the time, Some of the time, Rarely,* or *Never*. Here we present the percentage of students who report they do not always wear a seatbelt when they ride in a vehicle.

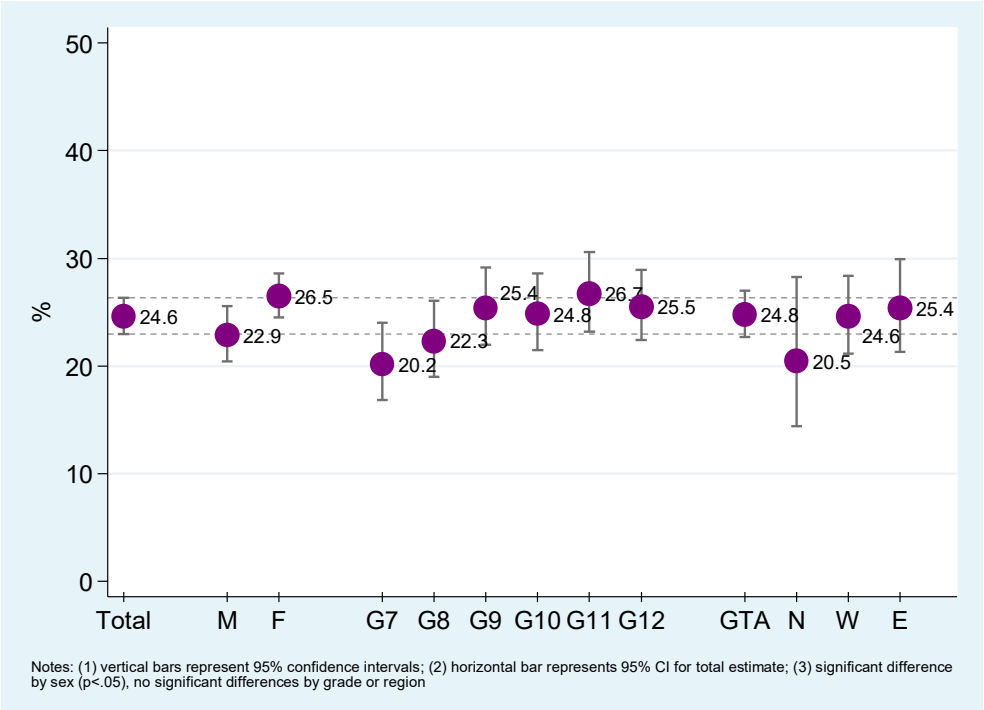
2019 (Grades 7–12):

- One-quarter (24.6%) of students report they do not always wear a seatbelt when in a vehicle. This estimate represents about 198,500 students in Ontario.
- Females (26.5%) are significantly more likely than males (22.9%) to report not always wearing a seatbelt when in a vehicle.
- There are no significant grade differences.
- There are no significant regional differences.

2011–2019 (Grades 7–12):

- The percentage of students who report not always wearing a seatbelt when in a vehicle has remained relatively stable since 2011, the first year of monitoring, at about 24%-28%.
- No subgroup shows a significant change since 2011.

Figure 3.2.22
Percentage Reporting Not Always Wearing a Seatbelt When in a Vehicle by Sex, Grade, and Region, 2019 OSDUHS



Notes: (1) vertical bars represent 95% confidence intervals; (2) horizontal bar represents 95% CI for total estimate; (3) significant difference by sex (p<.05), no significant differences by grade or region

3.2.13 Texting While Driving

(Figures 3.2.23, 3.2.24; Table A3.2.12)

Starting in 2013, the OSDUHS asked a random half sample of secondary students about texting and driving. The question was "*In the last 12 months, how many times did you send or read a text message or an email while you were driving a vehicle?*" Here we present the percentage of drivers in grades 10, 11, and 12 who report texting while driving a vehicle at least once in the past year.

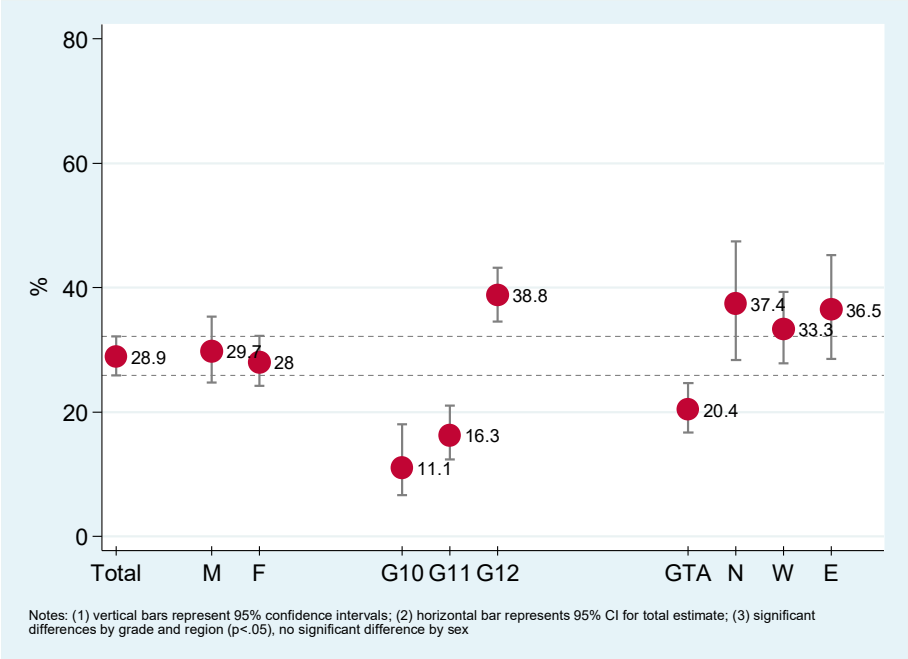
2019 (Drivers in Grades 10–12):

- Among drivers in grades 10–12, over one-quarter (28.9%) report texting while driving at least once in the past year. This estimate represents about 73,300 adolescent drivers in Ontario.
- Male drivers (29.7%) and female drivers (28.0%) are equally likely to report texting while driving at least once in the past year.
- There are significant grade differences showing that drivers in 12th grade (38.8%) are most likely to report texting while driving.
- There are significant regional differences showing that drivers in the Greater Toronto Area (20.4%) are least likely to report texting while driving compared with students in the other three regions (33%-37%).

2013–2019 (Drivers in Grades 10–12):

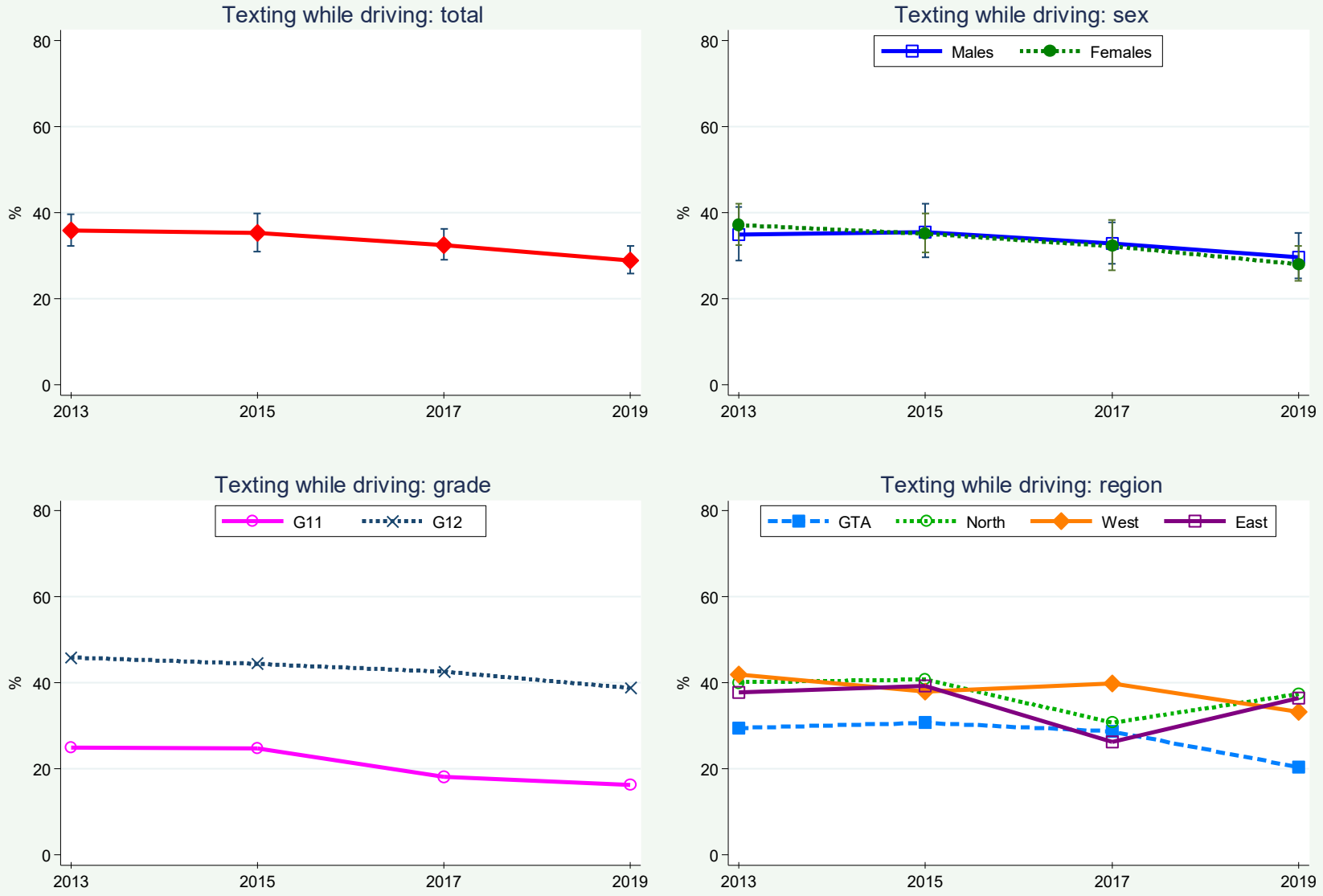
- The percentage of adolescent drivers reporting texting while driving did not significantly change between 2017 (32.5%) and 2019 (28.9%). However, the current estimate is significantly lower than the estimate from 2013 (35.9%), the first year of monitoring.
- Among the subgroups, females and students in the Greater Toronto Area show a significant decrease since 2013.

Figure 3.2.23
Percentage of Drivers in Grades 10–12 Reporting Texting While Driving at Least Once in the Past Year by Sex, Grade, and Region, 2019 OSDUHS



Notes: (1) vertical bars represent 95% confidence intervals; (2) horizontal bar represents 95% CI for total estimate; (3) significant differences by grade and region (p<.05), no significant difference by sex

Figure 3.2.24
Percentage Reporting of Drivers in Grades 10–12 Reporting Texting While Driving at Least Once in the Past Year, 2013–2019 OSDUHS



Note: Grade 10 not shown due to suppressed estimates between 2013 and 2017

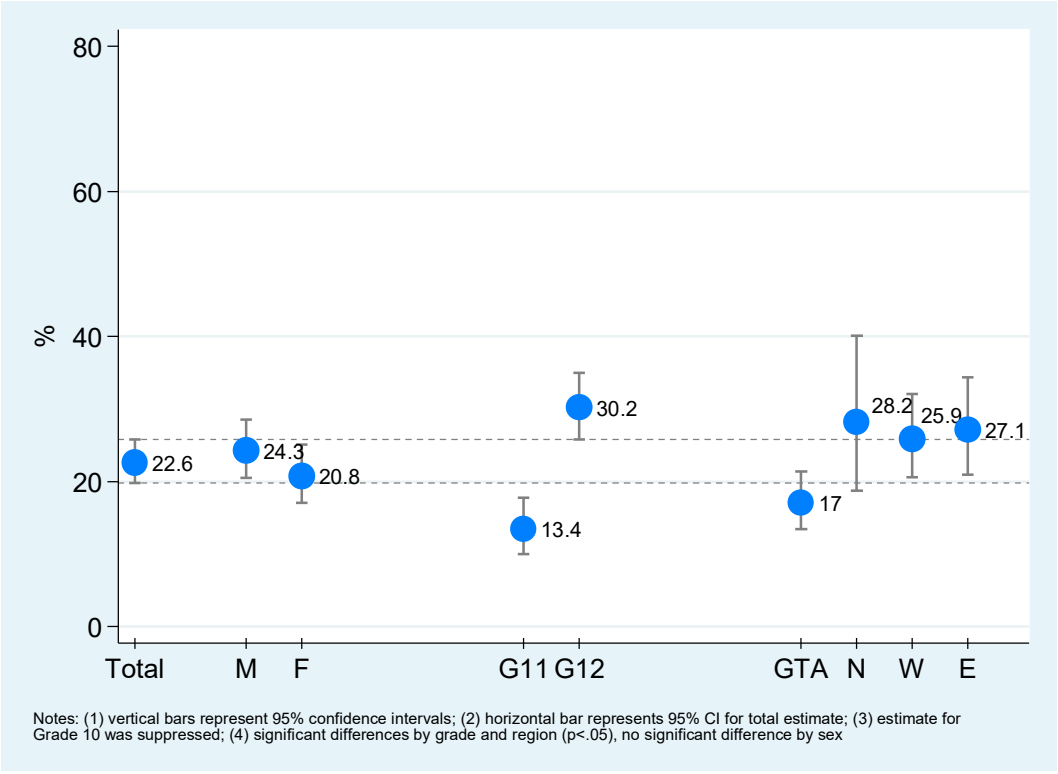
3.2.14 Talking on a Hand-Held Phone While Driving (Figure 3.2.25)

Starting in 2019, the OSDUHS asked a random half sample of secondary students about texting and driving. The question was "*In the last 12 months, how many times did you talk on a hand-held cell phone while you were driving a vehicle?*" Here we present the percentage of drivers in grades 10, 11, and 12 who report this behaviour at least once in the past year.

2019 (Drivers in Grades 10–12):

- Among drivers in grades 10–12, almost one-quarter (22.6%) report talking on a hand-held phone while driving at least once in the past year. This estimate represents about 57,200 adolescent drivers in Ontario.
- Male drivers (24.3%) and female drivers (20.8%) are equally likely to report talking on a hand-held phone while driving.
- There are significant grade differences showing that drivers in 12th grade (30.2%) are most likely to report talking on a hand-held phone while driving.
- There are significant regional differences showing that drivers in the Greater Toronto Area (17.0%) are least likely to report talking on a hand-held phone while driving compared with students in the other three regions (26%-28%).

Figure 3.2.25
Percentage of Drivers in Grades 10–12 Reporting Talking on a Hand-Held Phone While Driving at Least Once in the Past Year by Sex, Grade, and Region, 2019 OSDUHS



Notes: (1) vertical bars represent 95% confidence intervals; (2) horizontal bar represents 95% CI for total estimate; (3) estimate for Grade 10 was suppressed; (4) significant differences by grade and region (p<.05), no significant difference by sex

3.2.15 Vehicle Collision as a Driver

(Figure 3.2.26)

Starting in 2011, the OSDUHS asked students about being involved in a collision as a driver. The question was "*In the last 12 months, how many times were you in a car accident involving any kind of injury to you or to another person, or damage to the vehicle, while you were driving?*" Here we present the percentage of drivers in grades 10, 11, and 12 who report being involved in a collision, as a driver, at least once in the past year.

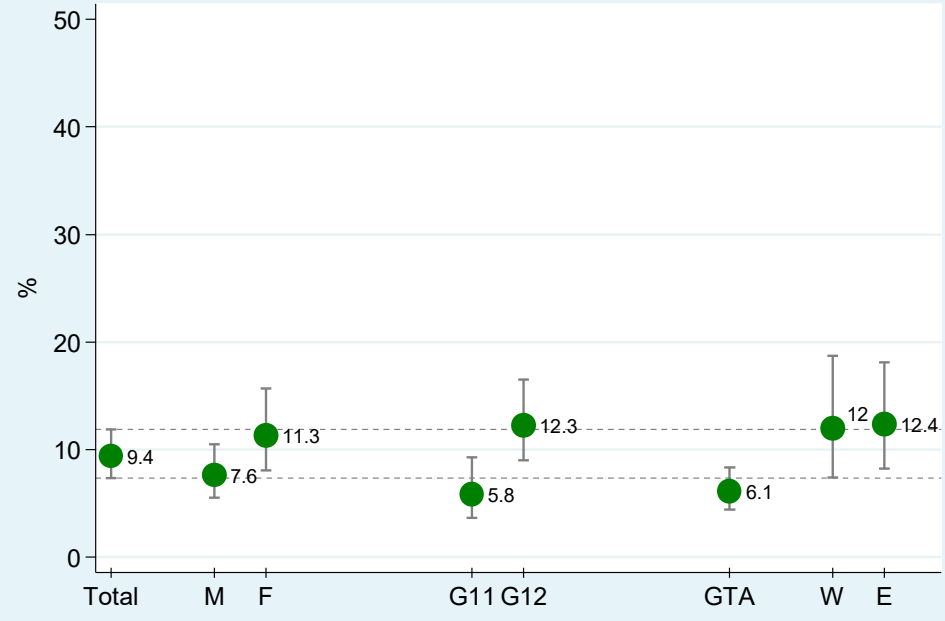
2019 (Drivers in Grades 10–12):

- Among drivers in grades 10–12, about one-in-eleven (9.4%) report having been involved in a collision as a driver at least once in the past year. This percentage represents an estimated 23,700 adolescent drivers.
- Male drivers (7.6%) and female drivers (11.3%) are equally likely to report involvement in a collision at least once in the past year.
- There is a significant difference by grade showing that drivers in 12th grade (12.3%) are most likely to report involvement in a collision at least once in the past year.
- There is significant regional variation showing that drivers in the Greater Toronto Area (6.1%) are least likely to report involvement in a collision compared with drivers in the other regions (about 12%).

2011–2019 (Drivers in Grades 10–12):

- The percentage of drivers who report having been involved in a collision in the past year has been stable since 2011, at about 8%–10%.

Figure 3.2.26
Percentage of Drivers in Grades 10–12 Reporting Having Been Involved in a Vehicle Collision as a Driver at Least Once in the Past Year by Sex, Grade, and Region, 2019 OSDUHS



Notes: (1) vertical bars represent 95% confidence intervals; (2) horizontal bar represents 95% CI for total estimate; (3) estimates for Grade 10 and the North were suppressed; (4) significant differences by grade and region (p<.05), no significant difference by sex

3.3 HEALTH CARE UTILIZATION

3.3.1 Use of Drugs for Medical Reasons

(Figures 3.3.1–3.3.3; Tables A3.3.3–A3.3.5)

This section presents past year prevalence estimates for three types of prescription drug classes used for medical reasons: tranquillizers/sedatives (asked of students in grades 9–12 only), drugs to treat ADHD, and opioid pain relievers. The medical tranquillizer question dates back to 1977, whereas the latter two drug classes were first introduced in the 2007 cycle. The following questions were asked:

- *Sedatives or tranquillizers are sometimes prescribed by doctors to help people sleep, calm them down, or to relax their muscles. In the last 12 months, how often did you use sedatives or tranquillizers (such as Xanax, Valium, Ativan) with a prescription or because a doctor told you to take them?*[74]

- *Sometimes doctors give medicine to students who are hyperactive or have problems concentrating in school. This is called Attention Deficit Hyperactivity Disorder (ADHD). In the last 12 months, how often did you use medicine to treat ADHD (such as Adderall, Ritalin, Concerta, Dexedrine) with a prescription or because a doctor told you to take it?*

- *In the last 12 months, how often did you use pain relief pills (such as Percocet, Percodan, Tylenol #3, Demerol, Dilaudid, OxyNeo, codeine) with a prescription or because a doctor told you to take them? (We do not mean regular Tylenol, Advil, or Aspirin that anyone can buy in a drugstore.)*

2019:

- Among all secondary students, 2.7% used tranquillizers/sedatives medically (by prescription) at least once in the past year (an estimated 18,400 students in grades 9–12 in Ontario).

- Among all students, 3.9% used an ADHD drug medically (an estimated 38,400 students in grades 7–12).

- Among all students, 20.3% used opioid pain relievers medically (an estimated 163,300 students in grades 7–12).

- Females are significantly more likely than males to report the medical use of tranquillizers/sedatives (3.4% vs. 2.0%, respectively), as well as opioid pain relievers (22.0% vs. 18.7%, respectively). Males are significantly more likely than females to report the medical use of a drug to treat ADHD (5.3% vs. 2.5%, respectively).

- Older students are significantly more likely than younger students to use tranquillizers/sedatives and opioid pain relievers medically. Despite some variation, ADHD drug use does not significantly differ by grade.

- The medical use of only one of these three drug classes significantly differs by region. Students in the Greater Toronto Area (2.2%) are least likely to use ADHD drugs medically compared with students in the other three regions (5%-6%).

[74] This question was asked of students in grades 9–12 only, and was not asked of 7th and 8th graders.

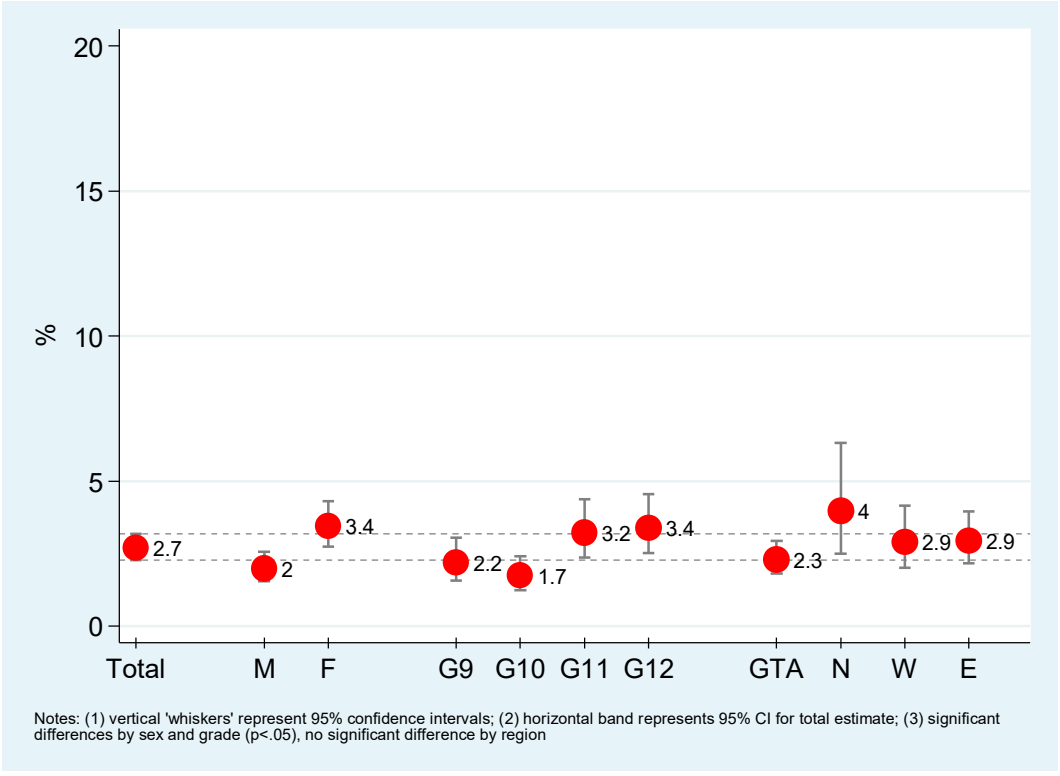
1999–2019:

- The medical use of tranquillizers/sedatives has not significantly changed since 1999, remaining at about 3%-5%.
- The medical use of ADHD drugs shows a small, but significant, increase since 2007 (when monitoring first began), from 2.3% to 3.9%. The increase is evident among males (3.2% to 5.3%), but not females.
- The medical use of opioid pain relievers has remained relatively stable since 2011 at about 18%-21%. However, the current estimate is significantly lower than the estimates seen over a decade ago (41% in 2007, and 32% in 2009). This decrease is evident among all subgroups.

1977–2019 (Grades 9 and 11 only):

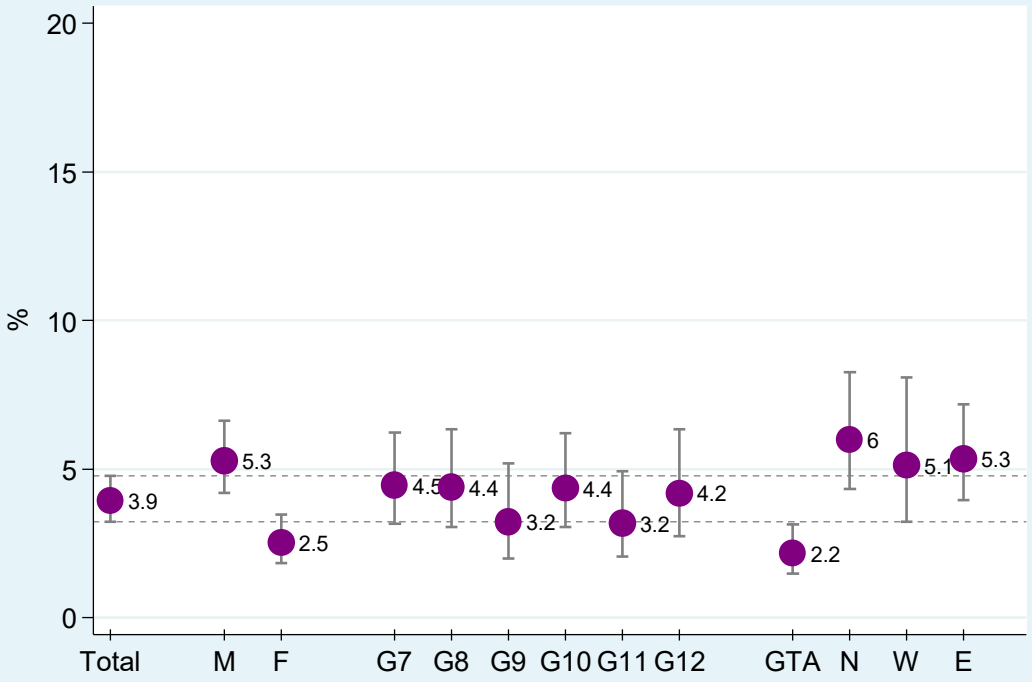
- Looking back over the past four decades, the medical use of tranquillizers/sedatives peaked in the late 1970s at about 10%, declined during the late 1980s, and has remained stable since then at about 3%-5%.

Figure 3.3.1
Percentage Reporting Medical Use Tranquillizers/Sedatives in the Past Year by Sex, Grade, and Region, 2019 OSDUHS (Grades 9–12 only)



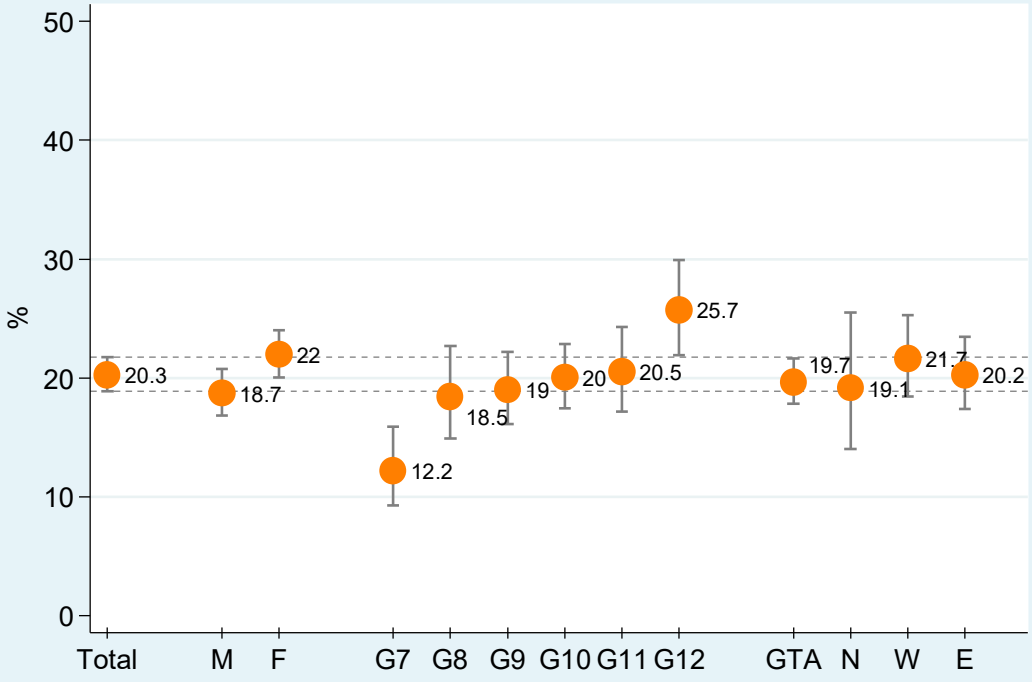
Notes: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal band represents 95% CI for total estimate; (3) significant differences by sex and grade (p<.05), no significant difference by region

Figure 3.3.2
Percentage Reporting Medical Use of ADHD Drugs in the Past Year by Sex, Grade, and Region, 2019 OSDUHS



Notes: (1) vertical bars represent 95% confidence intervals; (2) horizontal bar represents 95% CI for total estimate; (3) significant differences by sex and region (p<.05), no significant difference by grade

Figure 3.3.3
Percentage Reporting Medical Use of Prescription Opioid Pain Relievers in the Past Year by Sex, Grade, and Region, 2019 OSDUHS



Notes: (1) vertical bars represent 95% confidence intervals; (2) horizontal bar represents 95% CI for total estimate; (3) significant differences by sex and grade (p<.05), no significant difference by region

3.3.2 Prescribed Medication to Treat Anxiety or Depression

(Figures 3.3.4, 3.3.5; Table A3.3.6)

Starting in 2001, the OSDUHS has asked a random half sample of students in grades 9–12 about prescription medication for anxiety or depression. The question used was *"In the last 12 months, have you been prescribed medicine to treat anxiety or depression?"* The four response options were: *Yes, for anxiety only*; *Yes, for depression only*; *Yes, for both*; or *No*.

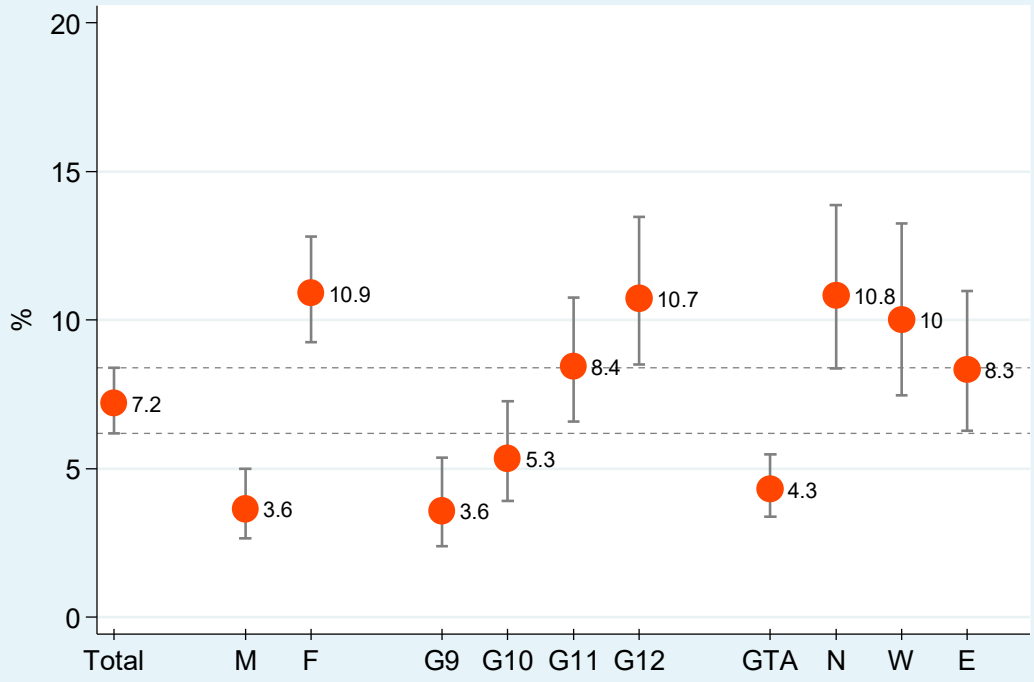
2019 (Grades 9–12):

- An estimated 2.3% of secondary students report having been prescribed medication to treat anxiety in the past year, 1.2% were prescribed medication to treat depression, and 3.6% were prescribed medication for *both* anxiety and depression.
- Combining the response options, an estimated 7.2% of secondary students report having been prescribed medication to treat anxiety, depression, or both conditions. This represents about 54,000 students in grades 9–12 in Ontario.
- Females (10.9%) are significantly more likely than males (3.6%) to report having been prescribed medication to treat anxiety and/or depression in the past year.
- The likelihood of having been prescribed medication to treat anxiety and/or depression significantly increases with grade, from 3.6% of 9th graders up to 10.7% of 12th graders.
- Among the four regions, students in the Greater Toronto Area (4.3%) are least likely, whereas those in the North (10.8%) and West (10.0%) are most likely, to report having been prescribed medication to treat anxiety and/or depression in the past year.

2001–2019 (Grades 9–12):

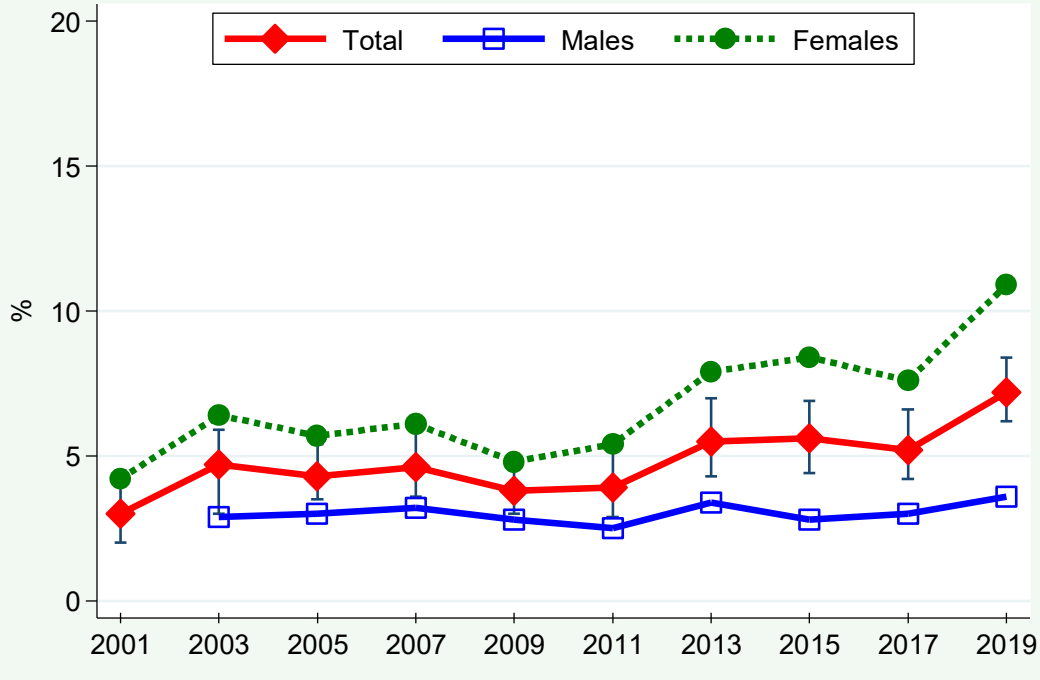
- The percentage of secondary students who report having been prescribed medication to treat anxiety, depression, or both did not significantly change between 2017 (5.2%) and 2019 (7.2%), and has been stable since 2013. However, the current estimate is significantly higher than in 2001 (3.0%), the first year of monitoring, and other estimates seen during the 2000s.
- Among the subgroups, significant increases since 2001 are evident for females, students in grade 12, and those in the North, West, and East regions.

Figure 3.3.4
Percentage Reporting Having Been Prescribed Medication to Treat Anxiety, Depression or Both in the Past Year by Sex, Grade, and Region, 2019 OSDUHS (Grades 9–12 only)



Notes: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal band represents 95% CI for total estimate; (3) significant differences by sex, grade, and region (p<.05)

Figure 3.3.5
Percentage Reporting Having Been Prescribed Medication to Treat Anxiety, Depression or Both in the Past Year by Sex, 2001–2019 OSDUHS (Grades 9–12 only)



Notes: (1) vertical bars represent 95% confidence intervals for the total estimates; (2) 2001 estimate for males was suppressed

3.3.3 Mental Health Care Visit

(Figures 3.3.6, 3.3.7; Table A3.3.7)

Starting in 1999, the OSDUHS asked a random half sample of students whether they consulted a professional about a mental health issue. The question was "*In the last 12 months, how often have you seen a doctor, nurse, or counsellor about your emotional or mental health?*" In this section, we present the percentage of students who report at least one mental health care visit during the past year.

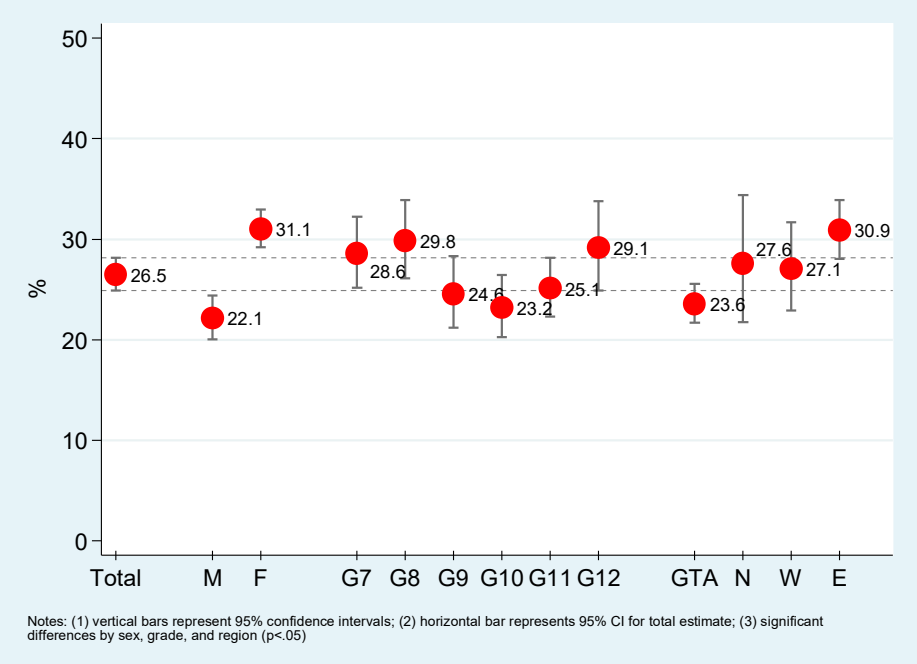
2019 (Grades 7–12):

- One-quarter (26.5%) of students report visiting a professional about a mental health issue at least once in the past year. This estimate represents about 260,900 students in Ontario.
- Females (31.1%) are significantly more likely than males (22.1%) to report visiting a professional about a mental health issue in the past year.
- There are significant grade differences showing that 7th and 8th graders, as well as 12th graders, are more likely to visit a mental health professional compared with students in grades 9 to 11.
- Students in the Greater Toronto Area (23.6%) are least likely, whereas students in the East (30.9%) are most likely, to visit a mental health professional.

1999–2019 (Grades 7–12):

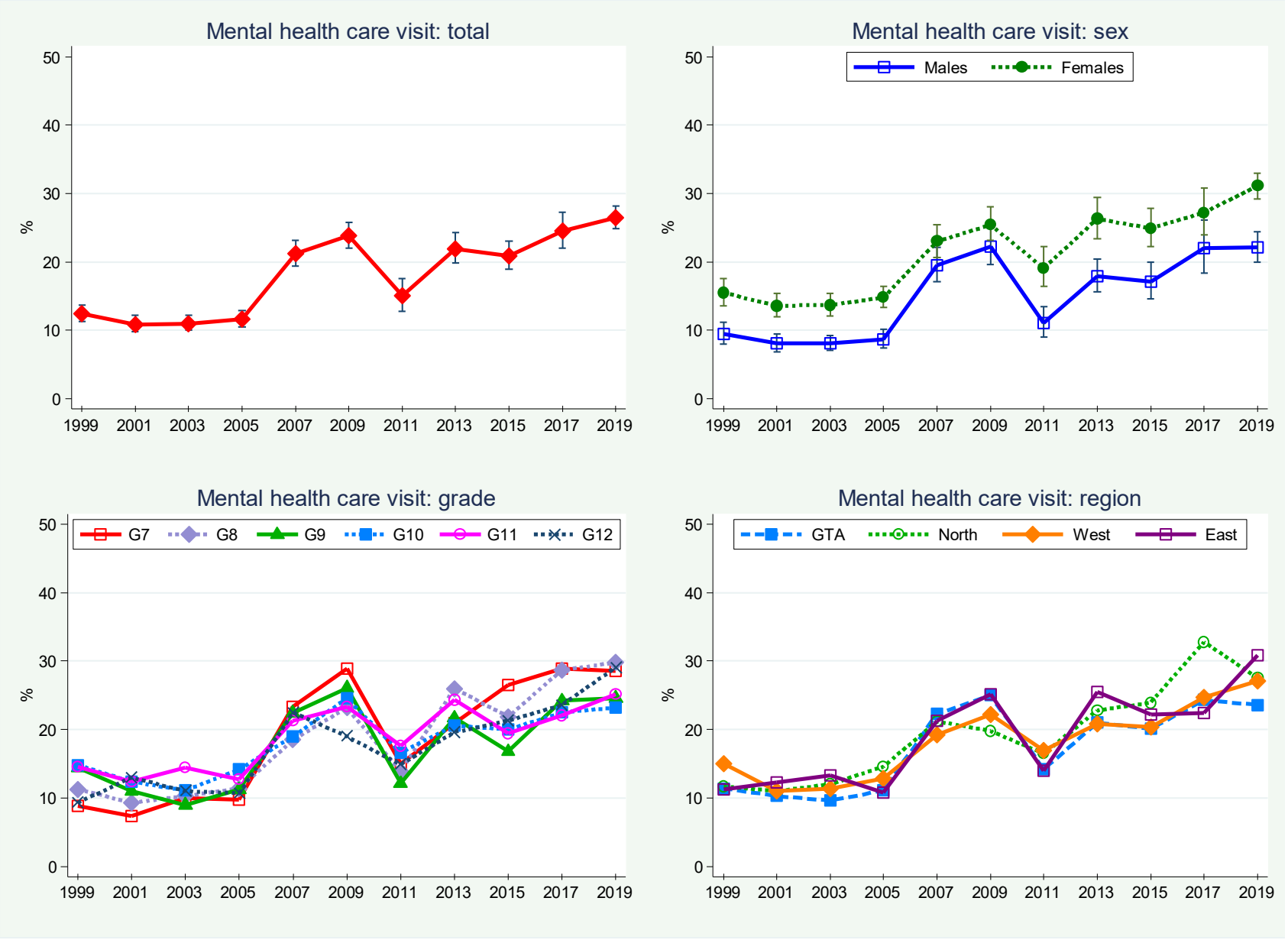
- The percentage of students who report visiting a professional about a mental health issue has remained stable during the past few years, at about 21%-26%. However, the current estimate is significantly higher than 1999 and the early-to-mid 2000s (about 11%-12%).
- All subgroups show stability during the past few years, but significant increases since 1999 and the early-to-mid 2000s.

Figure 3.3.6
Percentage Reporting at Least One Mental Health Care Visit in the Past Year by Sex, Grade, and Region, 2019 OSDUHS



Notes: (1) vertical bars represent 95% confidence intervals; (2) horizontal bar represents 95% CI for total estimate; (3) significant differences by sex, grade, and region (p<.05)

Figure 3.3.7
Percentage Reporting at Least One Mental Health Care Visit in the Past Year, 1999–2019 OSDUHS



3.3.4 Sought Counselling Over the Telephone or the Internet

(Figure 3.3.8; Table A3.3.7)

Between 2005 and 2009, the OSDUHS asked a random half sample of students whether they used a telephone counselling helpline in the past year. In 2011, the question was expanded to include websites. The question was *"In the last 12 months, have you phoned a telephone crisis helpline or gone on a website (such as 'KidsHelpPhone.ca') because you needed to talk to a counsellor about a problem?"* The response options were: *Yes, I've phoned a helpline only*; *Yes, I've posted a question on a website only*; *Yes, I've phoned a helpline and posted a question on a website*; or *No*.

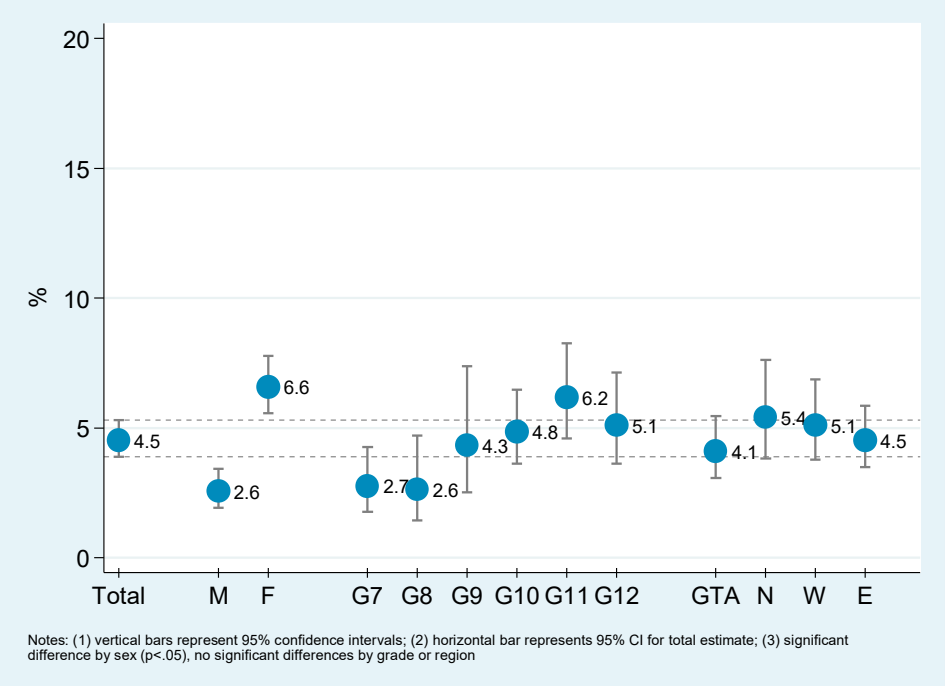
2019 (Grades 7–12):

- An estimated 3.0% of students report using a telephone counselling helpline in the past year. An estimated 2.0% report seeking help from a website. Overall, about 4.5% report using a phone helpline, a website, or both to seek counselling (roughly 44,600 students).
- Females (6.6%) are more likely than males (2.6%) to seek counselling either over the phone, the Internet, or both.
- Despite some variation, there are no significant differences among the grades in seeking counselling over the phone, the Internet, or both.
- There are no significant regional differences.

2011–2019 (Grades 7–12):

- The percentage of students who report using a helpline, a website, or both in 2019 (4.5%) is significantly higher than the estimates from 2011 to 2015 (about 2%-3%). Increases are evident for females and older students.

Figure 3.3.8
Percentage Reporting Seeking Counselling Over the Phone, Over the Internet, or Both Ways in the Past Year by Sex, Grade, and Region, 2019 OSDUHS



Notes: (1) vertical bars represent 95% confidence intervals; (2) horizontal bar represents 95% CI for total estimate; (3) significant difference by sex (p<.05), no significant differences by grade or region

3.3.5 Unmet Need for Mental Health Support (Figure 3.3.9; Table A3.3.8)

Starting in 2013, the OSDUHS asked students if, during the last 12 months, they wanted to talk to someone about a mental health problem, but did not know where to turn. The question, asked of a random half sample, was: "*In the last 12 months, was there a time when you wanted to talk to someone about a mental health or emotional problem you had, but did not know where to turn?*" The response options were yes or no.

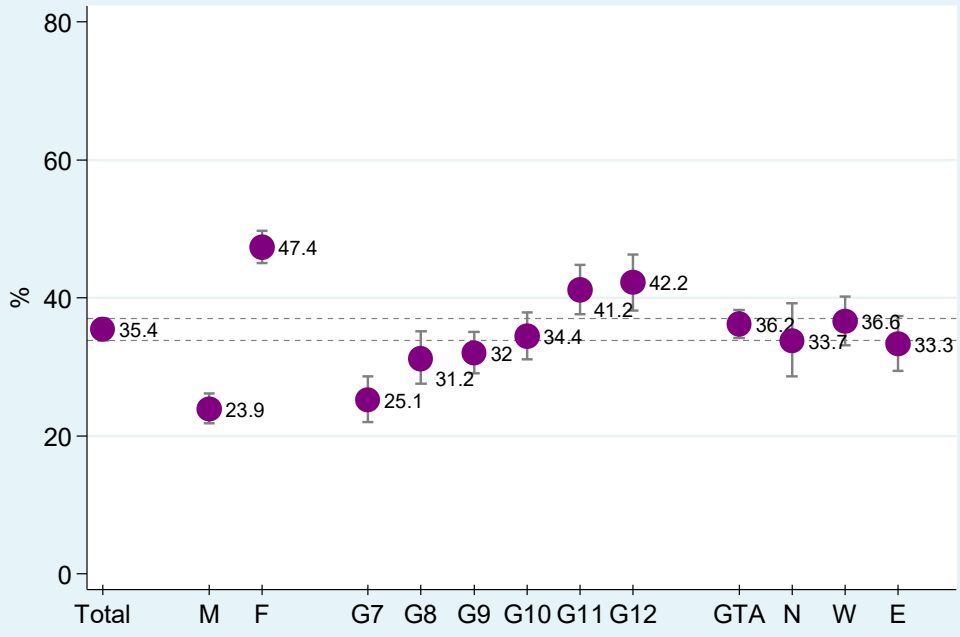
2019 (Grades 7–12):

- Over one-third (35.4%) of students report that they wanted to talk to someone about a mental health problem, but did not know where to turn. This estimate represents about 348,700 students.
- Females (47.4%) are twice as likely as males (23.9%) to report an unmet need for mental health support.
- There are significant increases with grade, from 25.1% of 7th graders up to about 42.2% of 12th graders reporting an unmet need for mental health support.
- There are no significant regional differences.

2013–2019 (Grades 7–12):

- The percentage of students reporting an unmet need for mental health support did not change between 2017 (31.2%) and 2019 (35.4%), but the current estimate is significantly higher than in 2013 (27.9%), the first year of monitoring.
- Among the subgroups, males, females, older grades, and most regions show significant increases since 2013.

Figure 3.3.9
Percentage Reporting an Unmet Need for Mental Health Support in the Past Year by Sex, Grade, and Region, 2019 OSDUHS



Notes: (1) vertical bars represent 95% confidence intervals; (2) horizontal bar represents 95% CI for total estimate; (3) significant differences by sex and grade (p<.05), no significant difference by region

3.3.6 Help-Seeking Preference

(Figure 3.3.10)

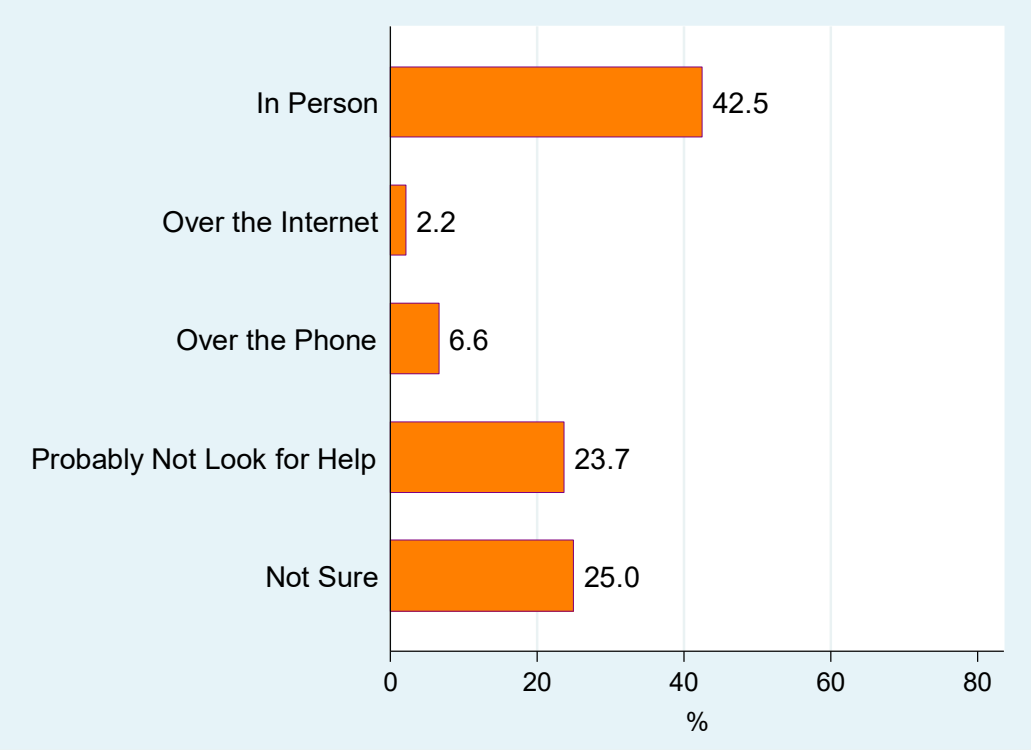
Starting in 2019, the OSDUHS asked students about how they would prefer to receive help for a mental health problem. The question, asked of a random half sample, was "*If you thought you needed professional help or advice to deal with an emotional problem, such as stress, sadness, depression, or an addiction problem, how would you prefer to get help?" The five response options were: I would prefer to get help in person (talk to a counsellor, doctor, nurse); I would prefer to get help over the phone (call a telephone helpline); I would prefer to get help over the Internet (visit a website, online chat/text); I would probably not look for professional help; or Not sure.*

2019 (Grades 7–12):

- Less than half (42.5%) of students would prefer to receive help for a mental health problem in person. About 2.2% would prefer to receive help over the phone, and 6.6% would prefer over the Internet (website or chat). About one-quarter (23.7%) of students would probably not look for professional help, and another quarter (25.0%) are not sure how they would prefer to receive help.

- Females are significantly more likely than males to prefer to receive help in person (47.0% vs. 38.2%, respectively). Males and females are equally likely to prefer to receive help over the Internet, the phone, or probably not look for professional help. Males are significantly more likely than females to be unsure of their preference (29.5% vs. 20.3%, respectively).

Figure 3.3.10
Percentage Reporting How They Would Prefer to Receive Help for a Mental Health Problem, 2019 OSDUHS (Grades 7–12)



3.4 MENTAL HEALTH

3.4.1 Self-Rated Mental Health

(Figures 3.4.1–3.4.3; Table A3.4.1)

Self-rated mental health is a simple, yet valid, way of measuring mental health status in a population survey (Mawani & Gilmour, 2010). Starting in 2007, we asked a random half sample of students "*How would you rate your emotional or mental health?*" The response options were: *Poor*, *Fair*, *Good*, *Very good*, or *Excellent*. Here we describe the percentage of students who rate their mental health as fair or poor.

2019 (Grades 7–12):

- About one-fifth (18.8%) of students rate their mental health as excellent and over one-quarter (27.5%) rate their mental health as very good. In contrast, over one-quarter (26.5%) rate their mental health as fair or poor. This estimate represents about 260,500 students in Ontario.
- Females (35.4%) are significantly more likely than males (17.9%) to rate their mental health as fair or poor.
- Ratings of fair or poor mental health significantly increase with grade, from 17.3% among 7th graders to 32.7% among 12th graders.
- There are no significant regional differences in the likelihood of rating one's mental health as fair or poor.

2007–2019 (Grades 7–12):

- The percentage of students who rate their mental health as fair or poor significantly increased between 2017 (18.8%) and 2019 (26.5%). The current estimate is the highest level seen since monitoring began in 2007 (11.4%).
- Among the subgroups, ratings of fair or poor mental health significantly increased between 2017 and 2019 among females, males, most of the grades, and students in the Greater Toronto Area. Increases over the past decade are evident for all subgroups.

Figure 3.4.1
Self-Rated Mental Health, 2019 OSDUHS (Grades 7–12)

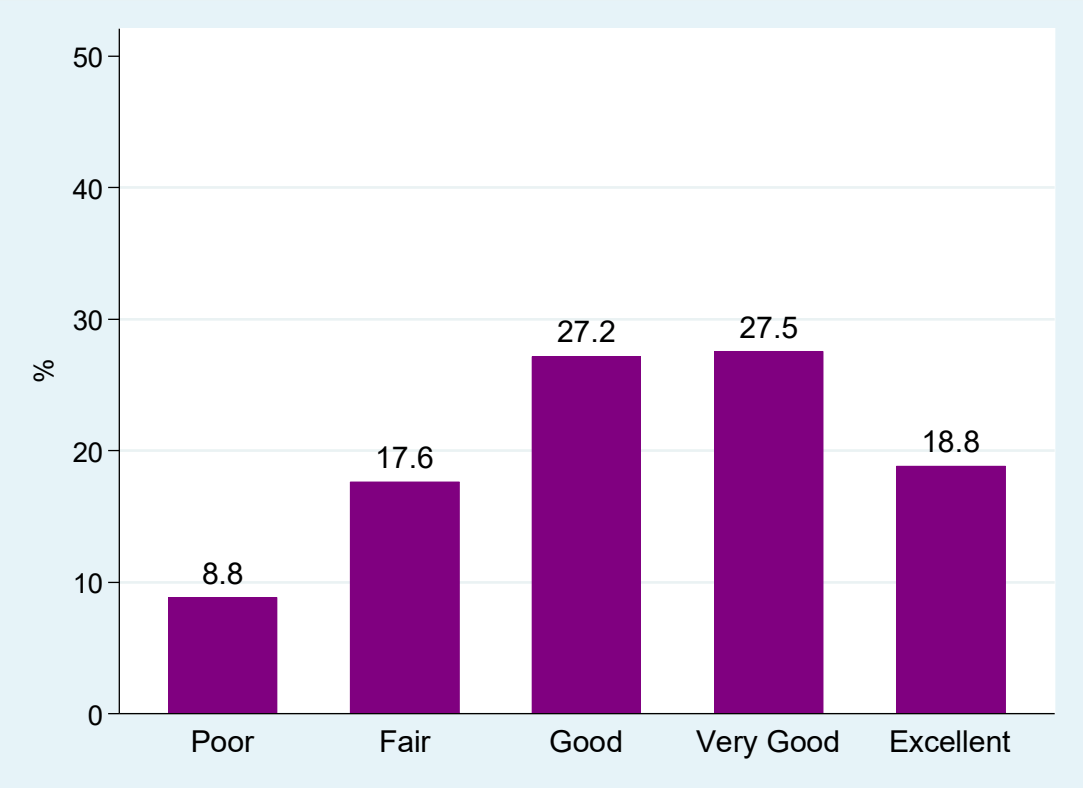
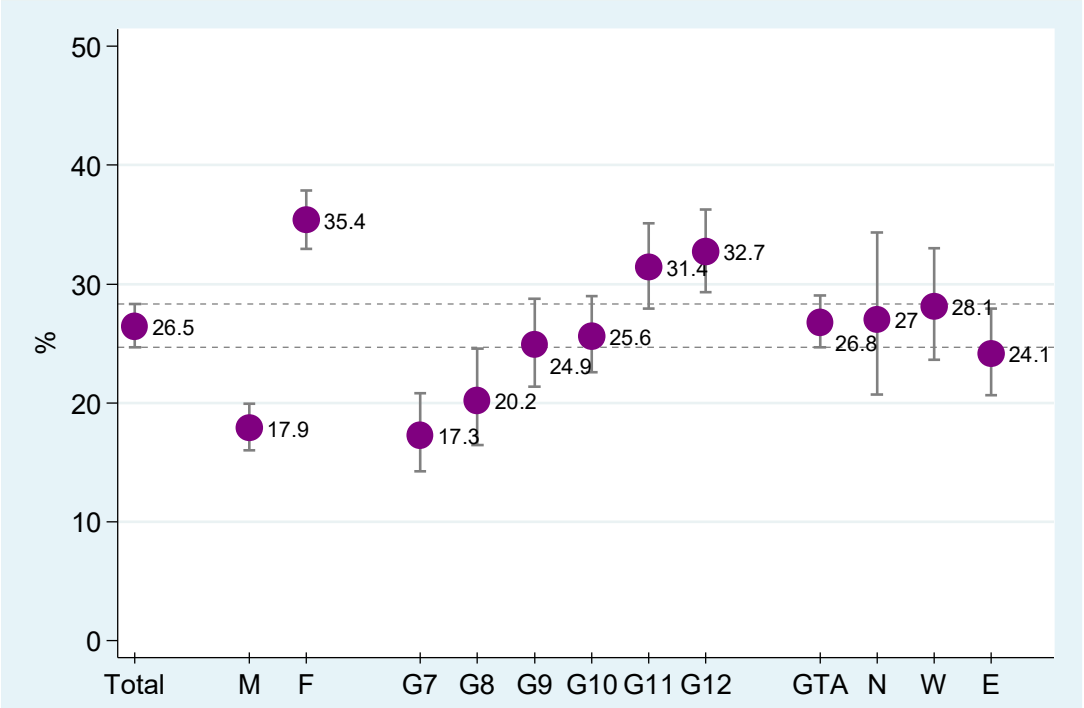
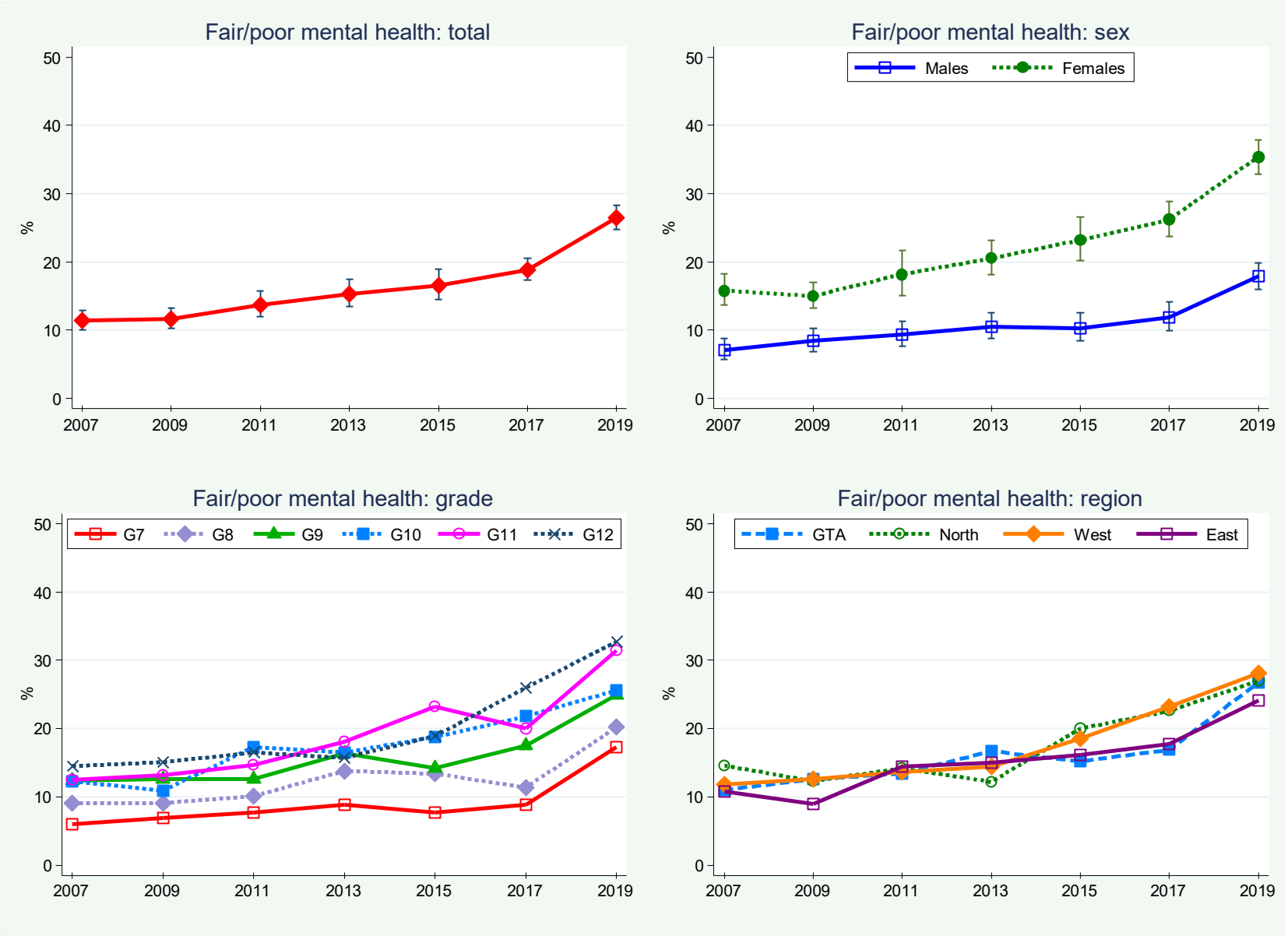


Figure 3.4.2
Percentage Reporting Fair or Poor Mental Health by Sex, Grade, and Region, 2019 OSDUHS



Notes: (1) vertical bars represent 95% confidence intervals; (2) horizontal bar represents 95% CI for total estimate; (3) significant differences by sex and grade (p<.05), no significant difference by region

Figure 3.4.3
Percentage Reporting Fair or Poor Mental Health, 2007–2019 OSDUHS (Grades 7–12)



3.4.2 Low Self-Esteem

(Figure 3.4.4; Table A3.4.2)

Starting in 2015, a global measure of self-esteem or self-liking from the *Rosenberg Self-Esteem Scale* (Rosenberg, Schooler, & Schoenbach, 1989) was included in the survey. A random half sample of students were asked "*How much do you agree or disagree with the following statement? On the whole, I am satisfied with myself.*" Those who responded "strongly disagree" were considered to have low self-esteem.

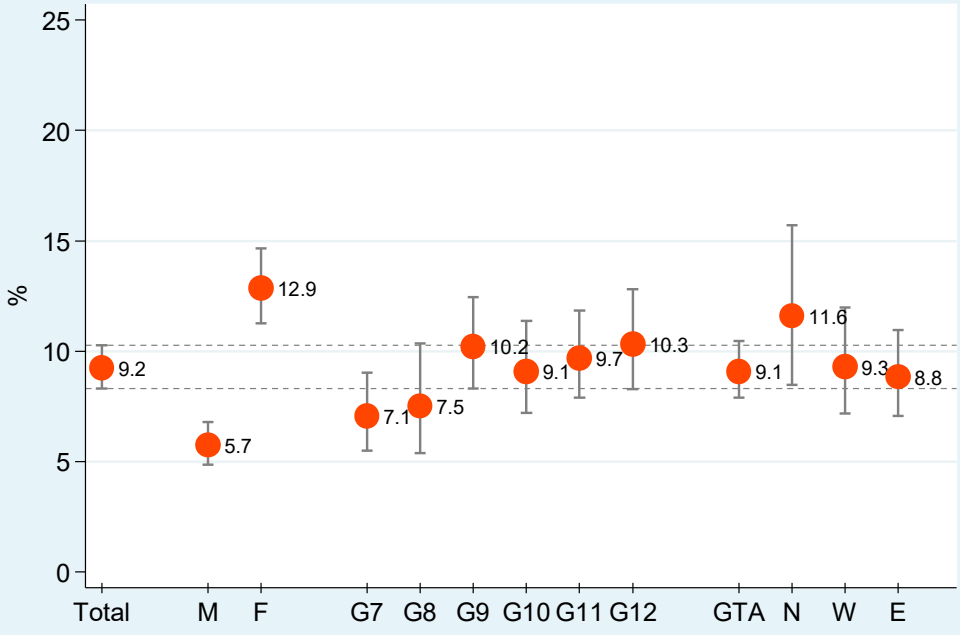
2019 (Grades 7–12):

- The majority of students are satisfied with themselves (29.3% "strongly agree" and 43.4% "somewhat agree" with the statement).
- About one-in-eleven (9.2%) students indicate low self-esteem. This estimate represents about 90,200 students.
- Females are twice as likely as males to indicate low self-esteem (12.9% vs. 5.7%, respectively).
- Despite some variation, there are no significant grade differences.
- Despite some variation, there are no significant regional differences.

2015–2019 (Grades 7–12):

- The percentage of students indicating low self-esteem is significantly higher in 2019 (9.2%) than in 2015 (7.0%) and 2017 (6.5%).
- Among the subgroups, females, students in the Greater Toronto Area and the North region show significant increases.

Figure 3.4.4
Percentage Reporting Low Self-Esteem by Sex, Grade, and Region, 2019 OSDUHS



Notes: (1) vertical bars represent 95% confidence intervals; (2) horizontal bar represents 95% CI for total estimate; (3) significant difference by sex (p<.05), no significant differences by grade or region

3.4.3 Elevated Stress

(Figures 3.4.5, 3.4.6; Table A3.4.3)

Starting in 2015, the OSDUHS included a question about the level of stress students experience. A random half sample of students were asked "*In the last 4 weeks, did you feel that you were under any stress, strain, or pressure?*" The response options were *Yes, almost more than I could take*; *Yes, a lot*; *Yes, some*; *Yes, a little*; or *Not at all*. Those who responded "Yes, almost more than I could take" or "Yes, a lot" are considered to be experiencing an elevated level of stress.

2019 (Grades 7–12):

- Only 15.3% of students report experiencing no stress in the past month. In contrast, 32.8% report an elevated level of stress. This percentage represents about 321,700 students.
- Females (42.2%) are twice as likely as males (23.8%) to report elevated stress.
- There are significant grade differences, from a low of 18.3% of 7th graders up to 43.6% of 12th graders reporting elevated stress.
- There are no significant regional differences.

2015–2019 (Grades 7–12):

- The percentage of students who report elevated stress remained stable between 2017 (30.5%) and 2019 (32.8%). However, the current estimate is significantly higher than 2015 (28.7%), the first year of monitoring.
- Among the subgroups, only 9th graders show a significant increase since 2015.

Figure 3.4.5
Percentage Reporting the Level of Stress Experienced in the Past Month, 2019 OSDUHS (Grades 7–12)

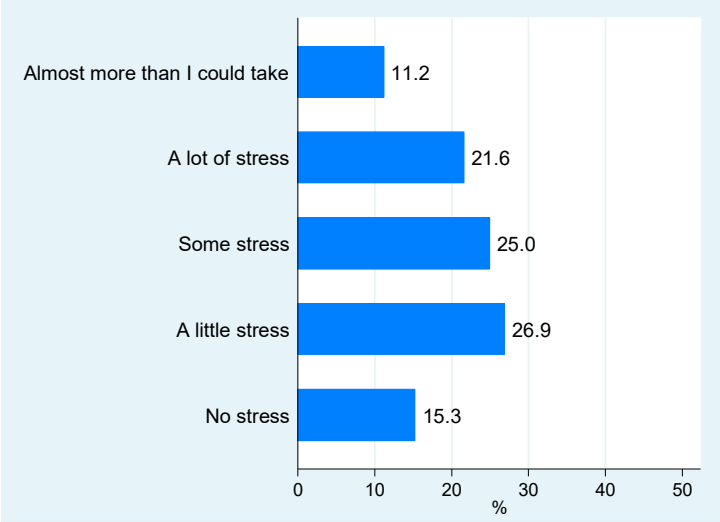
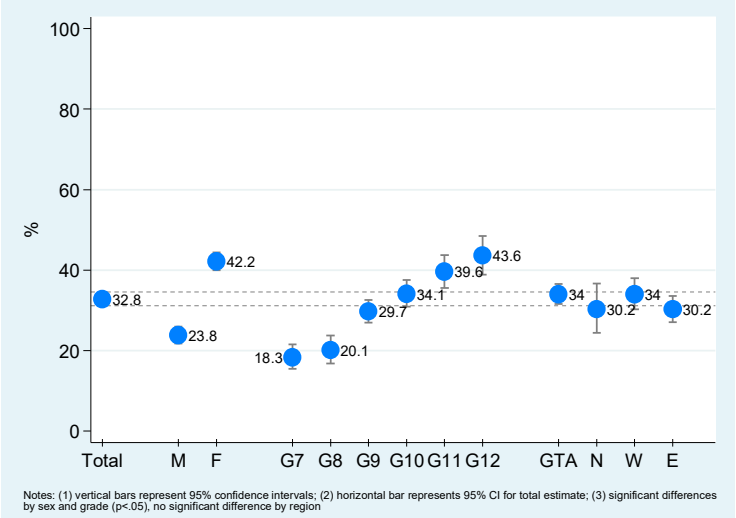


Figure 3.4.6
Percentage Reporting an Elevated Level of Stress Experienced in the Past Month by Sex, Grade, and Region, 2019 OSDUHS



3.4.4 Psychological Distress

(Figures 3.4.7–3.4.12; Tables A3.4.4-A3.4.6)

Starting in 2013,[75] the OSDUHS included the *Kessler 6-Item Psychological Distress Scale* (K6), which is a 6-item screening instrument designed to detect nonspecific psychological distress (symptoms of anxiety and depression) (Kessler et al., 2003). Although the K6 was first developed and calibrated for population health surveys of adults, the screener has been used in research with adolescents as well (Chan & Fung, 2014; Green, Gruber, Sampson, Zaslavsky, & Kessler, 2010; Li, Green, Kessler, & Zaslavsky, 2010; Peiper, Clayton, Wilson, & Illback, 2015). Note that this instrument is a screener not intended for clinical diagnoses.

Each of the six items in the K6 begins with the wording *"In the last 4 weeks, about how often did you…"* The following symptoms comprise the K6:

- *feel nervous*
- *feel hopeless*
- *feel restless or fidgety*
- *feel so depressed (sad) that nothing could cheer you up*
- *feel that everything was an effort, and*
- *feel worthless.*

Response categories are on a 5-point frequency scale ranging from (1) *None of the time* to (5) *All of the time*. Responses to each of the six items were rescaled ranging from 0 to 4. A summated score ranging from 0 to 24 was computed for students who answered all six items. Higher scores indicate higher levels of psychological distress. A cut-off score of eight or higher (of 24) was used to estimate the percentage experiencing a moderate-to-serious level of psychological distress (henceforth, called moderate psychological distress). A cut-off score of 13 or higher was used to estimate the percentage experiencing serious psychological distress.

2019 (Grades 7–12):

- The three most common K6 symptoms experienced by students are feeling restless or fidgety (22.1%), feeling nervous (21.9%), and feeling that everything was an effort (21.4%).
- Just under half (43.8%) of students meet the criteria for moderate psychological distress during the past month (representing about 417,600 Ontario students). One-in-five (20.6%) meet the criteria for serious psychological distress (representing about 196,000 Ontario students).
- Females are significantly more likely than males to indicate moderate psychological distress (56.6% vs. 31.4%, respectively), and serious distress (29.4% vs. 12.0%, respectively).
- Psychological distress significantly increases with grade, peaking in grades 11 and 12.
- There is no significant regional variation.

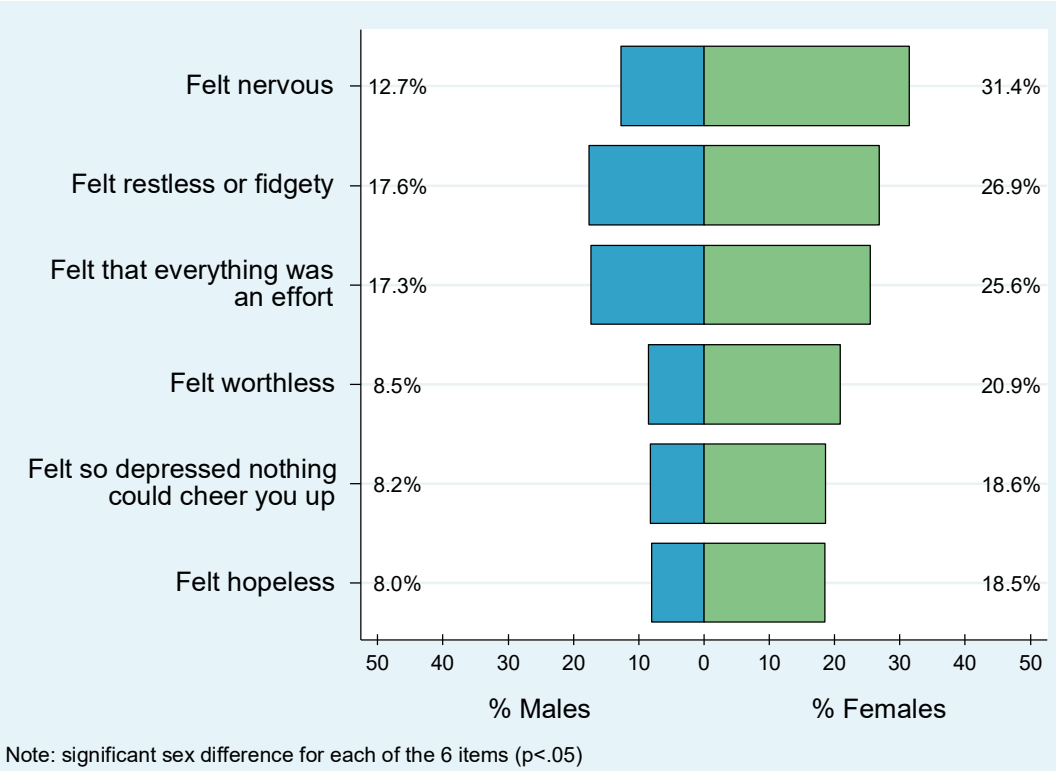
2013–2019 (Grades 7–12):

- While the percentage of students indicating moderate psychological distress increased numerically between 2017 and 2019 (from 38.7% to 43.8%), this increase was not statistically significant. However, the current estimate is significantly higher than estimates seen in 2015 (34.0%) and 2013 (23.5%). The increase over time is evident for all subgroups.
- The percentage indicating serious psychological distress significantly increased between 2017 and 2019, from 17.1% to 20.6%, reaching a record high. No subgroup significantly increased since 2017, but all show significant increases since 2013, the first year of monitoring.

[75] Between 1999 and 2011, the 12-item version of the General Health Questionnaire (GHQ12) was used to measure psychological distress. For various reasons (including a simpler response scale and one measuring absolute level rather than relative change), the OSDUHS transitioned to the Kessler 10-item scale (K10) to measure psychological distress in 2013. In 2015, the shorter Kessler 6-item scale (K6) was used because of its brevity. Note that the K6 is an abbreviated version of the K10.

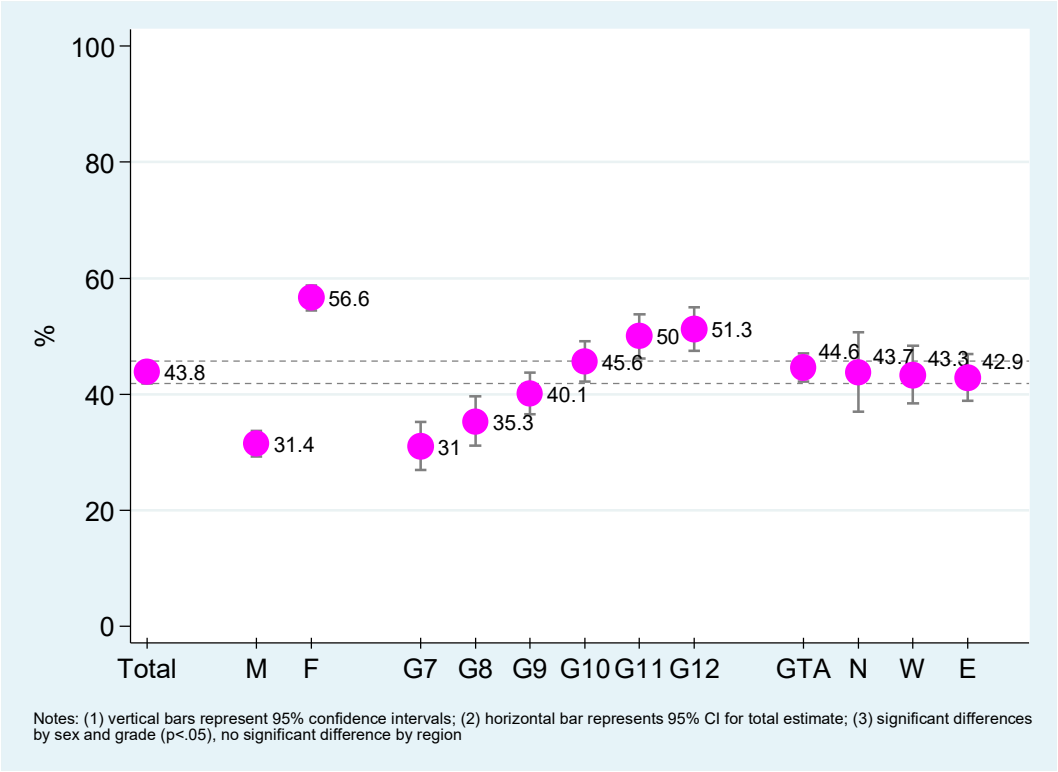
Figure 3.4.7
Kessler-6 (K6) Scale Symptoms of Psychological Distress Experienced "Most of the Time" or "All of the Time" in the Past Month, 2019 OSDUHS (Grades 7–12)

Figure 3.4.8
Kessler-6 (K6) Scale Symptoms of Psychological Distress Experienced "Most of the Time" or "All of the Time" in the Past Month by Sex, 2019 OSDUHS (Grades 7–12)



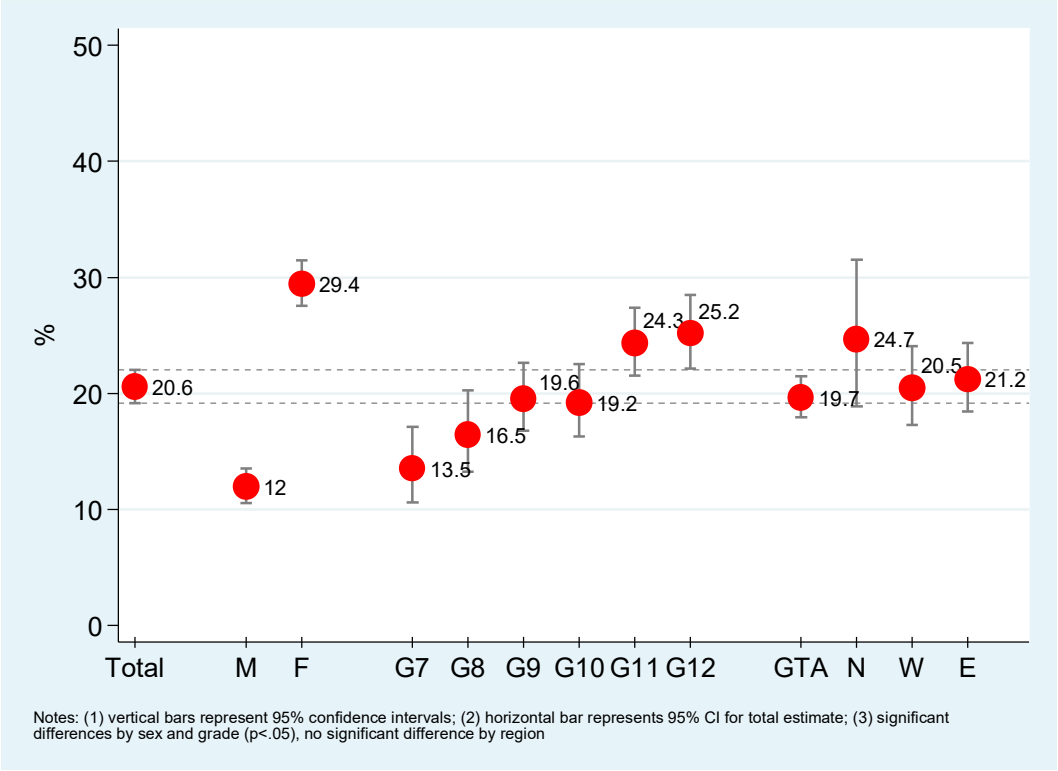
Note: significant sex difference for each of the 6 items (p<.05)

Figure 3.4.9
Percentage Indicating Moderate-to-Serious Psychological Distress (K6 Scale 8+) in the Past Month by Sex, Grade, and Region, 2019 OSDUHS



Notes: (1) vertical bars represent 95% confidence intervals; (2) horizontal bar represents 95% CI for total estimate; (3) significant differences by sex and grade (p<.05), no significant difference by region

Figure 3.4.10
Percentage Indicating Serious Psychological Distress (K6 Scale 13+) in the Past Month by Sex, Grade, and Region, 2019 OSDUHS



Notes: (1) vertical bars represent 95% confidence intervals; (2) horizontal bar represents 95% CI for total estimate; (3) significant differences by sex and grade (p<.05), no significant difference by region

Figure 3.4.11
Percentage Indicating Moderate-to-Serious Psychological Distress in the Past Month, 2013–2019 OSDUHS (Grades 7–12)

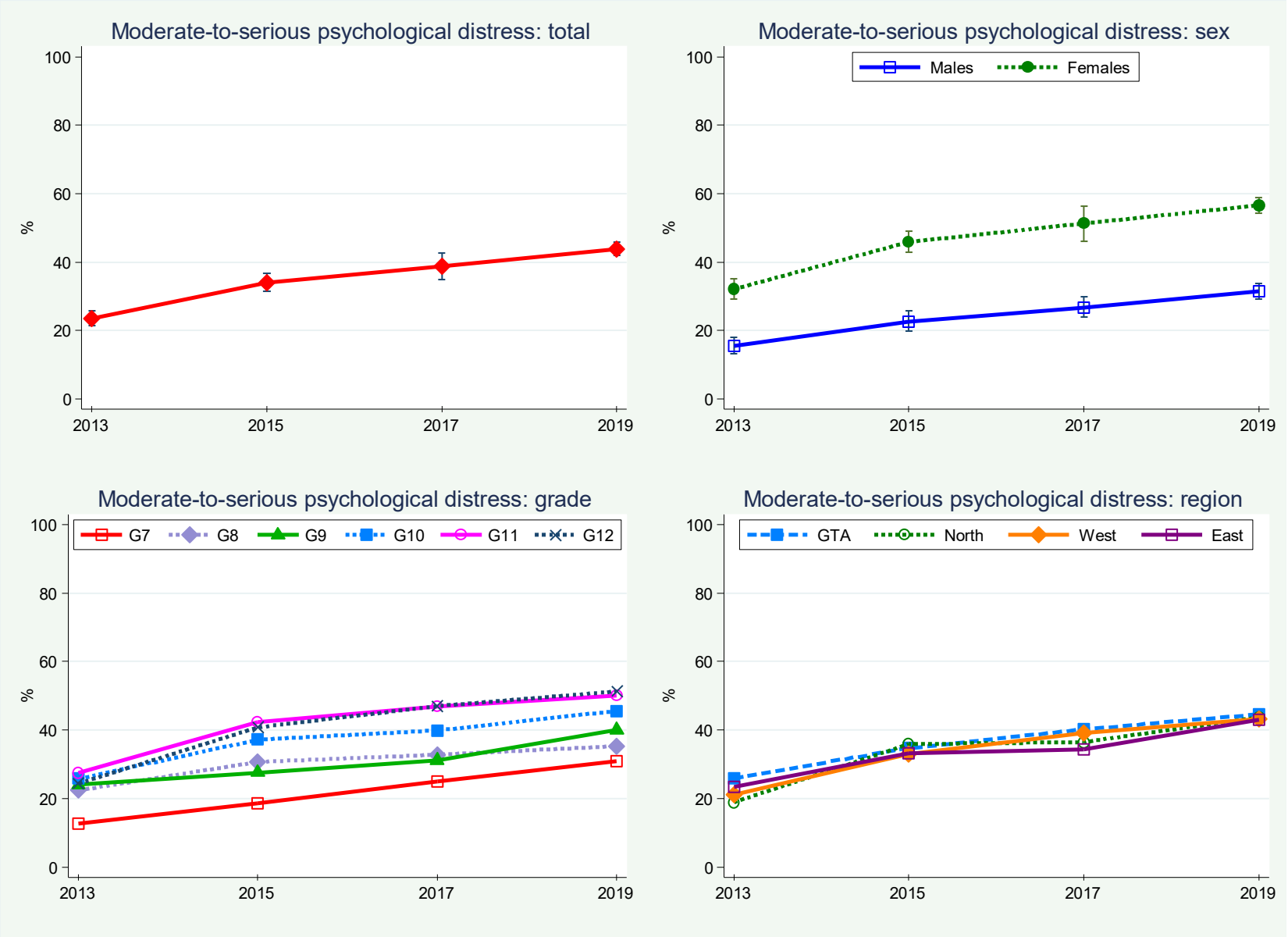
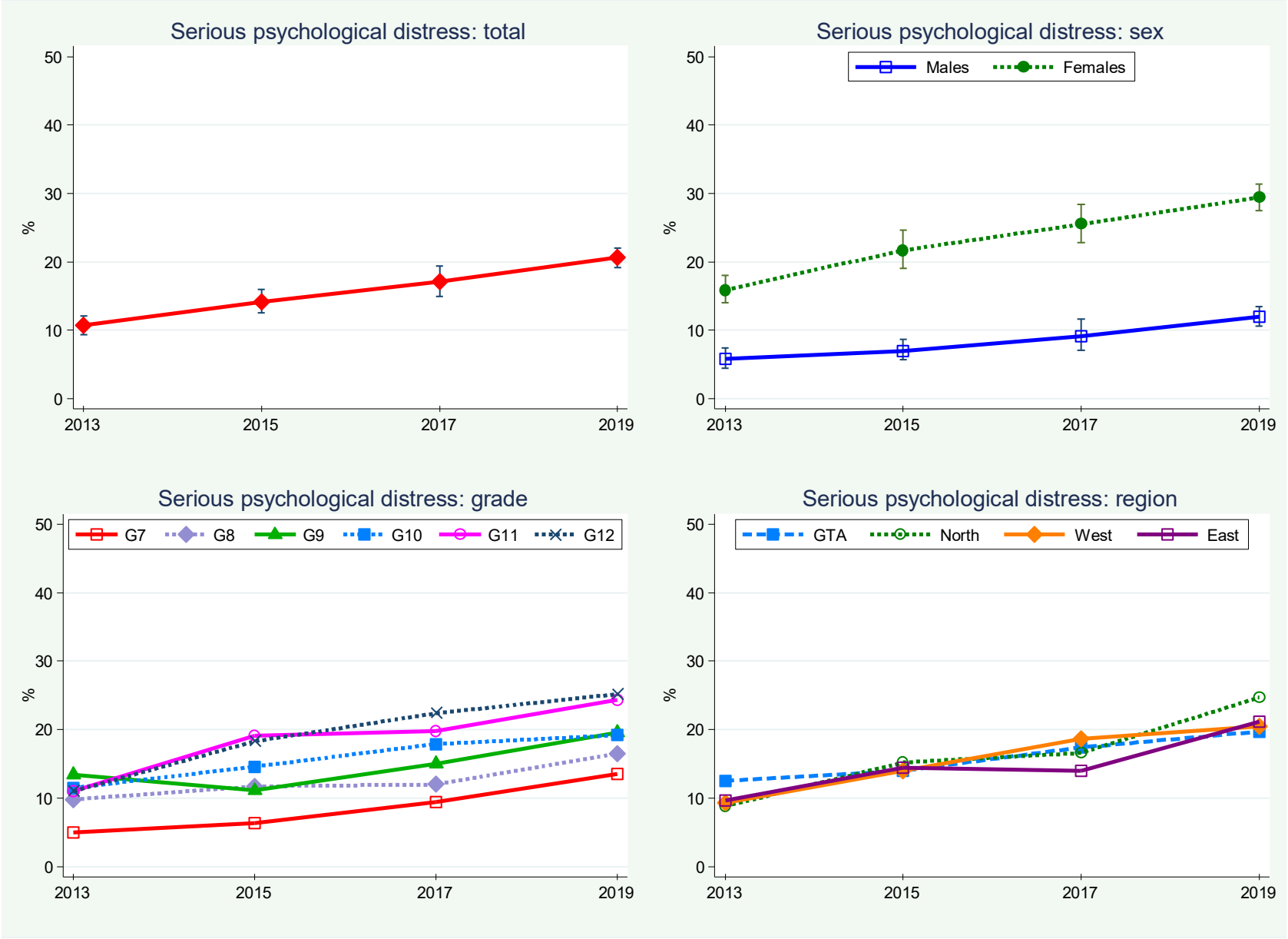


Figure 3.4.12
Percentage Indicating Serious Psychological Distress in the Past Month, 2013–2019 OSDUHS (Grades 7–12)



3.4.5 Self-Harm

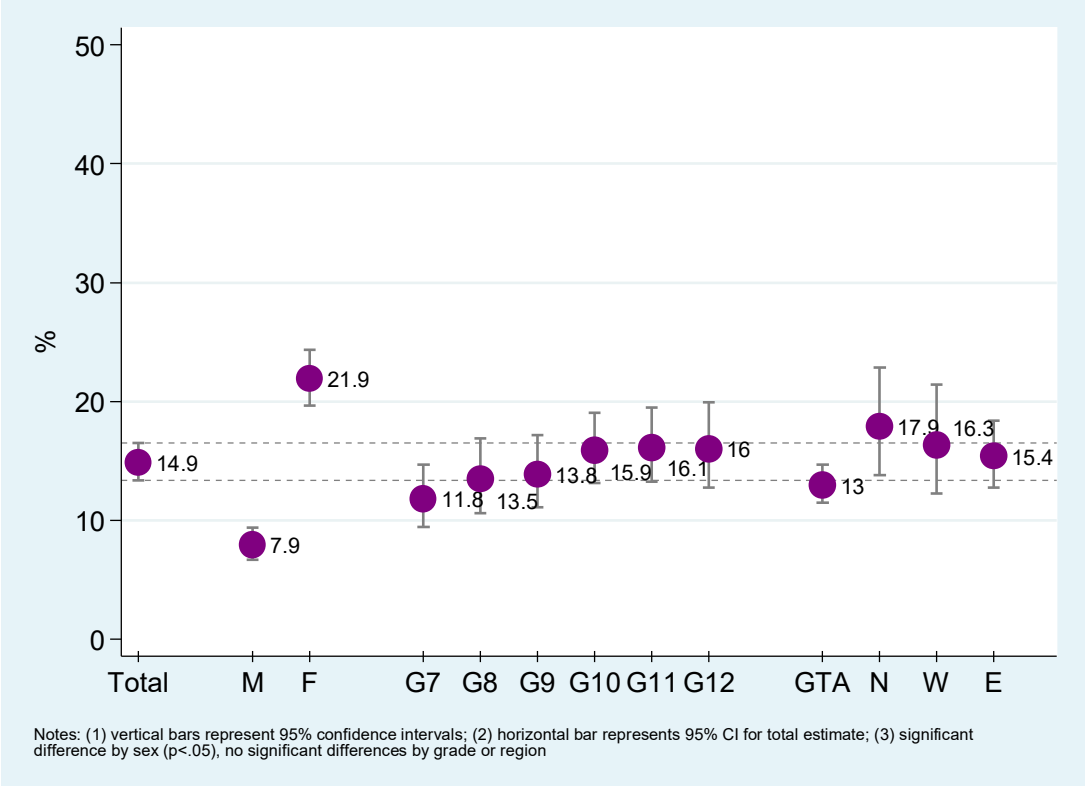
(Figure 3.4.13)

Starting in 2019, the OSDUHS included a question about self-harm. A random half sample of students were asked "*In the last 12 months, have you done something on purpose to hurt yourself without wanting to die, such as cutting or burning yourself on purpose?*" The response options were *Yes* or *No*.

2019 (Grades 7–12):

- About one-in-seven (14.9%) students report harming themselves on purpose in the past year. This estimate represents about 127,800 Ontario students.
- Females (21.9%) are about three times more likely than males (7.9%) to report harming themselves.
- Despite some variation, there are no significant differences among the grades.
- Despite some variation, there are no significant differences among the regions.

Figure 3.4.13
Percentage Reporting Self-Harm in the Past Year by Sex, Grade, and Region, 2019 OSDUHS



Notes: (1) vertical bars represent 95% confidence intervals; (2) horizontal bar represents 95% CI for total estimate; (3) significant difference by sex (p<.05), no significant differences by grade or region

3.4.6 Suicidal Ideation and Suicide Attempt (Figures 3.4.14–3.4.16; Tables A3.4.7, A3.4.8)

Starting in 2001, the OSDUHS included a question about suicidal ideation. Specifically, a random half sample of students were asked "*In the last 12 months, did you ever seriously consider attempting suicide?*" Starting in 2007, students were also asked about attempts using the question "*In the last 12 months, did you actually attempt suicide?*" The response options to both questions were *Yes* or *No*.

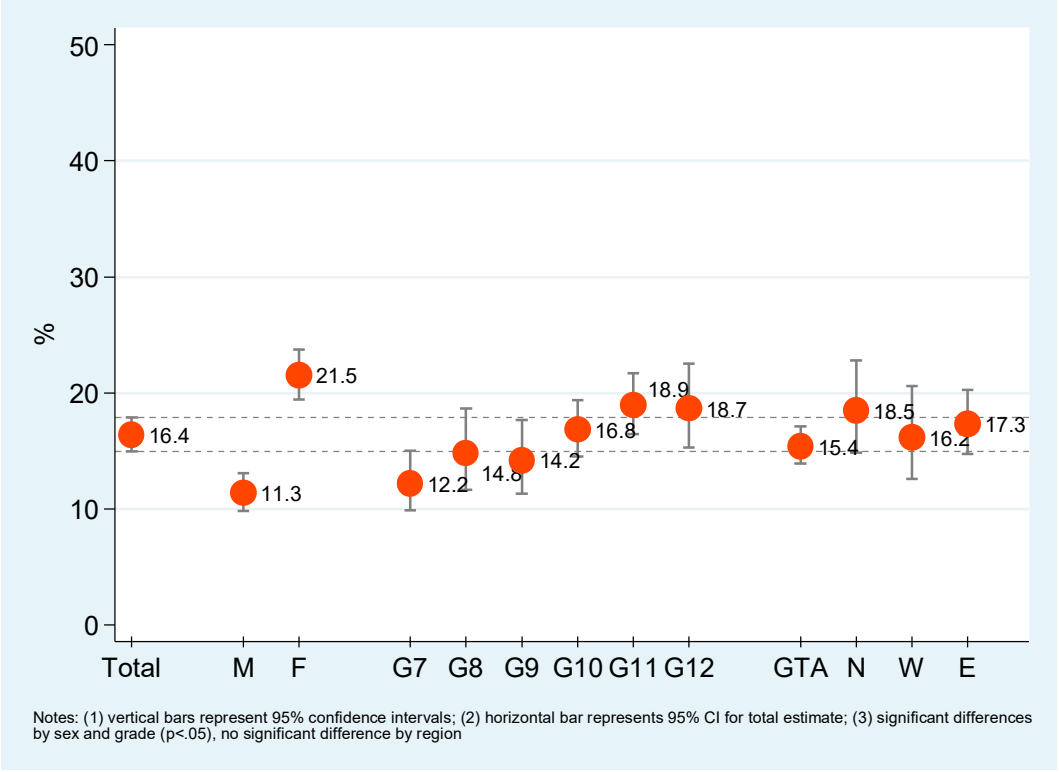
2019 (Grades 7–12):

- About one-in-six (16.4%) students report that they had seriously contemplated suicide in the past year. This percentage represents an estimated 140,300 Ontario students. An estimated 4.8% of students report attempting suicide in the past year. This represents about 40,900 Ontario students.
- Females are twice as likely as males to report suicidal ideation (21.5% vs. 11.3%, respectively), as well as a suicide attempt (6.7% vs. 2.9%, respectively).
- Suicidal ideation significantly increases with grade, from 12.2% of 7th graders to about 19% of 11th and 12th graders. There are no significant grade differences regarding reports of a suicide attempt.
- Neither of the two indicators significantly differs by region.

2001–2019 (Grades 7–12):

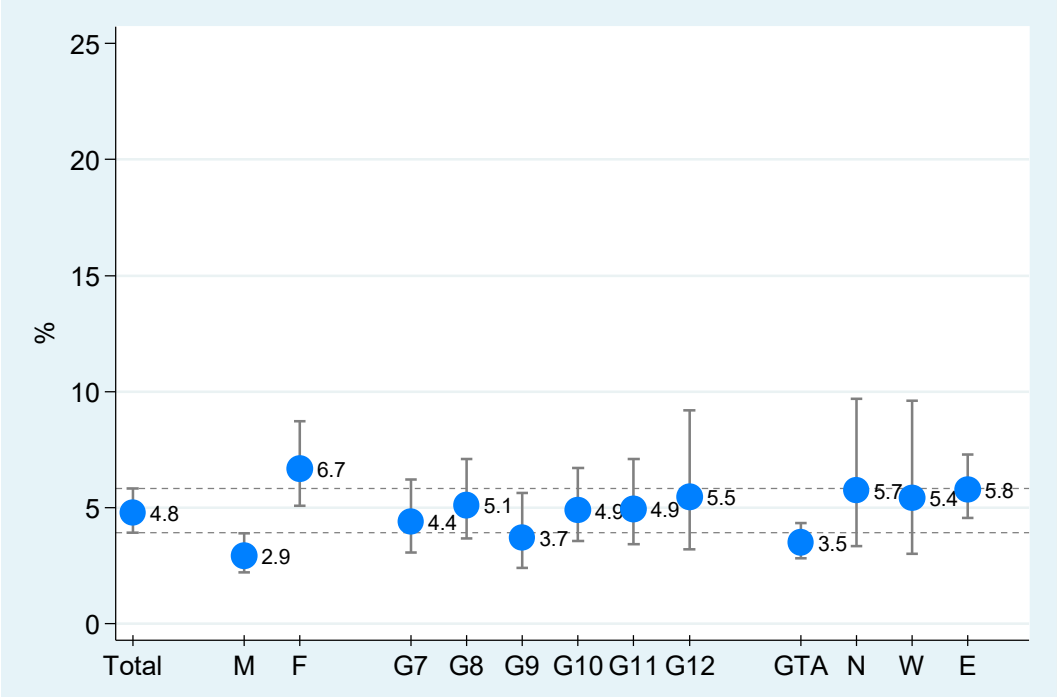
- The percentage of students who report contemplating suicide in the past year significantly increased between 2017 and 2019, from 13.6% to 16.4%. In fact, the current estimate is the highest on record since monitoring began in 2001, when the estimate was 11.5%.
- Among the subgroups, females and students in the North show significant increases over time in suicidal ideation.
- The percentage of students reporting a suicide attempt in the past year has remained relatively stable since 2007 (the first year of monitoring), fluctuating between 3% and 5%.
- No subgroup shows a significant change in reported suicide attempt.

Figure 3.4.14
Percentage Reporting Suicidal Ideation in the Past Year by Sex, Grade, and Region, 2019 OSDUHS



Notes: (1) vertical bars represent 95% confidence intervals; (2) horizontal bar represents 95% CI for total estimate; (3) significant differences by sex and grade (p<.05), no significant difference by region

Figure 3.4.15
Percentage Reporting a Suicide Attempt in the Past Year by Sex, Grade, and Region, 2019 OSDUHS



Notes: (1) vertical bars represent 95% confidence intervals; (2) horizontal bar represents 95% CI for total estimate; (3) significant difference by sex (p<.05), no significant differences by grade or region

Figure 3.4.16
Percentage Reporting Suicidal Ideation in the Past Year, 2001–2019 OSDUHS (Grades 7–12)

3.4.7 Traumatic Event

(Figure 3.4.17)

Starting in 2017, the OSDUHS included a question about experiencing a traumatic life event (nonspecific). A random half sample of secondary students were asked "*Have you ever experienced a serious traumatic or negative event in your life that affected you emotionally or physically?*" The response options were *Yes* or *No*.

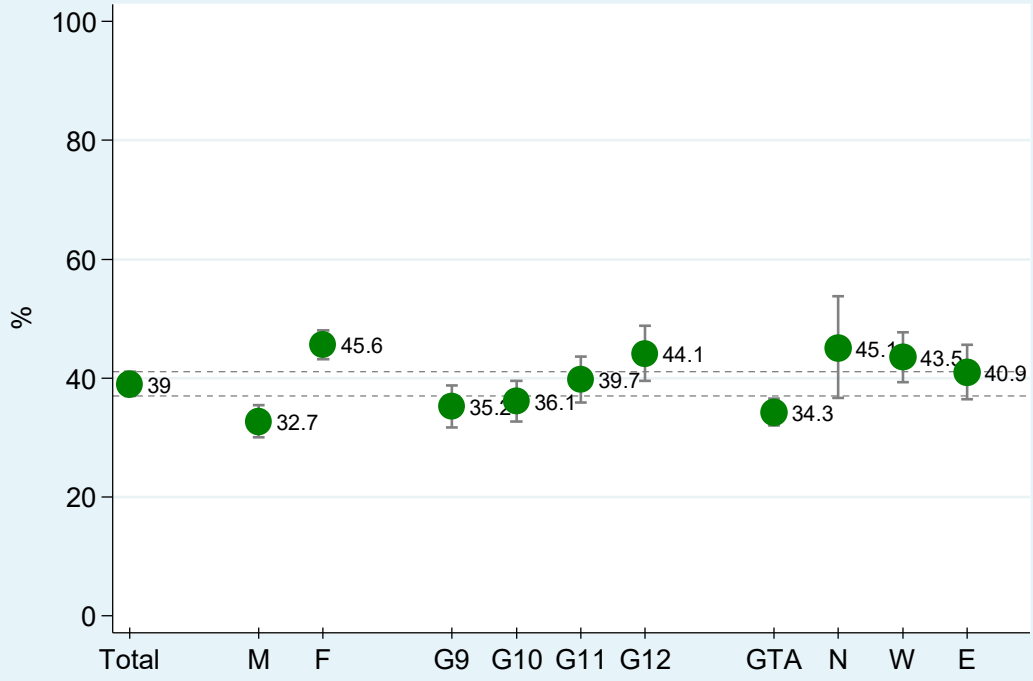
2019 (Grades 9–12):

- Over one-third (39.0%) of secondary students report that they have experienced a traumatic event in their lifetime. This percentage represents about 292,300 students in grades 9–12.
- Females (45.6%) are significantly more likely than males (32.7%) to report experiencing a traumatic event.
- There is significant grade variation showing that 12th graders (44.1%) are most likely to report experiencing a traumatic event.
- There is significant regional variation showing that students in the Greater Toronto Area (34.3%) are least likely to report experiencing a traumatic event.

2019 vs. 2017 (Grades 9–12):

- The estimate from 2019 (39.0%) does not significantly differ from the 2017 estimate (35.2%).

Figure 3.4.17
Percentage Reporting Ever Experiencing a Traumatic Event by Sex, Grade, and Region, 2019 OSDUHS



Notes: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal band represents 95% CI for total estimate; (3) significant differences by sex, grade, and region (p<.05)

3.4.8 Ability to Cope with Unexpected Problems (Figures 3.4.18, 3.4.19)

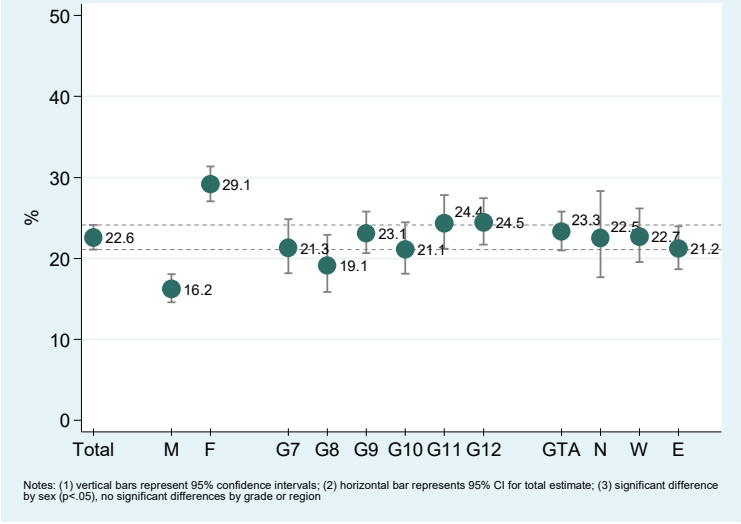
Starting in 2019, the OSDUHS included a question about coping ability. A random half sample were asked "*In general, how would you rate your ability to handle unexpected and difficult problems, such as a family or personal crisis? Would you say your ability is…?*" The response options were: *Excellent*, *Very good*, *Good*, *Fair*, or *Poor*.

2019 (Grades 7–12):

- Over one-third (38.7%) of students rate their ability to cope with unexpected and difficult problems as excellent or very good. In contrast, almost one-quarter (22.6%) rate their ability as fair or poor.
- Females (29.1%) are significantly more likely than males (16.2%) to rate their ability to cope as fair or poor.
- There is no significant grade variation in ratings of fair or poor ability to cope.
- There is no significant regional variation.

Figure 3.4.18
Percentage Reporting Ability to Cope with Unexpected and Difficult Problems, 2019 OSDUHS (Grades 7-12)

Figure 3.4.19
Percentage Reporting Fair or Poor Ability to Cope with Unexpected and Difficult Problems by Sex, Grade, and Region, 2019 OSDUHS



3.5 ANTISOCIAL BEHAVIOUR AND BULLYING

3.5.1 Antisocial Behaviour

Since 1991, the OSDUHS has surveyed students about engaging in violent and nonviolent antisocial behaviours. This section looks at the percentage of students engaging in antisocial behaviours at least once during the past year.

The 10 activities listed below were prefaced with the following question: "*How often (if ever) in the last 12 months have you done each of the following…?*"

Nonviolent Behaviours:

- *taken a car without permission*
- *banged up or damaged something on purpose (vandalism)*
- *sold marijuana or hashish*
- *taken things worth $50 or less*
- *taken things worth more than $50*
- *broken into a locked building (excluding home)*
- *ran away from home*
- *set something on fire that you weren't supposed to* (added in 2007)

Violent Behaviours:

- *beat up or hurt anyone (excluding sibling fights)*
- *carried a weapon (e.g., gun or knife)*

A random half sample of students responded to each activity question using an open-ended format to indicate the number of occasions during the past 12-month period.

An overall measure of antisocial behaviour was created based on the nine items consistently used since 1991 (this index excludes setting something on fire). Overall antisocial behaviour is defined here as participating in three or more of the nine behaviours at least once during the past year.

Overall Antisocial Behaviour

(Figures 3.5.1–3.5.4; Tables A3.5.1a, A3.5.1b)

2019:

- Among the total sample of students, the most prevalent of the 10 behaviours is theft of goods worth less than $50 (13.2%), running away from home (10.3%), and setting something on fire (10.3%).
- About one-in-twelve (8.3%) students engage in antisocial behaviour (defined as three or more of nine behaviours surveyed over time). This percentage represents about 80,000 students in Ontario.
- Males are significantly more likely than females to engage in antisocial behaviour (10.0% vs. 6.6%, respectively).
- Antisocial behaviour significantly increases with grade, from 4.8% among 7th graders up to 12.1% among 12th graders.
- Among the four regions, students in the Greater Toronto Area (7.1%) are least likely to engage in antisocial behaviour.

Figure 3.5.1
Percentage Reporting Engaging in Antisocial Behaviours at Least Once in the Past Year, 2019 OSDUHS (Grades 7–12)

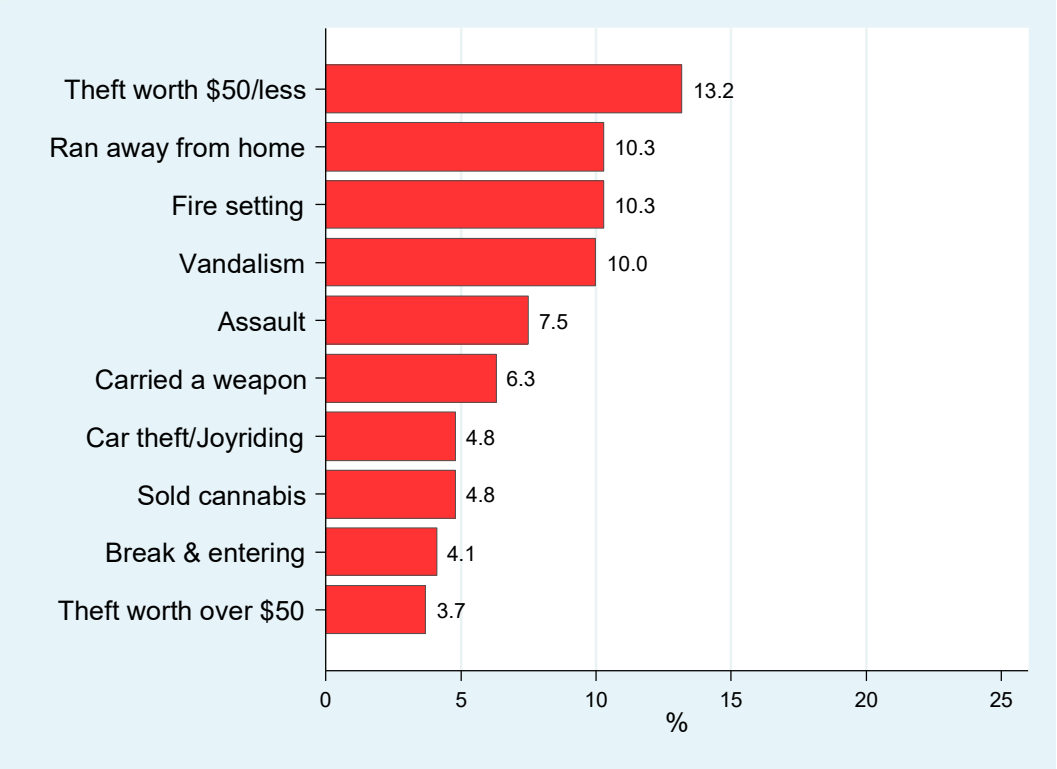
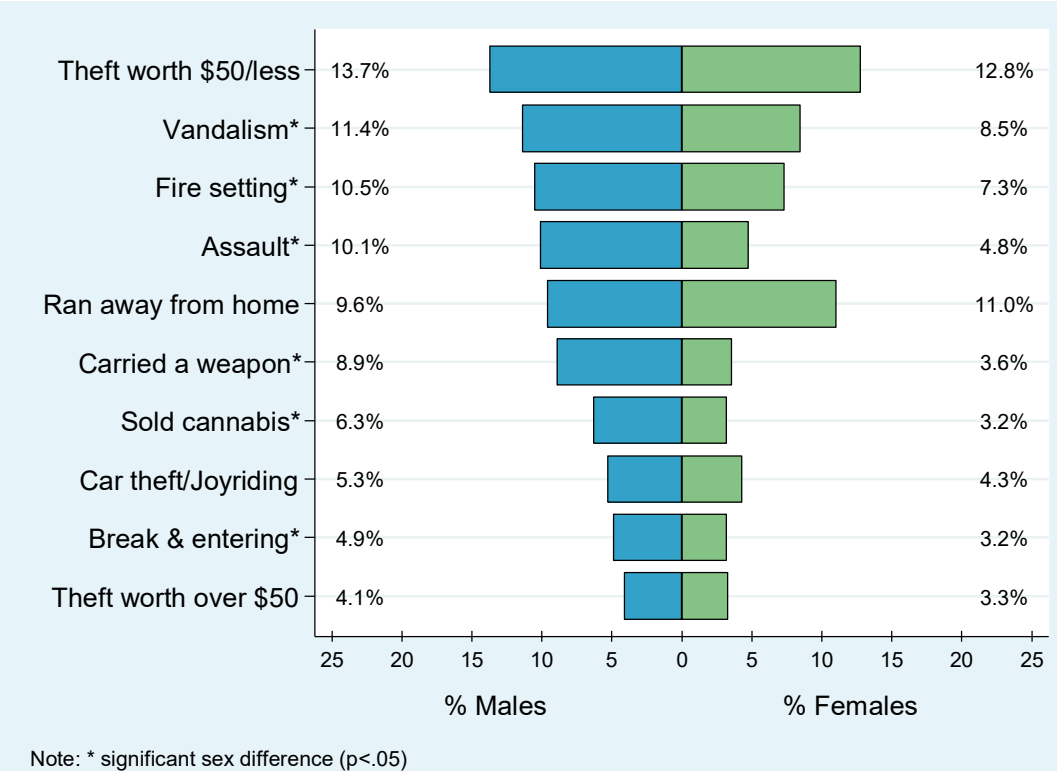


Figure 3.5.2
Percentage Reporting Engaging in Antisocial Behaviours at Least Once in the Past Year by Sex, 2019 OSDUHS (Grades 7–12)



Note: * significant sex difference (p<.05)

1999–2019 (Grades 7–12):

- Antisocial behaviour remained stable between 2017 (6.9%) and 2019 (8.3%), but the current estimate is significantly higher than 2015 (5.2%). Looking back to 1999, antisocial behaviour significantly decreased up until 2015, but has since steadily increased. However, the current estimate of 8.3% remains well below 1999 (16.0%).

- Both males and females show a significant decrease in antisocial behaviour between 1999 and 2015, followed by a significant increase.

- Students in all grades show a significant decrease in antisocial behaviour since 1999.

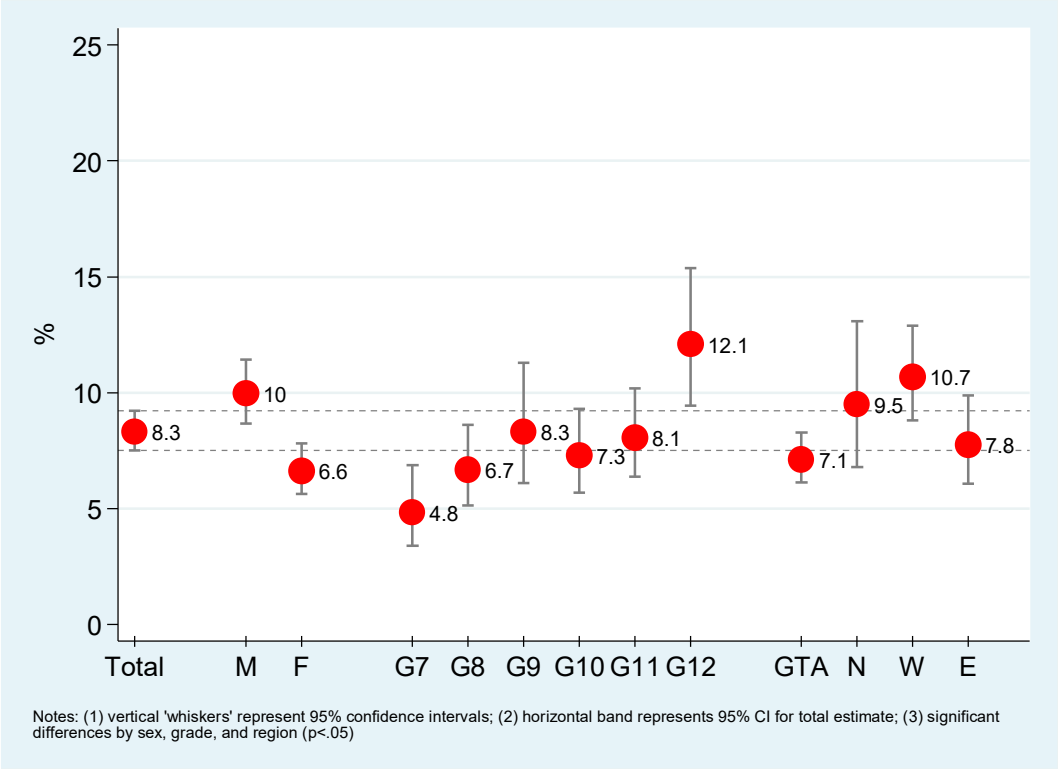
- All regions, except the North, show a significant decrease since 1999. Students in the West show a significant increase since 2015.

1993–2019 (Grades 7, 9, 11 only):

Note: 1991 is excluded due to the absence of the weapon carrying question.

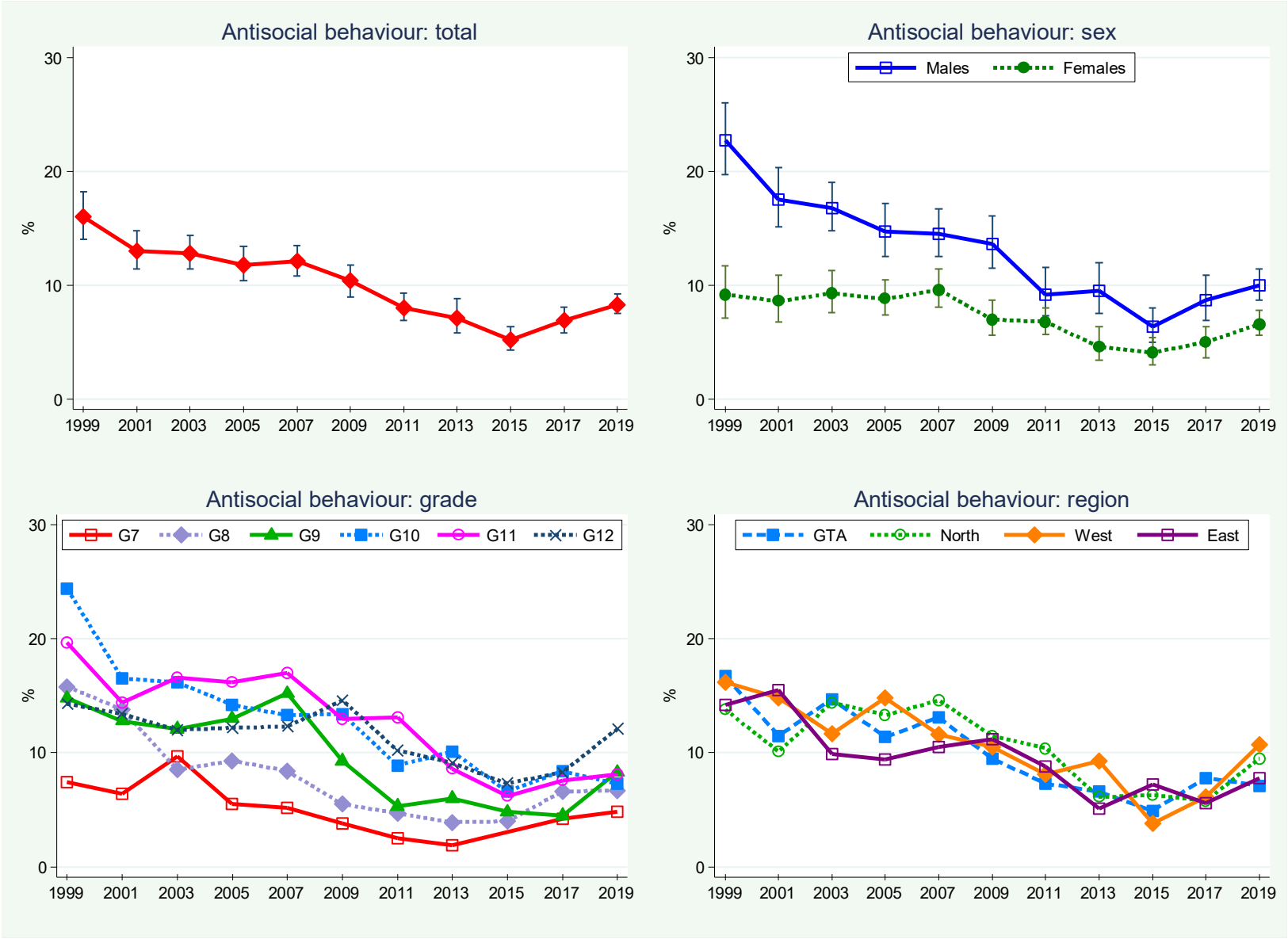
- Over the long-term (among grades 7, 9, and 11 only) antisocial behaviour peaked in the early-to-mid 1990s, declined until 2015, and has been steadily increasing since then. The 2019 remains significantly lower than estimates seen during the 1990s and 2000s.

Figure 3.5.3
Percentage Reporting Antisocial Behaviour (3+ of 9 Behaviours) in the Past Year by Sex, Grade, and Region, 2019 OSDUHS



Notes: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal band represents 95% CI for total estimate; (3) significant differences by sex, grade, and region (p<.05)

Figure 3.5.4
Percentage Reporting Antisocial Behaviour (3+ of 9 Behaviours) in the Past Year, 1999–2019 OSDUHS (Grades 7–12)



3.5.2 Violent Behaviours

(Figures 3.5.5–3.5.7; Tables A3.5.1a, A3.5.1b)

In this section we describe the past year prevalence of assault and carrying a weapon.

2019 (Grades 7–12):

Assault

- About 7.5% of students report assaulting someone at least once in the 12 months before the survey. This percentage represents about 70,800 students in Ontario.
- Males are significantly more likely than females to report assaulting someone (10.1% vs. 4.8%, respectively).
- Assault does not significantly vary by grade or by region.

Weapon Carrying

- An estimated 6.3% of students carried a weapon, such as a knife or gun, at least once during the 12 months before the survey. This percentage represents about 60,100 students.
- Males (8.9%) are significantly more likely than females (3.6%) to report carrying a weapon.
- The likelihood of carrying a weapon significantly increases with grade.
- Student in the West (9.0%) are most likely to carry a weapon compared with students in the other three regions (about 5%-6%).

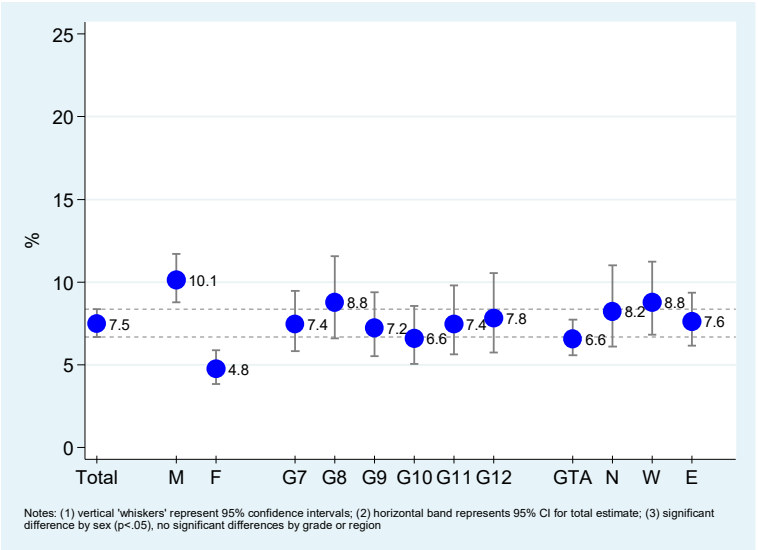
1999–2019 (Grades 7–12):

- The percentage of students reporting assaulting someone has been stable since 2011 (about 5%-9%), but the current estimate is significantly lower than those seen between 1999 and 2009 (about 10%-20%).
- The percentage of students reporting carrying a weapon has been stable since 2009 (about 5%-7%), but the current estimate is significantly lower than those seen between 1999 and the early-to-mid 2000s (about 10%-13%).

1991–2019 (Grades 7, 9, 11 only):

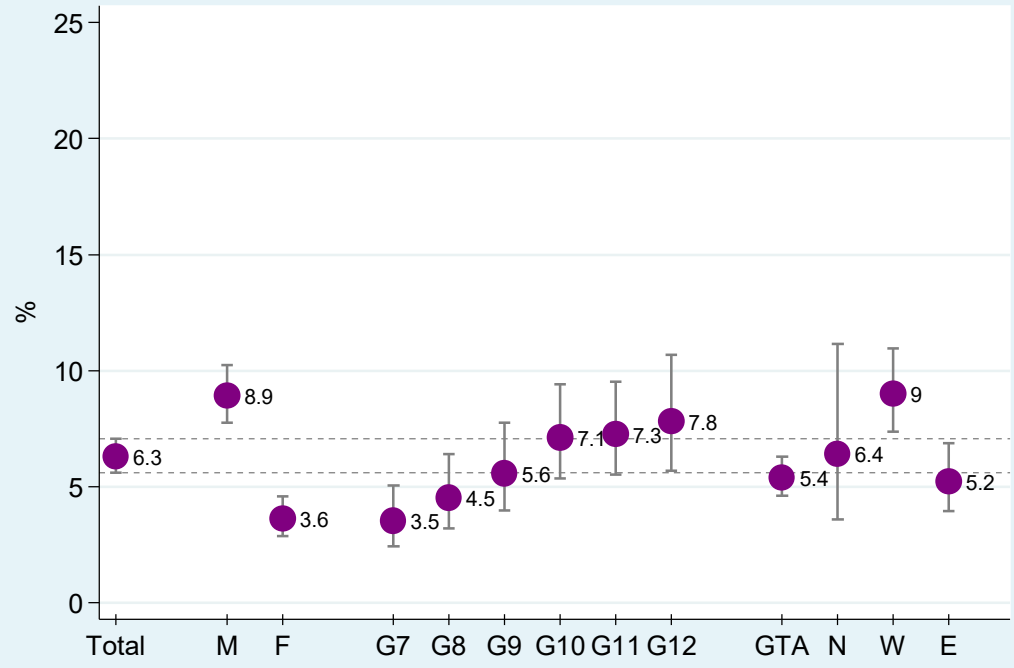
- Assault peaked in the late 1990s, declined sharply, and has remained stable in recent years. The 2019 estimate is significantly lower than estimates seen in the early 1990s.
- Weapon carrying peaked in 1993, steadily declined until about 2009, and has since remained stable. The 2019 estimate is significantly lower than estimates seen in the early 1990s.

Figure 3.5.5
Percentage Reporting Assaulting Someone at Least Once in the Past Year by Sex, Grade, and Region, 2019 OSDUHS



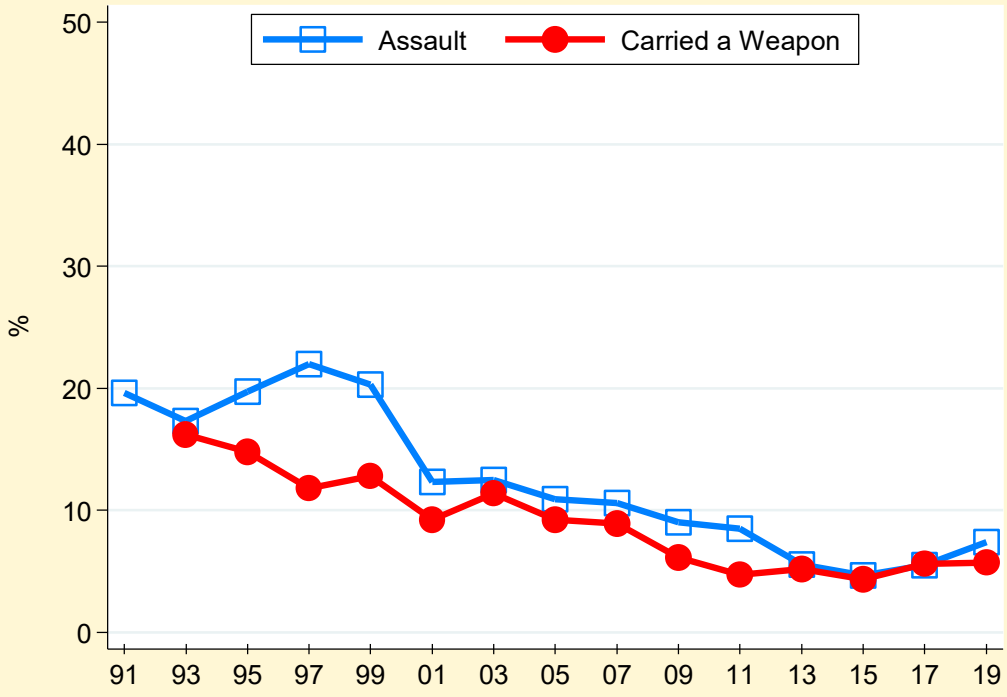
Notes: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal band represents 95% CI for total estimate; (3) significant difference by sex (p<.05), no significant differences by grade or region

Figure 3.5.6
Percentage Reporting Carrying a Weapon (i.e., Knife or Gun) at Least Once in the Past Year by Sex, Grade, and Region, 2019 OSDUHS



Notes: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal band represents 95% CI for total estimate; (3) significant differences by sex, grade, and region (p<.05)

Figure 3.5.7
Percentage Reporting Violent Behaviours, 1991–2019 OSDUHS (Grades 7, 9, 11 only)



Note: weapon carrying not asked about in 1991

3.5.3 Bullying at School

(Figures 3.5.8–3.5.11; Tables A3.5.4, A3.5.5)

Starting in 2003, the OSDUHS has included four questions about bullying at school. Bullying was defined in the questionnaire as "...*when one or more people tease, hurt or upset a weaker person on purpose, again and again. It is also bullying when someone is left out of things on purpose*." Note that the last sentence was added in 2005.

A random half sample of students were asked about the typical way they were bullied at school and the typical way they bullied others, if at all. The questions were *"In what way were you bullied the most at school?"* and *"In what way did you bully other students the most at school?"* For each of these questions, students were asked to choose only one among the following four response options: (1) Not involved in bullying at school; (2) Physical attacks (for example, beat up, pushed or kicked); (3) Verbal attacks (for example, teased, threatened, spread rumours); or (4) Stole or damaged possessions. **The prevalence estimates for bullying victim and perpetrator are based on these modal questions**.

Students were also asked about the frequency of bullying with the questions *"Since September, how often have you been bullied at school?"* and *"Since September, how often have you taken part in bullying other students at school?"* The response options were (1) Was not bullied/Did not bully others at school; (2) Daily or almost daily; (3) About once a week; (4) About once a month; or (5) Less than once a month.

2019 (Grades 7–12):

Bullied at School

- About one-quarter (22.9%) of students in grades 7-12 report being bullied at school since September. This represents about 222,400 Ontario students.
- The most prevalent mode of victimization is verbal (18.6%), while only 2.3% are typically bullied physically, and 2.0% are typically victims of theft or vandalism.
- An estimated 7.1% of students report being bullied on a daily or weekly basis.
- Females are significantly more likely than males to report being bullied in any way at school (25.4% vs. 20.5%, respectively). There is also a sex difference for mode. Females are more likely than males to be bullied verbally, whereas males are more likely to be bullied physically.
- Being bullied at school significantly decreases with grade, from 28%-29% of 7th and 8th graders down to about 20% of 11th and 12th graders.
- There are no significant regional differences.

2003–2019 (Grades 7–12):

- The percentage reporting being bullied at school has remained stable since 2013, at about 21%-25%. However, the current estimate of 22.9% is significantly lower than estimates seen between 2003 and 2011 (about 29%-33%).
- The decline in bullying victimization at school seen since 2003 is significant for all subgroups except 12th graders.
- There has been no significant change in the typical way students are bullied at school (mainly verbally).

Figure 3.5.8
Percentage Reporting the Typical Way They Were Bullied at School Since September by Sex, 2019 OSDUHS (Grades 7–12)

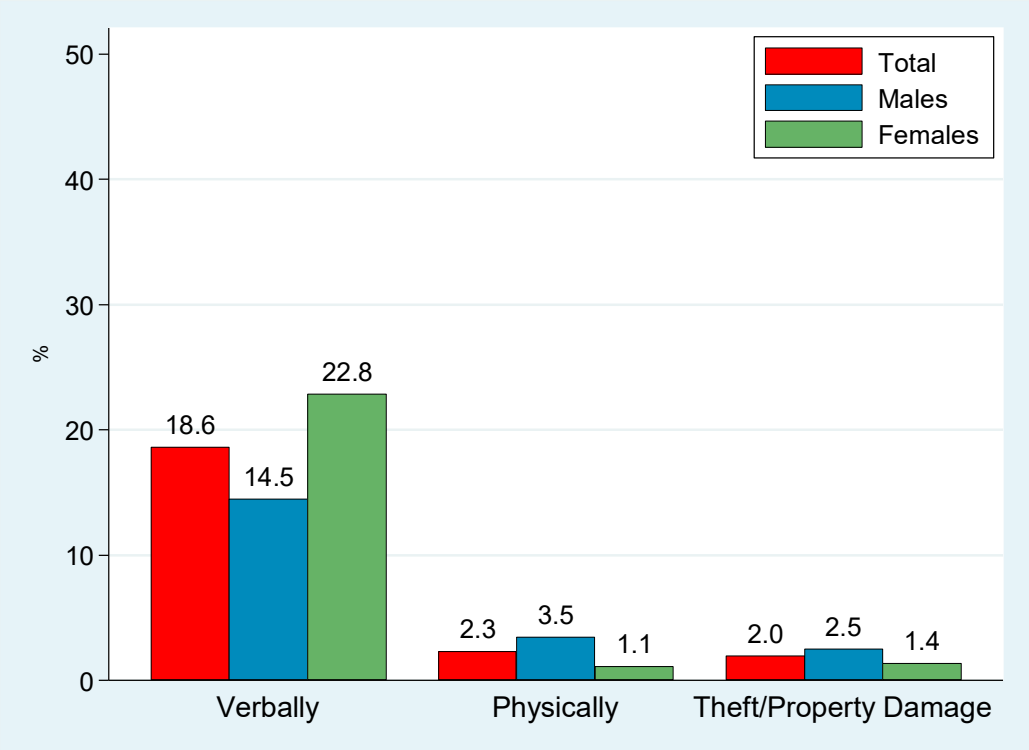
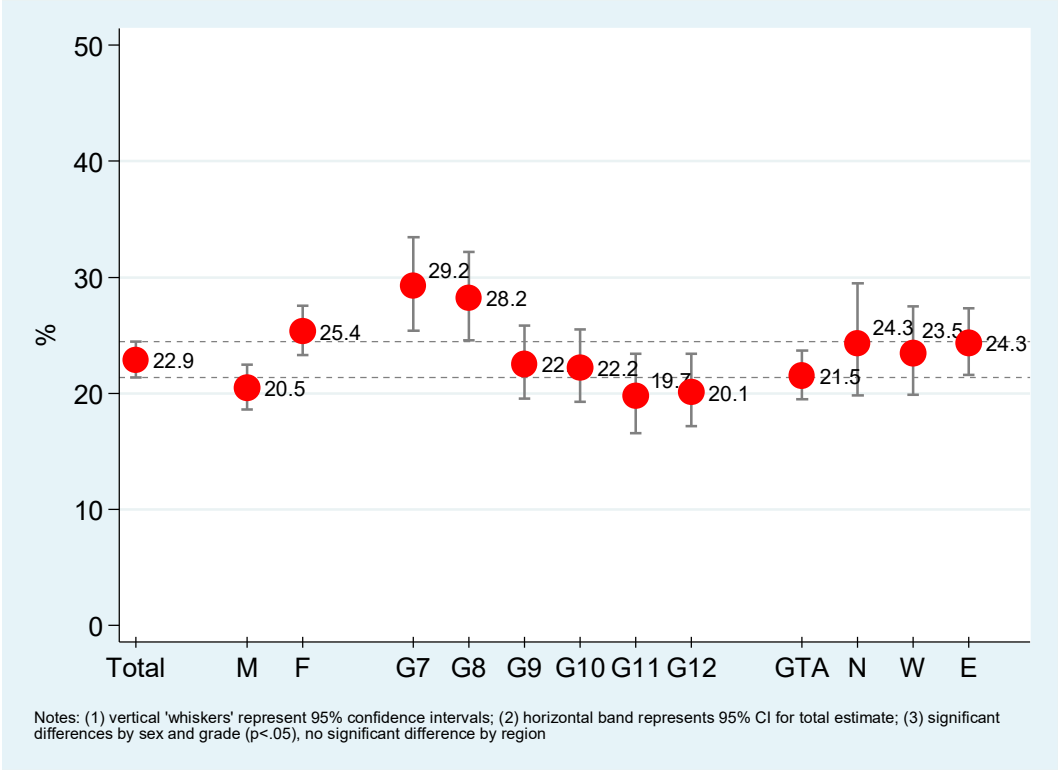
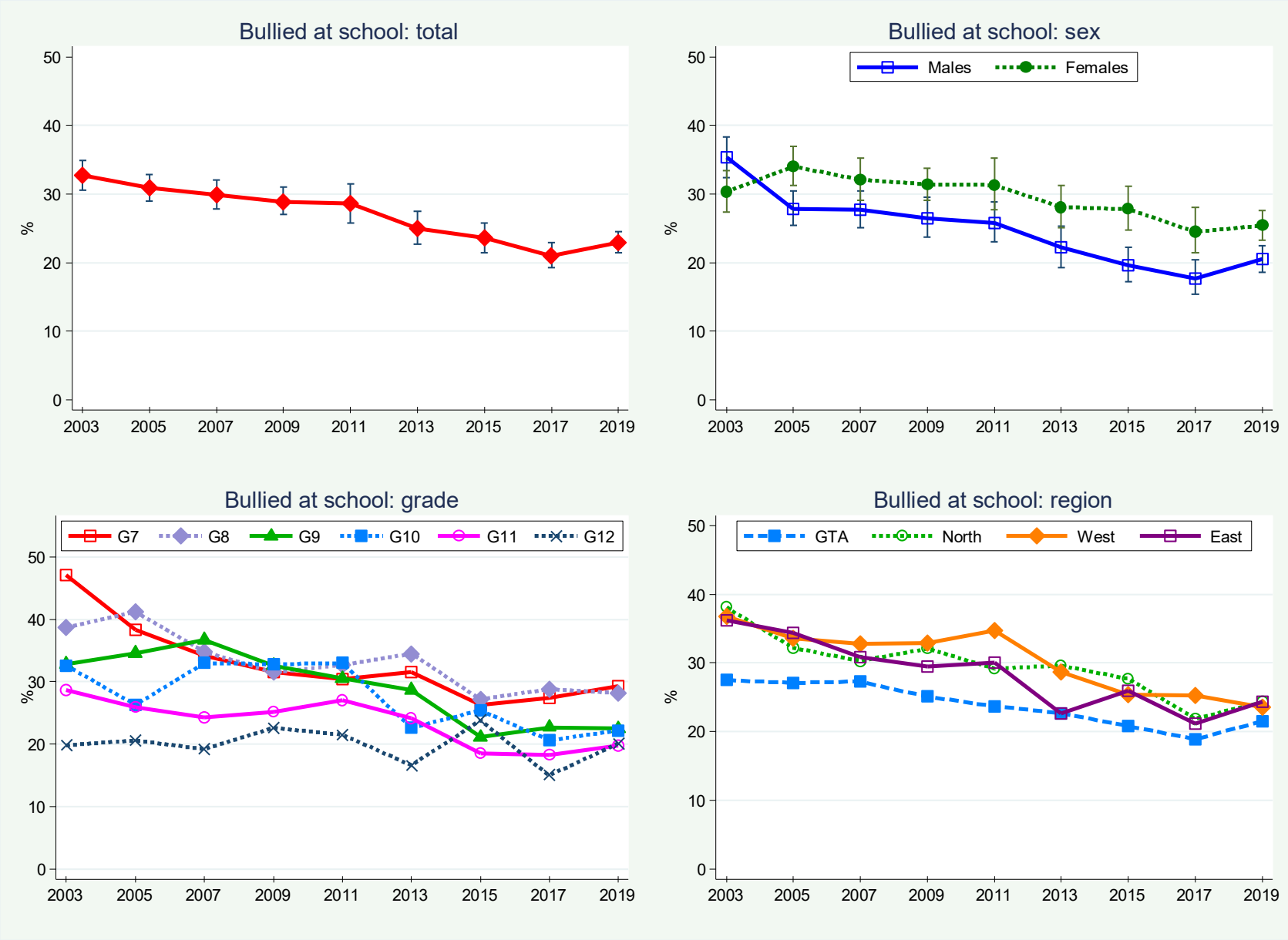


Figure 3.5.9
Percentage Reporting Having Been Bullied (in Any Way) at School Since September by Sex, Grade, and Region, 2019 OSDUHS



Notes: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal band represents 95% CI for total estimate; (3) significant differences by sex and grade (p<.05), no significant difference by region

Figure 3.5.10
Percentage Reporting Having Been Being Bullied (in Any Way) at School Since September, 2003–2019 OSDUHS (Grades 7–12)



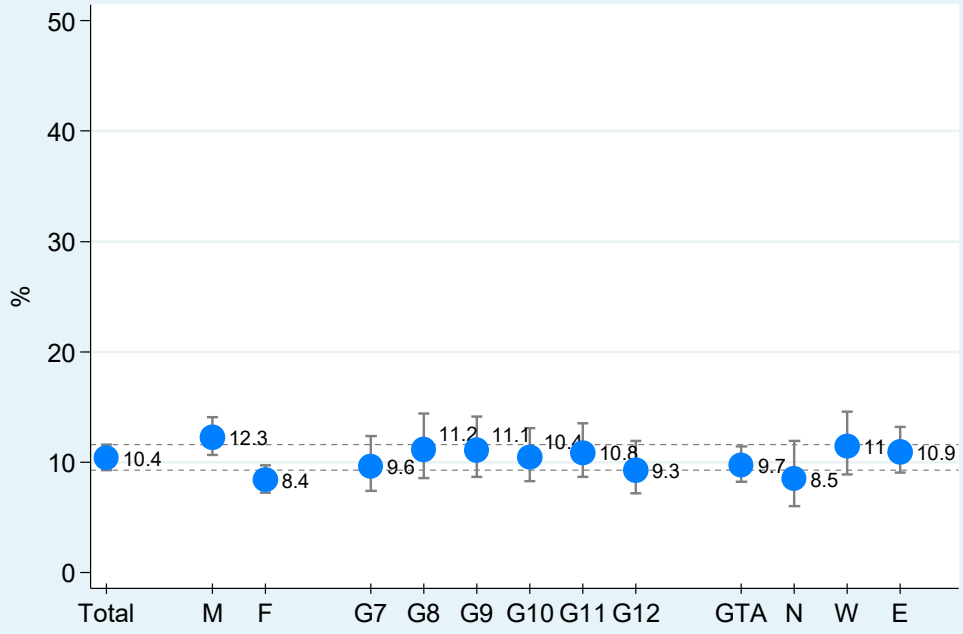
Bully Others at School

- One-in-ten (10.4%) 7th to 12th graders report bullying other students at school. This represents about 100,800 students in Ontario.
- The most prevalent mode of bullying others is through verbal attacks (8.9%), followed distantly by physical attacks (1.0%). Theft or damage to others' property is reported by less than 0.5% of students.
- About 1.9% of students report bullying others on a daily or weekly basis.
- Males (12.3%) are more likely than females (8.4%) to report bullying others at school.
- There is no significant grade variation.
- There is no significant regional variation.

2003–2019 (Grades 7–12):

- The percentage of students reporting bullying others at school remained stable between 2017 (11.1%) and 2019 (10.4%). However, the current estimate is significantly lower than all estimates seen between 2003 and 2015 (about 13%-30%).
- All subgroups show a significant decline since 2003.
- There has been no significant change over time regarding the typical way students report bullying others at school (mainly verbally).

Figure 3.5.11
Percentage Reporting Bullying Others (in Any Way) at School Since September by Sex, Grade, and Region, 2019 OSDUHS



Notes: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal band represents 95% CI for total estimate; (3) significant difference by sex (p<.05), no significant differences by grade or region

3.5.4 Cyberbullying

(Figures 3.5.12-3.5.14; Table A3.5.6)

Starting in 2011, the OSDUHS introduced a question about being victimized over the Internet. A random half sample of students were asked: *"In the last 12 months, how often did other people bully or pick on you electronically or through the Internet?*" Starting in 2017, another question about cyberbullying others was added: "*In the last 12 months, how often did you bully or pick on other people electronically or through the Internet?*" The response options to both questions were (1) *Don't use the Internet or cellphone*, (2) *Never*, (3) *Once*, (4) *2 or 3 times*, or (5) *4 or more times*. Note that those who responded they did not use the Internet or a cellphone (7% of the total sample) were assigned to the "not bullied" or "did not bully" group. Here we describe the percentage of students who report they were bullied over the Internet, and bullied others over the Internet, at least once in the past 12 months.

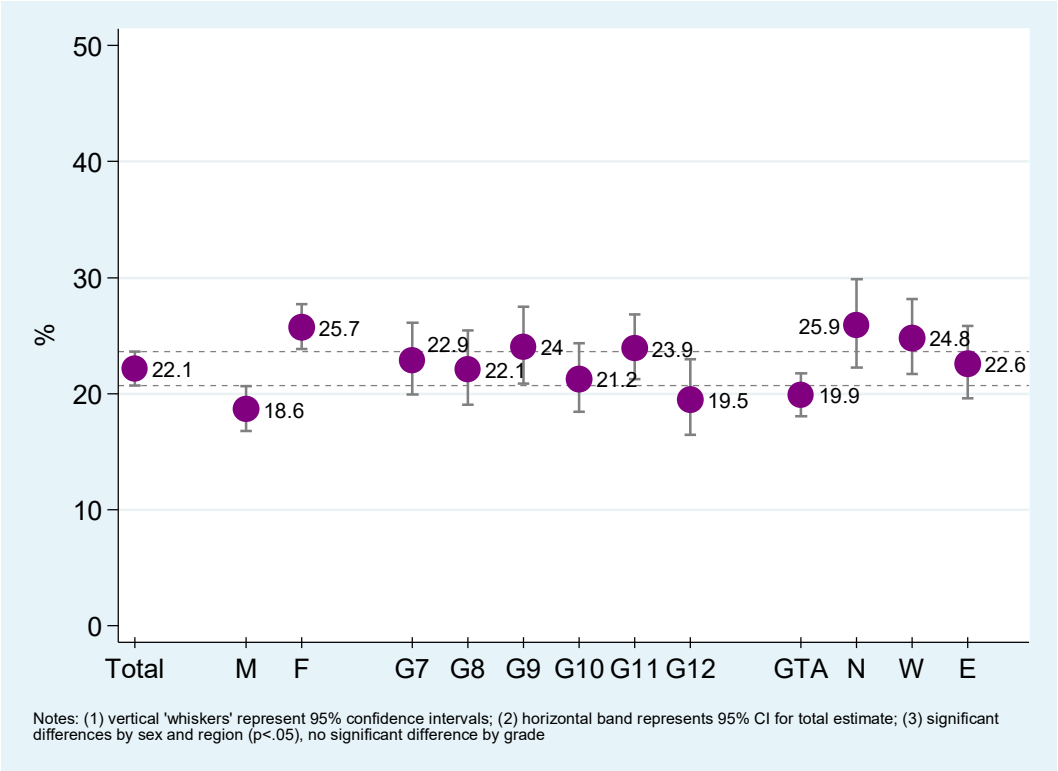
2019 (Grades 7–12):

- About one-in-five (22.1%) students in grades 7 to 12 report being bullied over the Internet at least once in the past year. This represents about 216,100 students in Ontario. One-in-nine (11.0%) students report bullying others over the Internet at least once in the past year (representing about 107,600 students).
- Females are significantly more likely than males to report being cyberbullied (25.7% vs. 18.6%, respectively). Males are significantly more likely than females to report bullying others over the Internet (12.7% vs. 9.3%, respectively).
- There are no significant differences among the grades for either estimate.
- Students in the Greater Toronto Area (19.9%) are least likely to report being cyberbullied compared with students in the other three regions (about 23%-26%). There are no significant regional differences in reports of cyberbullying others.

2011–2019 (Grades 7–12):

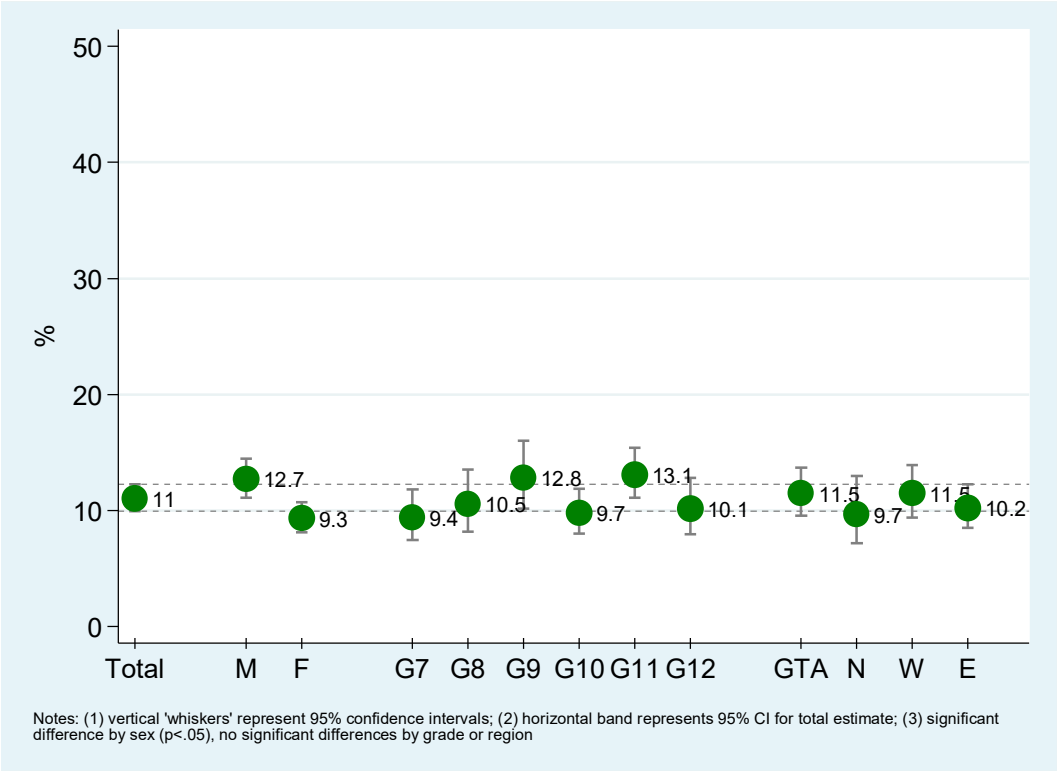
- The percentage of students reporting being cyberbullied has remained stable since 2011, when monitoring first began, at about 19%-22%.
- The percentage reporting cyberbullying others did not significantly change between 2017 (the first year of monitoring) and 2019 (9.7% vs. 11.0%, respectively).
- No subgroup shows a significant change since 2011.

Figure 3.5.12
Percentage Reporting Having Been Cyberbullied at Least Once in the Past Year by Sex, Grade, and Region, 2019 OSDUHS



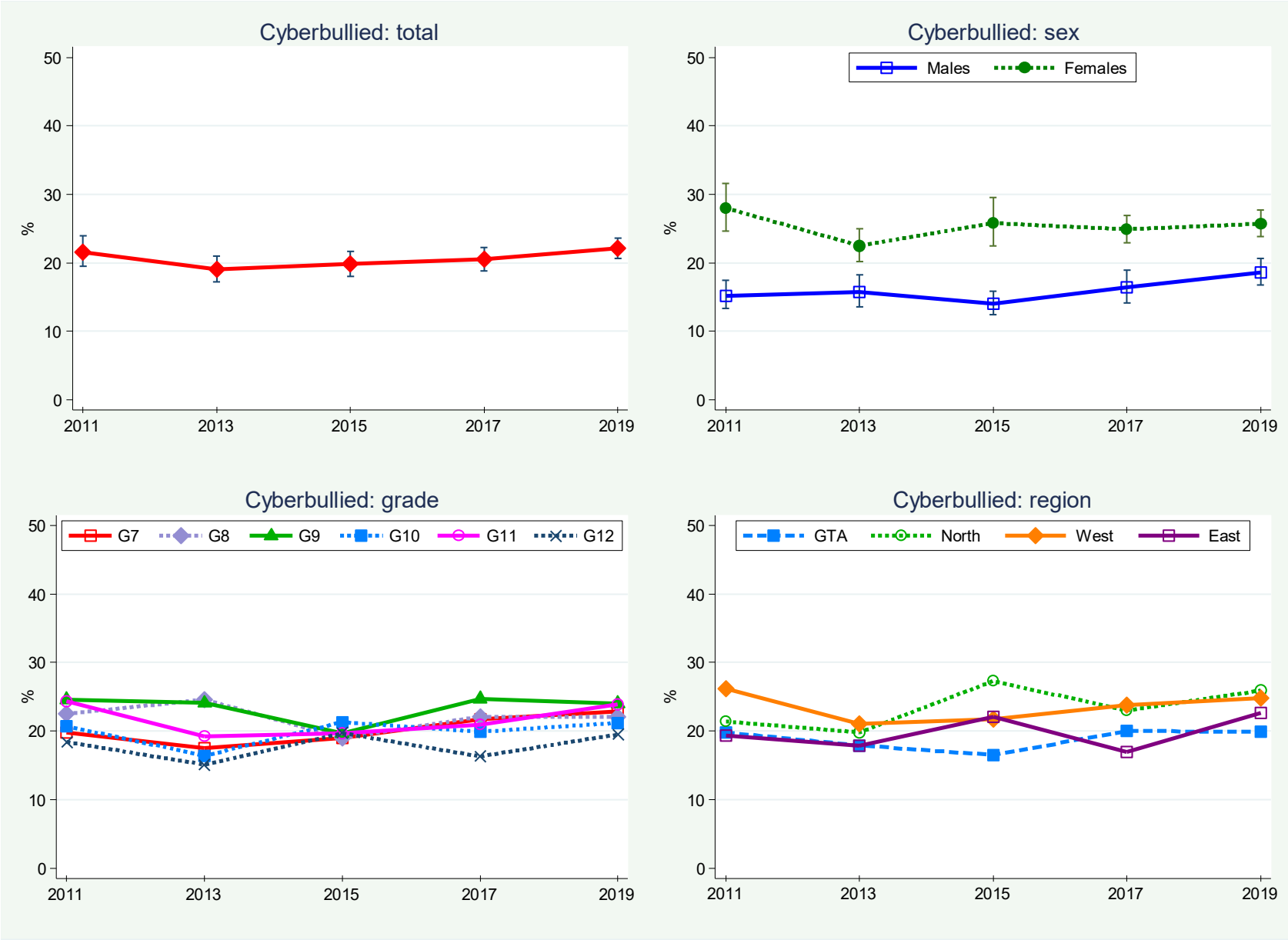
Notes: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal band represents 95% CI for total estimate; (3) significant differences by sex and region (p<.05), no significant difference by grade

Figure 3.5.13
Percentage Reporting Cyberbullying Others at Least Once in the Past Year by Sex, Grade, and Region, 2019 OSDUHS



Notes: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal band represents 95% CI for total estimate; (3) significant difference by sex (p<.05), no significant differences by grade or region

Figure 3.5.14
Percentage Reporting Having Been Cyberbullied at Least Once in the Past Year, 2011–2019 OSDUHS (Grades 7–12)



3.6 GAMBLING, VIDEO GAMING, AND TECHNOLOGY USE

3.6.1 Gambling Activity

(Figures 3.6.1–3.6.7; Table A3.6.1)

Starting in 2001, the OSDUHS introduced questions about gambling activity during the past year. The number of activities asked about has increased over the years. A random half sample of students in grades 7–12 were asked "*How often (if ever) in the last 12 months have you done each of the following?"* The 18 activities listed below were surveyed in 2019:

- *bet money on card games*
- *bet money on dice games*
- *bet money on other games of skill (such as pool, darts, chess, bowling)*
- *played bingo for money*
- *bet money in sports pools*
- *bet money on fantasy sports*
- *bought sports lottery tickets (such as Sports Select or Proline)*
- *bought any other lottery tickets at a store, including instant lottery (such as 6/49, Poker Lotto, scratch cards)*
- *bet money on video gambling machines, slot machines, or other gambling machines*
- *bet money at a casino in Ontario*
- *bet money on results of a video game*
- *bet money on a dare or private bet*
- *bet money on poker online*
- *bet money on bingo online*
- *bet money on sports betting online*
- *bet money on other online games*
- *bought lottery tickets online*
- *bet money in other ways not listed above*.

Students responded to each activity question using an open-ended format to indicate the number of occasions during the past 12-month period. Students were also asked about the largest amount of money they gambled in the past 12 months. Response options ranged from *$1 or less* to *$200 or more*.

In this section, we describe the percentage of students who report gambling money on each activity at least once in the past 12 months. For trend purposes, the five individual online gambling activities were combined to derive one estimate for any online gambling, and the sports pools and fantasy sports activities were combined. In addition, we present the percentage of students who report at least one of the activities (any gambling activity), and the percentage who report gambling at five or more activities (multi-gambling activity).

Individual Gambling Activities

- Of the specific gambling activities surveyed, betting money on a dare or private bet (10.5%) is the most prevalent among 7th–12th graders, followed by card games (8.4%), and betting in sports pools or on fantasy sports (8.3%). Casino gambling (prohibited to those under age 19) is the least prevalent activity (0.7%).

- Males are significantly more likely than females to report engaging in most of the gambling activities, except for playing bingo and buying lottery tickets (excluding sports lottery tickets).

- Only four activities significantly increase with grade: betting in sports pools/fantasy sports, betting on a dare/private bet, buying sports lottery tickets, and other lottery tickets.

- Students in the Greater Toronto Area are least likely to bet in card games, and buy lottery tickets. No other activity differs by region.

Figure 3.6.1
Percentage Reporting Gambling Activities in the Past Year, 2019 OSDUHS (Grades 7–12)

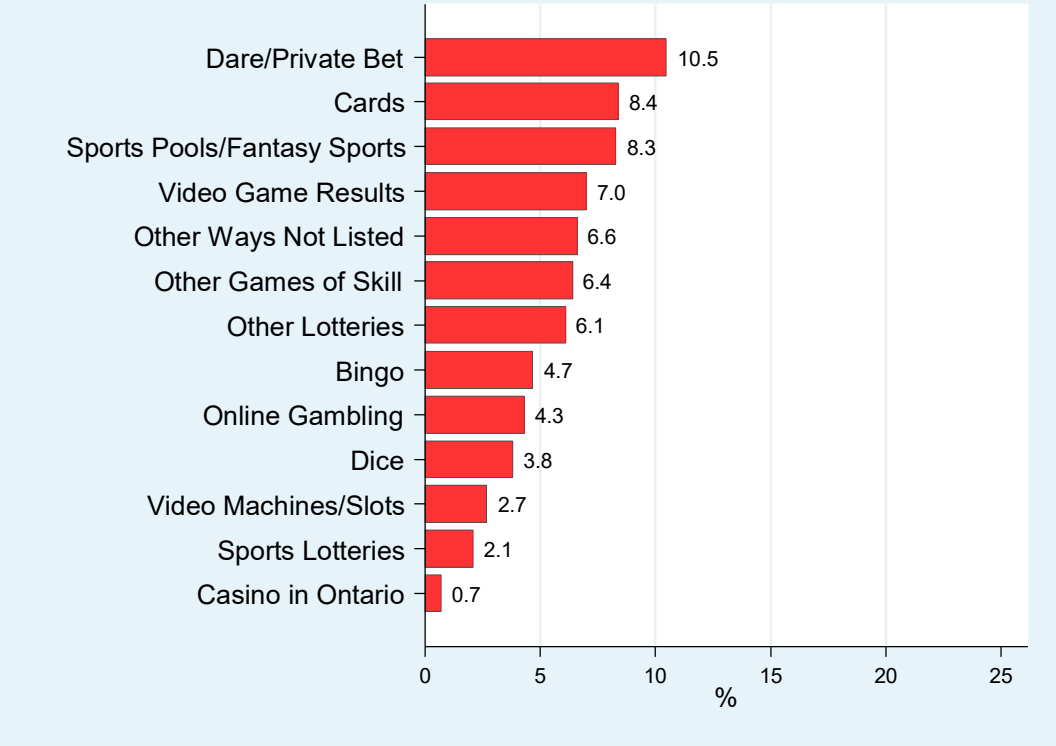
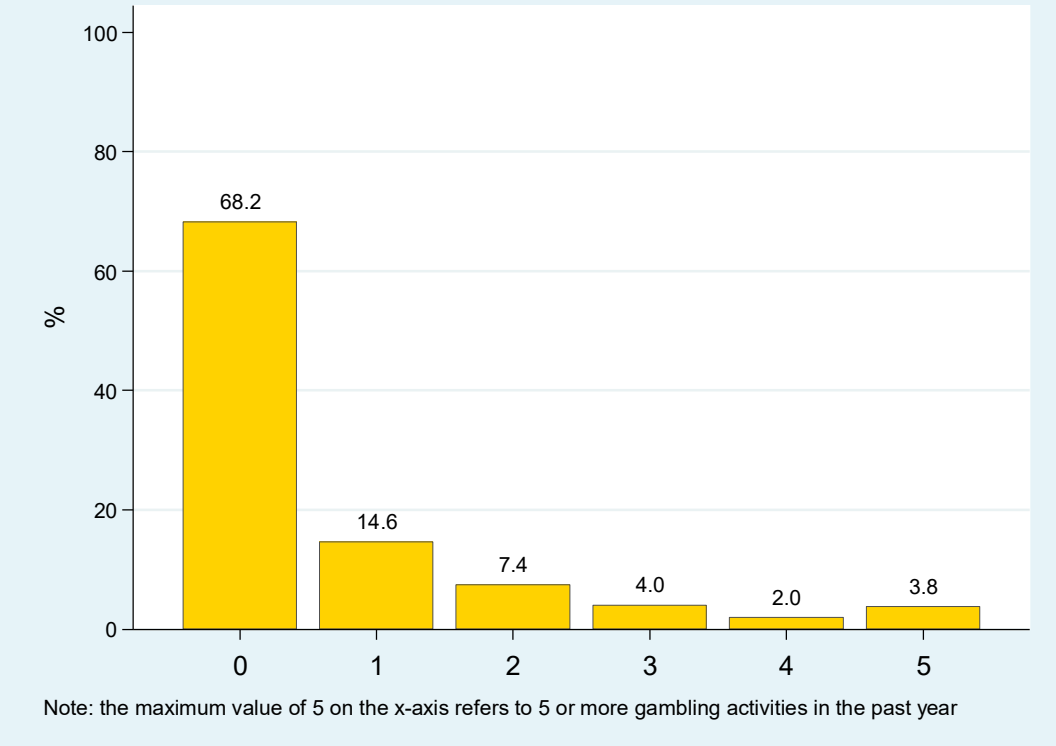
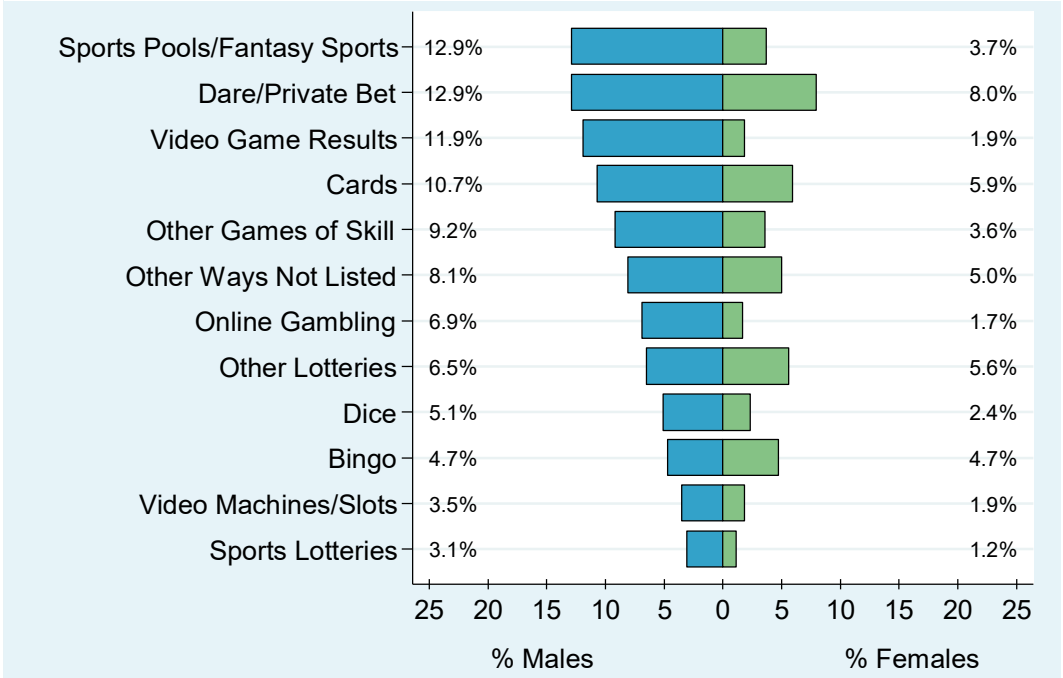


Figure 3.6.2
Number of Gambling Activities in the Past Year, 2019 OSDUHS (Grades 7–12)



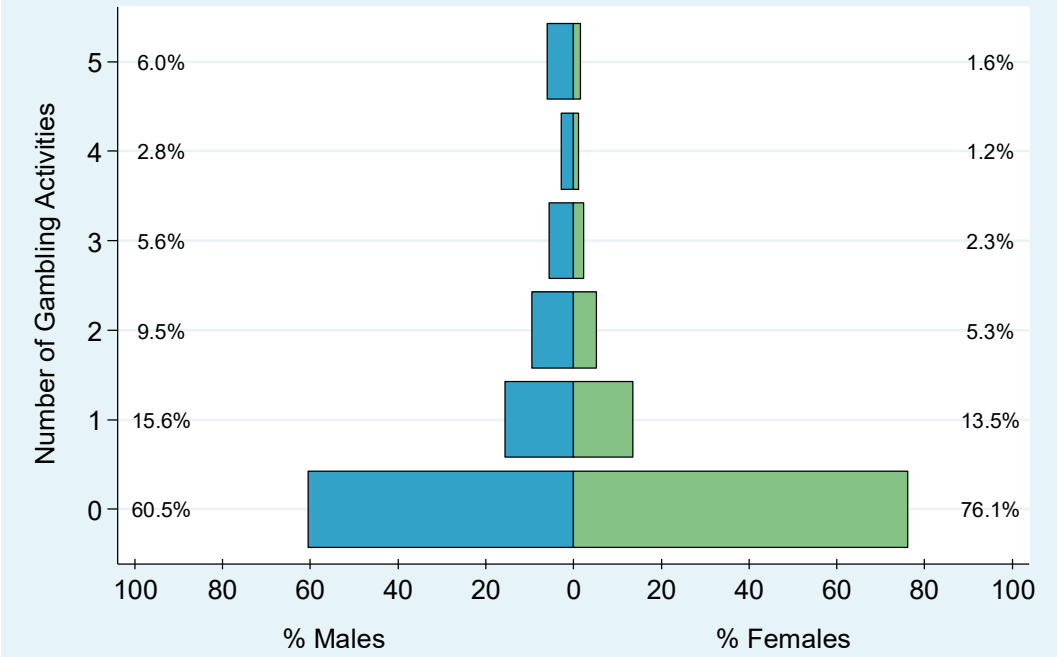
Note: the maximum value of 5 on the x-axis refers to 5 or more gambling activities in the past year

Figure 3.6.3
Percentage Reporting Gambling Activities in the Past Year by Sex, 2019 OSDUHS (Grades 7–12)



Notes: (1) significant sex difference (p<.05) for each activity except Other Lotteries and Bingo;
(2) 'Other Games of Skill' such as pool, darts, chess, bowling; (3) Casino gambling suppressed for both

Figure 3.6.4
Number of Gambling Activities in the Past Year by Sex, 2019 OSDUHS (Grades 7–12)



Notes: (1) the maximum value of 5 refers to 5 or more gambling activities in the past year; (2) the sex differences are significant (p<.05)

Any Gambling Activity

- About one-third (31.8%) of students in grades 7–12 report at least one gambling activity during the past year. This percentage represents about 302,800 students across Ontario.
- Males are significantly more likely than females to report any gambling in the past year (39.5% vs. 23.9%, respectively).
- There is significant grade variation, ranging from 26.2% of 7th graders up to 37.0% of 12th graders.
- Among the four regions, students in the Greater Toronto Area (29.4%) are least likely, while students in the North (36.0%) are most likely, to report any gambling in the past year.

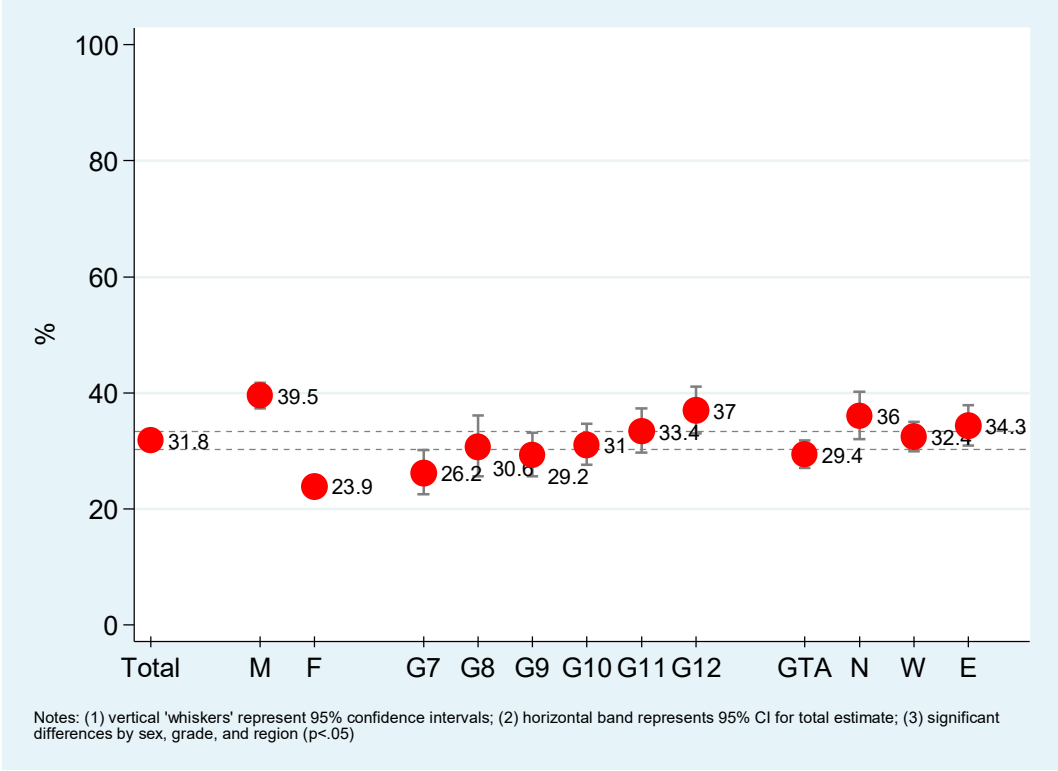
Multi-Gambling Activity

- About 3.8% of students in grades 7–12 gambled at five or more activities during the past year. This percentage represents about 36,200 students across Ontario.
- Males are significantly more likely than females to report gambling at five or more activities in the past year (6.0% vs. 1.6%, respectively).
- There is no significant grade variation.
- There is no significant regional variation.

2001–2019 (Grades 7–12):

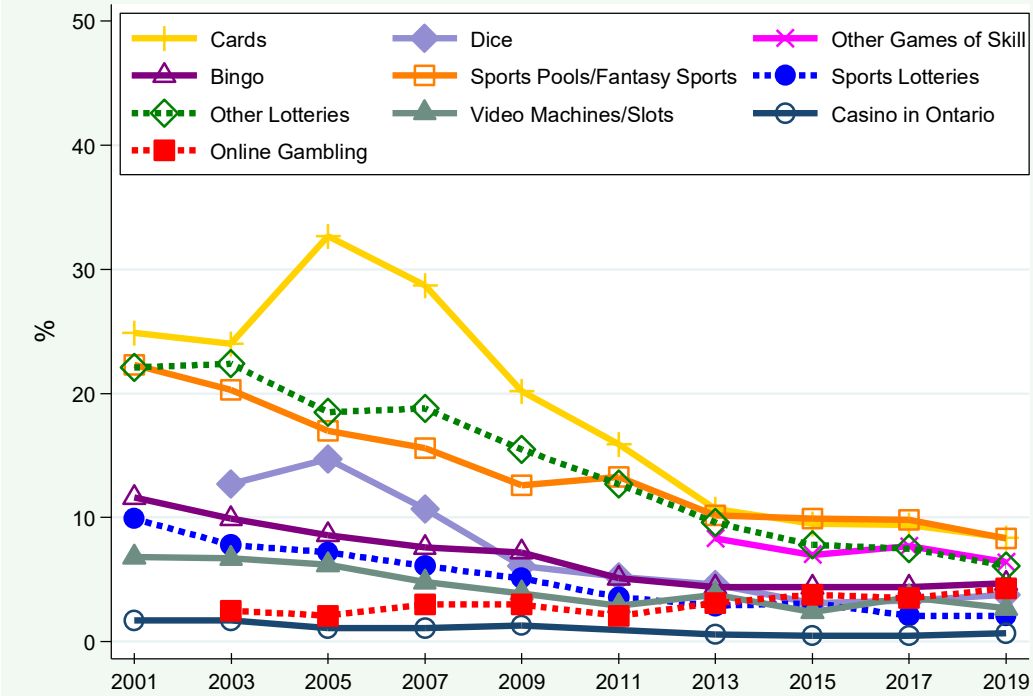
- No individual gambling activity increased between 2017 and 2019. In fact, most activities show significant downward trends. The past year prevalence estimates for the following activities are currently lower than in the early 2000s: cards, dice, bingo, sports pools/fantasy sports, sports lottery tickets, other lottery tickets, slots/gambling machines, casino gambling, and other gambling activities (not included in our list). The one exception to the declining trend is online gambling, which has steadily, but significantly, increased since 2003 (from 2.5% to 4.3%).
- The percentage of students who report any gambling activity in the past year has remained stable since 2013, at about 31%-35%. However, the current estimate is significantly lower than estimates seen between 2003 (57.3%) and 2011 (38.4%).
- The percentage reporting multi-gambling activity in the past year significantly increased between 2017 and 2019, from 2.1% to 3.8%. However, the current estimate remains significantly lower than 2003 (6.1%), when monitoring first began.

Figure 3.6.5
Percentage Reporting Any Gambling Activity in the Past Year by Sex, Grade, and Region, 2019 OSDUHS



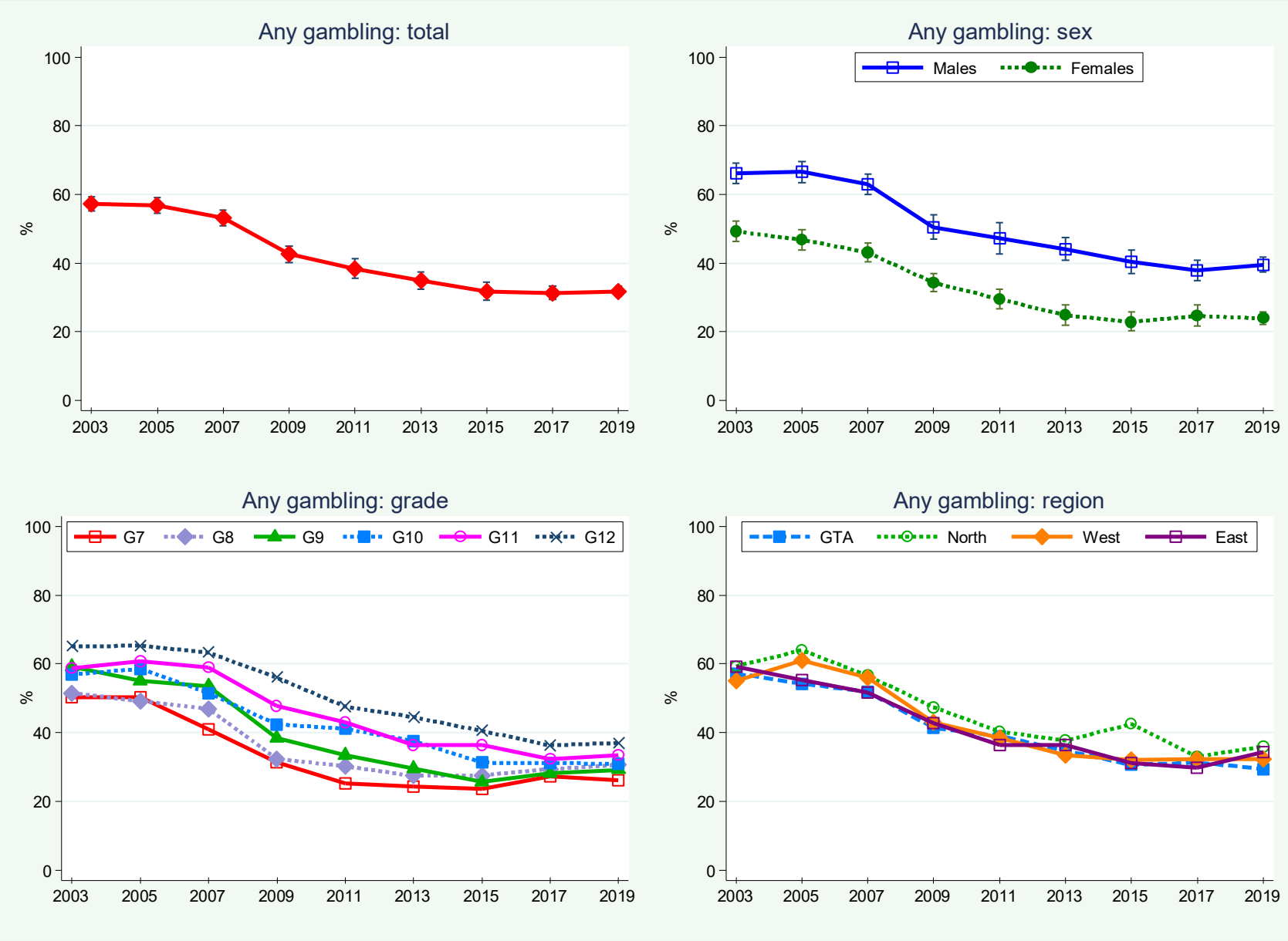
Notes: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal band represents 95% CI for total estimate; (3) significant differences by sex, grade, and region (p<.05)

Figure 3.6.6
Percentage Reporting Gambling Activities in the Past Year, 2001–2019 OSDUHS (Grades 7–12)



Note: Dice and Online Gambling first asked about in 2003, Other Games of Skill first asked about in 2013

Figure 3.6.7
Percentage Reporting Any Gambling Activity in the Past Year, 2003–2019 OSDUHS (Grades 7–12)



Money Spent on Gambling

- Among those students in grades 7–12 who report gambling in the past year, the vast majority (86%) report that the largest amount of money gambled was less than $50. Another 7% report gambling between $50 and $99; 3% report between $100 and $199; and 4% report spending $200 or more.

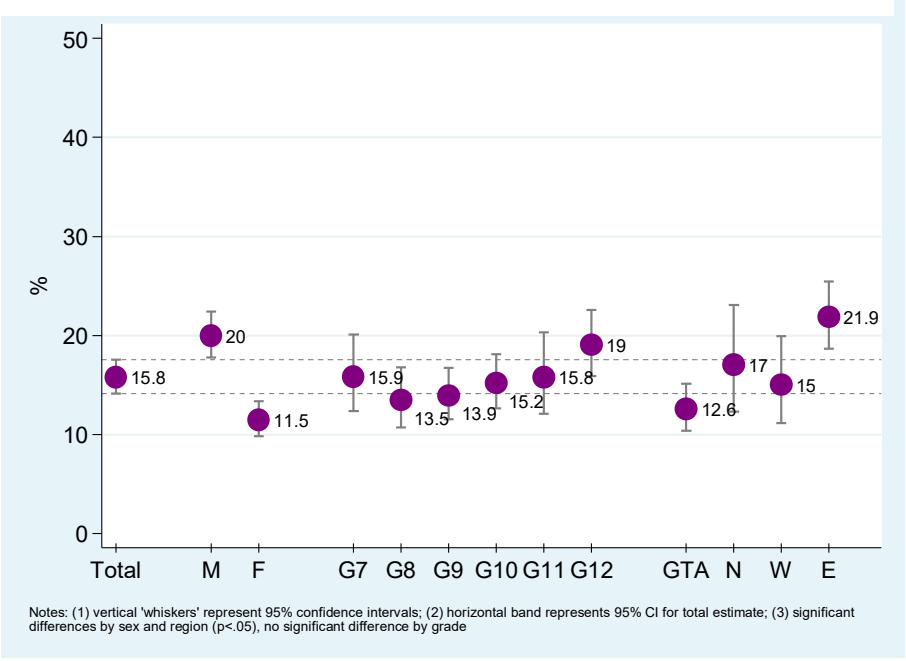
Playing Free Online Gambling-Type Games

(Figure 3.6.8)

The 2019 OSDUHS included a new question about playing free online gambling-type games. The question was "*In the last 3 months, how often did you play free gambling type games on the Internet (such as online poker, slots, or other gambling games on Facebook or other websites/apps) just for fun and not for money?*" Here we present the percentage of students who played these free games at least once in the past three months.

- About one-in-six (15.8%) students in grades 7–12 report playing free online gambling-type games in the past three months.
- Males (20.0%) are significantly more likely than females (11.5%) to play these games.
- There is no significant grade variation.
- Among the four regions, students in the GTA (12.6%) are least likely, while students in the East region (21.9%) are most likely, to play these types of games.

Figure 3.6.8
Percentage Reporting Playing Free Online Gambling-Type Games in the Past Three Months by Sex, Grade, and Region, 2019 OSDUHS



Notes: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal band represents 95% CI for total estimate; (3) significant differences by sex and region (p<.05), no significant difference by grade

3.6.2 Problem Gambling

(Figure 3.6.9, Table 3.6.1)

Starting in 2015, students were asked about gambling problems using the 9-item *Gambling Problem Severity Subscale* (GPSS) of the *Canadian Adolescent Gambling Inventory* (CAGI), developed specifically for adolescents (Stinchfield, 2010; Tremblay, Stinchfield, Wiebe, & Wynne, 2010). The following nine questions were asked of a random half sample of secondary students, each question referring to the past three months:

- *How often have you skipped practice or dropped out of activities (such as team sports or band) due to your gambling?*
- *How often have you skipped hanging out with friends who do not gamble to hang out with friends who do?*
- *How often have you planned your gambling activities?*
- *How often have you felt bad about the way you gamble?*
- *How often have you gone back another day to try to win back the money you lost while gambling?*
- *How often have you hidden your gambling from your parents, other family members, or teachers?*
- *How often have you felt that you might have a problem with gambling?*
- *How often have you taken money that you were supposed to spend on lunch, clothing, movies, etc., and used it for gambling or for paying off gambling debts?*
- *How often have you stolen money or other things of value in order to gamble or to pay off your gambling debts?*

Response options for the first seven items ranged from (1) *Never* to (4) *Almost always*, and were rescaled ranging from 0 to 3. Response options for the last two items ranged from (1) *Never* to (4) *7 or more times* and were rescaled ranging from 0 to 3. Students also had the option of responding that they never gambled in their lifetime or during the past three months and these responses were recoded to 0. A summated score ranging from 0 to 27 was computed for the total sample of secondary students who answered all nine items. Three categories were derived from this summated score: (1) No Problem (scores from 0–1), (2) Low-to-Moderate Problem Severity (scores from 2–5), and (3) High Problem Severity (scores of 6 or higher).

2019 (Grades 9–12):

- Of the nine GPSS items, the most prevalent is planning one's gambling activities (4.0%). The least prevalent is stealing to gamble or pay off debts (1.2%).
- The vast majority (94.0%) of secondary students do not have a gambling problem. About 4.3% of students meet the criteria for low-to-moderate severity of a gambling problem. About 1.7% meet the criteria for a high-severity gambling problem (representing about 12,200 Ontario students in grades 9–12).
- Males are significantly more likely than females to meet the criteria for both a low-to-moderate gambling problem and a high-severity gambling problem.
- There are no significant grade or regional differences.

2015–2019 (Grades 9–12):

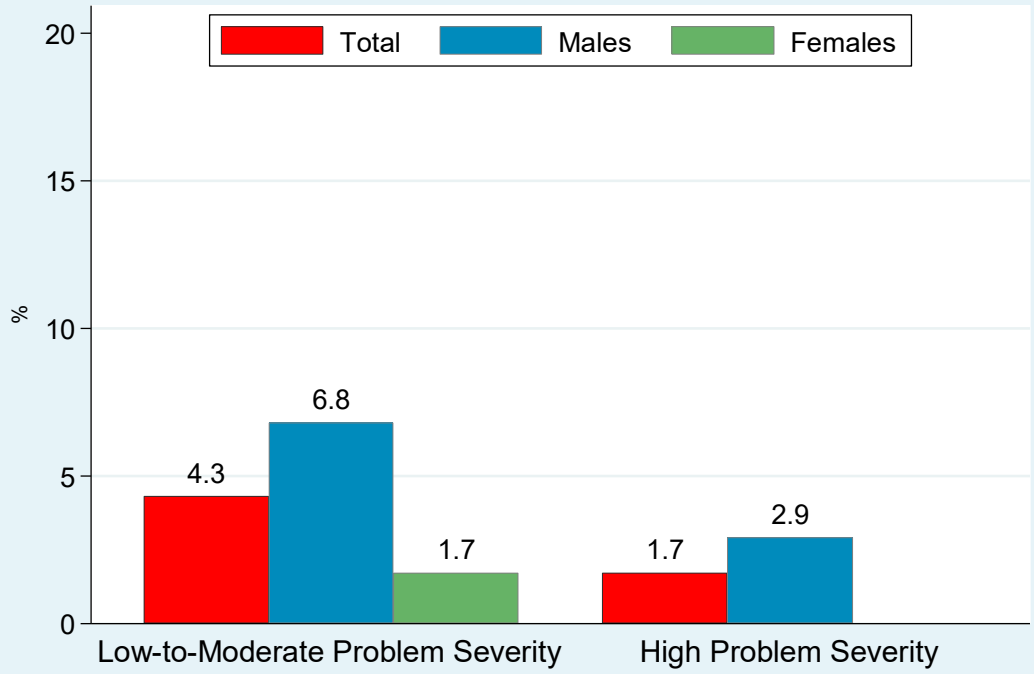
- The percentage of secondary students who meet the criteria for a low-to-moderate gambling problem in 2019 (4.3%) is similar to the estimates from 2015 (3.6%) and 2017 (6.9%).
- The percentage of secondary students who meet the criteria for a high-severity gambling problem in 2019 (1.7%) is similar to the estimates from 2015 (1.1%) and 2017 (1.8%).

Table 3.6.1: Percentage of Secondary Students Reporting Symptoms of a Gambling Problem in the Past Three Months as Measured by the *Gambling Problem Severity Subscale* (GPSS), 2019 OSDUHS (Grades 9–12)

GPSS Item	Total Sample (n=5,273)
1. Skipped practice or dropped out of activities (such as team sports or band) due to your gambling	1.8%
2. Skipped hanging out with friends who do not gamble to hang out with friends who do	1.7%
3. Planned your gambling activities	4.0%
4. Felt bad about the way you gamble	2.8%
5. Gone back another day to try to win back the money you lost while gambling	3.9%
6. Hidden your gambling from your parents, other family members, or teachers	2.7%
7. Felt that you might have a problem with gambling	2.1%
8. Taken money that you were supposed to spend on lunch, clothing, movies, etc., and used it for gambling or for paying off gambling debts	3.3%
9. Stolen money or other things of value in order to gamble or to pay off your gambling debts	1.2%

Notes: (1) for items 1–7 entries show the percentage who responded at least "sometimes" in the past three months; (2) for items 8 and 9 entries show the percentage who responded at least one time in the past three months; (3) n=number of students surveyed; (4) based on a random half sample of students in grades 9–12.

Figure 3.6.9
Percentage Classified According to Severity of Gambling Problem in the Past Three Months as Measured by the *Gambling Problem Severity Subscale* (GPSS), 2019 OSDUHS (Grades 9–12)



Notes: (1) females' estimate for High Problem Severity was suppressed due to a low value; (2) significant sex differences (p<.05)

3.6.3 Video Gaming

(Figures 3.6.10–3.6.13; Tables 3.6.2, A3.6.2)

Starting in 2007, the OSDUHS asked a random half sample of students about video gaming (either on a computer, TV, a cell phone, or in an arcade) and related problems using the 9-item *Problem Video Game Playing* (PVP) scale (Tejeiro Salguero & Bersabe Moran, 2002). The scale measures the dimensions of preoccupation, tolerance, loss of control, withdrawal, escape, disregard for consequences, and disruption to family/school. The following nine questions were asked of students in grades 7–12:

- *When you were not playing video games, did you keep thinking about them (such as planning your next game, remembering past games)?*
- *Did you spend an increasing amount of time playing video games?*
- *Did you try to control, cut back, or stop playing video games, or play for longer than you planned to?*
- *Did you get restless or irritated when you could not play video games?*
- *Did you play video games more often when you felt bad (sad, angry or nervous) or had problems?*
- *When you lost in a game or did not get the results you wanted, did you play again to achieve your target?*
- *Did you skip school or work, or lie or steal, or argue with someone so that you could play video games?*
- *Did you ignore homework or go to bed late, or spend less time with family and friends because of your video game playing?*
- *Did you ever hide your video game playing from your family or friends?*

Each question referred to the past 12 months and each had the response options of *Yes, No*, or *Don't play video games*. Reporting five or more of the nine problem indicators was used to identify those with a probable video gaming problem. Also included was a question about frequency of playing video games during the past 12 months, and a question about hours daily spent playing video games on days when one played.

Frequency of Playing Video Games

- Among students in grades 7–12, about 16.7% report that they do not play video games; 22.6% report playing three times a month or less often; 6.2% play once a week; 17.3% play two to three times a week; 13.0% play four to five times a week; and 24.3% play daily or almost daily.
- Males are about four times more likely than females to play video games daily (39.0% vs. 9.1%, respectively).
- Students in grades 11 and 12 are less likely to play daily compared with students in the younger grades (data not shown).
- There are no significant regional differences regarding the percentage that play daily (data not shown).

Usual Number of Hours per Day Spent Playing Video Games

- About 19.5% of students in grades 7–12 usually play video games for less than one hour a day; 15.3% play for about one hour; 19.4% play for two hours; 17.6% play for three to four hours; 7.3% play for five to six hours; and 3.6% play for seven or more hours a day.
- Males are significantly more likely than females to play video games for more hours per day. For example, 18.5% of males report playing video games for five hours or more daily, compared with 3.1% of females.
- There is no significant variation by grade.
- Students in the GTA (13.1%) are most likely to play video games for five hours or more a day, while students in the East (7.8%) are least likely. Students in the North and West regions fall in between at 9%-11%.

Figure 3.6.10
Frequency of Playing Video Games in the Past Year, 2019 OSDUHS (Grades 7–12)

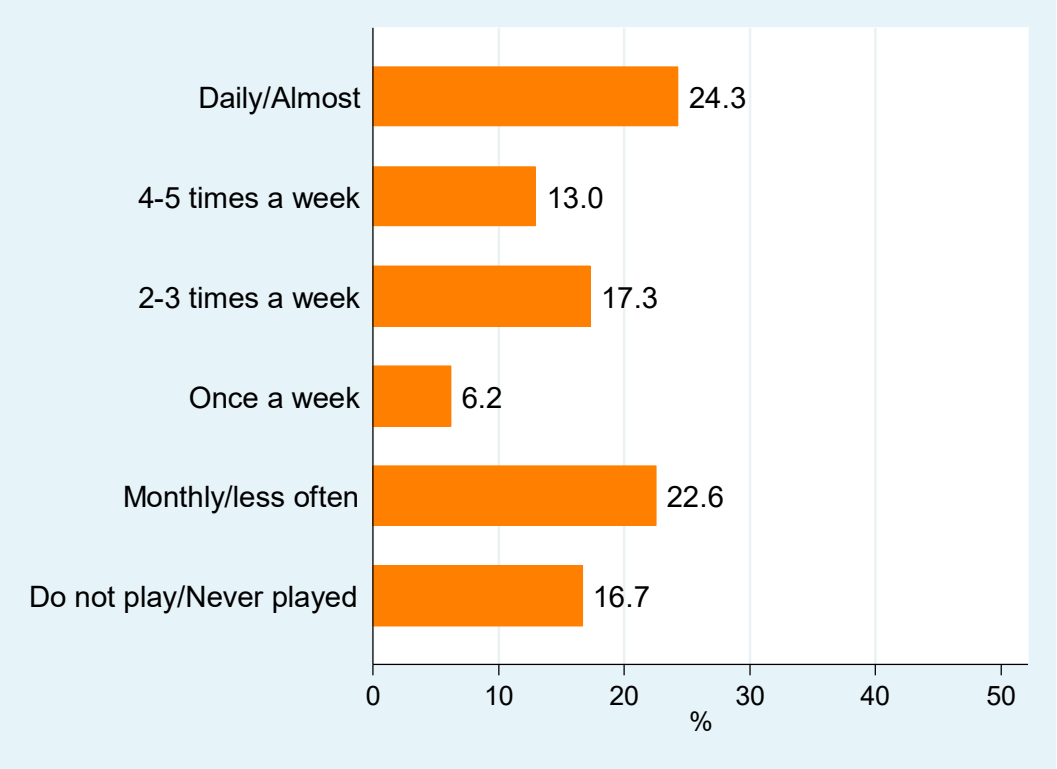
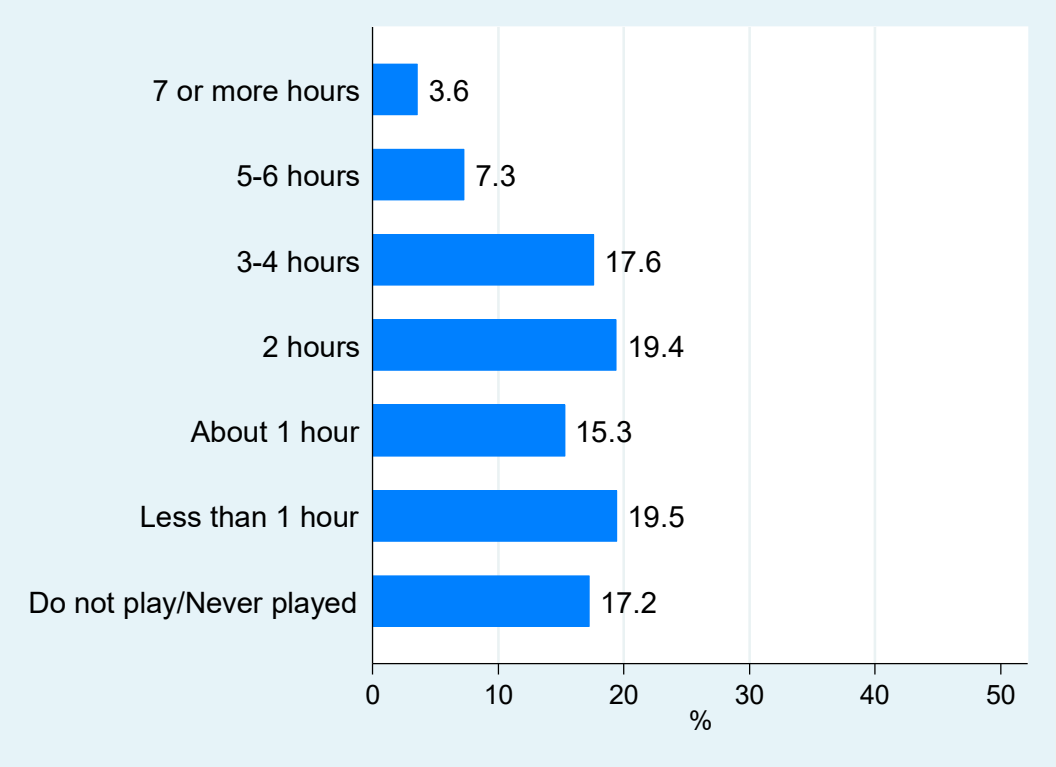


Figure 3.6.11
Usual Number of Hours per Day Spent Playing Video Games in the Past Year, 2019 OSDUHS (Grades 7–12)



Video Gaming Problems

- Table 3.6.2 presents the percentage of students in grades 7–12 reporting each of the nine video gaming problem symptoms. Males are significantly more likely than females to report each symptom.

- About one-in-seven (14.0%) students meet the criteria for a video gaming problem. This represents about 137,000 students in grades 7–12 in Ontario. When we look at only those students who played video games daily in the past year, one-third (34.2%) meet the criteria for a problem.

- Males are significantly more likely than females to indicate a video gaming problem (22.7% vs. 5.1%, respectively).

- Despite some variation, there are no significant differences among the grades.

- There are significant regional differences showing that students in the GTA (16.7%) are most likely to indicate a video gaming problem compared with students in the other three regions (about 11%-13%).

2007–2019 (Grades 7–12):

- The percentage of students classified as having a video gaming problem remained stable between 2017 (11.7%) and 2019 (14.0%). However, the current estimate is significantly higher than those seen a decade ago in 2007 and 2009 (9%-10%).

- The percentage of males classified as having a video gaming problem significantly increased between 2017 (16.6%) and 2019 (22.7%). Males also show a significant increase since 2007. Females show no significant change over time.

- Among the grades, only 9th graders show an increase between 2017 and 2019 (from 9.6% to 17.2%), as well as an increase since monitoring began in 2007.

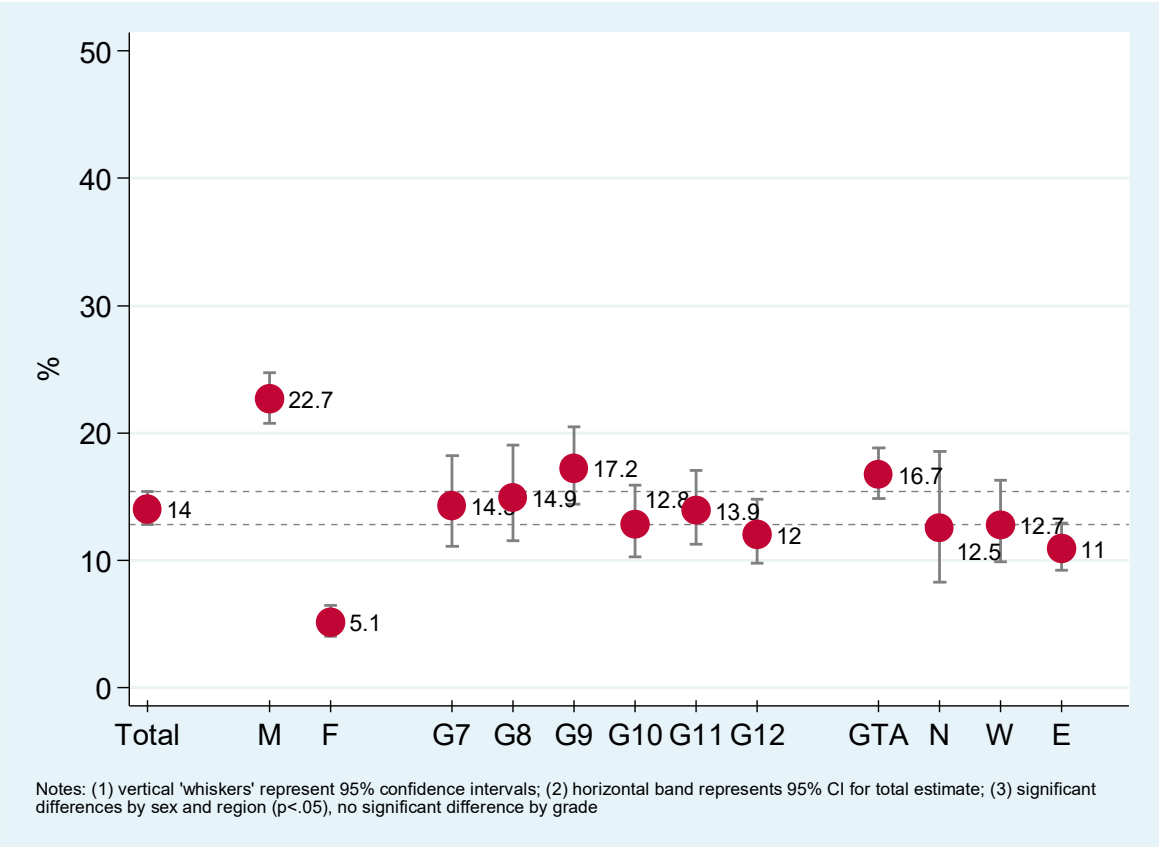
- Among the regions, only students in the Greater Toronto Area show an increase since 2007.

Table 3.6.2: Percentage of Students Reporting Symptoms of a Video Game Playing Problem in the Past Year as Measured by the *Problem Video Game Playing (PVP) Scale*, 2019 OSDUHS (Grades 7–12)

PVP Scale Item	Total Sample (n=7,617)	Males (n=3,345)	Females (n=4,272)
1. Kept thinking about playing video games, when not playing	24.5	38.5	9.9
2. Spent an increasing amount of time playing video games	19.3	29.8	8.4
3. Tried to control, cut back, stop playing video games, or played for longer than intended	27.9	39.8	15.8
4. Became restless or irritated when could not play video games	9.9	14.7	5.0
5. Played more often when felt bad (sad, angry or nervous) or had problems	22.6	32.1	12.8
6. When lost in a game or did not get the desired results, played again to achieve the target	48.3	66.6	29.3
7. Skipped school or work, or lied/stole/argued with someone in order to play	5.7	9.4	1.9
8. Ignored homework, went to bed late, or spent less time with family and friends because of video game playing	26.5	39.5	13.1
9. Hid video game playing from family or friends	7.8	11.8	3.7

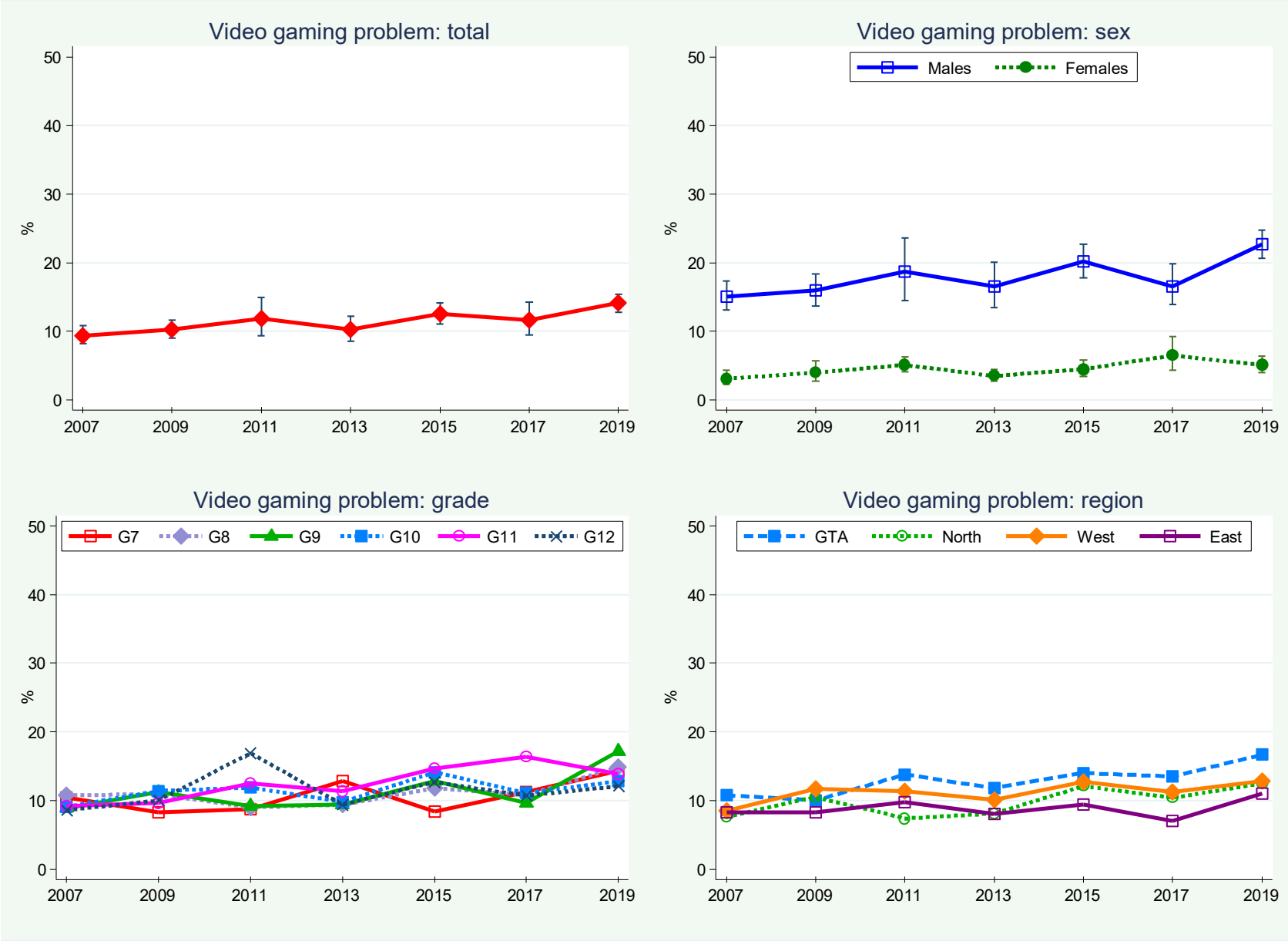
Notes: (1) entries are the percentages responding "Yes"; (2) n=number of students surveyed; (3) based on a random half sample; (4) significant sex difference for each item, p<.05.

Figure 3.6.12
Percentage Classified as Having a Video Gaming Problem (PVP Scale) by Sex, Grade, and Region, 2019 OSDUHS



Notes: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal band represents 95% CI for total estimate; (3) significant differences by sex and region (p<.05), no significant difference by grade

Figure 3.6.13
Percentage Classified as Having a Video Gaming Problem (PVP Scale), 2007–2019 OSDUHS (Grades 7–12)



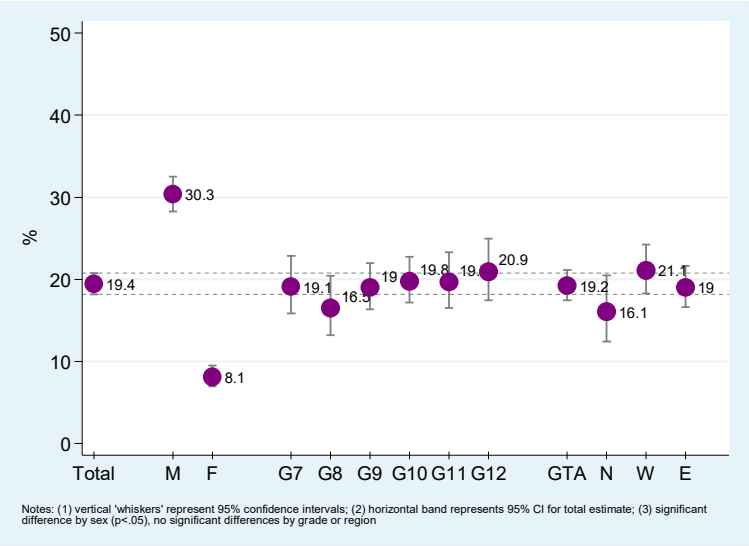
Betting Virtual Credits While Playing Video Games

Starting in 2019, the OSDUHS asked students if they have ever bet virtual credits while playing video games. The two questions were: "*Did you ever bet virtual credits (such as points, gems, coins, or skins) that you won or earned in a video game?*" and "*Did you ever bet virtual credits (such as points, gems, coins, or skins) that you purchased with real money?*" The response options for both questions were *Yes*, *No*, or *Don't play video games*.

2019 (Grades 7–12):

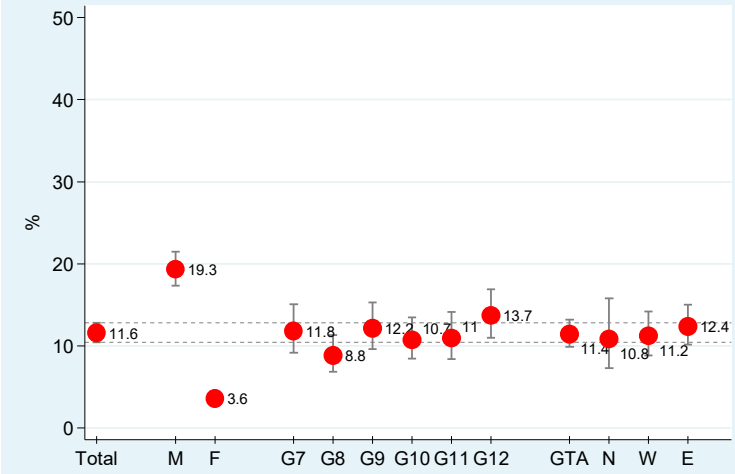
- About one-in-five (19.4%) students have ever bet virtual credits that they won or earned in a video game. One-in-nine (11.6%) have bet virtual credits that they purchased with money.
- Males are significantly more likely than females to bet virtual credits that they earned or that they purchased.
- There are no significant differences for either behaviour by grade or by region.

Figure 3.6.14
Percentage Reporting Ever Betting Virtual Credits Won or Earned in a Video Game by Sex, Grade, and Region, 2019 OSDUHS



Notes: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal band represents 95% CI for total estimate; (3) significant difference by sex (p<.05), no significant differences by grade or region

Figure 3.6.15
Percentage Reporting Ever Betting Virtual Credits Purchased with Money in a Video Game by Sex, Grade, and Region, 2019 OSDUHS



Notes: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal band represents 95% CI for total estimate; (3) significant difference by sex (p<.05), no significant differences by grade or region

3.6.4 Social Media Use

(Figures 3.6.16–3.6.19; Table A3.6.3)

Starting in 2013, the OSDUHS asked students how many hours per day they usually spend on social media. In 2019, students were asked the question: "*About how many hours a day do you usually spend on social media sites or apps, such as Instagram, Snapchat, Twitter, Facebook, either posting or browsing*?" Students also had the option to respond that they do not use these sites, or that they do not use the Internet. Here we focus on the percentage who report usually spending five hours or more daily on social media.

Starting in 2019, students were also asked about posting personal information on social media. The question was: "*If you use social media, have you ever posted personal information, a photo, or a video of yourself that you wish you had not posted?*" The response options were *Yes*, *No*, or *Don't use social media*.

Usual Number of Hours per Day Spent on Social Media

2019 (Grades 7–12):

- Most students visit social media websites on a daily basis. About 6.1% spend less than one hour a day on these sites, and a similar percentage (6.6%) spend seven or more hours a day.
- One-in-five (20.5%) students usually spend five hours or more a day on social media.
- Females (25.8%) are significantly more likely than males (15.6%) to spend five hours or more a day on social media.
- There is significant grade variation, with students in grades 9-12 (about 22%-24%) most likely to spend five hours or more a day on social media.
- There is significant regional variation showing that students in the East region (17.1%) are least likely to spend five hours or more a day on social media.

2013–2019 (Grades 7–12):

- The percentage of students who report spending five hours or more a day on social media remained stable between 2017 (20.1%) and 2019 (20.5%). However, the current estimate is significantly higher than 2015 (16.0%) and 2013 (10.7%), the first year of monitoring.
- The increase in excessive social media use seen since 2013 is evident among males, females, most grades, and most regions.

Regretfully Sharing Personal Information on Social Media

2019 (Grades 7–12):

- About one-in-five (21.4%) students report posting something personal on social media that they wish they had not.
- Females (24.7%) are significantly more likely than males (18.3%) to post something personal on social media that they wish they had not.
- There is significant grade variation, ranging from 7.8% of 7th graders up to 29.6% of 12th graders.
- There is no significant regional variation.

Figure 3.6.16
Hours per Day Usually Spent on Social Media, 2019 OSDUHS (Grades 7–12)

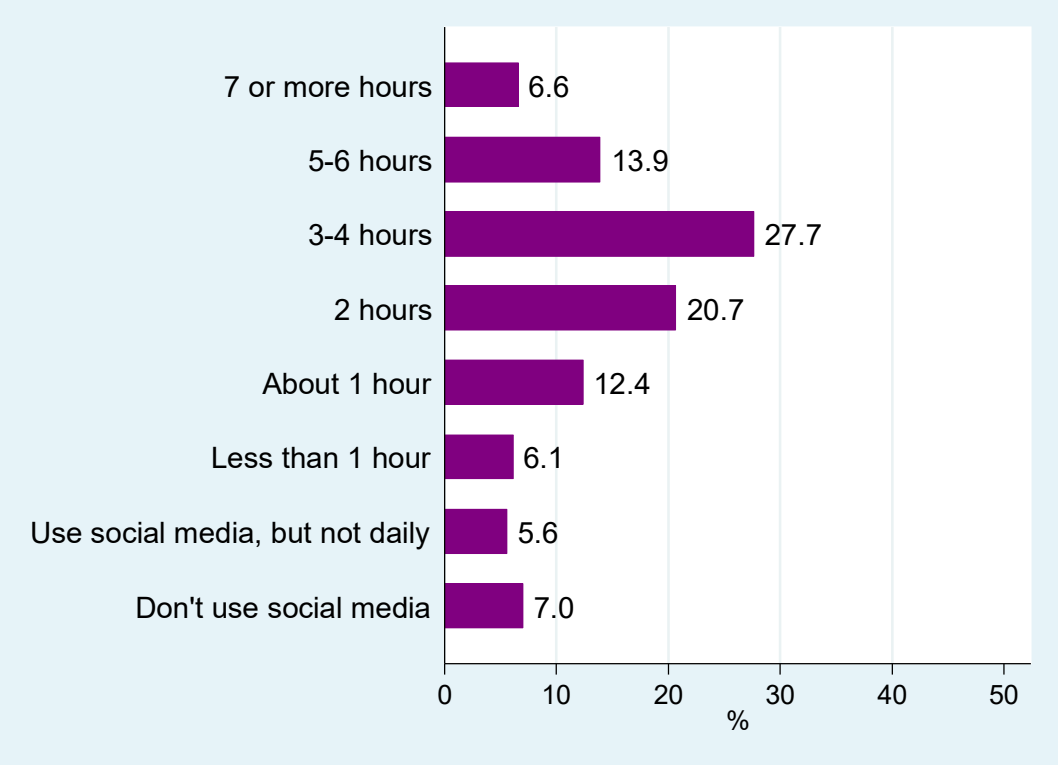
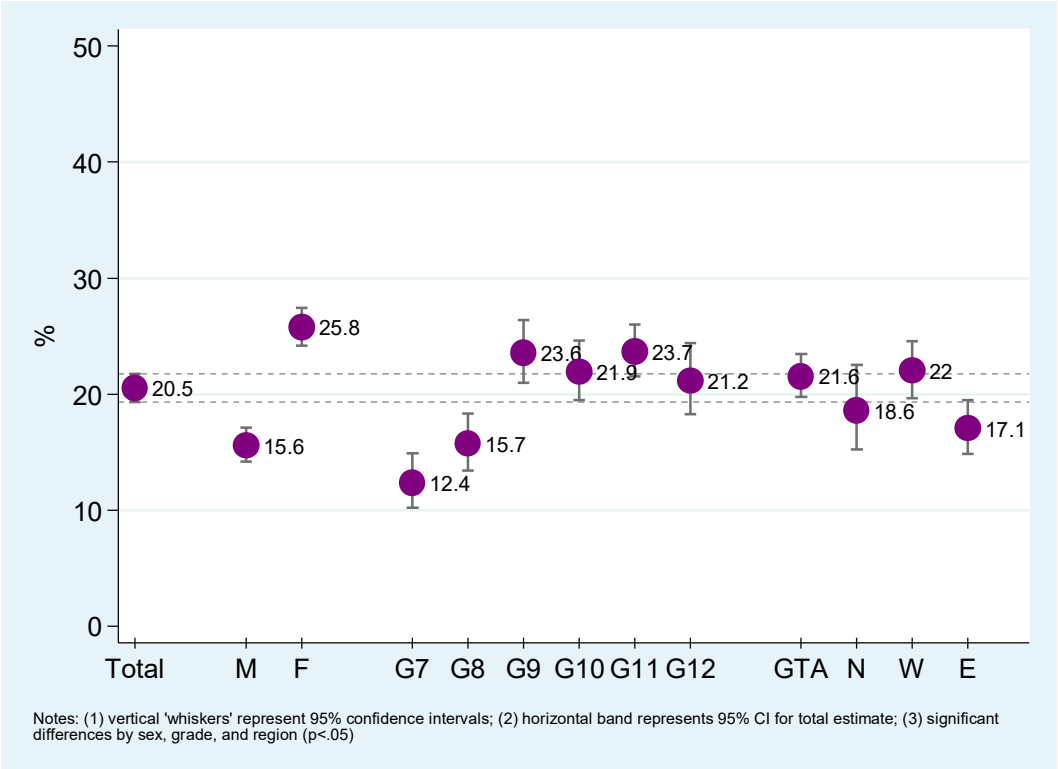
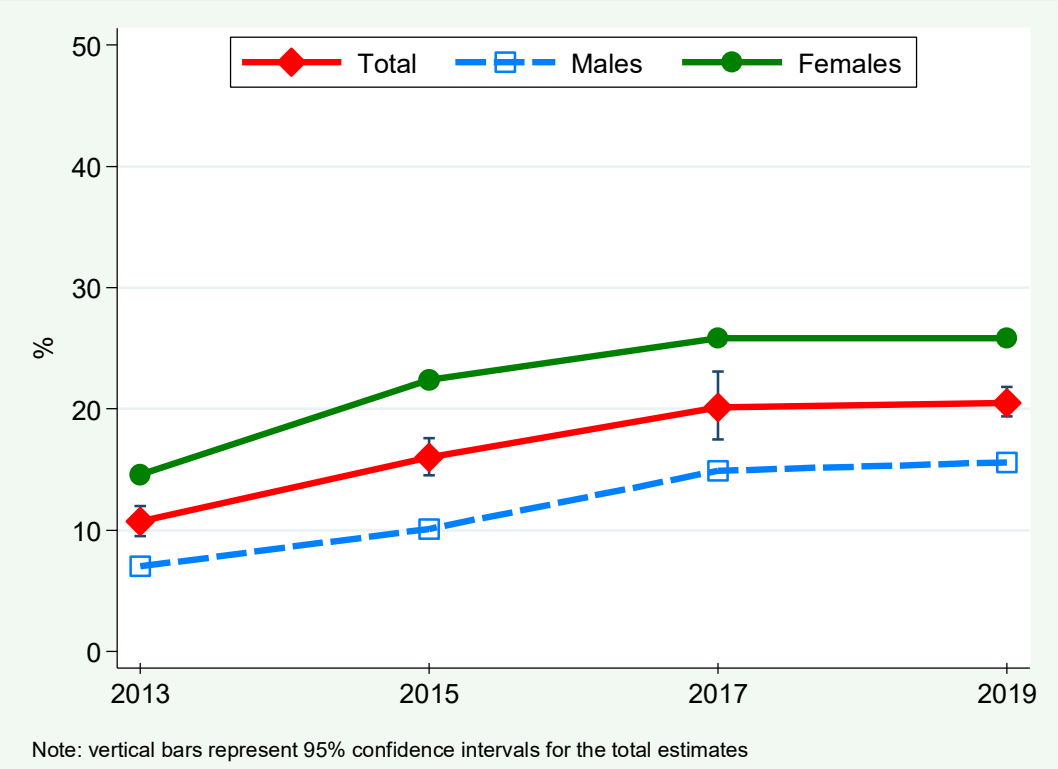


Figure 3.6.17
Percentage Reporting Usually Spending Five Hours or More per Day on Social Media by Sex, Grade, and Region, 2019 OSDUHS



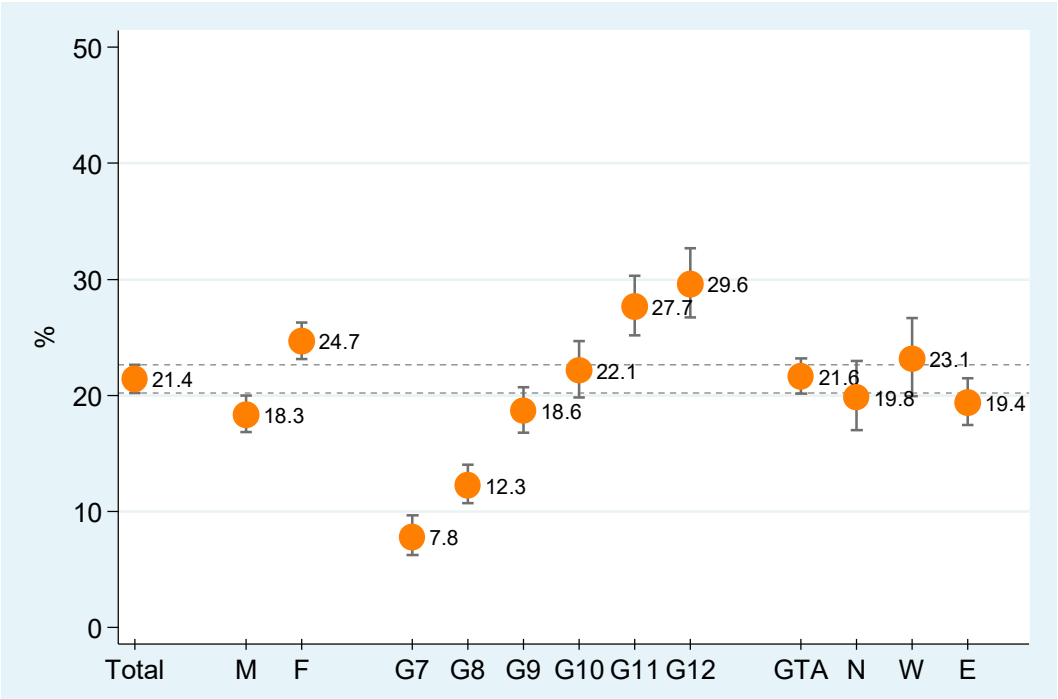
Notes: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal band represents 95% CI for total estimate; (3) significant differences by sex, grade, and region (p<.05)

Figure 3.6.18
Percentage Reporting Usually Spending Five Hours or More per Day on Social Media by Sex, 2013–2019 OSDUHS (Grades 7–12)



Note: vertical bars represent 95% confidence intervals for the total estimates

Figure 3.6.19
Percentage Reporting Regretfully Sharing Personal Information on Social Media by Sex, Grade, and Region, 2019 OSDUHS



Notes: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal band represents 95% CI for total estimate; (3) significant differences by sex and grade (p<.05), no significant difference by region

3.6.5 Technology Use

(Figures 3.6.20–3.6.25, Tables A3.6.4, A3.6.5)

Starting in 2017, the OSDUHS asked a random half sample of secondary students about their use of electronic devices (such as smartphones, tablets, laptops, computers, or gaming consoles) in their free time, and related problems using the 6-item *Short Problematic Internet Use Test* (SPIUT) (Siciliano et al., 2015).[76] This scale, which was adapted from the longer *Compulsive Internet Use Scale*, measures the dimensions of loss of control, preoccupation, conflict with family/friends, withdrawal and coping. The following six questions were asked:

- *How often do you find that you are staying on electronic devices longer than you intended?*
- *How often do you neglect homework because you are spending more time on electronic devices?*
- *How often are you criticized by your parents or your friends about how much time you spend on electronic devices?*
- *How often do you lose sleep because you use electronic devices late at night?*
- *How often do you feel nervous when you are not using electronic devices and feel relieved when you do go back to using them?*
- *How often do you choose to spend more time on electronic devices rather than go out with your friends?*

The response options for each item ranged from (1) *Never* to (5) *Very Often,* and were rescaled ranging from 0 to 4. Students also had the option of responding that they do not use electronic devices in their free time, and these responses were recoded to 0. A summated score ranging from 0 to 24 was computed for the total sample of secondary students who answered all six items. For the purpose of this report, two problem categories were derived from this summated score: a moderate-to-serious problem with technology use (scores of 14 or higher), and a serious problem with technology use (scores of 19 or higher).

[76] We adapted the wording of the SPIUT items by replacing "internet" with "electronic devices" to be more precise and to capture any off-line/download use.

The question used to measure daily device use was "*About how many hours a day in your free time do you usually spend on electronic devices texting, messaging, emailing, chatting, watching videos, playing games, using social media (such as Instagram, Snapchat, Facebook), or surfing the Internet?*" Students also had the option to respond that they do not use electronic devices daily or at all. Here we focus on the percentage who report using devices for five hours or more daily.

Usual Number of Hours per Day Spent on Electronic Devices

- The majority of secondary students use electronic devices for three hours or more a day in their free time. Specifically, one-third (34.6%) use for three to four hours, almost one-quarter (23.1%) use for five to six hours, and 12.3% use for seven hours or more per day. Only about 1.5% report not using electronic devices each day in their free time.

- Over one-third (35.4%) report using electronic devices for at least five hours a day, in their free time.

- Females (37.5%) are significantly more likely than males (33.5%) to use electronic devices for at least five hours a day, in their free time.

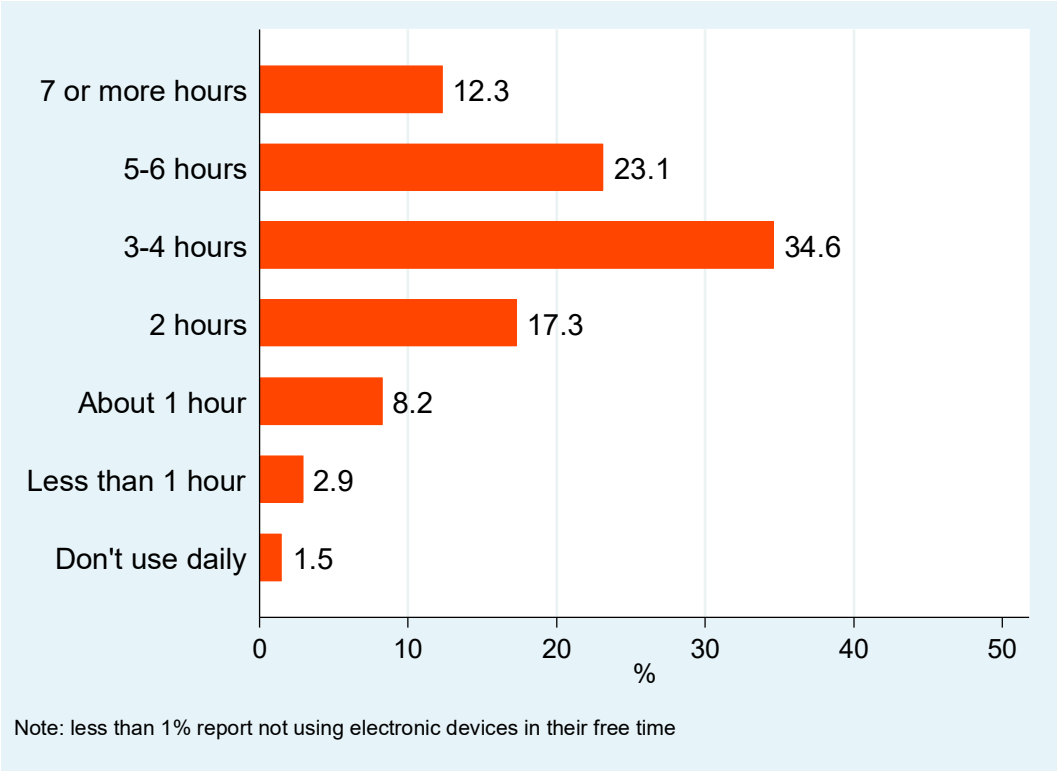
- There are no significant grade differences.

- Students in the Greater Toronto Area (38.7%) are most likely to use devices for at least five hours a day compared to the other three regions (about 30%-35%).

2019 vs. 2017 (Grades 9–12):

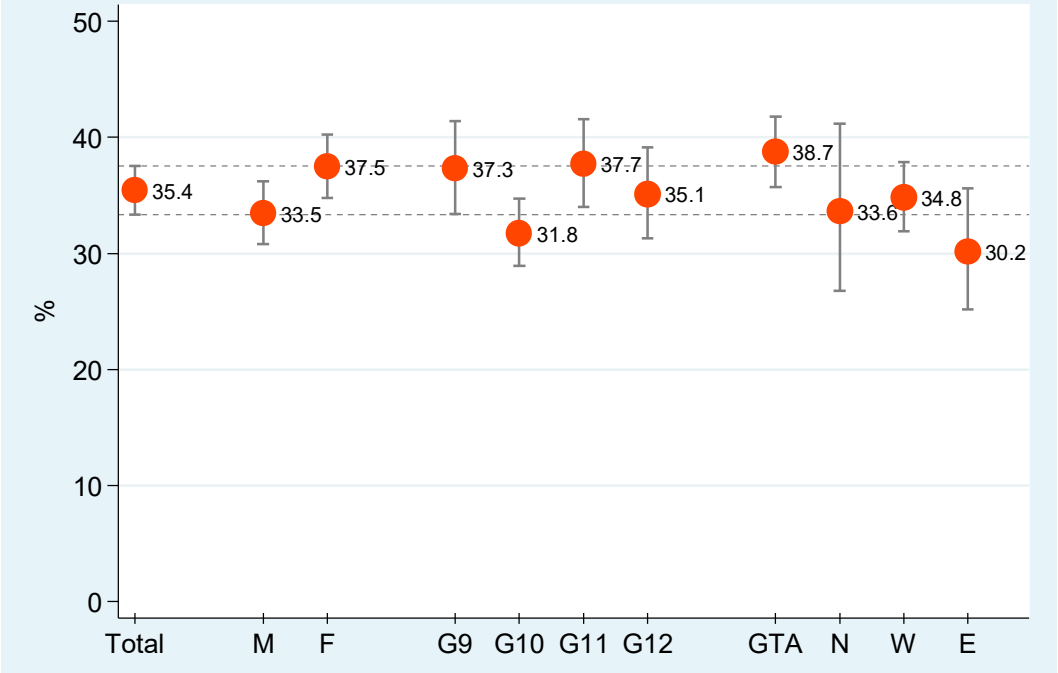
- The percentage of students reporting spending five hours or more daily on devices in their free time significantly increased between 2017 (29.5%) and 2019 (35.4%).

Figure 3.6.20
Hours per Day in Free Time Spent on Electronic Devices, 2019 OSDUHS (Grades 9–12)



Note: less than 1% report not using electronic devices in their free time

Figure 3.6.21
Percentage Reporting Usually Spending Five Hours or More per Day in Free Time on Electronic Devices by Sex, Grade, and Region, 2019 OSDUHS (Grades 9–12)



Notes: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal band represents 95% CI for total estimate; (3) significant differences by sex and region (p<.05), no significant difference by grade

Problematic Technology Use

- Among the six SPIUT items measuring symptoms of problematic technology use, the most prevalent (that is, experienced "quite often" or "very often") is staying on electronic devices longer than intended (41.7%). The least prevalent problem is feeling nervous when not using electronic devices, and feeling relieved when go back to using (7.4%).

- Females are significantly more likely than males to report staying on devices longer than intended, neglecting homework, and feeling nervous when not using devices.

- About one-in-five (18.6%) secondary students report symptoms that may suggest a moderate-to-serious problem with technology use (representing about 135,500 students in grades 9-12). About 2.9% report symptoms that may suggest a serious problem with technology use (representing about 21,200 students in grades 9-12).

- Females are significantly more likely than males to indicate a moderate-to-serious problem (22.5% vs. 14.7%, respectively), as well as a serious problem (3.9% vs. 1.9%, respectively).

- There is no significant variation by grade.

- Despite some variation, the differences among the four regions are not statistically significant.

2019 vs. 2017 (Grades 9–12):

- The percentage of secondary students who report symptoms of a moderate-to-serious problem with technology remained stable between 2017 (18.1%) and 2019 (18.6%).

- The percentage of secondary students who report symptoms of a serious problem with technology use remained stable between 2017 (4.9%) and 2019 (2.9%).

Figure 3.6.22
Percentage Reporting Experiencing Symptoms of Problematic Technology Use (SPIUT Items) "Quite Often" or "Very Often," 2019 OSDUHS (Grades 9–12)

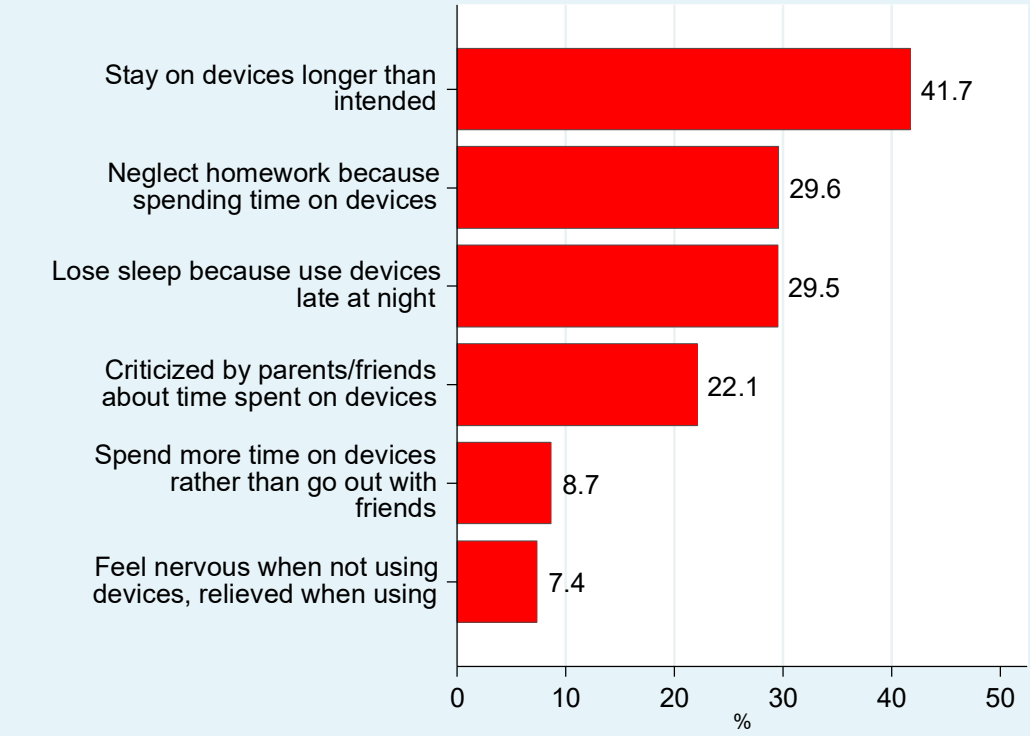
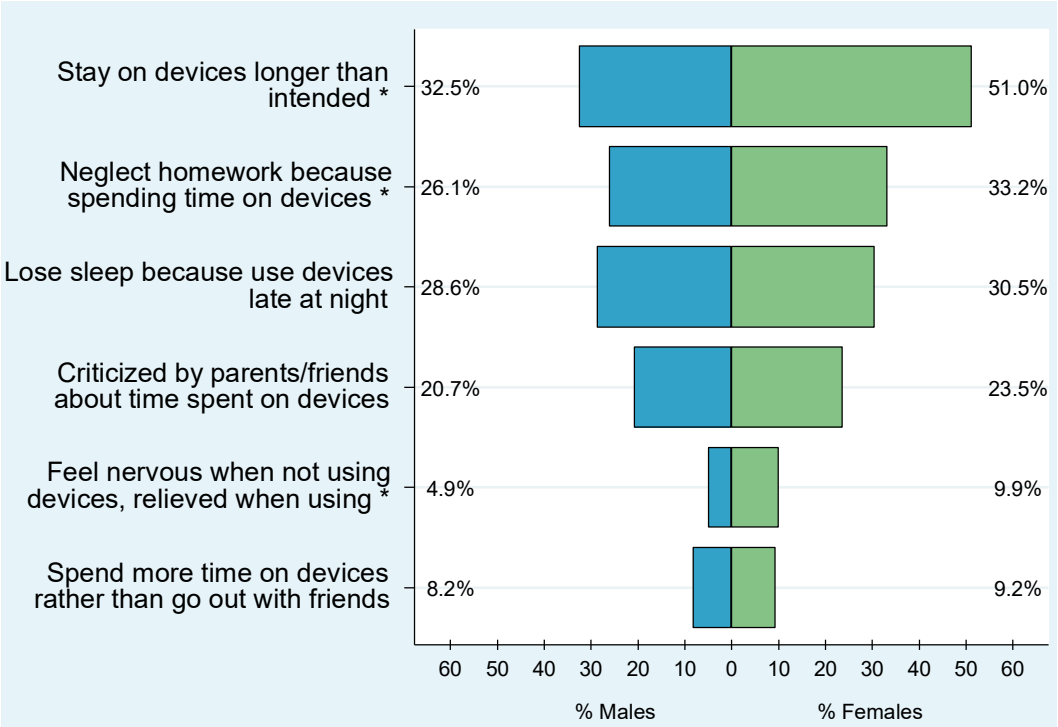
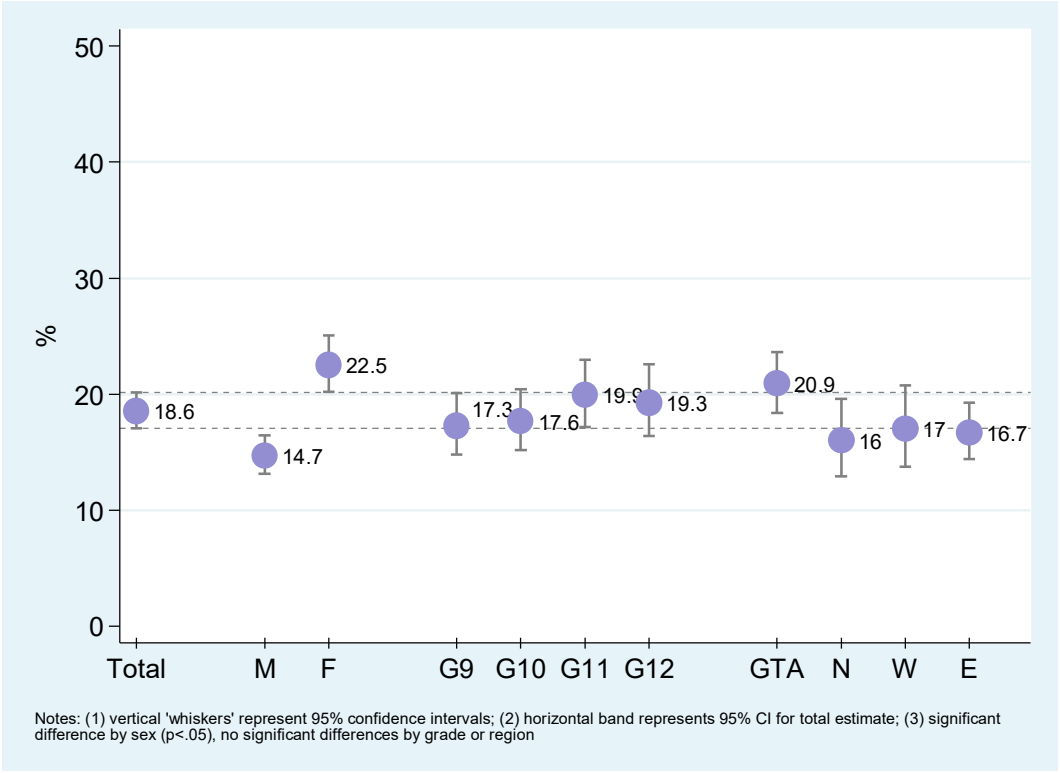


Figure 3.6.23
Percentage Reporting Experiencing Symptoms of Problematic Technology Use (SPIUT Items) "Quite Often" or "Very Often" by Sex, 2019 OSDUHS (Grades 9–12)



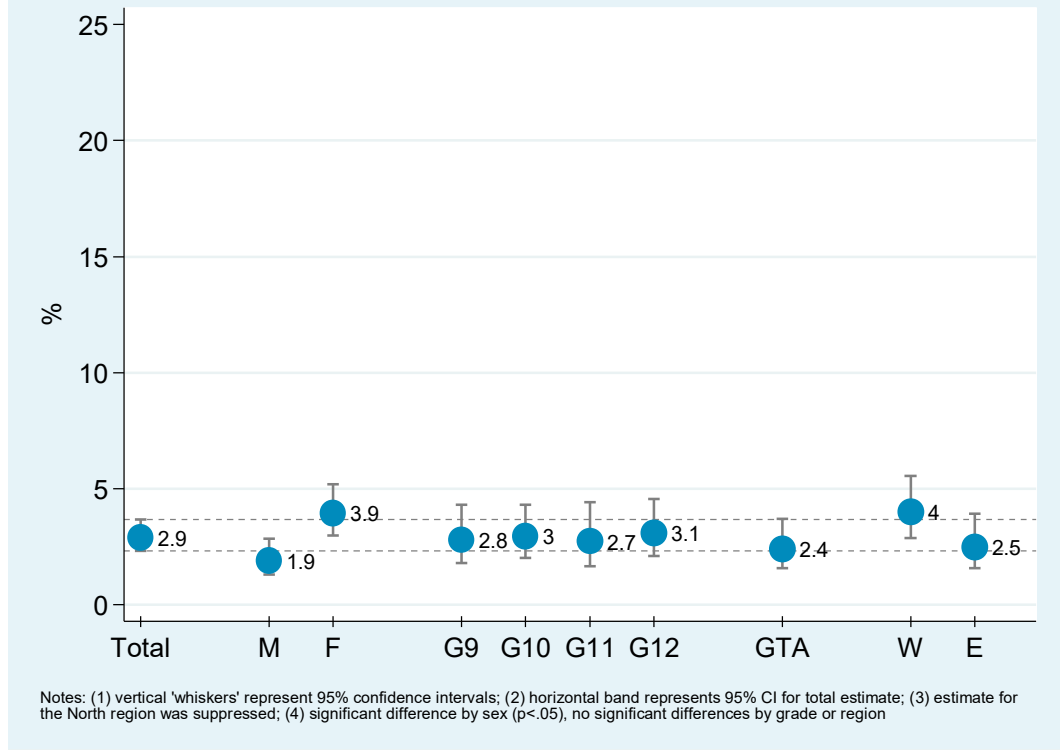
Note: * indicates significant sex difference (p<.05)

Figure 3.6.24
Percentage Reporting Symptoms of a Moderate-to-Serious Problem with Technology Use (SPIUT 14+) by Sex, Grade, and Region, 2019 OSDUHS (Grades 9–12)



Notes: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal band represents 95% CI for total estimate; (3) significant difference by sex (p<.05), no significant differences by grade or region

Figure 3.6.25
Percentage Reporting Symptoms of a Serious Problem with Technology Use (SPIUT 19+) by Sex, Grade, and Region, 2019 OSDUHS (Grades 9–12)



Notes: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal band represents 95% CI for total estimate; (3) estimate for the North region was suppressed; (4) significant difference by sex (p<.05), no significant differences by grade or region

4. DISCUSSION

THE PUBLIC HEALTH APPROACH TO MENTAL HEALTH AND RISK BEHAVIOURS

Designating mental health problems and risk behaviours as public health issues enables health professionals from diverse disciplines to work collaboratively on prevention. Preventing problems from occurring, or reducing their risk, is far more preferable than treating problems, both on an individual and a societal level. The OSDUHS performs several public health functions including: identifying the extent of impaired well-being in the mainstream student population, identifying risk and protective factors, tracking changes over time, and identifying priority areas for further research. Since 1977, the OSDUHS has been providing a knowledge base for designing and targeting prevention and health promotion programs, informing public health policy, evaluating the efficacy of policies and programs on a population level, and disseminating trustworthy information to health and education professionals and the general public.

STUDY LIMITATIONS

Before discussing our findings, we must first remind readers of some of the limitations of this study. Although an in-school probability sampling survey is the most feasible and valid method to monitor health and well-being indicators in the student population, those interpreting the OSDUHS results should consider the following limitations. First, these data are based on self-reports, which cannot be readily verified, nor are they based on clinical assessment. Respondents may unintentionally misreport their responses due to various errors in the response process. Respondents may err in their reporting of a behaviour or event due to such factors as the event not being stored in memory, not understanding the question, being unable to retrieve the information, and difficulty in formatting a response based on provided categories (Biemer & Lyberg, 2003).

Second, self-reports of height and weight (used to calculate body mass index, which in turn classifies overweight and obesity status), illegal behaviours (e.g., theft, drug use), and sensitive experiences (e.g., suicide attempt) likely underestimate the true rate by some unknown magnitude (Adlaf, 2005; Brener et al., 2003; Brener, Billy & Grady, 2003; Elgar & Stewart, 2008), but the extent of underreporting is not likely to greatly vary over time. Thus, estimates of change should remain valid and unaffected by such constant bias.

Third, the bias caused by nonrespondents can affect our estimates. We do not know whether, or by how much, nonrespondents differ from respondents. It is possible that absent students, suspended students, and those who were not allowed or refused to participate are more likely to have physical and mental health difficulties than those who did participate. However, because the rate of student absenteeism in the OSDUHS has remained stable across time, the trends reported here should remain valid. More compelling, our analysis comparing high-responding classes with low-responding classes found minimal differences in reports of mental health and well-being indicators (see the Methods chapter).

Fourth, our findings cannot be generalized to adolescents who are not attending school (e.g., dropouts, street youth, those in the military or in an institutionalized health or correctional setting). Mental health and well-being problems in such groups can differ appreciably from what is found in the mainstream student population. However, the bias caused by such noncoverage

depends not only on the difference in health indicators between those surveyed and those not, but also on the size of the group missed. Thus, although problems may be more likely among those adolescents excluded because they are out-of-scope, if the size of the excluded group is small relative to the total population, the bias will not likely be substantial (Heeringa et al., 2017). In our case, the non-school group excluded from our target constitutes only about 6% of the total adolescent population between the ages of 12 and 18 in Ontario.

Fifth, the data reflect a snapshot in time and because we do not re-survey the same students over time, we cannot identify causes of individual change or the temporal order of risk factors (i.e., whether X causes Y, or Y causes X). In addition, we cannot determine from these data to what extent our findings are adolescent-limited, for example, to what extent antisocial behaviours naturally decline with the transition into emerging adulthood.

Sixth and finally, the findings in such a large study are numerous and complex, and some findings are more reliable than others. For example, random variation causes us to be cautious in interpreting change between two points in time. Therefore, we place greater emphasis on change occurring over multiple survey time points.

Despite these limitations, population health surveys such as the OSDUHS excel at identifying the extent of various health behaviours and indicators that have important current and future implications for adolescent well-being. Population health surveys help to identify which groups are at risk of poor health outcomes, help to identify areas requiring more research, and help to identify potential future trends that have implications for future service and programming needs.

ENCOURAGING FINDINGS

There are many findings in this report that should be viewed as encouraging. A majority of Ontario students:

- like school, feel safe at school, and report a positive school climate
- rate their physical health as excellent or very good
- are satisfied with their weight, and are neither overweight nor obese
- do not report mental health problems (e.g., psychological distress, low self-esteem, elevated stress, self-harm, suicidal ideation)
- are not being bullied
- do not engage in antisocial behaviours or bullying others
- do not gamble or have a gambling problem
- do not have a video gaming problem or a problem with technology use.

We also found several **improvements over time**:

- Students today are more likely to report liking school very much or quite a lot compared to decades ago, and perceptions of school safety have remained elevated and stable over time.
- Reported texting and driving among adolescent drivers has decreased compared to a few years ago.

- Medical use of prescription opioid pain relievers (such as Percocet, Tylenol #3, Dilaudid) has decreased over the past decade or so.

- Antisocial behaviour has decreased during the past two and a half decades. Fewer students today report behaviours such as vandalism, theft, breaking and entering, assaulting others, and weapon carrying than they did in the early 1990s.

- Bullying victimization and bullying perpetration at school have decreased during the past decade or so.

- Most gambling activities have decreased since monitoring began in the early 2000s.

PUBLIC HEALTH CONCERNS

Although the majority of students do not report a problem, an important minority report some form of impaired well-being or problem behaviour.

About **one-in-two** students or more report…

- symptoms of moderate-to-serious psychological distress
- an injury that required treatment in the past year
- not getting at least eight hours of sleep on an average school night
- excessive screen time sedentary behaviour.

About **one-in-three** students report…

- elevated stress levels
- an unmet need for mental health support
- gambling in the past year
- a concussion in their lifetime
- a traumatic event in their lifetime
- indices that classify them as overweight or obese.

About **one-in-four** students **…**

- do not always wear a seatbelt in a vehicle
- report texting while driving (among drivers)
- report talking on a hand-held cell phone while driving (among drivers)
- rate their mental health as fair or poor
- report visiting a mental health professional in the past year
- report being bullied at school.

About **one-in-five** students report…

- being cyberbullied
- symptoms of serious psychological distress
- using social media for at least five hours a day
- symptoms of a moderate-to-serious problem with technology use.

About **one-in-six** to **one-in-eight** students report…

- a concussion in the past year
- harming themselves on purpose
- suicidal ideation
- symptoms of a video gaming problem.

About **one-in-nine** to **one-in-ten** students report…

- being inactive
- fair or poor physical health.

Some findings point to **concerning trends**:

- Ratings of fair or poor physical health have increased in recent years.
- The percentage of students exceeding the guidelines for daily screen time (screen time sedentary behaviour) has increased in recent years, reaching an all-time high in 2019.
- The percentage of students classified as overweight or obese has increased compared to over a decade ago.
- Reports of injuries that require medical attention have increased during the past decade.
- Ratings of fair or poor mental health have increased, reaching an all-time high in 2019.
- Psychological distress has increased in recent years. In fact, the percentage of students indicating a serious level of psychological distress reached an all-time high in 2019.
- The percentage of students reporting contemplating suicide has increased, reaching an all-time high in 2019.
- The percentage of students reporting visiting a mental health professional, and the percentage reporting having been prescribed medication for anxiety and/or depression, is currently higher than decades ago. This may be a positive trend reflecting increased access to services. However, this may reflect increases in the population in need of mental health services.
- The only gambling activity that did not significantly decline over time was online gambling. Online gambling has steadily but significantly increased since 2003. This is of concern given that the Ontario government launched an online gambling platform in January 2015 and has announced plans to further legalize online gambling on websites and smartphones.
- The percentage of students indicating a video gaming problem has increased during the past decade.
- Excessive social media use (defined as five hours or more per day) has increased during the past few years.

DEMOGRAPHIC CORRELATES

Our report showed that males and females significantly differ on many mental health and well-being indicators. As seen in Figure 4.1 and Table 4.2, a general pattern emerges showing that females are more likely to experience poor physical and mental health (e.g., are less active, do not get enough sleep, experience psychological distress, suicidal ideation), whereas males are more likely to report problem behaviours (e.g., antisocial behaviours, bullying others, gambling).

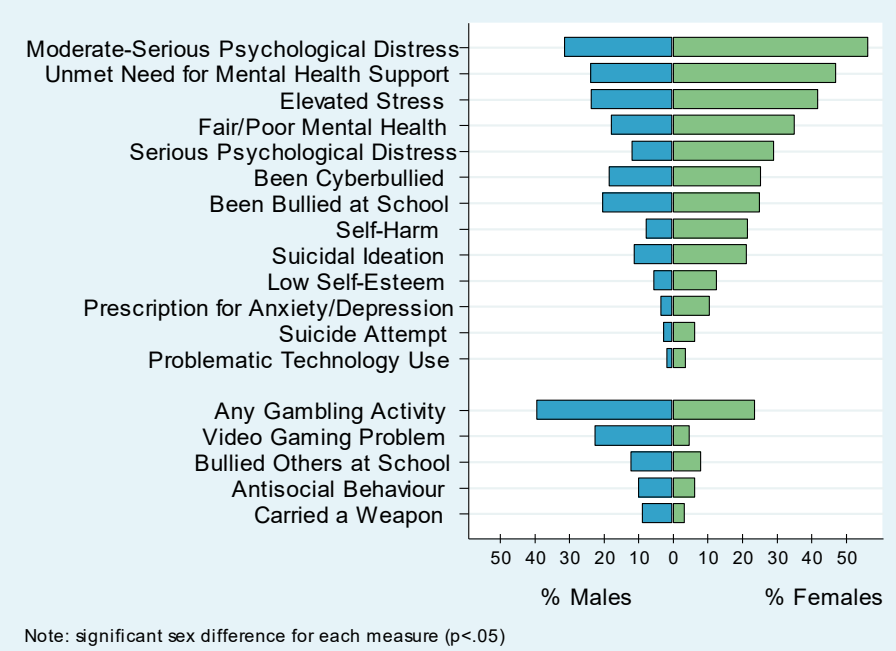
Grade/age is also significantly related to mental health and well-being. Generally, poor physical health indicators (e.g., sedentary behaviour), health risk behaviours (e.g., texting while driving), mental health problems (e.g., fair or poor self-rated mental health, stress, psychological distress), excessive social media and technology use, and gambling significantly increase with grade. Daily physical activity, experiencing a concussion, getting at least eight hours of sleep, and bullying at school are more prevalent among younger students and decline in later adolescence.

Some regional differences were also found in this report:

- Compared with the provincial average, **Greater Toronto Area** students are significantly *more* likely to report being physically inactive, sedentary behaviour, and symptoms of a video gaming problem. Compared with the provincial average, they are significantly *less* likely to report experiencing a concussion in the past year, a medically treated injury in the past year, texting while driving, being prescribed medication for anxiety or depression, medical use of ADHD drugs, visiting a mental health professional, antisocial behaviour, being cyberbullied, and any gambling activity.

- Compared with the provincial average, **Northern** Ontario students are *more* likely to be classified as overweight or obese, are more likely to report being prescribed medication for anxiety or depression, and any gambling activity.

Figure 4.1
Selected Mental Health and Well-Being Indicators by Sex, 2019 OSDUHS



Note: significant sex difference for each measure (p<.05)

- Compared with the provincial average, **Western** Ontario students are *more* likely to report being prescribed medication for anxiety or depression, and carrying a weapon.

- Compared with the provincial average, **Eastern** Ontario students are *more* likely to report meeting the daily physical activity guideline, experiencing a concussion in the past year, getting at least eight hours of sleep on a school night, and visiting a mental health professional in the past year. Compared with the average, they are significantly *less* likely to report excessive daily social media use.

CONCLUSION

The purpose of this OSDUHS report is to provide a snapshot of Ontario students' mental and physical well-being and to assess whether changes have occurred over time. A major strength of these findings is that they are not based on a selective sample of adolescents already experiencing emotional or other difficulties – rather they are based on a large representative sample of the mainstream population. Consequently, our findings should be highly generalizable.

Our findings are consistent with many expectations of the adolescent stage of development. While most Ontario students are in good physical and mental health, a sizeable minority experience an array of functional impairments. Some mental health problem indicators, such as suicidal ideation and psychological distress remain high. One-in-six Ontario students (an estimated 140,300) report suicidal ideation and one-in-twenty students (an estimated 40,900) report a suicide attempt in the past year. These large population numbers should remind us of the vulnerability of this age group. Also concerning is that many mental health problem indicators show increases over time, some reaching all-time highs in 2019. Increasing trends in poor mental health among youth have also been seen in other Western countries (Collishaw, 2015; Gardner et al., 2019; Keyes, Gary, O'Malley, Hamilton, & Schulenberg, 2019; Twenge, Cooper, Joiner, Duffy, & Binau, 2019; Twenge, Joiner, Rogers, & Martin, 2018).

While our results show that bullying victimization at school has decreased during the past decade or so – perhaps due to initiatives such as the safe school policies implemented in Ontario – the prevalence of cyberbullying victimization shows no change. Cyberbullying is a growing concern as electronic media become increasingly important in the lives of adolescents. This report showed that one-in-five students are cyberbullied. Bullying victimization is not only associated with immediate adverse consequences such as school problems, stress, and alcohol and drug use (Kowalski, Giumetti, Schroeder, & Lattanner, 2014), it can also have serious, enduring effects on mental health (Arseneault, Bowes, & Shakoor, 2010; Geoffroy et al., 2018; Meltzer, Vostanis, Ford, Bebbington, & Dennis, 2011).

Our findings also showed some encouraging improvements in well-being during the past decade or so, in particular declines in violence and other antisocial behaviour, bullying at school, and gambling. This decline in risk behaviours over time parallels the declines seen in drug using behaviours (Boak et al., 2020), suggesting a wider cultural shift to less externalizing or rebellious behaviours among young people today compared with previous generations. Ongoing monitoring will determine whether these trends reflect more enduring changes or temporary fluctuations.

The past decade has seen a growing interest in the state of adolescent mental health. For example, the *Mental Health Strategy for Canada* (Mental Health Commission of Canada,

2012) and Ontario's comprehensive strategy *Open Minds, Healthy Minds* (Government of Ontario, 2011) sought to bring mental health issues "out of the shadows" and into the public health domain. Mental health promotion, prevention efforts, and early intervention are priorities in both strategies. School is a significant influence on young people's cognitive, social, and emotional development. Given the substantial amount of time spent in the school setting, school-based prevention programs and interventions are an ideal way to reach youth. School-based mental health literacy, coping skills development, anti-stigma, and anti-bullying initiatives are a few examples of how schools can support mental health. The sex differences in physical and mental health indicators found in this report and elsewhere suggest the value in targeting programming to the specific needs of males and females. Systematic reviews of school programs promoting mental health and reducing behavioural problems conclude that programs can be effective if implemented with fidelity to the program, intensity, and a long-term commitment (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011; Ttofi & Farrington, 2011; Weare & Nind, 2011; Wolfe, Crooks, Hughes, Chiodo, & Jaffe, 2008).

This report also presented some concerning findings about the physical health of Ontario students. We found continuing elevated numbers of medically treated injuries – almost half of Ontario students report experiencing a serious injury in the past year and one-in-seven report experiencing a concussion in the past year. These numbers are especially worrisome given that injuries are the leading cause of morbidity and mortality among Canadian children and adolescents (Public Health Agency of Canada, 2009; Statistics Canada, 2017). Related to this, one-in-four students do not always wear a seatbelt when riding in a vehicle and one-in-four drivers text while driving. Our report also showed increases over the past decade in screen time sedentary behaviour and a slight, but significant, increase in the proportion of Ontario students who are overweight or obese, with the current level remaining elevated at about one-in-three. Continued and enhanced surveillance of these health indicators is clearly needed.

The OSDUHS focuses on a wide range of indicators that affect young people's health and well-being, and the data gathered are an important tool for planning and evaluating broad public health policies and programs that enable youth to experience optimal well-being. We hope the findings provided in this report – whether showing new concerns or enduring trends – help to raise awareness and to identify priority issues facing youth today.

Table 4.1: Significant Changes Over Time for Selected Indicators

	Fair/Poor Self-Rated Physical Health	Screen Time Sedentary Behaviour	Overweight or Obese	Medically Treated Injury	Mental Health Care Visit	Fair/Poor Self-Rated Mental Health	Moderate-to-Serious Psych. Distress	Serious Psych. Distress	Suicidal Ideation	Antisocial Behaviour Index	Victim of Bullying at School	Any Gambling Activity	Video Gaming Problem	5+ Hours Daily on Social Media
Total	↑△	↑△	△	△	△	↑△	△	△	↑△	▽	▽	▽	△	△
Males	↑	↑△		△	△	↑△	↑△	△		▽	▽	▽	↑△	△
Females	△	↑△	△	△	△	↑△	△	△	△		▽	▽		△
Grade 7	△	↑△		△	△	↑△	△	↑△			▽	▽		△
Grade 8		↑△	△	△	△	↑△	△			▽	▽	▽		
Grade 9		↑△		△	△	↑△	△	△		▽	▽	▽	↑△	△
Grade 10		↑△		△	△	△	△	△		▽	▽	▽		△
Grade 11		↑△			△	↑△	△	△		▽	▽	▽		△
Grade 12		↑△			△	△	△	△				▽		△
GTA		↑△	△	△	△	↑△	△	△		▽	▽	▽	△	△
North		↑△	△		△	△	△	△	↑△		▽	▽		△
West		↑△		△	△	△	△	△		▽	▽	▽		△
East		↑△		△	△	△	△	△		▽	▽	▽		

Notes: (1) for indicator definitions, please see Table 2.6 or individual chapters; (2) ↑↓ significant increase or decrease in 2019 vs. 2017, p<.01; (3)△▽ significant increase or decrease in 2019 vs. 1999, p<.01 for Fair/Poor Physical Health, Mental Health Visit, and Antisocial Behaviour; vs. 2001 for Suicidal Ideation; vs. 2003 for Medically Treated Injury, Victim of Bullying at School, and Any Gambling Activity; vs. 2007 for Overweight or Obese, Fair/Poor Mental Health; vs. 2009 for Screen Time Sedentary Behaviour; vs. 2013 for Psychological Distress and 5+ Hours Daily on Social Media.

Source: OSDUHS, Centre for Addiction & Mental Health

Table 4.2: Subgroup Differences for Selected Indicators, 2019 OSDUHS

	Inactive	3+ Hours Daily of Screen Time	Overweight or Obese	Concussion	Texting While Driving (Drivers)	Fair/Poor Self-Rated Mental Health	Elevated Stress	Moderate-to-Serious Psych. Distress	Self-Harm	Suicidal Ideation	Prescribed Medication for Anxiety or Depression	Antisocial Behaviour Index	Victim of Bullying at School	Victim of Cyber-bullying	Any Gambling Activity	Video Gaming Problem	5+ Hours Daily on Social Media	Serious Problem with Technology Use
Sex Difference	**	ns	***	**	ns	***	***	***	***	***	***	**	***	***	***	***	***	***
	F ↑		M ↑	M ↑		F ↑	F ↑	F ↑	F ↑	F ↑	F ↑	M ↑	F ↑	F ↑	M ↑	M ↑	F ↑	F ↑
Grade Difference	***	***	ns	***	***	***	***	***	ns	***	***	**	**	ns	**	ns	***	ns
(compared with previous grade)		8 ↑ 7			--						--						8 ↑ 7	
		9 ↑ 8		9 ↓ 8	--		9 ↑ 8	9 ↑ 8			--		9 ↓ 8				9 ↑ 8	
	10 ↑ 9						10 ↑ 9	10 ↑ 9										
		11 ↑ 10				11 ↑ 10	11 ↑ 10	11 ↑ 10			11 ↑ 10	11 ↑ 10						
					12 ↑ 11						12 ↑ 11	12 ↑ 11						
Region Difference	**	***	**	**	*	ns	ns	ns	ns	ns	**	*	ns	**	**	**	*	ns
(region compared with Ontario)	GTA ↑	GTA ↑		GTA ↓	GTA ↓						GTA ↓	GTA ↓		GTA ↓	GTA ↓	GTA ↑		
			N ↑								N ↑				N ↑			
											W ↑							
				E ↑													E ↓	

Notes: (1) for indicator definitions, please see Table 2.6 or individual chapters; (2) overall tests of effect are based on a univariate chi-square statistic, *p<.05, **p<.01, ***p<.001, ns=nonsignificant; (3) subgroup comparisons are based on contrasts in *adjusted* logistic regression models; (4) GTA=Greater Toronto Area, N=North, W=West, E=East.

Source: OSDUHS, Centre for Addiction & Mental Health

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6. APPENDIX TABLES

Table A3.1.1 School Performance and Attitudes, 1991–2019 OSDUHS

	1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013	2015	2017	2019
(n^1)					(4447)	(3898)	(6616)	(7726)	(6323)	(9112)	(9288)	(10272)	(10426)	(11435)	(14142)
(n^2)	(2961)	(2617)	(2907)	(3072)	(2421)	(2013)	(3389)	(3969)	(3215)	(4424)	(4669)	(5211)	(5225)	(5686)	(7059)
Usually Receive As (80%-100%)	—	—	—	—	**37.8**	**36.4**	**36.2**	**40.5**	**43.8**	**45.9**	**52.1**	**52.1**	**56.3**	**58.5**	**58.2**
	28.4	29.0	32.3	35.5	39.1	37.5	34.8	37.0	43.4	44.3	51.2	50.4	54.6	58.1	57.1
Feelings About School *															
Like it a lot/very much	—	—	—	—	**29.6**	**26.8**	**28.3**	**30.6**	**33.3**	**35.5**	**44.1**	**44.1**	**32.3**	**46.6**	**35.5**
	—	36.0	34.7	35.6	32.2	28.7	28.6	29.8	33.7	37.5	47.0	44.3	34.9	48.1	35.4
Like it to some degree	—	—	—	—	**51.8**	**52.8**	**49.9**	**48.8**	**48.9**	**46.6**	**42.1**	**41.3**	**49.5**	**34.1**	**41.6**
	—	51.1	49.7	47.4	50.7	51.6	49.4	49.9	46.7	45.4	39.8	42.0	49.5	34.3	40.7
Do not like it very much/at all	—	—	—	—	**18.5**	**20.4**	**21.8**	**20.6**	**17.8**	**17.9**	**13.7**	**14.6**	**18.2**	**19.3**	**22.9**
	—	12.9	15.5	17.0	17.2	19.8	22.0	20.4	19.7	17.1	13.2	13.7	15.6	17.6	23.9

Notes: (1) based on Grades 7-12 (full sample); (2) based on Grades 7, 9, 11 only (long-term sample); (3) n=total number of students surveyed; (4) numbers in cells are percentages; (5) – data not available for that year; (6) * question asked of a random half sample in each year; (7) shaded rows show results based on the long-term sample of grades 7, 9, and 11 only.
Qs: "Overall, what marks do you usually get in school?"; "How do you feel about going to school?"
Source: OSDUHS, Centre for Addiction and Mental Health

Table A3.1.2 School Climate Indicators, 1999–2019 OSDUHS (Grades 7–12)

	1999	2001	2003	2005	2007	2009	2011	2013	2015	2017	2019
(n=)	(4447)	(3898)	(6616)	(7726)	(6323)	(9112)	(9288)	(10272)	(10426)	(11435)	(14142)
I feel close to people at this school*	85.4	87.8	86.9	88.7	89.7	89.3	91.2	88.4	88.2	84.9	84.7
I feel like I am part of this school*	83.8	84.9	82.7	85.7	87.1	85.8	88.5	86.8	86.2	85.0	82.2
I feel safe in my school*	90.4	91.4	90.9	92.6	92.7	93.8	95.6	95.7	95.0	92.3	91.4
Like school very much or quite a lot‡	29.6	26.8	28.3	30.6	33.3	35.5	44.1	44.3	32.3	46.6	35.5 [ab]
Worried about being harmed or threatened at school‡	14.2	13.1	12.4	12.8	11.7	12.3	18.2	15.4	12.1	13.0	14.3
I feel that I am treated fairly by the adults at my school*	—	—	—	—	—	—	—	—	—	—	83.4
There is at least one adult at school that cares/can talk to	—	—	—	—	—	—	—	—	—	—	72.5

Notes: (1) entries are percentages; (2) n=number of students surveyed; (3) * "agree" or "somewhat agree" with the statement; (4) ‡ question asked of a random half sample; (5) – question not asked that year; (6) [a] 2019 vs. 2017 significant difference, p<.01; [b] 2019 vs. 1999 significant difference, p<.01.

Source: OSDUHS, Centre for Addiction and Mental Health

Table A3.1.3 Percentage Reporting Being Very or Somewhat Worried About Being Harmed or Threatened at School, 1999–2019 OSDUHS (Grades 7–12)

	1999	2001	2003	2005	2007	2009	2011	2013	2015	2017	2019
(n=)	(4447)	(3898)	(6616)	(7726)	(6323)	(9211)	(9288)	(10272)	(10426)	(6364)	(7617)
Total	**14.2**	**13.1**	**12.4**	**12.8**	**11.7**	**12.3**	**18.2**	**15.4**	**12.1**	**13.0**	**14.3** [d]
(95% CI)	(12.7-15.7)	(11.7-14.6)	(11.1-13.7)	(11.8-13.8)	(10.4-13.1)	(11.2-13.5)	(16.4-20.2)	(13.8-17.1)	(10.2-14.4)	(11.3-14.8)	(12.9-15.8)
Sex											
Males	**11.9**	**11.0**	**12.3**	**12.0**	**11.3**	**11.6**	**16.8**	**13.9**	**11.4**	**10.7**	**12.3**
	(10.5-13.5)	(9.3-13.1)	(10.7-14.0)	(10.7-13.4)	(9.8-12.9)	(10.3-13.2)	(14.5-19.5)	(12.0-16.1)	(9.4-13.8)	(9.1-12.6)	(10.6-14.2)
Females	**16.5**	**15.2**	**12.4**	**13.6**	**12.1**	**13.0**	**19.7**	**16.9**	**12.9**	**15.4**	**16.3**
	(14.4-18.8)	(13.2-17.4)	(10.9-14.2)	(12.2-15.1)	(10.4-14.0)	(11.6-14.6)	(17.7-21.9)	(15.0-19.1)	(10.5-15.8)	(13.0-18.0)	(14.8-18.0)
Grade											
7	**15.4**	**15.8**	**16.5**	**15.7**	**14.4**	**18.6**	**21.7**	**19.1**	**16.0**	**14.3**	**18.5**
	(12.6-18.8)	(12.8-19.3)	(13.1-20.7)	(13.2-18.6)	(11.4-17.9)	(15.4-22.1)	(17.5-26.5)	(15.2-23.6)	(10.1-24.4)	(11.9-17.2)	(15.6-21.7)
8	**18.6**	**15.7**	**15.2**	**17.4**	**13.7**	**12.2**	**18.9**	**16.3**	**15.6**	**16.6**	**16.4**
	(15.5-22.2)	(12.5-19.5)	(12.6-18.1)	(15.3-19.7)	(11.2-16.7)	(9.3-15.8)	(15.7-22.7)	(13.2-20.1)	(9.1-25.5)	(13.2-20.7)	(13.5-19.7)
9	**16.3**	**14.5**	**12.5**	**14.5**	**14.0**	**14.3**	**19.7**	**18.3**	**12.7**	**16.6**	**15.5**
	(12.9-20.4)	(11.4-18.3)	(10.1-15.4)	(12.2-17.0)	(10.9-18.0)	(11.8-17.3)	(16.9-22.9)	(15.3-21.8)	(10.1-15.9)	(13.3-20.5)	(12.9-18.5)
10	**15.6**	**12.0**	**12.7**	**11.5**	**11.4**	**12.9**	**19.7**	**16.3**	**12.0**	**11.7**	**12.7**
	(12.4-19.6)	(9.5-15.0)	(10.5-15.3)	(9.5-13.9)	(9.1-14.1)	(10.6-15.6)	(17.4-22.3)	(13.5-19.6)	(9.5-15.0)	(8.8-15.4)	(10.7-15.1)
11	**9.1**	**9.8**	**10.4**	**9.5**	**9.3**	**9.1**	**14.5**	**13.9**	**10.9**	**8.4**	**12.8**
	(6.9-12.0)	(6.0-15.8)	(8.2-12.9)	(7.6-11.8)	(7.0-12.2)	(7.2-11.4)	(11.6-18.0)	(11.1-17.2)	(8.3-14.2)	(4.0-17.0)	(10.5-15.5)
12	**9.6**	**9.6**	**7.6**	**8.6**	**8.2**	**8.8**	**16.4**	**11.5**	**8.3**	**12.1**	**12.6**
	(7.4-12.4)	(6.4-14.4)	(5.9-9.9)	(6.7-10.9)	(6.3-10.6)	(6.8-11.2)	(12.8-20.8)	(8.2-15.9)	(6.3-10.8)	(6.8-20.4)	(10.1-15.5)
Region											
GTA	**15.3**	**13.8**	**13.3**	**15.1**	**13.4**	**14.3**	**21.1**	**17.1**	**12.3**	**12.5**	**16.1**
	(13.2-17.6)	(11.5-16.6)	(11.3-15.6)	(13.5-16.8)	(11.2-16.0)	(12.6-16.3)	(18.0-24.5)	(14.7-19.9)	(9.9-15.1)	(10.1-15.4)	(13.8-18.7)
North	**12.1**	**10.7**	**13.1**	**9.8**	**10.0**	**11.1**	**14.4**	**13.6**	**10.7**	**9.8**	**13.4**
	(9.7-15.0)	(8.4-13.5)	(10.2-16.7)	(7.9-12.1)	(8.0-12.5)	(7.3-16.6)	(12.0-17.2)	(9.6-19.0)	(8.2-13.8)	(7.2-13.3)	(9.9-18.0)
West	**14.2**	**13.8**	**12.2**	**12.0**	**11.1**	**11.8**	**16.7**	**15.6**	**12.7**	**13.9**	**12.8**
	(11.3-17.8)	(11.3-16.7)	(9.6-15.3)	(9.7-14.6)	(9.2-13.4)	(10.1-13.8)	(13.9-19.9)	(12.6-19.2)	(10.2-15.8)	(11.2-17.3)	(9.8-16.7)
East	**11.5**	**11.6**	**10.3**	**10.1**	**9.7**	**9.7**	**15.2**	**11.1**	**11.6**	**14.0**	**12.8**
	(8.9-14.7)	(9.2-14.4)	(8.3-12.6)	(8.7-11.7)	(7.5-12.5)	(7.5-12.3)	(12.8-18.0)	(9.2-13.4)	(6.3-20.3)	(10.4-18.6)	(11.3-14.5)

Notes: (1) n=total number of students surveyed; (2) asked of a random half sample in 2017 and 2019; (3) entries in brackets are 95% confidence intervals; (4) GTA=Greater Toronto Area; (5) no significant differences 2019 vs. 2017 or 2019 vs. 1999; [d] significant nonlinear trend, p<.01.

Q: "At school, how worried are you that someone will hurt you, threaten you, or take something from you?"

Source: OSDUHS, Centre for Addiction and Mental Health

Table A3.2.1 Percentage Reporting Fair or Poor Physical Health, 1991–2019 OSDUHS (Grades 7–12)

	1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013	2015	2017	2019
(n[1])					(4447)	(3898)	(6616)	(7726)	(6323)	(9112)	(9288)	(10272)	(10426)	(11435)	(14142)
(n[2])	(2961)	(2617)	(2907)	(3072)	(2421)	(2013)	(3389)	(3969)	(3215)	(4424)	(4669)	(5211)	(5225)	(5686)	(7059)
Total[1]	—	—	—	—	**8.9**	**10.3**	**12.6**	**13.1**	**12.9**	**14.5**	**15.6**	**7.0**	**7.6**	**8.7**	**10.8**[acd]
(95% CI)					(7.9-10.1)	(9.1-11.7)	(11.7-13.7)	(12.0-14.3)	(11.8-14.2)	(13.3-15.8)	(14.2-17.1)	(6.2-7.9)	(6.8-8.5)	(7.7-9.7)	(9.9-11.7)
Total[2]	**5.8**	**6.3**	**7.4**	**9.3**	**8.7**	**9.0**	**12.0**	**13.0**	**11.8**	**13.1**	**14.0**	**7.0**	**7.2**	**7.8**	**10.4**[cd]
(95% CI)	(5.0-6.6)	(5.2-7.8)	(6.2-8.9)	(8.1-10.8)	(7.4-10.2)	(7.9-10.4)	(10.7-13.3)	(11.6-14.7)	(10.4-13.4)	(11.6-14.8)	(12.1-16.2)	(5.8-8.4)	(6.2-8.4)	(6.6-9.3)	(9.3-11.5)
Sex															
Males[1]	—	—	—	—	**8.7**	**8.3**	**9.9**	**10.5**	**9.6**	**10.8**	**12.2**	**7.1**	**6.4**	**6.6**	**9.3**[a]
					(7.3-10.4)	(6.8-10.1)	(8.7-11.3)	(9.3-11.7)	(8.3-11.1)	(9.6-12.2)	(10.6-14.0)	(5.9-8.4)	(5.5-7.4)	(5.6-7.7)	(8.1-10.7)
Males[2]	**5.3**	**5.0**	**5.7**	**7.5**	**9.4**	**7.1**	**9.5**	**10.9**	**8.8**	**10.2**	**12.0**	**7.4**	**6.2**	**5.6**	**8.9**
	(4.1-6.8)	(3.6-7.0)	(4.4-7.2)	(5.8-9.7)	(7.5-11.7)	(5.3-9.3)	(7.8-11.4)	(9.2-12.8)	(7.1-10.9)	(8.4-12.3)	(10.0-14.4)	(5.8-7.4)	(4.9-7.8)	(4.5-7.0)	(7.5-10.7)
Females[1]	—	—	—	—	**9.2**	**12.3**	**15.2**	**15.9**	**16.6**	**18.5**	**19.2**	**6.9**	**8.9**	**10.9**	**12.4**[b]
					(7.8-10.8)	(10.1-14.8)	(13.7-16.7)	(14.2-17.8)	(14.8-18.4)	(16.7-20.4)	(17.2-21.3)	(6.0-8.0)	(7.7-10.3)	(9.4-12.6)	(11.3-13.5)
Females[2]	**6.3**	**7.6**	**9.1**	**10.9**	**8.0**	**11.0**	**14.3**	**15.3**	**15.0**	**16.3**	**16.1**	**6.6**	**8.3**	**10.2**	**11.9**
	(5.0-7.9)	(5.7-10.1)	(7.6-10.8)	(9.5-12.5)	(6.3-10.0)	(9.1-13.2)	(12.3-16.6)	(13.2-17.6)	(12.9-17.3)	(14.1-18.7)	(13.9-19.0)	(5.4-8.0)	(6.9-10.0)	(8.4-12.3)	(10.4-13.5)
Grade															
7	**3.9**	**5.5**	**5.0**	**5.8**	**3.8**	**6.2**	**6.8**	**5.5**	**4.1**	**6.3**	**6.2**	**5.8**	**4.4**	**4.7**	**7.2**[b]
	(2.7-5.0)	(1.5-9.6)	(2.5-7.5)	(4.1-7.5)	(2.7-5.5)	(4.6-8.3)	(5.0-9.2)	(4.0-7.5)	(2.8-6.1)	(4.4-8.9)	(4.5-8.6)	(3.8-8.8)	(2.7-7.2)	(3.3-6.7)	(5.8-8.9)
8	—	—	—	—	**7.2**	**7.5**	**9.8**	**8.1**	**7.8**	**10.6**	**10.2**	**7.3**	**5.8**	**5.3**	**8.3**
					(5.5-9.4)	(5.6-99)	(7.4-12.9)	(6.3-10.3)	(5.8-10.5)	(8.8-12.9)	(7.9-13.2)	(4.6-11.2)	(3.5-9.4)	(3.9-7.2)	(6.6-10.4)
9	**6.9**	**5.8**	**6.6**	**10.0**	**9.8**	**8.9**	**11.4**	**14.6**	**11.7**	**14.3**	**11.4**	**5.8**	**7.5**	**8.1**	**9.1**
	(5.0-8.8)	(3.0-8.6)	(5.4-7.7)	(7.2-12.8)	(7.7-12.4)	(7.1-11.2)	(9.5-13.5)	(12.6-17.0)	(9.7-14.1)	(11.6-17.5)	(9.9-13.0)	(4.5-7.5)	(5.6-9.6)	(6.6-9.9)	(7.6-10.8)
10	—	—	—	—	**10.0**	**13.0**	**14.8**	**15.3**	**14.1**	**14.5**	**18.3**	**6.2**	**7.4**	**9.4**	**10.7**
					(7.2-13.7)	(10.1-16.7)	(12.3-17.6)	(13.2-17.7)	(11.9-16.5)	(11.8-17.8)	(15.7-21.2)	(4.5-8.4)	(6.0-9.2)	(7.5-11.8)	(9.4-12.3)
11	**6.4**	**7.5**	**10.3**	**11.8**	**11.5**	**12.2**	**16.6**	**18.7**	**18.9**	**17.6**	**22.3**	**8.9**	**9.0**	**10.0**	**13.6**
	(3.3-9.6)	(4.0-110)	(7.7-12.9)	(9.8-13.9)	(8.8-14.8)	(9.5-15.5)	(14.3-19.3)	(16.0-21.8)	(16.1-21.9)	(14.7-20.9)	(18.5-26.6)	(6.8-11.4)	(7.3-11.1)	(8.0-12.6)	(11.6-16.0)
12	—	—	—	—	**10.9**	**15.1**	**14.9**	**15.7**	**18.6**	**19.8**	**19.8**	**7.4**	**9.6**	**11.7**	**12.9**
					(8.3-14.2)	(10.9-20.6)	(12.4-17.8)	(13.2-18.5)	(16.1-21.9)	(16.8-23.2)	(16.3-23.9)	(5.4-10.1)	(8.1-11.3)	(10.0-13.7)	(10.8-15.4)
Region															
GTA	—	—	—	—	**9.3**	**10.4**	**13.2**	**13.8**	**13.9**	**15.8**	**16.3**	**7.2**	**7.6**	**9.0**	**10.7**
					(7.9-10.9)	(8.6-12.7)	(11.8-14.9)	(11.9-16.0)	(11.8-16.3)	(13.7-18.3)	(14.3-18.4)	(6.2-8.4)	(6.5-8.8)	(7.8-10.3)	(9.5-12.0)
North	—	—	—	—	**7.9**	**10.0**	**12.9**	**10.5**	**16.0**	**16.0**	**14.4**	**7.3**	**6.1**	**8.7**	**11.8**
					(6.3-9.9)	(7.8-12.7)	(10.1-16.5)	(8.3-13.2)	(12.8-19.7)	(12.4-20.3)	(11.5-18.0)	(5.5-9.4)	(4.5-8.1)	(6.9-10.8)	(8.8-15.6)
West	—	—	—	—	**9.9**	**10.6**	**13.4**	**14.8**	**12.0**	**14.3**	**17.7**	**6.9**	**7.9**	**8.9**	**11.2**
					(7.4-13.0)	(8.7-13.0)	(11.3-15.7)	(12.7-17.1)	(9.4-15.2)	(12.3-16.6)	(14.8-21.0)	(5.3-8.9)	(6.3-9.9)	(7.2-10.9)	(9.2-13.5)
East	—	—	—	—	**6.6**	**9.5**	**10.4**	**11.0**	**11.5**	**11.8**	**11.9**	**6.5**	**7.8**	**7.7**	**10.3**
					(5.1-8.5)	(6.1-14.5)	(8.5-12.8)	(8.8-13.6)	(10.0-13.2)	(9.8-14.2)	(9.6-14.7)	(4.8-8.8)	(5.7-10.6)	(5.2-11.1)	(8.7-12.0)

Notes: (1) based on Grades 7-12 (full sample); (2) based on Grades 7, 9, 11 only (long-term sample); (3) n=total number of students surveyed; (4) entries in brackets are 95% confidence intervals; (5) GTA=Greater Toronto Area; (6) long-term regional trends are not available; (7) [a] 2019 vs. 2017 significant difference, p<.01; [b] 2019 vs. 1999 significant difference, p<.01; [c] significant linear trend, p<.01; [d] significant nonlinear trend, p<.01.

Q: "How would you rate your physical health?" (Fair or poor health is defined as a rating of "fair" or "poor.")

Source: OSDUHS, Centre for Addiction and Mental Health

Table A3.2.2 Percentage Reporting Daily Physical Activity in the Past Seven Days, 2009–2019 OSDUHS (Grades 7–12)

	2009	2011	2013	2015	2017	2019
(n=)	(9112)	(9288)	(10272)	(10426)	(11435)	(14142)
Total	**20.8**	**21.3**	**21.8**	**22.3**	**23.0**	**21.2**
(95% CI)	(19.6-22.2)	(19.9-22.8)	(20.4-23.2)	(20.7-23.9)	(21.7-24.4)	(20.0-22.4)
Sex						
Males	**26.2** (24.3-28.2)	**27.0** (25.1-29.1)	**27.2** (24.9-29.7)	**27.0** (24.5-29.7)	**29.5** (27.5-31.5)	**26.4** (24.6-28.3)
Females	**15.2** (13.8-16.6)	**15.2** (13.8-16.6)	**16.0** (14.4-17.6)	**17.2** (15.4-19.2)	**16.2** (14.9-17.5)	**15.7** (14.6-16.9)
Grade						
7	**28.2** (24.5-32.3)	**27.0** (23.8-30.4)	**31.1** (26.7-35.8)	**28.3** (23.9-33.2)	**31.9** (29.1-34.8)	**28.6** (25.7-31.8)
8	**26.7** (23.4-30.1)	**27.8** (24.4-31.4)	**27.4** (24.1-30.9)	**19.0** (16.3-22.1)	**29.9** (26.1-34.0)	**28.6** (25.9-31.6)
9	**23.1** (20.2-26.4)	**24.3** (21.3-27.7)	**25.0** (21.9-28.4)	**28.0** (24.4-31.9)	**28.8** (25.3-32.7)	**24.8** (22.3-27.5)
10	**19.9** (17.1-22.9)	**22.5** (19.4-26.0)	**20.0** (16.8-23.7)	**21.5** (17.8-25.6)	**21.6** (18.7-24.8)	**21.0** (19.0-23.2)
11	**17.5** (14.5-21.0)	**15.7** (13.2-18.6)	**19.2** (16.0-22.9)	**19.7** (17.2-22.5)	**18.3** (15.5-21.4)	**18.9** (16.5-21.6)
12	**14.1** (12.4-16.0)	**15.6** (12.8-18.9)	**15.2** (12.8-18.0)	**19.4** (16.0-23.3)	**14.4** (11.5-17.9)	**12.9** (10.6-15.6)
Region						
Greater Toronto Area	**18.2** (16.3-20.4)	**20.8** (18.9-22.9)	**21.2** (19.2-23.3)	**20.7** (18.5-23.1)	**20.6** (19.0-22.2)	**19.1** (17.4-20.9)
North	**21.8** (18.3-25.6)	**24.6** (22.4-27.0)	**24.8** (21.4-28.5)	**24.4** (21.4-27.6)	**24.6** (21.6-27.9)	**20.2** (17.6-23.2)
West	**22.4** (20.1-25.0)	**19.5** (17.1-22.1)	**22.3** (19.4-25.5)	**22.1** (19.2-25.2)	**24.4** (21.9-27.0)	**22.1** (20.0-24.5)
East	**23.1** (20.7-25.8)	**23.7** (20.7-26.9)	**21.5** (18.8-24.4)	**25.6** (22.0-29.7)	**26.4** (23.2-29.9)	**24.9** (22.2-27.8)

Notes: (1) n=total number of students surveyed; (2) entries in brackets are 95% confidence intervals; (3) no significant changes since 2009 among the total sample.

Q: "On how many of the last 7 days were you physically active for a total of *at least 60 minutes* each day? Please add up all the time you spent in any kind of physical activity that increased your heart rate and made you breathe hard some of the time. (Some examples are brisk walking, running, rollerblading, biking, dancing, skateboarding, swimming, soccer, basketball, football.) Please include both school and non-school activities."

Source: OSDUHS, Centre for Addiction and Mental Health

Table A3.2.3 Percentage Reporting No Days of Physical Activity in the Past Seven Days, 2009–2019 OSDUHS (Grades 7–12)

	2009	2011	2013	2015	2017	2019
(n=)	(9112)	(9288)	(10272)	(10426)	(11435)	(14142)
Total	**8.5**	**8.4**	**7.3**	**6.4**	**8.9**	**9.4** [d]
(95% CI)	(7.6-9.5)	(7.4-9.6)	(6.4-8.3)	(5.5-7.5)	(7.8-10.2)	(8.6-10.3)
Sex						
Males	**7.9** (6.6-9.3)	**8.9** (7.4-10.8)	**6.3** (5.2-7.7)	**5.4** (4.2-6.9)	**6.7** (5.5-8.0)	**8.1** (6.9-9.4)
Females	**9.1** (8.0-10.4)	**7.9** (6.6-9.3)	**8.3** (7.1-9.7)	**7.4** (6.4-8.6)	**11.4** (9.3-13.8)	**10.8** (9.7-12.0)
Grade						
7	**6.9** (5.4-8.8)	**7.9** (6.1-10.3)	**4.4** (3.0-6.3)	**2.1** (1.3-3.4)	**5.0** (3.3-7.7)	**5.2** (4.0-6.8)
8	**7.3** (5.5-9.6)	**6.5** (4.8-8.8)	**2.4** (1.2-4.5)	**4.1** (2.8-6.0)	**3.5** (2.4-5.0)	**5.1** (3.7-6.8)
9	**6.8** (5.1-9.0)	**6.2** (4.4-8.6)	**4.3** (2.8-6.6)	**4.0** (3.0-5.3)	**6.3** (4.7-8.3)	**5.7** (4.6-7.0)
10	**7.6** (5.7-10.1)	**7.4** (5.2-10.3)	**7.4** (5.5-9.8)	**6.5** (5.1-8.3)	**7.1** (5.7-8.8)	**10.0** (8.6-11.7)
11	**9.5** (7.3-12.2)	**10.6** (8.3-13.6)	**9.0** (7.3-11.2)	**9.1** (7.2-11.5)	**12.3** (9.1-16.6)	**12.2** (10.0-14.8)
12	**11.4** (9.1-14.3)	**10.4** (7.8-13.8)	**11.9** (9.3-15.1)	**9.6** (7.1-12.8)	**15.0** (12.5-18.0)	**13.8** (11.9-15.9)
Region						
Greater Toronto Area	**9.9** (8.4-11.6)	**9.8** (8.2-11.7)	**9.0** (7.8-10.3)	**7.3** (6.1-8.6)	**10.4** (8.5-12.7)	**10.6** (9.4-11.9)
North	**7.4** (5.7-9.4)	**6.8** (5.6-8.2)	**7.0** (3.7-12.8)	**6.3** (4.7-8.4)	**8.2** (6.4-10.5)	**6.7** (5.0-8.8)
West	**7.1** (5.6-9.0)	**8.3** (6.1-11.2)	**5.4** (3.6-8.0)	**5.6** (4.3-7.5)	**7.0** (5.8-8.5)	**9.3** (7.3-11.7)
East	**8.1** (6.6-10.0)	**6.0** (4.7-7.7)	**6.3** (5.0-7.9)	**5.3** (2.8-9.7)	**8.4** (6.1-11.6)	**7.8** (6.3-9.5)

Notes: (1) n=total number of students surveyed; (2) entries in brackets are 95% confidence intervals; (3) no significant differences 2019 vs. 2017 or 2019 vs. 2009; [d] significant non-linear trend, p<.01.

Q: "On how many of the last 7 days were you physically active for a total of *at least 60 minutes* each day? Please add up all the time you spent in any kind of physical activity that increased your heart rate and made you breathe hard some of the time. (Some examples are brisk walking, running, rollerblading, biking, dancing, skateboarding, swimming, soccer, basketball, football.) Please include both school and non-school activities."

Source: OSDUHS, Centre for Addiction and Mental Health

Table A3.2.4 Percentage Reporting No Days of Physical Activity in Physical Education Class in the Past Five School Days, 1999–2019 OSDUHS (Grades 7–12)

	1999	2001	2003	2005	2007	2009	2011	2013	2015	2017	2019
(n=)	(2229)	(2061)	(6616)	(7726)	(6323)	(9211)	(9288)	(10272)	(10426)	(11435)	(6525)
Total	**43.8**	**44.2**	**46.4**	**49.5**	**44.5**	**45.5**	**48.1**	**51.0**	**41.9**	**44.8**	**46.5** [d]
(95% CI)	(40.3-47.4)	(40.3-48.2)	(44.0-48.7)	(47.0-52.1)	(41.6-47.4)	(43.4-47.6)	(44.2-52.1)	(47.7-54.2)	(38.3-45.5)	(42.5-47.2)	(43.5-49.5)
Sex											
Males	**41.2** (37.0-45.4)	**39.0** (34.1-44.1)	**43.5** (40.3-46.7)	**45.9** (42.9-48.9)	**40.6** (37.2-44.2)	**42.2** (39.6-45.0)	**43.1** (39.5-46.8)	**47.8** (44.1-51.6)	**40.4** (36.6-44.4)	**40.3** (36.7-44.1)	**42.4** (39.0-45.8)
Females	**46.5** (42.4-50.7)	**49.4** (44.9-53.8)	**49.0** (46.3-51.8)	**53.4** (50.5-56.4)	**48.6** (45.4-51.8)	**49.0** (46.3-51.6)	**53.5** (48.4-58.6)	**54.3** (50.5-58.0)	**43.4** (39.2-47.6)	**49.6** (46.9-52.3)	**50.8** (46.9-54.8)
Grade											
7	**30.0** (24.0-36.8)	**20.0** (15.6-25.3)	**27.9** (22.6-33.8)	**26.4** (21.2-32.2)	**21.6** (16.8-27.2)	**15.4** (12.9-18.2)	**14.2** (11.1-18.0)	**13.5** (10.9-16.6)	**10.9** (8.5-14.0)	**9.7** (7.2-12.8)	**12.9** [b] (10.4-15.8)
8	**23.9** (19.0-29.6)	**21.8** (16.7-27.8)	**22.3** (17.7-27.8)	**29.9** (23.4-37.4)	**16.5** (12.7-21.1)	**12.8** (10.2-15.9)	**9.8** (7.3-12.8)	**10.0** (7.6-12.9)	**13.0** (8.8-18.6)	**11.6** (7.6-17.3)	**12.3** [b] (9.2-16.2)
9	**35.6** (28.0-44.1)	**44.9** (34.8-55.5)	**43.5** (38.5-48.6)	**45.1** (39.7-50.6)	**43.1** (38.0-48.4)	**40.9** (35.4-46.6)	**44.4** (36.8-52.3)	**47.5** (41.2-53.8)	**33.8** (28.3-39.8)	**39.6** (34.3-45.2)	**34.9** (30.2-39.8)
10	**55.7** (47.4-63.6)	**57.6** (50.7-64.1)	**55.9** (50.3-61.4)	**63.3** (59.2-67.2)	**57.4** (51.5-63.1)	**58.9** (55.1-62.5)	**61.2** (56.7-65.6)	**60.9** (55.2-66.3)	**53.1** (46.2-59.9)	**55.2** (50.2-60.2)	**57.7** (52.1-63.2)
11	**57.2** (51.2-62.9)	**61.3** (50.9-70.8)	**59.8** (56.4-63.2)	**60.8** (55.8-65.5)	**58.3** (52.5-63.9)	**61.8** (56.4-66.9)	**64.9** (58.6-70.8)	**68.4** (64.0-72.4)	**55.2** (48.9-61.4)	**56.5** (49.8-63.1)	**59.2** (53.4-64.8)
12	**64.7** (57.5-71.3)	**62.2** (55.8-68.2)	**60.8** (55.1-66.2)	**67.7** (62.2-72.8)	**61.6** (55.5-67.4)	**66.3** (60.8-71.4)	**69.2** (64.2-73.8)	**73.0** (67.9-77.5)	**62.9** (55.3-70.0)	**71.4** (66.3-75.9)	**68.2** (62.8-73.2)
Region											
GTA	**45.5** (39.2-51.9)	**41.6** (34.0-49.7)	**46.4** (42.2-50.6)	**53.4** (48.4-58.4)	**46.8** (41.6-52.0)	**44.3** (39.4-49.3)	**45.4** (39.5-51.4)	**48.5** (43.9-53.2)	**43.2** (38.0-48.7)	**46.4** (43.6-49.3)	**44.7** (40.8-48.5)
North	**49.1** (43.1-55.2)	**46.9** (39.1-54.9)	**45.6** (41.3-49.9)	**42.3** (36.2-48.6)	**47.6** (42.4-52.8)	**49.5** (45.8-53.2)	**51.4** (48.3-54.4)	**52.3** (47.6-57.0)	**42.1** (37.6-46.7)	**43.5** (38.5-48.7)	**50.9** (44.1-57.8)
West	**44.3** (37.3-51.6)	**43.8** (36.8-51.0)	**47.6** (41.9-53.4)	**49.2** (42.9-55.4)	**42.1** (34.9-49.6)	**45.4** (40.2-50.6)	**52.7** (42.5-62.7)	**53.4** (45.4-61.2)	**42.9** (36.3-49.7)	**42.0** (38.5-45.6)	**53.3** [a] (46.1-60.3)
East	**35.4** (27.1-44.6)	**49.9** (40.2-59.6)	**45.1** (39.5-50.8)	**44.9** (39.8-50.1)	**42.1** (35.7-48.9)	**46.7** (43.4-50.0)	**47.5** (40.7-54.4)	**52.5** (45.8-59.0)	**37.3** (26.6-49.3)	**45.5** (37.4-53.8)	**40.5** (34.9-46.4)

Notes: (1) n=total number of students surveyed; (2) based on a random half sample in 2019, 2001, and 1999; (3) entries in brackets are 95% confidence intervals; (4) GTA=Greater Toronto Area; (5) [a] 2019 vs. 2017 significant difference, p<.01; [b] 2019 vs. 1999 significant difference, p<.01; [d] significant nonlinear trend, p<.01.

Q: "On how many of the last 5 school days did you participate in physical activity for *at least 20 minutes* that increased your heart rate and made you breathe hard some of the time in physical education class in your school?" (Note that students not enrolled in a physical education class at the time of the survey were assigned to the "no days" category, and remained in the analysis.)

Source: OSDUHS, Centre for Addiction and Mental Health

Table A3.2.5 Percentage Reporting Three or More Hours a Day of Recreational Screen Time (Sedentary Behaviour) in the Past Seven Days, 2009–2019 OSDUHS (Grades 7–12)

	2009	2011	2013	2015	2017	2019
(n=)	(9211)	(9288)	(10272)	(10426)	(11435)	(14142)
Total	**55.1**	**57.4**	**55.9**	**59.9**	**60.0**	**71.2** [abcd]
(95% CI)	(53.5-56.7)	(54.8-60.0)	(53.8-57.9)	(58.1-61.7)	(57.7-62.3)	(70.0-72.4)
Sex						
Males	**59.0** (56.8-61.2)	**61.1** (58.7-63.4)	**58.5** (56.0-61.0)	**59.7** (57.7-61.6)	**59.5** (56.5-62.6)	**70.9** [ab] (69.1-72.6)
Females	**50.9** (49.0-52.9)	**53.6** (49.7-57.4)	**53.1** (50.8-55.4)	**60.1** (57.3-62.9)	**60.5** (57.6-63.4)	**71.6** [ab] (70.0-73.1)
Grade						
7	**39.8** (36.5-43.2)	**42.7** (38.3-47.2)	**39.1** (36.0-42.4)	**42.6** (38.5-46.8)	**48.4** (44.6-52.3)	**54.3** [ab] (51.2-57.4)
8	**48.5** (44.7-52.4)	**50.2** (46.3-54.2)	**52.5** (47.6-57.4)	**53.0** (47.4-58.5)	**52.8** (48.4-57.2)	**66.0** [ab] (63.0-68.9)
9	**56.2** (52.2-60.0)	**57.3** (52.4-62.1)	**54.7** (50.6-58.7)	**62.9** (59.0-66.6)	**56.9** (52.2-61.4)	**72.5** [ab] (70.2-74.7)
10	**58.9** (54.8-63.0)	**59.2** (52.6-65.4)	**60.7** (57.0-64.3)	**63.5** (59.6-67.3)	**64.1** (59.2-68.7)	**73.8** [ab] (71.7-75.7)
11	**61.4** (56.4-66.2)	**64.8** (60.2-69.0)	**60.6** (56.6-64.6)	**63.6** (59.8-67.2)	**63.4** (57.1-69.3)	**77.4** [ab] (74.9-79.7)
12	**60.5** (57.0-63.9)	**63.1** (56.9-68.8)	**59.9** (56.6-63.2)	**66.2** (62.8-69.5)	**67.4** (63.2-71.4)	**74.5** [ab] (71.8-77.1)
Region						
Greater Toronto Area	**59.8** (57.1-62.4)	**62.6** (58.8-66.4)	**60.0** (57.8-62.1)	**61.6** (58.7-64.5)	**62.3** (59.1-65.4)	**73.3** [ab] (71.9-74.6)
North	**55.1** (51.8-58.3)	**48.0** (44.4-51.7)	**52.0** (45.8-58.1)	**56.6** (52.2-60.9)	**54.8** (51.2-58.4)	**67.8** [ab] (61.2-73.7)
West	**53.3** (50.1-56.4)	**54.7** (49.1-60.2)	**53.0** (48.4-57.4)	**58.0** (54.5-61.4)	**59.3** (56.0-62.5)	**71.0** [ab] (67.9-73.9)
East	**49.1** (45.4-52.8)	**52.5** (49.5-55.4)	**52.0** (46.3-57.6)	**59.3** (54.3-64.2)	**56.9** (49.4-64.2)	**67.9** [ab] (65.6-70.2)

Notes: (1) n=total number of students surveyed; (2) entries in brackets are 95% confidence intervals; (3) [a] 2019 vs. 2017 significant difference, p<.01; [b] 2019 vs. 2009 significant difference, p<.01; [c] significant linear trend, p<.01; [d] significant non-linear trend, p<.01.

Q: "In the last 7 days, about how many hours a day, on average, did you spend watching: TV/movies/videos, playing video games, texting, messaging, posting, or surfing the Internet in your free time? (Include time on any screen, such as a smartphone, tablet, TV, gaming device, computer, or wearable technology.)" (Note that students who responded "not sure" to the question remained in the denominator and, therefore, were included in the analysis.)

Source: OSDUHS, Centre for Addiction and Mental Health

Table A3.2.6 Percentage Classified as Overweight or Obese, 2007–2019 OSDUHS (Grades 7–12)

	2007	2009	2011	2013	2015	2017	2019
(n=)	(2795)	(8581)	(8868)	(9641)	(9805)	(10629)	(13189)
Total	**26.2**	**29.4**	**29.7**	**28.1**	**29.8**	**31.5**	**31.2** [bc]
(95% CI)	(24.2-28.3)	(28.0-30.9)	(27.2-32.3)	(26.5-29.7)	(28.2-31.5)	(29.6-33.4)	(30.0-32.6)
Sex							
Males	**30.9** (27.9-34.0)	**35.8** (33.4-38.2)	**34.2** (31.2-37.3)	**32.6** (30.0-35.4)	**34.2** (31.7-36.8)	**34.1** (31.4-36.9)	**33.9** (32.0-35.8)
Females	**21.0** (18.4-23.8)	**22.5** (20.8-24.4)	**24.8** (22.0-28.0)	**23.2** (21.5-25.0)	**25.0** (22.9-27.3)	**28.7** (25.5-32.2)	**28.5** [b] (26.8-30.2)
Grade							
7	**29.6** (23.4-36.7)	**30.8** (26.6-35.3)	**29.7** (25.3-34.6)	**28.6** (23.7-34.0)	**28.7** (23.2-34.9)	**27.1** (21.8-33.1)	**34.2** (31.2-37.4)
8	**21.7** (16.9-27.4)	**35.3** (32.1-38.6)	**28.5** (24.7-32.7)	**26.4** (23.6-29.4)	**30.5** (25.6-35.8)	**32.9** (28.8-37.2)	**32.5** [b] (29.5-35.7)
9	**26.6** (22.5-31.1)	**32.8** (29.0-36.8)	**31.6** (25.8-38.0)	**27.6** (24.5-31.1)	**29.1** (25.7-32.8)	**31.9** (27.8-36.2)	**32.0** (29.3-34.8)
10	**29.0** (24.4-34.1)	**29.0** (26.2-31.9)	**32.2** (27.8-36.9)	**31.3** (27.3-35.6)	**29.6** (25.7-32.8)	**32.0** (27.6-36.7)	**31.0** (28.6-33.4)
11	**26.5** (22.6-30.9)	**27.4** (24.0-31.1)	**30.2** (26.6-34.0)	**30.6** (27.1-34.4)	**32.0** (28.4-35.8)	**36.4** (31.0-42.0)	**30.5** (28.0-33.1)
12	**24.2** (20.6-28.4)	**24.3** (21.2-27.7)	**26.7** (22.6-31.2)	**30.6** (27.1-34.4)	**29.0** (25.9-32.3)	**28.8** (25.1-32.7)	**29.5** (27.1-32.1)
Region							
Greater Toronto Area	**25.5** (22.1-29.2)	**27.0** (24.6-29.5)	**27.9** (24.7-31.2)	**25.8** (23.5-28.3)	**28.4** (26.2-30.9)	**30.4** (27.2-33.8)	**31.0** [b] (29.2-32.8)
North	**27.2** (22.9-31.9)	**36.7** (33.0-40.5)	**31.4** (27.3-35.8)	**36.4** (32.8-40.2)	**31.4** (28.3-34.7)	**36.0** (31.8-40.3)	**38.5** [b] (33.9-43.3)
West	**26.6** (23.6-29.8)	**31.8** (29.0-34.6)	**33.2** (27.8-39.0)	**28.6** (25.5-31.8)	**31.2** (27.5-35.1)	**33.7** (30.9-36.5)	**30.7** (27.6-34.0)
East	**26.8** (23.0-31.1)	**28.6** (26.2-31.2)	**28.7** (25.6-32.0)	**30.3** (26.5-34.4)	**30.7** (27.3-34.2)	**29.5** (25.3-34.1)	**30.6** (28.4-32.9)

Notes: (1) n=total number of students with a valid response to the heights and weight questions, including those over age 19; (2) questions asked of a random half sample in 2007; (3) entries in brackets are 95% confidence intervals; (4) no significant differences 2019 vs. 2017; [b] 2019 vs. 2007 significant difference, p<.01; [c] significant linear trend, p<.01.

Q: "What is your current height without shoes?"; "What is your current weight without shoes?" Body mass index (BMI) was calculated based on self-reported height and weight. The *World Health Organization (WHO) Reference 2007* age-by-sex cut-off points were used to classify students as overweight or obese (de Onis et al. 2007).

Source: OSDUHS, Centre for Addiction and Mental Health

Table A3.2.7 Body Image and Weight Control, 2001–2019 OSDUHS (Grades 7–12)

		2001	2003	2005	2007	2009	2011	2013	2015	2017	2019	
TOTAL SAMPLE	(n=)	(1837)	(3152)	(3648)	(2935)	(4261)	(4472)	(4794)	(5023)	(5071)	(6525)	
Belief:	**too thin**	**10.3**	**11.1**	**10.8**	**10.3**	**10.0**	**10.9**	**11.8**	**10.3**	**12.2**	**14.5**	
	about right weight	**70.9**	**69.0**	**69.9**	**70.0**	**67.3**	**64.8**	**64.7**	**67.4**	**64.1**	**59.3**	
	too fat	**18.7**	**19.9**	**19.4**	**19.6**	**22.7**	**24.3**	**23.6**	**22.3**	**23.7**	**26.2**	bc
Trying to:	**lose weight**	**31.3**	**29.1**	**28.8**	**28.0**	**29.0**	**30.1**	**29.7**	**28.0**	**29.0**	**30.6**	
	gain weight	**12.2**	**11.6**	**12.0**	**13.4**	**12.9**	**13.8**	**13.8**	**12.8**	**13.6**	**15.9**	
	keep from gaining weight	**18.3**	**20.8**	**22.1**	**22.7**	**22.8**	**22.5**	**22.7**	**25.0**	**22.2**	**21.2**	
	not trying to do anything	**38.2**	**38.5**	**37.1**	**35.9**	**35.3**	**33.6**	**33.8**	**34.2**	**35.2**	**32.3**	
MALES		(899)	(1509)	(1786)	(1450)	(2055)	(2116)	(2182)	(2286)	(2272)	(2969)	
Belief:	too thin	12.9	15.8	14.8	13.4	14.0	14.1	15.9	14.6	17.8	18.7	
	about right weight	73.4	70.7	70.8	72.0	68.6	67.3	68.9	70.6	65.8	60.7	
	too fat	13.7	13.4	14.5	14.6	17.4	18.6	15.2	14.8	16.4	20.6	b
Trying to:	lose weight	21.2	18.4	20.8	20.3	20.7	21.1	21.1	21.1	19.2	24.5	
	gain weight	18.5	18.4	18.2	20.0	19.8	22.0	21.7	21.4	22.1	22.8	
	keep from gaining weight	16.9	14.8	18.6	19.1	19.6	19.0	19.0	21.0	20.2	19.0	
	not trying to do anything	43.4	48.4	42.4	40.6	39.8	38.0	38.2	36.6	38.5	33.7	
FEMALES		(938)	(1643)	(1862)	(1485)	(2206)	(2356)	(2612)	(2907)	(2799)	(3556)	
Belief:	too thin	7.9	6.7	6.4	6.9	5.4	7.4	7.5	5.8	6.3	10.1	
	about right weight	68.6	67.3	68.9	67.9	65.8	62.1	60.2	64.1	62.4	57.8	
	too fat	23.6	26.0	24.7	25.2	28.7	30.6	32.3	30.1	31.3	32.1	b
Trying to:	lose weight	40.9	39.2	37.5	36.7	38.3	40.2	38.8	35.3	39.1	37.2	
	gain weight	6.2	5.4	5.2	6.0	5.1	4.7	5.5	3.7	4.8	8.7	
	keep from gaining weight	19.6	26.3	26.0	26.7	26.4	26.3	26.6	29.5	24.4	23.4	
	not trying to do anything	33.3	29.1	31.3	30.6	30.2	28.7	29.1	31.5	31.7	30.8	
GRADE 7		(346)	(450)	(453)	(338)	(749)	(718)	(974)	(910)	(824)	(903)	
Belief:	too thin	12.1	9.9	6.2	7.2	9.3	9.5	9.9	5.9	7.3	11.4	
	about right weight	76.1	74.3	76.5	79.1	72.2	70.6	68.9	79.2	78.6	66.2	
	too fat	11.8	15.8	17.2	13.6	18.5	19.9	21.2	14.9	14.1	22.4	ab
Trying to:	lose weight	25.7	22.8	25.4	26.1	25.1	25.5	27.7	25.7	23.0	30.2	
	gain weight	10.5	8.1	5.5	8.5	9.4	8.6	7.6	7.4	8.7	11.5	
	keep from gaining weight	19.2	18.1	22.1	28.0	21.3	21.7	23.8	26.9	27.0	23.6	
	not trying to do anything	44.6	51.1	47.0	33.4	44.2	44.1	41.0	39.9	41.3	34.8	
GRADE 8		(312)	(464)	(470)	(350)	(784)	(729)	(925)	(942)	(958)	(971)	
Belief:	too thin	10.5	9.9	9.4	9.4	5.8	7.0	10.1	8.5	10.2	13.6	
	about right weight	68.1	74.3	75.3	72.7	73.9	72.6	69.9	69.9	65.8	63.3	
	too fat	21.5	15.8	15.3	17.8	20.3	20.3	20.1	21.7	24.1	23.1	
Trying to:	lose weight	32.3	25.2	26.7	25.7	29.8	26.2	25.5	25.2	31.8	29.2	
	gain weight	9.7	8.6	9.4	8.2	7.4	9.1	12.1	7.9	7.9	12.3	
	keep from gaining weight	22.2	25.1	24.8	23.8	23.8	28.2	20.6	24.7	19.9	25.0	
	not trying to do anything	35.8	41.1	39.1	42.3	39.0	36.5	41.8	42.2	40.4	33.5	
GRADE 9		(334)	(600)	(691)	(561)	(661)	(805)	(722)	(890)	(939)	(1210)	
Belief:	too thin	7.3	11.6	12.7	11.3	9.9	10.9	11.1	9.8	13.2	11.5	
	about right weight	73.8	70.5	66.8	67.9	65.6	66.1	65.2	67.6	66.5	63.3	
	too fat	18.9	17.9	20.5	20.8	24.6	23.0	23.7	22.6	20.4	25.1	
Trying to:	lose weight	34.3	29.4	28.3	27.4	29.6	34.2	28.5	27.0	27.6	30.6	
	gain weight	9.2	12.3	12.7	13.2	10.5	14.9	8.9	10.9	12.1	11.7	
	keep from gaining weight	18.1	19.6	22.5	19.8	22.8	18.8	24.4	26.1	24.8	22.5	
	not trying to do anything	38.4	38.7	36.5	39.5	37.2	32.0	38.2	36.0	35.5	35.2	

(cont'd)

		2001	2003	2005	2007	2009	2011	2013	2015	2017	2019
GRADE 10		(384)	(559)	(685)	(528)	(720)	(722)	(728)	(782)	(834)	(1153)
Belief:	too thin	7.7	11.7	9.9	9.8	8.4	11.3	12.0	11.9	12.0	16.5
	about right weight	73.8	64.2	68.8	68.7	66.5	60.7	66.5	65.3	64.0	56.2
	too fat	18.4	24.1	21.2	21.5	25.1	28.0	21.5	22.8	24.0	27.3
Trying to:	lose weight	34.3	32.2	29.7	28.3	33.6	35.6	33.5	27.7	29.3	32.7
	gain weight	11.0	11.9	11.3	12.4	11.3	14.4	12.5	13.8	14.4	17.3
	keep from gaining weight	16.8	21.6	23.6	20.6	21.1	17.2	20.9	23.8	21.2	18.6
	not trying to do anything	37.8	34.3	35.4	38.7	34.0	32.8	33.1	34.7	35.1	31.4
GRADE 11		(273)	(568)	(718)	(589)	(659)	(731)	(737)	(766)	(751)	(1129)
Belief:	too thin	12.2	11.6	13.5	12.0	10.6	10.2	11.9	9.2	14.6	15.1
	about right weight	66.1	65.5	66.1	67.2	64.4	60.2	62.2	64.7	59.0	55.2
	too fat	21.7	23.0	20.3	20.8	24.9	29.6	25.8	26.2	26.4	29.7
Trying to:	lose weight	31.1	31.8	30.1	28.2	28.5	30.6	30.9	33.6	30.9	30.7
	gain weight	17.1	13.9	15.0	18.9	15.8	13.8	16.4	14.1	20.2	18.3
	keep from gaining weight	16.5	20.1	21.5	20.1	26.3	22.7	25.4	22.5	19.2	19.2
	not trying to do anything	35.3	34.2	33.4	32.8	29.4	33.0	27.4	29.7	29.7	31.8
GRADE 12		(188)	(511)	(631)	(569)	(688)	(767)	(708)	(733)	(765)	(1159)
Belief:	too thin	15.4	11.8	12.1	11.4	13.6	14.1	13.6	13.5	14.2	16.8
	about right weight	63.0	67.0	67.1	66.7	64.5	62.6	60.3	63.9	56.3	56.8
	too fat	21.6	21.2	20.8	21.9	21.9	23.3	26.1	22.6	29.6	26.5
Trying to:	lose weight	27.4	31.5	31.7	31.2	27.5	27.8	30.2	27.4	29.9	30.1
	gain weight	18.5	13.9	16.7	17.0	18.8	18.2	20.1	17.6	16.2	19.8
	keep from gaining weight	17.6	20.6	18.9	24.2	21.7	25.6	21.3	26.3	22.0	20.6
	not trying to do anything	36.4	34.0	32.7	27.6	32.1	28.4	28.4	28.8	31.9	29.5
GREATER TORONTO AREA		(642)	(1359)	(1558)	(1103)	(1544)	(1867)	(2386)	(2157)	(2069)	(2689)
Belief:	too thin	12.3	12.2	12.6	10.8	11.1	13.3	13.6	10.9	14.5	14.9
	about right weight	71.4	68.8	67.4	69.5	68.4	64.4	64.1	67.1	62.7	59.4
	too fat	16.4	19.0	20.0	19.7	20.5	22.3	22.2	22.0	22.9	25.8 [b]
Trying to:	lose weight	32.2	29.0	30.6	28.3	30.4	30.5	30.0	28.1	28.8	31.8
	gain weight	12.5	11.5	13.6	15.0	14.4	15.0	14.0	13.4	14.6	16.4
	keep from gaining weight	19.0	20.7	20.5	21.1	22.0	18.9	22.7	23.2	22.3	20.3
	not trying to do anything	36.3	38.8	35.2	35.6	33.2	35.5	33.3	35.4	34.4	31.5
NORTH REGION		(415)	(539)	(517)	(376)	(290)	(771)	(495)	(557)	(568)	(362)
Belief:	too thin	8.3	9.7	10.8	9.7	6.7	8.0	5.9	7.3	9.0	10.9
	about right weight	67.5	70.4	70.8	68.8	68.9	68.8	68.5	71.1	66.9	62.6
	too fat	24.3	19.8	18.4	21.5	24.4	23.2	25.6	21.6	24.1	26.5
Trying to:	lose weight	31.2	26.8	27.3	28.1	31.3	29.0	29.1	29.3	29.2	27.6
	gain weight	11.9	10.6	10.9	9.4	17.1	12.0	11.9	10.2	12.4	12.0
	keep from gaining weight	19.5	19.9	21.9	22.2	19.6	24.2	29.4	25.3	20.2	26.9
	not trying to do anything	37.4	42.7	39.9	40.3	32.0	34.7	29.6	35.2	38.2	33.4
WEST REGION		(479)	(722)	(816)	(876)	(1033)	(839)	(500)	(1499)	(1056)	(2279)
Belief:	too thin	9.1	11.4	8.6	11.0	10.0	8.2	10.1	11.1	12.0	15.6
	about right weight	71.7	67.5	71.3	69.4	65.0	60.0	65.4	66.3	64.7	57.2
	too fat	19.2	21.1	20.1	19.6	25.0	31.8	24.6	22.6	23.3	27.2 [b]
Trying to:	lose weight	28.7	29.0	29.9	27.4	29.7	32.7	28.5	28.3	28.7	29.4
	gain weight	12.7	12.2	11.2	12.6	11.5	13.6	14.1	12.6	13.8	16.4
	keep from gaining weight	20.9	21.0	21.6	24.3	24.1	25.3	22.8	25.8	22.7	20.0
	not trying to do anything	37.7	37.8	37.3	35.8	34.6	28.3	34.6	33.3	34.8	34.3

(cont'd)

		2001	2003	2005	2007	2009	2011	2013	2015	2017	2019
EAST REGION		(301)	(532)	(757)	(580)	(1394)	(995)	(1413)	(810)	(1378)	(1195)
Belief:	too thin	8.4	8.8	9.2	8.6	8.5	9.8	11.1	8.3	9.2	13.1
	about right weight	70.2	70.7	73.4	72.5	68.3	70.3	63.8	69.1	65.0	61.3
	too fat	21.4	20.5	17.4	18.9	23.2	19.9	25.1	22.6	25.8	25.5
Trying to:	lose weight	33.6	30.4	24.2	28.3	24.4	26.7	31.5	27.0	29.6	30.1
	gain weight	10.6	11.5	9.7	12.3	10.5	11.9	13.3	12.4	12.0	14.9
	keep from gaining weight	11.5	21.0	26.2	24.0	23.5	25.9	20.1	28.5	21.7	23.7
	not trying to do anything	44.3	37.2	39.9	35.4	41.7	35.5	35.1	32.1	36.6	31.4

Notes: (1) n=total number of students surveyed; (2) questions asked of a random half sample in each year; (3) entries in cells are percentages; (4) [a] 2019 vs. 2017 significant difference, p<.01; [b] 2019 vs. 2001 significant difference, p<.01; [c] significant linear trend, p<.01.

Qs: "Do you think of yourself as being too thin, about the right weight, or too fat?"; "Which of the following are you doing about your weight?"

Source: OSDUHS, Centre for Addiction and Mental Health

Table A3.2.8 Percentage Reporting Eight or More Hours of Sleep on an Average School Night, 2015–2019 OSDUHS (Grades 7–12)

	2015	2017	2019
(n=)	(10426)	(11435)	(14142)
Total	**41.0**	**39.2**	**36.9** [bc]
(95% CI)	(38.9-43.2)	(37.1-41.3)	(35.3-38.5)
Sex			
Males	**44.9** (41.9-47.9)	**42.2** (40.1-44.4)	**41.7** (39.6-43.7)
Females	**36.9** (34.6-39.3)	**35.9** (32.9-39.1)	**31.9** [b] (30.1-33.7)
Grade			
7	**72.3** (67.1-77.0)	**72.3** (69.4-75.0)	**69.6** (66.4-72.6)
8	**65.6** (60.8-70.1)	**60.8** (54.0-67.2)	**58.8** (55.4-62.2)
9	**46.4** (43.2-49.6)	**41.8** (37.7-46.0)	**41.0** [b] (38.5-43.6)
10	**33.7** (30.5-37.0)	**30.4** (26.2-35.0)	**31.6** (28.5-34.9)
11	**23.7** (20.5-27.4)	**26.5** (21.6-32.1)	**23.5** (20.5-26.7)
12	**23.7** (20.3-27.4)	**21.1** (16.6-26.5)	**21.1** (18.1-24.5)
Region			
Greater Toronto Area	**39.6** (36.2-43.2)	**36.5** (33.2-40.0)	**35.1** (33.2-37.0)
North	**48.2** (44.8-51.6)	**45.5** (41.7-49.4)	**40.8** (35.5-46.2)
West	**40.8** (35.5-46.3)	**42.7** (39.5-45.9)	**33.6** (29.4-38.0)
East	**42.6** (36.2-49.2)	**38.5** (34.1-43.0)	**43.6** (40.6-46.6)

Notes: (1) n=total number of students surveyed; (2) entries in brackets are 95% confidence intervals; (3) no significant differences 2019 vs. 2017; [b] 2019 vs. 2015 significant difference, p<.01; [c] significant linear trend, p<.01.
Q: "On an average school night, how many hours of sleep do you get?"
Source: OSDUHS, Centre for Addiction and Mental Health

Table A3.2.9 Percentage Reporting Often or Always Going to School or Bed Hungry, 2015–2019 OSDUHS (Grades 7–12)

	2015	2017	2019
(n=)	(10426)	(11435)	(14142)
Total	**4.6**	**6.7**	**6.3** [b]
(95% CI)	(3.9-5.5)	(5.9-7.7)	(5.5-7.1)
Sex			
Males	**5.0** (4.0-6.3)	**7.1** (6.1-8.4)	**6.1** (5.3-7.1)
Females	**4.2** (3.3-5.3)	**6.3** (4.9-7.9)	**6.5** [b] (5.5-7.6)
Grade			
7	**3.8** (2.3-6.2)	**5.5** (3.3-9.0)	**3.7** (2.7-5.1)
8	**3.9** (2.4-6.4)	**5.3** (3.6-7.7)	**5.5** (4.3-6.9)
9	**4.2** (3.1-5.5)	**6.7** (4.6-9.7)	**6.2** (4.4-8.6)
10	**5.9** (4.4-8.0)	**8.9** (6.4-12.2)	**6.1** (4.9-7.6)
11	**4.2** (3.1-5.6)	**5.5** (4.0-7.6)	**5.8** (4.8-7.1)
12	**5.2** (3.6-7.5)	**7.6** (5.8-9.9)	**8.5** (6.8-10.5)
Region			
Greater Toronto Area	**4.5** (3.5-5.8)	**7.8** (6.5-9.5)	**6.4** (5.4-7.6)
North	**4.3** (2.9-6.3)	**7.9** (5.5-11.4)	**7.4** (5.0-10.9)
West	**4.9** (3.7-6.4)	**5.5** (4.1-7.3)	**5.4** (4.1-7.1)
East	**4.6** (2.7-7.8)	**5.6** (4.2-7.4)	**6.8** (5.0-9.0)

Notes: (1) n=total number of students surveyed; (2) entries in brackets are 95% confidence intervals; (3) no significant differences 2019 vs. 2017; [b] 2019 vs. 2015 significant difference, p<.01.
Q: "Some young people go to school or to bed hungry because there is not enough food at home. How often does this happen to you?"
Source: OSDUHS, Centre for Addiction and Mental Health

Table A3.2.10 Percentage Reporting a Medically Treated Injury at Least Once in the Past Year, 2003–2019 OSDUHS (Grades 7–12)

	2003	2005	2007	2009	2011	2013	2015	2017	2019
(n=)	(6616)	(7726)	(2935)	(4261)	(4472)	(4794)	(5023)	(5071)	(6525)
Total	**35.4**	**33.8**	**37.4**	**40.5**	**41.9**	**41.0**	**43.7**	**42.5**	**44.2** [bc]
(95% CI)	(33.7-37.1)	(32.2-35.5)	(35.2-39.6)	(38.5-42.5)	(39.4-44.4)	(38.2-43.9)	(41.0-46.3)	(39.9-45.2)	(42.0-46.4)
Sex									
Males	**38.0**	**37.9**	**39.4**	**43.0**	**44.2**	**43.6**	**45.4**	**43.2**	**46.0** [b]
	(35.6-40.5)	(35.8-40.0)	(36.3-42.6)	(40.2-46.0)	(41.3-47.1)	(39.8-47.5)	(41.7-49.1)	(39.8-46.7)	(42.8-49.2)
Females	**33.0**	**29.5**	**35.2**	**37.6**	**39.3**	**38.4**	**41.8**	**41.8**	**42.2** [b]
	(30.9-35.2)	(27.6-31.4)	(32.2-38.2)	(35.0-40.3)	(35.3-43.5)	(35.2-41.7)	(38.9-44.8)	(38.2-45.4)	(39.5-44.8)
Grade									
7	**32.5**	**29.6**	**31.3**	**39.1**	**34.9**	**39.5**	**40.1**	**41.8**	**46.1** [b]
	(27.9-37.4)	(26.7-32.6)	(25.3-37.9)	(33.9-44.6)	(30.4-39.8)	(33.4-46.0)	(35.4-45.0)	(34.3-49.7)	(41.6-50.7)
8	**36.3**	**35.3**	**31.4**	**40.8**	**41.0**	**47.1**	**48.0**	**42.5**	**46.4** [b]
	(32.2-40.5)	(31.2-39.6)	(26.8-36.3)	(37.0-44.8)	(34.9-47.4)	(41.0-53.4)	(41.4-54.6)	(35.4-49.8)	(42.6-50.2)
9	**38.3**	**35.1**	**39.9**	**42.9**	**43.2**	**41.5**	**41.5**	**46.4**	**47.9** [b]
	(34.9-41.8)	(32.2-38.1)	(34.4-45.7)	(38.2-47.7)	(37.9-48.7)	(36.4-46.8)	(36.9-46.2)	(40.8-52.1)	(44.0-51.8)
10	**35.1**	**33.3**	**37.7**	**42.0**	**45.7**	**39.4**	**44.9**	**43.2**	**43.5** [b]
	(31.6-38.8)	(30.1-36.6)	(33.5-42.1)	(37.8-46.5)	(40.8-50.6)	(33.0-46.1)	(41.4-48.6)	(38.5-47.9)	(39.2-4.9)
11	**36.0**	**33.1**	**38.9**	**40.8**	**38.5**	**39.7**	**43.5**	**46.9**	**42.0**
	(32.2-40.0)	(30.1-36.4)	(34.7-43.2)	(36.4-45.3)	(33.1-44.1)	(34.4-45.4)	(38.4-48.6)	(40.9-53.0)	(37.4-46.7)
12	**33.6**	**36.0**	**42.7**	**37.8**	**44.8**	**40.4**	**43.8**	**36.7**	**41.8** [b]
	(30.1-37.4)	(32.1-40.0)	(37.3-48.3)	(33.5-42.4)	(34.9-55.2)	(35.6-45.4)	(37.5-50.4)	(32.5-41.2)	(37.1-46.5)
Region									
GTA	**32.4**	**29.0**	**34.9**	**39.4**	**38.4**	**37.2**	**39.2**	**41.0**	**40.6** [b]
	(29.4-35.5)	(26.6-31.4)	(31.6-38.3)	(36.0-42.8)	(35.7-41.1)	(33.0-41.5)	(36.0-42.6)	(38.1-44.0)	(38.2-43.1)
North	**41.8**	**39.1**	**40.7**	**34.6**	**49.3**	**47.8**	**50.8**	**47.1**	**53.0** [b]
	(38.1-45.6)	(35.7-42.7)	(33.9-47.8)	(26.3-41.5)	(45.3-53.4)	(40.4-55.3)	(45.8-55.8)	(42.8-51.5)	(45.9-60.0)
West	**36.5**	**37.0**	**39.7**	**42.0**	**45.8**	**44.4**	**47.0**	**46.0**	**44.7**
	(33.5-39.7)	(34.6-39.5)	(35.8-43.8)	(38.5-45.6)	(40.0-51.8)	(38.4-50.6)	(42.9-51.1)	(42.0-50.1)	(38.4-51.2)
East	**38.1**	**38.1**	**38.5**	**42.2**	**42.9**	**44.4**	**48.4**	**38.2**	**50.7** [ab]
	(34.5-41.8)	(35.3-40.9)	(33.9-43.4)	(38.8-45.6)	(39.0-46.8)	(40.3-48.5)	(39.0-58.0)	(30.7-46.3)	(46.9-54.4)

Notes: (1) n=total number of students surveyed; (2) asked of a random half sample since 2007; (3) entries in brackets are 95% confidence intervals; (4) GTA=Greater Toronto Area; (5) [a] 2019 vs. 2017 significant difference, p<.01; [b] 2019 vs. 2003 significant difference, p<.01; [c] significant linear trend, p<.01.

Q: "In the last 12 months, how many times were you hurt or injured, and had to be treated by a doctor or nurse?"

Source: OSDUHS, Centre for Addiction and Mental Health

Table A3.2.11 Percentage Reporting Experiencing a Concussion in the Past Year, 2017–2019 OSDUHS (Grades 7–12)

	2017 (n=11435)	2019 (n=14142)
Total	**14.8**	**14.5**
(95% CI)	(13.7-16.0)	(13.5-15.5)
Sex		
Males	**15.4** (13.9-16.9)	**15.4** (13.9-17.0)
Females	**14.2** (12.3-16.4)	**13.5** (12.5-14.6)
Grade		
7	**16.2** (12.5-20.7)	**19.0** (16.8-21.6)
8	**22.0** (19.2-25.1)	**19.0** (16.9-21.3)
9	**12.3** (9.5-15.8)	**13.6** (12.2-15.2)
10	**13.7** (11.3-16.6)	**13.5** (11.7-15.4)
11	**14.1** (10.8-18.4)	**12.1** (10.2-14.2)
12	**12.8** (10.6-15.6)	**13.2** (11.1-15.8)
Region		
Greater Toronto Area	**11.5** (10.0-13.2)	**12.9** (11.8-14.2)
North	**14.4** (11.5-18.0)	**16.4** (13.1-20.2)
West	**18.1** (15.9-20.5)	**14.1** (11.7-16.8)
East	**18.0** (16.2-20.0)	**17.7** (15.5-20.0)

Notes: (1) n=total number of students surveyed; (2) entries in brackets are 95% confidence intervals; (3) no significant differences 2019 vs. 2017.
Q: "We are interested in any head injury that resulted in a headache, dizziness, blurred vision, vomiting, feeling confused or 'dazed,' problems remembering, or being unconscious (knocked out). Did you have this type of head injury in the last 12 months?" (Note that the definition in the 2017 cycle did not include being unconscious.)
Source: OSDUHS, Centre for Addiction and Mental Health

Table A3.2.12 Percentage Reporting Not Always Wearing a Seatbelt When in a Vehicle, 2011–2019 OSDUHS (Grades 7–12)

	2011	2013	2015	2017	2019
(n=)	(4472)	(4794)	(5023)	(5071)	(6525)
Total	**28.4**	**23.7**	**23.9**	**23.7**	**24.6**
(95% CI)	(25.9-31.0)	(21.5-26.0)	(21.8-26.3)	(21.4-26.1)	(23.0-26.4)
Sex					
Males	**28.8** (25.0-33.0)	**26.7** (23.3-30.3)	**22.5** (19.7-25.6)	**22.8** (19.5-26.5)	**22.9** (20.4-25.6)
Females	**27.8** (25.6-30.2)	**20.5** (17.7-23.7)	**25.5** (22.7-28.5)	**24.6** (21.2-28.4)	**26.5** (24.5-28.6)
Grade					
7	**19.8** (15.8-24.6)	**16.0** (12.2-20.8)	**17.3** (12.7-23.1)	**18.8** (15.2-23.1)	**20.2** (16.8-24.0)
8	**27.8** (23.2-32.9)	**20.4** (14.8-27.3)	**18.9** (13.9-25.2)	**14.6** (9.8-21.1)	**22.3** (19.0-26.1)
9	**35.3** (28.1-43.3)	**23.7** (19.4-28.6)	**25.3** (21.5-29.5)	**25.1** (21.5-29.2)	**25.4** (22.0-29.1)
10	**30.8** (26.1-36.0)	**29.2** (24.4-34.5)	**25.3** (20.8-30.4)	**28.3** (24.8-32.2)	**24.8** (21.4-28.6)
11	**29.0** (25.1-33.2)	**26.1** (21.8-30.8)	**24.2** (20.0-29.0)	**31.2** (26.3-36.5)	**26.7** (23.2-30.6)
12	**26.3** (19.3-34.8)	**23.7** (18.5-29.8)	**27.9** (22.6-34.0)	**23.9** (20.0-28.2)	**25.5** (22.4-28.9)
Region					
GTA	**30.1** (25.7-34.8)	**24.9** (22.0-28.0)	**23.7** (21.2-26.4)	**24.5** (22.1-27.2)	**24.8** (22.7-27.0)
North	**26.4** (21.4-32.1)	**22.9** (17.2-29.7)	**20.7** (14.8-28.1)	**17.5** (12.8-23.4)	**20.5** (14.4-28.3)
West	**28.1** (24.7-31.8)	**22.0** (17.3-27.7)	**24.4** (19.7-29.7)	**25.1** (22.0-28.5)	**24.6** (21.2-28.4)
East	**25.6** (22.2-29.4)	**23.4** (19.6-27.7)	**24.8** (18.9-32.0)	**21.4** (15.0-29.4)	**25.4** (21.3-29.9)

Notes: (1) n=total number of students surveyed; (2) asked of a random half sample since 2011; (3) entries in brackets are 95% confidence intervals; (4) GTA=Greater Toronto Area; (5) no significant differences 2019 vs. 2017 or 2019 vs. 2011.
Q: "How often do you wear a seat belt when you are in a vehicle?"
Source: OSDUHS, Centre for Addiction and Mental Health

Table A3.2.13 Percentage of Drivers in Grades 10–12 Reporting Texting While Driving at Least Once in the Past Year, 2013–2019 OSDUHS

	2013	2015	2017	2019
(n=)	(1139)	(1171)	(1190)	(1738)
Total	**35.9**	**35.3**	**32.5**	**28.9** [bc]
(95% CI)	(32.2-39.7)	(31.0-39.9)	(29.0-36.2)	(25.9-32.2)
Sex				
Males	**34.9** (28.9-41.4)	**35.5** (29.6-42.0)	**32.8** (28.1-37.8)	**29.7** (24.7-35.3)
Females	**37.1** (32.4-42.1)	**35.1** (30.7-39.8)	**32.2** (26.6-38.3)	**28.0** [b] (24.2-32.2)
Grade				
10	†	†	†	**11.1** (6.6-18.0)
11	**25.0** (19.2-32.0)	**24.7** (19.4-30.9)	**18.1** (13.0-24.8)	**16.3** (12.4-21.0)
12	**45.9** (40.9-51.1)	**44.4** (37.6-51.5)	**42.6** (36.8-48.5)	**38.8** (34.5-43.2)
Region				
Greater Toronto Area	**29.5** (25.0-34.5)	**30.7** (26.1-35.8)	**28.7** (24.5-33.3)	**20.4** [ab] (16.7-24.6)
North	**40.1** (34.3-46.2)	**40.8** (30.2-52.2)	**30.7** (21.9-41.1)	**37.4** (28.4-47.4)
West	**42.0** (34.9-49.4)	**37.9** (29.0-47.7)	**39.8** (33.8-46.1)	**33.3** (27.8-39.3)
East	**37.8** (29.2-47.2)	**39.3** (28.9-50.7)	**26.3** (17.5-37.6)	**36.5** (28.5-45.2)

Notes: (1) n=total number of students in grades 10-12 with a driver's licence; (2) asked of a random half sample of secondary school students since 2013; (3) entries in brackets are 95% confidence intervals; (4) †=estimate suppressed due to unreliability; (5) [a] 2019 vs. 2017 significant difference, p<.01; [b] 2019 vs. 2013 significant difference, p<.01; [c] significant linear trend, p<.01.

Q: "In the last 12 months, how many times did you send or read a text message or an email while you were driving a vehicle? (Note that the phrase "or read" was added to the question in 2015.)

Source: OSDUHS, Centre for Addiction and Mental Health

Table A3.3.1 Percentage Reporting Medical Use of Tranquillizers/Sedatives at Least Once in the Past Year, 1977–2019 OSDUHS (Grades 9–12 only)

	1977	1979	1981	1983	1985	1987	1989	1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013	2015	2017	2019
(n[1])												(2883)	(2457)	(4693)	(5794)	(4834)	(5783)	(6383)	(6159)	(6597)	(7587)	(9924)
(n[2])	(2640)	(2653)	(1894)	(2075)	(2092)	(2137)	(1919)	(2020)	(1723)	(1980)	(2221)	(1655)	(1263)	(2442)	(3008)	(2494)	(2792)	(3223)	(3111)	(3351)	(3886)	(5015)
Total[1]	—	—	—	—	—	—	—	—	—	—	—	**3.5**	**3.7**	**3.0**	**2.5**	**5.0**	**4.3**	**4.2**	**2.9**	**3.3**	**3.6**	**2.7**
(95% CI)												(2.8-4.4)	(3.0-4.5)	(2.4-3.9)	(1.9-3.4)	(4.1-6.1)	(3.3-5.6)	(3.4-5.3)	(2.3-3.7)	(2.9-3.7)	(2.8-4.6)	(2.3-3.2)
Total[2]	**9.5**	**7.4**	**8.9**	**7.7**	**5.2**	**5.5**	**3.3**	**3.3**	**2.6**	**1.8**	**2.5**	**3.5**	**3.7**	**3.3**	**2.6**	**4.3**	**3.9**	**3.8**	**3.3**	**2.8**	**3.9**	**2.7** [cd]
(95% CI)	(8.4-10.9)	(6.4-8.6)	(7.6-10.4)	(6.4-9.1)	(4.5-6.0)	(4.0-7.5)	(2.3-4.5)	(2.4-4.5)	(1.7-4.2)	(1.2-2.8)	(2.0-3.1)	(2.6-4.6)	(2.7-5.0)	(2.2-4.9)	(1.8-3.6)	(3.2-5.7)	(2.8-5.4)	(2.6-5.6)	(2.4-4.4)	(2.2-3.7)	(2.8-5.4)	(2.2-3.3)
Sex																						
Males[1]	—	—	—	—	—	—	—	—	—	—	—	**3.3**	**4.7**	**3.7**	**2.8**	**3.4**	**3.3**	**3.5**	**2.6**	**1.8**	**2.6**	**2.0**
												(2.4-4.6)	(3.5-6.2)	(2.7-5.1)	(1.8-4.2)	(2.6-4.5)	(2.3-4.7)	(2.3-5.2)	(1.8-3.7)	(1.3-2.4)	(1.9-3.5)	(1.5-2.6)
Males[2]	**8.5**	**7.4**	**8.5**	**6.5**	**5.4**	**4.6**	**2.9**	**3.4**	**3.1**	**2.0**	**2.6**	**2.9**	**4.4**	**4.4**	**2.5**	**3.1**	**2.8**	**3.5**	**3.1**	**1.7**	**2.4**	**2.4**
	(7.0-10.3)	(6.0-9.0)	(6.7-10.6)	(5.4-7.6)	(4.3-6.7)	(2.5-8.4)	(1.4-5.7)	(2.4-4.7)	(2.0-4.7)	(1.2-3.2)	(1.8-3.7)	(1.8-4.7)	(2.8-7.0)	(2.7-6.9)	(1.7-3.8)	(2.1-4.7)	(1.6-4.7)	(1.8-6.3)	(1.9-4.8)	(1.1-2.7)	(1.6-3.6)	(1.8-3.3)
Females[1]	—	—	—	—	—	—	—	—	—	—	—	**3.7**	**2.6**	**2.3**	**2.2**	**6.7**	**5.2**	**5.1**	**3.2**	**4.9**	**4.7**	**3.4**
												(2.6-5.1)	(1.9-3.6)	(1.5-3.6)	(1.5-3.4)	(5.2-8.6)	(3.8-7.3)	(4.2-6.1)	(2.4-4.3)	(4.0-5.9)	(3.3-6.5)	(2.7-4.3)
Females[2]	**10.4**	**7.5**	**9.3**	**8.8**	**5.0**	**6.2**	**3.6**	**3.1**	**2.2**	**1.7**	**2.4**	**4.1**	**2.8**	**2.3**	**2.6**	**5.5**	**5.0**	**4.2**	**3.5**	**3.9**	**5.5**	**3.0**
	(8.9-12.2)	(6.1-9.1)	(7.6-11.4)	(7.0-11.2)	(3.9-6.4)	(5.1-7.6)	(2.9-4.6)	(1.8-5.4)	(1.3-3.9)	(0.9-3.4)	(1.4-3.9)	(2.7-6.2)	(1.7-4.4)	(1.1-4.5)	(1.5-4.4)	(3.9-7.7)	(3.4-7.2)	(3.2-5.6)	(2.3-5.2)	(2.8-5.4)	(3.6-8.4)	(2.2-4.1)
Grade																						
9	**8.9**	**6.2**	**8.1**	**6.4**	**3.7**	**4.7**	**2.3**	**2.8**	**1.8**	**1.0**	**1.8**	**3.8**	**2.3**	**2.8**	**2.0**	**3.4**	**2.3**	**2.7**	**3.7**	**3.0**	**3.2**	**2.2**
	(7.4-10.7)	(4.9-7.7)	(6.5-10.0)	(4.6-8.9)	(2.9-4.7)	(3.6-6.2)	(1.4-3.6)	(1.6-4.9)	(0.7-4.4)	(0.5-2.0)	(1.2-2.6)	(2.6-5.4)	(1.4-3.8)	(1.4-5.4)	(1.2-3.3)	(2.2-5.3)	(1.3-4.1)	(1.7-4.3)	(2.5-5.4)	(2.0-4.5)	(2.2-4.6)	(1.6-3.0)
10	—	—	—	—	—	—	—	—	—	—	—	**3.1**	**2.6**	**2.3**	**2.7**	**4.0**	**4.5**	**4.5**	**2.7**	**3.4**	**3.2**	**1.7**
												(2.0-4.7)	(1.8-4.0)	(1.2-4.2)	(1.5-4.8)	(2.6-6.2)	(2.5-7.7)	(3.1-6.7)	(1.7-4.1)	(2.5-4.5)	(2.4-4.4)	(1.2-2.4)
11	**10.5**	**9.1**	**9.9**	**9.2**	**6.8**	**6.1**	**4.5**	**3.7**	**3.4**	**2.6**	**3.1**	**3.1**	**5.4**	**3.8**	**3.2**	**5.1**	**5.4**	**4.9**	**2.9**	**2.6**	**4.6**	**3.2**
	(8.8-12.5)	(7.5-11.1)	(7.9-12.3)	(8.2-10.4)	(5.9-7.9)	(3.7-9.9)	(3.0-6.6)	(2.6-5.4)	(2.2-5.4)	(1.6-4.4)	(2.4-4.2)	(1.9-5.0)	(3.6-8.0)	(2.3-6.2)	(2.1-4.9)	(3.4-7.6)	(3.6-8.0)	(2.8-8.7)	(1.8-4.7)	(1.8-3.8)	(2.8-7.6)	(2.3-4.4)
12	—	—	—	—	—	—	—	—	—	—	—	**4.0**	**5.9**	**3.2**	**2.2**	**7.1**	**4.8**	**4.6**	**2.6**	**3.8**	**3.4**	**3.4**
												(2.5-6.4)	(4.1-8.3)	(1.8-5.6)	(1.0-4.8)	(5.0-10.2)	(3.3-6.9)	(3.3-6.4)	(1.7-3.8)	(2.7-5.4)	(2.3-5.0)	(2.5-4.5)

(cont'd)

	1977	1979	1981	1983	1985	1987	1989	1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013	2015	2017	2019
(n[1])												(2883)	(2457)	(4693)	(5794)	(4834)	(5783)	(6383)	(6159)	(6597)	(7587)	(9924)
(n[2])	(2640)	(2653)	(1894)	(2075)	(2092)	(2137)	(1919)	(2020)	(1723)	(1980)	(2221)	(1655)	(1263)	(2442)	(3008)	(2494)	(2792)	(3223)	(3111)	(3351)	(3886)	(5015)
Region																						
GTA	—	—	—	—	—	—	—	—	—	—	—	**4.4** (3.4-5.6)	**3.0** (2.1-4.3)	**2.7** (1.8-4.1)	**2.1** (1.3-3.4)	**4.3** (2.9-6.3)	**3.3** (2.3-4.7)	**3.8** (2.9-5.0)	**2.2** (1.5-3.10	**2.0** (1.6-2.4)	**3.6** (2.3-5.5)	**2.3** (1.8-2.9)
North	—	—	—	—	—	—	—	—	—	—	—	**2.7** (1.6-4.6)	**4.3** (2.9-6.4)	†	†	**3.8** (2.3-6.2)	†	**5.0** (3.8-6.6)	†	**4.3** (2.6-7.0)	**4.6** (3.4-6.2)	**4.0** (2.5-6.3)
West	—	—	—	—	—	—	—	—	—	—	—	**2.0** (1.1-3.5)	**4.1** (2.9-5.9)	**3.1** (2.0-5.0)	†	**4.7** (3.0-7.4)	**5.1** (2.7-9.3)	**4.6** (2.6-8.1)	**3.3** (2.1-5.3)	**4.7** (3.6-6.0)	**3.3** (2.6-4.4)	**2.9** (2.0-4.2)
East	—	—	—	—	—	—	—	—	—	—	—	**4.2** (2.2-8.0)	**4.4** (3.2-6.0)	**3.8** (2.4-5.8)	**3.3** (1.9-5.7)	**7.1** (5.4-9.1)	**5.2** (3.8-7.0)	**4.4** (3.1-6.2)	**4.1** (2.6-6.6)	**3.9** (3.1-4.9)	**3.7** (2.2-5.9)	**2.9** (2.2-4.0)

Notes: (1) based on Grades 9-12 (full sample); (2) based on Grades 9 and 11 only (long-term sample); (3) n=total number of students surveyed; (4) asked of a random half sample starting in 2003; (5) entries in brackets are 95% confidence intervals; (6) †=estimate suppressed due to unreliability; (7) GTA=Greater Toronto Area; (8) long-term region trends are not available; (9) no significant changes between 1999 and 2019 (total sample); [c] significant linear trend, p<.01; [d] significant nonlinear trend, p<.01.

Q: "Sedatives or tranquillizers are sometimes prescribed by doctors to help people sleep, calm them down, or to relax their muscles. In the last 12 months, how often did you use sedatives or tranquillizers (such as Xanax, Valium, Ativan) *with a prescription* or because a doctor told you to take them?" (Note that "sedatives" was added to the question in 2007.)

Source: OSDUHS, Centre for Addiction and Mental Health

Table A3.3.2 Percentage Reporting Medical Use of ADHD Drugs at Least Once in the Past Year, 2007–2019 OSDUHS (Grades 7–12)

	2007	2009	2011	2013	2015	2017	2019
(n=)	(6323)	(4851)	(9288)	(10272)	(5403)	(6364)	(7617)
Total	**2.3**	**2.7**	**2.5**	**3.2**	**2.6**	**2.9**	**3.9** [bc]
(95% CI)	(1.9-2.9)	(2.1-3.5)	(2.1-3.1)	(2.5-4.2)	(2.1-3.3)	(2.1-4.1)	(3.2-4.8)
Sex							
Males	**3.2** (2.5-4.1)	**3.9** (2.8-5.3)	**3.0** (2.3-3.9)	**4.6** (3.3-6.3)	**2.9** (2.2-3.8)	**4.2** (2.9-5.9)	**5.3** [b] (4.2-6.6)
Females	**1.3** (0.9-2.0)	**1.4** (0.9-2.2)	**2.1** (1.4-3.2)	**1.8** (1.3-2.4)	**2.4** (1.7-3.3)	**1.6** (1.0-2.6)	**2.5** (1.8-3.5)
Grade							
7	**3.4** (2.1-5.6)	**3.2** (1.9-5.4)	**3.1** (2.0-4.8)	**4.1** (2.5-6.5)	†	**4.7** (3.0-7.1)	**4.5** (3.2-6.2)
8	**1.7** (0.9-3.1)	**2.8** (1.5-5.1)	**3.2** (2.0-5.0)	**3.6** (2.6-4.9)	**3.3** (2.0-5.5)	**2.8** (1.8-4.2)	**4.4** [b] (3.0-6.3)
9	**3.0** (1.9-4.4)	**4.2** (2.6-6.7)	**3.0** (2.2-4.1)	**2.0** (1.2-3.4)	†	**2.4** (1.3-4.4)	**3.2** (2.0-5.2)
10	**2.2** (1.4-3.4)	**2.4** (1.3-4.4)	**3.5** (2.2-5.4)	**3.5** (2.2-5.4)	**3.4** (2.3-5.2)	†	**4.4** (3.0-6.2)
11	**1.7** (1.0-2.9)	**2.6** (0.9-7.1)	†	**4.0** (2.7-5.8)	**3.4** (2.0-5.7)	**3.0** (1.8-5.0)	**3.2** (2.0-4.9)
12	**2.1** (1.2-3.6)	**1.4** (0.6-2.9)	**1.4** (0.8-2.5)	†	†	**1.8** (1.1-3.0)	**4.2** (2.7-6.3)
Region							
GTA	**1.3** (0.9-1.9)	**1.6** (1.0-2.5)	**1.7** (1.2-2.4)	**2.2** (1.6-3.1)	**2.1** (1.6-2.8)	**2.4** (1.3-4.3)	**2.2** (1.5-3.1)
North	**2.7** (1.4-5.1)	†	**3.0** (2.1-4.2)	**3.4** (2.0-5.6)	**4.0** (2.4-6.6)	**4.0** (2.3-6.9)	**6.0** (4.3-8.2)
West	**3.1** (2.2-4.2)	**3.1** (2.0-4.9)	**3.4** (2.7-4.2)	**4.3** (2.6-7.2)	**2.3** (1.5-3.4)	**3.7** (2.5-5.4)	**5.1** (3.2-8.1)
East	**3.1** (2.1-4.8)	**4.0** (2.5-6.4)	**3.1** (2.1-4.5)	**3.8** (2.5-5.6)	**3.8** (2.1-6.6)	†	**5.3** (3.9-7.2)

Notes: (1) ADHD=attention-deficit/hyperactivity disorder; (2) n=total number of students surveyed; (3) asked of a random half sample in 2009, 2015, and 2017; (4) entries in brackets are 95% confidence intervals; (5) GTA=Greater Toronto Area; (6) †=estimate suppressed due to unreliability; (7) no significant differences 2019 vs. 2017; [b] 2019 vs. 2007 significant difference, p<.01; [c] significant linear trend, p<.01.

Q: "Sometimes doctors give medicine to students who are hyperactive or have problems concentrating in school. This is called Attention Deficit Hyperactivity Disorder (ADHD). In the last 12 months, how often did you use medicine to treat ADHD (such as Adderall, Ritalin, Concerta, Dexedrine) *with a prescription* or because a doctor told you to take it?"

Source: OSDUHS, Centre for Addiction and Mental Health

Table A3.3.3 Percentage Reporting Medical Use of Prescription Opioid Pain Relievers at Least Once in the Past Year, 2007–2019 OSDUHS (Grades 7–12)

	2007	2009	2011	2013	2015	2017	2019
(n=)	(6323)	(9112)	(9288)	(10272)	(5023)	(5071)	(6525)
Total	**40.6**	**31.8**	**21.4**	**20.9**	**21.1**	**17.6**	**20.3** [bcd]
(95% CI)	(39.0-42.1)	(30.3-33.3)	(19.6-23.2)	(19.6-22.3)	(19.2-23.2)	(15.6-19.9)	(18.9-21.8)
Sex							
Males	**35.8** (33.8-37.9)	**26.7** (24.7-28.8)	**18.4** (16.9-20.1)	**19.7** (17.7-21.9)	**19.3** (16.9-21.8)	**15.9** (14.0-18.0)	**18.7** [b] (16.8-20.8)
Females	**45.7** (43.3-48.1)	**37.3** (35.2-39.3)	**24.5** (21.8-27.4)	**22.2** (20.6-24.0)	**23.1** (20.3-26.2)	**19.5** (16.5-22.8)	**22.0** [b] (20.0-24.0)
Grade							
7	**33.4** (29.5-37.4)	**23.9** (20.7-27.3)	**12.5** (10.3-15.0)	**14.2** (11.5-17.3)	**13.6** (9.7-18.7)	**12.1** (8.3-17.3)	**12.2** [b] (9.3-15.9)
8	**39.5** (35.7-43.4)	**28.7** (25.2-32.3)	**16.8** (14.4-19.7)	**16.5** (13.7-19.8)	**14.1** (10.6-18.6)	**12.0** (7.7-18.4)	**18.5** [b] (14.9-22.7)
9	**44.6** (41.2-48.0)	**33.9** (30.1-38.0)	**19.5** (17.9-21.2)	**18.9** (16.0-22.2)	**17.9** (14.6-21.8)	**13.1** (9.9-17.1)	**19.0** [b] (16.1-22.2)
10	**44.0** (40.7-47.4)	**33.6** (30.4-37.1)	**22.8** (19.4-26.6)	**23.7** (20.4-27.4)	**19.3** (16.1-23.0)	**20.0** (16.1-24.5)	**20.0** [b] (17.5-22.9)
11	**41.0** (37.7-44.4)	**33.9** (30.1-38.0)	**24.1** (19.1-30.0)	**22.0** (18.8-25.5)	**28.2** (23.9-32.9)	**23.5** (19.6-27.9)	**20.5** [b] (17.2-24.3)
12	**40.3** (36.9-43.8)	**34.1** (30.6-37.9)	**27.2** (24.2-30.3)	**25.1** (21.6-28.8)	**27.0** (22.4-32.2)	**22.5** (19.3-26.1)	**25.7** [b] (21.9-29.9)
Region							
GTA	**39.2** (36.7-41.7)	**30.1** (27.8-32.5)	**19.0** (17.0-21.0)	**22.4** (20.2-24.7)	**18.1** (16.1-20.4)	**18.7** (16.6-20.9)	**19.7** [b] (17.8-21.6)
North	**39.7** (35.7-43.9)	**31.1** (26.7-35.9)	**21.5** (19.0-24.3)	**17.7** (14.4-21.5)	**17.3** (14.0-21.1)	**17.6** (13.7-22.2)	**19.1** [b] (14.0-25.5)
West	**42.1** (39.4-44.7)	**32.8** (29.8-36.0)	**24.7** (20.6-29.3)	**18.7** (16.3-21.3)	**24.9** (21.2-29.1)	**18.6** (15.9-21.6)	**21.7** [b] (18.4-25.3)
East	**41.7** (38.1-45.4)	**33.5** (31.0-36.1)	**22.0** (19.1-25.4)	**22.1** (20.3-24.1)	**24.5** (18.4-31.9)	**14.6** (9.4-22.1)	**20.2** [b] (17.4-23.4)

Notes: (1) n=total number of students surveyed; (2) asked of a random half sample since 2015; (3) entries in brackets are 95% confidence intervals; (4) GTA=Greater Toronto Area; (5) no significant differences 2019 vs. 2017; [b] 2019 vs. 2007 significant difference, p<.01; [c] significant linear trend, p<.01; [d] significant nonlinear trend, p<.01.

Q: "In the last 12 months, how often did you use pain relief pills (such as Percocet, Percodan, Tylenol #3, Demerol, Dilaudid, OxyNeo, codeine) *with a prescription* or because a doctor told you to take them? (We do not mean regular Tylenol, Advil, or Aspirin that anyone can buy in a drugstore.)"

Source: OSDUHS, Centre for Addiction and Mental Health

Table A3.3.4 Percentage Reporting Having Been Prescribed Medication to Treat Anxiety, Depression, or Both in the Past Year, 2001–2019 OSDUHS (Grades 9–12 only)

	2001	2003	2005	2007	2009	2011	2013	2015	2017	2019
(n=)	(1278)	(2455)	(3069)	(2587)	(3055)	(3358)	(3264)	(3426)	(4298)	(5273)
Total	**3.0**	**4.7**	**4.3**	**4.6**	**3.8**	**3.9**	**5.5**	**5.6**	**5.2**	**7.2** [bc]
(95% CI)	(2.0-4.5)	(3.0-5.9)	(3.5-5.4)	(3.6-5.9)	(3.0-4.7)	(2.9-5.4)	(4.3-7.0)	(4.4-6.9)	(4.2-6.6)	(6.2-8.4)
Sex										
Males	†	**2.9** (1.9-4.4)	**3.0** (2.1-4.3)	**3.2** (2.1-4.7)	**2.8** (1.8-4.3)	**2.5** (1.4-4.5)	**3.4** (2.4-4.8)	**2.8** (1.9-4.2)	**3.0** (2.0-4.4)	**3.6** (2.6-5.0)
Females	**4.2** (2.6-6.7)	**6.4** (4.8-8.3)	**5.7** (4.4-7.3)	**6.1** (4.5-8.1)	**4.8** (3.7-6.1)	**5.4** (3.9-7.5)	**7.9** (6.0-10.2)	**8.4** (6.4-10.9)	**7.6** (5.9-9.8)	**10.9** [b] (9.3-12.8)
Grade										
9	†	**3.8** (2.5-5.7)	**3.2** (2.1-4.7)	**2.7** (1.5-4.8)	**2.3** (1.3-4.2)	†	**4.2** (2.7-6.3)	**3.3** (2.1-5.0)	**4.5** (3.2-6.4)	**3.6** (2.4-5.4)
10	†	**6.1** (4.0-9.2)	**3.8** (2.6-5.6)	**4.0** (2.4-6.7)	**2.8** (1.8-4.4)	†	**2.5** (1.4-4.3)	**4.9** (3.2-7.4)	**2.6** (1.7-3.9)	**5.3** [a] (3.9-7.3)
11	**5.5** (3.4-8.8)	**4.4** (2.7-7.0)	**6.5** (4.4-9.5)	**4.1** (2.8-6.0)	**4.4** (3.0-6.6)	†	**6.6** (4.6-9.5)	**5.8** (3.6-9.4)	**4.0** (2.6-6.2)	**8.4** [a] (6.6-10.8)
12	**4.4** (2.4-8.0)	**4.6** (3.0-6.9)	**3.9** (2.6-6.0)	**7.2** (4.9-10.3)	**5.0** (3.2-7.8)	**3.8** (2.2-6.5)	**7.9** (5.3-11.5)	**7.4** (4.9-11.0)	**8.6** (6.1-12.0)	**10.7** [b] (8.5-13.5)
Region										
GTA	**3.0** (1.5-5.7)	**4.2** (2.8-6.1)	**4.2** (3.0-5.7)	**4.2** (2.9-6.1)	**3.5** (2.6-4.7)	**2.5** (1.6-3.8)	**5.4** (3.7-7.8)	**4.3** (3.3-5.4)	**3.3** (2.3-4.6)	**4.3** (3.4-5.5)
North	**4.6** (2.5-8.2)	**3.6** (2.3-5.5)	**3.7** (2.5-5.3)	**4.3** (2.5-7.5)	†	**5.0** (2.8-8.8)	†	**6.5** (3.8-11.0)	**11.6** (9.1-14.8)	**10.8** [b] (8.4-13.9)
West	†	**4.6** (2.6-8.2)	**4.7** (2.8-7.9)	**5.3** (3.2-8.7)	**3.7** (2.5-5.4)	**5.5** (3.8-7.8)	**4.5** (2.6-7.7)	**6.1** (4.4-8.5)	**7.7** (5.8-10.2)	**10.0** [b] (7.5-13.3)
East	†	**6.3** (4.4-8.9)	**4.5** (2.9-6.9)	**4.8** (3.0-7.7)	**4.3** (2.4-7.6)	**4.3** (1.9-9.5)	**6.6** (4.3-9.9)	**7.4** (3.8-14.1)	**6.1** (3.6-10.3)	**8.3** [b] (6.3-11.0)

Notes: (1) n=total number of students surveyed; (2) asked of a random half sample of secondary students in each cycle; (3) entries in brackets are 95% confidence intervals; (4) †=estimate suppressed due to unreliability; (5) GTA=Greater Toronto Area; (6) [a] 2019 vs. 2017 significant difference, p<.01; [b] 2019 vs. 2001 significant difference, p<.01; [c] significant linear trend, p<.01.

Q: "In the last 12 months, have you been prescribed medicine to treat anxiety or depression?"

Source: OSDUHS, Centre for Addiction and Mental Health

Table A3.3.5 Percentage Reporting at Least One Mental Health Care Visit in the Past Year, 1999–2019 OSDUHS (Grades 7–12)

	1999	2001	2003	2005	2007	2009	2011	2013	2015	2017	2019
(n=)	(4447)	(3898)	(6616)	(7726)	(3388)	(4851)	(4816)	(5478)	(5403)	(6364)	(7617)
Total	**12.4**	**10.9**	**11.0**	**11.7**	**21.2**	**23.8**	**15.1**	**21.9**	**20.9**	**24.5**	**26.5** [bcd]
(95% CI)	(11.3-13.7)	(9.8-12.2)	(10.0-12.2)	(10.5-12.9)	(19.4-23.1)	(22.0-25.8)	(12.8-17.6)	(19.8-24.3)	(18.9-23.0)	(22.0-27.3)	(24.9-28.2)
Sex											
Males	**9.5** (8.0-11.2)	**8.1** (6.9-9.5)	**8.1** (7.1-9.3)	**8.7** (7.4-10.2)	**19.5** (17.1-22.1)	**22.3** (19.6-25.2)	**11.1** (9.0-13.5)	**17.9** (15.6-20.4)	**17.1** (14.6-20.0)	**22.0** (18.4-26.1)	**22.1** [b] (20.0-24.4)
Females	**15.5** (13.6-17.6)	**13.6** (12.0-15.4)	**13.7** (12.1-15.4)	**14.8** (13.3-16.4)	**23.0** (20.7-25.4)	**25.4** (23.1-28.0)	**19.1** (16.4-22.3)	**26.3** (23.4-29.4)	**24.9** (22.2-27.8)	**27.2** (23.9-30.8)	**31.1** [b] (29.2-33.0)
Grade											
7	**8.9** (7.0-11.3)	**7.4** (5.8-9.4)	**10.0** (8.2-12.1)	**9.8** (7.4-12.9)	**23.3** (18.7-28.6)	**28.9** (24.3-34.0)	**15.0** (11.7-19.0)	**20.9** (16.7-25.8)	**26.5** (20.8-33.0)	**28.9** (22.3-36.5)	**28.6** [b] (25.2-32.2)
8	**11.3** (8.9-14.3)	**9.3** (7.2-11.9)	**10.3** (7.5-14.0)	**11.4** (8.6-15.0)	**18.5** (14.3-23.6)	**23.2** (19.4-27.5)	**13.9** (10.5-18.3)	**26.0** (19.5-33.7)	**21.9** (15.3-30.4)	**28.7** (25.4-32.3)	**29.8** [b] (26.1-33.9)
9	**14.4** (11.4-18.1)	**11.0** (8.9-13.6)	**9.0** (7.1-11.3)	**11.2** (9.4-13.1)	**22.4** (18.8-26.5)	**26.1** (21.9-30.8)	**12.1** (9.0-15.9)	**21.7** (18.3-25.5)	**16.8** (13.5-20.8)	**24.2** (19.3-29.9)	**24.6** [b] (21.2-28.3)
10	**14.8** (11.3-19.1)	**12.4** (10.6-14.6)	**11.1** (8.5-14.2)	**14.2** (12.0-16.7)	**19.0** (15.4-23.2)	**24.6** (21.0-28.6)	**16.6** (11.6-23.0)	**20.6** (16.0-26.1)	**20.0** (16.8-23.7)	**22.5** (18.9-26.4)	**23.2** [b] (20.2-26.4)
11	**14.6** (11.2-18.8)	**12.4** (10.6-14.6)	**14.4** (12.0-17.3)	**12.7** (10.2-15.8)	**21.3** (17.6-25.6)	**23.3** (18.1-29.5)	**17.6** (10.9-27.1)	**24.4** (19.7-30.0)	**19.5** (15.7-24.0)	**22.1** (17.0-28.2)	**25.1** [b] (22.3-28.2)
12	**9.3** (7.2-12.1)	**13.0** (7.8-21.0)	**11.0** (9.0-13.4)	**10.7** (8.9-12.8)	**22.5** (18.5-27.1)	**19.0** (15.4-23.3)	**14.9** (12.2-18.1)	**19.6** (15.4-24.7)	**21.3** (17.5-25.6)	**23.6** (19.4-28.3)	**29.1** [b] (24.9-33.8)
Region											
GTA	**11.4** (9.8-13.1)	**10.3** (8.8-12.0)	**9.6** (8.2-11.1)	**11.1** (9.3-13.2)	**22.3** (19.8-25.1)	**25.0** (22.3-27.9)	**14.2** (12.4-16.3)	**21.0** (17.2-25.4)	**20.1** (17.9-22.6)	**24.3** (20.9-28.0)	**23.6** [b] (21.7-25.5)
North	**11.7** (8.9-15.3)	**11.0** (8.8-13.6)	**12.0** (10.0-14.4)	**14.6** (12.0-17.7)	**21.2** (15.8-27.8)	**19.8** (15.6-24.7)	**16.5** (12.5-21.6)	**22.8** (19.1-27.0)	**23.9** (20.1-28.1)	**32.8** (26.9-39.3)	**27.6** [b] (21.7-34.4)
West	**15.0** (12.4-17.9)	**11.0** (8.5-14.1)	**11.4** (9.1-14.1)	**12.8** (10.5-15.4)	**19.2** (15.5-23.4)	**22.2** (18.9-26.0)	**16.9** (11.2-24.8)	**20.8** (17.2-24.8)	**20.4** (16.8-24.6)	**24.7** (21.6-28.0)	**27.1** [b] (22.9-31.7)
East	**11.3** (9.5-13.4)	**12.3** (10.5-14.4)	**13.3** (10.9-16.1)	**10.8** (9.0-12.9)	**21.3** (17.6-25.6)	**25.1** (21.4-29.0)	**14.0** (11.2-17.4)	**25.5** (22.0-29.5)	**22.2** (16.9-28.6)	**22.4** (14.7-32.5)	**30.9** [b] (28.1-33.9)

Notes: (1) n=total number of students surveyed; (2) asked of a random half sample since 2007; (3) entries in brackets are 95% confidence intervals; (4) GTA=Greater Toronto Area; (5) no significant differences 2019 vs. 2017; [b] 2019 vs. 1999 significant difference, p<.01; [c] significant linear trend, p<.01; [d] significant nonlinear trend, p<.01.

Q: "In the last 12 months, how many times have you seen a doctor, nurse, or counsellor about your emotional or mental health?" (Note that in 2013 the response option format changed to closed-ended categories. An open-ended format was used from 1999 to 2011.)

Source: OSDUHS, Centre for Addiction and Mental Health

Table A3.3.6 Percentage Reporting Seeking Counselling Over the Phone, Over the Internet, or Both in the Past Year, 2011–2019 OSDUHS (Grades 7–12)

	2011	2013	2015	2017	2019
(n=)	(4816)	(5478)	(5403)	(6364)	(7617)
Total	**2.1**	**3.0**	**3.0**	**3.4**	**4.5** [bc]
(95% CI)	(1.6-2.9)	(2.4-3.7)	(2.3-3.7)	(2.3-5.1)	(3.9-5.3)
Sex					
Males	**1.7** (1.1-2.7)	**1.8** (1.2-2.7)	**1.8** (1.2-2.6)	**2.1** (1.3-3.4)	**2.6** (1.9-3.4)
Females	**2.5** (1.8-3.7)	**4.2** (3.3-5.5)	**4.2** (3.2-5.6)	**4.8** (3.0-7.5)	**6.6** [b] (5.6-7.8)
Grade					
7	†	**2.3** (1.2-4.4)	**1.1** (0.6-2.1)	**2.1** (1.2-3.5)	**2.7** (1.8-4.3)
8	**1.8** (1.0-3.3)	**3.1** (1.9-5.0)	**3.2** (1.7-6.1)	**2.8** (1.8-4.4)	**2.6** (1.4-4.7)
9	**2.6** (1.7-4.0)	**3.2** (2.0-5.1)	**3.6** (2.3-5.7)	†	**4.3** (2.5-7.4)
10	**1.8** (1.0-3.3)	**1.5** (0.9-2.5)	**3.3** (2.1-5.0)	**3.9** (2.2-6.8)	**4.8** [b] (3.6-6.5)
11	†	**4.5** (2.8-7.0)	**4.5** (3.2-6.2)	**1.6** (0.9-2.6)	**6.2** [ab] (4.6-8.2)
12	**1.3** (0.8-2.4)	**3.1** (1.9-5.2)	**2.1** (1.2-3.6)	**4.3** (2.3-7.8)	**5.1** [b] (3.6-7.1)
Region					
Greater Toronto Area	**2.3** (1.6-3.4)	**3.8** (2.8-5.1)	**3.7** (2.7-5.0)	†	**4.1** (3.1-5.4)
North	**2.8** (1.6-5.0)	†	**3.4** (2.1-5.4)	**3.9** (2.3-6.5)	**5.4** (3.8-7.6)
West	†	**1.9** (1.0-3.4)	**2.4** (1.3-4.5)	**3.6** (2.2-6.0)	**5.1** (3.8-6.8)
East	**3.1** (1.9-5.0)	**3.2** (2.4-4.4)	**2.0** (1.5-2.7)	**2.3** (1.3-4.0)	**4.5** (3.5-5.9)

Notes: (1) n=total number of students surveyed; (2) asked of a random half sample since 2011; (3) entries in brackets are 95% confidence intervals; (4) †=estimate suppressed due to unreliability; (5) [a] 2019 vs. 2017 significant difference, p<.01; [b] 2019 vs. 2011 significant difference, p<.01; [c] significant linear trend, p<.01.

Q: "In the last 12 months, have you phoned a telephone crisis helpline or gone on a website (such as 'KidsHelpPhone.ca') because you needed to talk to a counsellor about a problem?"

Source: OSDUHS, Centre for Addiction and Mental Health

Table A3.3.7 Percentage Reporting an Unmet Need for Mental Health Support, 2013–2019 OSDUHS (Grades 7–12)

	2013	2015	2017	2019
(n=)	(5478)	(5403)	(6364)	(7617)
Total	**27.9**	**28.4**	**31.2**	**35.4** [bc]
(95% CI)	(25.8-30.1)	(26.1-30.9)	(27.5-35.2)	(33.8-37.0)
Sex				
Males	**19.0** (16.4-21.8)	**18.6** (16.2-21.3)	**20.9** (17.2-25.2)	**23.9** [b] (21.8-26.1)
Females	**37.5** (34.9-40.2)	**39.0** (35.8-42.3)	**42.2** (38.4-46.1)	**47.4** [b] (45.0-49.7)
Grade				
7	**25.5** (21.7-29.8)	**17.6** (11.5-26.0)	**25.5** (21.1-30.5)	**25.1** (22.0-28.6)
8	**26.4** (21.2-32.4)	**28.7** (23.4-34.5)	**24.0** (21.0-27.4)	**31.2** [a] (27.5-35.1)
9	**29.0** (24.7-33.6)	**24.6** (20.6-29.1)	**30.7** (22.8-40.1)	**32.0** (29.0-35.1)
10	**27.8** (23.2-32.8)	**33.5** (28.4-38.9)	**29.5** (24.8-34.8)	**34.4** (31.1-37.9)
11	**29.4** (24.8-34.4)	**32.6** (27.5-38.2)	**32.9** (27.1-39.4)	**41.2** [b] (37.6-44.8)
12	**28.1** (23.7-33.1)	**30.9** (27.2-34.9)	**38.3** (32.1-45.0)	**42.2** [b] (38.2-46.3)
Region				
Greater Toronto Area	**29.3** (26.2-32.5)	**28.4** (25.8-31.1)	**32.2** (26.2-38.8)	**36.2** [b] (34.2-38.2)
North	**25.7** (21.1-30.9)	**27.5** (24.3-30.9)	**26.4** (22.9-30.3)	**33.7** (28.6-39.2)
West	**26.9** (22.1-32.4)	**28.1** (24.7-31.8)	**31.7** (28.3-35.4)	**36.6** [b] (33.2-40.2)
East	**27.3** (25.2-29.5)	**29.1** (21.1-38.7)	**29.2** (21.1-39.0)	**33.3** [b] (29.4-37.4)

Notes: (1) n=total number of students surveyed; (2) asked of a random half sample since 2013; (3) entries in brackets are 95% confidence intervals; (4) [a] 2019 vs. 2017 significant difference, p<.01; [b] 2019 vs. 2013 significant difference, p<.01; [c] significant linear trend, p<.01.

Q: "In the last 12 months, was there a time when you wanted to talk to someone about a mental health or emotional problem you had, but did not know where to turn?"

Source: OSDUHS, Centre for Addiction and Mental Health

Table A3.4.1 Percentage Reporting Fair or Poor Mental Health, 2007–2019 OSDUHS (Grades 7–12)

	2007	2009	2011	2013	2015	2017	2019
(n=)	(3388)	(4851)	(4816)	(5478)	(5403)	(6364)	(7617)
Total	**11.4**	**11.7**	**13.7**	**15.3**	**16.5**	**18.8**	**26.5** [abcd]
(95% CI)	(10.0-12.9)	(10.3-13.2)	(12.0-15.7)	(13.5-17.4)	(14.5-18.9)	(17.2-20.5)	(24.7-28.3)
Sex							
Males	**7.1** (5.7-8.8)	**8.4** (6.9-10.3)	**9.4** (7.7-11.3)	**10.5** (8.8-12.6)	**10.3** (8.4-12.6)	**11.9** (9.9-14.2)	**17.9** [ab] (16.0-19.9)
Females	**15.8** (13.7-18.2)	**15.0** (13.2-17.0)	**18.2** (15.1-21.7)	**20.5** (18.1-23.2)	**23.2** (20.2-26.6)	**26.2** (23.7-28.9)	**35.4** [ab] (32.9-37.9)
Grade							
7	**6.1** (4.0-9.2)	**6.9** (4.5-10.4)	**7.7** (4.9-11.7)	**8.8** (6.5-11.9)	**7.7** (4.7-12.4)	**8.9** (6.8-11.5)	**17.3** [ab] (14.2-20.8)
8	**9.1** (6.5-12.5)	**9.1** (6.4-12.7)	**10.1** (7.3-13.8)	**13.8** (11.0-17.2)	**13.4** (8.3-21.0)	**11.4** (8.7-14.8)	**20.2** [ab] (16.4-24.6)
9	**12.4** (9.6-15.9)	**12.6** (9.6-16.1)	**12.6** (9.7-16.3)	**16.4** (12.9-20.6)	**14.2** (11.4-17.7)	**17.5** (13.8-21.9)	**24.9** [ab] (21.4-28.7)
10	**12.3** (9.2-16.3)	**10.9** (8.3-14.3)	**17.3** (13.5-21.8)	**16.5** (12.1-22.2)	**18.8** (16.0-22.0)	**21.8** (19.0-24.9)	**25.6** [b] (22.6-29.0)
11	**12.5** (9.7-16.0)	**13.2** (10.5-16.4)	**14.7** (11.8-18.2)	**18.1** (14.4-22.6)	**23.2** (19.2-27.8)	**20.0** (13.8-28.0)	**31.4** [ab] (28.0-35.1)
12	**14.5** (11.3-18.4)	**15.1** (12.0-18.8)	**16.5** (13.2-20.3)	**15.7** (12.2-20.0)	**18.9** (15.3-23.2)	**26.0** (22.1-30.5)	**32.7** [b] (29.3-36.3)
Region							
Greater Toronto Area	**11.0** (9.0-13.4)	**12.6** (10.5-15.0)	**13.4** (11.8-15.2)	**16.7** (14.0-19.7)	**15.2** (13.0-17.8)	**16.9** (15.0-19.0)	**26.8** [ab] (24.7-29.0)
North	**14.6** (10.7-19.7)	**12.4** (9.4-16.0)	**14.2** (10.6-18.9)	**12.2** (8.9-16.4)	**20.0** (16.6-23.9)	**22.6** (18.6-27.1)	**27.0** [b] (20.7-34.4)
West	**11.8** (9.3-15.0)	**12.6** (10.1-15.6)	**13.6** (8.9-20.3)	**14.4** (11.1-18.4)	**18.5** (14.6-23.0)	**23.2** (20.4-26.1)	**28.1** [b] (23.6-33.0)
East	**10.8** (7.8-14.6)	**9.0** (6.5-12.3)	**14.4** (12.3-16.7)	**15.0** (11.0-20.3)	**16.1** (10.3-24.4)	**17.7** (13.0-23.5)	**24.1** [b] (20.7-27.9)

Notes: (1) n=total number of students surveyed; (2) asked of a random half sample in each year; (3) entries in brackets are 95% confidence intervals; (4) [a] 2019 vs. 2017 significant difference, p<.01; [b] 2019 vs. 2007 significant difference, p<.01; [c] significant linear trend, p<.01; [d] significant non-linear trend, p<.01.
Q: "How would you rate your mental or emotional health?"
Source: OSDUHS, Centre for Addiction and Mental Health

Table A3.4.2 Percentage Reporting Low Self-Esteem, 2015–2019 OSDUHS (Grades 7–12)

	2015	2017	2019
(n=)	(5403)	(6364)	(7617)
Total	**7.0**	**6.5**	**9.2** [ab]
(95% CI)	(5.7-8.5)	(5.5-7.7)	(8.3-10.3)
Sex			
Males	**4.7**	**4.5**	**5.7**
	(3.4-6.4)	(3.5-5.7)	(4.9-6.8)
Females	**9.5**	**8.6**	**12.9** [ab]
	(7.8-11.4)	(6.9-10.8)	(11.3-14.6)
Grade			
7	**2.1**	**4.8**	**7.1** [b]
	(1.3-3.5)	(3.0-7.4)	(5.5-9.0)
8	†	**4.2**	**7.5**
		(2.9-6.0)	(5.4-10.4)
9	**6.8**	**7.7**	**10.2**
	(4.7-9.7)	(5.5-10.6)	(8.3-12.5)
10	**6.6**	**6.8**	**9.1**
	(4.6-9.3)	(4.8-9.6)	(7.2-11.4)
11	**10.0**	**6.6**	**9.7**
	(7.9-12.6)	(3.9-11.0)	(7.9-11.8)
12	**5.9**	**7.4**	**10.3** [b]
	(4.3-8.2)	(5.2-10.5)	(8.3-12.8)
Region			
Greater Toronto Area	**6.2**	**5.9**	**9.1** [ab]
	(4.9-7.8)	(4.6-7.6)	(7.9-10.4)
North	**7.5**	**5.0**	**11.6** [a]
	(5.4-10.4)	(3.7-6.8)	(8.5-15.7)
West	**9.0**	**8.9**	**9.3**
	(6.5-12.3)	(6.7-11.9)	(7.2-12.0)
East	†	**5.4**	**8.8**
		(3.4-8.4)	(7.1-11.0)

Notes: (1) n=total number of students surveyed; (2) asked of a random half sample in each year; (3) entries in brackets are 95% confidence intervals; (4) †=estimate suppressed due to unreliability; (5) [a] 2019 vs. 2017 significant difference, p<.01; [b] 2019 vs. 2015 significant difference, p<.01.

Q: "How much do you agree or disagree with the following statement: On the whole, I am satisfied with myself." Low self-esteem is defined here as responding "strongly disagree."

Source: OSDUHS, Centre for Addiction and Mental Health

Table A3.4.3 Percentage Reporting Elevated Stress Experienced in the Past Month, 2015–2019 OSDUHS (Grades 7–12)

	2015	2017	2019
(n=)	(5403)	(6364)	(7617)
Total	**28.7**	**30.4**	**32.8** [bc]
(95% CI)	(26.1-31.4)	(27.7-33.3)	(31.1-34.5)
Sex			
Males	**19.8** (17.1-22.8)	**20.0** (17.4-22.9)	**23.8** (21.8-25.9)
Females	**38.2** (34.8-41.6)	**41.5** (35.7-47.6)	**42.2** (40.0-44.4)
Grade			
7	**10.9** (5.9-19.1)	**14.9** (12.2-18.1)	**18.3** (15.5-21.5)
8	**16.2** (12.6-20.7)	**17.1** (13.2-21.8)	**20.1** (16.8-23.8)
9	**20.0** (16.7-23.7)	**25.3** (20.0-31.5)	**29.7** [b] (26.9-32.6)
10	**32.8** (28.7-37.1)	**35.5** (30.3-41.1)	**34.1** (30.9-37.5)
11	**39.5** (34.9-44.4)	**40.9** (33.7-48.4)	**39.6** (35.6-43.7)
12	**42.2** (37.0-47.6)	**37.8** (32.9-42.9)	**43.6** (38.9-48.4)
Region			
Greater Toronto Area	**30.2** (26.8-33.9)	**30.9** (26.7-35.4)	**34.0** (31.6-36.5)
North	**29.3** (24.8-34.2)	**32.3** (24.8-40.8)	**30.2** (24.4-36.7)
West	**27.3** (22.6-32.6)	**31.1** (27.8-34.7)	**34.0** (30.2-38.0)
East	**26.9** (19.5-35.8)	**27.7** (21.3-35.1)	**30.2** (27.1-33.6)

Notes: (1) n=total number of students surveyed; (2) asked of a random half sample in each year; (3) entries in brackets are 95% confidence intervals; (4) no significant difference 2019 vs. 2017; [b] 2019 vs. 2015 significant difference, p<.01; [c] significant linear trend, p<.01.

Q: "In the last 4 weeks, did you feel that you were under any stress, strain, or pressure?" Elevated stress is defined here as responding "Yes, a lot" or "Yes, almost more than I could take."

Source: OSDUHS, Centre for Addiction and Mental Health

Table A3.4.4 Percentage Reporting Symptoms on the *Kessler Psychological Distress Scale* (K6), 2013–2019 OSDUHS (Grades 7–12)

K6 Symptom (n=)	2013 (5478)	2015 (5403)	2017 (6364)	2019 (7617)
1. Felt nervous	10.5	15.0	20.6	21.9 [b]
2. Felt hopeless	8.0	8.3	11.6	13.1 [b]
3. Felt restless or fidgety	11.6	16.6	19.9	22.1 [b]
4. Felt so depressed (sad) nothing could cheer you up	6.2	8.6	11.5	13.3 [b]
5. Felt that everything was an effort	12.9	17.2	17.7	21.4 [ab]
6. Felt worthless	9.2	10.1	12.0	14.6 [ab]

Notes: (1) entries show the percentage who experienced the symptom "most of the time" or "all of the time" in the past 4 weeks; (3) n=total number of students surveyed; (4) asked of a random half sample in each year; (5) [a] 2019 vs. 2017 significant difference, p<.01; [b] 2019 vs. 2013 significant difference, p<.01.
Source: OSDUHS, Centre for Addiction and Mental Health

Table A3.4.5 Percentage Indicating Moderate-to-Serious Psychological Distress (8+ on the K6 Scale), 2013–2019 OSDUHS (Grades 7–12)

	2013	2015	2017	2019
(n=)	(5478)	(5403)	(6364)	(7617)
Total	**23.5**	**34.0**	**38.7**	**43.8** [bc]
(95% CI)	(21.4-25.8)	(31.5-36.7)	(34.9-42.6)	(41.9-45.7)
Sex				
Males	**15.5** (13.3-18.0)	**22.7** (19.9-25.8)	**26.8** (24.0-29.8)	**31.4** [ab] (29.2-33.7)
Females	**32.1** (29.2-35.2)	**45.9** (42.9-49.0)	**51.3** (46.1-56.4)	**56.6** [b] (54.4-58.8)
Grade				
7	**12.6** (9.3-16.8)	**18.7** (14.0-24.5)	**24.9** (20.8-29.5)	**31.0** [b] (27.0-35.3)
8	**22.4** (17.8-27.8)	**30.7** (24.6-37.5)	**32.8** (28.5-37.4)	**35.3** [b] (31.2-39.6)
9	**24.0** (20.3-28.2)	**27.6** (23.4-32.2)	**31.2** (25.1-38.0)	**40.1** [b] (36.5-43.7)
10	**25.8** (21.2-30.9)	**37.2** (33.1-41.4)	**39.9** (33.5-46.7)	**45.6** [b] (42.2-49.1)
11	**27.5** (22.5-33.1)	**42.4** (37.4-47.5)	**46.8** (37.9-56.0)	**50.0** [b] (46.2-53.8)
12	**24.4** (19.6-30.0)	**40.8** (36.5-45.3)	**47.0** (41.2-52.7)	**51.3** [b] (47.5-55.0)
Region				
Greater Toronto Area	**26.0** (22.9-29.4)	**34.7** (30.9-38.8)	**40.2** (34.4-46.3)	**44.6** [b] (42.2-47.0)
North	**18.9** (14.6-24.2)	**35.9** (31.8-40.2)	**36.5** (32.0-41.3)	**43.7** [b] (37.0-50.7)
West	**21.2** (16.8-26.5)	**33.0** (28.7-37.7)	**39.2** (35.3-43.2)	**43.3** [b] (38.5-48.3)
East	**23.4** (20.0-27.3)	**33.2** (27.1-39.9)	**34.3** (26.1-43.6)	**42.9** [b] (38.9-46.9)

Notes: (1) "Moderate-to-Serious Psychological Distress" is defined as a score of 8 or higher out of 24 on the 6-item version of the *Kessler Psychological Distress Scale* (K6); (2) the reference period is the past 4 weeks; (3) n=total number of students surveyed; (4) asked of a random half sample in each year; (5) entries in brackets are 95% confidence intervals; (6) [a] 2019 vs. 2017 significant difference, p<.01; [b] 2019 vs. 2013 significant difference, p<.01; [c] significant linear trend, p<.01.

Source: OSDUHS, Centre for Addiction and Mental Health

Table A3.4.6 Percentage Indicating Serious Psychological Distress (13+ on the K6 Scale), 2013–2019 OSDUHS (Grades 7–12)

	2013	2015	2017	2019
(n=)	(5478)	(5403)	(6364)	(7617)
Total	**10.7**	**14.2**	**17.1**	**20.6** [abc]
(95% CI)	(9.4-12.1)	(12.5-16.0)	(14.9-19.4)	(19.2-22.0)
Sex				
Males	**5.8** (4.5-7.4)	**7.0** (5.7-8.7)	**9.1** (7.1-11.6)	**12.0** [b] (10.6-13.5)
Females	**15.9** (14.0-18.0)	**21.7** (19.0-24.6)	**25.5** (22.8-28.4)	**29.4** [b] (27.5-31.4)
Grade				
7	**5.0** (3.0-8.2)	**6.4** (4.0-10.1)	**9.4** (7.1-12.3)	**13.5** [b] (10.6-17.1)
8	**9.8** (6.8-14.0)	**11.7** (7.4-18.2)	**12.0** (9.2-15.6)	**16.5** (13.3-20.2)
9	**13.4** (10.7-16.7)	**11.1** (8.4-14.5)	**15.0** (10.1-21.7)	**19.6** [b] (16.8-22.6)
10	**11.5** (8.6-15.1)	**14.6** (12.1-17.4)	**17.9** (14.7-21.6)	**19.2** [b] (16.3-22.5)
11	**11.0** (8.1-14.9)	**19.1** (15.9-22.6)	**19.8** (16.2-24.0)	**24.3** [b] (21.5-27.4)
12	**11.0** (8.3-14.5)	**18.3** (14.8-22.5)	**22.4** (16.0-30.4)	**25.2** [b] (22.1-28.5)
Region				
Greater Toronto Area	**12.5** (10.3-15.0)	**14.0** (12.0-16.3)	**17.4** (14.1-21.4)	**19.7** [b] (17.9-21.5)
North	**8.8** (6.3-12.0)	**15.2** (12.7-18.0)	**16.6** (13.6-20.1)	**24.7** [b] (18.9-31.5)
West	**9.3** (7.1-12.1)	**14.0** (11.5-17.0)	**18.7** (16.0-21.7)	**20.5** [b] (17.3-24.1)
East	**9.6** (8.1-11.4)	**14.4** (9.5-21.3)	**14.0** (10.0-19.3)	**21.2** [b] (18.4-24.3)

Notes: (1) "Serious Psychological Distress" is defined as a score of 13 or higher out of 24 on the 6-item version of the *Kessler Psychological Distress Scale* (K6); (2) the reference period is the past 4 weeks; (3) n=total number of students surveyed; (4) asked of a random half sample since in each year; (5) entries in brackets are 95% confidence intervals; (6) [a] 2019 vs. 2017 significant difference, p<.01; [b] 2019 vs. 2013 significant difference, p<.01; [c] significant linear trend, p<.01.

Source: OSDUHS, Centre for Addiction and Mental Health

Table A3.4.7 Percentage Reporting Suicidal Ideation in the Past Year, 2001–2019 OSDUHS (Grades 7–12)

	2001	2003	2005	2007	2009	2011	2013	2015	2017	2019
(n=)	(2061)	(3464)	(4078)	(3388)	(4851)	(4816)	(5478)	(5403)	(6364)	(7617)
Total	**11.4**	**12.5**	**11.2**	**9.8**	**9.5**	**10.3**	**13.4**	**12.4**	**13.6**	**16.4** [abcd]
(95% CI)	(9.5-13.8)	(11.1-14.2)	(10.0-12.5)	(8.6-11.1)	(8.3-10.8)	(9.0-11.8)	(11.8-15.1)	(10.9-14.1)	(12.4-15.0)	(15.0-17.9)
Sex										
Males	**8.9** (7.0-11.3)	**7.9** (6.4-9.5)	**7.0** (5.8-8.5)	**5.9** (4.7-7.5)	**7.6** (6.1-9.4)	**7.0** (5.7-8.7)	**9.4** (7.6-11.6)	**8.2** (6.8-9.9)	**8.5** (6.3-11.4)	**11.3** (9.8-13.1)
Females	**14.0** (11.2-17.3)	**16.8** (14.6-19.2)	**15.5** (13.4-17.9)	**13.7** (11.8-15.9)	**11.4** (9.7-13.4)	**13.7** (12.1-15.4)	**17.6** (15.3-20.2)	**16.9** (14.2-20.1)	**19.0** (16.7-21.6)	**21.5** [b] (19.5-23.8)
Grade										
7	**8.4** (5.7-12.2)	**9.8** (6.7-14.0)	**8.4** (5.7-12.1)	**7.9** (5.5-11.3)	**5.9** (3.9-8.9)	**7.2** (4.7-10.7)	**9.1** (6.2-13.0)	**6.4** (3.7-10.8)	**8.9** (6.7-11.8)	**12.2** (9.9-15.0)
8	**12.5** (8.2-18.6)	**16.7** (11.1-24.3)	**11.6** (8.7-15.2)	**9.2** (6.6-12.8)	**8.7** (6.1-12.3)	**8.1** (5.4-11.9)	**13.8** (10.2-18.6)	**10.1** (6.5-15.4)	**11.7** (8.6-15.8)	**14.8** (11.6-18.6)
9	**8.8** (4.9-15.3)	**11.1** (8.9-13.9)	**12.6** (10.2-15.4)	**11.5** (8.7-15.2)	**9.7** (6.9-13.4)	**10.1** (7.6-13.3)	**14.5** (11.2-18.6)	**9.6** (7.3-12.6)	**14.7** (11.0-19.2)	**14.2** (11.3-17.7)
10	**12.8** (9.5-17.0)	**12.4** (9.1-16.8)	**13.1** (9.8-17.3)	**11.4** (8.9-14.5)	**10.6** (8.8-12.8)	**12.4** (9.0-16.7)	**14.9** (11.2-19.6)	**15.4** (12.8-18.4)	**14.3** (12.0-16.9)	**16.8** (14.5-19.4)
11	**13.9** (9.8-19.4)	**14.8** (11.4-18.9)	**12.9** (10.5-15.8)	**10.0** (7.8-12.6)	**10.7** (8.3-13.7)	**14.0** (11.4-17.2)	**16.2** (12.8-20.3)	**16.4** (13.0-20.4)	**11.0** (6.8-17.2)	**18.9** (16.4-21.7)
12	**14.1** (9.4-20.5)	**10.5** (8.1-13.4)	**8.8** (6.6-11.5)	**8.7** (6.3-11.8)	**10.3** (8.0-13.1)	**9.0** (6.2-12.8)	**11.4** (8.5-15.0)	**14.6** (11.6-18.1)	**17.5** (14.1-21.5)	**18.7** (15.3-22.5)
Region										
GTA	**12.0** (8.7-16.2)	**12.3** (9.8-15.3)	**10.2** (8.2-12.7)	**9.2** (7.6-11.1)	**11.0** (8.8-13.7)	**9.2** (7.7-11.1)	**13.8** (11.1-16.9)	**11.6** (9.9-13.6)	**14.2** (12.9-15.6)	**15.4** (13.9-17.1)
North	**11.9** (9.5-14.8)	**13.0** (10.2-16.4)	**12.0** (10.0-14.3)	**11.7** (8.4-15.9)	**9.0** (5.4-14.7)	**7.8** (5.8-10.5)	**12.3** (8.1-18.2)	**13.4** (9.8-18.0)	**12.4** (9.9-15.3)	**18.5** [ab] (14.8-22.8)
West	**10.1** (7.1-14.2)	**13.5** (10.5-17.2)	**14.7** (12.6-17.0)	**10.4** (8.1-13.3)	**8.7** (6.6-11.4)	**11.8** (9.1-15.3)	**13.4** (10.8-16.4)	**13.2** (11.2-15.6)	**14.8** (11.9-18.3)	**16.2** (12.6-20.6)
East	**11.9** (7.9-17.6)	**11.7** (9.7-14.1)	**9.6** (7.6-12.1)	**9.7** (7.2-13.0)	**8.1** (6.4-10.0)	**11.1** (8.9-13.7)	**13.1** (10.4-16.4)	**12.7** (8.3-18.9)	**11.1** (7.7-15.8)	**17.3** (14.7-20.3)

Notes: (1) n=total number of students surveyed; (2) asked of a random half sample in each year; (3) entries in brackets are 95% confidence intervals; (4) GTA=Greater Toronto Area; (5) [a] 2019 vs. 2017 significant difference, p<.01; [b] 2019 vs. 2001 significant difference, p<.01; [c] significant linear trend, p<.01; [d] significant nonlinear trend, p<.01.

Q: "During the last 12 months, did you ever seriously consider attempting suicide?" (Percentage responding "yes" is shown.)

Source: OSDUHS, Centre for Addiction & Mental Health

Table A3.4.8 Percentage Reporting a Suicide Attempt in the Past Year, 2007–2019 OSDUHS (Grades 7–12)

	2007	2009	2011	2013	2015	2017	2019
(n=)	(3388)	(4851)	(4816)	(5478)	(5403)	(6364)	(7617)
Total	**3.3**	**2.8**	**2.8**	**3.5**	**3.0**	**3.9**	**4.8**
(95% CI)	(2.6-4.2)	(2.2-3.4)	(2.1-3.6)	(2.8-4.3)	(2.2-3.9)	(3.0-4.9)	(3.9-5.8)
Sex							
Males	**1.8** (1.2-2.6)	**2.5** (1.7-3.6)	**1.6** (1.0-2.6)	**2.0** (1.4-3.0)	**1.5** (1.0-2.4)	**2.5** (1.8-3.5)	**2.9** (2.2-3.9)
Females	**4.9** (3.8-6.4)	**3.1** (2.3-4.1)	**4.0** (2.9-5.3)	**5.0** (3.8-6.5)	**4.5** (3.1-6.4)	**5.3** (3.7-7.6)	**6.7** (5.1-8.7)
Grade							
7	**2.7** (1.4-5.1)	†	†	†	†	†	**4.4** (3.1-6.2)
8	**3.0** (1.8-5.1)	**2.5** (1.4-4.6)	†	**2.6** (1.6-4.2)	†	**2.9** (1.6-5.2)	**5.1** (3.7-7.1)
9	**3.2** (2.0-5.0)	**3.4** (2.0-5.8)	**2.5** (1.3-4.7)	**4.2** (2.5-6.9)	**1.9** (1.1-3.3)	**4.4** (2.8-6.8)	**3.7** (2.4-5.6)
10	**5.5** (3.7-8.2)	**2.6** (1.6-4.0)	**3.7** (2.2-6.3)	**4.0** (2.3-6.9)	**3.0** (1.9-4.7)	**4.9** (3.3-7.2)	**4.9** (3.5-6.7)
11	**3.1** (2.0-4.7)	**3.1** (2.0-4.8)	**2.3** (1.2-4.4)	**4.3** (2.7-6.6)	**5.3** (3.3-8.5)	**1.9** (1.1-3.2)	**4.9** (3.4-7.1)
12	**2.5** (1.4-4.6)	**3.4** (1.7-6.4)	**3.8** (2.1-6.5)	**2.8** (1.6-4.9)	**2.5** (1.3-4.8)	**5.4** (3.1-9.1)	**5.5** (3.2-9.2)
Region							
Greater Toronto Area	**3.3** (2.1-5.2)	**2.4** (1.6-3.7)	**1.9** (1.2-2.9)	**3.1** (2.3-4.1)	**2.4** (1.6-3.5)	**4.0** (2.8-5.7)	**3.5** (2.8-4.3)
North	**3.8** (2.2-6.3)	†	†	**4.7** (2.6-8.4)	**3.5** (2.5-4.7)	**4.9** (3.2-7.5)	**5.7** (3.3-9.7)
West	**3.0** (1.9-4.6)	**2.1** (1.3-3.4)	**3.8** (2.8-5.2)	**3.5** (2.1-5.9)	**4.1** (2.5-6.6)	**3.9** (2.6-5.9)	**5.4** (3.0-9.6)
East	**3.6** (2.5-5.2)	**4.6** (3.2-6.5)	**3.5** (2.2-5.7)	**3.6** (2.7-4.9)	†	**3.1** (1.7-5.6)	**5.8** (4.5-7.3)

Notes: (1) n=total number of students surveyed; (2) asked of a random half sample in each year; (3) entries in brackets are 95% confidence intervals; (4) †=estimate suppressed due to unreliability; (5) no significant changes over time.
Q: "During the last 12 months, did you actually attempt suicide?" (Percentage responding "yes" is shown.)
Source: OSDUHS, Centre for Addiction & Mental Health

Table A3.5.1a Percentage Reporting Antisocial Behaviours at Least Once in the Past Year, 1999–2019 OSDUHS (Grades 7–12)

	1999	2001	2003	2005	2007	2009	2011	2013	2015	2017	2019	
TOTAL SAMPLE (n=)	(2148)	(2061)	(3464)	(4078)	(3388)	(4851)	(4816)	(5478)	(5403)	(6364)	(7617)	
fire setting	—	—	—	—	15.9	14.5	10.8	10.4	8.9	8.1	8.9	bc
ran away from home	8.4	7.4	10.2	9.2	9.7	9.6	10.5	9.7	7.8	10.9	10.3	
theft of goods worth $50/less	17.3	14.1	14.7	14.7	14.0	14.1	9.7	8.9	7.7	9.5	13.2	abc
vandalism	24.1	16.3	15.1	15.3	15.8	13.5	9.8	8.3	7.9	7.8	10.0	abcd
assault	19.9	12.8	11.5	11.7	10.6	9.8	8.7	6.4	5.4	5.4	7.5	bcd
carried a weapon	13.5	10.6	9.6	9.6	8.7	7.3	4.6	6.0	5.1	5.7	6.3	bcd
sold marijuana or hashish	7.8	10.1	8.3	7.6	6.8	6.4	5.2	5.6	4.2	3.7	4.8	bc
car theft/joyriding	10.2	9.1	9.3	7.8	7.2	6.9	6.0	4.8	4.1	4.0	4.8	bc
theft of goods worth > $50	6.6	5.8	5.3	5.5	5.1	5.2	3.8	4.1	2.3	3.1	3.7	bc
break and entering	6.4	5.0	4.4	4.7	4.6	4.4	4.4	3.3	3.3	5.0	4.1	bc
street racing (car/truck)*	—	—	—	—	—	5.6	3.8	3.9	—	—	—	
gang fighting*	7.6	5.4	6.7	6.0	4.8	2.9	—	—	—	—	—	
sold other drugs*	4.3	4.1	3.1	3.6	4.1	2.9	—	—	—	—	—	
carried a handgun*	—	—	—	2.2	1.8	1.7	—	—	—	—	—	
% 3+ behaviours /9	**16.0**	**13.0**	**12.8**	**11.8**	**12.1**	**10.4**	**8.0**	**7.1**	**5.2**	**6.9**	**8.3**	bcd
(95% CI)	(14.0-18.2)	(11.4-14.8)	(11.4-14.4)	(10.4-13.4)	(10.8-13.5)	(9.0-11.8)	(6.9-9.3)	(5.8-8.8)	(4.2-6.4)	(5.8-8.1)	(7.5-9.2)	
MALES	(1101)	(1018)	(1654)	(1934)	(1618)	(2286)	(2218)	(2469)	(2496)	(2754)	(3345)	
fire setting	—	—	—	—	19.6	19.5	14.4	13.4	11.1	10.1	10.5	
ran away from home	5.6	7.4	7.9	7.4	6.6	8.0	7.4	8.2	6.5	10.1	9.6	
theft of goods worth $50/less	20.9	17.5	17.9	16.5	16.2	17.1	10.8	10.8	7.6	11.0	13.7	
vandalism	29.3	21.2	18.2	18.0	19.1	16.4	10.4	9.6	9.6	10.3	11.4	
assault	29.4	17.1	14.4	15.9	14.3	12.9	11.0	8.7	6.7	7.1	10.1	
carried a weapon	21.5	17.0	14.9	14.9	13.2	11.4	7.6	9.1	7.8	8.6	8.9	
sold marijuana or hashish	11.1	13.8	11.9	9.8	9.0	8.6	7.4	8.4	5.3	5.4	6.3	
car theft/joyriding	12.5	12.5	12.7	8.8	8.3	9.1	7.2	5.6	5.4	5.3	5.3	
theft of goods worth > $50	9.1	8.2	8.0	6.7	6.2	6.6	4.4	5.4	2.7	3.8	4.1	
break and entering	9.6	6.5	6.7	6.0	5.5	5.8	5.4	4.4	4.2	6.6	4.9	
% 3+ behaviours /9	**22.7**	**17.5**	**16.8**	**14.7**	**14.5**	**13.6**	**9.2**	**9.5**	**6.4**	**8.7**	**10.0**	b
(95% CI)	(19.7-26.0)	(15.1-20.3)	(14.8-19.0)	(12.5-17.2)	(12.5-16.7)	(11.5-16.1)	(7.3-11.6)	(7.5-12.0)	(5.0-8.0)	(6.9-10.9)	(8.7-11.4)	

(cont'd)

	1999	2001	2003	2005	2007	2009	2011	2013	2015	2017	2019
FEMALES	(1047)	(1043)	(1810)	(2144)	(1770)	(2565)	(2598)	(3009)	(2907)	(3610)	(4272)
fire setting	—	—	—	—	12.2	9.4	7.2	7.2	6.7	6.1	7.3
ran away from home	11.2	7.4	12.3	11.0	13.0	11.4	13.7	11.3	9.1	11.8	11.0
theft of goods worth $50/less	13.7	10.9	11.8	12.9	11.8	11.1	8.7	6.8	7.7	7.8	12.8
vandalism	18.9	11.6	12.3	12.4	12.6	10.5	9.2	6.9	6.1	5.2	8.5
assault	10.4	8.6	8.9	7.2	6.8	6.7	6.3	3.8	4.1	3.6	4.8
carried a weapon	5.5	4.5	4.9	4.0	4.2	3.2	1.6	2.7	2.3	2.7	3.6
sold marijuana or hashish	4.4	6.5	5.1	5.3	4.5	4.2	3.0	2.6	3.1	1.9	3.2
car theft/joyriding	7.8	5.9	6.3	6.7	6.0	4.7	4.9	4.0	2.6	2.7	4.3
theft of goods worth > $50	4.0	3.4	2.9	4.3	4.0	3.8	3.2	5.4	2.0	2.4	3.3
break and entering	3.2	3.5	2.4	3.3	3.7	3.0	3.4	2.0	2.3	2.9	3.2
% 3+ behaviours /9	**9.2**	**8.6**	**9.3**	**8.8**	**9.6**	**7.0**	**6.8**	**4.6**	**4.1**	**5.0**	**6.6**
(95% CI)	(7.1-11.7)	(6.8-10.9)	(7.6-11.3)	(7.4-10.5)	(8.1-11.4)	(5.6-8.7)	(5.7-8.0)	(3.4-6.4)	(3.0-5.4)	(3.6-6.7)	(5.6-7.8)
GRADE 7	(369)	(404)	(497)	(508)	(383)	(883)	(728)	(1126)	(964)	(976)	(1141)
fire setting	—	—	—	—	6.1	8.0	5.6	10.2	4.7	6.9	4.8
ran away from home	7.4	7.2	9.7	7.4	5.0	6.3	7.3	4.7	†	10.1	5.8
theft of goods worth $50/less	9.3	8.1	9.9	7.7	6.0	6.1	3.8	3.3	2.7	6.0	6.6
vandalism	18.9	10.3	14.7	9.6	6.7	7.5	5.0	5.0	†	6.3	8.0
assault	17.1	13.5	11.1	8.6	8.1	7.6	7.2	5.2	4.6	6.2	7.4
carried a weapon	7.8	5.4	9.9	4.4	4.8	4.5	3.1	2.6	3.8	4.5	3.5
sold marijuana or hashish	†	0.8	2.0	†	†	†	†	†	†	†	†
car theft/joyriding	†	1.1	1.8	†	†	†	†	†	†	†	†
theft of goods worth > $50	2.4	3.2	3.2	1.9	1.7	†	†	†	†	†	2.0
break and entering	3.1	2.1	2.7	1.7	1.6	1.2	†	†	†	†	†
% 3+ behaviours /9	**7.4**	**6.4**	**9.7**	**5.5**	**5.2**	**3.8**	**2.5**	**1.9**	†	**4.2**	**4.8**
(95% CI)	(5.1-10.6)	(4.0-10.2)	(6.3-14.4)	(3.4-8.6)	(3.2-8.2)	(2.6-5.5)	(1.3-4.7)	(1.0-3.4)		(2.2-7.9)	(3.4-6.9)
GRADE 8	(391)	(379)	(512)	(501)	(418)	(913)	(730)	(1088)	(1013)	(1090)	(1203)
fire setting	—	—	—	—	15.3	11.0	7.9	10.7	9.2	7.3	8.4
ran away from home	9.2	9.7	9.5	9.8	9.2	9.2	7.5	6.6	8.7	8.6	8.7
theft of goods worth $50/less	15.6	14.3	13.3	11.1	10.5	7.6	5.3	5.0	5.4	10.5	10.6
vandalism	26.0	19.5	12.6	15.6	16.6	11.1	5.6	9.1	8.2	9.2	10.1
assault	24.8	15.5	12.3	13.6	12.1	7.4	8.8	6.9	5.9	9.8	8.8
carried a weapon	15.2	9.6	6.6	8.6	10.2	6.4	6.0	8.2	4.3	3.9	4.5
sold marijuana or hashish	4.0	4.4	3.8	3.6	†	1.9	†	†	†	†	†
car theft/ joyriding	4.3	4.4	2.2	3.1	†	2.7	†	†	†	†	†

	1999	2001	2003	2005	2007	2009	2011	2013	2015	2017	2019
theft of goods worth > $50	4.8	5.5	2.3	3.8	2.2	2.8	†	†	†	2.2	2.9
break and entering	6.8	4.0	2.2	5.3	2.8	3.3	†	†	†	†	3.1
% 3+ behaviours /9	**15.8**	**13.8**	**8.5**	**9.3**	**8.4**	**5.5**	**4.7**	**3.9**	**4.0**	**6.6**	**6.7** [b]
(95% CI)	(11.0-22.2)	(10.3-18.2)	(5.5-12.9)	(6.4-13.5)	(5.5-12.6)	(3.7-8.0)	(2.8-7.8)	(2.1-7.2)	(2.3-6.8)	(3.8-11.2)	(5.1-8.6)
GRADE 9	(442)	(368)	(654)	(780)	(660)	(753)	(879)	(815)	(904)	(1236)	(1386)
fire setting	—	—	—	—	23.8	15.7	13.1	11.1	9.6	9.5	10.4
ran away from home	7.8	6.9	9.6	10.8	11.9	13.1	8.4	9.4	7.1	10.1	10.8
theft of goods worth $50/less	16.9	15.4	13.7	16.4	17.8	13.7	7.2	6.6	7.9	7.7	14.7
vandalism	26.8	17.4	16.1	16.6	21.8	13.7	8.8	7.6	7.2	8.4	10.9
assault	22.6	13.4	11.0	12.9	11.7	9.6	7.7	5.3	4.0	6.8	7.2
carried a weapon	13.4	12.6	12.2	11.5	11.3	7.7	3.7	6.4	4.5	5.5	5.6
sold marijuana or hashish	6.5	8.8	7.3	8.2	6.6	5.3	1.7	4.3	2.1	†	2.4
car theft/joyriding	9.4	7.2	7.8	7.5	5.9	3.7	†	2.4	†	†	2.7
theft of goods worth > $50	6.3	6.0	5.5	5.3	6.0	4.9	2.2	†	1.8	3.1	3.9
break and entering	4.6	5.0	5.3	6.2	4.8	4.1	3.3	†	†	†	4.8
% 3+ behaviours /9	**14.8**	**12.8**	**12.1**	**13.0**	**15.2**	**9.3**	**5.3**	**6.0**	**4.8**	**4.5**	**8.3** [b]
(95% CI)	(11.2-19.3)	(9.8-16.5)	(9.8-14.8)	(9.6-17.5)	(11.6-19.8)	(6.7-12.7)	(3.5-7.9)	(4.0-8.8)	(2.9-7.6)	(2.8-7.2)	(6.1-11.3)
GRADE 10	(296)	(422)	(622)	(742)	(577)	(814)	(825)	(816)	(920)	(1119)	(1381)
fire setting	—	—	—	—	18.8	19.1	9.8	13.0	10.6	10.8	10.4
ran away from home	10.6	7.7	11.6	10.8	11.1	9.8	12.2	10.8	7.8	13.3	10.6
theft of goods worth $50/less	24.8	16.6	17.5	17.1	15.6	17.8	11.3	10.9	10.5	10.5	14.8
vandalism	34.2	20.0	16.3	17.3	17.0	17.6	14.4	11.7	8.4	8.7	9.8
assault	23.5	13.5	10.1	14.4	10.4	11.6	7.3	5.7	6.3	4.6	6.6
carried a weapon	18.3	15.9	8.6	12.6	8.6	10.0	4.6	8.6	5.6	6.7	7.1
sold marijuana or hashish	12.8	15.5	10.4	10.0	9.3	8.6	6.3	5.9	4.8	†	3.8
car theft/joyriding	12.8	14.5	13.3	7.8	7.0	6.7	2.9	5.0	4.9	†	3.9
theft of goods worth > $50	9.3	8.4	5.1	7.3	6.1	5.4	3.4	4.6	3.1	3.8	4.2
break and entering	8.1	6.7	4.8	7.5	6.1	5.2	4.2	5.0	3.5	6.4	3.8
% 3+ behaviours /9	**24.4**	**16.5**	**16.2**	**14.2**	**13.3**	**13.4**	**8.9**	**10.1**	**6.6**	**8.4**	**7.3** [b]
(95% CI)	(18.6-31.4)	(12.9-20.9)	(12.6-20.5)	(11.0-18.3)	(10.7-16.5)	(10.8-16.4)	(5.8-13.3)	(6.5-15.3)	(4.8-8.9)	(6.2-11.2)	(5.7-9.3)
GRADE 11	(357)	(288)	(620)	(819)	(684)	(719)	(808)	(837)	(791)	(960)	(1290)
fire setting	—	—	—	—	18.8	17.9	12.5	10.0	8.3	6.6	11.3
ran away from home	9.8	7.1	12.6	9.9	11.3	10.0	17.0	12.7	9.8	11.0	11.3
theft of goods worth $50/less	20.1	14.0	18.2	19.5	18.0	18.1	18.0	11.6	8.7	9.0	12.4
vandalism	21.4	16.0	16.6	19.3	18.1	15.2	10.7	7.7	7.9	7.7	8.9

	1999	2001	2003	2005	2007	2009	2011	2013	2015	2017	2019
assault	20.1	9.5	15.1	11.0	11.9	9.7	10.1	6.0	5.2	3.8	7.4
carried a weapon	16.2	8.5	11.8	11.3	10.1	5.9	6.8	5.7	4.6	6.5	7.3
sold marijuana or hashish	13.8	16.1	12.6	12.5	10.2	10.6	8.2	7.7	5.8	†	6.8
car theft/joyriding	20.1	14.3	16.2	13.8	13.7	12.2	10.5	7.1	5.2	5.3	7.2
theft of goods worth > $50	9.2	5.1	9.1	7.5	7.7	7.5	8.0	7.3	2.7	3.6	3.8
break and entering	10.4	7.2	6.4	4.6	6.6	4.4	6.1	4.1	4.3	5.6	5.0
% 3+ behaviours /9	**19.7**	**14.4**	**16.6**	**16.2**	**17.0**	**13.0**	**13.1**	**8.6**	**6.2**	**7.6**	**8.1** [b]
(95% CI)	(15.0-25.4)	(10.2-20.0)	(13.1-20.9)	(13.4-19.4)	(13.4-21.2)	(9.2-18.2)	(10.2-16.7)	(6.2-11.7)	(4.6-8.5)	(4.5-12.9)	(6.4-10.2)
GRADE 12	(293)	(200)	(559)	(728)	(666)	(769)	(846)	(796)	(811)	(983)	(1216)
fire setting	—	—	—	—	12.2	14.4	12.8	8.4	10.0	7.4	7.0
ran away from home	5.6	5.6	7.5	6.5	9.4	9.1	9.3	10.9	7.7	11.4	12.0
theft of goods worth $50/less	18.0	15.9	14.0	16.2	14.9	18.4	9.7	11.7	9.1	11.5	16.3
vandalism	16.7	11.9	13.3	13.2	14.0	14.4	11.4	7.9	8.8	7.0	11.3
assault	9.0	9.6	9.0	9.5	9.5	11.8	10.0	6.1	6.1	3.5	7.8
carried a weapon	9.6	8.3	8.0	8.7	7.1	8.7	3.5	4.6	6.9	5.8	7.8
sold marijuana or hashish	10.0	15.5	11.6	10.3	10.0	9.2	9.9	8.6	8.1	8.2	9.7
car theft/joyriding	12.9	14.4	11.4	12.6	12.0	12.8	14.1	9.1	7.8	7.6	8.3
theft of goods worth > $50	7.5	7.1	5.4	6.8	6.1	7.9	4.1	6.3	3.7	3.9	4.4
break and entering	5.5	4.0	4.3	2.8	5.1	7.0	6.7	4.8	4.3	6.5	5.3
% 3+ behaviours /9	**14.3**	**13.4**	**12.0**	**12.2**	**12.3**	**14.6**	**10.2**	**9.1**	**7.3**	**8.3**	**12.1**
(95% CI)	(9.5-21.0)	(7.9-21.8)	(9.2-15.7)	(9.6-15.3)	(9.5-15.8)	(11.1-18.8)	(7.1-14.4)	(5.4-14.9)	(4.3-12.1)	(6.4-10.7)	(9.4-15.4)
GREATER TORONTO AREA	(980)	(667)	(1360)	(1630)	(1174)	(1570)	(1859)	(2420)	(2131)	(2656)	(2764)
fire setting	—	—	—	—	16.4	13.6	10.5	10.8	8.4	8.6	7.4
ran away from home	8.4	6.0	9.5	7.7	9.4	9.1	9.1	7.8	6.4	12.5	9.1
theft of goods worth $50/less	17.8	14.9	16.0	15.1	16.4	14.3	10.5	10.5	7.8	10.7	14.0
vandalism	23.7	17.0	17.9	14.4	17.4	12.7	10.0	8.2	8.4	10.0	10.2
assault	20.5	12.2	11.5	11.1	11.8	10.1	7.6	5.7	5.4	6.1	6.6
carried a weapon	13.7	9.1	10.8	9.3	10.0	5.4	4.0	4.2	4.5	5.9	5.4
sold marijuana or hashish	8.3	8.2	9.2	7.0	6.3	5.6	5.4	4.2	4.0	2.7	3.4
car theft/joyriding	11.2	6.6	9.5	7.9	7.3	6.7	4.0	3.6	4.0	4.8	3.3
theft of goods worth > $50	7.4	5.4	6.5	6.0	6.4	5.2	4.2	4.8	2.5	4.4	4.2
break and entering	6.9	3.8	4.2	3.4	4.1	3.6	3.8	2.7	2.8	5.1	3.1
% 3+ behaviours /9	**16.7**	**11.5**	**14.7**	**11.4**	**13.1**	**9.5**	**7.3**	**6.6**	**4.9**	**7.8**	**7.1** [b]
(95% CI)	(13.9-19.9)	(9.3-14.1)	(12.8-16.9)	(9.5-13.7)	(11.0-15.5)	(7.7-11.8)	(5.9-8.9)	(5.1-8.5)	(3.9-6.3)	(6.1-9.8)	(6.1-8.3)

	1999	2001	2003	2005	2007	2009	2011	2013	2015	2017	2019
NORTH REGION	(424)	(599)	(746)	(728)	(421)	(359)	(1022)	(769)	(798)	(918)	(579)
fire setting	—	—	—	—	19.1	10.3	10.5	7.8	10.2	5.7	7.8
ran away from home	8.2	6.2	14.8	12.9	11.2	11.4	12.8	11.3	11.7	12.6	10.6
theft of goods worth $50/less	16.7	9.6	15.6	15.3	13.4	14.9	12.6	3.8	5.9	6.3	10.5
vandalism	23.0	15.7	16.6	15.5	19.2	14.8	10.8	8.3	8.8	6.4	8.8
assault	16.7	13.1	15.1	12.2	10.7	11.1	8.3	4.8	5.1	4.0	8.2
carried a weapon	12.1	11.3	9.5	9.6	12.0	7.6	7.0	6.3	7.4	4.6	6.4
sold marijuana or hashish	7.9	5.8	9.8	8.0	9.2	6.9	7.6	3.3	7.0	4.7	6.3
car theft/joyriding	11.9	8.4	9.4	10.5	8.5	6.2	7.8	6.4	6.1	5.4	8.8
theft of goods worth > $50	4.1	3.8	4.9	4.8	6.9	7.1	5.1	†	2.6	†	3.2
break and entering	7.8	5.2	7.6	6.2	6.4	4.2	6.1	†	5.5	2.3	4.7
% 3+ behaviours /9	**13.8**	**10.1**	**14.4**	**13.3**	**14.6**	**11.5**	**10.4**	**6.1**	**6.3**	**5.8**	**9.5**
(95% CI)	(10.5-18.1)	(7.1-14.0)	(11.1-18.4)	(10.5-16.8)	(10.6-19.8)	(8.0-16.3)	(6.9-15.5)	(4.1-8.9)	(4.6-8.5)	(4.2-7.9)	(6.8-13.1)
WEST REGION	(525)	(486)	(717)	(813)	(887)	(1022)	(941)	(561)	(1549)	(1012)	(2302)
fire setting	—	—	—	—	16.7	16.8	10.8	11.3	8.1	8.0	11.2
ran away from home	8.6	10.2	10.8	11.4	9.4	10.3	13.3	10.1	6.0	8.3	12.3
theft of goods worth $50/less	18.5	14.5	12.7	15.6	14.0	13.6	8.1	9.0	8.3	9.1	14.4
vandalism	24.8	14.4	11.2	17.2	14.9	13.6	9.2	7.7	5.3	5.5	9.7
assault	22.1	11.8	11.9	14.4	10.8	9.6	9.5	8.1	4.7	4.7	8.8
carried a weapon	13.8	10.3	8.3	11.5	7.7	9.4	4.3	9.1	4.6	6.8	9.0
sold marijuana or hashish	8.5	14.5	7.7	9.1	6.8	7.1	4.5	9.0	3.4	5.0	7.3
car theft/joyriding	8.1	12.4	10.6	9.0	7.9	7.2	7.6	6.2	2.2	3.3	6.3
theft of goods worth > $50	6.2	6.2	5.0	5.9	3.7	5.0	2.6	4.6	1.7	2.4	3.0
break and entering	5.7	6.2	3.7	6.3	4.6	4.2	3.2	3.2	2.5	5.1	5.2
% 3+ behaviours /9	**16.2**	**14.8**	**11.7**	**14.8**	**11.6**	**10.5**	**8.1**	**9.3**	**3.8**	**6.1**	**10.7** [ab]
(95% CI)	(12.3-21.0)	(11.4-18.9)	(8.9-15.2)	(12.5-17.5)	(9.0-14.7)	(8.6-12.7)	(5.7-11.4)	(6.1-13.9)	(2.5-5.8)	(4.2-8.8)	(8.8-12.9)
EAST REGION	(370)	(309)	(641)	(907)	(906)	(1900)	(994)	(1728)	(925)	(1778)	(1972)
fire setting	—	—	—	—	13.8	14.4	11.3	9.1	10.6	7.9	9.6
ran away from home	8.1	7.2	9.3	8.6	10.2	9.3	9.3	12.3	11.4	9.6	10.2
theft of goods worth $50/less	13.2	14.0	14.2	13.4	10.6	14.3	9.7	6.7	7.2	7.2	11.4
vandalism	24.7	17.8	13.2	15.0	13.6	14.4	10.0	9.4	9.6	5.0	10.3
assault	15.0	15.6	9.7	10.2	8.5	9.5	9.8	5.5	6.5	4.5	7.6
carried a weapon	13.0	14.3	8.9	8.3	6.8	7.9	5.3	4.7	6.4	3.5	5.2
sold marijuana or hashish	4.1	10.1	6.9	7.3	6.9	6.8	5.1	3.6	5.0	4.7	4.4
car theft/joyriding	10.0	10.8	7.6	5.7	6.0	7.2	7.7	4.6	†	2.2	5.1

	1999	2001	2003	2005	2007	2009	2011	2013	2015	2017	2019
theft of goods worth > $50	6.0	7.1	3.4	4.7	3.9	5.0	4.3	2.8	†	†	3.6
break and entering	5.7	5.7	4.6	5.0	4.9	6.0	6.8	4.9	4.3	4.2	4.6
% 3+ behaviours /9	**14.2**	**15.5**	**9.9**	**9.4**	**10.5**	**11.2**	**8.8**	**5.1**	**7.2**	**5.6**	**7.8** [b]
(95% CI)	(10.0-19.9)	(11.6-20.4)	(7.2-13.4)	(6.2-14.0)	(8.4-13.0)	(7.8-15.8)	(6.6-11.6)	(3.5-7.5)	(4.2-12.2)	(4.0-7.7)	(6.1-9.9)

Notes: (1) percentages show engagement in the behaviour at least once during the 12 months before the survey; (2) n=the number of students surveyed; (3) based on a random half sample in each year; (4) — indicates data not available; (5) * results among grades 9-12 only; (6) †=estimate suppressed due to unreliability; (7) "% 3+ behaviours /9" shows the percentage reporting three or more behaviours out of nine (excludes fire setting, street racing, gang fighting, sold other drugs, and carried a handgun); (8) trend analysis for the individual behaviours were conducted among the total sample only, and not among each subgroup; (9) [a] 2019 vs. 2017 significant difference, p<.01; [b] 2019 vs. 1999 (vs. 2007 for fire-setting) significant difference, p<.01; [c] significant linear trend, p<.01; [d] significant nonlinear trend, p<.01.

Table A3.5.1b Percentage Reporting Antisocial Behaviours at Least Once in the Past Year, 1991–2019 OSDUHS (based on Grades 7, 9, and 11 only)

	1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013	2015	2017	2019
TOTAL SAMPLE (n=)	(2961)	(2617)	(2907)	(1527)	(1168)	(1060)	(1771)	(2107)	(1727)	(2355)	(2415)	(2778)	(2659)	(5686)	(7059)
ran away from home	9.1	8.8	8.9	8.2	8.4	7.0	10.8	9.4	9.6	9.9	11.4	9.5	7.5	10.4	9.8
theft of goods worth $50/less	19.9	20.0	21.1	17.3	15.9	12.7	14.3	14.6	14.2	12.9	10.4	7.7	6.6	7.8	11.8 [cd]
vandalism	19.8	20.0	20.7	18.8	22.9	14.8	15.9	15.3	15.9	12.3	8.6	7.0	7.2	7.6	9.5 [cd]
assault	19.6	17.3	19.7	22.0	20.3	12.3	12.5	10.9	10.6	9.0	8.5	5.5	4.6	5.5	7.4 [cd]
carried a weapon	—	16.2	14.8	11.8	12.8	9.2	11.4	9.2	8.9	6.1	4.7	5.2	4.4	5.6	5.7 [c]
sold marijuana or hashish	3.1	4.0	7.2	6.4	7.2	8.4	7.8	7.2	6.1	5.8	3.7	4.6	2.8	2.6	3.6 [d]
car theft/ joyriding	11.3	8.7	10.9	9.5	10.6	7.4	9.2	7.4	7.1	5.6	4.7	3.6	2.3	2.9	4.3 [cd]
theft of goods worth > $50	5.8	6.4	7.1	6.2	6.2	4.8	6.2	5.0	5.3	4.7	4.2	3.6	1.7	2.7	3.4 [cd]
break and entering	6.2	6.1	6.8	6.6	6.2	4.7	5.0	4.2	4.4	3.3	3.8	2.2	2.5	3.7	3.9 [c]
% 3+ behaviours /9	—	**15.9**	**16.8**	**14.2**	**14.5**	**11.3**	**13.1**	**11.6**	**12.8**	**8.9**	**7.5**	**5.9**	**4.1**	**5.6**	**7.4** [cd]
(95% CI)		(15.0-16.9)	(15.4-18.3)	(12.7-15.7)	(12.3-17.0)	(9.5-13.4)	(11.3-15.1)	(9.8-13.8)	(10.8-15.0)	(7.1-11.0)	(6.3-9.0)	(4.6-7.6)	(3.0-5.6)	(4.2-7.5)	(6.3-8.6)
MALES	(1554)	(1270)	(1412)	(723)	(582)	(529)	(888)	(1024)	(842)	(1107)	(1129)	(1229)	(1260)	(2426)	(1646)
ran away from home	7.2	5.3	6.6	6.0	6.9	7.6	8.3	7.3	7.2	7.1	8.3	8.1	5.0	10.1	8.3
theft of goods worth $50/less	26.1	22.0	25.4	19.0	18.8	15.5	17.4	16.6	15.8	15.7	12.5	7.4	6.4	8.7	13.0
vandalism	26.3	24.1	27.0	21.4	27.7	20.0	18.6	17.2	18.4	13.9	8.4	7.3	8.4	7.8	11.3
assault	26.1	22.6	27.7	29.6	30.6	16.9	14.6	14.8	14.9	10.8	11.2	7.4	5.0	6.6	9.1
carried a weapon	—	23.6	23.7	18.6	20.8	15.3	16.4	14.7	12.1	9.8	8.0	7.1	6.3	7.8	8.2
sold marijuana or hashish	4.9	6.0	10.0	10.1	10.6	12.2	11.0	9.2	8.3	7.8	5.0	6.2	2.8	3.9	4.4
car theft/ joyriding	15.6	11.6	14.4	12.5	15.0	10.2	12.9	8.5	8.8	7.2	5.2	3.6	2.6	3.1	5.1
theft of goods worth > $50	8.9	8.8	10.3	9.3	9.0	7.5	8.7	6.2	6.4	5.7	4.9	3.9	1.5	2.4	3.8
break and entering	9.3	8.9	10.3	8.0	9.2	6.4	6.9	5.1	5.5	4.3	3.7	2.5	2.5	4.1	4.5
% 3+ behaviours /9	—	**21.0**	**22.8**	**18.2**	**20.8**	**15.5**	**16.0**	**14.1**	**14.8**	**11.2**	**8.4**	**6.8**	**3.9**	**5.7**	**8.6**
(95% CI)		(18.3-23.9)	(20.7-25.1)	(15.6-21.0)	(17.4-24.8)	(12.4-19.1)	(13.2-19.1)	(11.2-17.5)	(12.1-17.9)	(8.8-14.3)	(6.3-11.1)	(4.8-9.4)	(2.7-5.6)	(4.0-8.0)	(7.0-10.5)

(cont'd)

	1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013	2015	2017	2019
FEMALES	(1407)	(1347)	(1495)	(804)	(586)	(531)	(883)	(1083)	(885)	(1248)	(1286)	(1549)	(1399)	(3260)	(2171)
ran away from home	11.1	12.1	11.1	10.1	9.8	6.5	13.2	11.6	11.9	12.7	14.4	10.9	10.2	10.8	11.2
theft of goods worth $50/less	13.2	18.2	17.1	15.8	13.2	9.9	11.2	12.6	12.7	10.2	8.3	8.0	6.9	6.8	10.6
vandalism	12.6	16.1	14.8	16.4	18.2	9.5	13.2	13.2	13.4	10.8	8.7	6.7	5.9	7.3	7.6
assault	12.5	12.2	12.2	15.1	10.0	7.7	10.5	6.9	6.4	7.3	5.7	3.7	4.3	4.4	5.6
carried a weapon	—	9.2	6.7	5.8	4.9	3.2	6.6	3.5	5.6	2.4	1.3	3.2	2.2	3.4	3.1
sold marijuana or hashish	1.2	2.1	4.6	3.2	3.9	4.7	4.6	5.0	3.9	3.9	2.4	2.9	2.8	1.2	2.8
car theft/ joyriding	6.8	6.0	7.8	6.9	6.3	4.6	5.5	6.3	5.4	4.1	4.1	3.7	2.0	2.7	3.4
theft of goods worth > $50	2.4	4.0	4.1	3.5	3.4	2.2	3.7	3.6	4.2	3.7	3.4	3.4	1.9	3.0	2.9
break and entering	2.7	3.4	3.6	5.4	3.2	3.1	3.1	3.4	3.4	2.3	3.9	2.0	2.5	3.3	3.3
% 3+ behaviours /9	—	**11.2**	**11.2**	**10.6**	**8.1**	**7.1**	**10.2**	**9.1**	**10.7**	**6.5**	**6.6**	**5.1**	**4.3**	**5.6**	**6.2**
(95% CI)		(9.4-13.2)	(8.9-13.9)	(8.9-12.4)	(5.9-11.0)	(4.9-10.3)	(7.9-13.1)	(7.0-11.8)	(8.2-13.8)	(4.8-8.8)	(4.5-9.5)	(3.6-7.1)	(2.8-6.6)	(3.4-8.8)	(4.7-8.0)

Notes: (1) percentages reflect engaging in the behaviour at least once during the 12 months before the survey; (2) n=number of students surveyed; (3) based on a random half sample in each year starting in 1997; (4) — indicates data not available; (5) †=estimate suppressed due to unreliability; (6) "% 3+ behaviours /9" shows the percentage reporting three or more behaviours of the nine listed; (7) [c] significant linear trend, p<.01; [d] significant nonlinear trend, p<.01.

Source: OSDUHS, Centre for Addiction and Mental Health

Table A3.5.2 Percentage Reporting Being Bullied in Any Way at School Since September, 2003–2019 OSDUHS (Grades 7–12)

	2003	2005	2007	2009	2011	2013	2015	2017	2019
(n=)	(3464)	(4078)	(3388)	(4851)	(4816)	(5478)	(5403)	(6364)	(7617)
Total	**32.7**	**30.9**	**29.9**	**28.9**	**28.6**	**25.0**	**23.6**	**21.0**	**22.9** [bc]
(95% CI)	(30.6-34.9)	(29.0-32.8)	(27.8-32.0)	(27.0-31.0)	(25.8-31.5)	(22.7-27.5)	(21.5-25.8)	(19.3-22.9)	(21.4-24.5)
Sex									
Males	**35.3** (32.4-38.3)	**27.8** (25.4-30.4)	**27.7** (25.1-30.4)	**26.5** (23.7-29.5)	**25.8** (23.0-28.8)	**22.2** (19.3-25.3)	**19.6** (17.2-22.2)	**17.7** (15.4-20.4)	**20.5** [b] (18.6-22.5)
Females	**30.3** (27.4-33.4)	**34.0** (31.3-36.9)	**32.1** (29.1-35.2)	**31.4** (29.1-33.8)	**31.3** (27.7-35.2)	**28.1** (25.1-31.3)	**27.8** (24.7-31.1)	**24.5** (21.4-28.0)	**25.4** [b] (23.3-27.6)
Grade									
7	**47.1** (39.2-55.0)	**38.3** (33.0-43.8)	**34.2** (28.4-40.5)	**31.6** (26.8-36.9)	**30.4** (24.0-37.7)	**31.6** (25.2-38.8)	**26.3** (20.6-32.8)	**27.4** (23.5-31.7)	**29.2** [b] (25.4-33.4)
8	**38.7** (33.2-44.6)	**41.2** (37.0-45.6)	**34.8** (29.4-40.5)	**31.5** (27.4-36.0)	**32.7** (28.3-37.5)	**34.5** (29.4-40.0)	**27.2** (21.2-34.2)	**28.8** (24.7-33.3)	**28.2** [b] (24.6-32.2)
9	**32.8** (28.6-37.2)	**34.6** (30.7-38.7)	**36.7** (31.7-42.0)	**32.6** (27.6-38.1)	**30.5** (27.1-34.2)	**28.7** (24.2-33.6)	**21.1** (17.6-25.1)	**22.7** (19.5-26.4)	**22.5** [b] (19.6-25.8)
10	**32.6** (27.9-37.5)	**26.3** (22.5-30.4)	**33.0** (28.8-37.4)	**32.8** (28.4-37.6)	**33.0** (26.7-40.1)	**22.6** (18.3-27.7)	**25.3** (21.4-29.8)	**20.6** (15.3-27.0)	**22.2** [b] (19.2-25.5)
11	**28.7** (24.2-33.7)	**25.9** (22.7-29.4)	**24.3** (20.9-28.0)	**25.2** (21.4-29.5)	**27.1** (21.7-33.3)	**24.2** (19.3-29.8)	**18.5** (14.9-22.7)	**18.3** (13.7-23.9)	**19.8** [b] (16.6-23.4)
12	**19.8** (16.4-23.7)	**20.6** (16.6-25.2)	**19.2** (15.6-23.4)	**22.6** (18.6-27.3)	**21.5** (17.9-25.6)	**16.6** (13.3-20.5)	**23.8** (19.9-28.2)	**15.0** (11.3-19.6)	**20.1** (17.2-23.4)
Region									
GTA	**27.5** (24.8-30.3)	**27.1** (24.5-29.8)	**27.3** (23.8-31.2)	**25.1** (22.6-27.8)	**23.7** (21.2-26.4)	**22.7** (20.5-25.0)	**20.8** (18.4-23.4)	**18.9** (16.7-21.4)	**21.5** [b] (19.5-23.7)
North	**38.1** (33.7-42.7)	**32.2** (27.6-37.2)	**30.3** (24.8-36.5)	**32.1** (26.8-37.8)	**29.2** (24.0-34.9)	**29.6** (24.1-35.8)	**27.7** (24.5-31.2)	**21.9** (18.2-26.1)	**24.3** [b] (19.8-29.5)
West	**36.8** (31.8-42.2)	**33.6** (29.7-37.8)	**32.8** (28.7-37.2)	**32.9** (29.1-37.0)	**34.7** (29.0-40.8)	**28.7** (23.3-34.8)	**25.4** (20.7-30.8)	**25.3** (22.0-29.0)	**23.5** [b] (19.9-27.5)
East	**36.2** (31.4-41.3)	**34.4** (30.4-38.7)	**30.9** (27.3-34.7)	**29.5** (25.2-34.2)	**30.1** (25.9-34.7)	**22.6** (17.2-29.1)	**26.0** (20.9-31.9)	**21.2** (17.0-26.0)	**24.3** [b] (21.6-27.3)

Notes: (1) n=number of students surveyed; (2) based on a random half sample in each year; (3) CI=confidence interval; (4) GTA=Greater Toronto Area; (5) no significant differences, 2019 vs. 2017; [b] 2019 vs. 2003 significant difference, p<.01; [c] significant linear trend, p<.01.

Qs: "Bullying is when one or more people tease, hurt or upset a weaker person on purpose, again and again. It is also bullying when someone is left out of things on purpose. Since September, in what way were you bullied the most at school?" (Bullying victimization is defined here as being bullied through either physical attacks, verbal attacks, or theft/vandalism.)

Source: OSDUHS, Centre for Addiction and Mental Health

Table A3.5.3 Percentage Reporting Bullying Others in Any Way at School Since September, 2003–2019 OSDUHS (Grades 7–12)

	2003	2005	2007	2009	2011	2013	2015	2017	2019
(n=)	(3464)	(4078)	(3388)	(4851)	(4816)	(5478)	(5403)	(6364)	(7617)
Total	**29.7**	**27.3**	**24.7**	**25.1**	**20.7**	**16.0**	**13.1**	**11.1**	**10.4** [bcd]
(95% CI)	(27.6-32.0)	(25.2-29.5)	(22.8-26.7)	(23.2-27.2)	(16.9-25.2)	(14.4-17.8)	(11.5-14.8)	(10.0-12.4)	(9.3-11.6)
Sex									
Males	**34.9** (31.7-38.3)	**29.4** (26.9-32.0)	**26.0** (23.4-28.8)	**28.1** (25.3-31.2)	**18.6** (16.3-21.2)	**17.5** (15.0-20.5)	**14.6** (12.2-17.3)	**12.0** (10.2-14.0)	**12.3** [b] (10.7-14.1)
Females	**25.1** (22.3-28.0)	**25.2** (22.4-28.1)	**23.4** (20.8-26.2)	**22.1** (19.7-24.7)	**22.8** (17.0-30.0)	**14.3** (12.0-16.9)	**11.5** (9.5-13.9)	**10.2** (8.9-11.6)	**8.4** [b] (7.2-9.7)
Grade									
7	**31.7** (25.6-38.6)	**26.1** (21.0-31.9)	**17.2** (13.6-21.4)	**21.3** (17.5-25.8)	**13.9** (10.5-18.1)	**12.7** (8.9-17.9)	**7.6** (4.6-12.2)	**11.1** (7.9-15.4)	**9.6** [b] (7.4-12.4)
8	**32.2** (25.9-39.3)	**30.4** (22.5-40.0)	**30.4** (25.0-36.3)	**25.2** (20.3-31.0)	**22.1** (17.8-27.0)	**20.2** (15.8-25.5)	**16.9** (11.6-23.8)	**13.2** (9.9-17.4)	**11.2** [b] (8.5-14.4)
9	**32.7** (28.8-36.8)	**29.3** (25.7-33.3)	**25.9** (21.6-30.6)	**23.9** (20.2-28.1)	**21.4** (14.0-31.3)	**17.6** (14.3-21.4)	**11.4** (8.5-15.2)	**12.6** (9.9-15.8)	**11.1** [b] (8.7-14.1)
10	**30.5** (26.8-34.6)	**26.4** (22.4-30.8)	**27.8** (23.6-32.4)	**26.8** (23.3-30.5)	**24.9** (21.2-29.0)	**18.7** (15.4-22.6)	**14.6** (11.4-18.5)	**11.3** (8.1-15.4)	**10.4** [b] (8.3-13.1)
11	**29.4** (25.7-33.4)	**30.1** (26.4-34.0)	**24.7** (21.8-27.9)	**27.0** (23.1-31.3)	**22.3** (13.9-33.8)	**15.5** (12.0-19.8)	**10.8** (8.4-13.8)	**8.8** (6.1-12.4)	**10.8** [b] (8.7-13.5)
12	**22.1** (17.5-27.5)	**22.2** (18.6-26.3)	**22.2** (18.4-26.5)	**25.7** (21.4-30.5)	**18.7** (14.6-23.6)	**12.7** (9.3-17.0)	**15.7** (12.8-19.1)	**10.8** (8.4-13.6)	**9.3** [b] (7.2-11.9)
Region									
GTA	**25.9** (23.2-28.8)	**25.6** (23.2-28.1)	**25.0** (22.1-28.1)	**24.2** (21.2-27.5)	**16.5** (14.1-19.2)	**15.5** (13.1-18.1)	**12.7** (10.6-15.0)	**12.2** (10.7-14.0)	**9.7** [b] (8.2-11.4)
North	**36.0** (31.2-41.2)	**26.6** (22.7-31.0)	**25.4** (20.5-31.0)	**27.8** (21.6-35.0)	**19.6** (14.7-25.6)	**16.2** (11.8-21.8)	**14.1** (11.2-17.6)	**10.4** (7.5-14.1)	**8.5** [b] (6.0-11.9)
West	**32.7** (28.5-37.3)	**31.0** (27.1-35.2)	**26.8** (22.6-31.5)	**29.0** (25.0-33.5)	**28.2** (19.3-39.1)	**18.4** (15.0-22.3)	**13.1** (9.9-17.2)	**11.3** (9.3-13.7)	**11.4** [b] (8.9-14.6)
East	**31.6** (26.1-37.6)	**27.3** (21.9-33.4)	**22.2** (19.0-25.8)	**21.3** (17.9-25.1)	**19.9** (16.8-23.4)	**13.2** (11.1-15.5)	**13.7** (10.3-17.9)	**7.8** (6.0-10.2)	**10.9** [b] (9.1-13.2)

Notes: (1) n=number of students surveyed; (2) based on a random half sample in each year; (3) CI=confidence interval; (4) GTA=Greater Toronto Area; (5) no significant differences, 2019 vs. 2017; [b] 2019 vs. 2003 significant difference, p<.01; [c] significant linear trend, p<.01; [d] significant nonlinear trend, p<.01.

Qs: "Bullying is when one or more people tease, hurt or upset a weaker person on purpose, again and again. It is also bullying when someone is left out of things on purpose. Since September, in what way did you bully other students the most at school?" (Bullying others is defined here as bullying through either physical attacks, verbal attacks, or stealing/vandalizing someone's property.)

Source: OSDUHS, Centre for Addiction and Mental Health

Table A3.5.4 Percentage Reporting Being Cyberbullied in the Past Year, 2011–2019 OSDUHS (Grades 7–12)

	2011	2013	2015	2017	2019
(n=)	(4816)	(5478)	(5403)	(6364)	(7617)
Total	**21.6**	**19.0**	**19.8**	**20.5**	**22.1**
(95% CI)	(19.5-24.0)	(17.2-21.0)	(18.0-21.7)	(18.8-22.3)	(20.7-23.6)
Sex					
Males	**15.2** (13.3-17.4)	**15.8** (13.6-18.2)	**14.0** (12.4-15.9)	**16.4** (14.1-18.9)	**18.6** (16.8-20.6)
Females	**28.0** (24.6-31.6)	**22.5** (20.2-25.0)	**25.8** (22.5-29.5)	**24.9** (22.9-26.9)	**25.7** (23.8-27.7)
Grade					
7	**19.8** (15.9-24.3)	**17.5** (13.8-22.0)	**19.0** (13.4-26.2)	**21.7** (17.8-26.2)	**22.9** (19.9-26.1)
8	**22.5** (17.7-28.1)	**24.6** (18.5-32.0)	**19.0** (15.0-23.8)	**22.1** (18.2-26.5)	**22.1** (19.0-25.4)
9	**24.6** (19.8-30.2)	**24.1** (20.0-28.6)	**19.7** (16.4-23.4)	**24.7** (20.0-30.2)	**24.0** (20.9-27.5)
10	**20.7** (17.9-23.8)	**16.4** (12.5-21.4)	**21.3** (17.8-25.4)	**19.9** (15.3-25.6)	**21.2** (18.4-24.4)
11	**24.4** (20.2-29.2)	**19.2** (15.5-23.5)	**19.7** (16.0-24.0)	**20.9** (13.7-30.6)	**23.9** (21.2-26.8)
12	**18.4** (15.2-22.0)	**15.1** (12.3-18.4)	**19.7** (15.5-24.7)	**16.3** (13.0-20.2)	**19.5** (16.4-23.0)
Region					
Greater Toronto Area	**19.8** (17.3-22.7)	**17.9** (15.7-20.4)	**16.5** (14.5-18.7)	**20.0** (17.4-22.8)	**19.9** (18.1-21.8)
North	**21.4** (17.7-25.5)	**19.8** (15.2-25.4)	**27.3** (23.2-31.8)	**23.0** (20.1-26.2)	**25.9** (22.2-30.0)
West	**26.2** (21.9-31.0)	**21.0** (16.9-25.8)	**21.7** (18.2-25.7)	**23.8** (21.0-26.8)	**24.8** (21.7-28.1)
East	**19.3** (15.7-23.5)	**17.9** (15.7-20.3)	**22.1** (17.0-28.1)	**16.9** (13.9-20.3)	**22.6** (19.6-25.8)

Notes: (1) n=total number of students surveyed; (2) based on a random half sample in each year; (3) entries in brackets are 95% confidence intervals; (4) no significant changes over time.

Q: "In the last 12 months, how many times did other people bully or pick on you electronically or through the Internet?" (Those who reported that they do not use the Internet were classified as "not cyberbullied" and remained in the denominator.)

Source: OSDUHS, Centre for Addiction and Mental Health

Table A3.5.5 Percentage Reporting Cyberbullying Others in the Past Year, 2017–2019 OSDUHS (Grades 7–12)

	2017 (n=6364)	2019 (n=7617)
Total	**9.7**	**11.0**
(95% CI)	(8.3-11.3)	(9.9-12.2)
Sex		
Males	**9.7** (8.2-11.5)	**12.7** (11.1-14.4)
Females	**9.7** (7.8-11.9)	**9.3** (8.1-10.7)
Grade		
7	**9.8** (7.3-13.1)	**9.4** (7.4-11.8)
8	**9.2** (6.8-12.3)	**10.5** (8.2-13.5)
9	**9.3** (7.2-12.0)	**12.8** (10.2-16.0)
10	**11.3** (7.9-15.8)	**9.7** (8.0-11.8)
11	**10.0** (7.6-13.1)	**13.1** (11.1-15.4)
12	**8.7** (5.7-13.0)	**10.1** (8.0-12.8)
Region		
Greater Toronto Area	**10.3** (8.2-13.0)	**11.5** (9.6-13.7)
North	**9.5** (7.2-12.4)	**9.7** (7.2-13.0)
West	**10.0** (7.9-12.6)	**11.5** (9.4-13.9)
East	**7.3** (5.3-10.0)	**10.2** (8.5-12.2)

Notes: (1) n=total number of students surveyed; (2) based on a random half sample in each year; (3) entries in brackets are 95% confidence intervals; (4) no significant changes over time.
Q: "In the last 12 months, how many times did you bully or pick on other people electronically or through the Internet?" (Those who reported that they do not use the Internet or a cellphone were classified as "did not cyberbully others" and remained in the denominator).
Source: OSDUHS, Centre for Addiction and Mental Health

Table A3.6.1 Percentage Reporting Gambling Activities at Least Once in the Past Year, 2001–2019 OSDUHS (Grades 7–12)

	2001	2003	2005	2007	2009	2011	2013	2015	2017	2019	
TOTAL (n=)	(2061)	(3464)	(4078)	(3388)	(4851)	(4816)	(5478)	(5403)	(6364)	(7617)	
Cards	24.9	24.0	32.7	28.7	20.2	15.9	10.7	9.5	9.4	8.4	bcd
Dice	—	12.7	14.7	10.7	6.1	5.2	4.6	3.1	3.3	3.8	bcd
Other Games of Skill	—	—	—	—	—	—	8.3	7.0	7.7	6.4	
Bingo	11.6	9.9	8.6	7.6	7.2	5.1	4.4	4.4	4.4	4.7	bcd
Sports Pools/Fantasy Sports	22.3	20.3	17.0	15.6	12.6	13.3	10.2	9.9	9.8	8.3	bc
Sports Lottery Tickets	9.9	7.8	7.2	6.1	5.1	3.6	2.9	3.1	2.1	2.1	bc
Other Lottery Tickets (Store)	22.1	22.4	18.5	18.8	15.5	12.7	9.6	7.8	7.5	6.1	bcd
Video Gambling/Slot Machines	6.8	6.7	6.2	4.8	3.9	2.9	3.8	2.4	3.6	2.7	bc
Casino in Ontario	1.7	1.7	1.1	1.1	1.3	†	0.6	0.5	0.5	0.7	bc
Video Game Results	—	—	—	—	—	—	—	—	7.6	7.0	
Dare/Private Bet	—	—	—	—	—	—	—	—	11.6	10.5	
Online Gambling (Any)*	—	2.5	2.1	3.0	3.0	2.1	3.1	3.8	3.5	4.3	bc
Other ways not listed above	—	27.1	23.6	24.1	18.8	17.6	13.4	10.5	9.3	6.6	bcd
Any Gambling Activity (95% CI)	—	**57.3** (55.2-59.4)	**56.8** (54.5-59.0)	**53.2** (50.8-55.5)	**42.6** (40.2-45.0)	**38.4** (35.6-41.2)	**34.9** (32.4-37.4)	**31.8** (29.3-34.5)	**31.3** (29.5-33.2)	**31.8** (30.3-33.3)	bcd
5+ Gambling Activities (95% CI)	—	**6.1** (5.0-7.4)	**5.9** (4.8-7.1)	**4.7** (3.8-5.8)	**3.0** (2.2-4.0)	**2.7** (1.9-3.7)	**2.6** (2.0-3.4)	**1.7** (1.3-2.3)	**2.1** (1.4-3.2)	**3.8** (3.3-4.4)	abcd
MALES	(1018)	(1654)	(1934)	(1618)	(2286)	(2218)	(2469)	(2496)	(2754)	(3345)	
Cards	35.4	32.1	44.2	41.0	28.1	21.6	15.1	13.7	13.5	10.7	
Dice	—	19.1	22.0	16.5	9.6	7.8	6.5	4.8	4.2	5.1	
Other Games of Skill	—	—	—	—	—	—	12.4	10.4	10.9	9.2	
Bingo	12.5	9.5	7.4	6.7	7.4	4.5	3.9	4.2	4.5	4.7	
Sports Pools/Fantasy Sports	38.1	32.7	26.1	25.4	20.6	21.3	16.4	16.3	15.4	12.9	
Sports Lottery Tickets	16.3	13.7	11.2	10.0	8.3	6.0	4.7	5.0	3.0	3.0	
Other Lottery Tickets (Store)	23.2	20.4	18.5	18.0	15.3	12.7	10.4	8.5	8.2	6.5	
Video Gambling or Slot Machines	8.1	8.9	7.4	5.9	5.0	3.8	4.4	3.2	5.7	3.5	
Casino in Ontario	2.6	2.5	1.6	1.4	1.9	†	0.9	0.7	†	1.0	
Video Game Results	—	—	—	—	—	—	—	—	13.2	11.9	
Dare/Private Bet	—	—	—	—	—	—	—	—	13.9	12.9	
Online Gambling (Any)	—	3.4	3.0	4.1	4.8	3.1	5.0	6.4	5.1	6.9	
Other ways not listed above	—	32.9	28.8	30.3	24.1	23.2	18.7	14.2	12.4	8.1	
Any Gambling Activity (95% CI)	—	66.2 (63.2-69.1)	66.5 (63.4-69.5)	63.0 (60.0-66.0)	50.5 (46.9-54.1)	47.3 (42.7-51.8)	44.1 (40.8-47.5)	40.3 (36.9-43.8)	37.8 (34.9-40.8)	39.5 (37.4-41.8)	b
5+ Gambling Activities (95% CI)	—	9.6 (7.9-11.6)	9.1 (7.3-11.2)	7.5 (6.1-9.3)	4.5 (3.1-6.5)	3.6 (2.4-5.6)	4.4 (3.3-6.0)	3.2 (2.4-4.3)	2.9 (1.8-4.6)	6.0 (5.0-7.1)	ab

(cont'd)

	2001	2003	2005	2007	2009	2011	2013	2015	2017	2019
FEMALES	(1043)	(1810)	(2144)	(1770)	(2565)	(2598)	(3009)	(2907)	(3610)	(4272)
Cards	14.8	16.7	20.8	16.2	12.1	10.2	5.8	5.0	5.1	5.9
Dice	—	7.0	7.1	4.9	2.5	2.7	2.4	1.3	2.3	2.4
Other Games of Skill	—	—	—	—	—	—	4.0	3.4	4.3	3.6
Bingo	10.6	10.2	9.9	8.4	6.8	5.7	4.9	4.6	4.2	4.7
Sports Pools/Fantasy Sports	7.3	9.1	7.7	5.6	4.4	5.3	3.4	3.3	4.0	3.7
Sports Lottery Tickets	3.8	2.4	3.1	2.2	1.9	†	1.0	1.1	1.1	1.2
Other Lottery Tickets (Store)	21.0	24.2	18.4	19.5	15.7	12.7	8.6	7.0	6.7	5.6
Video Gambling or Slot Machines	5.7	4.7	4.9	3.8	2.8	2.0	3.2	†	1.5	1.9
Casino in Ontario	0.8	1.0	0.6	0.7	†	†	†	†	†	†
Video Game Results	—	—	—	—	—	—	—	—	1.7	1.9
Dare/Private Bet	—	—	—	—	—	—	—	—	9.2	8.0
Online Gambling (Any)	—	1.6	1.2	1.9	1.2	1.1	1.1	1.1	†	1.7
Other ways not listed above	—	21.9	18.2	17.8	13.4	11.9	7.7	6.7	6.1	5.0
Any Gambling Activity (95% CI)	—	49.2 (46.2-52.3)	46.8 (43.7-49.8)	43.1 (40.4-45.9)	34.3 (31.8-37.0)	29.5 (26.8-32.3)	24.8 (22.0-27.8)	22.9 (20.3-25.7)	24.6 (21.6-27.9)	23.9 (22.1-25.8)[b]
5+ Gambling Activities (95% CI)	—	3.0 (2.0-4.2)	2.6 (1.8-3.6)	1.8 (1.3-2.7)	1.5 (0.9-2.5)	1.7 (1.0-2.8)	0.7 (0.4-1.2)	†	†	1.6 (1.1-2.4)
GRADE 7	(404)	(497)	(508)	(383)	(883)	(728)	(1126)	(964)	(976)	(1141)
Cards	17.1	19.1	19.4	15.0	10.9	7.3	6.7	4.4	6.9	7.0
Dice	—	9.7	†	6.1	2.9	†	3.0	1.3	1.6	2.5
Other Games of Skill	—	—	—	—	—	—	7.0	2.0	4.5	3.9
Bingo	8.9	10.3	7.6	8.1	7.3	6.3	4.3	†	3.8	4.2
Sports Pools/Fantasy Sports	10.1	15.8	10.4	9.3	6.5	6.0	†	†	5.6	6.2
Sports Lottery Tickets	3.8	4.8	2.7	3.0	3.2	†	†	†	2.3	1.9
Other Lottery Tickets (Store)	13.8	13.6	10.7	12.4	8.9	5.3	5.2	5.4	5.7	3.1
Video Gambling or Slot Machines	3.1	7.2	†	†	3.1	†	†	†	†	3.3
Casino in Ontario	†	†	†	†	†	†	†	†	†	†
Video Game Results	—	—	—	—	—	—	—	—	7.1	6.1
Dare/Private Bet	—	—	—	—	—	—	—	—	9.3	7.0
Online Gambling (Any)	—	†	†	†	†	†	†	†	2.6	2.9
Other ways not listed above	—	27.7	20.9	16.6	15.7	14.9	13.0	11.2	9.5	7.0
Any Gambling Activity (95% CI)	—	50.2 (44.6-55.8)	50.4 (42.3-58.4)	41.0 (34.0-48.3)	31.5 (26.6-36.9)	25.2 (19.7-31.6)	24.3 (20.5-28.5)	23.7 (17.7-31.0)	27.2 (23.5-31.2)	26.2 (22.5-30.2)[b]
5+ Gambling Activities (95% CI)	—	6.0 (3.5-10.2)	1.8 (0.9-3.3)	1.3 (0.5-3.2)	1.9 (0.8-4.1)	†	†	†	†	2.8 (1.8-4.3)

	2001	2003	2005	2007	2009	2011	2013	2015	2017	2019
GRADE 8	(379)	(512)	(501)	(418)	(913)	(730)	(1088)	(1013)	(1090)	(1203)
Cards	24.3	20.0	24.7	24.2	14.7	12.1	9.1	8.6	5.4	6.7
Dice	—	8.3	9.2	7.9	5.4	†	2.3	2.2	2.5	2.8
Other Games of Skill	—	—	—	—	—	—	5.6	4.1	5.0	4.8
Bingo	11.6	10.0	11.1	6.0	5.7	3.4	4.9	†	3.4	4.6
Sports Pools/Fantasy Sports	15.5	14.2	15.2	11.4	7.0	9.8	6.5	9.8	6.5	5.7
Sports Lottery Tickets	7.9	3.8	4.6	2.5	†	†	†	1.9	2.4	1.2
Other Lottery Tickets (Store)	16.2	14.9	13.1	11.5	7.2	6.7	4.4	4.8	6.3	3.3
Video Gambling or Slot Machines	4.8	6.8	6.0	3.3	2.4	†	†	†	2.3	2.9
Casino in Ontario	†	†	†	†	†	†	†	†	†	†
Video Game Results	—	—	—	—	—	—	—	—	7.0	6.7
Dare/Private Bet	—	—	—	—	—	—	—	—	15.2	9.7
Online Gambling (Any)	—	†	†	†	†	†	†	†	3.1	3.8
Other ways not listed above	—	28.9	23.7	25.9	14.8	18.3	10.3	8.1	8.9	6.4
Any Gambling Activity (95% CI)	—	51.5 (44.8-58.1)	49.2 (39.0-59.5)	46.9 (42.1-51.8)	32.4 (27.6-37.7)	30.2 (25.2-35.8)	27.4 (20.4-35.8)	27.6 (19.6-37.3)	29.4 (25.0-34.2)	30.6 (25.6-36.1)[b]
5+ Gambling Activities (95% CI)	—	4.5 (2.5-8.2)	5.6 (3.3-9.2)	2.5 (1.3-5.0)	1.7 (0.9-3.0)	†	†	†	†	1.7 (1.1-2.6)[b]
GRADE 9	(368)	(654)	(780)	(660)	(753)	(879)	(815)	(904)	(1236)	(1386)
Cards	24.2	24.1	33.9	27.4	18.2	13.6	8.3	6.8	7.6	7.6
Dice	—	16.7	16.4	12.9	5.3	1.5	4.1	3.2	2.3	3.2
Other Games of Skill	—	—	—	—	—	—	7.4	5.2	6.3	6.4
Bingo	13.7	9.6	8.9	8.7	8.0	6.4	3.7	3.7	†	4.9
Sports Pools/Fantasy Sports	27.0	23.6	19.3	16.4	10.6	9.7	10.7	8.7	8.5	7.8
Sports Lottery Tickets	9.4	7.0	6.0	4.7	3.4	2.1	†	†	†	1.5
Other Lottery Tickets (Store)	18.7	15.9	15.4	17.0	10.3	8.6	3.7	4.7	4.0	4.5
Video Gambling or Slot Machines	5.1	5.3	7.5	7.2	†	†	†	†	2.3	2.8
Casino in Ontario	†	†	†	†	†	†	†	†	†	†
Video Game Results	—	—	—	—	—	—	—	—	6.7	6.6
Dare/Private Bet	—	—	—	—	—	—	—	—	9.8	9.1
Online Gambling (Any)	—	3.5	†	2.6	3.1	†	†	3.8	3.1	4.6
Other ways not listed above	—	31.2	24.9	28.2	21.7	17.1	9.7	7.5	10.1	7.5
Any Gambling Activity (95% CI)	—	59.2 (54.2-64.1)	55.1 (49.7-60.4)	53.6 (48.8-58.4)	38.5 (33.7-43.6)	33.5 (29.4-37.8)	29.6 (24.8-34.9)	25.6 (21.8-29.9)	28.1 (22.7-34.1)	29.2 (25.6-33.1)[b]
5+ Gambling Activities (95% CI)	—	5.9 (3.8-9.0)	6.0 (3.5-10.0)	4.6 (2.9-7.3)	2.9 (1.6-5.0)	†	†	†	†	3.6 (2.4-5.3)

	2001	2003	2005	2007	2009	2011	2013	2015	2017	2019
GRADE 10	(422)	(622)	(742)	(577)	(814)	(825)	(816)	(920)	(1119)	(1381)
Cards	29.6	25.3	36.6	29.8	20.2	14.9	15.5	7.5	7.7	9.6
Dice	—	12.3	18.5	8.9	7.3	8.8	7.4	2.7	†	3.3
Other Games of Skill	—	—	—	—	—	—	11.5	8.0	7.9	7.0
Bingo	11.3	9.8	7.6	5.6	5.6	3.4	4.9	4.8	4.5	5.8
Sports Pools/Fantasy Sports	28.7	24.1	17.4	15.4	15.2	16.9	12.7	12.4	10.2	8.8
Sports Lottery Tickets	10.0	6.9	7.0	4.4	3.5	†	†	3.5	2.4	1.7
Other Lottery Tickets (Store)	23.4	18.2	16.0	14.9	11.5	7.9	6.3	6.1	5.1	5.5
Video Gambling or Slot Machines	10.4	6.6	6.2	4.9	3.7	†	3.8	†	3.1	2.5
Casino in Ontario	†	†	†	†	†	†	†	†	†	†
Video Game Results	—	—	—	—	—	—	—	—	9.0	7.2
Dare/Private Bet	—	—	—	—	—	—	—	—	14.5	10.1
Online Gambling (Any)	—	3.3	2.8	3.0	2.8	†	†	3.8	4.0	4.1
Other ways not listed above	—	26.9	26.2	23.4	20.9	19.8	15.5	12.0	8.2	6.6
Any Gambling Activity (95% CI)	—	56.9 (52.3-61.4)	58.6 (53.7-63.4)	51.5 (47.0-56.1)	42.4 (37.4-47.6)	41.1 (34.4-48.2)	37.6 (32.4-43.1)	31.3 (26.5-36.5)	31.1 (25.6-37.2)	31.0 (27.6-34.7)[b]
5+ Gambling Activities (95% CI)	—	4.8 (3.0-7.6)	6.1 (4.2-8.8)	4.1 (2.2-7.5)	2.5 (1.6-3.9)	†	3.8 (2.2-6.4)	1.9 (1.0-3.5)	†	4.1 (2.8-6.1)
GRADE 11	(288)	(620)	(819)	(684)	(719)	(808)	(837)	(791)	(960)	(1290)
Cards	28.4	27.0	39.0	36.5	25.2	22.5	8.2	10.2	13.6	8.2
Dice	—	14.7	17.2	14.0	9.2	6.4	3.3	2.9	†	4.9
Other Games of Skill	—	—	—	—	—	—	7.7	7.2	12.4	7.1
Bingo	9.7	9.5	7.4	7.6	7.7	6.5	3.2	5.7	†	5.3
Sports Pools/Fantasy Sports	23.1	20.5	17.1	19.0	7.3	15.8	10.0	12.9	11.4	8.4
Sports Lottery Tickets	12.8	9.6	9.4	8.9	18.8	5.3	1.7	3.1	1.6	1.5
Other Lottery Tickets (Store)	27.8	28.9	21.4	20.3	18.8	18.2	10.4	7.5	9.0	5.3
Video Gambling or Slot Machines	7.8	5.2	4.9	5.3	5.7	†	†	1.8	†	2.3
Casino in Ontario	†	†	†	1.6	†	†	†	†	†	†
Video Game Results	—	—	—	—	—	—	—	—	7.4	9.0
Dare/Private Bet	—	—	—	—	—	—	—	—	10.2	14.4
Online Gambling (Any)	—	†	†	†	†	†	†	4.8	†	4.6
Other ways not listed above	—	26.8	22.2	25.6	21.0	20.2	14.6	11.3	10.7	5.4
Any Gambling Activity (95% CI)	—	58.8 (54.0-63.4)	60.8 (55.8-65.7)	58.9 (53.5-64.1)	47.7 (41.9-53.5)	42.9 (37.4-48.6)	36.5 (31.8-41.5)	36.3 (32.2-40.5)	32.3 (23.8-42.3)	33.4 (29.6-37.3)[b]
5+ Gambling Activities (95% CI)	—	7.2 (5.1-10.3)	6.8 (5.0-9.0)	6.0 (4.0-8.7)	4.6 (2.4-8.4)	5.6 (3.4-9.2)	1.5 (0.9-2.6)	2.0 (1.2-3.3)	†	4.7 (3.2-6.9)

	2001	2003	2005	2007	2009	2011	2013	2015	2017	2019
GRADE 12	(200)	(559)	(728)	(666)	(769)	(846)	(796)	(811)	(983)	(1216)
Cards	25.0	26.6	40.6	36.0	27.9	19.8	13.4	15.6	12.1	9.6
Dice	—	12.8	14.7	13.4	6.1	7.3	5.8	4.9	2.9	4.9
Other Games of Skill	—	—	—	—	—	—	9.3	12.1	7.8	7.5
Bingo	14.7	10.3	8.9	9.0	8.1	4.6	5.2	4.2	3.0	3.5
Sports Pools/Fantasy Sports	28.7	21.3	21.8	20.2	17.9	17.0	11.4	11.1	13.1	11.0
Sports Lottery Tickets	19.3	13.8	12.5	11.7	9.3	6.2	6.5	4.8	3.0	4.2
Other Lottery Tickets (Store)	40.3	40.5	32.1	32.6	30.1	22.0	20.2	14.3	12.0	11.6
Video Gambling or Slot Machines	10.9	9.4	6.0	5.2	5.1	4.2	5.9	2.7	†	2.8
Casino in Ontario	7.8	4.5	2.6	†	3.3	†	1.7	†	†	†
Video Game Results	—	—	—	—	—	—	—	—	7.9	5.9
Dare/Private Bet	—	—	—	—	—	—	—	—	11.3	11.1
Online Gambling (Any)	—	†	1.8	2.6	3.9	†	2.8	4.7	2.8	5.0
Other ways not listed above	—	21.2	23.4	24.0	18.4	15.2	15.5	12.0	8.6	6.7
Any Gambling Activity (95% CI)	—	65.1 (60.8-69.1)	65.3 (61.2-69.1)	63.3 (58.2-68.1)	56.0 (51.6-60.4)	47.6 (41.1-54.2)	44.5 (39.2-49.9)	40.5 (34.9-46.2)	36.2 (32.3-40.3)	37.0 (33.0-41.0)[b]
5+ Gambling Activities (95% CI)	—	7.9 (5.4-11.5)	8.5 (6.2-11.5)	8.5 (6.3-11.3)	4.1 (2.4-6.8)	2.4 (1.5-3.7)	4.4 (2.6-7.4)	2.5 (1.4-4.3)	†	4.6 (3.3-6.5)
GREATER TORONTO AREA	(667)	(1360)	(1630)	(1174)	(1570)	(1859)	(2420)	(2131)	(2656)	(2764)
Cards	22.3	24.1	32.3	27.1	20.4	17.1	10.4	9.7	10.6	6.8
Dice	—	18.6	17.3	15.2	7.8	6.9	7.2	4.5	3.2	3.8
Other Games of Skill	—	—	—	—	—	—	9.9	7.7	8.0	5.8
Bingo	9.9	9.5	7.5	6.1	5.7	4.8	4.3	4.0	4.2	3.9
Sports Pools/Fantasy Sports	20.8	20.0	14.7	15.1	10.4	12.0	9.1	8.8	10.6	7.1
Sports Lottery Tickets	11.0	8.8	7.6	7.1	5.7	4.0	2.8	3.2	1.6	1.6
Other Lottery Tickets (Store)	19.7	21.9	17.8	18.3	13.9	13.7	9.4	7.5	6.3	4.7
Video Gambling or Slot Machines	6.6	6.7	4.9	4.4	3.1	3.1	2.2	1.5	4.8	2.5
Casino in Ontario	†	2.0	†	†	†	†	†	†	†	†
Video Game Results	—	—	—	—	—	—	—	—	8.4	6.8
Dare/Private Bet	—	—	—	—	—	—	—	—	11.0	9.9
Online Gambling (Any)	—	2.1	2.0	3.7	2.8	2.6	3.4	3.7	3.8	4.2
Other ways not listed above	—	27.7	22.4	24.4	17.9	17.8	13.6	11.7	11.2	7.1
Any Gambling Activity (95% CI)	—	57.2 (54.0-60.4)	54.3 (50.8-57.7)	51.9 (47.8-56.0)	41.3 (37.6-45.1)	39.0 (35.9-42.3)	34.8 (30.9-38.8)	30.6 (27.7-33.5)	31.3 (28.6-34.2)	29.4 (27.0-31.8)[b]
5+ Gambling Activities (95% CI)	—	6.9 (5.2-9.1)	5.8 (4.4-7.6)	5.8 (4.2-7.8)	2.5 (1.5-4.0)	2.7 (1.6-4.6)	2.7 (1.8-4.1)	2.1 (1.4-3.1)	2.2 (1.1-4.1)	3.5 (2.6-4.6)[b]

	2001	2003	2005	2007	2009	2011	2013	2015	2017	2019
NORTH REGION	(599)	(746)	(728)	(421)	(359)	(1022)	(769)	(798)	(918)	(579)
Cards	30.1	24.2	38.8	38.0	22.0	20.8	12.0	12.1	14.4	12.9
Dice	—	9.0	16.8	9.6	6.5	5.7	2.6	4.4	5.3	6.3
Other Games of Skill	—	—	—	—	—	—	6.4	10.8	7.0	5.8
Bingo	17.8	12.2	14.7	12.5	11.3	6.6	7.3	12.7	6.1	6.9
Sports Pools/Fantasy Sports	19.8	17.0	19.0	19.6	11.3	14.3	9.8	11.7	11.8	9.8
Sports Lottery Tickets	9.4	8.0	8.6	8.7	7.0	3.6	†	2.6	2.2	2.1
Other Lottery Tickets (Store)	25.5	27.8	25.9	23.7	20.2	16.0	13.6	12.5	10.0	7.1
Video Gambling or Slot Machines	10.5	8.1	13.5	5.6	†	†	†	†	5.9	2.3
Casino in Ontario	3.1	†	†	†	†	†	†	†	†	†
Video Game Results	—	—	—	—	—	—	—	—	7.2	5.8
Dare/Private Bet	—	—	—	—	—	—	—	—	8.5	8.8
Online Gambling (Any)	—	2.7	2.5	4.7	†	2.7	2.8	4.2	5.2	3.7
Other ways not listed above	—	27.1	24.6	22.9	17.5	17.6	12.4	9.7	6.3	5.2
Any Gambling Activity (95% CI)	—	59.3 (54.0-64.4)	64.0 (58.8-69.0)	56.6 (49.8-63.2)	47.4 (39.8-55.1)	40.3 (35.8-44.9)	37.7 (31.6-44.2)	42.5 (36.1-49.2)	33.0 (28.4-38.0)	36.0 (32.0-40.2)[b]
5+ Gambling Activities (95% CI)	—	6.2 (4.0-9.3)	9.6 (7.1-12.9)	7.1 (4.6-10.8)	3.9 (1.8-8.4)	4.1 (2.6-6.5)	3.9 (2.3-6.4)	3.0 (1.6-5.7)	3.1 (1.9-5.2)	3.4 (2.1-5.3)
WEST REGION	(486)	(717)	(813)	(887)	(1022)	(941)	(561)	(1549)	(1012)	(2302)
Cards	27.0	21.7	36.9	32.9	20.6	15.0	9.8	9.2	8.5	8.7
Dice	—	6.8	11.6	7.9	4.9	3.0	2.5	1.5	2.6	3.7
Other Games of Skill	—	—	—	—	—	—	7.1	7.1	8.7	8.1
Bingo	12.0	9.8	11.2	7.9	8.2	5.6	4.1	3.2	4.3	5.2
Sports Pools/Fantasy Sports	23.8	19.9	18.6	17.7	15.7	14.6	11.6	12.6	9.8	9.5
Sports Lottery Tickets	8.4	6.7	8.8	5.9	4.8	3.2	2.9	2.7	4.0	3.2
Other Lottery Tickets (Store)	24.6	23.1	23.5	21.1	17.5	10.5	8.5	7.5	8.8	8.0
Video Gambling or Slot Machines	6.8	5.4	4.9	3.9	2.2	†	†	1.9	1.6	2.6
Casino in Ontario	†	†	†	†	†	†	†	†	†	†
Video Game Results	—	—	—	—	—	—	—	—	7.4	6.6
Dare/Private Bet	—	—	—	—	—	—	—	—	12.7	12.2
Online Gambling (Any)	—	3.4	2.4	2.8	3.1	†	1.6	3.7	3.5	4.5
Other ways not listed above	—	25.3	25.8	23.1	20.2	16.7	13.5	8.7	8.2	6.5
Any Gambling Activity (95% CI)	—	55.0 (50.7-59.3)	61.0 (57.4-64.4)	56.0 (51.9-60.0)	43.0 (38.6-47.5)	38.4 (30.9-46.5)	33.4 (28.9-38.2)	32.0 (28.2-36.0)	32.1 (28.6-35.9)	32.4 (30.0-37.9)[b]
5+ Gambling Activities (95% CI)	—	5.6 (3.9-7.9)	7.4 (5.5-10.0)	3.7 (2.4-5.5)	3.6 (2.4-5.2)	1.8 (1.1-3.0)	2.3 (1.4-3.8)	1.3 (0.7-2.4)	†	5.0 (4.1-6.1)

	2001	2003	2005	2007	2009	2011	2013	2015	2017	2019
EAST REGION	(309)	(641)	(907)	(906)	(1900)	(994)	(1728)	(925)	(1778)	(1972)
Cards	24.8	26.2	28.0	25.2	19.0	13.4	12.0	8.7	5.6	9.4
Dice	—	9.2	12.2	6.9	4.7	4.7	3.1	†	3.7	3.2
Other Games of Skill	—	—	—	—	—	—	7.7	4.5	5.5	6.0
Bingo	11.5	9.9	6.4	8.3	7.2	4.6	4.0	4.3	4.6	5.0
Sports Pools/Fantasy Sports	25.2	22.5	19.0	13.6	12.8	13.9	10.3	8.8	6.9	9.0
Sports Lottery Tickets	9.6	7.0	4.8	4.4	4.0	3.5	†	3.5	†	1.9
Other Lottery Tickets (Store)	22.2	20.5	13.3	16.2	14.6	12.6	10.3	7.3	8.1	6.4
Video Gambling or Slot Machines	5.4	7.4	7.2	6.1	6.8	3.2	†	†	†	3.4
Casino in Ontario	†	†	†	†	2.9	†	†	†	†	†
Video Game Results	—	—	—	—	—	—	—	—	5.5	7.8
Dare/Private Bet	—	—	—	—	—	—	—	—	13.1	10.4
Online Gambling (Any)	—	2.2	†	1.8	3.5	†	†	†	1.7	4.4
Other ways not listed above	—	28.0	23.4	24.7	19.2	18.2	13.2	10.4	6.2	6.2
Any Gambling Activity (95% CI)	—	59.2 (54.0-64.2)	55.3 (50.0-60.5)	51.7 (46.7-56.6)	42.7 (37.3-48.4)	36.5 (32.4-40.8)	36.5 (32.7-40.6)	31.2 (22.7-41.2)	29.7 (26.4-33.2)	34.3 (30.9-37.9)[b]
5+ Gambling Activities (95% CI)	—	5.2 (3.3-8.1)	3.7 (1.7-7.6)	3.5 (2.1-5.8)	3.0 (1.3-6.7)	3.3 (1.7-6.5)	†	†	†	3.3 (2.4-4.6)

Notes: (1) n=number of students surveyed; (2) based on a random half sample in each year; (3) CI=confidence interval; (4) † indicates estimate suppressed due to unreliability; (5) percentages are reports of engaging in the activity at least once in the past 12 months; (6) trend analysis for the individual activities were conducted among the total sample only, and not among each subgroup; (7) [a] 2019 vs. 2017 significant difference, p<.01; [b] 2019 vs. 2001 (or 2003) significant difference, p<.01; [c] significant linear trend, p<.01; [d] significant nonlinear trend, p<.01.

Qs: "How often in the last 12 months have you done each of the following: Bet money on card games?; Bet money on dice games?; Bet money on other games of skill (such as pool, darts, chess, bowling)?; Played bingo for money?; Bet money in sports pools?; Bet money on fantasy sports?; Bought sports lottery tickets (such as Sports Select or Proline)?; Bought any other lottery tickets at a store including instant lottery (such as 6-49, Poker Lotto, scratch cards)?; Bet money on video gambling machines, slot machines, or any other gambling machines?; Bet money at a casino in Ontario?; Bet money on results of a video game?; Bet money on a dare or private bet?".

* The Online Gambling Index is based on the following five questions in 2017 and 2019: Bet money on poker online?, Bet money on bingo online?, Bet money on sports betting online?, Bet money on other online games?, and Bought lottery tickets online? However, in prior years a general question "Bet money over the Internet on any game?" was asked.

Source: OSDUHS, Centre for Addiction and Mental Health

Table A3.6.2 Percentage Classified as Having a Video Gaming Problem (PVP Scale), 2007–2019 OSDUHS (Grades 7–12)

	2007	2009	2011	2013	2015	2017	2019
(n=)	(2935)	(4261)	(4816)	(5478)	(5403)	(6364)	(7617)
Total	**9.4**	**10.3**	**11.9**	**10.3**	**12.5**	**11.7**	**14.0** [bc]
(95% CI)	(8.2-10.8)	(9.0-11.7)	(9.4-14.9)	(8.6-12.2)	(11.1-14.1)	(9.5-14.2)	(12.8-15.4)
Sex							
Males	**15.1** (13.1-17.3)	**16.0** (13.7-18.4)	**18.7** (14.5-23.6)	**16.5** (13.5-20.1)	**20.2** (17.8-22.7)	**16.6** (13.9-19.8)	**22.7** [ab] (20.7-24.8)
Females	**3.1** (2.3-4.3)	**4.0** (2.7-5.7)	**5.1** (4.1-6.3)	**3.5** (2.7-4.5)	**4.5** (3.4-5.8)	**6.5** (4.4-9.3)	**5.1** (4.0-6.4)
Grade							
7	**10.4** (6.9-15.3)	**8.3** (5.0-13.4)	**8.7** (6.3-11.8)	**12.8** (9.9-16.4)	**8.4** (6.1-11.5)	**11.2** (8.3-15.0)	**14.3** (11.1-18.2)
8	**10.8** (7.9-14.8)	**10.9** (7.5-15.4)	**9.0** (6.4-12.5)	**9.4** (6.9-12.8)	**11.8** (9.2-15.0)	**10.8** (8.4-13.8)	**14.9** (11.5-19.0)
9	**8.9** (6.4-12.2)	**11.2** (7.9-15.6)	**9.2** (6.3-13.1)	**9.4** (6.9-12.6)	**12.8** (10.4-15.6)	**9.6** (7.4-12.3)	**17.2** [ab] (14.4-20.5)
10	**9.1** (6.7-12.4)	**11.4** (8.6-14.9)	**11.9** (8.6-16.2)	**9.8** (6.1-15.4)	**14.1** (10.4-18.9)	**11.1** (8.4-14.4)	**12.8** (10.3-15.9)
11	**9.2** (6.7-12.7)	**9.7** (6.8-13.5)	**12.5** (9.3-16.5)	**11.4** (8.1-15.8)	**14.7** (10.9-19.6)	**16.4** (11.5-22.9)	**13.9** (11.2-17.1)
12	**8.6** (6.4-11.4)	**10.0** (7.0-14.0)	**16.9** (9.1-29.1)	**9.4** (6.9-12.8)	**12.7** (9.6-16.5)	**10.7** (7.4-15.1)	**12.0** (9.8-14.8)
Region							
Greater Toronto Area	**10.8** (8.8-13.2)	**10.0** (8.3-12.0)	**13.8** (11.1-17.1)	**11.8** (9.9-13.9)	**14.0** (11.8-16.6)	**13.5** (10.0-17.9)	**16.7** [b] (14.8-18.8)
North	**7.6** (5.5-10.5)	**10.5** (7.7-14.1)	**7.4** (5.8-9.4)	**8.1** (6.1-10.5)	**12.1** (8.8-16.6)	**10.4** (7.0-15.0)	**12.5** (8.3-18.5)
West	**8.5** (6.6-10.9)	**11.7** (9.2-14.9)	**11.4** (5.5-22.3)	**10.1** (6.8-14.9)	**12.7** (9.9-16.0)	**11.3** (9.0-14.1)	**12.7** (9.9-16.3)
East	**8.3** (5.6-12.0)	**8.3** (5.4-12.6)	**9.8** (7.8-12.4)	**8.0** (4.4-13.9)	**9.4** (7.1-12.3)	**7.0** (4.8-10.3)	**11.0** (9.2-12.9)

Notes: (1) "Video Gaming Problem" is defined as positive responses to five or more of the nine symptoms in the *Problem Video Game Playing (PVP) Scale*; (2) n=total number of students surveyed; (3) based on a random half sample in each year; (4) entries in brackets are 95% confidence intervals; (5) [a] 2019 vs. 2017 significant difference, p<.01; [b] 2019 vs. 2007 significant difference, p<.01.

Source: OSDUHS, Centre for Addiction and Mental Health

Table A3.6.3 Percentage Reporting Using Social Media for Five Hours or More a Day, 2013–2019 OSDUHS (Grades 7–12)

	2013	2015	2017	2019
(n=)	(10272)	(5403)	(6364)	(14142)
Total	**10.7**	**16.0**	**20.1**	**20.5** [b]
(95% CI)	(9.5-12.0)	(14.5-17.6)	(17.5-23.1)	(19.4-21.8)
Sex				
Males	**7.0** (5.8-8.6)	**10.1** (8.6-11.8)	**14.9** (11.8-18.5)	**15.6** [b] (14.2-17.1)
Females	**14.6** (12.6-16.7)	**22.4** (20.0-25.0)	**25.8** (23.1-28.6)	**25.8** [b] (24.2-27.4)
Grade				
7	**5.0** (3.5-7.0)	**8.9** (6.6-11.8)	**11.5** (8.0-16.1)	**12.4** [b] (10.2-14.9)
8	**11.1** (8.3-14.6)	**11.0** (8.5-14.2)	**15.0** (12.0-18.5)	**15.7** (13.4-18.3)
9	**9.9** (8.1-12.0)	**14.0** (11.3-17.1)	**22.9** (18.4-28.2)	**23.6** [b] (21.0-26.4)
10	**12.3** (9.5-15.7)	**20.6** (17.5-24.2)	**20.6** (15.5-26.8)	**21.9** [b] (19.5-24.6)
11	**11.8** (9.8-14.3)	**22.8** (18.3-28.0)	**24.2** (18.0-31.7)	**23.7** [b] (21.5-26.0)
12	**11.8** (9.4-14.9)	**16.7** (13.0-21.2)	**22.1** (17.5-27.5)	**21.2** [b] (18.2-24.4)
Region				
Greater Toronto Area	**12.3** (10.5-14.2)	**17.0** (14.8-19.4)	**21.8** (17.5-26.8)	**21.6** [b] (19.8-23.5)
North	**9.0** (6.8-11.6)	**17.3** (14.1-21.2)	**18.8** (16.1-22.0)	**18.6** [b] (15.2-22.5)
West	**7.9** (6.1-10.2)	**13.8** (11.5-16.4)	**19.4** (15.6-23.8)	**22.0** [b] (19.7-24.6)
East	**12.0** (9.0-16.0)	**16.2** (12.0-21.5)	**16.6** (13.7-19.9)	**17.1** (14.9-19.5)

Notes: (1) n=total number of students surveyed; (2) asked of a random half sample in 2015 and 2017; (3) entries in brackets are 95% confidence intervals; (4) no significant differences, 2019 vs. 2017; [b] 2019 vs. 2013 significant difference, p<.01.
Q: "About how many hours a day do you usually spend on social media sites or apps, such as Instagram, Snapchat, Twitter, Facebook, either posting or browsing?"
Source: OSDUHS, Centre for Addiction and Mental Health

Table A3.6.4 Percentage Indicating a Moderate-to-Serious Problem with Technology Use, 2017–2019 OSDUHS (Grades 9–12 only)

	2017 (n=4298)	2019 (n=5273)
Total	**18.1**	**18.6**
(95% CI)	(16.2-20.1)	(17.0-20.2)
Sex		
Males	**11.9** (9.7-14.6)	**14.7** (13.1-16.4)
Females	**24.4** (21.7-27.2)	**22.5** (20.2-25.0)
Grade		
9	**16.3** (12.5-21.0)	**17.3** (14.8-20.1)
10	**19.2** (15.5-23.7)	**17.6** (15.2-20.4)
11	**20.7** (15.8-26.6)	**19.9** (17.1-23.0)
12	**16.4** (13.2-20.2)	**19.3** (16.4-22.6)
Region		
Greater Toronto Area	**20.8** (17.9-24.0)	**20.9** (18.4-23.6)
North	**10.6** (8.2-13.6)	**16.0** (12.9-19.6)
West	**14.9** (11.9-18.6)	**17.0** (13.8-20.8)
East	**16.2** (13.5-19.3)	**16.7** (14.4-19.2)

Notes: (1) A moderate-to-serious problem with technology use is defined as scoring 14 or higher out of 24 on the *Short Problematic Internet Use Test* (SPIUT); (2) n=total number of students surveyed; (3) asked of a random half sample of secondary students in each year; (4) entries in brackets are 95% confidence intervals; (5) no significant differences, 2019 vs. 2017.
Source: OSDUHS, Centre for Addiction and Mental Health

Table A3.6.5 Percentage Indicating a Serious Problem with Technology Use, 2017–2019 OSDUHS (Grades 9–12 only)

	2017 (n=4298)	2019 (n=5273)
Total	**4.9**	**2.9**
(95% CI)	(3.3-7.2)	(2.3-3.7)
Sex		
Males	**3.2** (1.6-6.4)	**1.9** (1.3-2.8)
Females	**6.6** (4.7-9.3)	**3.9** (3.0-5.2)
Grade		
9	**3.6** (2.4-5.4)	**2.8** (1.8-4.3)
10	**4.5** (2.6-7.5)	**3.0** (2.0-4.3)
11	†	**2.7** (1.7-4.4)
12	**3.2** (1.8-5.6)	**3.1** (2.1-4.5)
Region		
Greater Toronto Area	**7.1** (4.5-10.8)	**2.4** [a] (1.6-3.7)
North	**2.7** (1.7-4.1)	†
West	**2.9** (1.8-4.9)	**4.0** (2.9-5.5)
East	**1.6** (0.9-2.8)	**2.5** (1.6-3.9)

Notes: (1) A serious problem with technology use is defined as scoring 19 or higher out of 24 on the *Short Problematic Internet Use Test* (SPIUT); (2) n=total number of students surveyed; (3) asked of a random half sample of secondary students in each year; (4) entries in brackets are 95% confidence intervals; (5) † indicates estimate suppressed due to unreliability; (6) [a] 2019 vs. 2017 significant difference, p<.01.
Source: OSDUHS, Centre for Addiction and Mental Health

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