Detailed OSDUHS Findings

The Mental Health and Well-Being of Ontario Students

1991-2013

avec résumé en français à l'intérieur

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Centre for Addiction and Mental Health
Centre de toxicomanie et de santé mentale

OSDUHS
Ontario Student Drug Use and Health Survey

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The 2013 OSDUHS Mental Health and Well-Being Report Executive Summary

The Study

The Centre for Addiction and Mental Health's Ontario Student Drug Use and Health Survey (OSDUHS) is the longest ongoing school survey of adolescents in Canada, and one of the longest in the world. The study has been conducted across the province every two years since 1977. A total of 10,272 students (63% of selected students in participating classes) in grades 7 through 12 from 42 school jurisdictions (boards), 198 schools, and 671 classes participated in the 2013 OSDUHS, which was administered by the Institute for Social Research, York University. All 2013 data are based on self-reports derived from anonymous questionnaires completed in classrooms between November 2012 and June 2013.

This report describes mental health, physical health, and risk behaviours among Ontario students in 2013 and changes since 1991, where available. Although the OSDUHS was launched in 1977, most physical health and mental health indicators were introduced in the early 1990s. Results in this report are provided for two analytical groups of students: those in grades 7–12, and those in grades 7, 9, and 11 only. The first group is used to assess current behaviour and relatively **recent trends (1999–2013)**, whereas the second is used to assess **long-term trends (1991–2013)**.

New indicators in this report include use of tanning beds and diet pills or other diet aids, wearing a bicycle helmet, texting while driving, unmet need for mental health support, hours spent daily on social media and on video gaming.

Home and School Life

- Almost one-in-five (18%) Ontario students report living with a single parent (or no parental guardian – birth, adoptive, or step).
- About 12% of students report dividing their living between two or more homes.
- Nearly half (45%) of secondary school students have a part-time job. Five percent work more than 20 hours per week.
- The majority (81%) visit social media sites daily. About one-in-ten students spend five hours or more hours on these sites daily.
- Just under one-quarter (23%) of students report spending less than one hour per week doing homework, outside of school.
- Four percent of students report being suspended from school during the current academic year.
- Although most students feel safe in their school, 15% express worry about being harmed or threatened at school.

➢ Since 1999, more students report that they like school "very much" or "quite a lot," increasing from 29% to 44%.

➢ The percentage of students who express worry about being harmed or threatened at school in 2013 (15%) is similar to estimates observed during the past decade (about 12% to 14%).

Physical Health

- Although the majority (65%) of students rate their health as excellent or very good, about

7% (an estimated 68,100 students in Ontario) report fair or poor physical health.

- One-in-twelve (8%) students report that they have a current asthma diagnosis.

- Only one-in-five (22%) 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. At the other extreme, 7% were physically inactive on each of the past seven days.

- Over half (58%) of students spend three hours or more per day in front of a TV or computer ("screen time" sedentary behaviour). Males (61%) are significantly more likely than females (56%) to report this type of sedentary behaviour.

- One-quarter (25%) of students are classified as overweight or obese (an estimated 233,300 grade 7–12 students in Ontario). Males (29%) are significantly more likely than females (21%) to be overweight or obese.

➢ The percentage of students classified as overweight or obese has not changed since 2007, the first year of monitoring.

- Some 3% of students used diet pills, powders, or liquids without a doctor's advice to lose weight or keep from gaining weight at least once in the past year. Females are more likely than males to report doing so (4% vs. 2%, respectively).

- About 4% of students (an estimated 39,700) used an indoor tanning device (e.g., sunbed, tanning booth, sunlamp) at least once in the past year. Females are more likely than males to use an indoor tanning device (6% vs. 3%, respectively).

- Roughly 41% of students were treated for an injury at least once during the past year. Males are significantly more likely than females to sustain an injury that requires treatment (44% vs. 38%).

➢ The percentage of students reporting a medically treated injury significantly increased between 2003 (35%), the first year of monitoring, and 2013 (41%).

- Among bicyclists, over three-quarters (79%) report that they do not always wear a helmet while cycling. Half (53%) of bicyclists report rarely or never wearing a helmet.

- One-quarter (24%) of students report that they do not always wear a seatbelt when in a motor vehicle. Males (27%) are more likely than females (21%) to report that they do not always wear a seatbelt.

- Over one-third (36%) of drivers in grades 10–12 report texting while driving at least once in the past year. This percentage represents an estimated 107,900 adolescent drivers.

- Among drivers in grades 10–12, one-in-twelve (8%; an estimated 49,300 drivers) report being involved in a collision as a driver at least once in the past year.

Body Image

- Two-thirds (65%) of students are satisfied with their weight. One-quarter (24%) believe they are too fat, and one-tenth (12%) believe they are too thin.

- One-third (34%) of students are not attempting to change their weight. Another 30% are attempting to lose weight, 22% want to keep from gaining weight, and 14% want to gain weight.

- Females are twice as likely as males to believe they are too fat (32% vs. 15%), whereas males are twice as likely as females to believe that they are too thin (16% vs. 8%).

➢ More females today (32%) believe they are too fat compared with their counterparts a decade ago in 2001 (24%). There has been no comparable increase among males.

Health Care Utilization

Physician Health Care Visit

- One-quarter (27%) of students did not visit a doctor for their physical health, not even for a check-up, during the past year. Males are more likely than females to report no past year physician visit (31% vs. 24%).

Mental Health Care Visit

- One-in-five (22%) students visited a mental health care professional (such as a doctor, nurse or counsellor) for a mental health matter at least once during the past year. Females (26%) are significantly more likely than males (18%) to visit a mental health professional.

Medical Drug Use

- One-in-five (21%) students report using a prescribed opioid pain reliever (e.g., Tylenol #3, Percocet) in the past year. About 3% of students used a prescribed drug for Attention Deficit Hyperactivity Disorder (ADHD) (e.g., Ritalin, Adderall, Concerta) in the past year. About 3% of secondary school students used a prescribed tranquillizer/sedative (e.g., Valium, Ativan, Xanax) in the past year.

- Males are significantly more likely than females to report medical use of ADHD medication (5% vs. 2%, respectively). There is no significant sex difference regarding medical opioid pain reliever use or medical tranquillizer/sedative use.

- Six percent of secondary school students report that they were prescribed medication for either anxiety or depression, or both, during the past year. Females (8%) are more likely than males (3%) to report being prescribed medication to treat anxiety, depression, or both.

Sought Counselling Over the Phone or the Internet

- Two percent of students report using a telephone counselling helpline in the past year. Similarly, 1% report using the Internet to seek mental health counselling in the past year. Females are more likely than males to report seeking counselling either over the phone, the Internet, or both.

- Over one-quarter (28%) 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. Females are twice as likely as males to report an unmet need for mental health support (38% vs. 19%, respectively).

Internalizing Indicators

Self-Rated Mental Health

- One-in-seven (15%) students rate their mental health as fair/poor, with females being twice as likely as males to do so (21% vs. 11%).

➢ The percentage of students who rated their mental health as fair/poor in 2013 (15%) is significantly higher than in 2007 (11%).

Low Self-Esteem

- Seven percent of students report low self-esteem, with females being more than five times as likely as males to do so (11% vs. 2%).

Psychological Distress

- One-quarter (26%) of students indicate psychological distress (symptoms of depression and anxiety), with females more likely to than males (36% vs. 17%).

Suicidal Ideation and Suicide Attempt

- One-in-eight (13%) students had serious thoughts about suicide in the past year, and 4% (an estimated 33,300) reported a suicide attempt in the past year. Females are more likely than males to contemplate suicide (18% vs. 9%, respectively), and to report a suicide attempt (5% vs. 2%).

➢ Suicidal ideation increased between 2011 (10%) and 2013 (13%), returning to a level observed about decade ago. The percentage reporting a suicide attempt has remained stable since 2007, the first year of monitoring.

Externalizing Indicators

Antisocial Behaviour

- Among the 11 antisocial behaviours surveyed in 2013, the most common was fire setting (10%), and the least common was breaking and entering (3%).

- Seven percent of students engaged in antisocial behaviour (defined as three or more behaviours) during the past year. Males are more likely than females to engage in antisocial behaviour (10% vs. 5%).

➢ The percentage of students engaging in antisocial behaviour is significantly lower today than in the early 1990s.

Violent Behaviour

- About 6% of students report that they assaulted someone at least once during the past year, and a similar percentage (6%) report carrying a weapon (a gun or knife). Males are significantly more likely than females to report these behaviours.

➢ Since the early 1990s, there have been significant declines in the percentage of students reporting assaulting someone and carrying a weapon.

School Violence

- One-in-ten (11%) students report physically fighting on school property at least once during the past year, with males more likely than females to do so (18% vs. 4%, respectively).

- Six percent of students were threatened or injured with a weapon on school property at least once during the past year. Males are more likely than females to report being threatened or injured with a weapon at school (8% vs. 4%, respectively).

Bullying at School

- One-quarter (25%) of students report being bullied at school since the beginning of the school year. By far, the most prevalent form of bullying victimization is verbal (21%), while 2% report that they are primarily bullied physically, and 2% of students are victims of theft/vandalism. Females are more likely than males to report being bullied at school in any manner (28% vs. 22%, respectively).

- One-in-six (16%) students report bullying others at school since September. The most prevalent form of bullying others is through verbal attacks (14%), followed by physical attacks (1%), and theft/vandalism (less than 1%).

➢ The percentage reporting being bullied at school shows a linear decline between 2003 and 2013, from 33% to 25%. Similarly, the percentage reporting bullying others at school significantly declined during the past decade, from 30% in 2003 to 16% in 2013.

Victim of Cyberbullying

- One-in-five (19%) students report being bullied over the Internet in the past year. Females are more likely than males to report being a victim of cyberbullying (23% vs. 16%).

➢ The percentage reporting being bullied over the Internet did not significantly change between 2011 (22%), the first year of monitoring, and 2013 (19%).

Gambling and Video Gaming

Gambling Activities

- Of the 10 gambling activities surveyed in 2013, the most prevalent among all students are playing card games (11%) and betting in sports pools (10%). A further 13% gambled money at "other activities" not measured in the survey. The least prevalent activity is casino gambling (less than 1%).

- Gambling over the Internet is reported by 3% of students.

- Over one-third (35%) of students report gambling at one or more activities in the past year, with males more likely than females to gamble (44% vs. 25%).

- Three percent of students gambled at five or more activities in the past year. Males are about four times as likely as females to report multi-gambling activity (4% vs. less than 1%).

➢ The percentage of students reporting any gambling in 2013 (35%) is significantly lower than the estimate from 2003 (57%). Similarly, multi-gambling activity is significantly lower in 2013 (3%) than in 2003 (6%).

Gambling Problem

- About 1% of secondary school students (an estimated 8,800) report symptoms of a gambling problem (loss of control, problems with family/friends, disruption to school/work).

➢ The percentage of secondary school students with a gambling problem significantly decreased during the past decade, from 8% in 1999 to 1% in 2013.

Video Gaming Problem

- One-in-five (21%) students play video games daily or almost daily, with males being almost four times as likely as females to do so (32% vs. 9%). Six percent of students play video games for five hours or more per day.

- Ten percent of students (an estimated 105,600) report symptoms of a video gaming problem (preoccupation, tolerance, loss of control, withdrawal, escape, disregard for consequences, disruption to family/school). Males are four times as likely as females to have a video gaming problem (17% vs. 4%).

➢ The percentage of students with a video gaming problem remained stable between 2007 and 2013.

Coexisting Problems

- The majority (54%) of secondary school students report none of the following four problems: psychological distress, antisocial behaviour, hazardous/harmful drinking, or a drug use problem. About 28% of secondary school students report one of these problems, about 12% report two, 5% report three, and 2% report all four problems.

Grade Variation

- Grade is significantly related to mental health and well-being. Generally, poor physical health indicators (e.g., inactivity, sedentary behaviour, injuries), internalizing indicators (e.g., fair/poor self-rated mental health, psychological distress), antisocial behaviour, gambling, and coexisting problems significantly increase with grade. Bullying behaviour and physical fighting at school are more prevalent in the younger grades and decline in later adolescence.

Regional Variation

Historically, the survey design has divided the province into four regions: Toronto; Northern Ontario (Parry Sound District, Nipissing District and farther north); Western Ontario (Peel District, Dufferin County and farther west); and Eastern Ontario (Simcoe County, York County and farther east).

Only two indicators significantly differ according to region of the province:

- Compared with the provincial average, **Toronto** students are significantly more likely to be physically inactive, yet less likely to be classified as overweight or obese.

- Compared with the provincial average, **Northern** Ontario students are more likely to be classified as overweight or obese.

- Students in **Western** Ontario and **Eastern** Ontario do not significantly differ from the average on any indicator.

Readers should note that an overview of results according to Ontario's Local Health Integration Networks is provided in the report on page 110, and results for the Greater Toronto Area (GTA) are provided on page 113.

Percentage Reporting Selected Mental Health and Well-Being Indicators by Sex, 2013 OSDUHS (Grades 7–12)

Indicator	Total %	(95% CI)	Estimated Number†	Males %	Females %	
fair/poor self-rated physical health	**7.0**	(6.2-7.9)	68,100	7.1	6.9	
asthma diagnosis (current)	**7.9**	(6.6-9.3)	69,800	7.6	8.1	
no physician health care visit (past year)	**27.4**	(25.1-29.8)	243,600	30.8	23.7	*
physically inactive (no days of activity in past week)	**7.3**	(6.4-8.3)	70,500	6.3	8.3	*
sedentary behaviour (3+ hours of screen time daily)	**58.3**	(56.2-60.4)	542,500	60.7	55.7	*
overweight or obese	**25.1**	(23.5-26.7)	233,300	28.9	21.0	*
use of diet pills, powders, or liquids (past year)	**2.9**	(2.3-3.7)	25,800	2.2	3.7	*
use of an indoor tanning device (past year)	**4.4**	(3.6-5.5)	39,700	2.7	6.3	*
medically treated injury (past year)	**41.0**	(38.2-43.9)	364,600	43.6	38.4	*
not always wear a bike helmet (among bicyclists)	**78.7**	(76.4-80.8)	535,800	80.4	76.5	
not always wear a seatbelt when in motor vehicle	**23.7**	(21.5-26.0)	214,300	26.7	20.5	*
texting while driving (past year, among drivers)	**35.9**	(32.2-39.7)	107,900	34.9	37.1	
vehicle collision as a driver (past year, among drivers)	**7.6**	(6.4-9.1)	49,300	8.0	7.1	
mental health care visit (past year)	**21.9**	(19.8-24.3)	227,500	17.9	26.3	*
sought counselling over phone or Internet (past year)	**3.0**	(2.4-3.7)	31,100	1.8	4.2	*
unmet need for mental health support	**27.9**	(25.8-30.1)	288,300	19.0	37.5	*
used tranquillizers/sedatives medically (past year)††	**2.9**	(2.3-3.7)	21,300	2.6	3.2	
used an ADHD drug medically (past year)	**3.2**	(2.5-4.2)	31,400	4.6	1.8	*
prescribed medication for depression/anxiety/both††	**5.5**	(4.3-7.1)	43,200	3.4	7.9	*
fair/poor self-rated mental health	**15.3**	(13.5-17.4)	157,900	10.5	20.5	*
low self-esteem	**6.8**	(5.6-8.2)	60,600	2.4	11.4	*
psychological distress (past month)	**26.0**	(23.9-28.3)	264,200	17.2	35.5	*
suicidal ideation (past year)	**13.4**	(11.8-15.1)	128,400	9.4	17.6	*
suicide attempt (past year)	**3.5**	(2.8-4.3)	33,300	2.0	5.0	*
antisocial behaviour (3+/9 behaviours in past year)	**7.1**	(5.8-8.8)	72,400	9.5	4.6	*
carried a weapon (past year)	**6.0**	(5.0-7.3)	60,500	9.1	2.7	*
physical fight at school (past year)	**10.9**	(9.6-12.4)	109,700	17.5	3.9	*
threatened/injured with weapon at school (past year)	**5.8**	(4.7-7.1)	59,400	7.7	3.7	*
worried be harmed or threatened at school	**15.4**	(13.8-17.1)	150,800	13.9	17.0	*
bullied others at school (since September)	**16.0**	(14.4-17.8)	163,900	17.5	14.3	
been bullied at school (since September)	**25.0**	(22.7-27.5)	256,200	22.2	28.1	*
been cyberbullied (past year)	**19.0**	(17.2-21.0)	195,500	15.8	22.5	*
any gambling activity (past year)	**34.9**	(32.4-37.4)	352,400	44.1	24.8	*
multi-gambling activity (5+ activities in past year)	**2.6**	(2.0-3.4)	26,600	4.4	0.7	*
gambling problem (past year)††	**1.1**	(0.7-2.0)	8,800	s	s	
video gaming problem (past year)	**10.3**	(8.6-12.2)	105,600	16.5	3.5	*
3 or all 4 coexisting problems††	**6.6**	(5.2-8.3)	52,200	6.4	6.8	

Notes: the survey sample size is 10,272 students; some estimates are based on a random half sample; CI=confidence interval; † the estimated number of students is based on a student population of about 982,100 in Ontario (numbers have been rounded down); * indicates a significant sex difference ($p<.05$) *not* controlling for other factors; †† among grades 9–12 only; medical drug use refers to use with a prescription; "coexisting problems" refers to the following four problems: psychological distress, antisocial behaviour, hazardous/harmful drinking, and drug use problem.

Percentage Reporting Selected Mental Health and Well-Being Indicators by Grade, 2013 OSDUHS

Indicator	G7	G8	G9	G10	G11	G12	
fair/poor self-rated physical health	5.8	7.3	5.8	6.2	8.9	7.4	
asthma diagnosis (current)	8.2	8.4	8.2	7.5	7.9	7.4	
no physician health care visit (past year)	29.0	26.3	30.5	26.7	28.1	25.0	
physically inactive (no days of activity in past week)	4.4	2.4	4.3	7.4	9.0	11.9	*
sedentary behaviour (3+ hours of screen time daily)	43.5	56.0	56.8	62.3	62.4	61.4	*
overweight or obese	21.1	22.1	24.0	27.8	28.9	24.2	*
use of diet pills, powders, or liquids (past year)	s	s	2.2	3.7	3.9	4.0	*
use of an indoor tanning device (past year)	s	s	s	3.9	5.4	8.0	*
medically treated injury (past year)	39.5	47.1	41.5	39.4	39.7	40.4	
not always wear a bike helmet (among bicyclists)	53.1	71.0	82.2	79.8	86.3	88.7	*
not always wear a seatbelt when in motor vehicle	16.0	20.4	23.7	29.2	26.1	23.7	*
texting while driving (past year, among drivers)	--	--	--	s	25.0	45.9	*
vehicle collision as a driver (past year, among drivers)	--	--	--	s	3.2	10.8	*
mental health care visit (past year)	20.9	26.0	21.7	20.6	24.4	19.6	
sought counselling over phone or Internet (past year)	2.3	3.1	3.2	1.5	4.5	3.1	
unmet need for mental health support	25.5	26.4	29.0	27.8	29.4	28.1	
used tranquillizers/sedatives medically (past year)††	--	--	3.7	2.7	2.9	2.6	*
used an ADHD drug medically (past year)	4.1	3.6	2.0	3.5	4.0	s	*
prescribed medication for depression/anxiety/both††	--	--	4.2	2.5	6.6	7.9	*
fair/poor self-rated mental health	8.8	13.8	16.4	16.5	18.1	15.7	*
low self-esteem	5.3	6.9	6.1	8.7	7.0	6.6	
psychological distress (past month)	13.4	23.1	26.1	29.6	31.7	26.8	*
suicidal ideation (past year)	9.1	13.8	14.5	14.9	16.2	11.4	
suicide attempt (past year)	s	2.6	4.2	4.0	4.3	2.8	
antisocial behaviour (3+/9 behaviours in past year)	1.9	3.9	6.0	10.1	8.6	9.1	*
carried a weapon (past year)	2.6	8.2	6.4	8.6	5.7	4.7	*
physical fight at school (past year)	15.0	18.4	12.1	8.6	9.4	7.1	*
threatened/injured with weapon at school (past year)	4.9	6.2	5.9	8.2	4.7	5.0	
worried be harmed or threatened at school	19.1	16.3	18.3	16.3	13.9	11.5	*
bullied others at school (since September)	12.7	20.2	17.6	18.7	15.5	12.7	
been bullied at school (since September)	31.6	34.5	28.7	22.6	24.2	16.6	*
been cyberbullied (past year)	17.5	24.6	24.1	16.4	19.2	15.1	*
any gambling activity (past year)	24.3	27.4	29.6	37.6	36.5	44.5	*
multi-gambling activity (5+ activities in past year)	s	s	s	3.8	1.5	4.4	*
gambling problem (past year)††	--	--	s	s	s	s	
video gaming problem (past year)	12.8	9.4	9.4	9.8	11.4	9.4	
3 or all 4 coexisting problems††	--	--	3.0	6.0	7.8	8.7	*

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 refers to use with a prescription; "coexisting problems" refers to the following four problems: psychological distress, antisocial behaviour, hazardous/harmful drinking, and drug use problem

Percentage Reporting Selected Mental Health and Well-Being Indicators by Region, 2013 OSDUHS (Grades 7–12)

Indicator	Toronto	North	West	East	
fair/poor self-rated physical health	7.8	7.3	7.1	6.3	
asthma diagnosis (current)	5.4	6.9	9.4	7.1	
no physician health care visit (past year)	24.7	34.5	29.0	25.2	
physically inactive (no days of activity in past week)	10.0	7.0	6.2	7.4	*
sedentary behaviour (3+ hours of screen time daily)	63.1	54.5	57.2	57.8	
overweight or obese	21.6	31.9	25.4	25.3	*
use of diet pills, powders, or liquids (past year)	s	3.4	2.6	4.2	
use of an indoor tanning device (past year)	2.4	s	4.4	5.8	
medically treated injury (past year)	33.7	47.8	42.0	43.4	
not always wear a bike helmet (among bicyclists)	81.4	72.4	79.9	76.0	
not always wear a seatbelt when in motor vehicle	26.9	22.9	22.2	24.1	
texting while driving (past year, among drivers)	23.5	40.1	39.0	35.5	
vehicle collision as a driver (past year, among drivers)	5.9	7.3	7.9	7.9	
mental health care visit (past year)	22.1	22.8	21.3	22.7	
sought counselling over phone or Internet (past year)	3.8	s	2.1	3.9	
unmet need for mental health support	29.2	25.7	26.6	29.6	
used tranquillizers/sedatives medically (past year)††	2.0	s	3.1	3.3	
used an ADHD drug medically (past year)	s	3.4	3.7	3.3	
prescribed medication for depression/anxiety/both††	s	s	4.5	5.9	
fair/poor self-rated mental health	19.8	12.2	13.9	15.8	
low self-esteem	9.2	5.8	6.4	6.0	
psychological distress (past month)	30.2	20.7	24.5	27.3	
suicidal ideation (past year)	15.5	12.3	12.9	13.6	
suicide attempt (past year)	s	4.7	3.3	4.0	
antisocial behaviour (3+/9 behaviours in past year)	8.0	6.1	7.9	5.8	
carried a weapon (past year)	4.6	6.3	7.3	4.8	
physical fight at school (past year)	13.0	9.4	11.3	9.6	
threatened/injured with weapon at school (past year)	8.2	4.5	5.7	4.8	
worried be harmed or threatened at school	18.4	13.6	16.2	12.7	
bullied others at school (since September)	16.1	16.2	17.2	14.0	
been bullied at school (since September)	20.6	29.6	26.5	24.3	
been cyberbullied (past year)	17.8	19.8	19.4	18.9	
any gambling activity (past year)	37.1	37.7	33.1	35.7	
multi-gambling activity (5+ activities in past year)	s	3.9	2.2	2.7	
gambling problem (past year)††	s	s	s	s	
video gaming problem (past year)	11.0	8.1	10.7	9.7	
3 or all 4 coexisting problems††	6.3	4.2	7.4	6.2	

Notes: * indicates a significant region difference (p<.05) not controlling for other factors; 's' indicates estimate suppressed due to unreliability; †† among grades 9–12 only; medical drug use refers to use with a prescription; "coexisting problems" refers to the following four problems: psychological distress, antisocial behaviour, hazardous/harmful drinking, and drug use problem

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

Indicator	Among Grades	Period	Change
% fair/poor self-rated physical health	7, 9, 11	1991–2013	Increased from 6% to 14% in 2011, declined to 7% in 2013
% physically inactive (no days of activity past week)	7–12	2009–2013	Stable
% sedentary behaviour (3+ hours screen time daily)	7–12	2009–2013	Stable
% overweight/obese	7–12	2009–2013	Stable
% asthma diagnosis (current)	7–12	2011–2013	Stable
% not always wearing a seatbelt in vehicle	7–12	2011–2013	Decreased from 28% to 24%
% medically treated injury	7–12	2003–2013	Increased from 35% to 41%
% 1+ mental health care visit (past year)	7–12	1999–2013	Increased from 12% to 22%
% medical use of ADHD prescription drugs	7–12	2007–2013	Stable
% prescription for depression/anxiety/both	9–12	2001–2013	Stable
% fair/poor self-rated mental health	7–12	2007–2013	Increased from 11% to 15%
% suicidal ideation (past year)	7–12	2001–2013	Stable between 2001 and 2009 (about 10%), increased to 13% in 2013
% suicide attempt (past year)	7–12	2007–2013	Stable
% antisocial behaviour (past year)	7, 9, 11	1993–2013	Decreased from 16% to 6%
% carried a weapon (past year)	7, 9, 11	1993–2013	Decreased from 16% to 5%
% physical fighting at school (past year)	7–12	2001–2013	Decreased from 17% to 11%
% threatened/injured with a weapon at school	7–12	2003–2013	Stable
% worried be threatened/harmed at school	7–12	1999–2013	Stable
% been bullied at school (since September)	7–12	2003–2013	Decreased from 33% to 25%
% been cyberbullied (past year)	7–12	2011–2013	Stable
% any Internet gambling (past year)	7–12	2003–2013	Stable
% any gambling activity (past year)	7–12	2003–2013	Decreased from 57% to 35%
% multi-gambling activity (past year)	7–12	2003–2013	Decreased from 6% to 3%
% gambling problem (past year)	9–12	1999–2013	Decreased from 8% to 1%
% video gaming problem (past year)	7–12	2007–2013	Stable

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

Résumé du rapport de 2013 sur la santé mentale et le bien-être selon le SCDSEO

L'étude

Le Sondage sur la consommation de drogues et la santé des élèves de l'Ontario (SCDSEO), réalisé par le Centre de toxicomanie et de santé mentale, est la plus ancienne étude menée auprès des adolescents en milieu scolaire au Canada et est une des premières études du genre à avoir vu le jour au monde. Cette étude est menée tous les deux ans à l'échelle de la province depuis 1977. Un total de 10 272 élèves (63 % des élèves sélectionnés dans les classes participantes) de la 7e à la 12e année répartis dans 42 conseils scolaires, 198 écoles et 671 classes ont participé au SCDSEO 2013, qui a été administré par l'Institut de recherche sociale de l'Université York. Toutes les données de 2013 proviennent de questionnaires anonymes que les élèves ont remplis en classe entre novembre 2012 et juin 2013.

Le présent rapport décrit la santé physique et mentale ainsi que les comportements à risque des élèves ontariens en 2013 et les changements survenus depuis 1991, lorsque c'est possible. Bien que le SCDSEO ait commencé en 1977, la plupart des indicateurs de la santé physique et mentale ont été inclus pour la première fois au début des années 1990. Les résultats présentés dans le rapport sont fournis pour deux groupes d'élèves analysés : ceux de la 7e à la 12e année et ceux des 7e, 9e et 11e années uniquement. Le premier groupe sert à évaluer les comportements actuels et les **tendances** relativement **récentes (1999–2013)** tandis que le second est utilisé pour évaluer les **tendances à long terme (1991–2013)**.

Parmi les **nouveaux indicateurs** figurant dans le présent rapport, citons l'utilisation des lits de bronzage ainsi que des comprimés amaigrissants et d'autres aides diététiques, le port du casque de cycliste, l'envoi de textos au volant, le soutien en santé mentale non obtenu, et le nombre d'heures consacrées aux médias sociaux et aux jeux vidéo par jour.

Vie familiale et scolaire

- Près d'un élève ontarien sur cinq (18 %) a déclaré habiter avec un seul parent ou ne pas avoir de tuteur parental (parent biologique, adoptif ou beau-parent).
- Environ 12 % des élèves ont dit qu'ils partageaient leur temps entre deux foyers ou plus.
- Près de la moitié des élèves du secondaire (45 %) ont un emploi à temps partiel et 5 % travaillent plus de 20 heures par semaine.
- La majorité des élèves (81 %) consulte les sites de médias sociaux tous les jours. Environ un élève sur dix y passe au moins cinq heures par jour.
- Un peu moins du quart des élèves (23 %) ont dit qu'ils consacraient moins d'une heure par semaine à leurs devoirs à l'extérieur de l'école.
- Quatre pour cent des élèves ont déclaré avoir été suspendus de l'école pendant l'année scolaire.
- Même si la majorité des élèves se sent en sécurité à l'école, 15 % craignent d'être blessés ou menacés à l'école.
- ➢ Depuis 1999, le pourcentage d'élèves qui disent aimer l'école énormément ou beaucoup est passé de 29 % à 44 %.
- ➢ Le pourcentage d'élèves qui craignaient d'être blessés ou menacés à l'école en 2013 (15 %) est semblable aux estimations faites au cours des 10 dernières années (de 12 % à 14 % environ).

Santé physique

- Bien que la majorité des élèves (65 %) se dise en excellente ou en très bonne santé, environ 7 % des élèves (68 100 élèves selon les estimations) signalent une santé passable ou médiocre.

- Un élève sur douze (8 %) a déclaré qu'on avait diagnostiqué de l'asthme chez lui.

- Un élève sur cinq seulement (22 %) 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. À l'opposé, environ 7 % des élèves ont été classés comme physiquement inactifs pour toute la période de sept jours.

- Plus de la moitié des élèves (58 %) passent au moins trois heures par jour devant un téléviseur ou un ordinateur (comportement sédentaire devant un écran). Les garçons (61 %) sont nettement plus susceptibles que les filles (56 %) de déclarer avoir ce type de comportement sédentaire.

- Le quart des élèves ontariens (25 %) sont considérés comme ayant un excès de poids ou comme étant obèses (233 300 élèves selon les estimations). Les garçons (29 %) sont nettement plus susceptibles que les filles (21 %) d'avoir un excès de poids ou d'être obèses.

➢ Le pourcentage d'élèves considérés comme ayant un excès de poids ou comme étant obèses n'a pas changé depuis 2007, première année de surveillance de cet indicateur.

- Environ 3 % des élèves ont pris des comprimés ou des produits liquides ou en poudre, sans avoir consulté un médecin, au moins une fois au cours de l'année écoulée pour perdre du poids ou ne pas en prendre. Les filles sont plus susceptibles de le faire que les garçons (4 % et 2 % respectivement).

- Environ 4 % des élèves (39 700 selon les estimations) ont utilisé un appareil de bronzage à l'intérieur (p. ex., lit ou autre appareil de bronzage, lampe solaire) au moins une fois au cours de l'année écoulée. Les filles sont plus susceptibles que les garçons d'utiliser un appareil de bronzage à l'intérieur (6 % et 3 % respectivement).

- Environ 41 % des élèves ont été soignés pour blessures au moins une fois au cours de l'année écoulée. Les garçons (44 %) sont nettement plus susceptibles que les filles (38 %) d'avoir une blessure nécessitant des soins.

➢ La proportion d'élèves ayant déclaré avoir reçu des soins médicaux pour une blessure a nettement augmenté entre 2003 (35 %), première année de surveillance de cet indicateur, et 2013 (41 %).

- Plus des trois quarts des cyclistes (79 %) ont déclaré qu'ils ne portaient pas toujours de casque à vélo. À l'extrémité de la courbe statistique, la moitié des cyclistes (53 %) ont déclaré qu'ils portaient rarement un casque ou n'en portaient jamais.

- Le quart des élèves (24 %) ont déclaré qu'ils ne portaient pas toujours de ceinture de sécurité lorsqu'ils étaient à bord d'un véhicule automobile. Les garçons (27 %) sont plus susceptibles que les filles (21 %) de signaler qu'ils ne portent pas toujours leur ceinture de sécurité.

- Plus du tiers (36 %) des conducteurs de la 10^{e} à la 12^{e} année ont déclaré avoir envoyé des textos au volant au moins une fois au cours de l'année écoulée. Ce pourcentage représente environ 107 900 conducteurs.

- Parmi les conducteurs de la 10^{e} à la 12^{e} année, un sur douze (8 %, soit 49 300 conducteurs selon les estimations) a

déclaré avoir été impliqué dans une collision pendant qu'il était au volant au moins une fois au cours de l'année écoulée.

Image corporelle

- Les deux tiers (65 %) des élèves se sont dits satisfaits de leur poids. Un quart (24 %) des élèves estimaient être trop gros et un dixième (12 %) estimaient être trop maigres.

- Un tiers des élèves (34 %) ont déclaré ne pas chercher à changer de poids, tandis que 30 % ont déclaré qu'ils cherchaient à perdre du poids, 22 % voulaient éviter de prendre du poids et 14 % voulaient prendre du poids.

- Les filles sont deux fois plus susceptibles que les garçons de penser qu'elles sont trop grosses (32 % par rapport à 15 %), tandis que les garçons sont deux fois plus susceptibles que les filles de se trouver trop maigres (16 % par rapport à 8 %).

➢ Actuellement, davantage de filles (32 %) qu'en 2001 (24 %) estiment qu'elles sont trop grosses. On n'a pas observé une telle augmentation chez les garçons.

Recours aux services de santé

Consultation d'un médecin

- Un quart des élèves (27 %) n'ont pas consulté un médecin au sujet de leur santé physique, pas même pour un examen régulier au cours de l'année écoulée. Les garçons (31 %) sont plus susceptibles que les filles (24 %) de déclarer ne pas avoir consulté un médecin au cours de l'année écoulée.

Consultations de professionnels de la santé mentale

- Un élève sur cinq (22 %) a consulté un professionnel de la santé mentale (comme un médecin, une infirmière ou un conseiller) pour des raisons de santé mentale au moins une fois au cours de l'année écoulée. Les filles (26 %) sont nettement plus susceptibles que les garçons (18 %) de rendre visite à un professionnel de la santé mentale.

Utilisation de médicaments

- Un élève sur cinq (21 %) a déclaré avoir consommé des analgésiques opioïdes sur ordonnance (p. ex., Tylenol 3, Percocet) au cours de l'année écoulée. Environ 3 % des élèves ont pris un médicament prescrit pour trouble déficitaire de l'attention avec ou sans hyperactivité (TDAH) (p. ex., Ritalin, Adderall, Concerta) au cours de l'année écoulée. Environ 3 % des élèves du secondaire ont pris un tranquillisant ou un sédatif sur ordonnance (p. ex., Valium, Ativan, Xanax) au cours de l'année écoulée.

- Les garçons sont beaucoup plus susceptibles que les filles de déclarer avoir pris des médicaments pour traiter le TDAH (5 % par rapport à 2 %). Il n'y a pas de différence significative selon le sexe concernant la prise d'analgésiques opioïdes ou de tranquillisants ou sédatifs à des fins médicales.

- Six pour cent des élèves du secondaire ont déclaré qu'on leur avait prescrit un médicament contre l'anxiété ou la dépression ou contre ces deux troubles au cours de l'année écoulée. Les filles (8 %) sont plus susceptibles que les garçons (3 %) de déclarer qu'on leur a prescrit un médicament contre l'anxiété ou la dépression ou ces deux troubles.

Demande de counseling par téléphone ou par Internet

- Deux pour cent des élèves ont dit avoir utilisé une ligne d'aide téléphonique pour obtenir du counseling au cours de l'année écoulée. De même, 1 % des élèves ont dit avoir utilisé Internet pour obtenir du counseling en santé mentale au cours de l'année écoulée. Les filles sont plus susceptibles que les garçons de déclarer avoir utilisé une ligne téléphonique ou Internet ou ces deux moyens pour obtenir du counseling.

- Plus du quart des élèves (28 %) ont déclaré que, au cours de l'année écoulée, ils avaient voulu parler d'un problème de santé mentale à quelqu'un, mais qu'ils n'avaient pas su à qui s'adresser. Les filles sont deux fois plus susceptibles que les garçons de déclarer ne pas avoir pu obtenir de soutien en santé mentale (38 % et 19 % respectivement).

Indicateurs d'intériorisation

Santé mentale autoévaluée

- Un élève sur sept (15 %) qualifie sa santé mentale de passable ou médiocre, les filles étant deux fois plus susceptibles de qualifier leur santé mentale de cette façon que les garçons (21 % par rapport à 11 %).

➢ Le pourcentage d'élèves qui qualifient leur santé mentale de passable ou médiocre était nettement plus élevé en 2013 (15 %) qu'en 2007 (11 %).

Faible estime de soi

- Sept pour cent des élèves ont déclaré qu'ils avaient une faible estime de soi. Les filles sont plus de cinq fois plus susceptibles que les garçons d'avoir une faible estime de soi (11 % par rapport à 2 %).

Détresse psychologique

- Un quart des élèves (26 %) ont signalé une détresse psychologique (symptômes de dépression et d'anxiété), les filles (36 %) étant plus susceptibles de signaler un tel état que les garçons (17 %).

Idées suicidaires et tentatives de suicide

- Un élève sur huit (13 %) a songé sérieusement à se suicider au cours de l'année écoulée et 4 % des répondants (33 300 élèves selon les estimations) ont signalé une tentative de suicide pendant la même période. Les filles sont plus susceptibles que les garçons d'avoir des idées suicidaires (18 % par rapport à 9 %) et de signaler une tentative de suicide (5 % par rapport à 2 %).

➢ Le pourcentage d'élèves qui ont envisagé de se suicider a augmenté entre 2011 (10 %) et 2013 (13 %) et est revenu au niveau observé il y a une dizaine d'années. Le pourcentage d'élèves ayant signalé une tentative de suicide a peu changé depuis 2007, première année de surveillance de cet indicateur.

Indicateurs d'extériorisation

Comportement antisocial

- Parmi les 11 actes antisociaux étudiés en 2013, le plus fréquent était l'allumage d'un feu (10 %) et le moins courant, l'introduction par effraction (3 %).

- Dans l'ensemble, 7 % des élèves ont eu un comportement antisocial (c.-à-d. ont commis au moins trois actes antisociaux) au cours des 12 mois ayant précédé le sondage. Ce phénomène est plus courant chez les garçons (10 %) que chez les filles (5 %).

➢ Le pourcentage d'élèves qui commettent des actes antisociaux est nettement plus faible aujourd'hui qu'il ne l'était au début des années 1990.

Comportement violent

➢ Environ 6 % des élèves ont déclaré avoir agressé quelqu'un au moins une fois au

cours de l'année écoulée et 6 % ont dit qu'ils portaient une arme (pistolet ou couteau). Les garçons sont nettement plus susceptibles que les filles de signaler ces comportements. Depuis le début des années 1990, il y a eu une baisse importante du nombre d'élèves ayant déclaré avoir agressé quelqu'un ou porté une arme.

Violence scolaire

- Un élève sur dix (11 %) a dit s'être battu à l'école au moins une fois au cours de l'année écoulée, les garçons étant plus susceptibles que les filles d'avoir un tel comportement (18 % par rapport à 4 %).

- Six pour cent des élèves ont été menacés ou blessés avec une arme à l'école au moins une fois au cours de l'année écoulée. Les garçons sont plus susceptibles que les filles d'indiquer qu'ils ont été menacés ou blessés par une arme à l'école (8 % par rapport à 4 %).

Intimidation à l'école

- Le quart des élèves (25 %) ont dit avoir été victimes d'intimidation à l'école depuis le début de l'année scolaire. La principale forme en est, de loin, l'intimidation verbale (21 %), tandis que 2 % des élèves ont déclaré avoir été victimes surtout d'intimidation physique et 2 %, de vol ou de vandalisme. Les filles sont plus susceptibles que les garçons de signaler avoir été victimes d'intimidation à l'école, sous quelque forme que ce soit (28 % par rapport à 22 %).

- Un élève sur six (16 %) a déclaré avoir intimidé d'autres élèves à l'école depuis septembre. En général, l'intimidation se faisait sous forme d'attaques verbales (14 %), d'attaques physiques (1 %) ou de vol ou de vandalisme (moins de 1 %).

➢ La proportion d'élèves ayant déclaré avoir été victimes d'intimidation a diminué de façon linéaire entre 2003 et 2013, passant de 33 % à 25 %. De même, le pourcentage d'élèves ayant déclaré avoir intimidé d'autres élèves à l'école a diminué de moitié pendant cette période, passant de 30 % en 2003 à 16 % en 2013.

Victimes de la cyberintimidation

- Un élève sur cinq (19 %) a déclaré avoir été victime d'intimidation sur Internet au cours de l'année écoulée. Les filles sont plus susceptibles de signaler avoir été victimes de cyberintimidation que les garçons (23 % par rapport à 16 %).

➢ La proportion de répondants ayant déclaré avoir été victimes d'intimidation sur Internet n'a pas beaucoup changé entre 2011 (22 %), première année de surveillance de cet indicateur, et 2013 (19 %).

Jeux de hasard et d'argent et jeux vidéo

Activités de jeu

- Parmi les 10 jeux de hasard et d'argent étudiés lors du sondage de 2013, les plus fréquents pour tous les élèves étaient les jeux de cartes (11 %) et les paris sportifs (10 %). Par ailleurs, 13 % des élèves ont déclaré s'adonner à d'« autres activités » de jeu non évaluées dans le sondage. Les jeux de casino étaient l'activité la moins courante (moins de 1 %).

- Trois pour cent des élèves ont déclaré s'adonner à des jeux de hasard et d'argent sur Internet.

- Plus du tiers des élèves (35 %) ont déclaré s'être livrés à au moins une activité de jeu au cours de l'année écoulée, les garçons (44 %) étant plus susceptibles que les filles (25 %) de se livrer à de telles activités.

- Trois pour cent des élèves ont déclaré s'être adonnés à au moins cinq jeux de hasard et d'argent au cours de l'année écoulée. Les garçons sont plus de quatre fois plus susceptibles que les filles de déclarer jouer à

de multiples jeux de hasard et d'argent (4 % par rapport à moins de 1 %).

➢ Le pourcentage d'élèves ayant déclaré s'être adonnés à des jeux de hasard et d'argent en 2013 (35 %) est nettement inférieur à l'estimation faite en 2003 (57 %). De même, le pourcentage d'élèves s'adonnant à de multiples jeux était nettement inférieur en 2013 (3 %) à ce qu'il était en 2003 (6 %).

Problème de jeu

- Environ 1 % des élèves du secondaire (8 800 élèves selon les estimations) ont signalé des symptômes d'un problème de jeu (perte de contrôle, problèmes avec les amis et la famille, ennuis à l'école ou au travail).

➢ Le pourcentage d'élèves du secondaire ayant un problème de jeu a diminué considérablement au cours des 10 dernières années, passant de 8 % en 1999 à 1 % en 2013.

Problème lié aux jeux vidéo

- Un élève sur cinq (21 %) s'adonne à des jeux vidéo tous les jours ou presque, et presque quatre fois plus de garçons que de filles jouent à ces jeux (32 % par rapport à 9 %). Six pour cent des élèves consacrent au moins cinq heures aux jeux vidéo chaque jour.

- Dix pour cent des élèves (105 600 élèves selon les estimations) ont déclaré avoir des symptômes d'un problème lié aux jeux vidéo (préoccupation, tolérance, perte de contrôle, état de manque, fuite, indifférence quant aux conséquences, ennuis avec la famille et à l'école). Les garçons sont quatre fois plus susceptibles que les filles d'avoir un problème lié aux jeux vidéo (17 % par rapport à 4 %).

➢ La proportion d'élèves ayant un problème lié aux jeux vidéo est restée stable entre 2007 et 2013.

Problèmes concomitants

- La majorité des élèves (54 %) dit n'avoir aucun des quatre problèmes suivants : détresse psychologique, comportement antisocial, consommation dangereuse ou nocive d'alcool, problème lié à l'usage de drogues. Environ 28 % des élèves du secondaire ont dit avoir un de ces problèmes; environ 12 % ont déclaré en avoir deux; 5 % ont dit en avoir trois; et 2 % ont affirmé avoir les quatre problèmes.

Variation selon l'année d'études

- L'année d'études est significativement liée à la santé mentale et au bien-être. En général, les indicateurs d'une santé médiocre (p. ex., inactivité, comportement sédentaire, blessures), les indicateurs d'internalisation (p. ex., déclarer un état de santé mentale passable ou médiocre, détresse psychologique), le comportement antisocial, les jeux de hasard et d'argent et les problèmes concomitants augmentent nettement avec l'année d'études. L'intimidation et les bagarres à l'école sont des phénomènes plus fréquents chez les plus jeunes et ont tendance à diminuer à mesure de l'avancement dans l'adolescence.

Variations régionales

Dans le passé, on a divisé la province en quatre régions pour les besoins du sondage : Toronto, le Nord de l'Ontario (district de Parry Sound, district de Nipissing et régions situées au nord), l'Ouest de l'Ontario (district de Peel, comté de Dufferin et régions situées à l'ouest) et l'Est de l'Ontario (comté de Simcoe, comté de York et régions situées à l'est).

On a relevé des différences significatives entre les régions pour deux indicateurs seulement :

- Comparativement à la moyenne provinciale, les élèves de **Toronto** sont beaucoup plus susceptibles de ne pas faire d'exercice

physique. Pourtant, ils sont moins susceptibles d'être considérés comme ayant un excès de poids ou comme étant obèses.

- Comparativement à la moyenne provinciale, les élèves du **Nord** de l'Ontario sont plus susceptibles d'être considérés comme ayant un excès de poids ou comme étant obèses.

- Les élèves de **l'Ouest** et de **l'Est** de l'Ontario ne diffèrent pas de façon significative de la moyenne pour quelque indicateur que ce soit.

On trouvera à la page 110 du rapport un aperçu des résultats par réseau local d'intégration des services de santé de l'Ontario et à la page 113 les résultats pour la région du grand Toronto.

Pourcentage d'élèves ayant déclaré présenter certains indicateurs de santé mentale et de bien-être, selon le sexe, lors du SCDSEO 2013 (de la 7e à la 12e année)

Indicateur	Total %	(IC de 95 %)	Nombre estimatif†	Garçons %	Filles %	
Santé physique jugée passable ou médiocre par l'élève	**7**	(6,2-7,9)	68 100	7,1	6,9	
Asthme diagnostiqué chez l'élève (en souffre actuellement)	**7,9**	(6,6-9,3)	69 800	7,6	8,1	
Aucune consultation médicale (an écoulé)	**27,4**	(25,1-29,8)	243 600	30,8	23,7	*
Inactivité physique (tous les jours de la semaine passée)	**7,3**	(6,4-8,3)	70 500	6,3	8,3	*
Comportement sédentaire (3 h/jour et plus devant un écran)	**58,3**	(56,2-60,4)	542 500	60,7	55,7	*
Excès de poids ou obésité	**25,1**	(23,5-26,7)	233 300	28,9	21	*
Usage de comprimés, poudres ou liquides amaigrissants (an écoulé)	**2,9**	(2,3-3,7)	25 800	2,2	3,7	*
Usage d'un appareil de bronzage à l'intérieur (an écoulé)	**4,4**	(3,6-5,5)	39 700	2,7	6,3	*
Blessure ayant nécessité un traitement médical (an écoulé)	**41**	(38,2-43,9)	364 600	43,6	38,4	*
Ne porte pas toujours de casque (pour les cyclistes)	**78,7**	(76,4-80,8)	535 800	80,4	76,5	
Ne porte pas toujours de ceinture à bord d'un véhicule automobile	**23,7**	(21,5-26)	214 300	26,7	20,5	*
Envoyer des textos au volant (an écoulé, pour les élèves qui conduisent)	**35,9**	(32,2-39,7)	107 900	34,9	37,1	
Collision automobile, en tant que conducteur (an écoulé)	**7,6**	(6,4-9,1)	49 300	8	7,1	
Consultation en santé mentale (an écoulé)	**21,9**	(19,8-24,3)	227 500	17,9	26,3	*
Demande de counseling par téléphone/Internet (an écoulé)	**3**	(2,4-3,7)	31 100	1,8	4,2	*
Soutien en santé mentale non obtenu	**27,9**	(25,8-30,1)	288 300	19	37,5	*
Usage médical de tranquillisants/sédatifs (an écoulé)††	**2,9**	(2,3-3,7)	21 300	2,6	3,2	
Usage médical d'un médicament – TDAH (an écoulé)	**3,2**	(2,5-4,2)	31 400	4,6	1,8	*
Médicaments prescrits pour la dépression, l'anxiété ou les deux††	**5,5**	(4,3-7,1)	43 200	3,4	7,9	*
Santé mentale jugée passable ou médiocre par l'élève	**15,3**	(13,5-17,4)	157 900	10,5	20,5	*
Faible estime de soi	**6,8**	(5,6-8,2)	60 600	2,4	11,4	*
Détresse psychologique (mois écoulé)	**26**	(23,9-28,3)	264 200	17,2	35,5	*
Idées suicidaires (an écoulé)	**13,4**	(11,8-15,1)	128 400	9,4	17,6	*
Tentative de suicide (an écoulé)	**3,5**	(2,8-4,3)	33 300	2	5	*
Comportement antisocial (3+/9 actes antisociaux, an écoulé)	**7,1**	(5,8-8,8)	72 400	9,5	4,6	*
Port d'armes (an écoulé)	**6**	(5-7,3)	60 500	9,1	2,7	*
Bagarre à l'école (an écoulé)	**10,9**	(9,6-12,4)	109 700	17,5	3,9	*
Menace/blessure avec arme à l'école (an écoulé)	**5,8**	(4,7-7,1)	59 400	7,7	3,7	*
Crainte d'être blessé ou menacé à l'école	**15,4**	(13,8-17,1)	150 800	13,9	17	*
Auteur d'actes d'intimidation à l'école (depuis septembre)	**16**	(14,4-17,8)	163 900	17,5	14,3	
Victime d'intimidation à l'école (depuis septembre)	**25**	(22,7-27,5)	256 200	22,2	28,1	*
Victime de cyberintimidation (an écoulé)	**19**	(17,2-21)	195 500	15,8	22,5	*
Jeux de hasard et d'argent (an écoulé)	**34,9**	(32,4-37,4)	352 400	44,1	24,8	*
Plusieurs activités de jeu (5 activités et plus, an écoulé)	**2,6**	(2-3,4)	26 600	4,4	0,7	*
Problème de jeu (an écoulé)††	**1,1**	(0,7-2)	8 800	s	s	
Problème lié aux jeux vidéo (an écoulé)	**10,3**	(8,6-12,2)	105 600	16,5	3,5	*
3 ou les 4 problèmes concomitants††	**6,6**	(5,2-8,3)	52 200	6,4	6,8	

Nota : 10 272 élèves ont participé au sondage; certaines estimations reposent sur un demi-échantillon aléatoire; IC = intervalle de confiance;
† le nombre estimatif d'élèves repose sur une population d'environ 982 100 élèves ontariens (arrondis au nombre entier inférieur); * indique une différence significative entre les garçons et les filles ($p < 0,05$) sans contrôle d'autres facteurs; †† chez les élèves de la 9e à la 12e année seulement; usage médical d'un médicament signifie usage d'un médicament prescrit; problèmes concomitants : les quatre indicateurs de problèmes suivants : détresse psychologique, comportement antisocial, consommation dangereuse ou nocive d'alcool et problème d'usage de drogues.

Pourcentage d'élèves ayant déclaré présenter certains indicateurs de santé mentale et de bien-être, selon l'année d'études, lors du SCDSEO 2013

Indicateur	7e	8e	9e	10e	11e	12e	
Santé physique jugée passable ou médiocre par l'élève	5,8	7,3	5,8	6,2	8,9	7,4	
Asthme diagnostiqué chez l'élève (en souffre actuellement)	8,2	8,4	8,2	7,5	7,9	7,4	
Aucune consultation médicale (an écoulé)	29	26,3	30,5	26,7	28,1	25	
Inactivité physique (tous les jours de la semaine passée)	4,4	2,4	4,3	7,4	9	11,9	*
Comportement sédentaire (3 h/jour et plus devant un écran)	43,5	56	56,8	62,3	62,4	61,4	*
Excès de poids ou obésité	21,1	22,1	24	27,8	28,9	24,2	*
Usage de comprimés, poudres ou liquides amaigrissants (an écoulé)	s	s	2,2	3,7	3,9	4	*
Usage d'un appareil de bronzage à l'intérieur (an écoulé)	s	s	s	3,9	5,4	8	*
Blessure ayant nécessité un traitement médical (an écoulé)	39,5	47,1	41,5	39,4	39,7	40,4	
Ne porte pas toujours de casque (pour les cyclistes)	53,1	71	82,2	79,8	86,3	88,7	*
Ne porte pas toujours de ceinture à bord d'un véhicule automobile	16	20,4	23,7	29,2	26,1	23,7	*
Envoyer des textos au volant (an écoulé, pour les élèves qui conduisent)	--	--	--	s	25	45,9	*
Collision automobile, en tant que conducteur (an écoulé)	--	--	--	s	3,2	10,8	*
Consultation en santé mentale (an écoulé)	20,9	26	21,7	20,6	24,4	19,6	
Demande de counseling par téléphone/Internet (an écoulé)	2,3	3,1	3,2	1,5	4,5	3,1	
Soutien en santé mentale non obtenu	25,5	26,4	29	27,8	29,4	28,1	
Usage médical de tranquillisants/sédatifs (an écoulé)††	--	--	3,7	2,7	2,9	2,6	*
Usage médical d'un médicament – TDAH (an écoulé)	4,1	3,6	2	3,5	4	s	*
Médicaments prescrits pour la dépression, l'anxiété ou les deux††	--	--	4,2	2,5	6,6	7,9	*
Santé mentale jugée passable ou médiocre par l'élève	8,8	13,8	16,4	16,5	18,1	15,7	*
Faible estime de soi	5,3	6,9	6,1	8,7	7	6,6	
Détresse psychologique (mois écoulé)	13,4	23,1	26,1	29,6	31,7	26,8	*
Idées suicidaires (an écoulé)	9,1	13,8	14,5	14,9	16,2	11,4	
Tentative de suicide (an écoulé)	s	2,6	4,2	4	4,3	2,8	
Comportement antisocial (3+/9 actes antisociaux, an écoulé)	1,9	3,9	6	10,1	8,6	9,1	*
Port d'armes (an écoulé)	2,6	8,2	6,4	8,6	5,7	4,7	*
Bagarre à l'école (an écoulé)	15	18,4	12,1	8,6	9,4	7,1	*
Menace/blessure avec arme à l'école (an écoulé)	4,9	6,2	5,9	8,2	4,7	5	
Crainte d'être blessé ou menacé à l'école	19,1	16,3	18,3	16,3	13,9	11,5	*
Auteur d'actes d'intimidation à l'école (depuis septembre)	12,7	20,2	17,6	18,7	15,5	12,7	
Victime d'intimidation à l'école (depuis septembre)	31,6	34,5	28,7	22,6	24,2	16,6	*
Victime de cyberintimidation (an écoulé)	17,5	24,6	24,1	16,4	19,2	15,1	*
Jeux de hasard et d'argent (an écoulé)	24,3	27,4	29,6	37,6	36,5	44,5	*
Plusieurs activités de jeu (5 activités et plus, an écoulé)	s	s	s	3,8	1,5	4,4	*
Problème de jeu (an écoulé)††	--	--	s	s	s	s	
Problème lié aux jeux vidéo (an écoulé)	12,8	9,4	9,4	9,8	11,4	9,4	
3 ou les 4 problèmes concomitants††	--	--	3	6	7,8	8,7	*

Nota : * indique une différence significative selon l'année d'études ($p < 0,05$) sans contrôle d'autres facteurs; « s » indique que l'estimation a été supprimée parce qu'elle n'est pas fiable; †† chez les élèves de la 9e à la 12e année seulement; usage médical d'un médicament signifie usage d'un médicament prescrit; problèmes concomitants : les quatre indicateurs de problèmes suivants : détresse psychologique, comportement antisocial, consommation dangereuse ou nocive d'alcool et problème d'usage de drogues.

Pourcentage d'élèves ayant déclaré présenter certains indicateurs de santé mentale et de bien-être, selon la région (de la 7e à la 12e année), lors du SCDSEO 2013

Indicateur	Toronto	Nord	Ouest	Est	
Santé physique jugée passable ou médiocre par l'élève	7,8	7,3	7,1	6,3	
Asthme diagnostiqué chez l'élève (en souffre actuellement)	5,4	6,9	9,4	7,1	
Aucune consultation médicale (an écoulé)	24,7	34,5	29,0	25,2	
Inactivité physique (tous les jours de la semaine passée)	10	7	6,2	7,4	*
Comportement sédentaire (3 h/jour et plus devant un écran)	63,1	54,5	57,2	57,8	
Excès de poids ou obésité	21,6	31,9	25,4	25,3	*
Usage de comprimés, poudres ou liquides amaigrissants (an écoulé)	s	3,4	2,6	4,2	
Utilisation d'un appareil de bronzage intérieur (an écoulé)	2,4	s	4,4	5,8	
Blessure ayant nécessité un traitement médical (an écoulé)	33,7	47,8	42	43,4	
Ne porte pas toujours de casque (pour les cyclistes)	81,4	72,4	79,9	76	
Ne porte pas toujours de ceinture à bord d'un véhicule automobile	26,9	22,9	22,2	24,1	
Envoyer des textos au volant (an écoulé, pour les élèves qui conduisent)	23,5	40,1	39	35,5	
Collision automobile, en tant que conducteur (an écoulé)	5,9	7,3	7,9	7,9	
Consultation en santé mentale (an écoulé)	22,1	22,8	21,3	22,7	
Demande de counseling par téléphone/Internet (an écoulé)	3,8	s	2,1	3,9	
Soutien en santé mentale non obtenu	29,2	25,7	26,6	29,6	
Usage médical de tranquillisants/sédatifs (an écoulé)††	2	s	3,1	3,3	
Usage médical d'un médicament – THADA (an écoulé)	s	3,4	3,7	3,3	
Médicaments prescrits pour dépression, anxiété ou les deux††	s	s	4,5	5,9	
Santé mentale jugée passable ou médiocre par l'élève	19,8	12,2	13,9	15,8	
Faible estime de soi	9,2	5,8	6,4	6	
Détresse psychologique (mois écoulé)	30,2	20,7	24,5	27,3	
Idées suicidaires (an écoulé)	15,5	12,3	12,9	13,6	
Tentative de suicide (an écoulé)	s	4,7	3,3	4	
Comportement antisocial (3+/9 actes antisociaux, an écoulé)	8	6,1	7,9	5,8	
Port d'armes (an écoulé)	4,6	6,3	7,3	4,8	
Bagarre à l'école (an écoulé)	13	9,4	11,3	9,6	
Menace/blessure avec arme à l'école (an écoulé)	8,2	4,5	5,7	4,8	
Crainte d'être blessé ou menacé à l'école	18,4	13,6	16,2	12,7	
Auteur d'actes d'intimidation à l'école (depuis septembre)	16,1	16,2	17,2	14	
Victime d'intimidation à l'école (depuis septembre)	20,6	29,6	26,5	24,3	
Victime de cyberintimidation (an écoulé)	17,8	19,8	19,4	18,9	
Jeux de hasard et d'argent (an écoulé)	37,1	37,7	33,1	35,7	
Plusieurs activités de jeu (5 activités et plus, an écoulé)	s	3,9	2,2	2,7	
Problème de jeu (an écoulé)††	s	s	s	s	
Problème lié aux jeux vidéo (an écoulé)	11	8,1	10,7	9,7	
3 ou les 4 problèmes concomitants††	6,3	4,2	7,4	6,2	

Nota : * indique une différence significative selon la région ($p < 0,05$) sans contrôle d'autres facteurs; « s » indique que l'estimation a été supprimée parce qu'elle n'est pas fiable; †† chez les élèves de la 9e à la 12e année seulement; usage médical d'un médicament signifie usage d'un médicament prescrit; problèmes concomitants : les quatre indicateurs de problèmes suivants : détresse psychologique, comportement antisocial, consommation dangereuse ou nocive d'alcool et problème d'usage de drogues.

Aperçu des tendances relatives à certains indicateurs de santé mentale et de bien-être parmi l'échantillon total d'élèves, SCDSEO

Indicateur	Années d'études	Période	Variation
% d'élèves qui ont déclaré avoir une santé physique passable ou médiocre	7e, 9e, 11e	1991-2013	En hausse, de 6 % à 14 % en 2011, a diminué pour s'établir à 7 % en 2013
% d'élèves inactifs physiquement (tous les jours de la semaine passée)	7e – 12e	2009-2013	Stable
% d'élèves ayant un comportement sédentaire (3 h/jour et plus devant un écran)	7e – 12e	2009-2013	Stable
% d'élèves qui ont un excès de poids ou sont obèses	7e – 12e	2009-2013	Stable
% d'élèves chez qui on a diagnostiqué de l'asthme (en souffrent actuellement)	7e – 12e	2011-2013	Stable
% d'élèves qui ne portent pas toujours de ceinture à bord d'un véhicule	7e – 12e	2011-2013	En baisse, de 28 % à 24 %
% d'élèves qui ont subi une blessure nécessitant un traitement	7e – 12e	2003-2013	En hausse, de 35 % à 41 %
% d'élèves ayant consulté un spécialiste de la santé mentale au moins une fois (an écoulé)	7e – 12e	1999-2013	En hausse, de 12 % à 22 %
% d'élèves qui ont déclaré prendre des médicaments prescrits pour le TDAH	7e – 12e	2007-2013	Stable
% d'élèves qui ont déclaré prendre des médicaments prescrits pour la dépression, l'anxiété ou les deux	9e – 12e	2001-2013	Stable
% d'élèves qui ont déclaré avoir une santé mentale passable ou médiocre	7e – 12e	2007-2013	En hausse, de 11 % à 15 %
% d'élèves ayant eu des idées suicidaires (an écoulé)	7e – 12e	2001-2013	Stable entre 2001 et 2009 (environ 10 %), a augmenté pour atteindre 13 % en 2013
% d'élèves ayant fait une tentative de suicide (an écoulé)	7e – 12e	2007-2013	Stable
% d'élèves ayant signalé un comportement antisocial (an écoulé)	7e, 9e, 11e	1993-2013	En baisse, de 16 % à 6 %
% d'élèves ayant porté une arme (an écoulé)	7e, 9e, 11e	1993-2013	En baisse, de 16 % à 5 %
% d'élèves s'étant battus à l'école (an écoulé)	7e – 12e	2001-2013	En baisse, de 17 % à 11 %
% d'élèves ayant été menacés ou blessés avec une arme à l'école	7e – 12e	2003-2013	Stable
% d'élèves craignant d'être menacés ou blessés à l'école	7e – 12e	1999-2013	Stable
% d'élèves ayant été victimes d'intimidation à l'école (depuis septembre)	7e – 12e	2003-2013	En baisse, de 33 % à 25 %
% d'élèves ayant été victimes de cyberintimidation (an écoulé)	7e – 12e	2011-2013	Stable
% d'élèves ayant joué à des jeux de hasard et d'argent sur Internet (an écoulé)	7e – 12e	2003-2013	Stable
% d'élèves ayant joué à des jeux de hasard et d'argent (an écoulé)	7e – 12e	2003-2013	En baisse, de 57 % à 35 %
% d'élèves ayant joué à plusieurs jeux (an écoulé)	7e – 12e	2003-2013	En baisse, de 6 % à 3 %
% d'élèves ayant eu un problème de jeu (an écoulé)	9e – 12e	1999-2013	En baisse, de 8 % à 1 %
% d'élèves ayant eu un problème lié aux jeux vidéo (an écoulé)	7e – 12e	2007-2013	Stable

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

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1. INTRODUCTION

The World Health Organization 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 matters for several reasons, not the least of which is their long-lasting effects over the life course (Sawyer et al, 2012). Childhood and adolescence are pivotal developmental stages during which many life-long health behaviours, beliefs, and attitudes become established. Therefore, healthy children have a better chance to become healthy adults.

The need to address mental health and addiction challenges to better promote healthy children and youth has been prioritized within the first three years of the Ontario mental health strategy, *Open Minds, Healthy Minds* (Government of Ontario, 2011). Mental health promotion and early intervention for mental health problems among children and youth have also been prioritized within the mental health strategy for Canada (Mental Health Commission of Canada, 2012). Both strategies contend that greater attention to child and youth mental health will contribute to enduring benefits to individual children, youth, and families as well as long-term economic benefits to larger sectors such as health, social service, and justice systems, and the country as a whole.

Physical Health

Generally, adolescence is a period of optimal physical health. Past research has shown that over three-quarters of Canadian children and young adolescents rate their health as "excellent" or "very good" (Currie et al., 2008; Tremblay, Dahinten, & Kohen, 2003). Despite this positive health status, many health-compromising behaviours and their consequent health problems originate in adolescence. Poor physical health, obesity, physical inactivity, and poor diet among children and youth are especially concerning given that these health states and behaviours are likely to continue into adulthood, leading to future morbidity or mortality (Hallal, Victora, Azevedo, & Wells, 2006; Sawyer et al, 2012; Singh, Mulder, Twisk, van Mechelen, & Chinapaw, 2008). Further, poor physical health is associated with concurrent negative school experience, lower academic performance, and poor mental health (Ortega, Ruiz, Castillo, & Sjöström, 2008). During the past three decades, obesity among Canadian adolescents has tripled (Shields, 2006; Tremblay et al., 2010). Epidemiological estimates indicate that between 4% and 10% of Canadian adolescents are classified as obese, and 12% to 21% as overweight (Janssen, 2008; Roberts, Shields, de Groh, Azis, & Gilbert, 2012; Shields, 2006). Perhaps more telling is that Canadian adolescents' overweight/obesity rates rank among the highest internationally (Currie et al., 2012).

Injuries are the leading cause of morbidity and mortality among Canadian adolescents, with motor vehicle crashes being the primary cause (Pan et al., 2007). Injury may serve as a marker for a high-risk lifestyle that may include engaging in health risk behaviours such as binge drinking and driving after using alcohol or other drugs (Adlaf, Mann, & Paglia, 2003). Canadian statistics show that about 40% of adolescents report experiencing an injury that needed medical treatment in the past year (Currie et al., 2012; Paglia-Boak et al., 2012). Recent research has found that one-in-five Ontario adolescents has experienced a traumatic brain injury (TBI) in their lifetime (Ilie, Boak, Adlaf, Asbridge, &

Cusimano, 2013) and TBI has been linked with school and mental health problems (Ilie et al., 2014). On the positive side, research shows that Canadian mortality and hospitalization rates due to injuries have decreased in recent years (Pan et al., 2007; Public Health Agency of Canada, 2009).

Mental Health

The last decade has seen a growing interest in the state of adolescent mental health (e.g., Mental Health Commission of Canada, 2012). This interest has partly grown due to some disturbing statistics. The evidence is building that shows the burden caused by mental illness and addiction exceeds many other conditions. For example, the burden of mental illness and addictions in Ontario is more than 1.5 times that of all cancers and more than seven times that of all infectious diseases.[1]

The prevalence of mental health problems is also an issue for adolescents. Significant life transitions occur during adolescence, such as puberty, entering and exiting high school, and the transition from school-to-work, and for most it is a stressful and emotionally turbulent period. These transitions can lead to academic, behavioural and emotional difficulties (Patton & Viner, 2007). Mental health impairments during the formative years can adversely affect personal and social functioning throughout life. In fact, the onset of most mental disorders occurs during adolescence or young adulthood (Health Canada, 2002; Kessler et al., 2005; Merikangas et al., 2010; Patel, Flisher, Hetrick, & McGorry, 2007). For many, these conditions become enduring and, in turn, result in elevated markers of health problems, such as *years of life lost* (YLL) and *health-adjusted life years* (HALYs)

> *"Mental health is an integral part of health; indeed, there is no health without mental health."* (World Health Organization, 2014)
>
> *"Ontarians experience a high burden of illness related to mental illness and addictions. Individuals may be encumbered by these illnesses at a young age, experiencing the disruption of important life transitions, and challenged by their ongoing burden over a long period of time."* (Ratnasingham et al., 2012, p.7)

(Ratnasingham, Cairney, Rehm, Manson, & Kurdyak, 2012). For this reason, the need to address mental health problems early in life has been identified as a priority within Canada's first mental health strategy (Mental Health Commission of Canada, 2012).

The pervasiveness of mental health disorders and problems in youth underscores the public health importance. An estimated one-in-five to one-in-four (20%–25%) children and adolescents currently has or has had a mental health disorder (Merikangas et al., 2010; Offord, 1995; Offord et al., 1996; Romano, Tremblay, Vitaro, Zoccolillo, & Pagani, 2001; US Department of Health and Human Services, 1999). Sex differences are prominent in this regard: females are more likely than males to exhibit mood or anxiety disorders, whereas males are more likely to exhibit behavioural and substance use disorders (Kessler et al., 2005; Merikangas et al., 2010; Public Health Agency of Canada, 2011; Romano et al., 2001). In Canada and the US, suicide is the second leading cause of death among adolescents, following accidents (Navaneelan, 2012; US Department of Health and Human Services, 1999). One Canadian study showed that between 1980 and 2008, suicide decreased among male adolescents, but increased among female adolescents (Skinner & McFaull, 2012).

There is some evidence suggesting that the prevalence of mental health problems among children and adolescents may have increased

[1] Data based on health-adjusted life years (HALYs) – calculated by combining years of life lost due to premature death (YLL) and year-equivalents of reduced functioning from living with the disease (YERF). The total HALYs for mental illness and addictions was 600,000 years compared with 350,000 years for all cancers (Ratnasingham et al., 2012).

over time. Some examples include the following:

- The identification of mental health problems, such as emotional and conduct disorders, diagnosed by family physicians in the US increased between the late 1970s and late 1990s among children aged 4 to 15 (Kelleher, McInerny, Gardner, Childs, & Wasserman, 2000).
- Rates of prescribing antidepressant, antianxiety, and antipsychotic medication to American adolescents significantly increased between 1993 and 2002, but the reasons for these increases are not fully understood (Olfson, Blanco, Liu, Moreno, & Laje, 2006; Thomas, Conrad, Casler, & Goodman, 2006).
- US researchers found large generational increases in psychopathological symptoms between the 1950s and the early 2000s, suggesting cultural shifts as a possible reason (Twenge et al., 2010).
- Between the 1950s and the 1990s, anxiety among American children had increased substantially, possibly due to a decrease in social connectedness (Twenge, 2000).
- Research on emotional well-being shows no changes between 1976 and 2006 among adolescents regarding happiness, life satisfaction, hopelessness, or narcissism, but did find that later cohorts are less trusting and more cynical than earlier cohorts (Trzesniewski & Donnellan, 2010).
- UK researchers found substantial increases over three decades in self-reported and parent-reported emotional and conduct problems among adolescents (Collishaw, Maughan, Goodman, & Pickles, 2004; Collishaw, Maughan, Natarajan, & Pickles, 2010).
- An increase between 1987 and 2006 in psychological distress among adolescents in Scotland (Sweeting, Young, & West, 2009) was attributed to parallel increases in family discord and school disengagement and stress (Sweeting, West, Young, & Der, 2010).

Risk and Problem Behaviours

For most youth, risk behaviour is experimental and ephemeral, and a natural manifestation of emerging independence. Activities such as drug use, gambling, antisocial and violent behaviours and risky driving are typically "adolescent limited" – most likely to emerge during this period and then subside with time as one adopts adult roles (Moffitt, 1993). Nonetheless, for a minority, these risk behaviours are the catalyst for shaping one's life-course trajectory leading to problems in adulthood (Gotlib & Wheaton, 1997).

Bullying, whether at school or over the Internet, has become recognized as an important public health issue not only because of the notable prevalence, but more importantly because of the immediate and long-term negative consequences for the bullied victim, the bully perpetrator, and society. Children and adolescents who are bullied are at increased risk for mental health problems, physical health problems, social and school problems, and these problems can endure well into adulthood (Arseneault, Bowes, & Shakoor, 2010; Copeland, Wolke, Angold, & Costello, 2013; Espelage & Holt, 2013; Gini & Pozzoli, 2009; Meltzer, Vostanis, Ford, Bebbington, & Dennis, 2011; Wolke, Copeland, Angold, & Costello, 2013). Yet the consequences of bullying are not restricted to the bullied. Those who bully others are at risk for further aggressive and antisocial behaviour, substance use problems, and criminality (Farrington & Ttofi, 2011; Ttofi, Farrington, & Lösel, 2012).

Gambling among youth is a growing concern given the expanding market and that most North American adolescents gamble. Gambling estimates vary from 20% to 90% with most studies in the 40% to 65% range (Hardoon & Derevensky, 2002; Volberg, Gupta, Griffiths, Olason, & Delfabbro, 2011). More worrisome is that rates of gambling problems are typically higher among adolescents than adults (Huang & Boyer, 2007; Shaffer & Hall, 2001; Shaffer, Hall, & Vander Bilt, 1999), and that future gambling disorders likely originate during this period (Gupta & Derevensky, 1998). Estimates

of pathological or problem gambling among North American youth range from 2% to 8% (Derevensky, Gupta, & Winters, 2003; Dickson & Derevensky, 2006; Huang & Boyer, 2007) and in Canada range between 2% and 5% among studies conducted since 1999 (Volberg et al, 2011). The harms associated with problem gambling include an increased likelihood of antisocial and criminal activities, problems with family, school and work, and mental health problems (Dickson & Derevensky, 2006; Estevez, Herrero-Fernández, Sarabia, & Jauregui, 2013; Shead, Derevensky & Gupta, 2011).

Social Health

Social well-being is a relatively recent addition to the concept of health. It refers to adequate integration and adjustment in a person's social environment, the extent of social support available, and the quality of one's relationships. Indeed, studying quality of life is increasingly becoming an important area of health research (McDowell, 2006).

A strong social support network is important in its own right, and it appears to be a buffer against physical and mental health problems across the life span. Social support has been correlated with reduced levels of depression and anxiety (Hall-Lande, Eisenberg, Christenson, & Neumark-Sztainer, 2007). Similarly, a strong bond with one or both parents has been associated with better mental and physical health (Canadian Institute for Health Information, 2005). School connectedness is another area of increasing study, and may serve as a protective factor against poor mental health and risk behaviours (Bond et al., 2007; Bonny, Britto, Klostermann, Hornung, & Slap, 2000; Canadian Institute for Health Information, 2005; Faulkner, Adlaf, Irving, Allison, & Dwyer, 2009).

Risk and Protective Factors

Studies of the interplay between risk factors (health-compromising or threatening) and protective factors (health-enhancing) in the areas of mental health and risk behaviour among youth have identified several crosscutting predictors at the level of the individual, the family, the peer context, and the broader environment (Clayton, 1992; Hawkins, Catalano, & Miller, 1992; Masten & Coatsworth, 1998; Viner et al., 2012). Risk factors include influences that increase the likelihood of problems in life – one example is poverty. Protective factors are those that reduce the likelihood of problems, such as high quality relationships with parents. It is these factors that often account for those that thrive in the presence of adversity. The risk-protective factor influence is perhaps best understood as the net influence of the two. For example, protective factors cumulate resources or assets used to ameliorate or dampen the negative effects of cumulated risk factors.

In addition to the major demographic factors such as age and sex, **individual**-level factors include genetics, temperament, problem-solving and coping skills, social skills and a sense of self-efficacy. **Family**-related factors include family structure, marital discord, parent-child attachment, frequency and quality of parental communication, parental monitoring, parental modelling, and parental maltreatment.

In the **peer and school context** such factors as peer behaviour, peer rejection and social support, academic achievement and attitudes toward school have been shown to be influential.

Some **environmental** factors associated with psychosocial problems and risk behaviours include poverty, legal policies affecting availability and access (e.g., in the cases of substance use, gambling), the media and wider cultural norms (e.g., in the cases of substance use, eating disorders). Most recently, new forms of social media, of which young people are its earliest adopters, have become new drivers of adolescent health by changing the speed at

which sociocultural norms are affected (Litt & Stock, 2011; Sawyer et al, 2012).

Of course, adversity or traumatic events during childhood, such as the death of a parent, interpersonal violence, or a natural disaster, can also lead to emotional and behavioural problems (Gotlib & Wheaton, 1997).

Why Monitor the Mental Health and Well-Being of Students?

As a population health survey, the OSDUHS informs the "population health approach" defined as follows:

> *Population health refers to the health of a population as measured by health status indicators and as influenced by social, economic and physical environments, personal health practices, individual capacity and coping skills, human biology, early childhood development, and health services* (Federal Provincial and Territorial Advisory Committee on Population Health, 1999, p. 7).

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 survey monitoring** include:

- establishing the current and potential burden of impaired mental health arising in early and later adolescence;
- assessing changes in health status, impairment, and disability;
- assessing changes among the determinants of health (e.g., socioeconomic status, family structure)[2];
- providing scientific, reliable data that can confirm or challenge anecdotal and media reports;
- providing a basis for program and policy evaluation and the assessment of health goals and targets established by governmental and nongovernmental agencies;
- assessing initiatives such as active lifestyle government programs and media campaigns or changes in the youth criminal justice system;
- providing 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 the 7th graders. This would require monitoring to assess if this behaviour moves with the cohort, or if it migrates to older or younger adolescents.

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

[2] The nature of adolescence is rapidly changing with youth transitioning to adult roles at an older age. Because marriage and child rearing serve to reduce many risk behaviours, the trend for people to marry and have children at older ages postpones the reduction in drug use and other risk behaviours (Sawyer et al, 2012).

What Student Health Surveys Tell Us

Student health surveys provide essential knowledge that serves as a basis for understanding:

- the relative and absolute size of the adolescent student population currently experiencing physical and mental health problems, and engaging in risk behaviours;
- population and subpopulation changes in health indicators over time;
- the risk predictors that correlate with these problems;
- the identification of various subtypes, especially high-risk groups; and
- the uptake of such behaviours and states in adolescence which affect the burden of disease in adults.

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 poor grades cause depression 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.

Why Use a School-Based Survey to Monitor Adolescent Well-Being?

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

- School-based surveys are cost-effective, having a low cost per respondent, and are efficiently administered. For example, numerous students in a class or school can be interviewed during a single visit.
- Because administrative data on student enrolment and the number of schools and classes is 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 sampling methods (e.g., telephone frames).
- 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.
- 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. Moreover, this period also covers the adolescent-to-adult passage, a key life-course transition.
- Although procedural features such as type of consent (i.e., active versus passive) can generate between-school variation, response rates for school-based surveys are usually higher than other methods such as household face-to-face surveys or telephone surveys (Hibell, Adlaf et al., 2003).

- The group-administered classroom setting is conducive to eliciting truthful responses by adolescents (versus in-home interviews, for example). Adolescents feel more comfortable answering sensitive questions about drug use and other personal matters 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-completed, school-based surveys often exhibit higher validity than do data collected through alternative methods (e.g., Brenner et al., 2006; Hibell, Adlaf 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 investigation. Schools are part of a 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 physical and mental health status of students. For example, OSDUHS research has shown that school characteristics, such as school size, policies, school climate, and connectedness are associated with student drug use (Kairouz & Adlaf, 2003; Rehm et al., 2005).

What Student Health Surveys Do Not Tell Us

Because school-based surveys comprise adolescents attending school, their data cannot fully measure the health and well-being of all adolescents in the population. **Student surveys cannot address the following**:

- 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 exiting school prematurely; and

- the causes of individual changes over time.

The OSDUHS Mental Health and Well-Being Report

In this report, we describe physical and mental health indicators among Ontario students in grades 7 through 12 using data from the 2013 cycle of the OSDUHS. To help organize the material, we classify mental health indicators as internalizing and externalizing indicators. By **internalizing** indicators, we mean emotional health indicators such as symptoms of anxiety/depression and suicidal ideation. By **externalizing** indicators, we mean overt risk behaviours such as aggression, theft, gambling, and drug use. We also present trend data spanning back more than a decade to 1991, where possible.

New indicators in this report include estimates of the use of social media, tanning beds, diet pills, bicycle helmets, and texting and 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 based on the 2013 OSDUHS describing the extent of licit and illicit drug use among Ontario students since 1977. This publication *Drug Use Among Ontario Students, 1977–2013: Detailed OSDUHS Findings* is available electronically at: www.camh.ca/research/osduhs.aspx.

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. Under the direction of Dr. Reginald Smart, four biennial surveys from **1968 through 1974** monitored alcohol, tobacco and other drug use among Toronto students in grades 7, 9, 11 and 13. (Given the restricted target population of Toronto students, these data are not presented here.)

In **1977**, the study expanded to include students across Ontario, and in **1999**, the OSDUHS was further expanded 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.

During the past three decades, the OSDUHS has surveyed thousands of students every two years, and to date some 100,000 students in Ontario have participated. The study's history is underscored by considering that most of the 12th graders interviewed in 1977 are now in their 50s. Since its inception, the OSDUHS has not only been the source data for numerous scientific and policy publications on an array of adolescent health issues, but has evolved into a well-recognized school survey globally. Indeed, UN agencies often seek OSDUHS involvement in international work, especially those concerning the methodology of surveying students.

All OSDUHS surveys since 1977 received primary funding support from the Ontario Ministry of Health and Long-Term Care. The survey has been administered in schools by the Institute for Social Research, York University, since 1981.

2. METHODS

Sampling Design

Target and Survey Population

For each of the 19 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 systems (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, those who were home-schooled, those institutionalized for correctional or health reasons, those schooled on First Nations reserves, military bases, or in the remote northern region of Ontario. These out-of-scope groups represent a small proportion of the Ontario student population (about 8%). Therefore, although our target population represents students, it captures the vast majority (92%) of Ontario children and adolescents aged 12–18 years.

Table 2.1 Thirty-Seven Years (19 Cycles) of the OSDUHS

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

Notes: (1) response rates represent the student participation rate; (2) 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 built on 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 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: 1977–1979, 1981–1997 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 proportional allocation of students by grade and region allowed for self-weighted (i.e., unweighted) estimates.[4] In **1981**, the design was modified to a *disproportionally stratified single-stage cluster design* with paired selection (two-per-stratum) of first-stage school board district clusters to improve the precision and efficiency of estimates.[5] This design resulted in the selection of more school boards and schools.[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, weighting and initial dataset preparation. The OSDUHS team is responsible for institutional and school board approval, questionnaire content, consent forms, 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 *disproportionally stratified* (region by school level[8]), *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).[9] 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 provided greater age variation and more developmentally relevant detail on the relationship between health compromising risk behaviours and age. The revised design also allows for more direct grade comparisons to 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

[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 second grade (grade 7, 9, 11, 13) in every second year (1977, 1979, etc.) allowed for the assessment of 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 2 × 2 cohort design can also be generated for later surveys.

[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.

[7] In addition to the authors, the 2013 OSDUHS sample design team, headed by Michael Ornstein, also included John Pollard, David Northrup, and Hugh McCague all from the Institute for Social Research (ISR) at York University.

[8] In Ontario, 7th and 8th graders can be enrolled in elementary schools (JK–G8), middle or senior public schools (G6–G8), or junior high schools (G7–G9). The primary stage stratification of region is disproportional to the enrolled population.

[9] Prior to 1999, the allocation of students from Northern Ontario was proportional 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 lack of statistical power. This redesign was headed by Professor Michael Ornstein, York University/ISR.

stage 1, rather than selection of school board clusters. In sum, the revised design specifies the sampling of more students per school and a greater geographical dispersion of schools with more precise school-level estimates.[10]

OSDUHS Regions

Since 1977, the sample design has divided Ontario into four regional strata based on the following boundaries: *City of Toronto*;[11] *Northern* Ontario (Parry Sound District, Nipissing District, and areas farther north); *Western* Ontario (Peel District, Dufferin County and areas farther west); and *Eastern* Ontario (Simcoe County, York County and areas farther east).

Sponsored Oversamples by Ontario Public Health Units/Departments in 2013

In addition to the four regional strata of the base design just described, the 2013 OSDUHS included an additional **seven 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. Schools in the following seven regions of the province were oversampled: the City of Ottawa; Leeds, Grenville, and Lanark District; Haliburton, Kawartha, and Pine Ridge District; York Region; Durham Region; Peel Region; and Sudbury District.

The addition of these seven regional oversamples resulted in **11 mutually exclusive regions**. This created 20 region-by-school level strata ([4 × 2] + [7 × 2]) = 22 – 2 (elementary students were not sampled in two regions) = **20 total design-based strata**). Mutually exclusive school samples were drawn for each of these 20 strata.[12]

School Selection (Stage 1)

Publicly funded schools represented by four school systems in Ontario – English and French language schools in the public and Catholic school sectors – were eligible to participate.[13] **Schools excluded** as being out-of-scope were private schools, schools on First Nations reserves, on Canadian Forces Bases, and schools in geographically inaccessible northern areas.

The 2013 OSDUHS school selection proceeded as follows:[14]

1) The sampling frame used to randomly draw the school sample was the Ontario Ministry of Education's 2009/2010 school enrolment database (most recently available at the time). This frame included all publicly funded schools in Ontario that included the grades in our target. As noted earlier, this comprised schools in four sectors: English language public, English language Catholic, French language public, and French language Catholic. For cost-efficiency reasons and due to estimation difficulties with sparse data, schools with low enrolment (i.e., fewer than 20 students in schools with grades 7 and 8, and fewer than

[10] The disadvantages of greater 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, greater school dispersion provides richer, more precise school-level data necessary for multilevel analysis. Recent OSDUHS examples of this work include Rehm et al. (2005), and Kariouz and Adlaf (2003).

[11] Throughout the OSDUHS program, the geographical boundary for Toronto schools remained unchanged despite a municipal amalgamation in 1998.

[12] Although each oversample was an independent stratum, for our analyses and presentation, oversamples were assigned to one of the four corresponding base regions.

[13] In Ontario, each regional county has both a public and Catholic school board.

[14] 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 sample.

80 students in schools with grades 9 through 12), and schools in the remote northern region of the province, were excluded from the sampling frame.

2) Within *each* of the 20 region-by-school level primary-stage strata, a **probability proportionate-to-size (PPS) selection of schools** was drawn (i.e., larger schools had a greater probability of being selected). Following a random start, schools were selected with systematic sampling without replacement (WOR).

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 the **public health region oversamples**, the class selection procedure in the secondary schools did not differ from the standard one class per grade selection. In the elementary/middle schools, rather than the standard selection of one class per grade, *two* 7th-grade and *two* 8th-grade classes were selected to participate (or all students in these grades if there was fewer than two classes in each grade).

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

Sample Exclusions

School Exclusions

- private schools
- schools on First Nations reserves
- schools on Canadian Forces bases
- geographically inaccessible
- elementary/middle schools with fewer than 20 students enrolled
- secondary schools with fewer than 80 students enrolled

Class Exclusions

- special education classes
- English as a Second Language (ESL) classes
- classes with fewer than 5 students

Student Exclusions

- institutionalized or home schooled

Selection of Units

School Selection

- **PPS/WOR**: probability-proportionate-to-school size via systematic sampling; sampled without replacement

Class Selection

- **EPSEM/WOR**: Equal probability selection of classes; sampled without replacement

Student Selection

- **None**: all students in a class with a signed consent form were eligible to participate

Administrative and Recruitment Procedures

The 2013 OSDUHS protocol was approved by the Research Ethics Boards (REBs) at CAMH and York University,[15] as well as 29 school board research review committees (RRC).

Student participation required the approval of school boards, school principals, classroom teachers, parents (if under 18 years) and students themselves. For each school board associated with one or more randomly selected schools, permission to survey students was first requested from the Director of Education. Depending on the school board's policy, agreement to participate was conditional upon approval from the board RRC, as well as school principals, classroom teachers, parents, and students. 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. Once a school was recruited, the principal provided ISR with a grade-stratified list of classes, from which random selections were drawn.

All participating schools were provided with **active** (also known as explicit) **parental consent forms**,[16] which were available in six languages (English, French, Spanish, Portuguese, Russian, and Mandarin). Well in advance of the survey date, each school 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 not allowed to participate. If a student did not participate, no substitution took place (because all students in the class were invited to participate). Instead, the selection weights were statistically adjusted for this unit nonresponse.

Administration procedures were designed to protect students' privacy by ensuring anonymous and voluntary participation. The survey was administered across the province by 30 trained ISR field staff in the selected classrooms between November 2012 and June 2013.[17] 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.[18] 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. No compensation for participation was provided to schools or students.

The ISR field staff collected all completed questionnaires, which were then couriered to ISR

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

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

[17] While some data collection predates 2013, 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 for a longer interval in which schools could arrange an acceptable administration date.

[18] The survey administrators also recorded information about the classroom, such as the number of students enrolled, number absent, presence of teacher during administration, and whether the class was randomly selected.

for editing and data capture by using the Computer-Assisted Survey Execution System (CASES) software. The quality of the data entry was verified by independent re-keying a random sample of about 5% of all questionnaires.[19] The major editing rule used for processing a valid questionnaire was that at least half of the questions had to be completed. Only 22 questionnaires failed to meet this rule and were withdrawn from data entry.

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 topics covered in the survey is as follows: demographics, family and school life, alcohol, tobacco, 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, healthy weight, injuries), bullying, gambling and gambling problems, video game playing problems, 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**, depending on school level. As in past cycles, we used split ballot modularized questionnaires whose item content was distributed according to questionnaire form (Form A vs. Form B).[20] However, in 2013 we reduced the number of questions in these forms for students in elementary schools (i.e., the 7th and 8th graders). That is, elementary school students (grades 7 and 8) completed shorter questionnaires than the secondary school students (grades 9–12). The **elementary school questionnaires excluded the following topics**: the use of cocaine, crack, heroin, methamphetamine, hallucinogens, club drugs and new synthetic drugs, prescription tranquillizers, drug use problem screeners, gambling problem screener, and driving-related behaviours. See **Table 2.2** for an overview of the questionnaire content across the four forms. The item count was 163 in Form A-SS, 160 in Form B-SS, 128 in Form A-ES, and 125 in Form B-ES. About half of the items in each form were designated as core, that is, items common to all four forms. A **French version** of Form A (ES and SS) was used in French-language schools.[21] The 2013 questionnaires are available at www.camh.ca/research/osduhs.aspx.

In each classroom, Form A and Form B were distributed alternately (i.e., A, B, A, B) so that there would be two near-equal random samples completing each form.[22] The average completion time was 29 minutes (median=28 minutes) for secondary school students, and 31 minutes (median=30 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 that students in a classroom completed the questionnaires roughly the same time thereby reducing the likelihood of identifying drug-using students (or those reporting other sensitive behaviours o problems) who would take longer to complete additional questions.[23] 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 items. A further advantage of minimizing item branching is a reduced risk of navigational errors (i.e., students skipping ahead to the wrong question).

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

[20] Split ballot methods can not 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.

[21] Form B was not translated into French.

[22] Such distribution should result in two balanced random samples of students. An assessment of this alternate distribution showed good random characteristics, as there were few differences between the samples completing each form regarding demographics and drug use variables.

[23] A similar strategy is used in NIDA's *National Survey on Drug Use and Health* (NSDUH) (Biemer & Lyberg, 2003, p. 146).

Table 2.2 Topic Overview of the Four Questionnaire Forms Used in the 2013 OSDUHS

Grades 7 and 8 (ES)		Grades 9–12 (SS)	
Form A-ES	**Form B-ES**	**Form A-SS**	**Form B-SS**
Demographics			
age, gender, living situation, how long lived in Canada, ethno-racial identity, language spoken at home, **hours spent daily on social media**		age, gender, living situation, how long lived in Canada, ethno-racial identity, language spoken at home, **hours spent daily on social media**, hours spent weekly at part-time job	
School Life			
usual marks, attitudes about school, school transportation	usual marks, attitudes about school, school transportation, school suspensions, hours spent on homework	usual marks, attitudes about school, school transportation	usual marks, attitudes about school, school transportation, school suspensions, hours spent on homework
Family Life			
relationship with parents, parents' education, parents born in Canada, subjective socio-economic status, experience with any Children's Aid Society	relationship with parents, parents' education, parents born in Canada, subjective socio-economic status	relationship with parents, parents' education, parents born in Canada, subjective socio-economic status, experience with any Children's Aid Society	relationship with parents, parents' education, parents born in Canada, subjective socio-economic status
Drug Use			
alcohol, tobacco, cannabis, **synthetic cannabis**, OTC cough/cold medication, prescription opioid pain relievers, prescription ADHD drugs	alcohol, tobacco, smokeless tobacco, **waterpipe**, cannabis, **synthetic cannabis**, inhalants, salvia, OTC cough/cold medication, prescription opioid pain relievers, prescription ADHD drugs	alcohol, tobacco, cannabis, **synthetic cannabis**, OTC cough/cold medication, prescription opioid pain relievers, prescription ADHD drugs	alcohol, tobacco, smokeless tobacco, **waterpipe**, cannabis, **synthetic cannabis**, inhalants, salvia, OTC cough/cold medication, prescription opioid pain relievers, prescription ADHD drugs
More Drug Use			
		hallucinogens, cocaine, crack, ecstasy, heroin, methamphetamine, prescription tranquillizers, **prescription stay-awake pills**	hallucinogens, cocaine, crack, ecstasy, heroin, methamphetamine, prescription tranquillizers, **prescription stay-awake pills**, new club drugs and synthetic drugs, **electronic cigarettes**, steroids, any injection drug use
Alcohol			
first use, past month use, heavy episodic drinking, problem use	first use, past month use, heavy episodic drinking, source of alcohol, nonbeverage alcohol	first use, past month use, heavy episodic drinking, problem use, been in treatment	first use, past month use, heavy episodic drinking, source of alcohol, nonbeverage alcohol, been in treatment, **drinking games**
Cannabis			
first use, past month use, quantity used	first use, past month use	first use, past month use, quantity used, cannabis and other drug problem use	first use, past month use
Tobacco/Cigarettes			
	first use, quitting, source of cigarettes, exposure to second-hand smoke, opinions		first use, quitting, source of cigarettes, exposure to second-hand smoke, opinions
Vehicles			
been passenger with intoxicated driver, driven recreational vehicle after drinking	seatbelt use, been passenger with intoxicated driver, driven recreational vehicle after drinking	been passenger with intoxicated driver, driven recreational vehicle after drinking	seatbelt use, been passenger with intoxicated driver, driven recreational vehicle after drinking
Driving Behaviours			
		driver's licence and training, collisions, impaired driving	driver's licence and training, collisions, impaired driving, **texting and driving**

(continued…)

Grades 7 and 8 (ES)		Grades 9–12 (SS)	
Form A-ES	**Form B-ES**	**Form A-SS**	**Form B-SS**
Perceptions About Drugs, Education, and Exposure			
	availability and risk perceptions (alcohol, cigarettes, cannabis, prescription pain relievers), recall of drug education, intoxicated at school, exposure to drugs		availability and risk perceptions (alcohol, cigarettes, cannabis, prescription pain relievers, cocaine, ecstasy, LSD), recall of drug education, intoxicated at school, exposure to drugs
Physical Health			
self-rated health, physical activity, sedentary behaviour, healthy eating, energy drinks, height and weight, injuries	self-rated health, physical activity, sedentary behaviour, healthy eating, energy drinks, height and weight, injuries, body image, **use of diet pills/liquids**, doctor visits, asthma, **tanning bed use**, **helmet use**	self-rated health, physical activity, sedentary behaviour, healthy eating, energy drinks, height and weight, injuries	self-rated health, physical activity, sedentary behaviour, healthy eating, energy drinks, height and weight, injuries, body image, **use of diet pills/liquids**, doctor visits, asthma, **tanning bed use**, **helmet use**
Mental Health			
self-rated mental health, psychological distress, suicidal ideation and suicide attempt, help-seeking behaviour	self-esteem	self-rated mental health, psychological distress, suicidal ideation and suicide attempt, help-seeking behaviour, prescription medication for anxiety and/or depression	self-esteem
Other Risk Behaviours			
aggressive and other problem behaviours, bullying perpetration and victimization at school, cyberbullying, gambling activities, video gaming and problems		aggressive and other problem behaviours, bullying perpetration and victimization, cyberbullying, gambling activities and problems, video gaming and problems	
questionnaire evaluation & first three digits of postal code			

Notes: (1) bolded font indicates new topics in 2013; (2) Form A-ES and Form A-SS were translated into French.

To maximize validity and to enhance cross-study comparability, many of the OSDUHS questionnaire items were derived from international guidelines (e.g., Hibell, Adlaf, et al., 2003) and recognized student surveys such as NIDA's *Monitoring the Future* (MTF) survey,[24] the CDC's *Youth Risk Behavior Survey* (YRBS),[25] and the WHO's *Health Behaviour in School-aged Children* (HBSC) survey,[26] and have been shown to produce valid responses (Brener et al., 2002; Currie et al., 2012; Fosse & Haas, 2009; Johnston, O'Malley, Bachman, & Schulenberg, 2013; Mawani & Gilmour, 2010; May & Klonsky, 2011; 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).

Also included in the 2013 OSDUHS questionnaire were 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 10-Item Psychological Distress Scale* (K10) (Kessler et al., 2002; Kessler et al. 2003) assessing nonspecific psychological distress, and the *Problem Video Game Playing* (PVP) scale assessing problems with video gaming (Tejeiro Salguero & Morán, 2002).

All newly introduced items in the 2013 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 2013 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: 97% of students (95% of 7th graders) indicated that the questionnaire was "fairly" or "very easy" to understand; only 8% of students (9% of 7th graders) indicated that the questionnaire was "much too long"; and only 6% of students (8% 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.

Data Quality

2013 Sample Participation and Characteristics

A central objective of the OSDUHS is to generate a representative, unbiased sample of Ontario students in grades 7 through 12. The target sample size for the 2013 OSDUHS was calculated to be 11,500 students.

Schools — In total, 323 schools (267 initial selections plus 56 replacements) were invited to participate. Of these, **198 schools** (89 elementary/middle – of which six were French language – and 109 secondary – of which seven were French language) from 42 school boards participated in the survey, resulting in a school response rate of 61%. The most common reasons given by nonparticipating schools were that they were too busy, or that they had already committed to other research projects.[27] Each

[24] See http://www.monitoringthefuture.org

[25] See http://www.cdc.gov/healthyyouth/yrbs

[26] See http://www.hbsc.org

[27] During the 2012/2013 school year, Ontario experienced labour disruptions in the educational sector that likely

school that was unable to participate was replaced with a randomly selected school from the same stratum and with similar school size in order to maintain representativeness. Although we could not conduct a systematic follow-up of nonparticipating schools, we do not expect these refusals to have created appreciable bias. Our analysis showed that this group of nonparticipating schools did not discernibly differ from participating schools regarding school level (elementary/middle versus secondary). However, there was a larger proportion of public schools that refused relative to the proportion in the participating sample. Further, compared with the regional distribution of the participating schools, there were fewer refusing schools in the Northern region, and more refusals in Toronto and the Western region of the province. As we shall see, such distortions were corrected by adjustments made to the sampling weights. A further analysis was conducted to examine whether replacement schools[28] differed from initially selected schools. Results showed no significant differences between students in these two groups of schools with respect to demographics or drug use measures.

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 sector (public vs. Catholic), or 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 (Johnston et al., 2013) – a factor that is controlled for in the replacement sampling within the same region-by school level stratum. This would imply that if schools are fairly similar in drug use and other risk behaviours then which particular schools participate in the survey has a small influence on estimates.

Classes — A total of **671 classes** were recruited for the survey (259 from elementary/middle schools, 412 from secondary schools). The class participation rate was 87%. We must note that 111 classes were not randomly selected. Rather, these classes were convenient same-grade replacements, typically identified by principals, for classes that were originally selected but declined to participate for logistical reasons.[29]

Students[30] **—** Finally, of the 16,535 students enrolled in these recruited classes, 10,398 completed the survey (**63%** of students in participating classes).[31] Eleven percent (11%) were lost due to absenteeism and 26% were lost due to either unreturned consent forms or parental refusal. The sources of nonresponse vary by grade: the major source of nonresponse in the lower grades is unreturned consent or parental refusal (27%–29% in grades 7–9 versus 22% in grade 12, whereas in the upper grades absenteeism is higher than in the lower grades (15%–16% in grades 11 and 12 versus 8% in grades 7 and 8). The student response rates

contributed to the unusually high level of school refusals which otherwise average 25%-30%.

[28] Of the 198 participating schools, 41 were replacements.

[29] Statistical tests comparing randomly selected versus nonrandomly selected classes showed that only 3 of 43 drug use measures showed significant differences (with nonrandom classes showing higher prevalence). Drug use measures were also evaluated with and without the inclusion of the nonrandom classes, and results did not substantially differ. Thus, all classes remained in the final dataset.

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

[31] This shows the *unweighted* student response rate. The *weighed* student response rate is based on the sum of the product of the regional weighted distribution and regional response rate: Toronto (.178×.59) + North (.042×.63) + Sudbury (.014×.50) + West (.344×.57) + Peel Region (.124×.71) + East (.079×.69) + Ottawa (×.072×.70) + Durham Region (.059×.60) + Haliburton (.013×.65) + Leeds (.013×.62) + York Region (.062×.62) = 62%. The weighted response rate of 62% is similar to the unweighted 63% response rate.

according to the four regions presented in this report were 59% in Toronto, 56% in the North, 65% in the West, and 64% in the East.[32]

Trends in student participation — Student participation in the OSDUHS has trended downward over the long-term. Between 1977 and 2013, the student participation rate fell from 70% to 63%, with a peak in 1981–1983 at 85%. This decline is strongly associated with an increase in consent loss, which increased from 4% to 26% during this interval. In contrast, the loss due to absent students remained flat (11%–15%). While the loss due to absenteeism has remained constant 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 possible 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 generally and is not unique to the OSDUHS (de Leeuw & de Heer, 2002; Galea & Tracy, 2007; Groves et al., 2009; Porter, 2004).

Still, our student participation rate of 63% is nominally above average for a student survey employing full active parental consent (Courser, Shamblen, Lavrakas, Collins, & Ditterline, 2009; White, Hill, Effendi, 2004). For example, Health Canada's 2010/2011 *Youth Smoking Survey*, based on a combination of active and passive consent procedures, had a national student response rate of 73% yet the response rate in Ontario was appreciably lower at 56% (University of Waterloo, 2011). The US *Monitoring the Future* (MTF) survey also employs a blend of active and passive consent procedures, an active parental dissent procedure (i.e., passive consent) for all students unless a school requires active consent procedures. MTF reports student response rates of 80%–84% of 12th graders and 86%–91% of 8th and 10th graders.[33]

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; Johnson & Wislar, 2012).[34] 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.[35]

Existing research examining the impact of nonconsent on estimates of student drug use and other risk behaviours has not been conclusive. Some studies have found that students not providing parental consent are more likely to use drugs and to engage in risk behaviours than students who do provide consent (Anderman, Cheadle, Curry, & Diehr, 1995; Courser et al., 2009; White et al., 2004), whereas others have found no such differences (Eaton, Lowry, Brener, Grunbaum, & Kann, 2004; Jelsma et al., 2012).

[32] For further details about the 2013 sample selection and participation rates for the 11 regions, please see Pollard, Ornstein, and Northrup (2013).

[33] 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 US 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, participating schools in the MTF are given a substantial monetary incentive to commit to the study for two cycles.

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

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

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 and risk behaviours in classes in which the class response rate was below 70% (n=377 classes) with classes in which the class response rate was 70% or higher (n=294 classes). If students without consent are indeed "high-risk" youth, then we would expect classes with low participation to have lower prevalence estimates (less likely) of risk behaviours and problem indicators due to the greater absence of high-risk students compared with high-participation classes. We found no significant grade differences between classes with low versus high participation, however low participation classes did have fewer males. Of the 43 drug use measures compared between the two groups, only one measure showed a significant difference.[36] This suggests that students who participated in the survey were not dominantly "low-risk" youth. In sum, we have no compelling evidence that our nonresponse rate produced appreciable nonresponse bias.

By design, one group not represented by the OSDUHS sample is dropouts or 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.[37] This should serve as a reminder that readers should not attempt to extrapolate the OSDUHS findings to groups outside the target population (e.g., school leavers, homeless or institutionalized youth).

School Exiting 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,[38] there are some exceptions (e.g., illness, legal emancipation). One challenge in assessing the impact of school exiters (dropouts) on our sample lies with the differing methods of measurement and their corresponding estimates. The Ministry of Education estimates that the Ontario high school graduation rate in 2011/2012 was 83% (Ontario Ministry of Education, April 2013). However, we cannot assume that the early exit rate was 17% because some students remain in school without graduating (i.e., take more than four years to graduate). Statistics Canada, on the other hand, measures the dropout rate using the *Labour Force Survey* and found that about 5% of 16 to 17 year-olds and 7% of 18 to 19 year-olds in Ontario were not attending high school (and did not already graduate) in 2009/2010 (McMullen & Gilmore, 2010).

Because school exiters are outside our target population of enrolled students, their omission should not bias our target population estimates. It is known that school exiters are more likely to be male, Canadian-born, and live outside of large urban centres (Gilmore, 2010). However, our poststratification weight adjustments should reduce this concern. The omission of school exiters would not affect our drug use and other risk behaviours trends if the proportion remains constant from cycle to cycle. However, both the Ontario Ministry of Education and Statistics Canada indicate that the proportion of high 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 exiters does not substantially affect our trend estimates.

[36] Low participation classes had a lower estimate for past year use of salvia divinorum compared with high participation classes.

[37] Another source of sampling error would occur if recent 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.

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

Postsurvey Processing

Data editing — Consistent with previous process quality procedures, editing rules were established to enhance data quality. **Students were removed from the final dataset if they**: (1) did not report their age; (2) did not report their sex;[39] (3) reported the use of a fictitious drug;[40] (4) reported using four or five of the five core illicit drugs 40 or more times during the past year ("faking bad"); or (5) did not respond to half or more of the core substance use questions. If a case met any *one* of these criteria, then it was removed from the dataset. Note that criteria 3 and 4 address the potential bias due to overreporting drug use.[41] In 2013, only 126 cases were removed from the dataset, which is a proportion similar to past cycles. This data editing process resulted in **10,272 minimally complete cases** used in the data analyses (Form A-ES *n*=2,214 students; Form B-ES *n*=1,899 students; Form A-SS *n*=3,264 students; Form B-SS *n*=2,895 students).

Item missingness — Both the single item missing rate and the cumulated item missing rate were low, suggesting quality responding. Across the 77 core questions (i.e., items in all four questionnaire forms), the item missingness average was about 1%. In addition, there is no evidence that item nonresponse inflates with the transition from the demographic questions to the more sensitive drug use questions.[42] In this report, missing responses to questions were not statistically imputed, but were excluded on a casewise (i.e., listwise) basis for all multivariable analyses.

Poststratification — We compared the 2013 OSDUHS sample with the most current school enrolment figures from the Ministry of Education based on the 2011/2012 academic year. **Table 2.3** shows that there were slight discrepancies between the 2013 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 younger males were overrepresented, whereas in other regions older 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 eleven regional strata separately* to restore each region's demographic composition to the population composition.[43] 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.[44] **Table 2.4** shows the demographic characteristics of the final weighted sample.

[39] We contend that if students are unwilling to provide valid responses to questions about their sex or age, the data quality of their remaining responses is untrustworthy.

[40] The fictitious drug was called "adrenochromes" (also known as "wagon wheels" or "dreens").

[41] Our data suggest that any overreporting bias should be minimal given rare reports of fictitious drug use (*n*=86 cases) and of exaggerated frequent (40 or more times in the past year) multiple drug use (*n*=9 cases).

[42] For example, the demographic and background items immediately preceding the drug use items averaged an item missing rate of 0.66%. Transition to the subsequent module containing the drug use items did not appreciably alter this rate (0.91%).

[43] The sex-by-grade population distribution was not available according to each of the 11 regions, 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.

[44] After adjustment, the difference between the weighted sample and enrolment figures did not exceed 0.7 percentage points in any of the 9 poststratification classes.

Table 2.3 The 2013 OSDUHS Sample vs. Ontario 2011/2012 School Enrolment

	OSDUHS Preadjusted		Population Enrolment		OSDUHS Postadjusted	
	% Male	% Female	% Male	% Female	% Male	% Female
Grade 7	5.7	6.5	7.3	6.9	6.3	5.9
Grade 8	5.9	6.7	7.5	7.1	6.4	6.1
Grade 9	7.3	9.9	8.0	7.6	8.4	8.0
Grade 10	7.2	9.9	8.2	7.8	8.7	8.2
Grade 11	7.4	10.1	8.7	8.3	9.2	8.7
Grade 12	10.6	12.6	12.1	10.6	12.8	11.2
Total	44.2	55.8	51.8	48.2	51.8	48.2

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 982,100 students enrolled in Ontario's publicly funded schools during the 2011/2012 academic year.

Table 2.4 Sample Characteristics, 2013 OSDUHS

	Final Number (*n*)	Weighted %
Total	**10,272**	
Males	4,651	51.8
Females	5,621	48.2
Grade 7	2,100	12.2
Grade 8	2,013	12.5
Grade 9	1,537	16.4
Grade 10	1,544	17.0
Grade 11	1,574	17.9
Grade 12	1,504	24.0
Toronto	769	17.8
North	605	4.2
Sudbury District (OS)	659	1.4
West	1,205	34.4
Peel Region (OS)	2,100	12.4
East	249	7.9
Ottawa (OS)	1,272	7.2
Leeds, Grenville and Lanark District (OS)	862	1.3
Haliburton, Kawartha, Pine Ridge District (OS)	758	1.3
Durham Region (OS)	742	5.9
York Region (OS)	1,051	6.2
Public School	6,054	60.6
Catholic School	4,218	39.4

Notes: (1) OS=oversample for the public health unit/department; (2) mean age was 15.2 years (SD=1.8); (3) the 11 regional strata were mutually exclusive; (4) for the four regional estimates presented in this report, the North region includes Sudbury District (combined *n*=1,264), the West region includes Peel Region (combined *n*=3,305), and the East region includes Ottawa, Leeds District, Haliburton District, Durham Region, and York Region (combined *n*=4,934).

Data Analysis, Interpretation, and Presentation

Data Weighting

Our deliberate oversampling of students in certain regions and our equal allocation of students within grade (and the additional public health region oversamples), 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.[45]

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 figures.

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 10,272 students to represent about **982,100 Ontario students** in grades 7 through 12, while ensuring that the sample composition corresponds to the population.[46]

Sample Weights

One intuitive way of thinking of the sampling weight is that each student in the sample represents or "stands in" for 96 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 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

[45] 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).

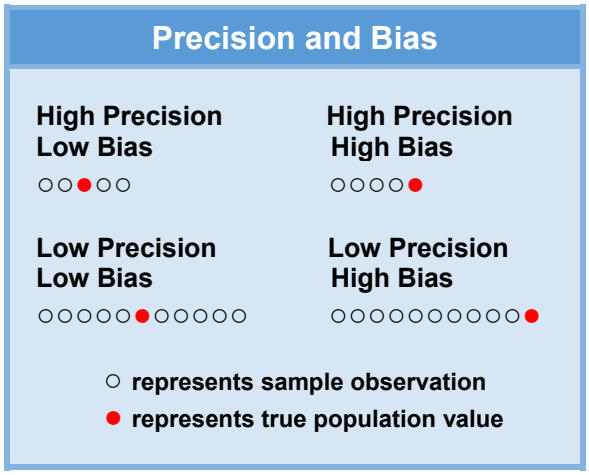
[46] The population-scaled weights range in value from 2.029 to 1461.614 (mean=95.614; median=50.147) and inflates to the population count of 982,147. The sample-scaled weight ranges in value from .0212 to 15.286 (mean=1.00; median=0.524).

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 carried a weapon in the past year was 6.0% (5.0%-7.3%), 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;[47] 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.[48] 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.



Validity of self-reports — The OSDUHS data collection features (i.e., in-class, self-completed, anonymous, voluntary) 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, Adlaf, et al., 2003; O'Malley, Johnston, Bachman, & Schulenberg, 2000; Tourangeau & Yan, 2007). We made full effort to elicit truthful responses by repeatedly

[47] 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.

[48] 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.

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 other items including demographics, aggressive and other problem behaviours, and school problems (for examples see Fischer et al., 2013; Hamilton, Danielson, Mann, & Paglia-Boak, 2012; MacKay, Paglia-Boak, Henderson, Marton, & Adlaf, 2009; Vingilis et al., 2011). 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.

- 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, Adlaf, et al., 2003; McCambridge & Strang, 2006; Meiklejohn, Connor, & Kypri, 2012; Johnston et al., 2013; Tourangeau & Yan, 2007). In addition to intentional misreporting, respondents may unintentionally misreport their responses due to various errors in the response process. Indeed, 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; Centers for Disease Control and Prevention, 1994; 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 and absenteeism remains rather constant across years (as our data show for absenteeism), then any biases in trend estimates should remain constant across time. 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 curves provides support for this assertion.

2013 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.[49]

[49] 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

All 2013 percentage and population count estimates and corresponding confidence intervals presented in this report were design-based and statistical tests were design-adjusted, i.e., accommodated for characteristics of the complex sampling (namely, stratification, clustering, weighting) using **Taylor series linearization (TSL)** available in Stata 12 (Heeringa et al., 2010; StataCorp, 2011).[50]

The 2013 OSDUHS sampling design was comprised of **20 strata** (region by school level),[51] **198 primary sampling units** (schools), and **10,272 students**. The design-based degrees of freedom (*df*) for our complex sample was 178 (*df*=198 [# school PSUs] – 20 [# 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., 2010, p. 67).[52] In addition, our negligible sampling fraction allows us to ignore the finite population correction (fpc) in our estimation.[53]

The statistical significance of subgroup (i.e., sex, grade, region) differences in 2013 was tested using bivariate second-order design-adjusted Rao-Scott Pearson chi-square tests at the $p<.05$ level of significance (Heeringa et al., 2010).

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.[54]

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, SPSSs Complex Samples module, SASs SURVEY procedures, Rs survey package, and dedicated systems including SUDAAN, WesVar, and Mplus.

[50] 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.

[51] Elementary/middle schools were not sampled in 2 of the 11 regions, resulting in 20 rather than 22 strata.

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

[53] 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 2013 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).

[54] 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., 2010; Korn & Graubard, 1999). Consequently, although observations are "removed" their strata and PSUs are not.

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.[55]

Trend Analysis

In this report, we describe three patterns of change in our data: the first describes changes between 2011 and 2013 (changes since the previous survey); the second describes recent trends from 1999 to 2013; and the third describes long-term trends from 1977 to 2013. To evaluate the time trends, a merged or "stacked" dataset was used.[56] All estimates spanning back to 1977 were accommodated for the respective survey design effects.

2013 vs. 2011 and **1999–2013 Trends —** We first evaluated changes since the previous survey (i.e., 2013 vs. 2011). 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 2013 and 2011 estimates and estimates since 1999 were based on **grades 7 through 12**.

For time trends 1999 through 2013, we assessed change with a binary-response logistic regression providing an appraisal of the cycle-to-cycle change (with 2013 contrasted to each prior survey, i.e., reference group contrasts) as well as assessing the presence of linear and nonlinear trends.[57] 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.

[55] 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.

[56] Trend analyses were conducted using a stacked dataset cumulating 19 cycles for the years 1977–2013. The dataset contains 93,253 students enrolled in 2,253 schools (stage 1 PSU clusters) distributed among 243 region-by-school level-by-year 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.

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

1991–2013 Trends — The long-term trend analyses from 1991 through 2013 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 2013 contrasted to each prior survey, i.e., reference group contrasts) and a joint test of the presence of any change between 1991 and 2013. 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.

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.

- 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, 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.

- For multi-item measures and screeners (e.g., the *K10, SOGS-RA, PVP*), we report the alpha reliability coefficient which measures the internal consistency of the scale – the degree to which the items are strongly interrelated and thus measure the same construct.

- 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[58] (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.

[58] 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 2013 OSDUHS Method and Sample Summary

2013 OSDUHS Method and Sample Summary	
Design	▪ Target sample consisted of 7th–12th graders enrolled in publicly funded English and French language schools (public and Catholic school sectors) in Ontario during the 2012/2013 school year. Students excluded as being out-of-scope were those in private schools, those schooled in correctional or health facilities, those schooled on First Nations reserves, military bases, those schooled in the remote areas of Northern Ontario, and those who were home-schooled. ▪ Sample selected by a 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 design component (4 regions × 2 school levels) and an optionally-sponsored public health oversample (7 regions × 2 school levels), resulted in a combined total of 20 (22-2) region-by-school level strata (elementary/middle schools were not sampled in 2 of the 11 regions). ▪ Within each stratum, schools were selected by systematic random sampling according to PPS using the 2009/2010 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	▪ 10,398 of 7th–12th graders sampled from 198 schools, 671 classes, and who provided active parental consent and student assent, completed questionnaires from Nov. 2012 to June 2013 ▪ 61% of selected schools, 87% of selected classes, and 63% of students in participating classes participated in the survey ▪ The **final (edited) sample of 10,272 students** is representative of the 982,100 7th to 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.
Student Characteristics	▪ Males (n=4,651; 52% weighted); Females (n=5,621; 48% weighted) ▪ 7th graders (n=2,100; 12%); 8th graders (n=2,013; 13%); 9th graders (n=1,537; 16%); 10th graders (n=1,544; 17%); 11th graders (n=1,574; 18%); 12th graders (n=1,504; 24%). ▪ Toronto (n=769; 18%); North (n=1,264; 6%); West (n=3,305; 47%); East (n=4,934; 30%).
Data Quality	▪ Data editing rules were applied, resulting in 126 'incomplete' or 'untrustworthy' questionnaires removed from the final dataset. ▪ Nonresponse analysis comparing classes with response rates of 70% or higher to classes with lower rates showed no significant differences in most of the drug use 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 made to correspond to the Ministry of Education's 2011/2012 enrolment for sex-by-grade groupings. ▪ The complex sample analysis model is based on a design with 198 primary sampling unit clusters (schools), 671 secondary sampling unit clusters (classes) distributed among 20 region-by-school level strata. For analysis, only stage 1 primary sampling units (schools) and strata were necessary to approximate the two-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 7 days of physical activity (defined as a total of at least 60 minutes of moderate-to-vigorous activity per day) during the 7 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 7 days before the survey
Screen Time Sedentary Behaviour	Reporting watching TV and/or on a computer for recreational purposes for 3 hours or more per day, on average, during the 7 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 *International Obesity Task Force*, based on self-reported height and weight
Asthma Diagnosis	Reporting currently having asthma, as diagnosed by a doctor or nurse. Those who reported "not sure" remained in the analysis and were classified as "no diagnosis."
No Physician Health Care Visit	Reporting no visits to a doctor for physical health reasons, not even for a check-up, during the 12 months before the survey
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"
Low Self-Esteem	Reporting positively (low esteem) to all 5 of 5 items selected from the Rosenberg Self-Esteem Scale
Psychological Distress	Scoring at least 22 of 50 (Likert scoring) on the *Kessler-10 Psychological Distress Scale* (K10). The K10 scale measures unspecified psychological distress (symptoms of anxiety and/or depression) experienced during the past 4 weeks. Those scoring 22 or higher were classified as having a moderate to high level of psychological distress.
Suicidal Ideation	Reporting having seriously considered suicide during the 12 months before the survey
Antisocial Behaviour (Index)	Reporting at least 3 of the following 9 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
Fire Setting Behaviour	Reporting setting something on fire (that they were not supposed to) at least once during the 12 months before the survey
Carried a Weapon	Reporting carrying a weapon, such as a gun, knife, or club, at least once during the 12 months before the survey
Bullying Victim (at School)	Reporting being bullied at school since September in any one of the following manners: 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 manners: verbally, physically, or stealing/damaging something of theirs
Cyberbullying Victim	Reporting being bullied 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 "not bullied."
Any Gambling Activity	Reporting gambling money at any gambling activity during the 12 months before the survey
Multi-Gambling Activity	Reporting gambling money at 5 or more gambling activities during the 12 months before the survey
Gambling Problem	Reporting at least 2 of 6 symptoms selected from the *South-Oaks Gambling Screen Revised for Adolescents* (abbreviated SOGS-RA6), which measures problems due to gambling during the 12 months before the survey
Video Gaming Problem	Reporting at least 5 of the 9 items on the *Problem Video Game Playing (PVP) Scale*, which measures problems with preoccupation, tolerance, and disruption to school/family due to video gaming during the 12 months before the survey

Table 2.7 Outline of Topics Presented by Survey Year

	1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013
3.1 Home & School Life												
Family Living Arrangement	•	•	•	•	•	•	•	•	•	✓	✓	✓
Relationship with Parents	•	•	•	•	•	•	•	•	•	✓[B]	✓[B]	✓[B]
Part-Time Employment[±]	•	•	•	•	•	•	•	•	•	•	•	✓[B]
Social Media Use	•	•	•	•	•	•	•	•	•	•	•	✓
School Performance and Attitudes	✓	✓	✓	✓	✓	✓[B]	✓[B]	✓[B]	✓[B]	✓[B]	✓[B]	✓[B]
School Suspensions	•	•	•	•	•	•	•	✓	✓	✓[B]	✓[B]	✓[B]
School Climate	•	•	•	•	✓	✓	✓	✓	✓	✓	✓	✓
3.2 Physical Health												
Self-Rated Physical Health	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Asthma Diagnosis	•	•	•	•	•	•	•	•	•	•	✓[B]	✓[B]
Physical Activity	•	•	•	•	•	•	•	•	•	✓	✓	✓
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]
Use of Diet Pills, Powders, Liquids	•	•	•	•	•	•	•	•	•	•	•	✓[B]
Use of an Indoor Tanning Device	•	•	•	•	•	•	•	•	•	•	•	✓[B]
Medically Treated Injury	•	•	•	•	•	•	✓[A]	✓[A]	✓[B]	✓[B]	✓[B]	✓[B]
Helmet Use While Bicycling	•	•	•	•	•	•	•	•	•	•	•	✓[B]
Seatbelt Use	•	•	•	•	•	•	•	•	•	•	✓[B]	✓[B]
Texting While Driving	•	•	•	•	•	•	•	•	•	•	•	✓[B]
Vehicle Collision as a Driver	•	•	•	•	•	•	•	•	•	•	✓[B]	✓[B]
3.3 Health Care Utilization												
Physician Health Care Visit	•	•	•	•	✓	✓	✓	✓	✓	✓	✓[B]	✓[B]
Mental Health Care Visit	•	•	•	•	✓	✓	✓	✓	✓	✓	✓[A]	✓[A]
Medical Tranquillizer/Sedative Use[±]	✓	✓	✓	✓	✓	✓	✓[B]	✓[A]	✓[A]	✓[A]	✓[A]	✓
Medical ADHD Drug Use	•	•	•	•	•	•	•	•	✓	✓	✓	✓
Medical Opioid Pain Reliever Use	•	•	•	•	•	•	•	•	✓	✓	✓	✓
Prescription for Depression/Anxiety[±]	•	•	•	•	•	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]
Sought Counselling Over the Phone	•	•	•	•	•	•	•	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]
Sought Counselling Over the Internet	•	•	•	•	•	•	•	•	•	•	✓[A]	✓[A]
Unmet Need for Mental Health Support	•	•	•	•	•	•	•	•	•	•	•	✓[A]

(cont'd)

	1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013
3.4 Internalizing Indicators												
Self-Rated Mental Health	•	•	•	•	•	•	•	•	✓[A]	✓[A]	✓[A]	✓[A]
Low Self-Esteem	•	•	•	•	•	•	•	•	•	•	•	✓[B]
Psychological Distress (K10 screener)	•	•	•	•	•	•	•	•	•	•	•	✓[A]
Suicidal Ideation	•	•	•	•	•	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]
Suicide Attempt	•	•	•	•	•	•	•	•	✓[A]	✓[A]	✓[A]	✓[A]
3.5 Externalizing Indicators												
Nonviolent Antisocial Behaviour	✓	✓	✓	✓[B]	✓[B]	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]
Fire Setting Behaviour	•	•	•	•	•	•	•	•	✓[A]	✓[A]	✓[A]	✓[A]
Violent/Aggressive Behaviour	✓	✓	✓	✓[B]	✓[B]	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]
Violence on School Property	•	•	•	•	•	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]
Bullying Behaviour at School	•	•	•	•	•	•	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]
Victim of Cyberbullying	•	•	•	•	•	•	•	•	•	•	✓[A]	✓[A]
3.6 Gambling & Video Gaming												
Gambling Activities	•	•	•	•	•	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]
Gambling Problems (SOGS-RA)[±]	•	•	•	•	✓[B]	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]	✓[A]
Video Gaming Problems (PVP scale)	•	•	•	•	•	•	•	•	✓[B]	✓[B]	✓[A]	✓[A]
3.7 Coexisting Problems[±]	•	•	•	•	•	•	•	•	•	•	•	✓[A]
3.8 Overview by LHIN Areas[±]	•	•	•	•	•	•	•	•	•	•	•	✓
3.9 Overview of the GTA	•	•	•	•	•	•	•	•	•	•	•	✓

• 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

3.1.1 Family Living Arrangement

Family structure is an important influence on child and youth development. Indeed, family structural factors, such as an "intact" family – defined by the presence of two (or more) parents (including a stepparent) – can increase or decrease the economic, emotional and cognitive resources available to children, thereby affecting their well-being (Gore, Aseltine, & Colton, 1992; Mohanty & Ullah, 2012; Paxton, Valois, & Drane, 2007; Simons, Lin, Gordon, Conger, & Lorenz, 1999; Wells & Rankin, 1991).

Between 1993 and 1995, family living arrangement was measured with the question "*Do you currently live with both parents?*" In 1997, this was revised to "*With whom are you currently living?*" Starting in 2007, the question was further revised to "*Which of the following adults live with you in your main home?*" Students 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. We also queried whether the student lives in a single home, or divides their living between two or more homes.

2013 (Grades 7–12):

- An estimated 18.3% (95% CI: 16.8%-20.0%) of students 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).
- About 12.3% (95% CI: 11.1%-13.5%) of students report that they divide their time between two or more homes.

3.1.2 Relationship with Parents

Parents are a primary influence on children's lives, although as children become adolescents peers increasingly play an influential role. Nevertheless, the relationship quality between young people and their parents remains a significant factor in healthy psychosocial development.

We use three questions to assess the quality of relationships between adolescents and their parents. Students were asked how well they are getting along with their mother, how well they are getting along with their father, and whether one of their parents knows their whereabouts when away from home – an indicator of parental monitoring.

2013 (Grades 7–12):

- Roughly 4.4% (95% CI: 3.5%-5.6%) of students report not getting along with their mother, and 6.5% (95% CI: 5.6%-7.4%) report not getting along with their father.
- Most students (92.3%; 95% CI: 91.2%-93.2%) report that at least one parent "always" or "usually" knows where they are when away from home.

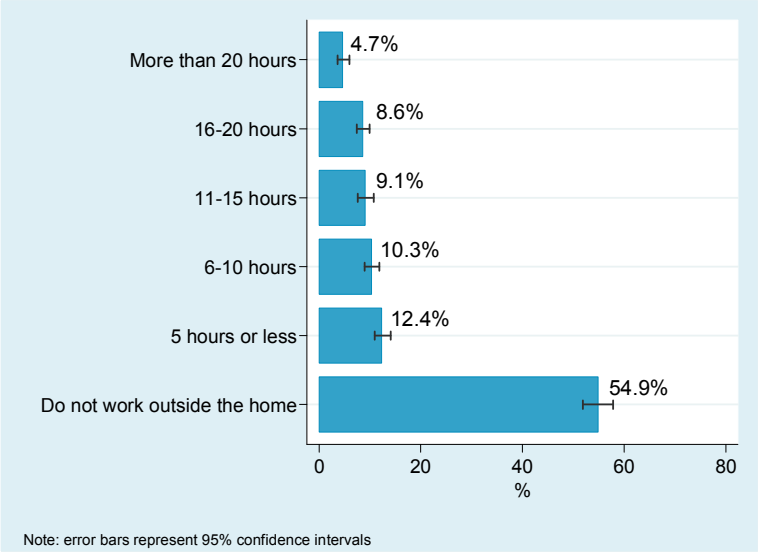
3.1.3 Part-Time Employment
(Figure 3.1.1)

A random half sample of secondary students was 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?*"

2013 (Grades 9–12):

- Most students (54.9%) in grades 9–12 do not work outside of the home. About 12.4% work five hours or less per week outside of the home, while 4.7% work more than 20 hours per week.

Figure 3.1.1
Hours Per Week Work Outside the Home, 2013 OSDUHS
(Grades 9–12, n=2,895)



Note: error bars represent 95% confidence intervals

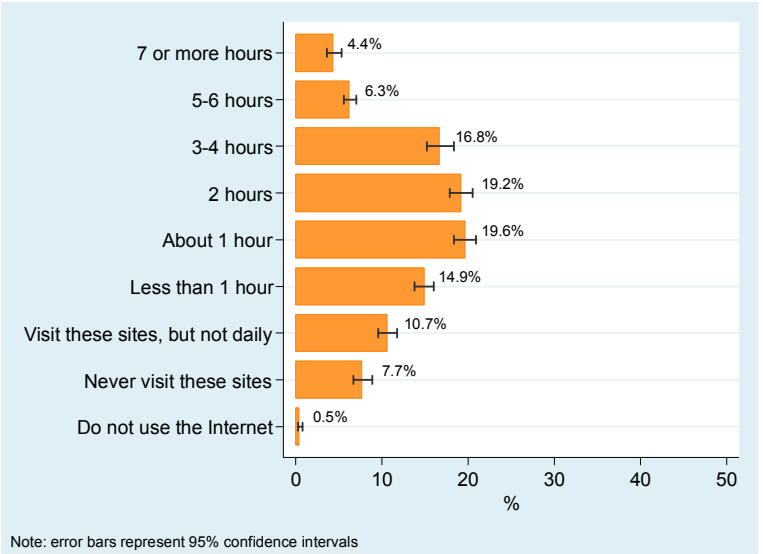
3.1.4 Social Media Use
(Figure 3.1.2)

All students were asked how many hours daily they usually spend on social media websites, with the question: "*About how many hours a day do you usually spend on social media websites such as Facebook, Twitter, MySpace, Instagram, either posting or browsing?*"

2013 (Grades 7–12):

- Most students visit social media websites on a daily basis. About 14.9% spend less than 1 hour daily on these sites, whereas about 4.4% spend seven or more hours daily.

Figure 3.1.2
Hours Per Day Spent on Social Media, 2013 OSDUHS
(Grades 7–12, n=10,272)



Note: error bars represent 95% confidence intervals

3.1.5 School Performance and Attitudes (Figure 3.1.3; Table A3.1.1)

School is one of the major socialization agents in adolescent development. In addition to academics, school fosters social skills, a personal sense of competence, all of which influence current and future health-related behaviours.

Starting in 1991, the OSDUHS introduced a set of questions about students' school experiences including school grades usually received, time spent on homework, and how much students like school. Since 2001, this module has been asked of a random half sample of students.

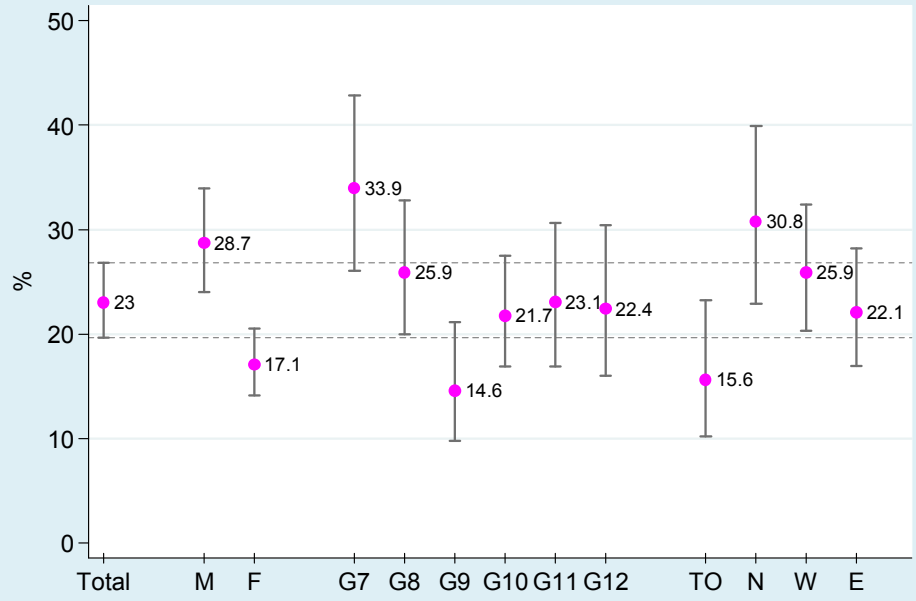
2013 (Grades 7–12):

- Overall, 11% of students report usually receiving school grades of 90% or higher; 41% report grades between 80% and 89%; 37% report grades between 70% and 79%; 10% report grades between 60% and 69%; and about 1% report usually receiving grades below 60%.
- About one-quarter (23.0%) of students spend less than one hour on homework per week, outside of school. One-in-seven (14.1%) students report spending seven hours or more on homework weekly, outside of school.
- Just under half (44.1%) of students report liking school very much or quite a lot. In contrast, one-in-seven (14.6%) report not liking school very much or at all.

1999–2013 (Grades 7–12):

- The percentage of students who report usually receiving grades of 80% or higher significantly increased between 1999 (37.8%) and 2013 (52.1%).
- Between 1999 and 2013, the percentage of students reporting that they spend less than an hour on homework outside of school did not significantly change.
- As seen in **Table 3.1.1**, more students in 2013 (44.1%) report that they like school very much or quite a lot than students surveyed in 1999 (29.6%).

Figure 3.1.3
Percentage Reporting Usually Spending Less Than One Hour on Homework Weekly Outside of School by Sex, Grade, and Region, 2013 OSDUHS (n=4,794)



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

3.1.6 School Suspensions

Starting in 2005, students were asked how many times they were suspended from school since September. We present the percentage reporting being suspended **at least once**.

- An estimated 3.9% (95% CI: 2.6%-5.7%) of students report being suspended from school at least once during the 2012/2013 school year.
- Males are much more likely than females to report a school suspension (6.4% vs. 1.2%, respectively).
- There are no significant differences among the grades.
- There are no significant differences among the four regions.

2005–2013 (Grades 7–12):

- The estimated percentage of student suspended from school at least once in 2013 (3.9%) is statistically similar to the estimate from 2011 (5.5%), but significantly lower than the estimate from 2005 (8.0%), the first year of monitoring.

3.1.7 School Climate

(Figures 3.1.4, 3.1.5; Tables 3.1.1, A3.1.2)

School climate is a multidimensional construct, usually referring to the physical, organizational, and cultural elements of a school. Examples of school climate characteristics include school size, policies and enforcement, teaching quality, student misconduct, and attachment to school. School climate can influence not only academic performance, but also skill development, social behaviour, and emotional well-being (Bond et al., 2007; Bonny et al., 2000; Saab & Klinger, 2010; Welsh, 2000).

Starting in 1999, the OSDUHS asked students to indicate their agreement on a five-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*

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**.

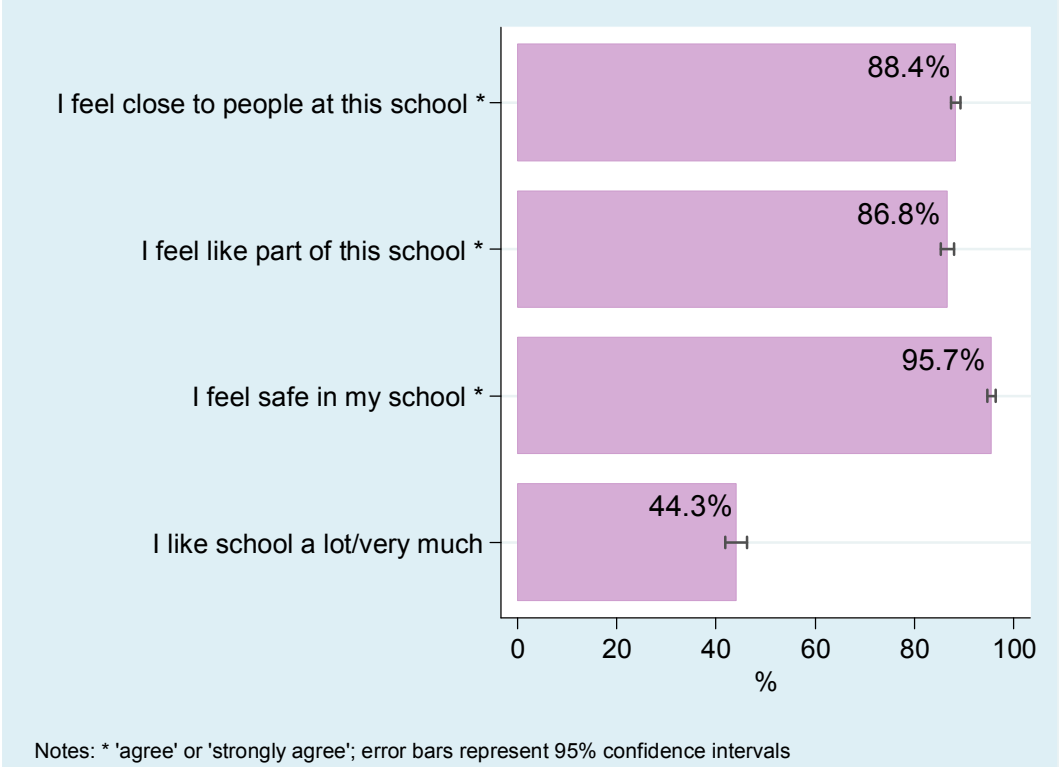
2013 (Grades 7–12):

- Most students feel close to people at their school (88.4%), and feel like they are part of their school (86.8%).
- Although virtually all students (95.7%) generally feel safe in their school, 15.4% – an estimated 150,800 Ontario students – are worried about being harmed, threatened, or being a victim of theft at school.
- Females (16.9%) are significantly more likely than males (13.9%) to express worry about being harmed or threatened at school.
- Younger students are more likely than older students to express worry (e.g., 19.1% of 7th graders vs. 11.5% of 12th graders).
- There are no significant regional differences.

1999–2013 (Grades 7–12):

- As seen in **Table 3.1.1**, the percentage of students reporting that they are worried about being harmed or threatened at school did not significantly change between 2011 (18.2%) and 2013 (15.4%). The 2013 estimate is also similar to that found in 1999 (14.2%), the first year of monitoring. No subgroup shows a significant change between 1999 and 2013.

Figure 3.1.4
Attitudes About School, 2013 OSDUHS (Grades 7–12, n=10,272)



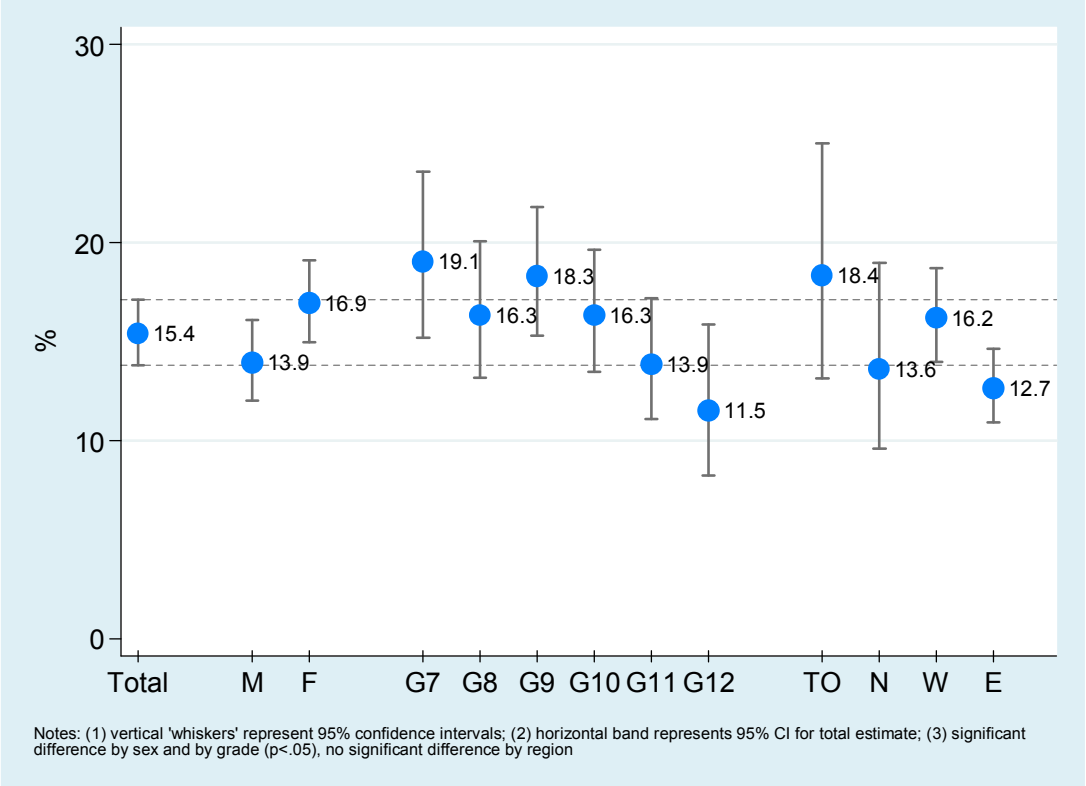
Notes: * 'agree' or 'strongly agree'; error bars represent 95% confidence intervals

Table 3.1.1 Attitudes About School, 1999–2013 (Grades 7–12)

	1999	2001	2003	2005	2007	2009	2011	2013
TOTAL SAMPLE (*n*=)	(4447)	(3898)	(6616)	(7726)	(6323)	(9112)	(9288)	(10272)
I feel close to people at this school*	85.4	87.8	86.9	88.7	89.7	89.3	91.2	88.4
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
I feel safe in my school*	90.4	91.4	90.9	92.6	92.7	93.8	95.6	95.7
Like school very much or quite a lot	29.6	26.8	28.3	30.6	33.3	35.5	44.1	44.3 [b]
Worried that will be harmed/threatened at school	14.2	13.1	12.4	12.8	11.7	12.3	18.2	15.4

Notes: n=number of students surveyed; entries are percentages; * "agree" or "somewhat agree" with the statement; no significant differences 2013 vs. 2011; [b] 2013 vs. 1999 significant difference, p<.01.
Source: OSDUHS, Centre for Addiction and Mental Health

Figure 3.1.5
Percentage Expressing Worry About Being Harmed, Threatened, or a Victim of Theft at School by Sex, Grade, and Region, 2013 OSDUHS (n=10,272)



Notes: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal band represents 95% CI for total estimate; (3) significant difference by sex and by grade (p<.05), no significant difference 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, global self-rated 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 describe the percentage of students who rate their health as **fair or poor**.

2013 (Grades 7–12):

- About two-thirds of Ontario students rate their health as either excellent (25.4%) or very good (40.3%). At the risk end, 7.0% report fair or poor health. This estimate represents roughly 68,100 Ontario students.
- Males (7.1%) and females (6.9%) are equally likely to report fair or poor health.
- Fair or poor self-rated health does not significantly vary by grade.
- There are no significant differences among the four regions.

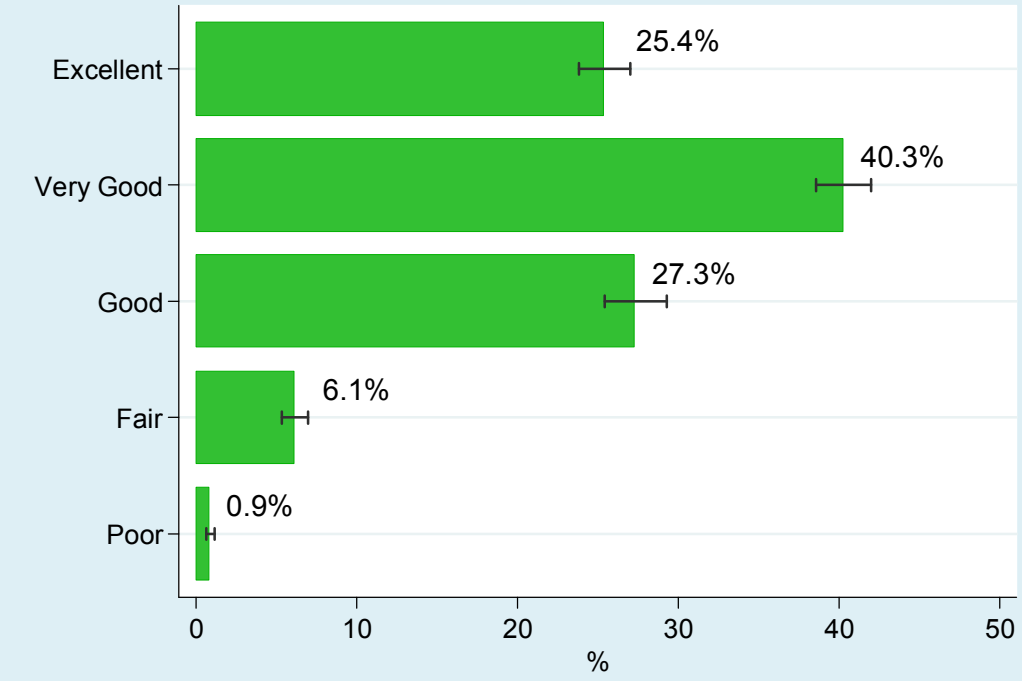
1999–2013 (Grades 7–12):

- Among the total sample of students, fair/poor self-rated health significantly decreased between 2011 (15.6%) and 2013 (7.0%). The drop since the last survey is evident among all subgroups, except 7th and 8th graders.
- The percentage rating their health as fair/poor significant increased between 1999 (8.9%) and 2011 (15.6%), and subsequently declined in 2013 (7.0%). The current estimate is significantly lower than that found in 1999.

1991–2013 (Grades 7, 9, 11 only):

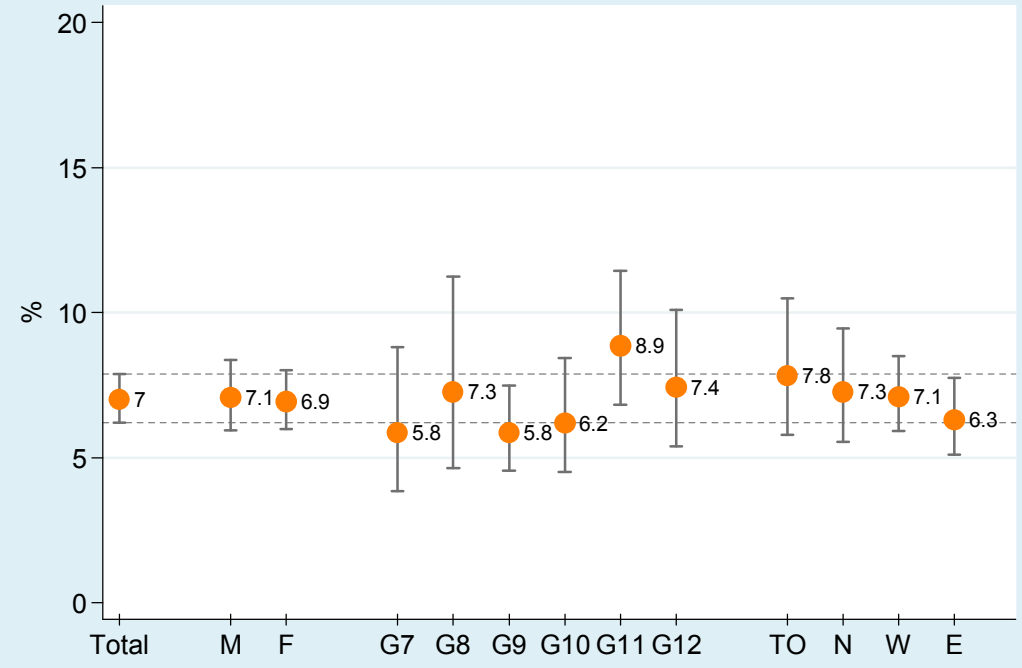
- Among 7th, 9th, and 11th graders only, fair/poor self-rated health increased from a low of 5.8% in 1991 to 12.0% in 2003 and remained elevated and stable until 2011. The estimate shows a significant decline in 2013, returning to a low level seen when monitoring first began over two decades ago.

Figure 3.2.1
Self-Rated Physical Health, 2013 OSDUHS (Grades 7–12, n=10,272)



Note: error bars represent 95% confidence intervals

Figure 3.2.2
Percentage Reporting Fair or Poor Physical Health by Sex, Grade, and Region, 2013 OSDUHS (n=10,272)



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

3.2.2 Asthma Diagnosis

(Figure 3.2.3)

The prevalence of asthma among children and adolescents is typically twice that of adults, and there is some evidence to suggest that it has increased over time (Gershon, Guan, Wang, & To, 2010).

Starting in 2011, a random half sample of students was asked whether they have had an asthma diagnosis. The question was "*Has a doctor or nurse ever told you that you have asthma?*" The response options were: *No*; *Yes, I have asthma now*; *Yes, I used to have asthma, but not anymore*; or *Not sure*. Here we present the percentage who reported that they **currently have asthma**.

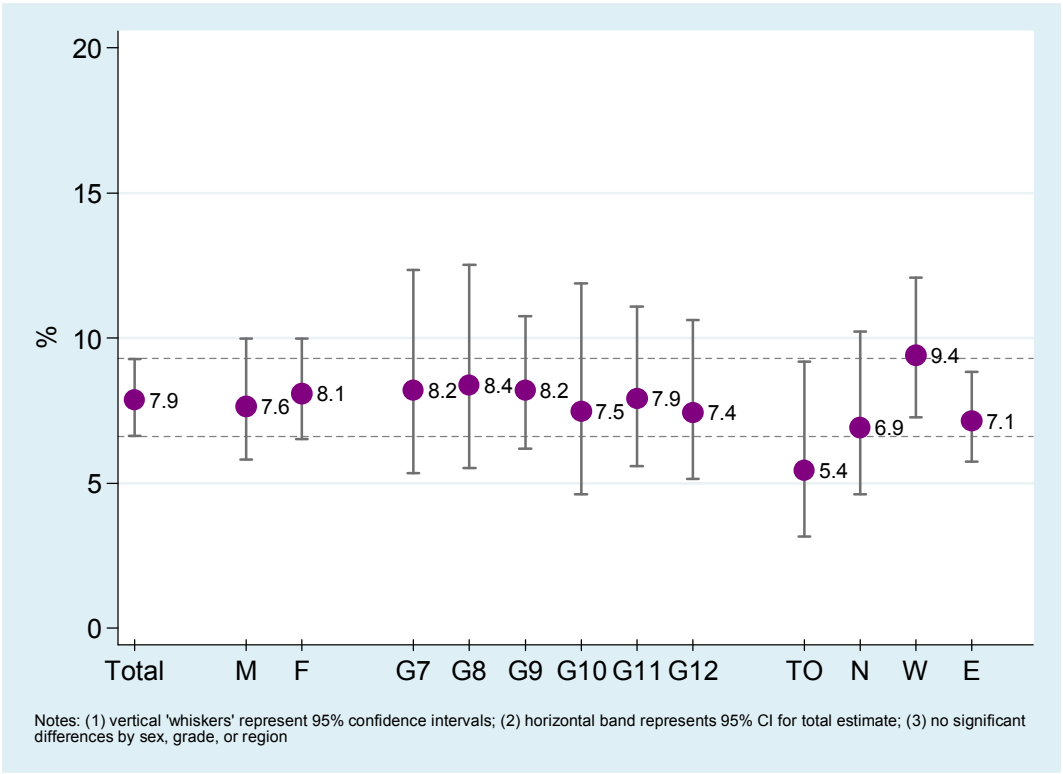
2013 (Grades 7–12):

- An estimated 7.9% (95% CI: 6.6%-9.3%) of students currently have asthma. This estimate represents about 69,800 Ontario students in grades 7–12.
- Males (7.6%) and females (8.1%) are equally likely to report currently having asthma.
- There is no significant grade variation.
- There is no significant regional variation.

2013 vs. 2011 (Grades 7–12):

- The percentage of students who report having a current asthma diagnosis in 2013 (7.9%) does not significantly differ from the percentage seen in 2011 (9.0%; 95% CI: 7.0%-11.3%).

Figure 3.2.3
Percentage Reporting a Current Asthma Diagnosis by Sex, Grade, and Region, 2013 OSDUHS (n=4,794)



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

3.2.3 Daily Physical Activity

(Figure 3.2.4; Table A3.2.2)

Regular physical activity offers short-term physical and mental health benefits, such as reducing the risk of obesity and stress, and improving self-esteem (Faulkner et al., 2007; Ferreira et al., 2007; Petty, Davis, Tkacz, Young-Hyman, & Waller, 2009). Moreover, an active lifestyle established during adolescence is likely to extend into adulthood (Singh et al., 2008). In Canada, a minimum of 60 minutes of moderate-to-vigorous physical activity per day is recommended for children and youth (Janssen, 2007).

Starting in 2009, students were asked to report on how many 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.*" In this section, we describe the percentage of students who reported meeting the 60-minute daily recommendation on **each of the past seven days**.

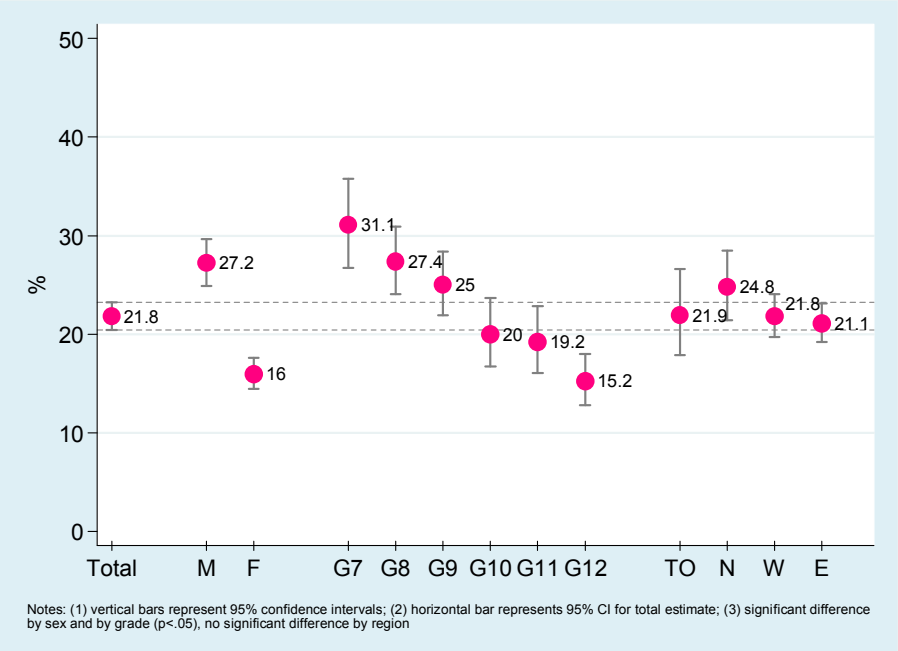
2013 (Grades 7–12):

- About one-fifth (21.8%) of students report meeting the 60-minute daily activity recommendation. This estimate represents about 211,400 Ontario students.
- Males (27.2%) are significantly more likely than females (16.0%) to be active daily.
- Sixty-minute daily physical activity significantly decreases with grade, from 31.1% of 7th graders to 15.2% of 12th graders.
- There are no significant differences among the four regions.

2009–2013 (Grades 7–12):

- There has been no significant change in the percentage of 7th–12th graders meeting the daily physical activity recommendation between 2009 (20.8%) and 2013 (21.8%).
- No subgroup shows a significant change between 2009 and 2013.

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, 2013 OSDUHS (n=10,272)



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

3.2.4 Physical Inactivity

(Figure 3.2.5; Table A3.2.3)

This section describes the percentage of students who reported **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.

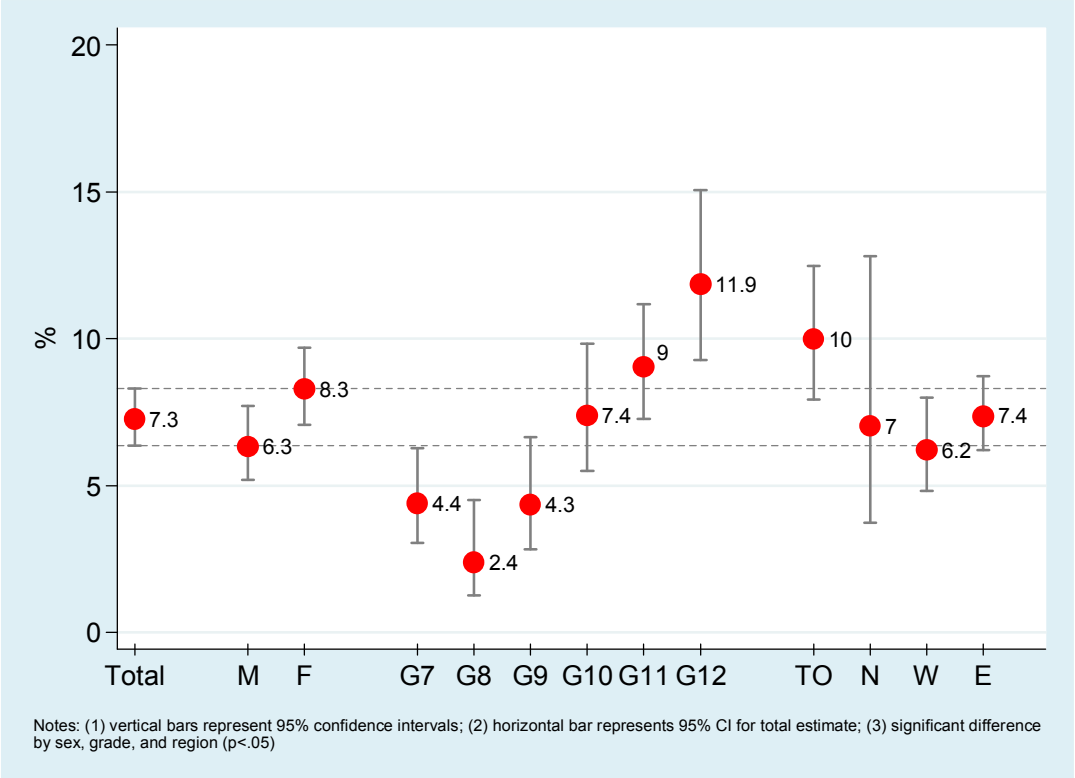
2013 (Grades 7–12):

- An estimated 7.3% of students were physically inactive on each of the seven days before the survey. This estimate represents about 70,500 Ontario students.
- Females (8.3%) are significantly more likely than males (6.3%) to be inactive.
- Inactivity significantly increases with grade, peaking in 12th grade at 11.9%.
- Students in Toronto (10.0%) are more likely to be inactive than students in the other three regions (about 6%–7%).

2009–2013 (Grades 7–12):

- There has been no significant change in the percentage of students who are inactive between 2009 (8.5%) and 2013 (7.3%).
- No subgroup shows a significant change between 2009 and 2013.

Figure 3.2.5
Percentage Reporting No Physical Activity on Any of the Past Seven Days by Sex, Grade, and Region, 2013 OSDUHS (n=10,272)



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

3.2.5 Physical Inactivity at School

(Figures 3.2.6, 3.2.7; 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.

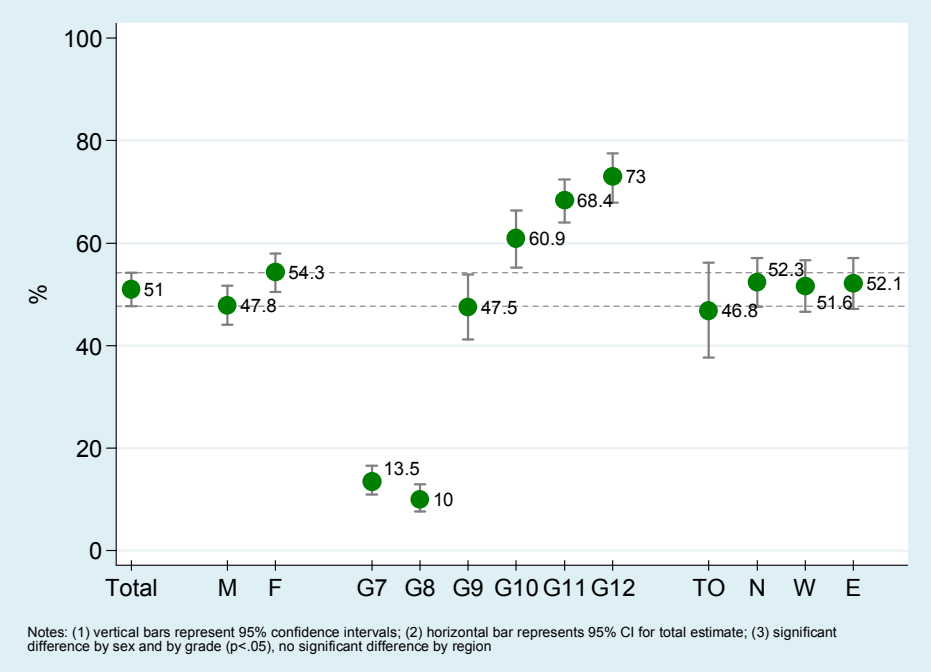
2013 (Grades 7–12):

- Half (51.0%) of all students do not engage in physically activity in a PE class.
- Females are significantly more likely than males to be inactive at school (54.3% vs. 47.8%, respectively).
- Inactivity at school significantly increases with grade, from about 10%–13% among 7th and 8th graders to 73.0% among 12 graders.
- There are no significant regional differences.

1999–2013 (Grades 7–12):

- The percentage of students in 2013 (51.0%) who report being physically inactive at school in a PE class is similar to the percentage found in 2011 (48.1%). However, more students in 2013 report being inactive at school than did students in 1999 (43.8%).
- Among the subgroups, inactivity at school significantly increased over the past decade or so among females, 11th graders, and students in the Eastern region. However, students in grades 7 and 8 show a significant *decrease* in inactivity at school over the past decade (from 30.0% in 1999 to 13.5% in 2013 among 7th graders; from 23.9% in 1999 to 10.0% in 2013 among 8th graders).

Figure 3.2.6
Percentage Reporting No Physical Activity at School in Physical Education Class on Any of the Past Five School Days by Sex, Grade, and Region, 2013 OSDUHS (n=10,272)



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

Figure 3.2.7
Percentage Reporting No Physical Activity at School in Physical Education Class on Any of the Past Five School Days, 1999–2013 OSDUHS (Grades 7–12)

3.2.6 Screen Time Sedentary Behaviour (Figure 3.2.8; Table A3.2.5)

Starting in 2009, students were asked about the usual amount of time they spend in front of a computer or television (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, playing video/computer games, on a computer chatting, emailing, or surfing the Internet?*" The Canadian Society for Exercise Physiology's *Canadian Sedentary Behaviour Guidelines for Children and Youth* recommend that youth aged 12–17 limit recreational screen time to no more than two hours per day (Tremblay et al., 2011). Here we present the percentage who are considered to be sedentary based on reporting **three or more hours a day** of screen time.

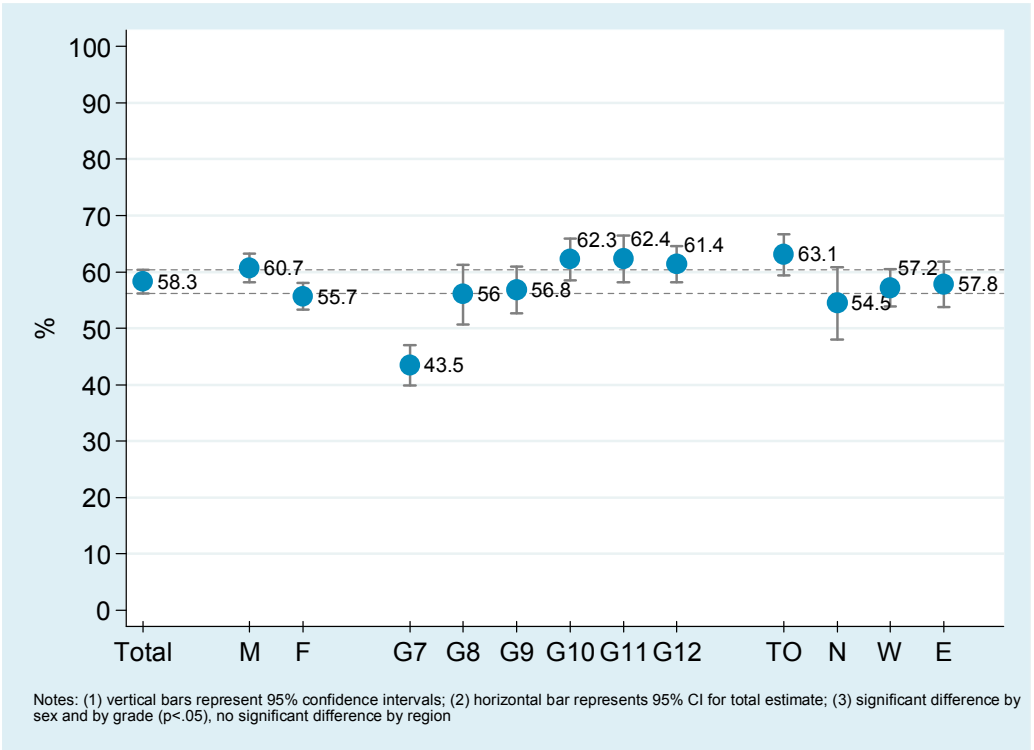
2013 (Grades 7–12):

- Over half (58.3%) of students spend at least three hours a day on recreational screen time. This estimate represents about 542,500 Ontario students in grades 7–12. At the extreme end, 10.4% report seven or more hours a day, representing about 96,600 students.
- Males (60.7%) are significantly more likely than females (55.7%) to spend at least three hours a day in front of a screen.
- There is significant grade variation showing that 7th graders (43.5%) are least likely to be screen time sedentary.
- There are no significant differences among the four regions.

2009–2013 (Grades 7–12):

- The percentage of students who are screen time sedentary in 2013 (58.3%) is similar to the percentage found in 2011 (60.0%) and in 2009 (57.4%), the first year of monitoring.

Figure 3.2.8
Percentage Reporting Three or More Hours Per Day of Recreational Screen Time (Sedentary Behaviour) During the Past Seven Days by Sex, Grade, and Region, 2013 OSDUHS (n=10,272)



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

3.2.7 Overweight or Obese

(Figures 3.2.9, 3.2.10; Table A3.2.6)

Studies have shown that Canadian children and adolescents today are more likely to be overweight or obese than their counterparts were decades ago (Shields, 2006; Tremblay et al., 2010). Moreover, the prevalence of childhood-adolescent obesity in Canada is one of the highest internationally (Currie et al., 2012). This is a public health concern because obesity during childhood significantly increases the likelihood of obesity during adulthood, a host of illnesses, and premature mortality (Cali & Caprio, 2008; Reilly, 2006). Furthermore, youth who are overweight/obese are more likely to experience concurrent psychosocial difficulties, such as low self-esteem, bully victimization, or frequent substance use (Farhat, Iannotti, & Simons-Morton, 2010; Zametkin, Zoon, Klein, & Munson, 2004).

Since 2007, the OSDUHS has asked students to report their current height and weight, using precoded response options.[59] Using the mid-point of the responses, body mass index (BMI) was calculated as weight in kilograms divided by height in metres squared.[60] Students without valid height or weight responses (n=635, or 6.2% of the total sample) were excluded from the analysis. BMI is the most commonly used indicator to measure adiposity status among children and adolescents. The age-by-sex specific BMI cut-off points created by Cole and colleagues (2000), and recommended by the *International Obesity Task Force*, were used. 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).

2013 (Grades 7–12):

- An estimated 9.5% (95% CI: 8.5%-10.6%) of students are classified as underweight; 65.5% (63.8%-67.1%) are a healthy weight; 18.1% (16.8%-19.4%) are overweight, and 7.0% (6.2%-7.9%) are classified as obese.
- An estimated 25.1% of students are either overweight or obese. This percentage represents about 233,300 7th–12th graders in Ontario.
- Males (28.9%) are significantly more likely than females (21.0%) to be overweight or obese.
- There is significant grade variation, with students in grades 10 and 11 (about 28%–29%) more likely to be overweight or obese than students in grades 7 and 8 (about 21%–22%).
- There is significant regional variation showing that students in the North (31.9%) are most likely to be overweight or obese, and students in Toronto (21.6%) are least likely.

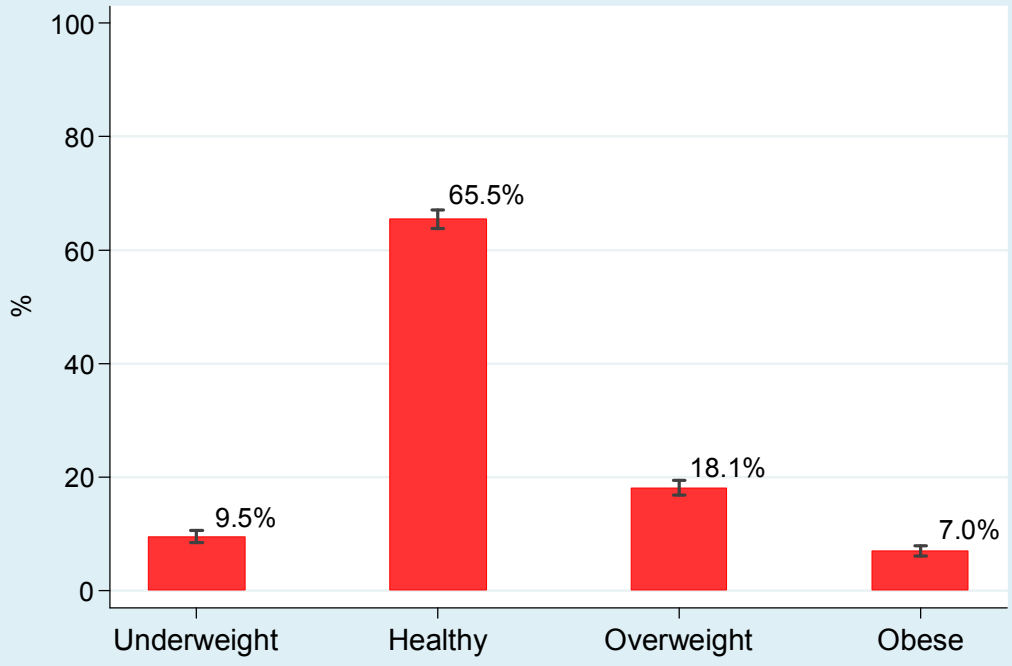
2007–2013 (Grades 7–12):

- The percentage of Ontario students who were classified as overweight or obese did not significantly change between 2007 (23.2%) and 2013 (25.1%). No subgroup shows a significant change during this period.

[59] 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*.

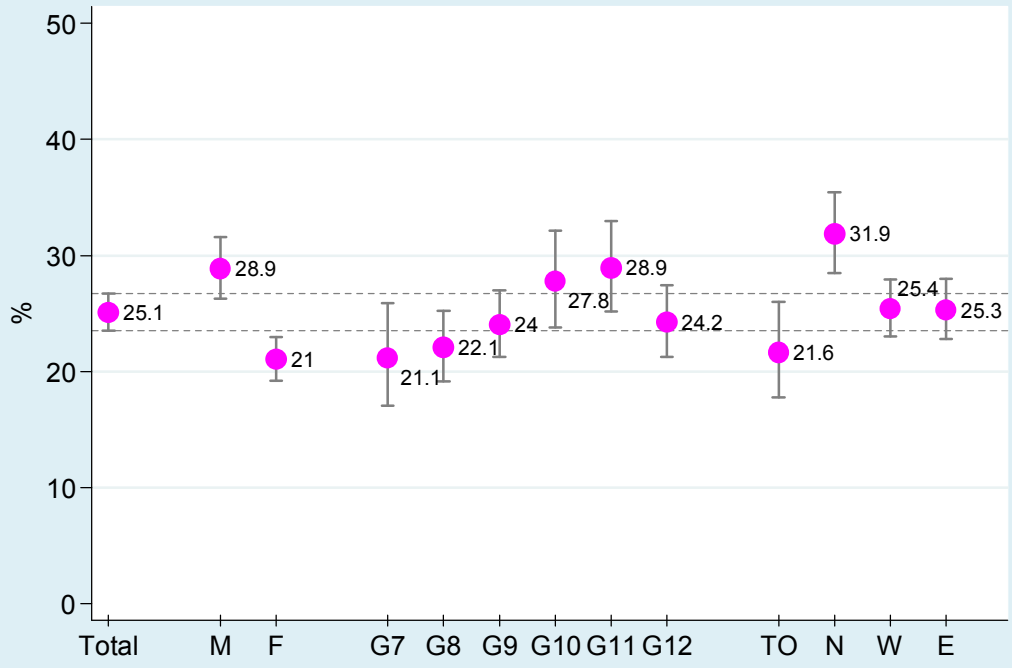
[60] Using the "zanthro" module in *Stata* 12.0.

Figure 3.2.9
Percentage Classified as Underweight, Healthy Weight, Overweight, and Obese, 2013 OSDUHS (Grades 7–12, n=10,272)



Note: error bars represent 95% confidence intervals

Figure 3.2.10
Percentage Classified as Overweight or Obese by Sex, Grade, and Region, 2013 OSDUHS (n=10,272)



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)

3.2.8 Body Image and Weight Control

(Figures 3.2.11, 3.2.12; Table A3.2.7)

The issues surrounding body image and weight become increasingly prominent during the adolescent years. Teenagers, especially females, can become preoccupied with achieving an "ideal" body, which can subsequently cause physical and mental health problems. In the extreme, a fixation on body image can lead to eating disorders such as anorexia nervosa or bulimia.

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?"*

2013 (Grades 7–12):

- Two-thirds (64.7%) of students are satisfied with their weight. One-quarter (23.6%) believe they are too fat, and one-tenth (11.8%) believe they are too thin.
- Females are significantly more likely than males to believe that they are too fat, (32.3% vs. 15.2%, respectively), whereas males are more likely than females to believe that they are too thin (15.9% vs. 7.5%, respectively).
- Satisfaction with weight does not significantly vary by grade level.
- One-third (33.8%) of students are not trying to alter their weight. Another 29.7% are attempting to lose weight, 22.7% want to keep from gaining weight, and 13.8% want to gain weight.
- Females are nearly twice as likely as males to report they are trying to lose weight (38.8% vs. 21.1%, respectively), whereas males are more likely than females to report that they are trying to gain weight (21.7% vs. 5.5%, respectively).
- The desire to change one's weight significantly differs by grade, but the direction is dependent on the sex of respondents. Among males, attempts to gain weight increase with grade, from about 9% of 7th graders to 35% of 12th graders. In contrast, among females, attempts to lose weight significantly increase with grade, from 29% of 7th graders to 44% of 12th graders.

2001–2013 (Grades 7–12):

- Since 2001, and especially 2007, there has been a significant increase in the percentage who believe they are "too fat" (from 18.7% in 2001 to 23.6% in 2013). Among the subgroups, this increase is evident for females (from 23.6% in 2001 to 32.3% in 2013) and for 7th graders (from 11.8% to 21.2%).
- There have been no significant changes over time regarding weight control efforts.

Figure 3.2.11
Body Image and Weight Control by Sex, 2013 OSDUHS (Grades 7–12, n=4,794)

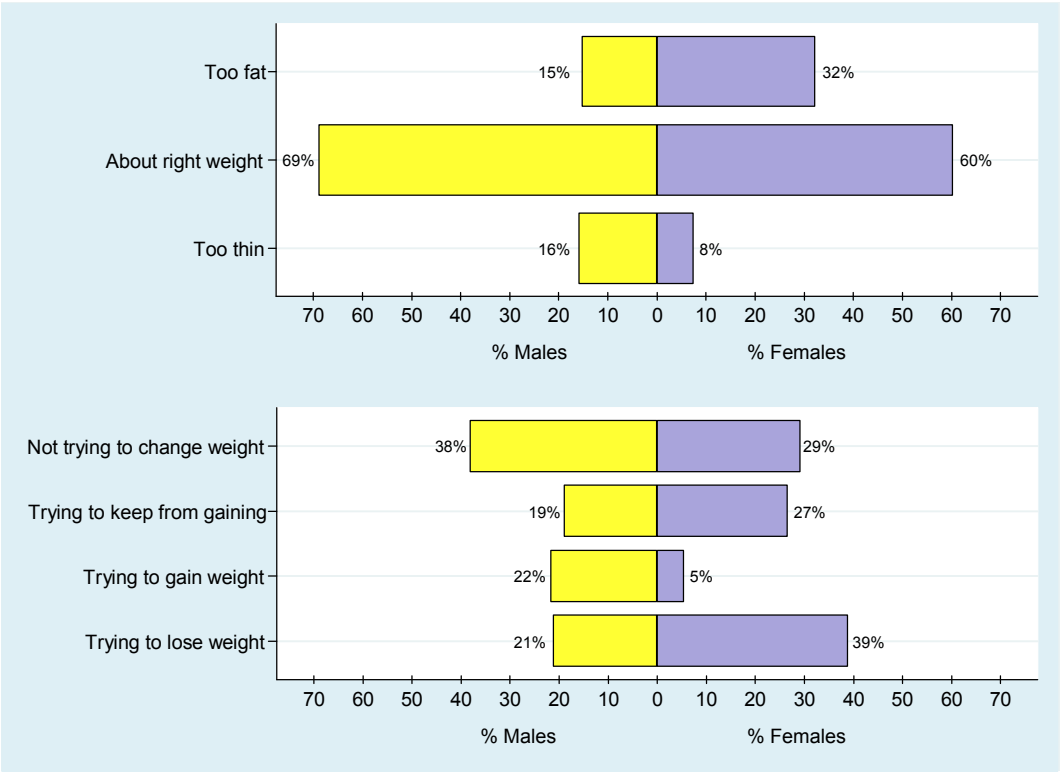
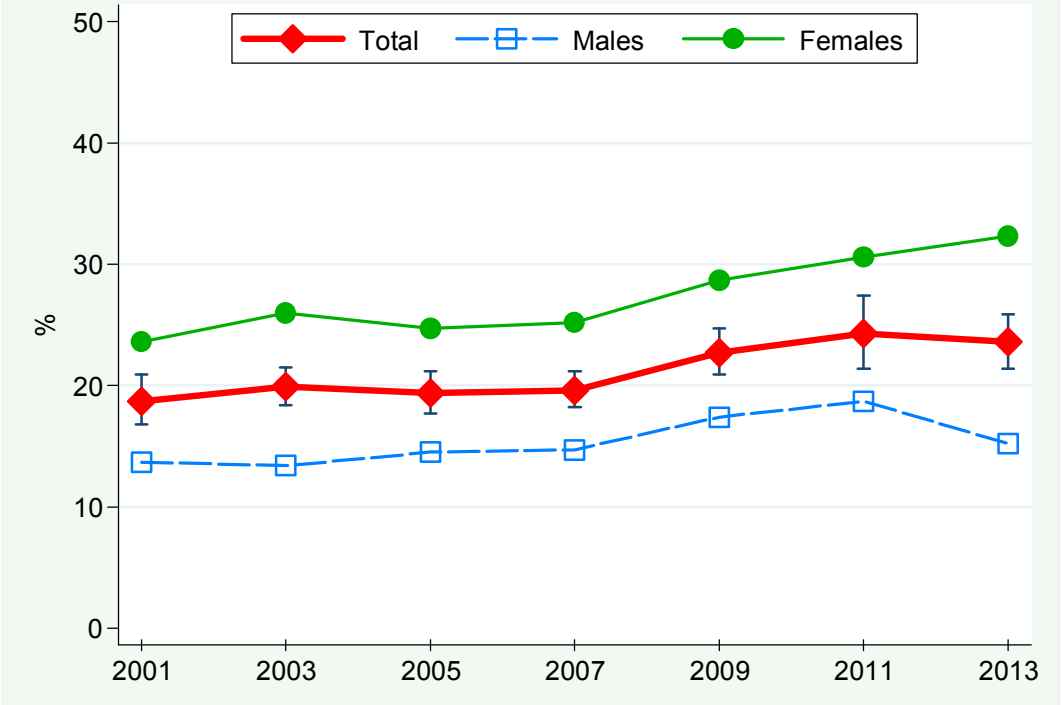


Figure 3.2.12
Percentage Reporting the Belief That They are “Too Fat” by Sex, 2001–2013 OSDUHS (Grades 7–12)



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

3.2.9 Use of Diet Pills or Other Diet Aids Without a Doctor's Advice

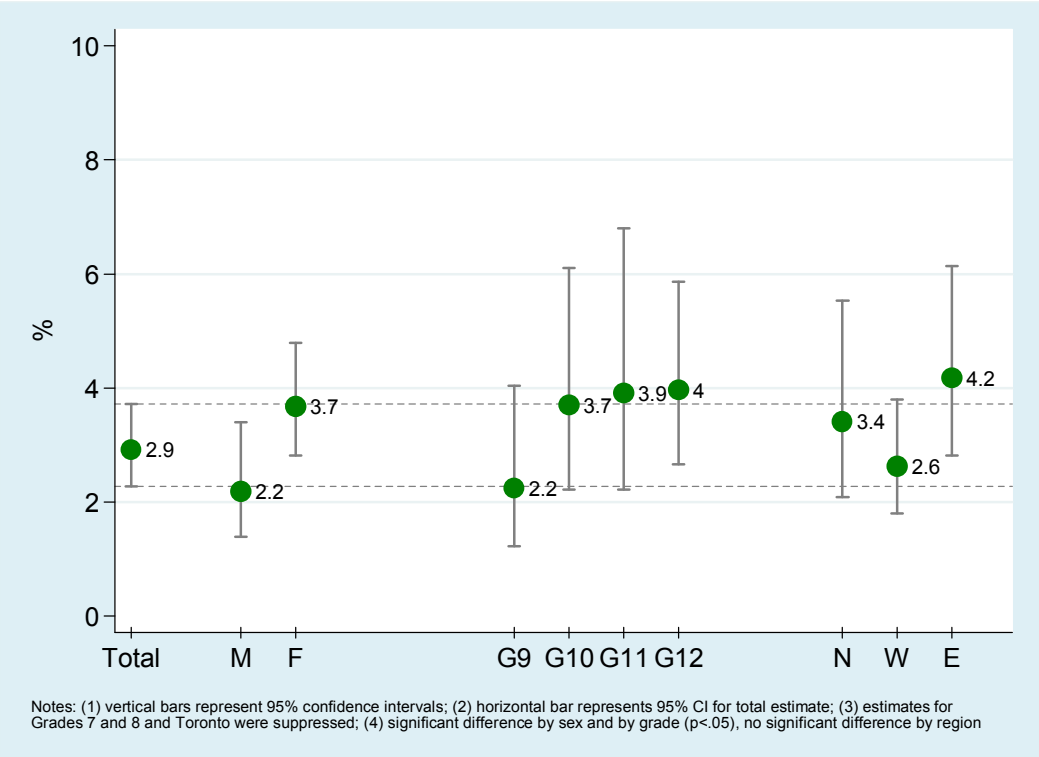
(Figure 3.2.13)

For the first time in 2013, a random half sample of students was asked about their use of diet pills other diet aids to lose weight or keep from gaining weight in the past year. The question was *"In the last 12 months, have you taken any diet pills, powders, or liquids without a doctor's advice to lose weight or to keep from gaining weight? (Do not include meal replacement products such as Slim Fast.)*" The response options were *yes* or *no*.

2013 (Grades 7–12):

- An estimated 2.9% (95% CI: 2.3%-3.7%) of students report using diet pills, powders, or liquids without a doctor's advice to lose weight or keep from gaining weight in the past year. This estimate represents about 25,800 students in grades 7 through 12.
- Females are significantly more likely than males to report using diet pills or other aids without a doctor's advice (3.7% vs. 2.2%, respectively).
- There is significant grade variation showing that the 9th graders (2.2%) are least likely to use diet pills or other aids.
- There are no significant differences among the four regions.

Figure 3.2.13
Percentage Reporting Using Diet Pills, Powders, or Liquids Without a Doctor's Advice to Lose Weight or Keep from Gaining Weight in the Past Year by Sex, Grade, and Region, 2013 OSDUHS (n=4,794)



Notes: (1) vertical bars represent 95% confidence intervals; (2) horizontal bar represents 95% CI for total estimate; (3) estimates for Grades 7 and 8 and Toronto were suppressed; (4) significant difference by sex and by grade (p<.05), no significant difference by region

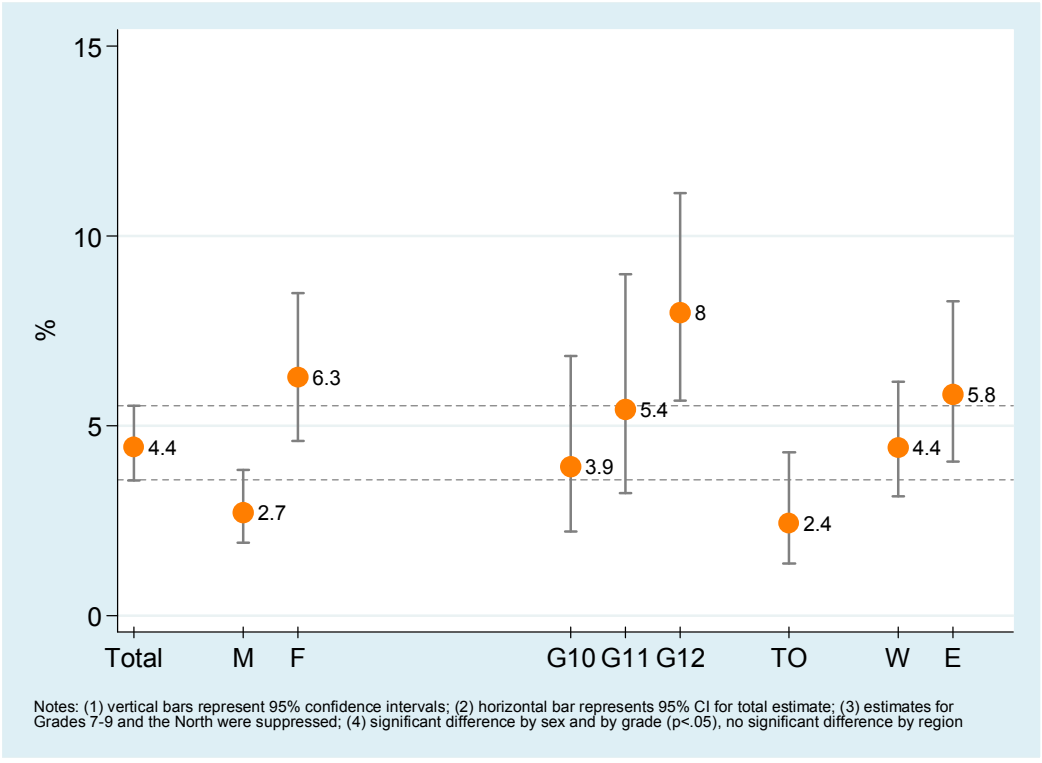
3.2.10 Use of an Indoor Tanning Device (Figure 3.2.14)

For the first time in 2013, a random half sample of students was asked about using an indoor tanning device. The question was "*In the last 12 months, how often did you use an indoor tanning device such as a sunlamp, sunbed, or tanning booth? (Do not include getting a spray-on tan or tanning cream.)*" Response options ranged from one or two times up to 40 or more times. Students also had the options of responding that they did not use in the past 12 months or never used in lifetime. Here we describe the percentage of students using **at least once** in the past year.

2013 (Grades 7–12):

- An estimated 4.4% (95% CI: 3.6%-5.5%) of students report using an indoor tanning device such as a sunlamp, sunbed, or tanning booth at least once in the past year. This estimate represents about 39,700 students in grades 7 through 12 in Ontario. About 8.0% (95% CI: 6.7%-9.5%) of students report using an indoor tanning device in their lifetime.
- Females are twice as likely as males to report using an indoor tanning device at least once in the past year (6.3% vs. 2.7%, respectively).
- There is significant grade variation, with 12th graders (8.0%) most likely to report using an indoor tanning device.
- There are no significant differences among the four regions.

Figure 3.2.14
Percentage Reporting Using an Indoor Tanning Device (Sunlamp, Sunbed, Tanning Booth) at Least Once in the Past Year by Sex, Grade, and Region, 2013 OSDUHS (n=4,794)



Notes: (1) vertical bars represent 95% confidence intervals; (2) horizontal bar represents 95% CI for total estimate; (3) estimates for Grades 7-9 and the North were suppressed; (4) significant difference by sex and by grade (p<.05), no significant difference by region

3.2.11 Medically Treated Injury

(Figures 3.2.15, 3.2.16; Table A3.2.8)

Injuries are the leading causes of death of children and adolescents in Canada (Pan et al., 2007; Public Health Agency of Canada, 2009). Starting in 2003, the OSDUHS asked a random half sample of students whether they experienced medically treated injuries during the past year. The question used 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 five ordinal count response options were: *Not treated for an injury in the last 12 months; One time; 2 times; 3 times;* or *4 or more times*.

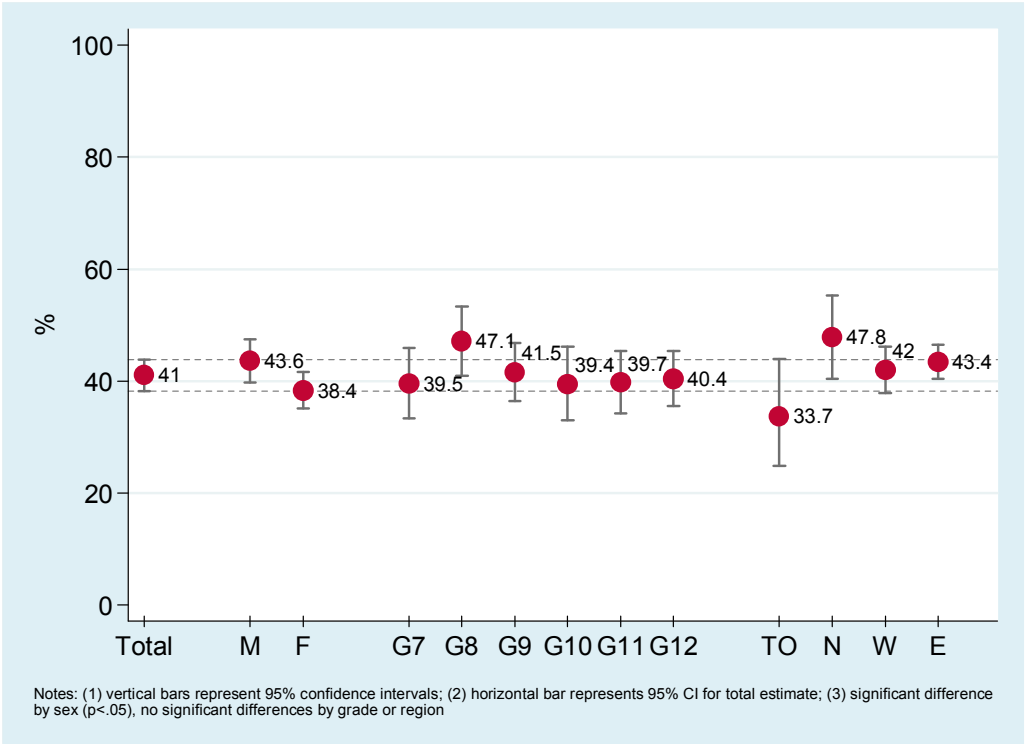
2013 (Grades 7–12):

- An estimated 41.0% of all students were treated for an injury at least once in the 12 months before the survey. This percentage represents about 364,600 students across Ontario. More specifically, 20.0% were treated for an injury once in the past year, 12.0% were treated twice, 4.7% were treated three times, and 4.3% four or more times.
- Males (43.6%) are significantly more likely than females (38.4%) to report a medically treated injury at least once in the past year.
- There are no significant grade differences.
- Despite some variation, there are no significant differences among the four regions.

2003–2013 (Grades 7–12):

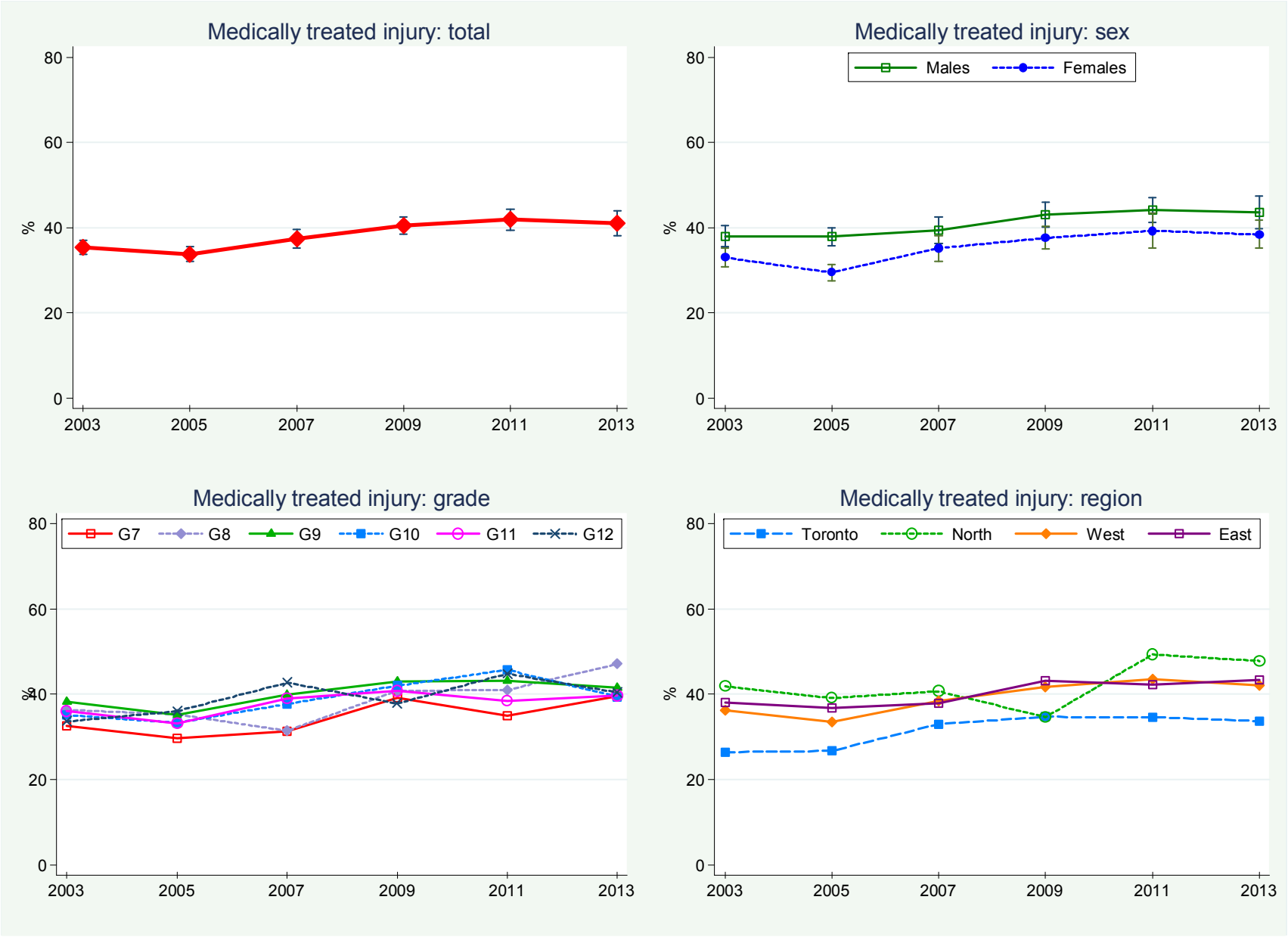
- The percentage of students sustaining a medically treated injury in 2013 (41.0%) is similar to the estimate from 2011 (41.9%). However, there has been an upward trend during the past decade and the current estimate is significantly higher than the estimate from 2003 (35.4%), the first year of monitoring.
- Among the subgroups, males, females, and 8th graders show significantly higher estimates in 2013 compared with their respective estimates from 2003.

Figure 3.2.15
Percentage Reporting a Medically Treated Injury in the Past Year by Sex, Grade, and Region, 2013 OSDUHS (n=4,794)



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 3.2.16
Percentage Reporting a Medically Treated Injury in the Past Year, 2003–2013 OSDUHS (Grades 7–12)



3.2.12 Bicycle Helmet Use

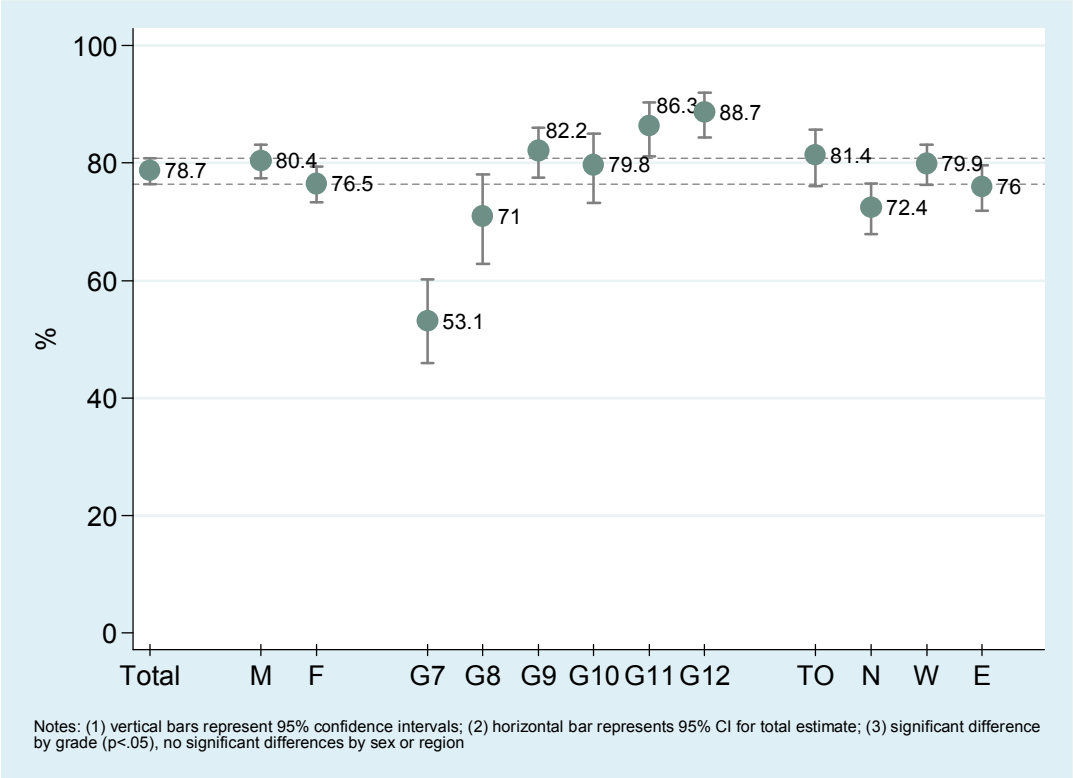
(Figure 3.2.17)

For the first time in 2013, the OSDUHS asked a random half sample of students how often they wear a helmet while bicycling. The question was "*In the last 12 months, how often did you wear a helmet while riding a bicycle?*" The response options were: *Did not ride a bicycle in the last 12 months*, *All of the time*, *Most of the time*, *Some of the time*, *Rarely*, or *Never*. Here, we describe the percentage who reported that they **do not always** wear a helmet while they bicycle among students who reported that they rode a bicycle in the past year (76% of all students, n=3,676).

2013 (Grades 7–12):

- Over three-quarters (78.7%; 95% CI: 76.4%-80.8%) of bicyclists in grades 7–12 report that they do not always wear a helmet. This estimate represents about 535,800 students in Ontario. Looking at the extreme end, 52.7% of bicyclists report that they rarely or never wear a helmet (representing 358,800 students).
- Male (80.4%) and female (76.5%) cyclists are equally likely to report that they do not always wear a helmet.
- There is significant grade variation showing that older students are most likely to report not always wearing a helmet while bicycling.
- There is no significant regional variation.

Figure 3.2.17
Percentage Who Rode a Bicycle in the Past Year Reporting Not Always Wearing a Helmet by Sex, Grade, and Region, 2013 OSDUHS (n=3,676)



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

3.2.13 Seatbelt Use

(Figure 3.2.18)

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 **do not always** wear a seatbelt when they are in a vehicle.

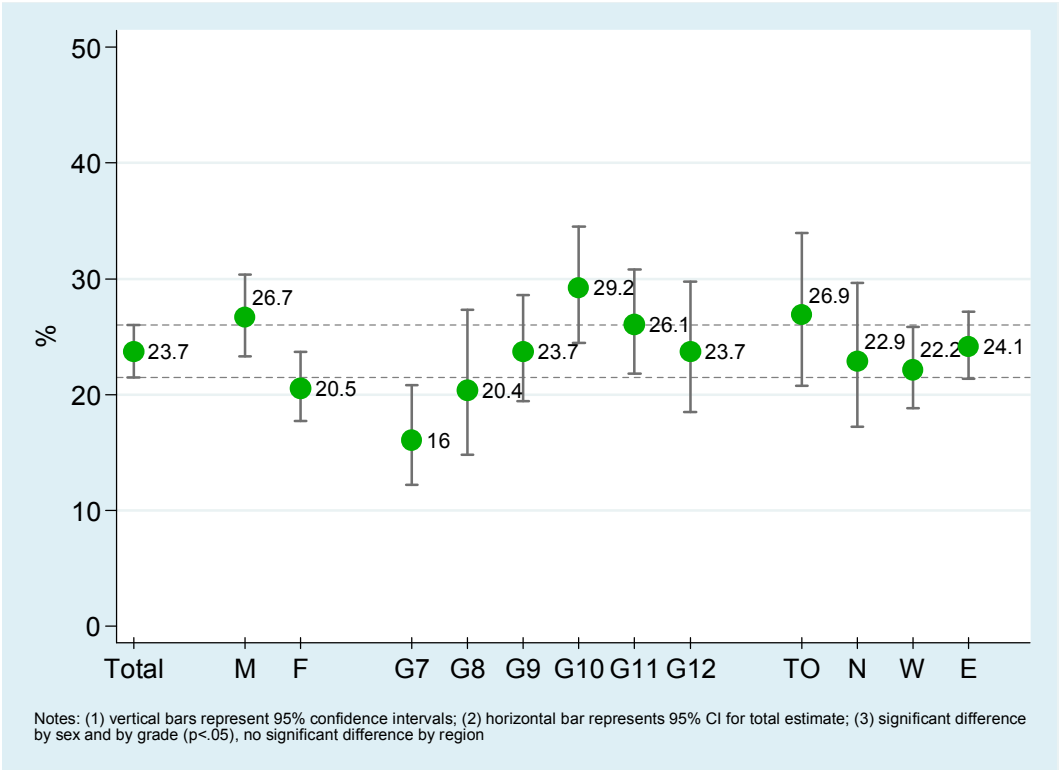
2013 (Grades 7–12):

- An estimated 23.7% (95% CI: 21.5%-26.0%) of students in grades 7–12 report they do not always wear a seatbelt. This estimate represents about 214,300 students in Ontario. Looking at the extreme end, 1.7% of students report that they rarely or never wear a seatbelt (representing 15,100 students).
- Males (26.7%) are significantly more likely than females (20.5%) to report that they do not always wear a seatbelt.
- There are significant grade differences showing that students in grades 10 and 11 are most likely to report not always wearing a seatbelt.
- There are no significant regional differences.

2013 vs. 2011 (Grades 7–12):

- The percentage of students who reported not always wearing a seatbelt in 2013 (23.7%) is significantly lower than the percentage found in 2011 (28.4%; 95% CI: 25.9%-31.0%), the first year of monitoring.

Figure 3.2.18
Percentage Reporting Not Always Wearing a Seatbelt When in a Vehicle by Sex, Grade, and Region, 2013 OSDUHS (n=4,794)



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

3.2.14 Texting While Driving

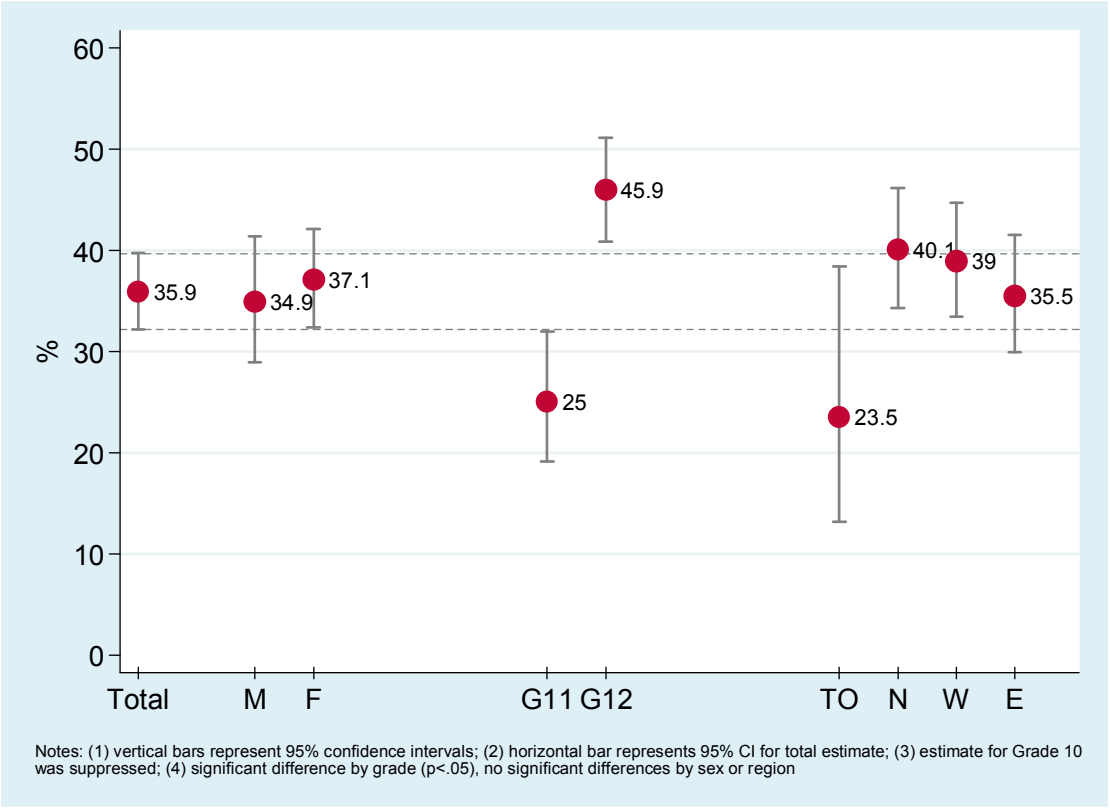
(Figure 3.2.19)

For the first time in 2013, the OSDUHS asked a random half sample of students in grades 9–12 about texting and driving. The question was "*In the last 12 months, how often did you type a text or email to someone 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.

2013 (Drivers in Grades 10–12):

- Among drivers in grades 10–12, just over one-third (35.9%; 95% CI: 32.2%-39.7%) report texting while driving at least once in the past year. This estimate represents about 107,900 adolescent drivers in Ontario.
- Male drivers (34.9%) and female drivers (37.1%) are equally likely to report texting while driving at least once in the past year.
- There is a significant difference by grade showing that 12th graders (45.9%) are most likely to text while they drive.
- Despite some variation, there are no significant regional differences.

Figure 3.2.19
Percentage of Drivers in Grades 10–12 Reporting Texting While Driving at Least Once in the Past Year by Sex, Grade, and Region, 2013 OSDUHS (n=1,139)



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 difference by grade (p<.05), no significant differences by sex or region

3.2.15 Vehicle Collision as a Driver

(Figure 3.2.20)

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 often 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?*" The response options were: *No driver's licence of any type*, *Never*, *Once*, *2 times*, *3 times*, or *4 or more times*. We describe 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.

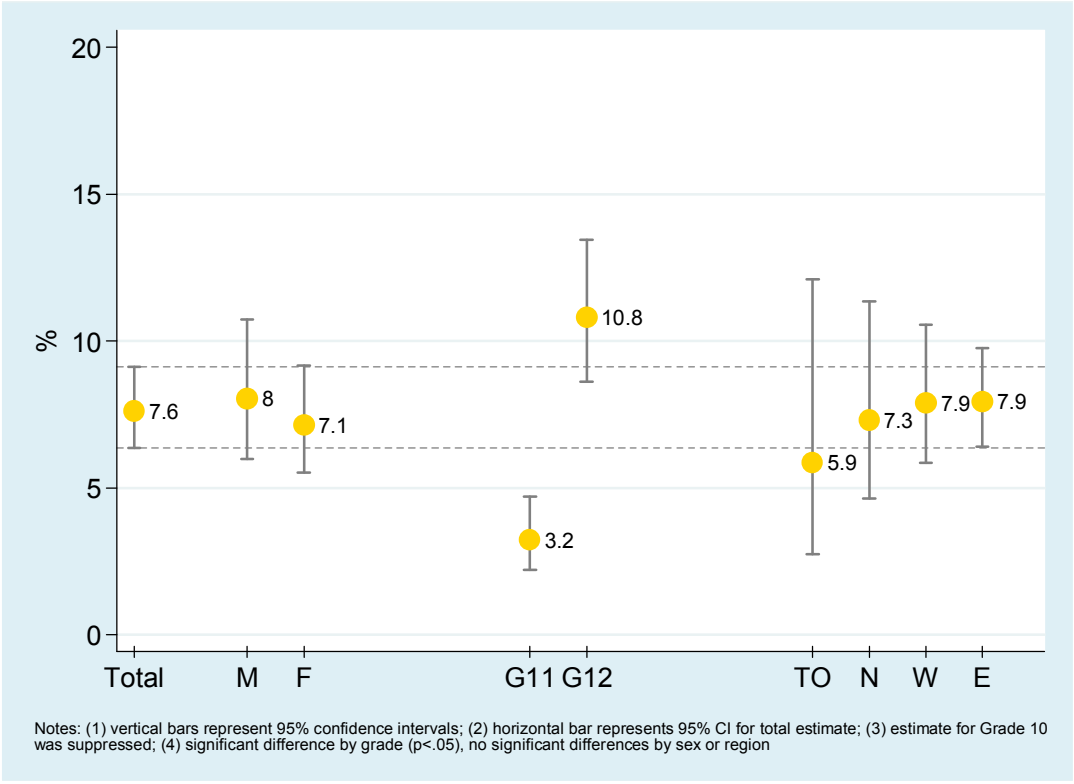
2013 (Drivers in Grades 10–12):

- Among drivers in grades 10–12, about 7.6% (95% CI: 6.4%-9.1%) report being involved in a collision as a driver at least once in the past year. This percentage represents an estimated 49,300 adolescent drivers.
- Male drivers (8.0%) and female drivers (7.1%) 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 12th graders (10.8%) are most likely to report involvement in a collision.
- There are no significant regional differences.

2013 vs. 2011 (Drivers in Grades 10–12):

- The percentage of drivers who reported being in a collision in 2013 (7.6%) is not significantly different from the percentage seen in 2011 (9.8%; 95% CI: 7.0%-13.5%), the first year of monitoring.

Figure 3.2.20
Percentage of Drivers in Grades 10–12 Reporting Being Involved in a Vehicle Collision as a Driver at Least Once in the Past Year by Sex, Grade, and Region, 2013 OSDUHS (n=2,433)



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 difference by grade (p<.05), no significant differences by sex or region

3.3 Health Care Utilization

In this section, we examine visits to health care professionals, past year use of prescription medication, whether students were prescribed medication for depression or anxiety, whether students sought telephone or website counselling, and whether students experienced an unmet need for mental health support.

3.3.1 Physician Health Care Visit

(Figure 3.3.1; Table A3.3.1)

Starting in 1999, the OSDUHS asked a random half sample of students how often they visited a doctor about their physical health, including just for a check-up, during the past 12 months. The question was "*In the last 12 months, how many times have you seen a doctor about your physical health or for a check-up?*" Here we describe the percentage of students who reported **not visiting** a doctor during the past 12 months.

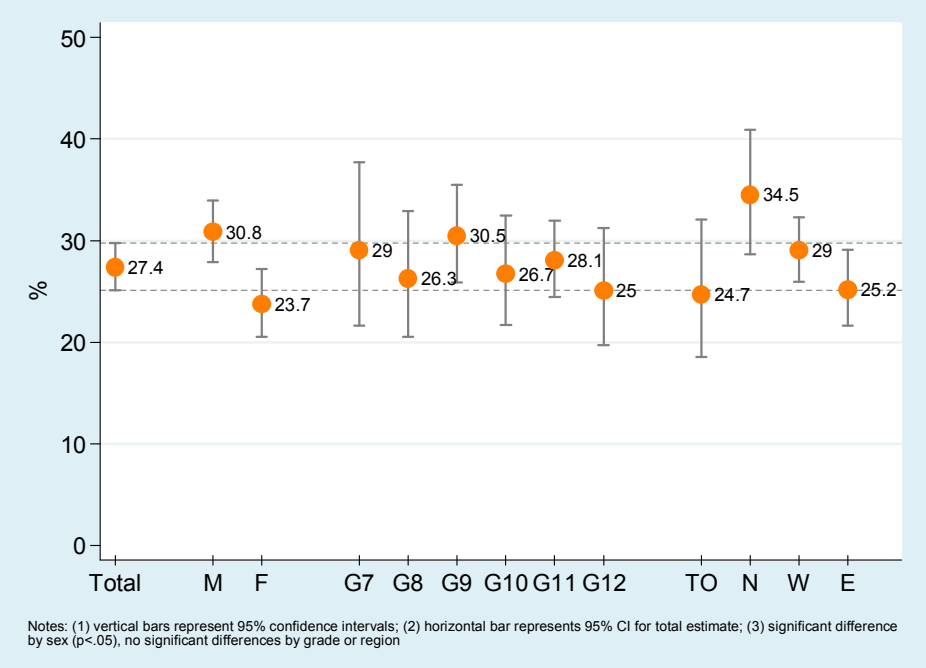
2013 (Grades 7–12):

- Over one-quarter (27.4%) of students did not visit a physician, not even for a check-up, in the past year. This estimate represents about 243,600 students in Ontario.
- Males (30.8%) are significantly more likely than females (23.7%) to not visit a doctor.
- There are no significant grade differences.
- Despite some variation, there are no significant differences among the four regions.

1999–2013 (Grades 7–12):

- The percentage of students reporting not visiting a physician in 2013 (27.4%) is significantly lower than the estimate from 2011 (32.7%), returning to a level seen in 1999 (30.0%).

Figure 3.3.1
Percentage Reporting No Physician Health Care Visit in the Past Year by Sex, Grade, and Region, 2013 OSDUHS (n=4,794)



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

3.3.2 Mental Health Care Visit

(Figure 3.3.2; Table A3.3.2)

Starting in 1999, the OSDUHS asked a random half sample of students whether they consulted a professional about a mental health matter. 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 describe the percentage who reported **at least one** mental health care visit during the past year.

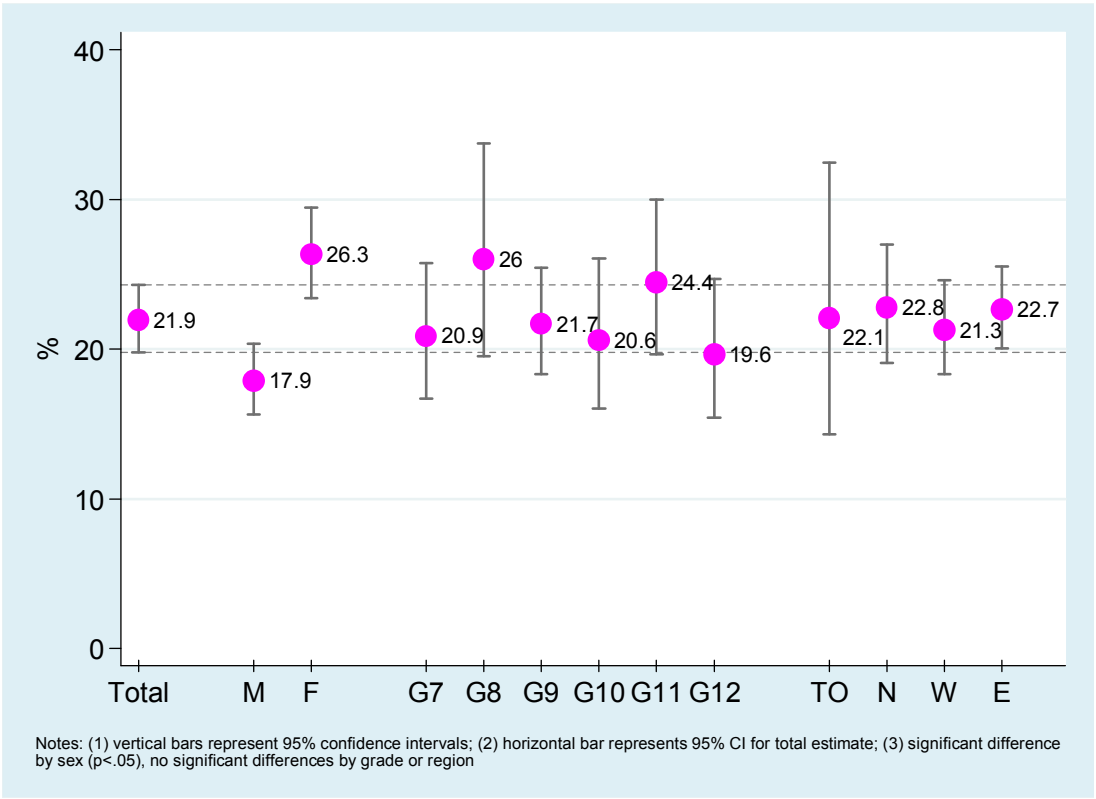
2013 (Grades 7–12):

- About one-fifth (21.9%) of students report visiting a professional about a mental health issue at least once in the past year. This estimate represents about 227,500 students in Ontario.
- Females (26.3%) are significantly more likely than males (17.9%) to report a mental health care visit.
- Despite some variation among the grades, these differences are not statistically significant.
- There are no significant differences among the four regions.

1999–2013 (Grades 7–12):

- The percentage of students who reported a mental health care visit significantly increased between 2011 (15.1%) and 2013 (21.9%), returning to a level seen a few years ago. The 2013 estimate is also significantly higher than the estimate found in 1999 (12.4%), the first year of monitoring. Most subgroups show increases compared with their respective 1999 estimates.

Figure 3.3.2
Percentage Reporting at Least One Mental Health Care Visit in the Past Year by Sex, Grade, and Region, 2013 OSDUHS (n=5,478)



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

3.3.3 Medical Drug Use

(Figures 3.3.3 to 3.3.5; Tables A3.3.3 to A3.3.5)

This section presents past year prevalence estimates for three types of prescription drug classes used for medical purposes: tranquillizers/sedatives (asked of students in grades 9–12 only), drugs to treat Attention Deficit Hyperactivity Disorder (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 Valium, Ativan, Xanax) with a prescription or because a doctor told you to take them?*[61]

- *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 Ritalin, Concerta, Adderall, 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, OxyContin/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.)*

2013:

- Among all secondary students, 2.9% used tranquillizers/sedatives medically, that is by prescription, at least once in the past year (an estimated 21,300 students in grades 9–12 in Ontario).

- Among all students, 3.2% used an ADHD drug medically (31,400 students in grades 7–12).

- Among all students, 20.9% used opioid pain relievers medically (203,200 students in grades 7–12).

- Males are more likely than females to report using an ADHD drug medically (4.6% vs. 1.8%, respectively). Males and females are equally likely to report the medical use of tranquillizers and opioid pain relievers.

- Older students are significantly more likely than younger students to use opioid pain relievers. Despite some variation, medical tranquillizer use and ADHD drug use do not significantly differ by grade.

- There are no significant regional differences for any of the three medical drugs.

1999–2013:

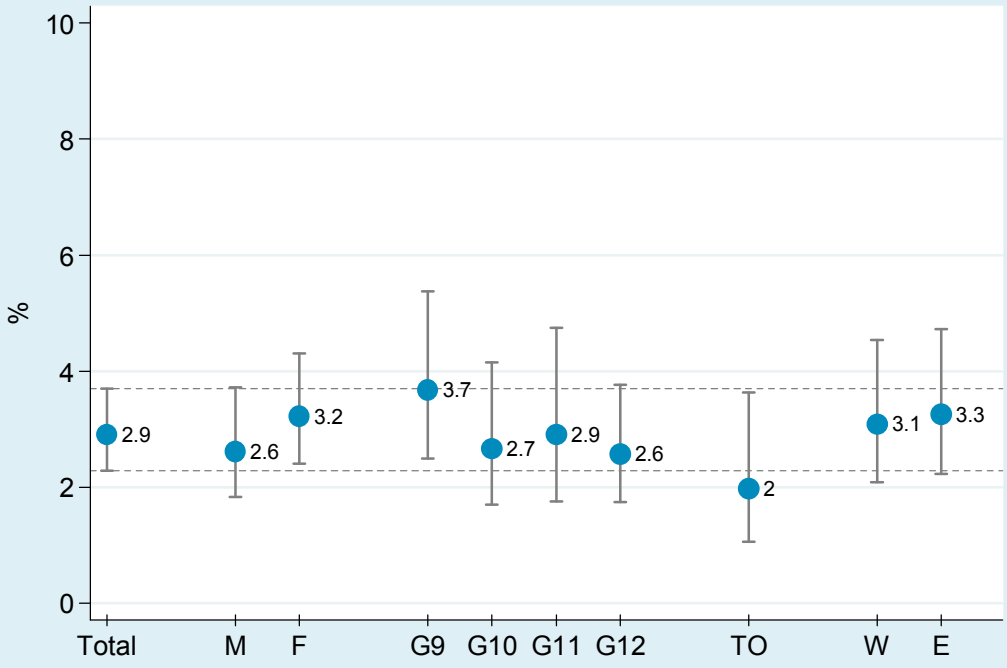
- During the past decade, medical tranquillizer use has not significantly changed nor has medical ADHD drug use. Although medical opioid pain reliever use did not change between 2011 (21.4%) and 2013 (20.9%), the 2013 estimate is significantly lower than the estimate from 2007 (40.6%), the first year of monitoring.

1977–2013 (Grades 9 and 11 only):

- Over the past three decades, the medical use of tranquillizers/sedatives peaked in the late 1970s, declined during the 1980s, and stabilized in the 1990s and 2000s, at around 3% or 4%.

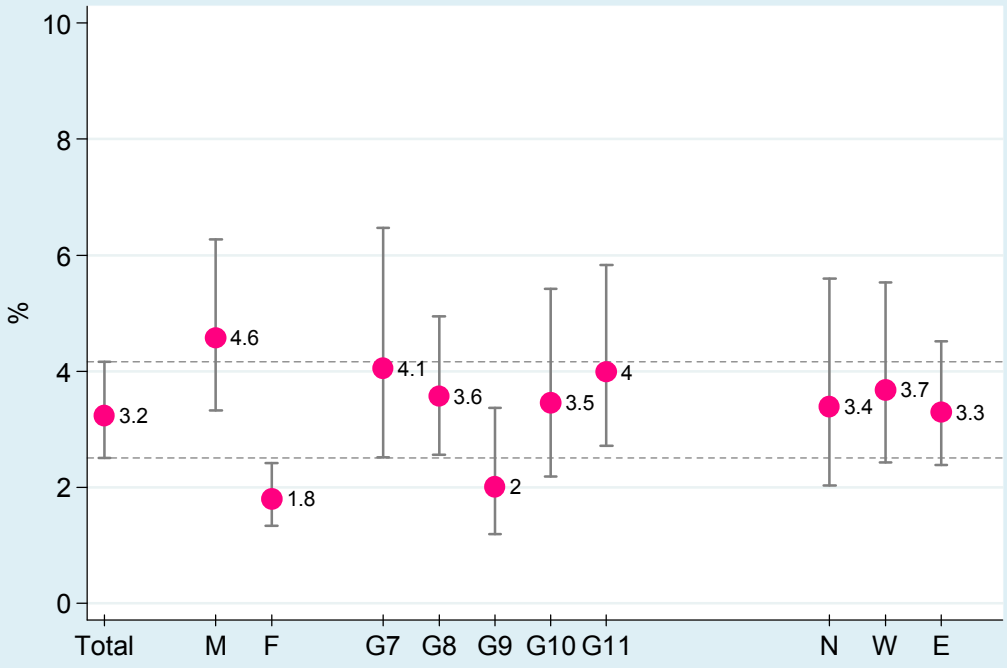
[61] This question was asked of students in grades 9–12 only, and was not asked of 7th and 8th graders.

Figure 3.3.3
Percentage Reporting Medical Tranquillizer/Sedative Use in the Past Year by Sex, Grade, and Region, 2013 OSDUHS (Grades 9–12 only, n=6,159)



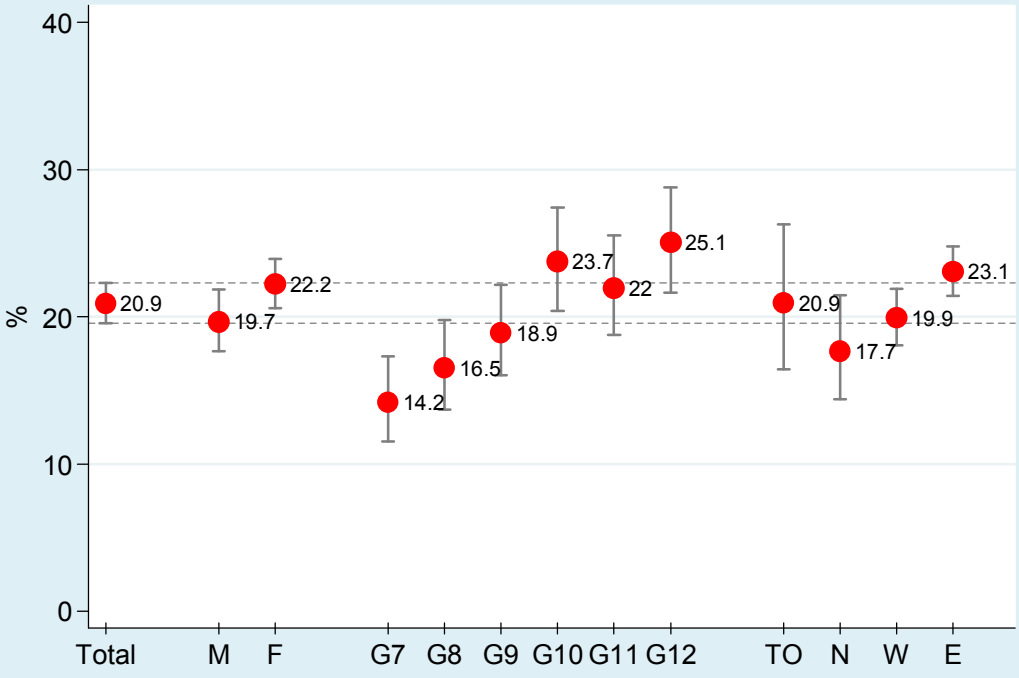
Notes: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal band represents 95% CI for total estimate; (3) estimate for the North was suppressed; (4) no significant differences by sex, grade, or region

Figure 3.3.4
Percentage Reporting Medical ADHD Drug Use in the Past Year by Sex, Grade, and Region, 2013 OSDUHS (n=10,272)



Notes: (1) vertical bars represent 95% confidence intervals; (2) horizontal bar represents 95% CI for total estimate; (3) estimates for Grade 12 and Toronto were suppressed; (4) significant difference by sex (p<.05), no significant differences by grade or region

Figure 3.3.5
Percentage Reporting Medical Opioid Pain Reliever Use in the Past Year by Sex, Grade, and Region, 2013 OSDUHS (n=10,272)



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

3.3.4 Prescription Medication to Treat Anxiety or Depression

(Figure 3.3.6)

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*.

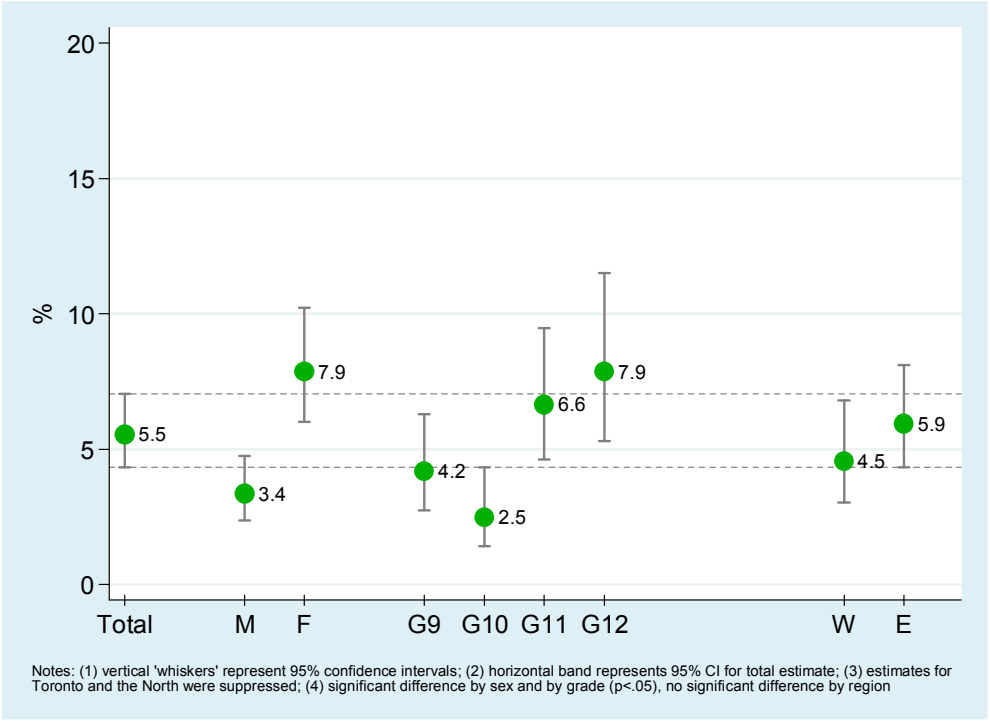
2013 (Grades 9–12):

- An estimated 1.8% of secondary students report they were prescribed medication to treat anxiety in the past year, 1.8% were prescribed medication to treat depression, and 1.9% were prescribed medication for *both* anxiety and depression.
- Combining the response options, an estimated 5.5% (95% CI: 4.3%-7.1%) report being prescribed medication to treat anxiety, depression, or both conditions. This represents about 43,200 secondary students in Ontario.
- Females (7.9%) are twice as likely as males (3.4%) to report being prescribed medication to treat anxiety, depression, or both conditions.
- There is significant grade variation showing the highest likelihood is among 11th and 12th graders.
- There are no significant regional differences.

2001–2013 (Grades 9–12):

- The percentage of secondary students who report being prescribed medication to treat anxiety, depression, or both in 2013 (5.5%) is similar to the estimate seen in 2011 (3.9%; 95% CI: 2.9%-5.4%). Further, there has been no significant change since 2001, as rates have been stable at about 3% to 5%.

Figure 3.3.6
Percentage Reporting Having Been Prescribed Medication to Treat Either Anxiety or Depression or Both in the Past Year by Sex, Grade, and Region, 2013 OSDUHS (Grades 9–12, n=3,264)



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

3.3.5 Sought Counselling Over the Telephone or the Internet

(Figure 3.3.7)

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 and 2013, 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?"* 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*.

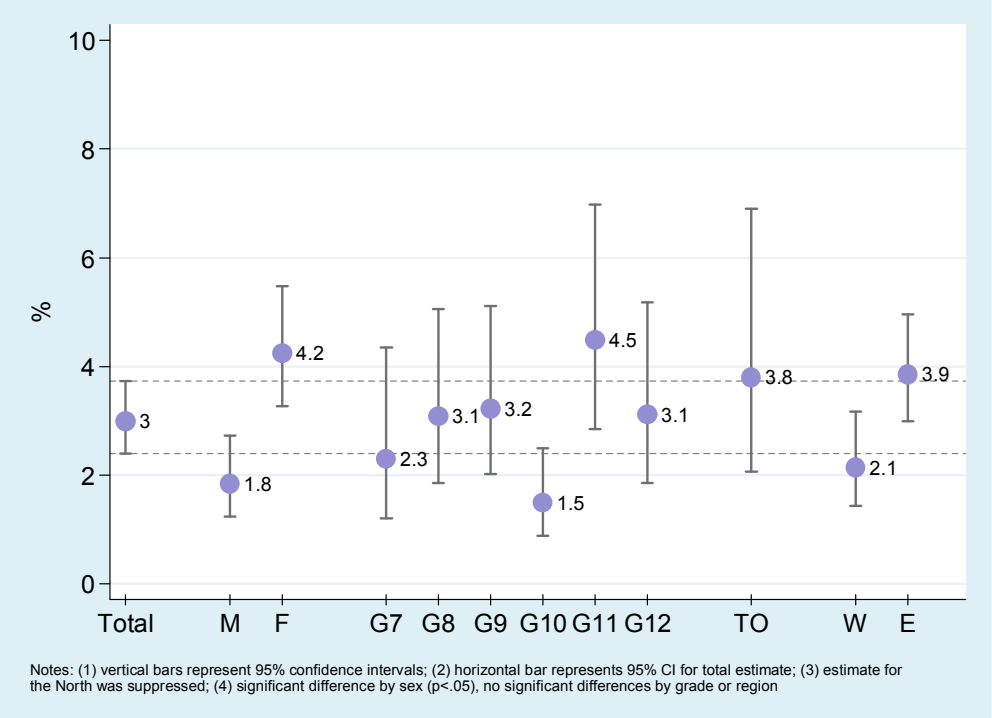
2013 (Grades 7–12):

- An estimated 1.9% (95% CI: 1.4%-2.6%) report using a telephone counselling helpline in the past year (roughly 19,600 students in grades 7–12). An estimated 1.4% (95% CI: 1.0%-1.9%) report seeking help from a website (roughly 14,400 students). In combination, 3.0% (95% CI: 2.4%-3.7%) report using a helpline or a website or both to seek counselling (roughly 31,000 students).
- Females (4.2%) are more likely than males (1.8%) to seek counselling either over the phone, the Internet, or both.
- There are no significant grade differences in seeking counselling over the phone, the Internet, or both.
- There are no significant regional differences.

2013 vs. 2011 (Grades 7–12):

- The percentage of students who report using a helpline, a website, or both in 2013 (3.0%) is similar to the estimate from 2011 (2.1%; 95% CI: 1.6%-2.9%).

Figure 3.3.7
Percentage Reporting Seeking Counselling Over the Phone, Over the Internet, or Both in the Past Year by Sex, Grade, and Region, 2013 OSDUHS (n=5,478)



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

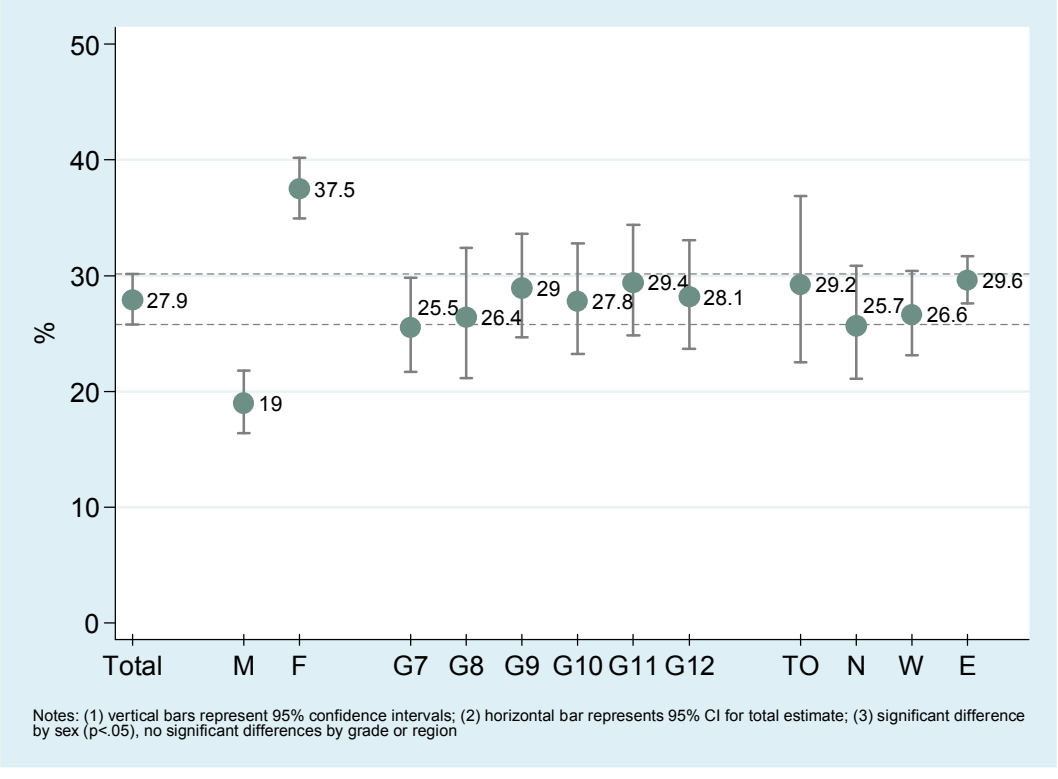
3.3.6 Unmet Need for Mental Health Support (Figure 3.3.8)

For the first time 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 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*.

2013 (Grades 7–12):

- Over one-quarter (27.9%; 95% CI: 25.8%-30.1%) 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 288,300 students.
- Females (37.5%) are more likely than males (19.0%) to report an unmet need for mental health support.
- There are no significant grade differences.
- There are no significant regional differences.

Figure 3.3.8
Percentage Reporting an Unmet Need for Mental Health Support in the Past Year by Sex, Grade, and Region, 2013 OSDUHS (n=5,478)



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 Internalizing Indicators

Internalizing indicators are emotional states or psychological traits that can adversely affect all life areas, including one's ability to function. Some examples include low self-esteem, depression, and anxiety.

3.4.1 Self-Rated Mental Health

(Figures 3.4.1, 3.4.2; 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?"* Response options were: *Poor*, *Fair*, *Good*, *Very good*, or *Excellent*. We describe the percentage of students who rate their mental health as **fair or poor**.

2013 (Grades 7–12):

- Almost two-thirds of Ontario students rate their mental health as excellent (26.6%) or very good (36.1%). At the risk end, 15.3% report fair or poor mental health. This estimate represents about 157,900 students in Ontario.
- Females (20.5%) are significantly more likely than males (10.5%) to rate their mental health as fair or poor.
- Ratings of fair or poor mental health significantly increase with grade, ranging from 8.8% among 7th graders to about 16% to 18% among students in grades 9–12.
- Despite some variation, there are no significant regional differences.

2007–2013 (Grades 7–12):

- The percentage of students rating their mental health as fair/poor in 2013 (15.3%) does not significantly differ from 2011 (13.7%). However, the 2013 percentage is significantly higher than that found in 2007 (11.4%), the first year of monitoring.

Figure 3.4.1
Self-Rated Mental Health, 2013 OSDUHS (Grades 7–12, n=5,478)

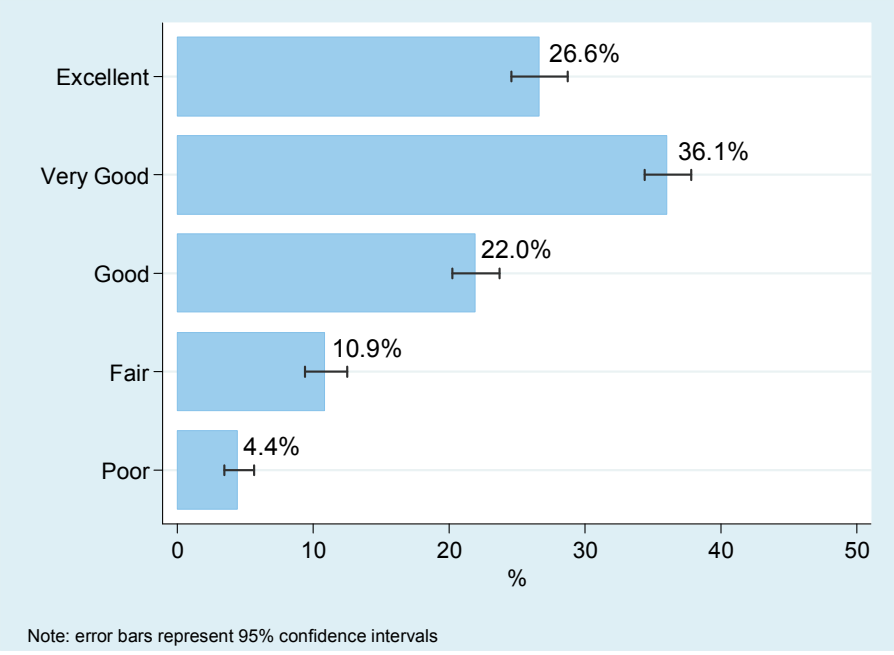
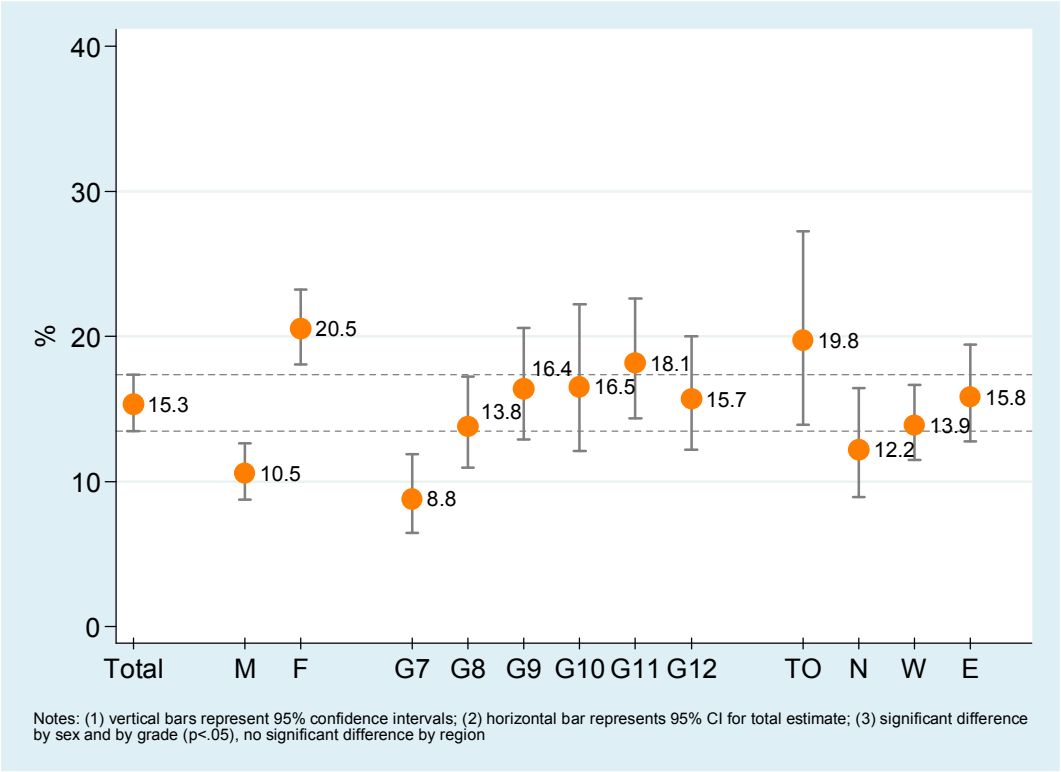


Figure 3.4.2
Percentage Reporting Fair or Poor Mental Health by Sex, Grade, and Region, 2013 OSDUHS (n=5,478)



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

3.4.2 Low Self-Esteem

(Figures 3.4.3, 3.4.4)

The following five items adapted from the 20-item *Rosenberg Self-Esteem Scale* (Rosenberg, Schooler, & Schoenback, 1989) were used in 2013 to measure self-esteem:

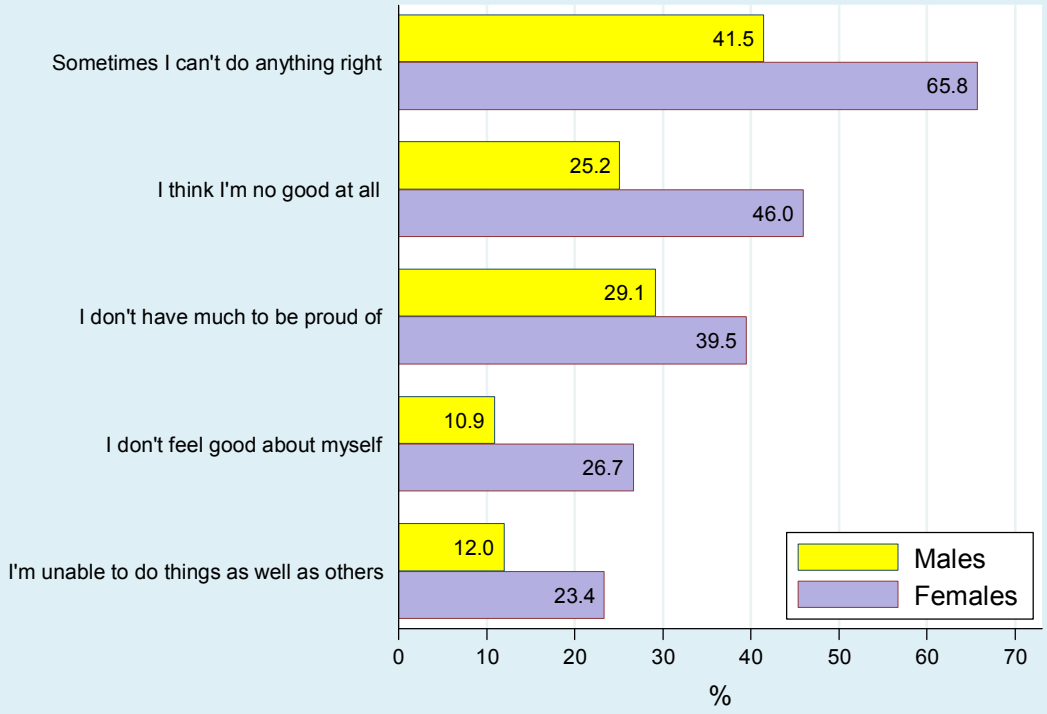
- *Sometimes I feel that I can't do anything right*
- *I feel I do not have much to be proud of*
- *Sometimes I think I am no good at all*
- *I feel good about myself*
- *I am able to do most things as well as other people can*

Each item has a 4-point response scale ranging from *strongly agree* to *strongly disagree*. We define **low self-esteem** as negative responses (lower esteem) on **all five** of the items (i.e., *strongly agree* or *somewhat agree* for negative statements, *strongly disagree* or *somewhat disagree* for positive statements). The reliability coefficient (α) for these five items is 0.76.

2013 (Grades 7–12):

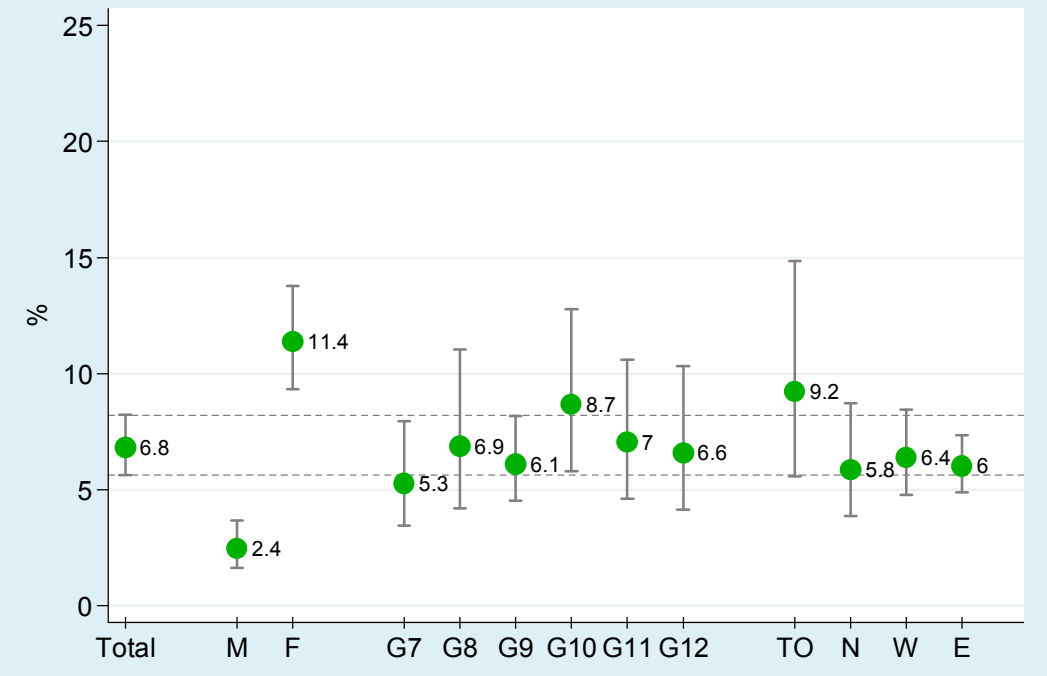
- Just over half (53.4%) of students feel that sometimes they cannot do anything right; 35.4% feel that they are no good at all; 34.2% feel that they do not have much to be proud of; 18.6% do not feel good about themselves; and 17.6% feel that they cannot do things as well as others.
- An estimated 6.8% (95% CI: 5.6%-8.2%) of students report low self-esteem – that is, report low esteem on all five items.
- Females (11.4%) are significantly more likely than males (2.4%) to report low self-esteem.
- There are no significant grade differences.
- There are no significant regional differences.

Figure 3.4.3
Self-Esteem Items (% Agree) by Sex, 2013 OSDUHS (Grades 7–12, n=5,478)



Note: significant sex difference on all items (p<.05)

Figure 3.4.4
Percentage Reporting Low Self-Esteem by Sex, Grade, and Region, 2013 OSDUHS (n=5,478)



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 Psychological Distress

(Figures 3.4.5 to 3.4.7)

For the first time in 2013,[62] the OSDUHS included the *Kessler 10-Item Psychological Distress Scale* (K10), which is a 10-item screening instrument designed to detect nonspecific psychological distress (symptoms of anxiety and depression) (Kessler et al., 2002, Kessler et al, 2003). Although the K10 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; Huang, Xia, Sun, Zhang, & Wu, 2009; Slade, Grove, & Burgess, 2011). Note that this instrument is a screener and is not used for clinical diagnoses.

Each of the 10 items in the K10 begins with the wording *"In the last 4 weeks, about how often did you…"* The following symptoms comprise the K10:

- *feel tired out for no good reason*
- *feel nervous*
- *feel so nervous that nothing could calm you down*
- *feel hopeless*
- *feel restless or fidgety*
- *feel so restless you could not sit still*
- *feel depressed*
- *feel that everything was an effort*
- *feel so depressed (sad) that nothing could cheer you up*
- *feel worthless*

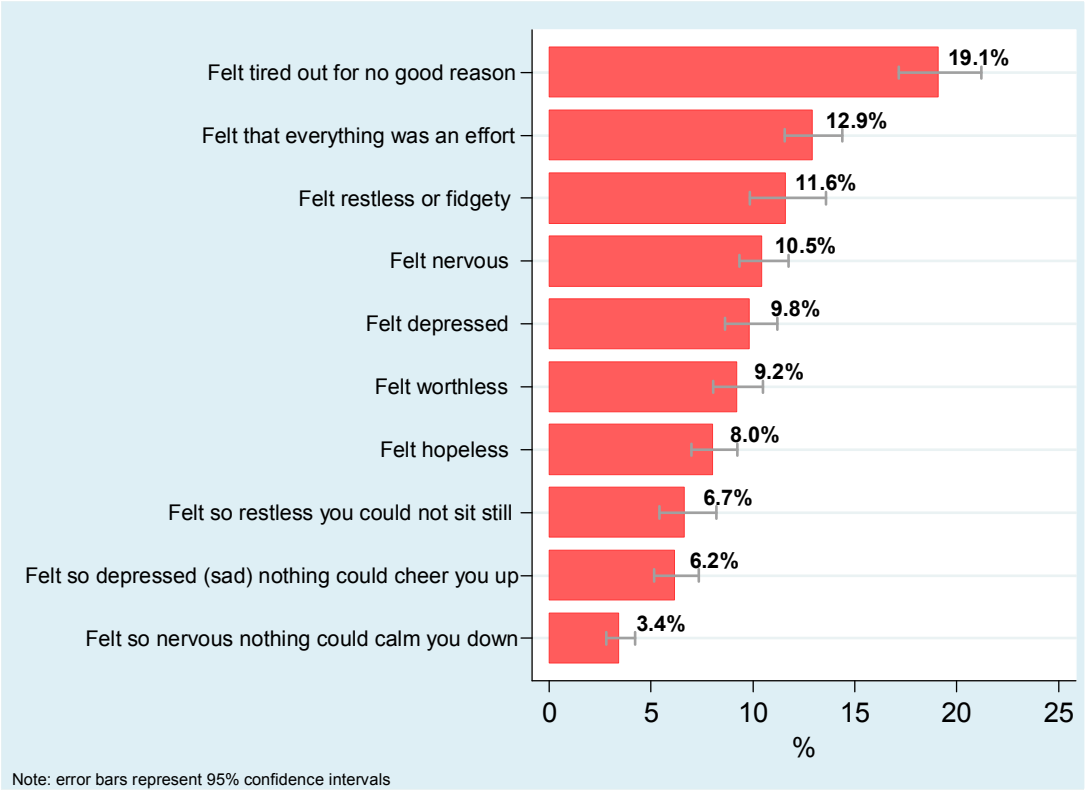
Response categories are on a 5-point frequency scale ranging from (1) *None of the time* to (5) *All of the time*. Responses to each of the 10 items were coded from 1 to 5 and a summated score ranging from 10 to 50 was computed. Low scores indicate low levels of psychological distress and high scores indicate high levels of distress. For our purposes, we used a cut-off score of 22 (of 50) to estimate the percentage experiencing a **moderate-to-high level of psychological distress** (henceforth, called psychological distress). Assessment of these 10 scale items indicates an excellent internal consistency (α=0.92).

2013 (Grades 7–12):

- The three most common symptoms experienced "most of the time" or "all of the time" during the past month were: feeling tired out for no good reason (19.1%), feeling that everything was an effort (12.9%), and feeling restless or fidgety (11.6%). The least prevalent symptom was feeling so nervous that nothing could calm you down (3.4%).
- An estimated 26.0% (95% CI: 23.9%-28.3%) of 7th–12th graders report psychological distress during the past month. This represents about 264,200 Ontario students.
- Females are twice as likely as males to report psychological distress (35.5% vs. 17.2%, respectively). Moreover, females are significantly more likely than males to report 8 of the 10 symptoms.
- Psychological distress significantly increases with grade, from 13.4% of 7th graders to 31.7% of 11th graders, with a slight drop to 26.8% of 12th graders.
- There is no significant regional variation in psychological distress.

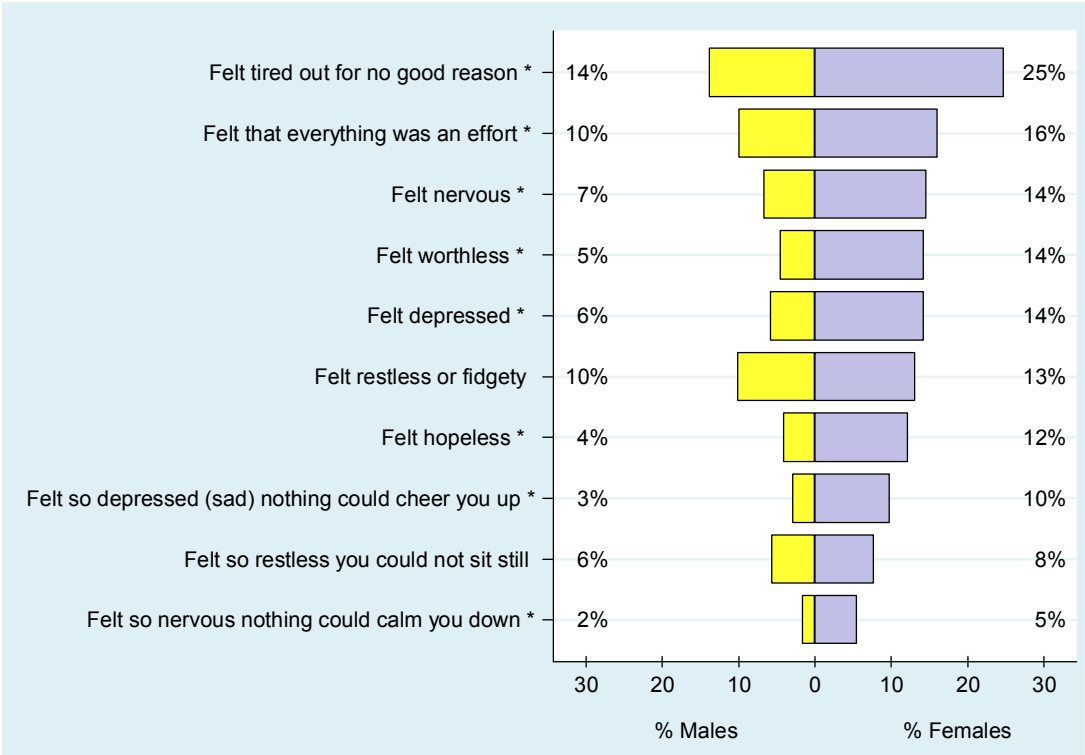
[62] During the years 1999 to 2011, the 12 item version of the General Health Questionnaire (GHQ12) was used as the OSDUHS indicator of psychological distress. For various reasons (including a simpler response scale and one measuring absolute level rather than relative change), beginning with the 2013 cycle, the OSDUHS transitioned to the Kessler K10 for a measure of psychological distress.

Figure 3.4.5
Kessler-10 (K10) Symptoms of Psychological Distress Experienced “Most of the Time” or “All of the Time” in the Past Month, 2013 OSDUHS (Grades 7–12, n=5,478)



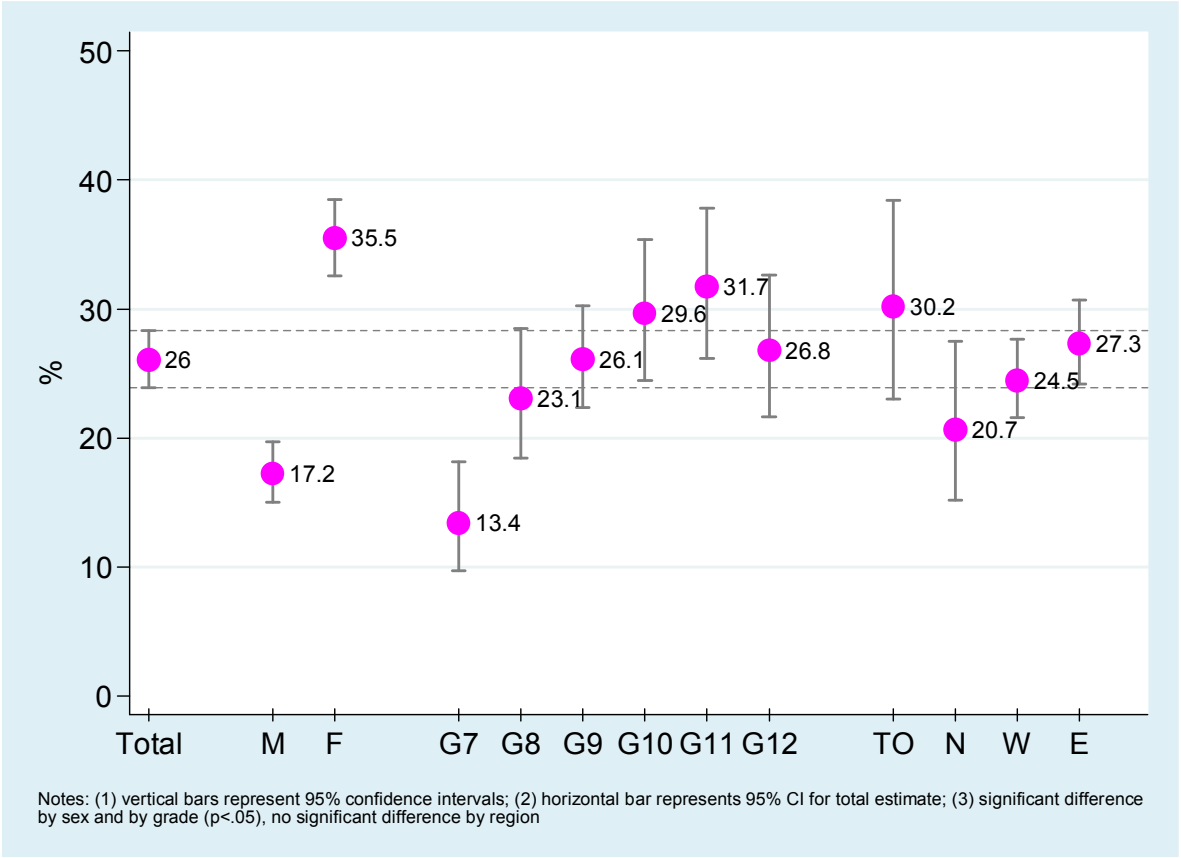
Note: error bars represent 95% confidence intervals

Figure 3.4.6
Kessler-10 (K10) Symptoms of Psychological Distress Experienced “Most of the Time” or “All of the Time” in the Past Month by Sex, 2013 OSDUHS (Grades 7–12, n=5,478)



* significant sex difference (p<.05)

Figure 3.4.7
Percentage Classified as Having a Moderate to High Level of Psychological Distress (K10/22+) in the Past Month by Sex, Grade, and Region, 2013 OSDUHS (n=5,478)



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

3.4.4 Suicidal Ideation and Suicide Attempt

(Figures 3.4.8 to 3.4.10; Tables A3.4.2, A3.4.3)

Suicide is the second leading cause of death among Canadians aged 10 to 19 (Pan et al., 2007). Between 1980 and 2008, suicide decreased among male adolescents in Canada, but increased among female adolescents (Skinner & McFaull, 2012).

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: "*In the last 12 months, did you actually attempt suicide?"* Response options to both questions were *yes* or *no*.

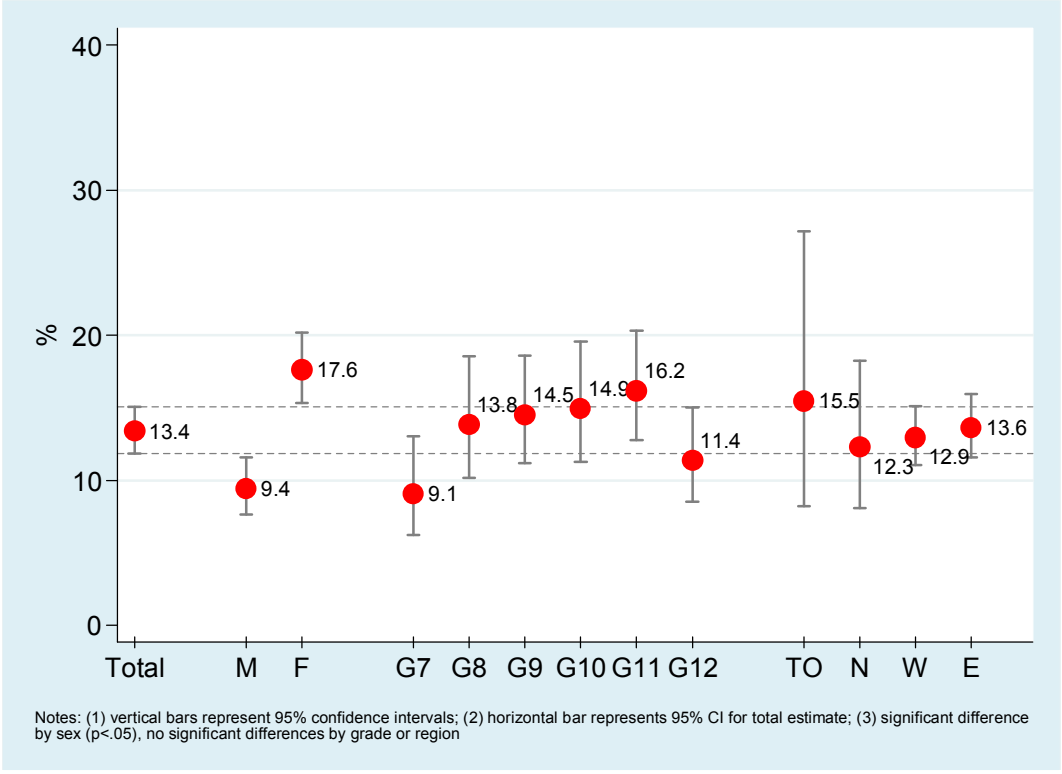
2013 (Grades 7–12):

- About one-in-eight (13.4%) students report that they had seriously contemplated suicide in the past year. This percentage represents an estimated 128,400 Ontario students. An estimated 3.5% of students report attempting suicide in the past year. This represents about 33,300 Ontario students.
- Females are twice as likely as males to report suicidal ideation (17.6% vs. 9.4%, respectively), as well as a suicide attempt (5.0% vs. 2.0%, respectively).
- Despite some variation, suicidal ideation and suicide attempt do not significantly differ by grade.
- Neither of the two indicators significantly differs by region.

2001–2013 (Grades 7–12):

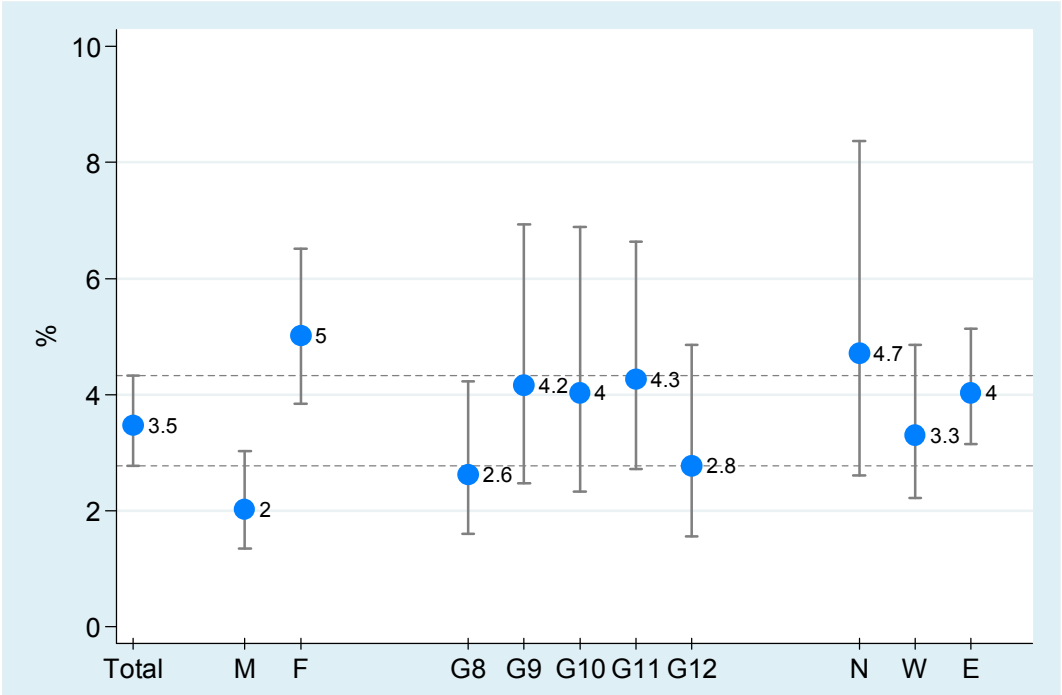
- Among the total sample, the percentage who reported contemplating suicide significantly increased between 2011 (10.3%) and 2013 (13.4%), reverting back to a level seen about a decade ago when monitoring first began. This increase was only evident among females (from 13.7% in 2011 to 17.6% in 2013) and not males. No other subgroup showed a significant increase between these two years.
- The percentage of students reporting a suicide attempt has remained stable since 2007, the first year of monitoring, at around 3%.

Figure 3.4.8
Percentage Reporting Suicidal Ideation in the Past Year by Sex, Grade, and Region, 2013 OSDUHS (n=5,478)



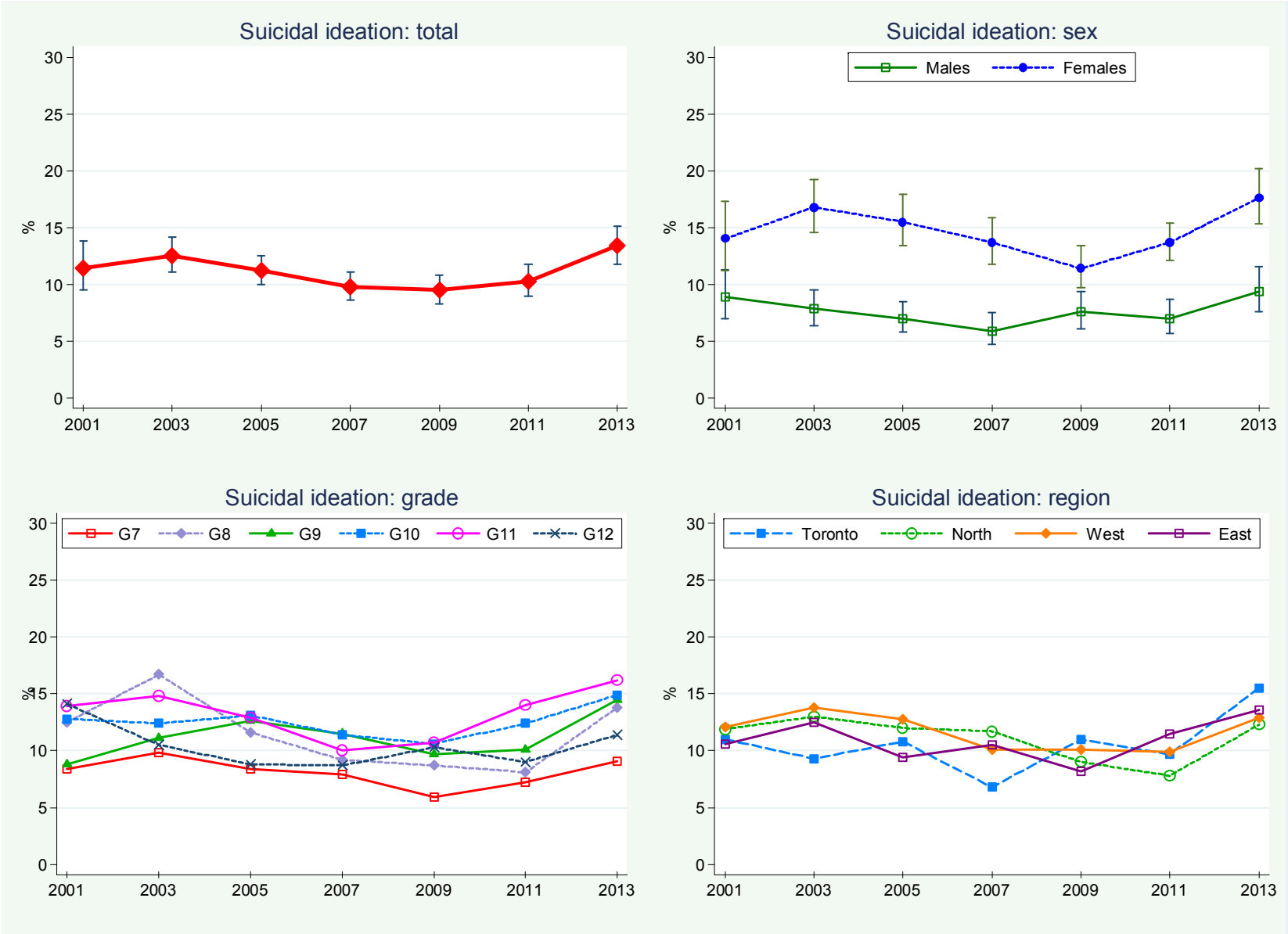
Notes: (1) vertical bars represent 95% confidence intervals; (2) horizontal bar represents 95% CI for total estimate; (3) significant difference by sex (p<.05), no significant differences by grade or region

Figure 3.4.9
Percentage Reporting a Suicide Attempt in the Past Year by Sex, Grade, and Region, 2013 OSDUHS (n=5,478)



Notes: (1) vertical bars represent 95% confidence intervals; (2) horizontal bar represents 95% CI for total estimate; (3) estimates for Grade 7 and Toronto were suppressed; (4) significant difference by sex (p<.05), no significant differences by grade or region

Figure 3.4.10
Percentage Reporting Suicidal Ideation in the Past Year, 2001–2013 OSDUHS (Grades7–12)



3.5 Externalizing Indicators

This chapter examines externalizing problem indicators that are mainly conduct problems or antisocial behaviours, such as criminal acts, violence, and bullying. These behaviours have a negative impact not only on the individuals involved, but also on society as a whole.

3.5.1 Antisocial Behaviour

Since 1991, the OSDUHS has surveyed students about engaging in violent and nonviolent antisocial behaviours. (As of 1999, these items have been asked among a half sample of 7th to 12th graders.) This section looks at the percentage of students engaging in antisocial behaviours at least once during the past year. The 11 activities were prefaced with the following: "*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)
- *driven a car in a street race* (added in 2009)[63]

Violent Behaviours:

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

Students responded to each activity on an open-ended count response indicating 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 and street racing). 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

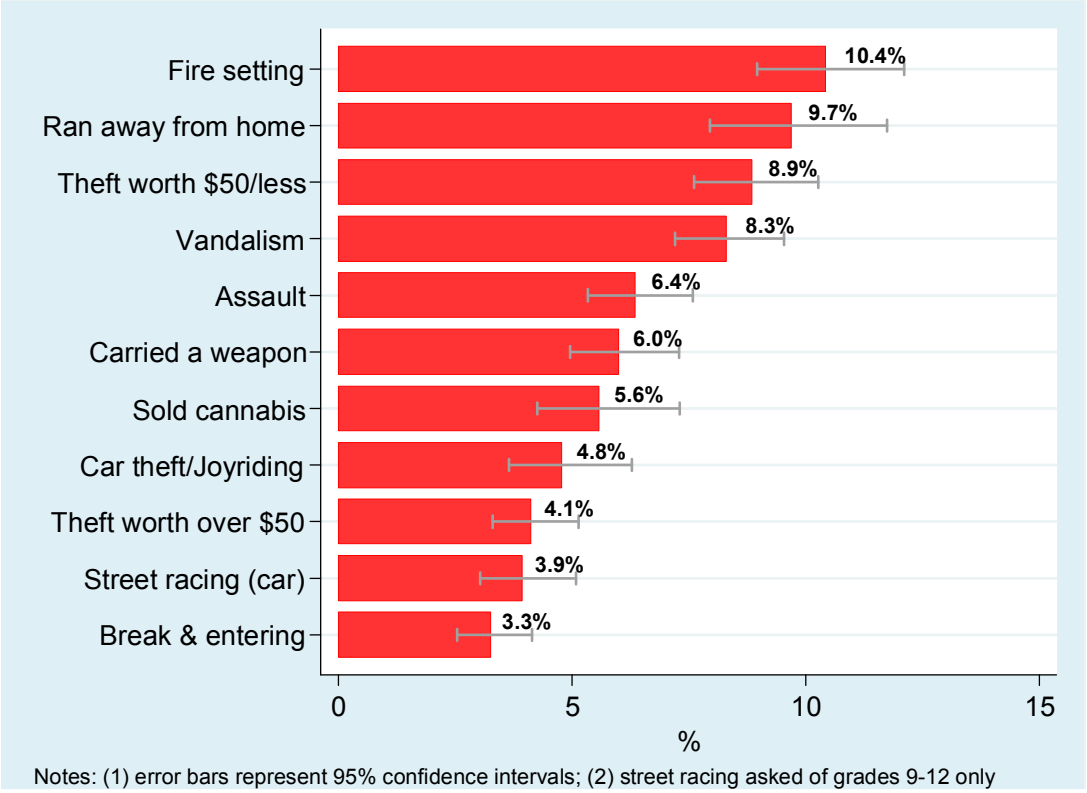
(Figures 3.5.1 to 3.5.4; Tables A3.5.1a, A3.5.1b)

2013:

- Among 7th to 12th graders, the most prevalent of the 11 behaviours was fire setting (10.4%) and the least prevalent was breaking and entering (3.3%)
- An estimated 7.1% of students engage in antisocial behaviour (defined as three or more of nine behaviours surveyed over time). This percentage represents about 72,400 students.
- Males are significantly more likely than females to engage in antisocial behaviour (9.5 % vs. 4.6%, respectively).
- Students in grades 10 through 12 are the most likely to engage in antisocial behaviour (about 10%).
- There are no significant differences among the regions.

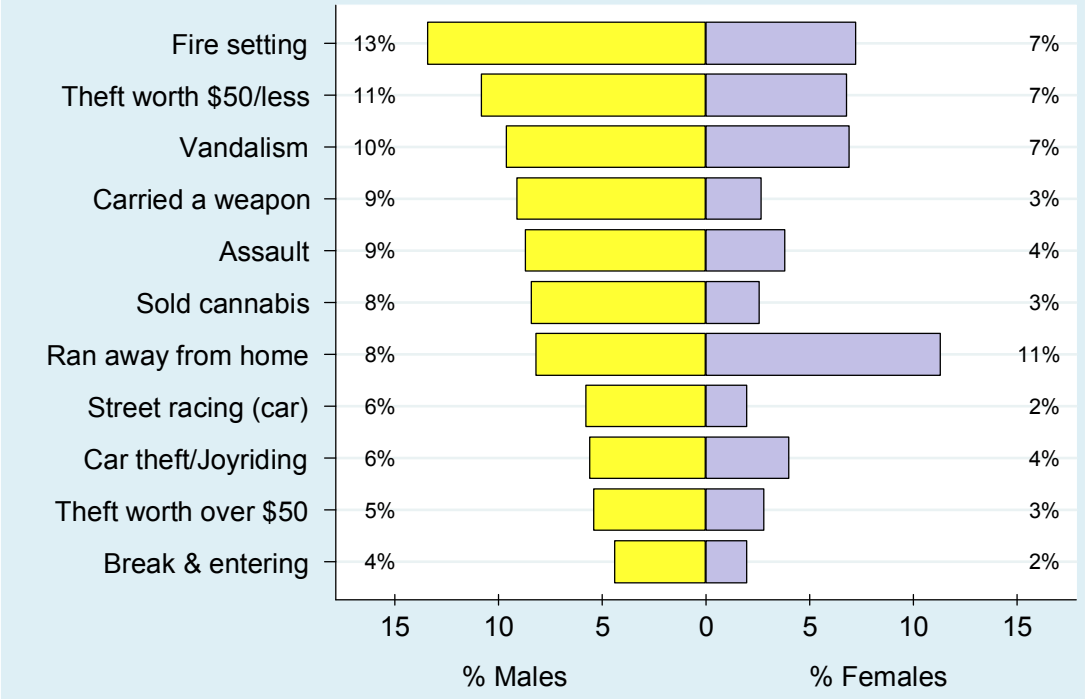
[63] This question was asked of student in grades 9–12, and not asked of 7th and 8th graders.

Figure 3.5.1
Percentage Reporting Engaging in Antisocial Behaviours at Least Once in the Past Year, 2013 OSDUHS (Grades 7–12, n=5,478)



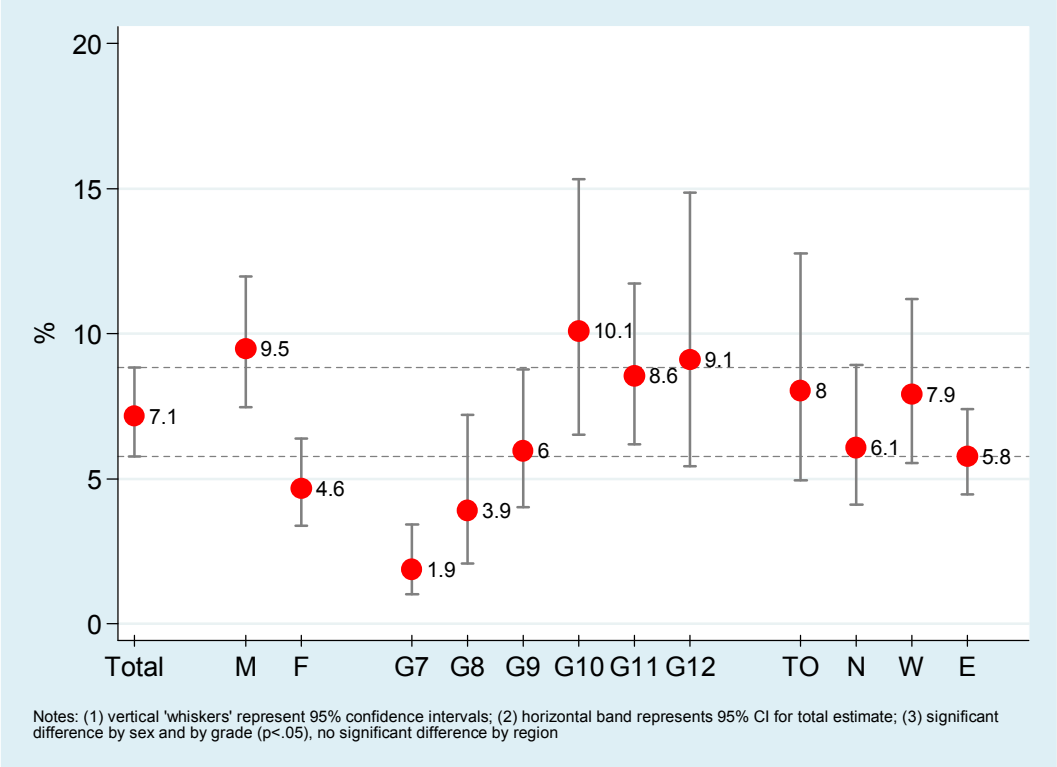
Notes: (1) error bars represent 95% confidence intervals; (2) street racing asked of grades 9-12 only

Figure 3.5.2
Percentage Reporting Engaging in Antisocial Behaviours at Least Once in the Past Year by Sex, 2013 OSDUHS (Grades 7–12, n=5,478)



Notes: (1) significant sex difference (p<.05) for each behaviour except for car theft/joyriding; (2) street racing asked of grades 9-12 only

Figure 3.5.3
Percentage Reporting Antisocial Behaviour (3+ of 9 Behaviours) in the Past Year by Sex, Grade, and Region, 2013 OSDUHS (n=5,478)



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

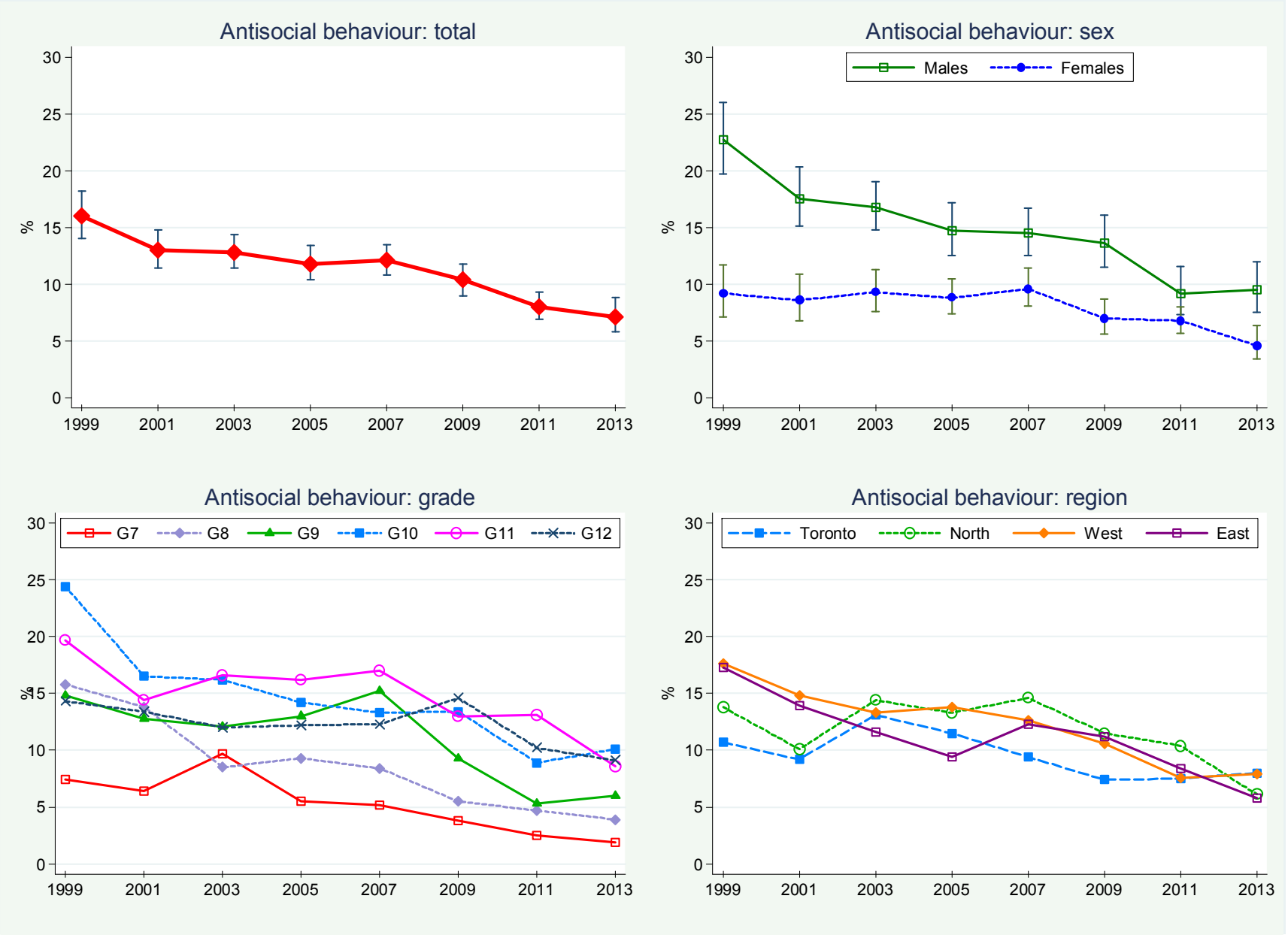
1999–2013 (Grades 7–12):

- Among 7th to 12th graders, antisocial behaviour shows a linear decline between 1999 and 2013, from 16.0% to 7.1%.
- There was a significant decline among males (from 22.7% in 1999 to 9.5% in 2013) and, although weaker, among females as well (from 9.2% to 4.6%).
- Students in all grades except for grade 12 show a significant decline in antisocial behaviour since 1999.
- All regions except for Toronto show a significant decline in antisocial behaviour since 1999.

1993–2013 (Grades 7, 9, 11 only):
Note: 1991 is excluded due to the absence of the weapon carrying question.

- The 2013 estimate (5.9%) for antisocial behaviour among grades 7, 9, and 11 only is significantly lower than the estimate seen in 1993 (15.1%). The long-term decline in antisocial behaviour is especially evident among males (who show a three-fold decline from 21.0% in 1993 down to 6.8% in 2013).

Figure 3.5.4
Percentage Reporting Antisocial Behaviour (3+ of 9 Behaviours) in the Past Year, 1999–2013 OSDUHS (Grades 7–12)



3.5.2 Nonviolent Antisocial Behaviours

(Figures 3.5.2, 3.5.5, 3.5.6; Tables A3.5.1a, A3.5.1b)

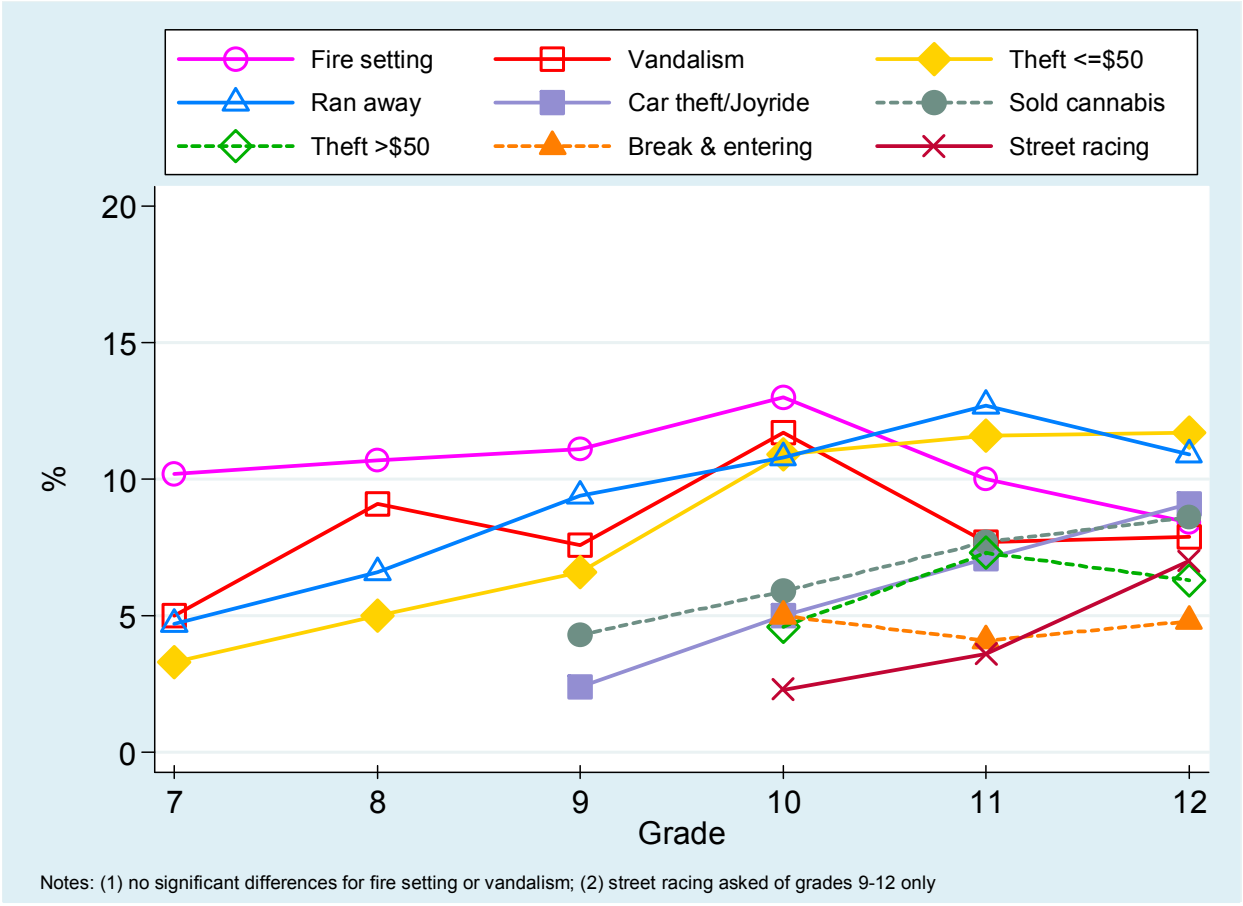
2013 (Grades 7–12):

- Males are significantly more likely than females to report seven of nine nonviolent behaviours. Females are more likely to report running away from home. Car theft/joyriding showed no significant sex difference.
- Seven of nine nonviolent behaviours are significantly related to grade. All of these behaviours increase with grade, with most peaking in 11th or 12th grade. Fire setting and vandalism do not significantly vary by grade.
- Only theft of goods worth less than $50 significantly varies by region, with Northern students least likely to report this behaviour.

1999–2013 (Grades 7–12):

- Among 7th to 12th graders, the following six of nine nonviolent behaviours show significant declines between 1999 and 2013: vandalism (from 24.1% down to 8.3%); theft worth $50 or less (from 17.3% to 8.9%); theft worth more than $50 (6.6% to 4.1%); car theft/joyriding (from 10.2% to 4.8%); breaking and entering (from 6.4% to 3.3%); and fire setting (from 15.9% in 2007 to 10.4% in 2013).

Figure 3.5.5
Grade Profile: Percentage Reporting Nonviolent Antisocial Behaviours at Least Once in the Past Year, 2013 OSDUHS (n=5,478)



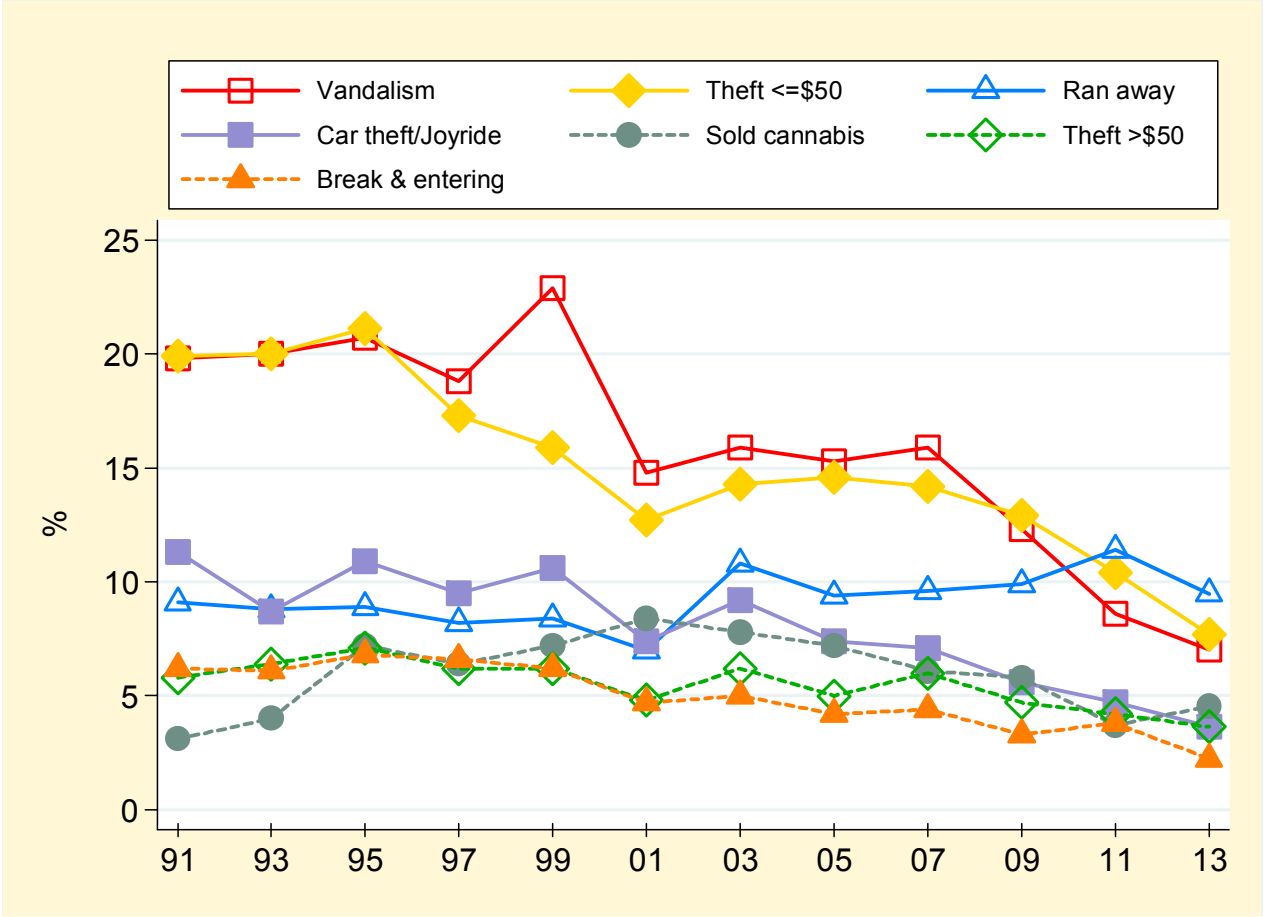
Notes: (1) no significant differences for fire setting or vandalism; (2) street racing asked of grades 9-12 only

1991–2013 (Grades 7, 9, 11 only):

Over the long-term, six nonviolent behaviours significantly declined among students in grades 7, 9, and 11.

- **Vandalism** has been on a steady decline since 1991 despite a spike in 1999. The 2013 estimate is among the lowest on record.
- **Theft of goods worth $50 or less** shows a significant linear downward trend. The 2013 estimate is among the lowest on record.
- **Theft of goods worth more than $50** shows a decline between 1991 and 2005 and then levelled off. The 2013 estimate is significantly lower than the estimates seen in the 1990s.
- The percentage of students reporting **car theft/joyriding** held steady during the 1990s and early 2000s and began to decline in the late 2000s. The 2013 estimate is significantly lower than estimates seen in the 1990s.
- The percentage of students reporting **selling cannabis** significantly increased between 1991 and 2001, and has since steadily declined. The 2013 estimate is significantly lower than the estimates seen in the early 2000s, and resembles the low levels seen in the early 1990s.
- The percentage reporting **breaking into a locked building** shows a significant linear downward trend. The 2013 estimate is among the lowest on record.

Figure 3.5.6
Percentage Reporting Nonviolent Antisocial Behaviours, 1991–2013 OSDUHS (Grades 7, 9, and 11 only)



3.5.3 Violent Behaviours

(Figures 3.5.7 to 3.5.9; Tables A3.5.1a, A3.5.1b)

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

2013 (Grades 7–12):

Assault

- Among all students, 6.4% (95% CI: 5.3%-7.6%) report assaulting someone at least once during the 12 months before the survey. This percentage represents about 64,100 students in Ontario.
- Males are twice as likely as females to report assaulting someone (8.7% vs. 3.8%, respectively).
- Assault does not significantly vary by grade, or by region.

Weapon Carrying

- An estimated 6.0% (95% CI: 5.0%-7.3%) 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 60,500 students.
- Males (9.1%) are three times as likely as females (2.7%) to report carrying a weapon.
- Weapon carrying significantly varies by grade showing that 7th graders are least likely to report this behaviour.
- There are no significant regional differences.

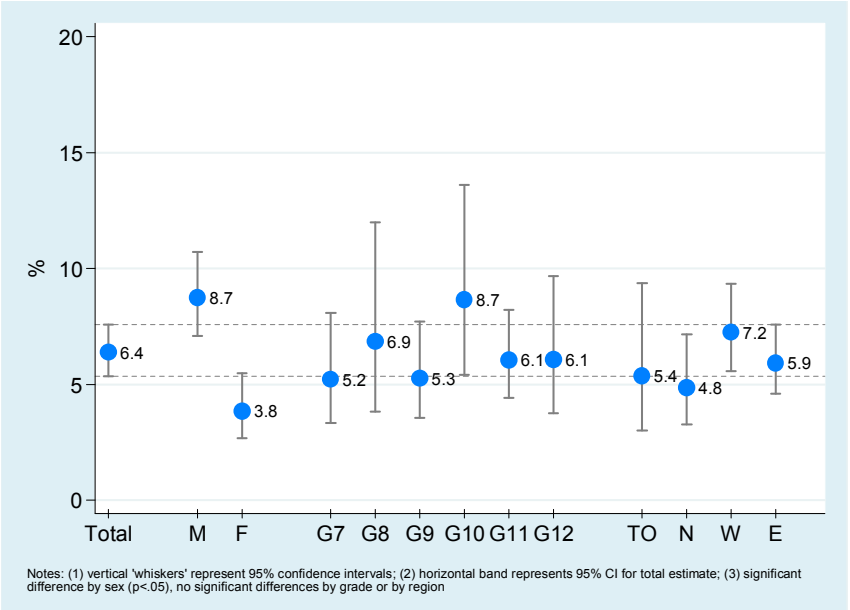
1999–2013 (Grades 7–12):

- The estimated percentage of students reporting assaulting someone significantly declined over the past decade or so, from 19.9% in 1999 to 6.4% in 2013.
- The estimated percentage of students reporting carrying a weapon significantly declined from 13.5% in 1999 to 6.0% in 2013.

1991–2013 (Grades 7, 9, 11 only):

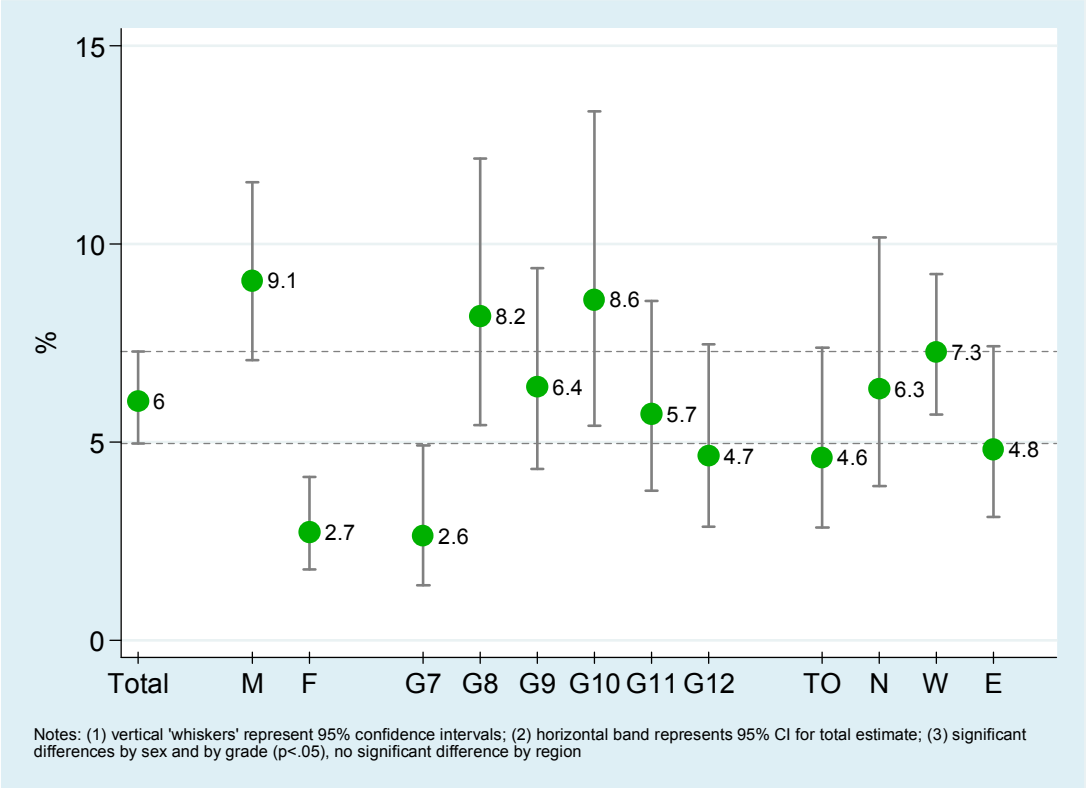
- Assault peaked in the late 1990s, declined sharply thereafter, followed by a steady decline. The 2013 estimate is the lowest on record.
- Carrying a weapon peaked in 1993, steadily declined until about 2009, and has since levelled off. The 2013 estimate is significantly lower than estimates seen in the early 1990s.

Figure 3.5.7
Percentage Reporting Assaulting Someone at Least Once in the Past Year by Sex, Grade, and Region, 2013 OSDUHS (n=5,478)



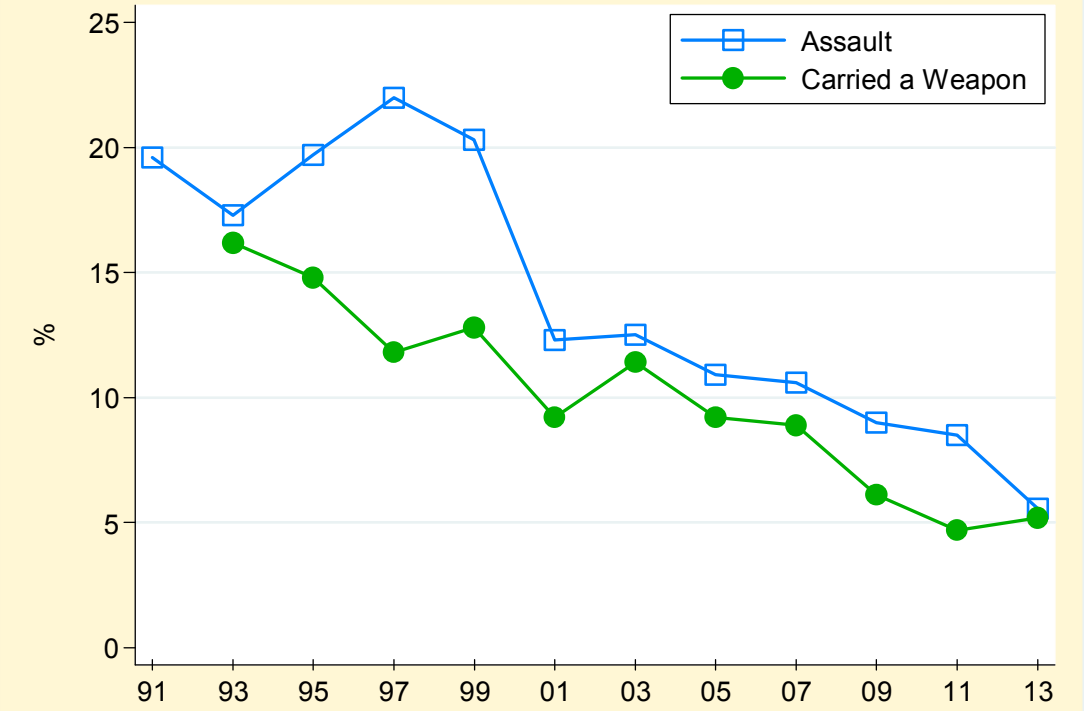
Notes: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal band represents 95% CI for total estimate; (3) significant difference by sex (p<.05), no significant differences by grade or by region

Figure 3.5.8
Percentage Reporting Carrying a Weapon (i.e., knife or gun) at Least Once in the Past Year by Sex, Grade, and Region, 2013 OSDUHS (n=5,478)



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

Figure 3.5.9
Percentage Reporting Violent Behaviours, 1991–2013 OSDUHS (Grades 7, 9, 11 only)



Note: weapon carrying not asked about in 1991

3.5.4 Violence on School Property

(Figures 3.5.10 to 3.5.12; Tables A3.5.2, A3.5.3)

Starting in 2001, the OSDUHS introduced a question about fighting on school property. A random half sample was asked: *"During the last 12 months, how many times were you in a physical fight on school property?"* In this section, we describe the percentage reporting **at least one occasion** during the past year.

Starting in 2003, the OSDUHS asked students about being threatened with a weapon on school property. A random half sample was asked: *"During the last 12 months, how many times has someone threatened or injured you with a weapon, such as a gun, knife or club on school property?"* In this section, we describe the percentage reporting **at least one occasion** during the past year.

2013 (Grades 7–12):

Physical Fighting

- About one-in-ten (10.9%) – an estimated 109,700 students – report fighting on school property at least once in the past 12 months (6.6% report a single time, while 4.3% report two or more times).
- There is a significant sex difference, with males being four times as likely as females to report fighting at school (17.5% vs. 3.9%, respectively).
- Fighting at school significantly decreases with grade. Students in grades 7 and 8 (about 15%–18%) are most likely to fight at school, whereas 12th graders (7.1%) are least likely.
- There are no significant differences among the regions.

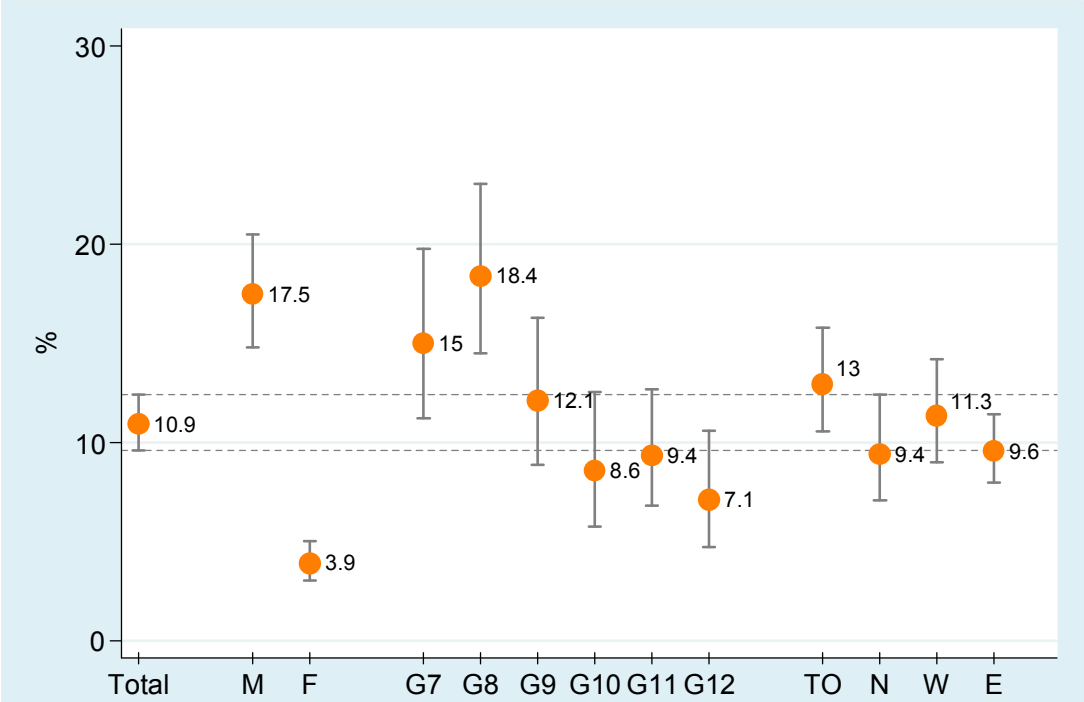
Threatened or Injured with a Weapon

- An estimated 5.8% – roughly 59,400 students in grades 7 through 12 – report being threatened or injured with a weapon on school property at least once in the past year (4.1% report a single event, while 1.7% report two or more times).
- Males are twice as likely as females to report being threatened or injured with a weapon at school (7.7% vs. 3.7%, respectively).
- There are no significant differences among the grades.
- There are no significant differences among the regions.

2001–2013 (Grades 7–12):

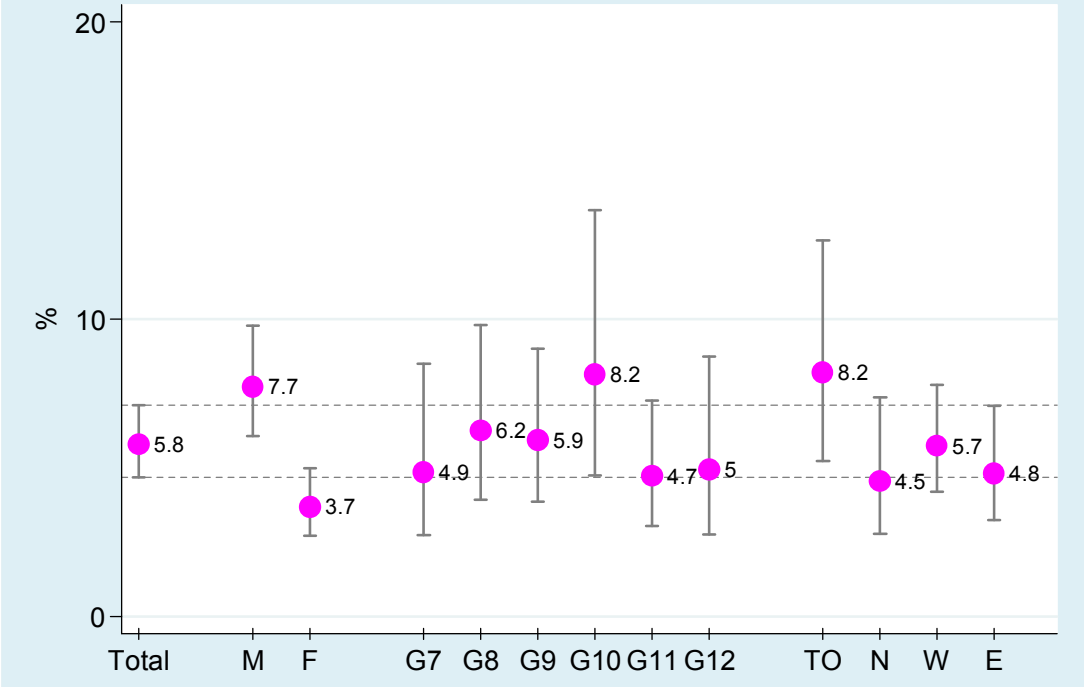
- The percentage of students reporting **physical fighting at school** in 2013 (10.9%) is similar to the estimate from 2011 (11.9%), but significantly lower than the estimate from 2001 (16.9%), the first year of monitoring. The 2013 estimates for males, females, 7th graders, students in the North, West, and East are significantly lower than their respective 2001 estimates.
- The percentage of students reporting being **threatened or injured with a weapon at school** in 2013 (5.8%) is similar to the estimate from 2011 (6.5%), and 2003 (7.7%), the first year of monitoring. No significant changes among the subgroups are evident.

Figure 3.5.10
Percentage Reporting Fighting at School at Least Once in the Past Year by Sex, Grade, and Region, 2013 OSDUHS (n=5,478)



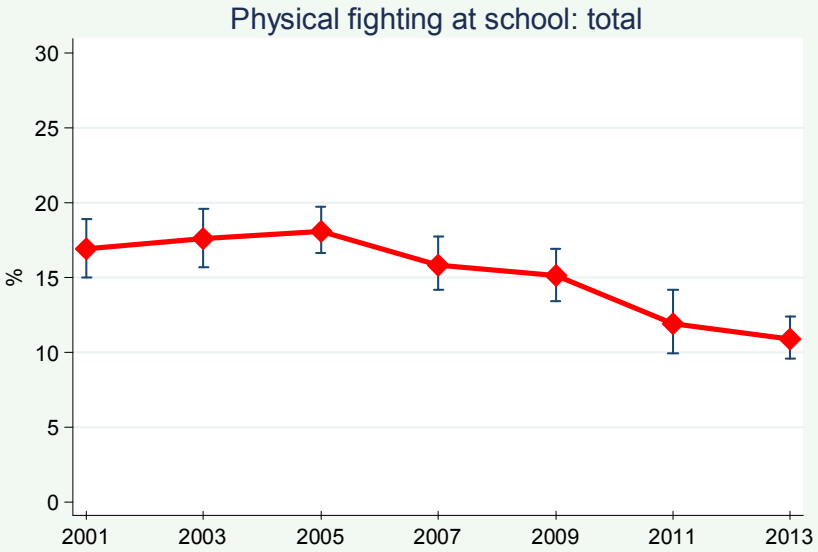
Notes: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal band represents 95% CI for total estimate; (3) significant difference by sex and by grade (p<.05), no significant difference by region

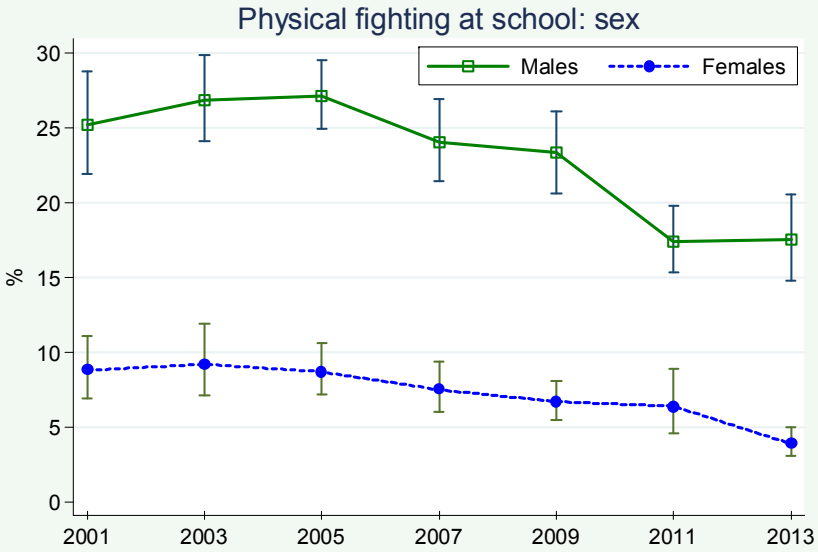
Figure 3.5.11
Percentage Reporting Having Been Threatened or Injured with a Weapon at School at Least Once in the Past Year by Sex, Grade, and Region, 2013 OSDUHS (n=5,478)

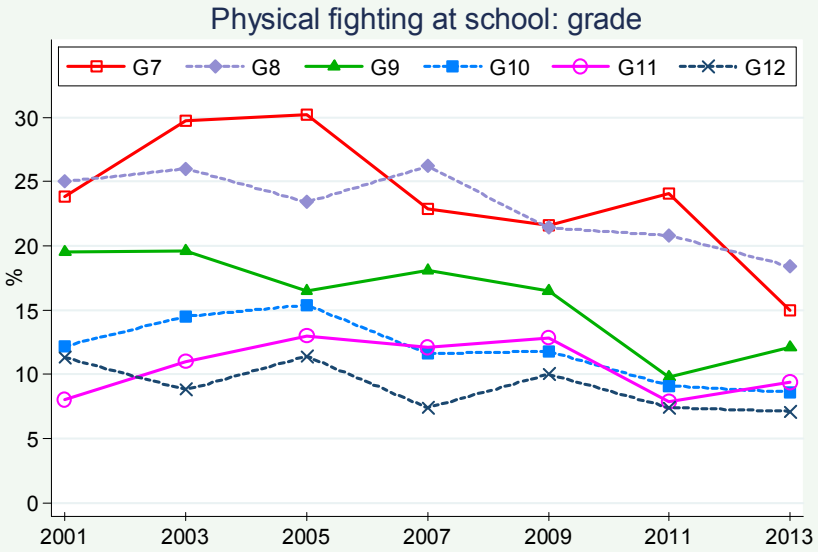


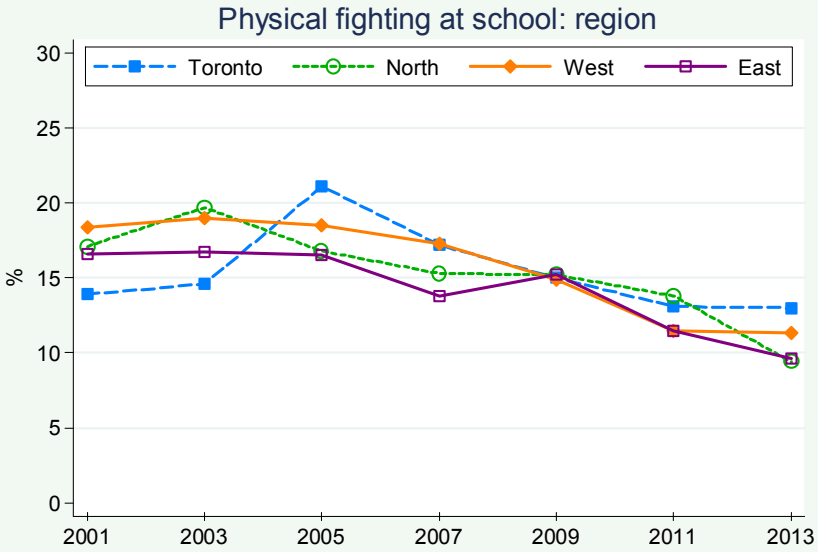
Notes: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal band represents 95% CI for total estimate; (3) significant difference by sex (p<.05), no significant differences by grade or region

Figure 3.5.12
Percentage Reporting Fighting at School in the Past Year, 2001–2013 OSDUHS (Grades 7–12)









3.5.5 Bullying at School

(Figures 3.5.13 to 3.5.16; Tables A3.5.4, A3.5.5)

Starting in 2003, the OSDUHS introduced four questions about bullying. 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: *Was not bullied at school*; *Daily or almost daily*; *About once a week*; *About once a month*; or *Less than once a month*.

2013 (Grades 7–12):

Bullying Victims at School

- One-quarter (25.0%) of 7th to 12th graders report being bullied at school since September. This represents about 256,200 students in Ontario.
- The most prevalent mode of victimization is verbal (21.4%), while 1.7% are typically bullied physically, and 1.9% are typically victims of theft or vandalism.
- An estimated 7.3% of students report being bullied on a daily or weekly basis, and 17.1% are bullied monthly or less often.
- Females are significantly more likely than males to report being bullied in any way at school (28.1% vs. 22.2%, respectively). This sex difference, however, varies by mode. Females are more likely than males to be bullied verbally, whereas males are more likely to be bullied physically or be victims of theft/vandalism.
- There is significant grade variation, with students in grades 7 and 8 (about one-third) most likely to be bullied in any manner, while 12th graders (16.6%) are least likely. Grade 7 and 8 students are also the most likely to be bullied physically (about 5%), and to be bullied on a daily/weekly basis (12%–14%).
- Despite some variation, there are no significant differences among the four regions regarding reports of being bullied at school.

Bullying Perpetrators at School

- An estimated 16.0% of 7th to 12th graders report bullying other students at school. This represents about 163,900 students in Ontario.
- The most prevalent mode of bullying others is through verbal attacks (14.0%), followed distantly by physical attacks (1.1%). Theft or damage to others' property is reported by less than 1% of students.
- An estimated 3.1% of students report bullying others on a daily or weekly basis, and 13.0% report bullying others monthly or less often.

- Males (17.5%) and females (14.3%) are equally likely to report bullying others at school.
- There are no significant grade differences.
- There are no significant regional differences.

2003–2013 (Grades 7–12):

- Despite a slight numerical decrease, the percentage of 7th to 12th graders reporting **being bullied at school** did not significantly change between 2011 (28.6%) and 2013 (25.0%). However, there has been a significant linear decline since 2003 (32.7%), the first year of monitoring.
- The decline in bullying victimization at school since 2003 is significant among males, but not among females. Other subgroups showing this declining trend since 2003 include 7th and 10th graders, as well as students in the West and East regions.
- There has been no significant change over time regarding the typical way students are bullied at school, or in the frequency of being bullied.
- Among 7th to 12th graders, the percentage reporting **bullying others** at school in 2013 (16.0%) is not significantly different from the estimate seen in 2011 (20.7%), but is significantly lower than the estimate seen in 2003 (29.7%), the first year of monitoring.
- Both males and females show a decline since 2003, and females show a further decline between 2011 and 2013. All grades show a significant decline since 2003, as do all regions except for Toronto.
- There has been no significant change over time regarding the typical way students bully others at school, or in the frequency of bullying others.

Figure 3.5.13
Percentage Reporting the Typical Way They Were Bullied at School Since September by Sex, 2013 OSDUHS (Grades 7–12, n=5,478)

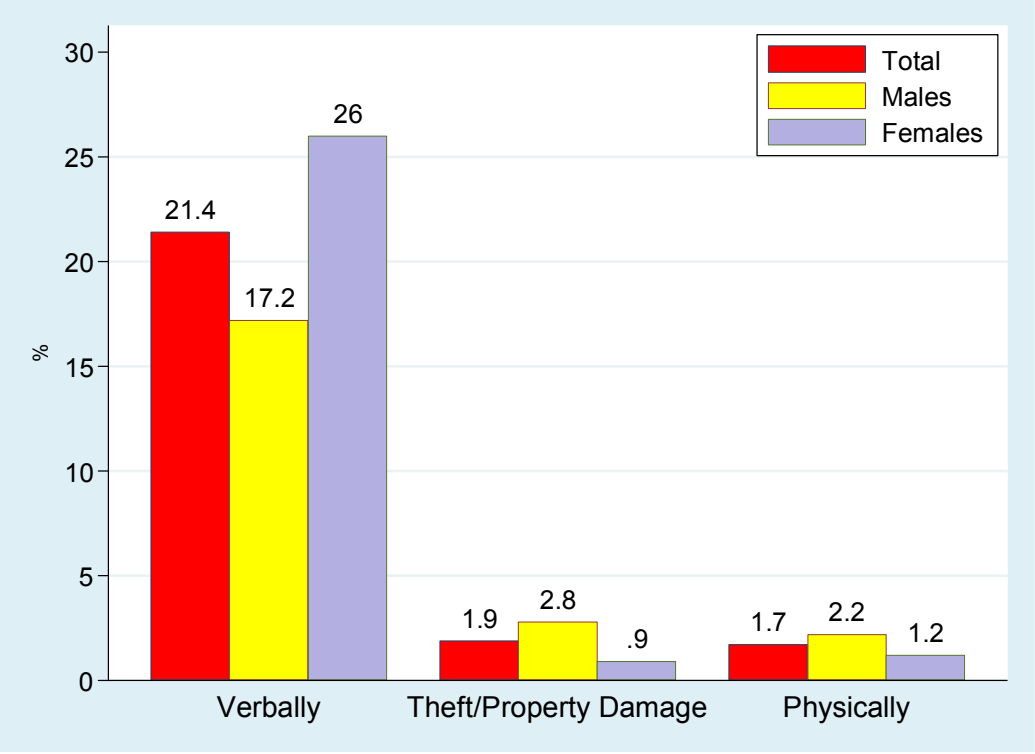
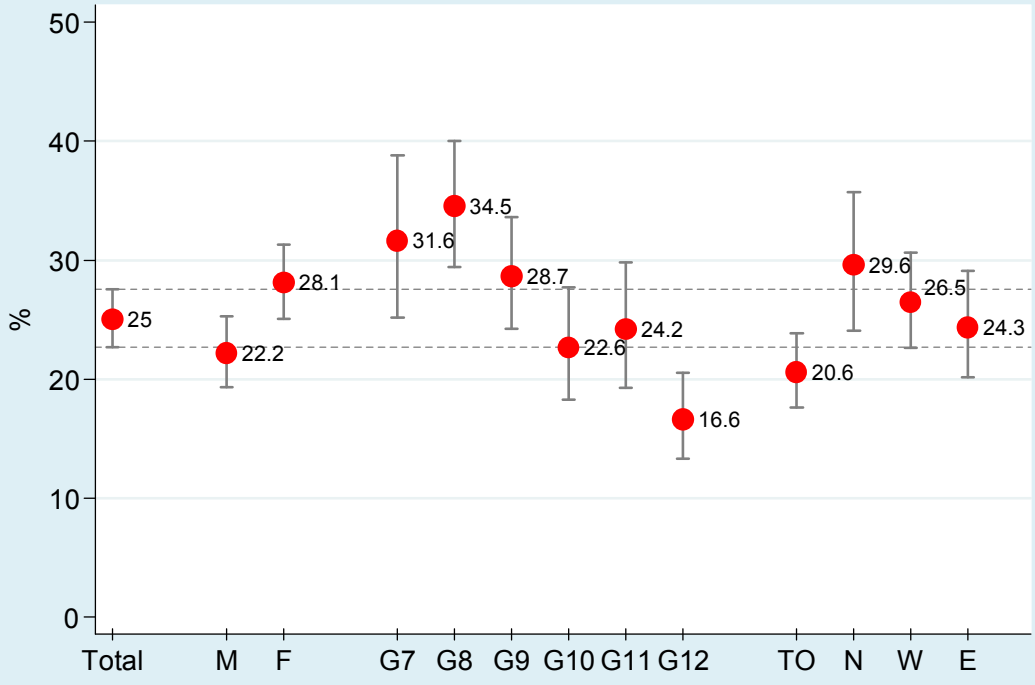
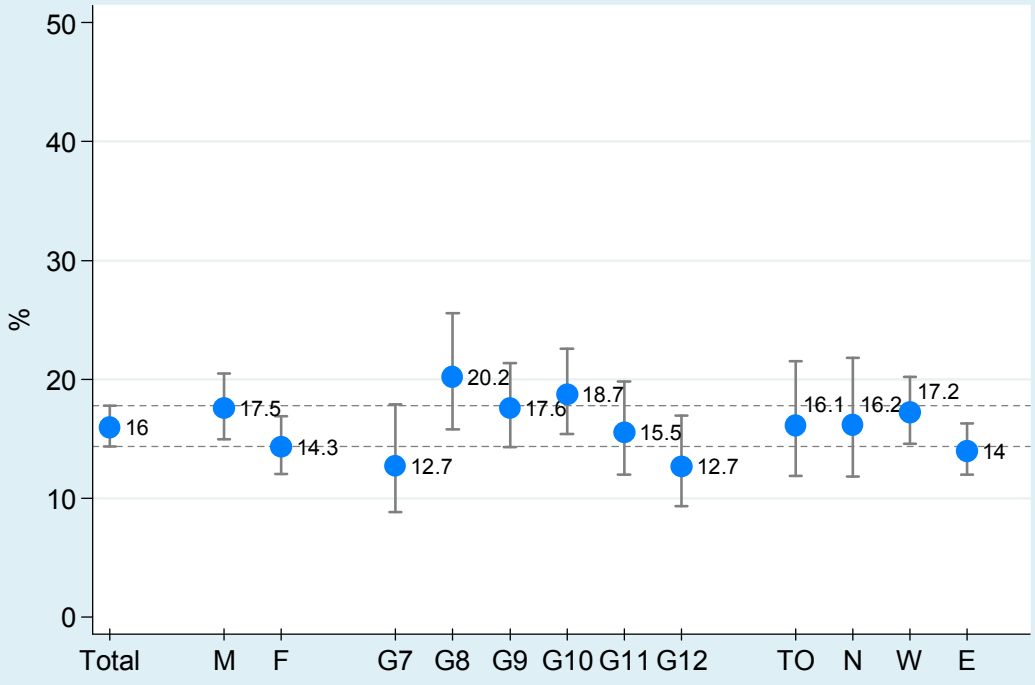


Figure 3.5.14
Percentage Reporting Being Bullied (in Any Way) at School Since September by Sex, Grade, and Region, 2013 OSDUHS (n=5,478)



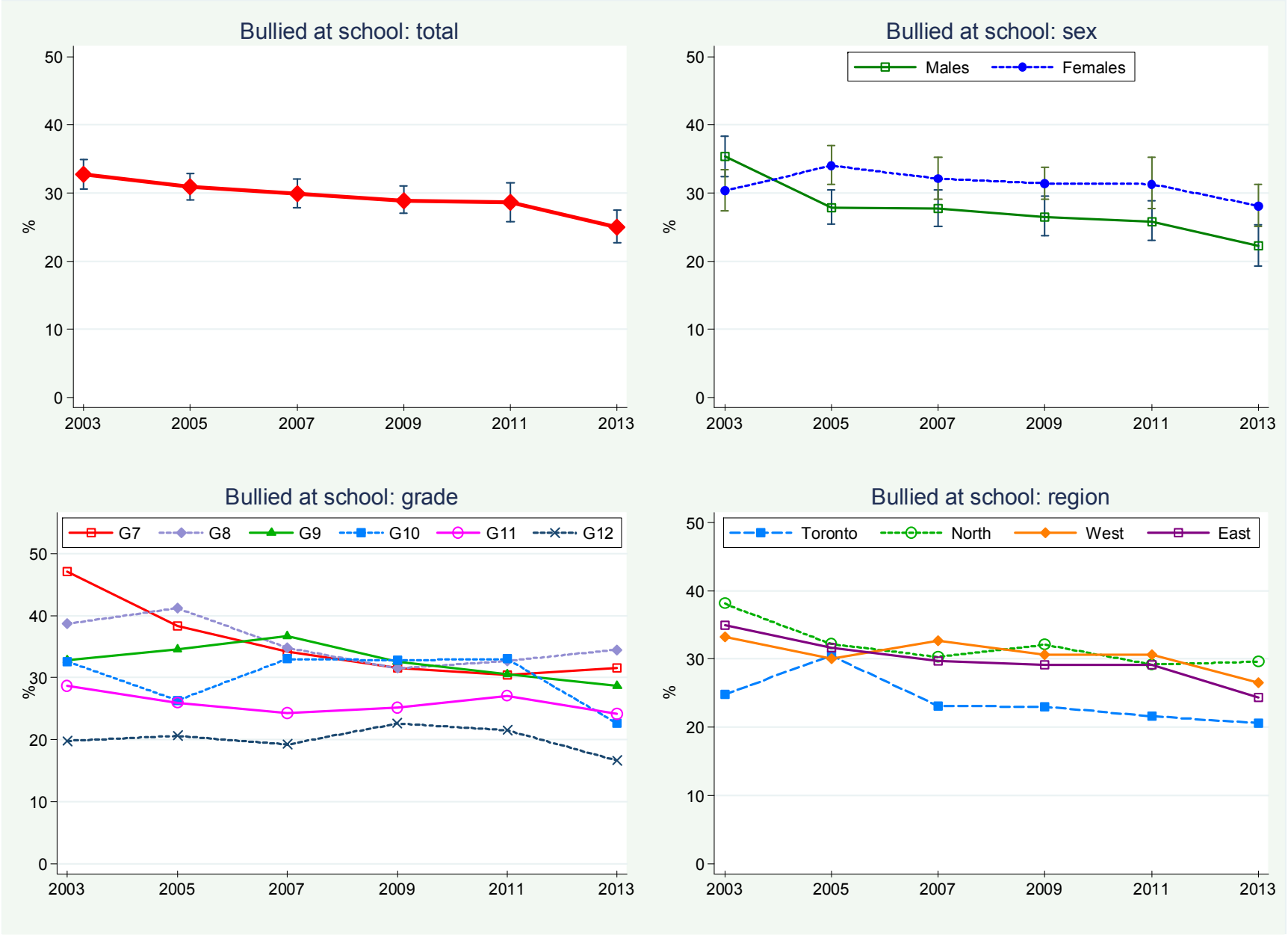
Notes: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal band represents 95% CI for total estimate; (3) significant difference by sex and by grade (p<.05), no significant difference by region

Figure 3.5.15
Percentage Reporting Bullying Others (in Any Way) at School Since September by Sex, Grade, and Region, 2013 OSDUHS (n=5,478)



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

Figure 3.5.16
Percentage Reporting Being Bullied (in Any Way) at School Since September, 2003-2013 OSDUHS (Grades 7–12)



3.5.6 Victim of Cyberbullying

(Figure 3.5.17; Table A3.5.6)

Starting in 2011, the OSDUHS introduced a question about being victimized over the Internet. A random half sample was asked: *"In the last 12 months, how many times did other people bully or pick on you through the Internet?"* The response options were: *Never*, *Once*, *Two or three times*, or *Four or more times*. Students also had the option of responding that they do not use the Internet. (Note that those who responded they did not use the Internet [n=297, 5.8%] were assigned to the "not bullied" group.) Here, we describe the percentage of students who report they were bullied over the Internet at least once in the previous 12 months.

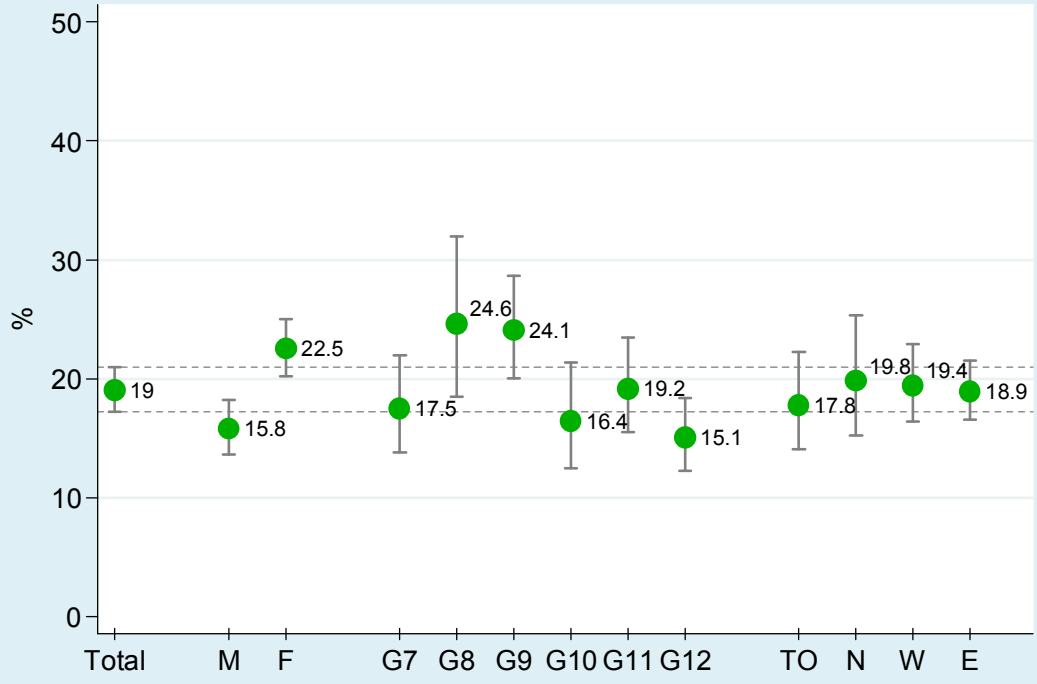
2013 (Grades 7–12):

- About one-fifth (19.0%) of students in grades 7 through 12 report being bullied over the Internet at least once in the past year. This represents about 195,500 students in Ontario.
- Females are significantly more likely than males to report being cyberbullied (22.5% vs. 15.8%, respectively).
- There are significant differences among the grades showing that 8th and 9th graders (about 25%) are most likely to report being cyberbullied.
- There are no significant differences among the four regions.

2013 vs. 2011 (Grades 7–12):

- Among 7th to 12th graders, the percentage reporting being cyberbullied did not significantly change between 2011 (21.6%) and 2013 (19.0%). However, there was a significant decrease among females (from 28.0% to 22.5%). No other subgroup showed a significant change.

Figure 3.5.17
Percentage Reporting Being Cyberbullied at Least Once in the Past Year by Sex, Grade, and Region, 2013 OSDUHS (n=5,478)



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

3.6 Gambling and Video Gaming

3.6.1 Gambling Activity

(Figures 3.6.1 to 3.6.8; Table A3.6.1)

Starting in 2001, the OSDUHS introduced questions about gambling activity during the past year. A random half sample of students was asked "*How often (if ever) in the last 12 months have you done each of the following?"* The 11 activities listed below were surveyed in 2013.

- *bet money on card games*
- *bet money on dice games* (added in 2003)
- *bet money on other games of skill (such as pool, darts, chess, bowling)* (added in 2013)
- *played bingo for money*
- *bet money in sports pools*
- *bought sports lottery tickets (such as Sports Select or Proline)*
- *bought any other lottery tickets, including instant lottery (such as 6/49, scratch cards, pull-tabs)*
- *bet money on video gambling machines, slot machines, or other gambling machines*
- *bet money at a casino in Ontario*
- *bet money over the Internet, on any game* (added in 2003)
- *bet money in other ways not listed above* (added in 2003)

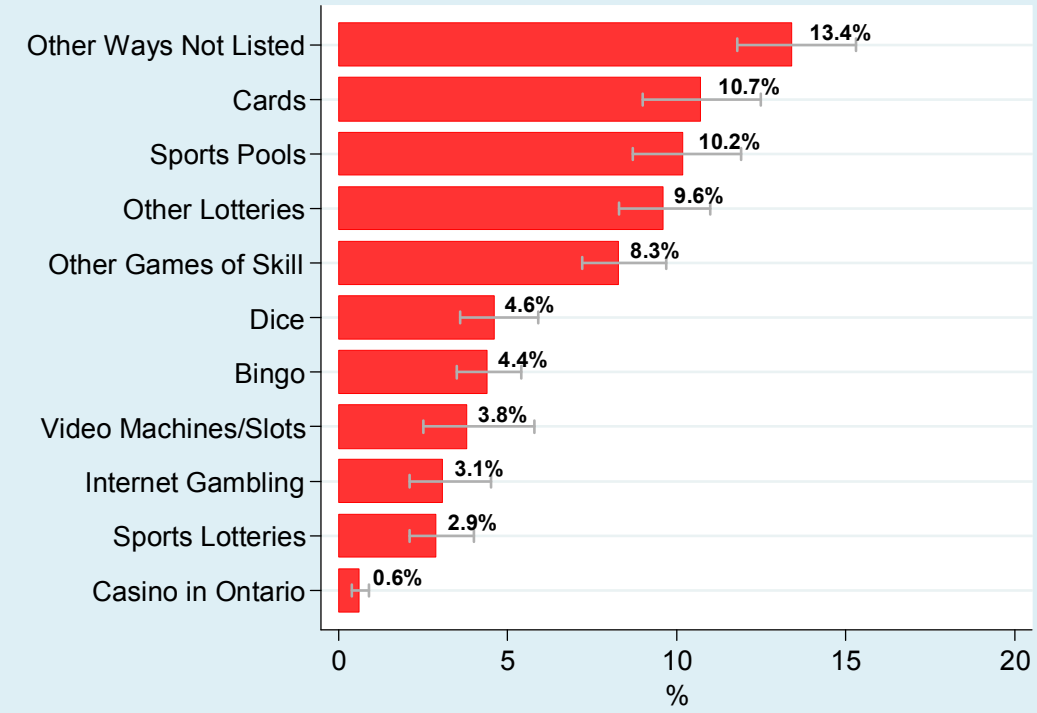
In this section, we describe the percentage of students who report gambling money on each activity at least once in the past 12 months, and the percentage who report **at least one of the activities**. In addition, the percentage reporting gambling at **five or more activities** is presented as an indicator of multi-gambling activity.

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*.

Individual Gambling Activities in 2013 (Grades 7–12):

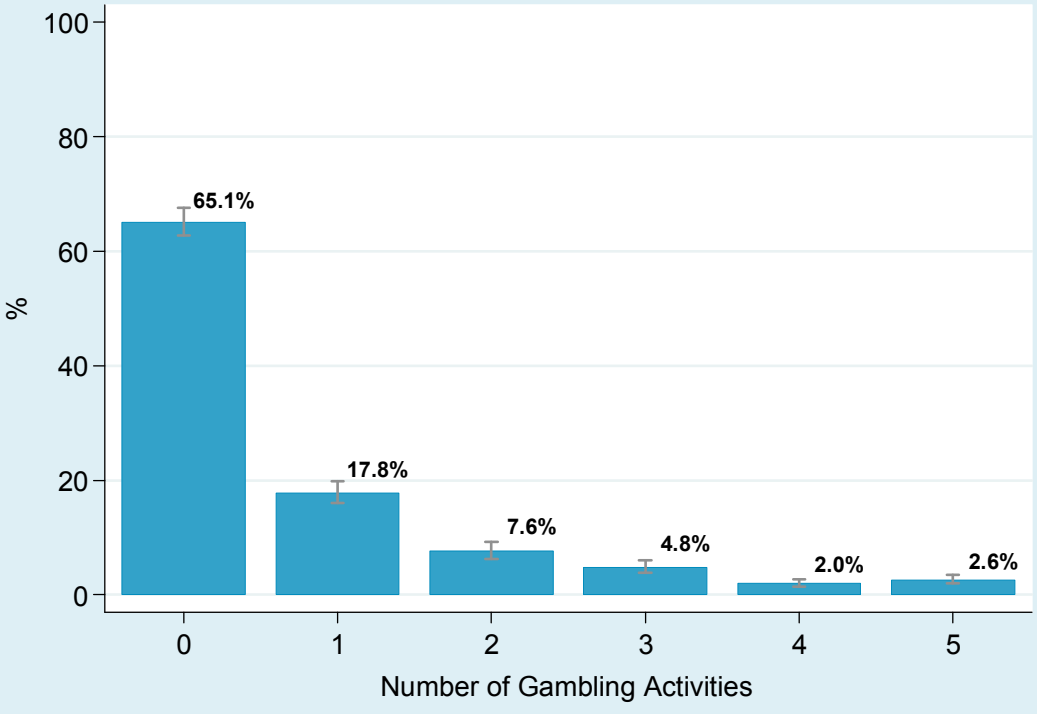
- Of the specific gambling activities surveyed, card games are the most prevalent (10.7%) among 7th–12th graders, followed closely by sports pools (10.2%). Casino gambling (prohibited to those under age 19) is the least prevalent activity (less than 1%). About one-in-eight (13.4%) students are gambling money on activities not included in our list of activities.
- All gambling activities, except for two, significantly vary by sex. The activities that do not differ by sex are playing bingo and gambling with lottery tickets (excluding sports lottery tickets).
- There are significant grade differences for five of the gambling activities: card games, dice games, sports lottery tickets, other lottery tickets, and casino gambling. Generally, these activities increase with grade and peak in grade 12.
- Of the activities, only betting money on dice games significantly varies by region. Toronto students (10.4%) are significantly more likely than students in the other three regions (about 3%) to bet money on dice games.

Figure 3.6.1
Percentage Reporting Gambling Activities in the Past Year, 2013 OSDUHS
(Grades 7–12, n=5,478)



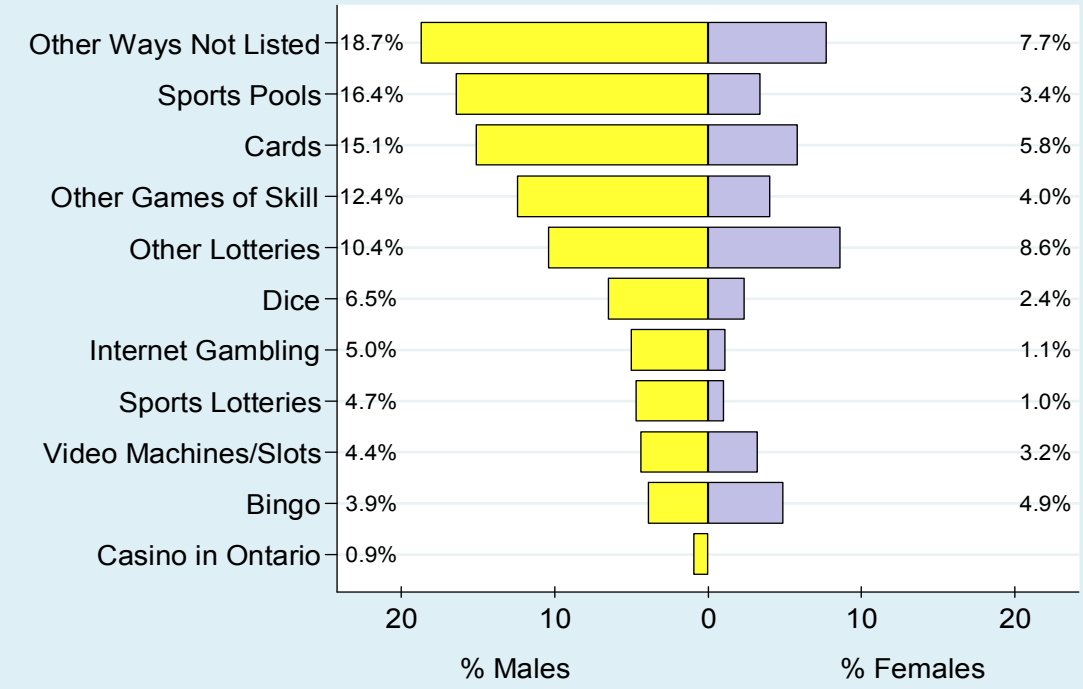
Notes: (1) error bars represent 95% confidence intervals; (2) 'Other Games of Skill' such as pool, darts chess, bowling

Figure 3.6.2
Number of Gambling Activities in the Past Year, 2013 OSDUHS (Grades 7–12, n=5,478)



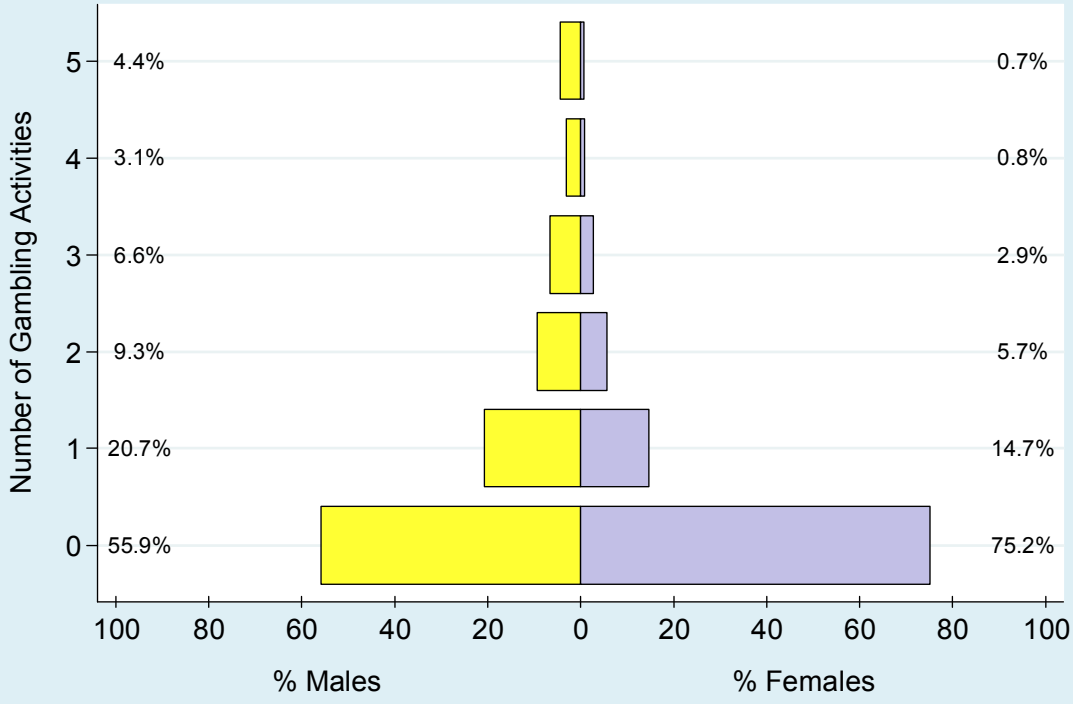
Notes: (1) error bars represent 95% confidence intervals; (2) the maximum value of 5 on the x-axis refers to 5 or more gambling activities in the past year

Figure 3.6.3
Percentage Reporting Gambling Activities in the Past Year by Sex, 2013 OSDUHS
(Grades 7–12, n=5,478)



Notes: (1) significant sex difference (p<.05) for each activity except other lotteries and bingo;
(2) the females' estimate for betting in a casino in Ontario was suppressed

Figure 3.6.4
Number of Gambling Activities in the Past Year by Sex, 2013 OSDUHS
(Grades 7–12, n=5,478)



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 in 2013 (Grades 7–12)

- An estimated 34.9% of students in grades 7–12 report at least one gambling activity during the past 12 months. This percentage represents about 352,400 students across Ontario.
- Males are significantly more likely than females to report any gambling (44.1% vs. 24.8%, respectively).
- Gambling significantly increases with grade, from 24.3% of 7th graders to 44.5% of 12th graders.
- There are no significant differences among the four regions.

Multi-Gambling Activity in 2013 (Grades 7–12):

- An estimated 2.6% of students in grades 7–12 gambled at five or more activities during the past 12 months. This percentage represents about 26,600 students across Ontario.
- Males are significantly more likely than females to report multi-gambling activity (4.4% vs. 0.7%, respectively).
- Multi-gambling activity is more likely among the older grades (the younger grade estimates are suppressed due to low values).
- There are no significant differences among the regions.

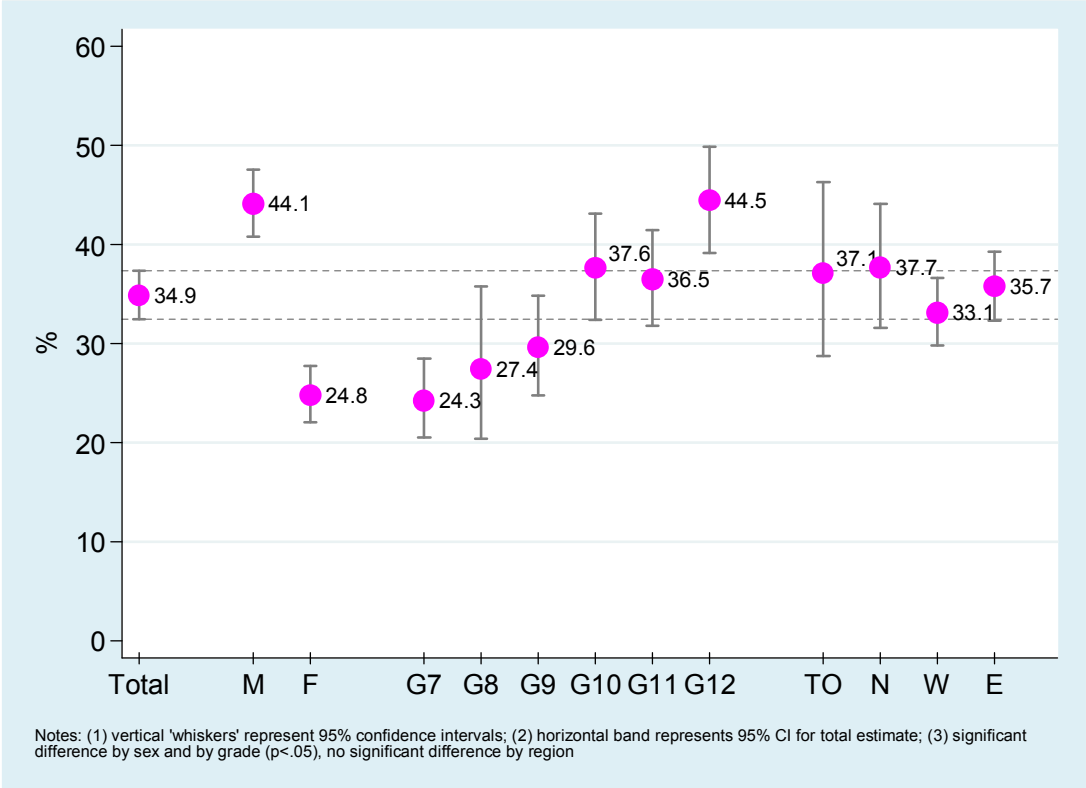
2001–2013 (Grades 7–12):

- Among 7th–12th graders, no individual gambling activity increased in 2013. In fact, most activities show significant downward trends. The past year prevalence estimates of the following activities are currently lower than a decade ago: cards, dice, bingo, sports pools, sports lottery tickets, other lottery tickets, dice, casino gambling, and other gambling activities (not asked about). The percentage of students gambling at video gambling machines/slots and the percentage gambling over the Internet held steady.
- There has been a significant decline in the percentage of students who report any gambling activity during the past decade, from 57.3% in 2003 to 34.9% in 2013.
- There has been a significant decline in the percentage of students who report multi-gambling activity between 2003 (6.1%) and 2013 (2.6%).

Money Spent on Gambling in 2013 (Grades 7–12):

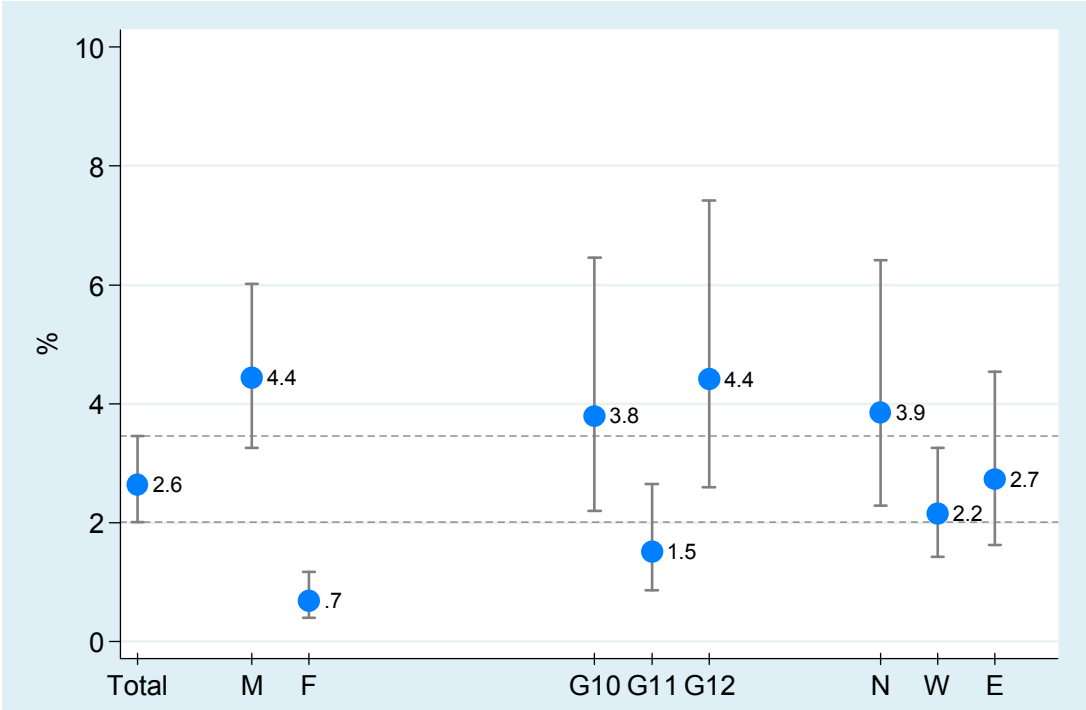
- Among only those students who report gambling in the past year, the majority (90%) report that the largest amount of money gambled was less than $50. Another 5% report gambling between $50 and $99; 2% report between $100 and $199; and 2% report spending $200 or more.

Figure 3.6.5
Percentage Reporting Any Gambling Activity in the Past Year by Sex, Grade, and Region, 2013 OSDUHS (n=5,478)



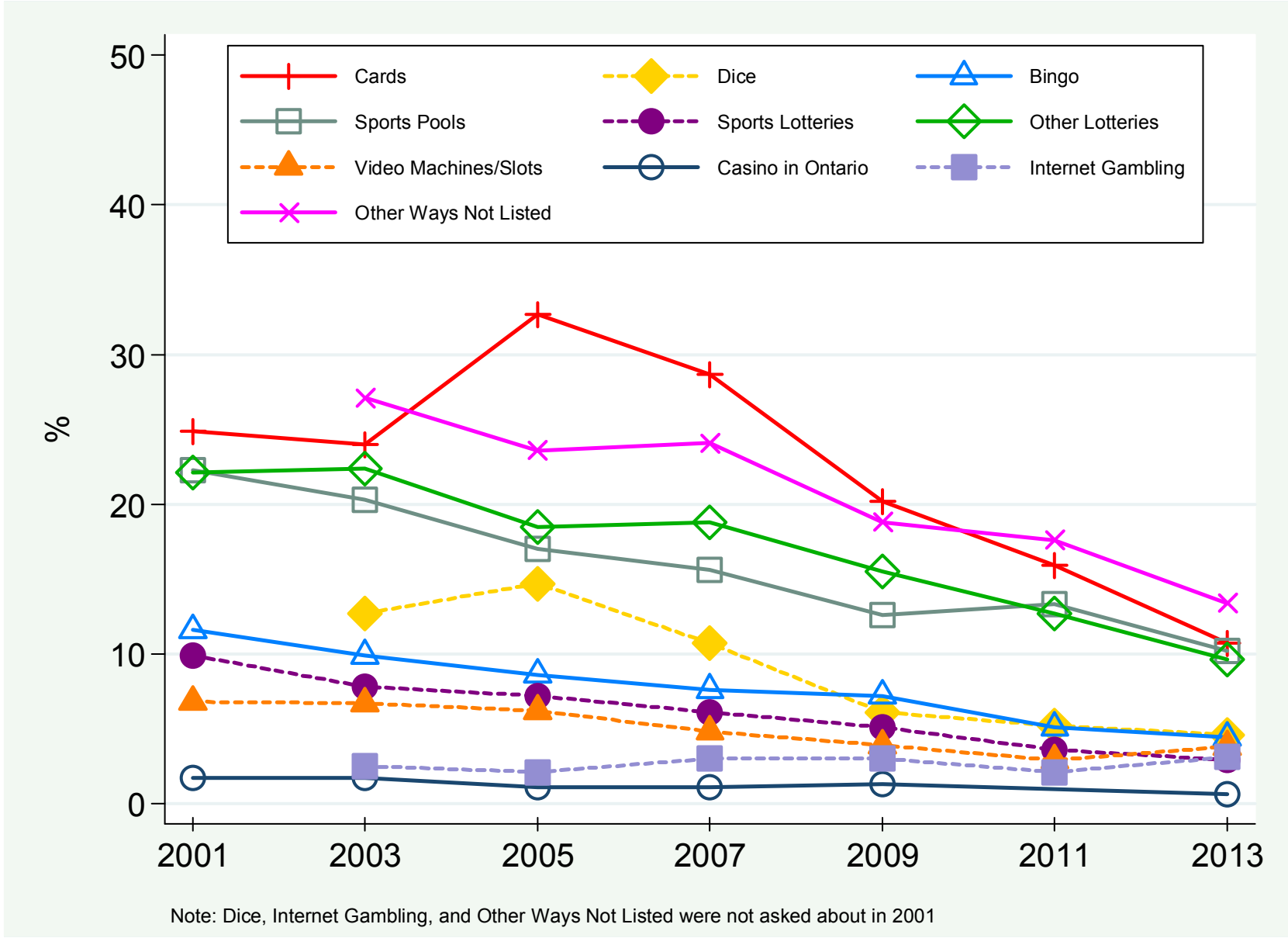
Notes: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal band represents 95% CI for total estimate; (3) significant difference by sex and by grade (p<.05), no significant difference by region

Figure 3.6.6
Percentage Reporting Multi-Gambling Activity (5+ Activities) in the Past Year by Sex, Grade, and Region, 2013 OSDUHS (n=5,478)



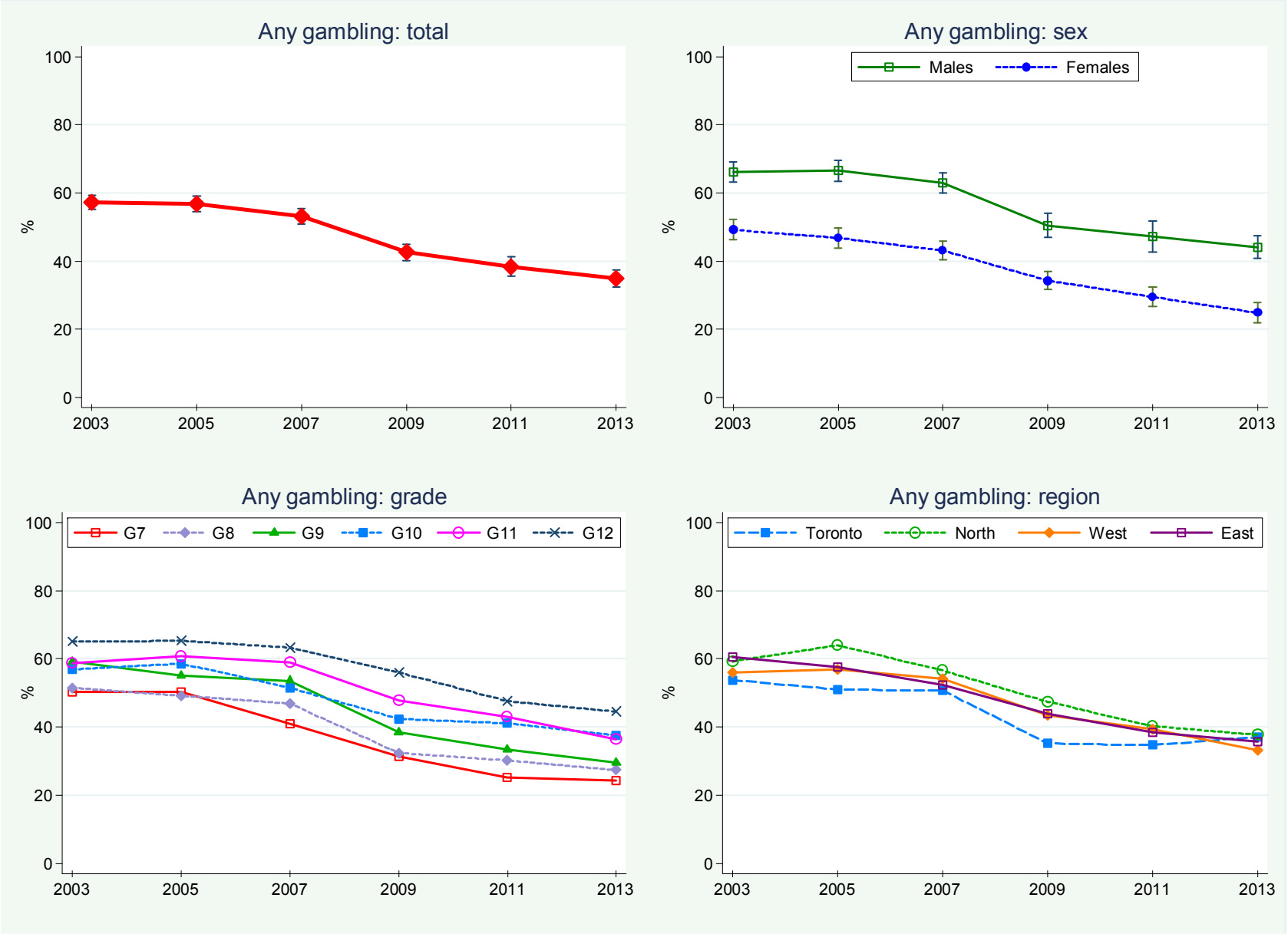
Notes: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal band represents 95% CI for total estimate; (3) estimates for Grades 7-9 and Toronto were suppressed; (4) significant difference by sex and by grade (p<.05), no significant difference by region

Figure 3.6.7
Percentage Reporting Gambling Activities in the Past Year, 2001–2013 OSDUHS (Grades 7–12)



Note: Dice, Internet Gambling, and Other Ways Not Listed were not asked about in 2001

Figure 3.6.8
Percentage Reporting Any Gambling Activity in the Past Year, 2003–2013 OSDUHS (Grades 7–12)



3.6.2 Gambling Problems

(Tables 3.6.1, A3.6.2)

Starting in 1999, students were asked about gambling problems using the *South Oaks Gambling Screen Revised for Adolescents* (SOGS-RA; Winters, Stinchfield, & Fulkerson, 1993). Between 1999 and 2003, the 12-item screen was used, but in 2005 this was abbreviated to six items.[64] The following six questions were asked of a random half of students in grades 9–12, each question referring to the past 12 months:

- *Has your betting ever caused any problems for you such as arguments with family/friends, problems at school/work?*
- *Have you ever gambled more than you had planned to?*
- *Has anyone criticized your betting or told you that you had a gambling problem, regardless of whether you thought it was true or not?*
- *Have you had arguments with family/friends because of the money you spend on gambling?*
- *Have you ever skipped or been absent from school or work due to betting activities?*
- *Have you borrowed money or stolen something in order to bet or to cover gambling debts?*

To identify those with a probable **gambling problem**, we examined the percentage that answered positive to **two or more of the six** questions. The reliability coefficient (α) for these items is 0.70.

2013 (Grades 9–12):

- Of the six SOGS-RA6 items displayed in **Table 3.6.1**, the most prevalent is gambling more than one had planned (1.7%), followed by experiencing problems with family or school due to one's gambling (1.5%).
- An estimated 1.1% of secondary students are classified as having a gambling problem, as measured by the abbreviated SOGS-RA6. This percentage represents roughly 8,800 Ontario students in grades 9–12. When we look only among secondary students who report gambling at one or more of the activities measured in the survey in the past year, 2.7% (95% CI: 1.4%-4.9%) are classified as having a gambling problem.
- Subgroup estimates were suppressed due to low values and large coefficients of variation.

1999–2013 (Grades 9–12):

- The percentage of secondary students classified as having a gambling problem in 2013 (1.1%) does not significantly differ from the estimate from 2011 (1.9%). However, the prevalence of problem gambling shows a significant linear decline since 1999, falling from 7.7% to 1.1%.
- The decline in problem gambling among secondary students during the past decade or so is also evident among all subgroups except for females (whose values have been low and stable) and students in the North.

[64] A ROC analysis on the 2003 data was performed to reduce the number of SOGS items from 12 to six in 2005, and to determine the corresponding cut-off for a gambling problem.

Table 3.6.1: Percentage of Secondary Students Reporting SOGS-RA6 Gambling Problem Indicators Experienced in the Past Year, 2013 OSDUHS (Grades 9–12)

South Oaks Gambling Screen Items (Abbreviated)	Total Sample (*n*=3264)	Males (*n*=1425)	Females (*n*=1839)	
1. Betting caused problems such as arguments with family/friends, problems at school or work	1.5	2.1	0.9	*
2. Gambled more than you had planned to	1.7	2.9	†	*
3. Anyone criticized your betting or told you that you had a gambling problem, regardless of whether you thought it was true or not	†	†	†	
4. Had arguments with family or friends because of the money you spend on gambling	†	†	†	
5. Skipped or been absent from school or work due to betting activities	0.5	0.7	†	
6. Borrowed money or stolen something in order to bet or to cover gambling debts	0.9	†	†	

Notes: (1) entries are the percentages responding "Yes"; (2) n=number of students surveyed; (3) † indicates estimate suppressed; (4) * indicates significant sex difference, p<.05; (5) based on a random half sample of students in grades 9–12.

3.6.3 Video Gaming

(Figures 3.6.9 to 3.6.11; Tables 3.6.2, A3.6.3)

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:

- *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**. The reliability coefficient (α) for these items is 0.78. 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 in 2013 (Grades 7–12):

- Among 7th to 12th graders, 13.3% report that they do not play video games; 28.6% report playing three times a month or less often; 7.6% play once a week; 16.6% play two to three times a week; 13.3% play four to five times a week; and 20.7% play daily or almost daily.
- Males are about three times as likely as females to play video games daily (31.6% vs. 8.9%, respectively).
- There are significant differences among the grades showing that students in grades 7 to 9 (about 25%) are more likely to play daily than are the older grades (about 17%).
- 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 in 2013 (Grades 7–12):

- Over one-quarter (26.3%) of students usually play video games for less than one hour a day; 21.1% play for about one hour; 19.4% play for two hours; 13.4% play for three to four hours; 4.3% play for five to six hours; and 2.1% play for seven or more hours a day.
- Males are significantly more likely than females to play video games for more hours per day (data not shown).

Video Gaming Problems in 2013 (Grades 7–12):

- The percentage of students reporting each of the nine symptoms is presented in **Table 3.6.2**. Males are significantly more likely than females to report each symptom.

- An estimated 10.3% of students are classified as having a video gaming problem. This represents about 105,600 students in grades 7–12 in Ontario. When we look only among students who played video games in the past year, 11.8% (95% CI: 9.8%-14.0%) have a problem. When we look only among students who played video games daily in the past year, over one-quarter (26.6%; 95% CI: 22.9%-30.7%) have a problem.

- Males are about four times as likely as females to exhibit a video gaming problem (16.5% vs. 3.5%, respectively).

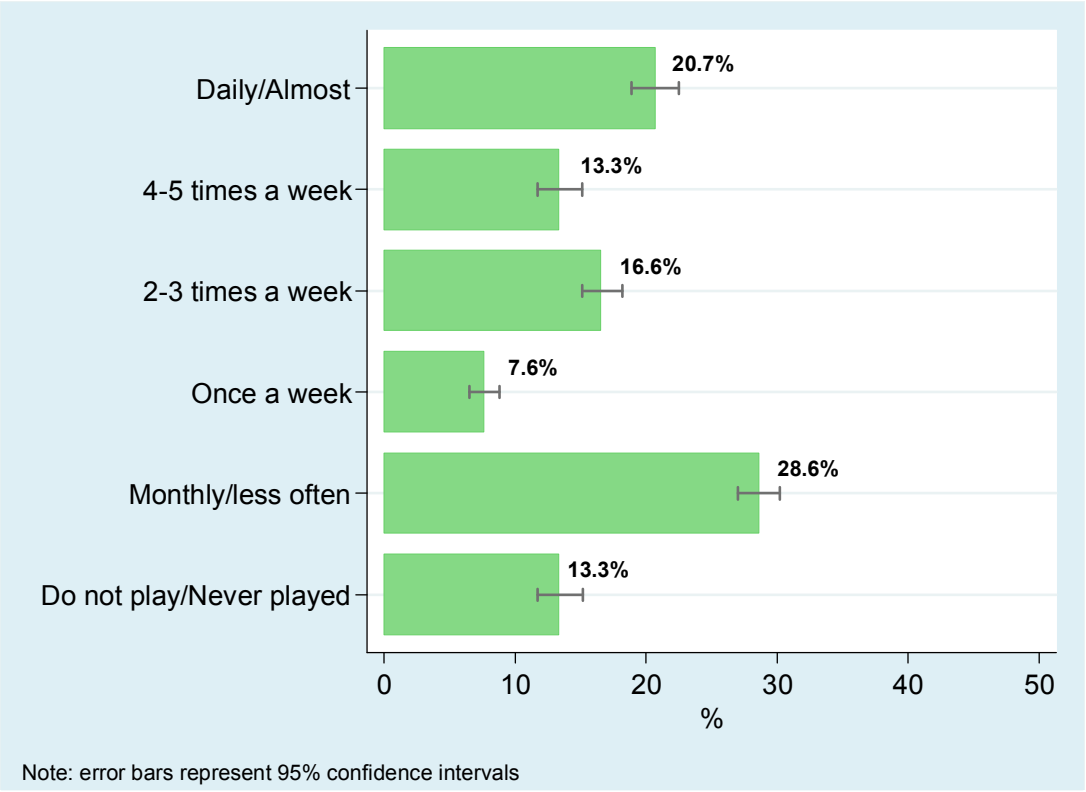
- Despite some variation, there are no significant differences among the grades.

- There are no significant differences among the regions.

2007–2013 (Grades 7–12):

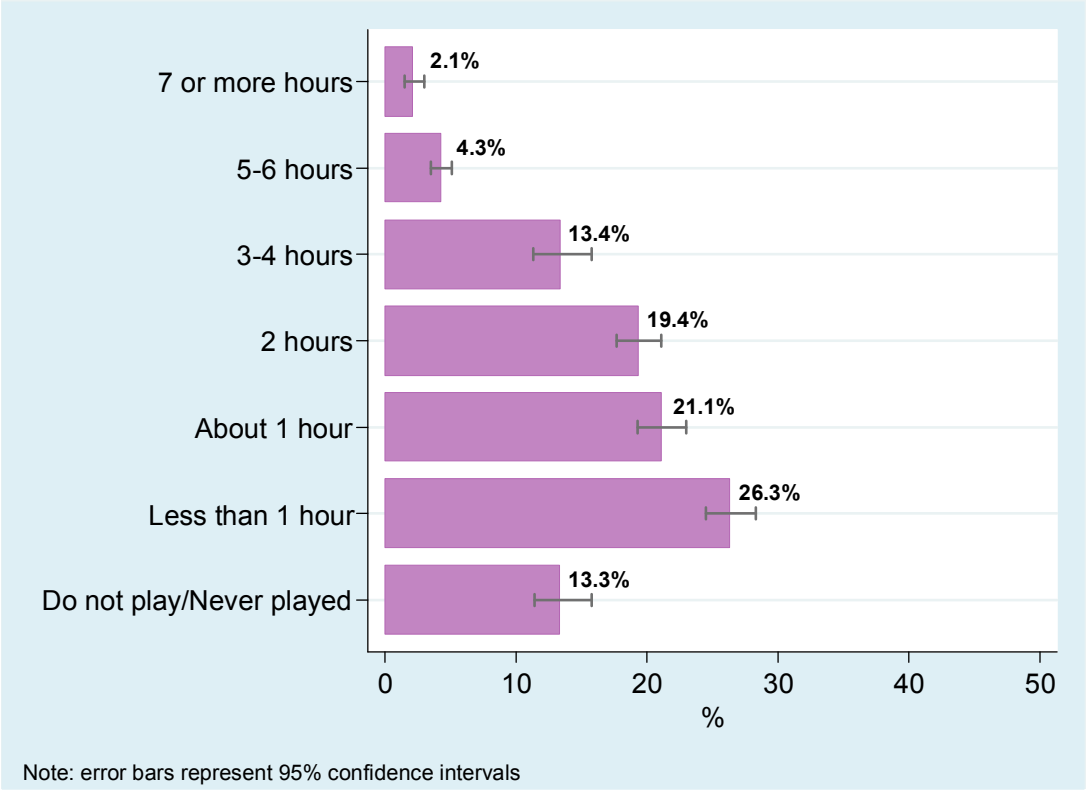
- There was no significant change in the percentage of all students with a video gaming problem between 2007 (9.4%) and 2013 (10.3%). There were no significant changes among the subgroups.

Figure 3.6.9
Frequency of Playing Video Games in the Past Year, 2013 OSDUHS
(Grades 7–12, n=5,478)



Note: error bars represent 95% confidence intervals

Figure 3.6.10
Usual Number of Hours Per Day Spent Playing Video Games in the Past Year,
2013 OSDUHS (Grades 7–12, n=5,478)



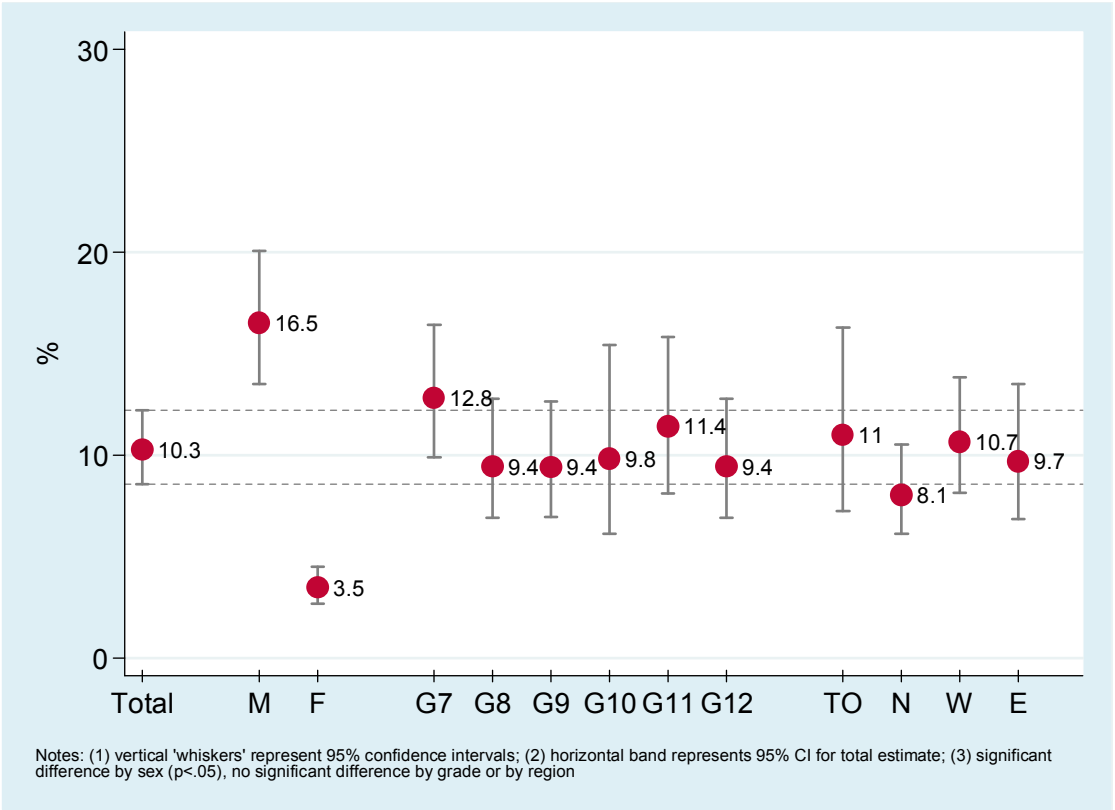
Note: error bars represent 95% confidence intervals

Table 3.6.2: Percentage of Students Reporting Video Game Playing Problem Indicators in the Past Year, 2013 OSDUHS (Grades 7–12)

Problem Video Game Playing (PVP) Scale Items	Total Sample (*n*=5478)	Males (*n*=2469)	Females (*n*=3009)
1. Kept thinking about playing video games, when not playing	20.6	31.3	9.0
2. Spent an increasing amount of time playing video games	15.4	13.6	17.4
3. Tried to control, cut back, stop playing video games, or played for longer than intended	21.4	33.7	8.7
4. Became restless or irritated when could not play video games	9.1	14.0	3.8
5. Played more often when felt bad (sad, angry or nervous) or had problems	15.2	20.8	9.3
6. When lost in a game or did not get the desired results, played again to achieve the target	43.6	57.1	29.0
7. Skipped school or work, or lied/stole/argued with someone in order to play	3.6	5.5	1.5
8. Ignored homework, went to bed late, or spent less time with family and friends because of video game playing	23.6	34.3	12.0
9. Hid video game playing from family or friends	5.7	7.7	3.4

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 3.6.11
Percentage Classified as Having a Video Gaming Problem (PVP Scale) by Sex, Grade, and Region, 2013 OSDUHS (n=5,478)



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 difference by grade or by region

3.7 Coexisting Problems

This chapter describes the co-occurrence or overlap between substance use problems, mental health problems, and antisocial behaviour. Given the potential array of mental health and substance use problems, it is important to describe the co-occurrence of problems experienced by students.

Research on coexisting substance use and mental disorders among clinical populations indicate such occurrences are the norm rather than the exception. Epidemiological estimates, however, are less conclusive mainly due to the lack of general population surveys on adolescents in Canada and the United States. Much is yet to be understood about the prevalence of coexisting disorders, patterns of onset, and the specific combinations of substances and mental health problems.

Research has found an association between existing mental disorders (e.g., conduct disorder) and substance use (Armstrong & Costello, 2002; Boyle & Offord, 1991; Costello et al., 1999; Kandel et al., 1999; Roberts et al., 2007). Adolescents with severe emotional or behavioural problems have been found to be much more likely to be dependent on alcohol or illicit drugs, than those without problems (Kandel et al., 1999; US Department of Health and Human Services, 1999). The *National Comorbidity Survey* in the US found that half of those aged 15-54 who had a mental disorder during their lifetime also had a history of substance use disorder (Kessler et al., 1994). Especially relevant to our study here is the research showing that younger groups have a higher likelihood of coexisting disorders than older groups (Kessler et al., 1994; Wang & El-Guebaly, 2004).

In general, mental health problems (e.g., anxiety, depression, conduct disorder) are thought to precede the onset of substance abuse (Clark et al., 1997; Copeland et al., 2013; Kessler et al., 1996; Kessler et al., 2005; Kumpulainen, 2000; Wolitzky-Taylor, Bobova, Zinbarg, Mineka, & Craske, 2012). Some have explained this via the "self-medicating hypothesis" which argues that substance abuse is a coping strategy. Alternatively, the "common cause hypothesis" suggests that pre-existing factors common to both mental health and substance abuse, such as stress, play a role in the onset of both conditions (US Department of Health and Human Services, 1999).

3.7.1 Configurations of Risk

(Figures 3.7.1 to 3.7.3)

This section describes the overlap or co-occurrence among the following four problems: (1) moderate-to-high **psychological distress** (as indicated by a score of 22 or higher on the K10 screener – see Chapter 3.4); (2) **antisocial behaviour** (indicated by engaging in three or more of nine antisocial acts – see Chapter 3.5); (3) **hazardous/harmful drinking** (indicated by a score of eight or higher on the AUDIT screener); and (4) a **drug use problem** (indicated by a score of two or higher on the CRAFFT screener).[65] This section describes the distribution of the co-occurring indicators and the percentage of secondary school students (random half sample) who report three or all four indicators.

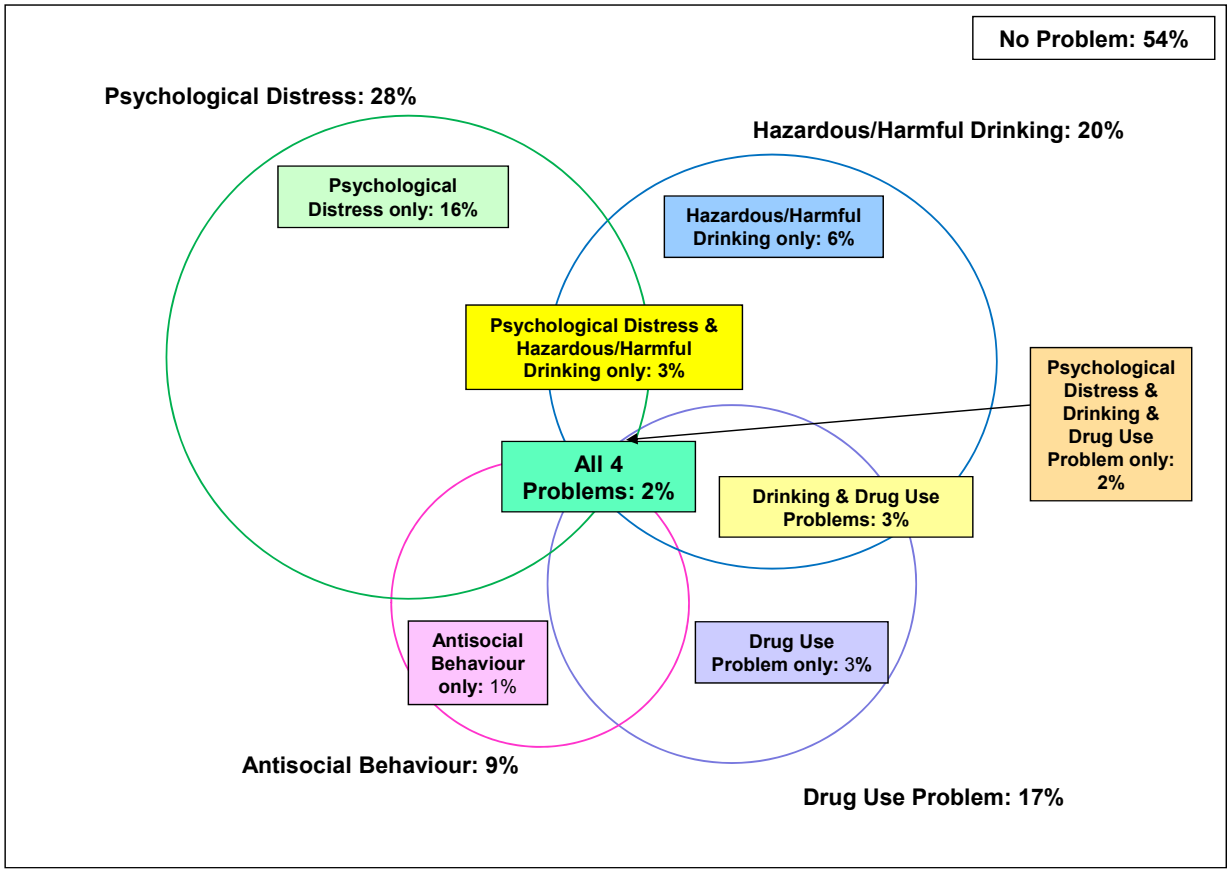
2013 (Grades 9–12):

- The majority (54.2%) of secondary students report none of the four problems. Another 27.7% report one problem, 11.5% report two problems, 4.8% report three problems, and 1.8% report all four problems.

[65] Details of the AUDIT and CRAFFT screeners can be found in the companion OSDUHS drug use report "*Drug Use Among Ontario Students, 1977-2013: Detailed OSDUHS Findings"* available on our webpage at http://www.camh.ca/research/osduhs.aspx.

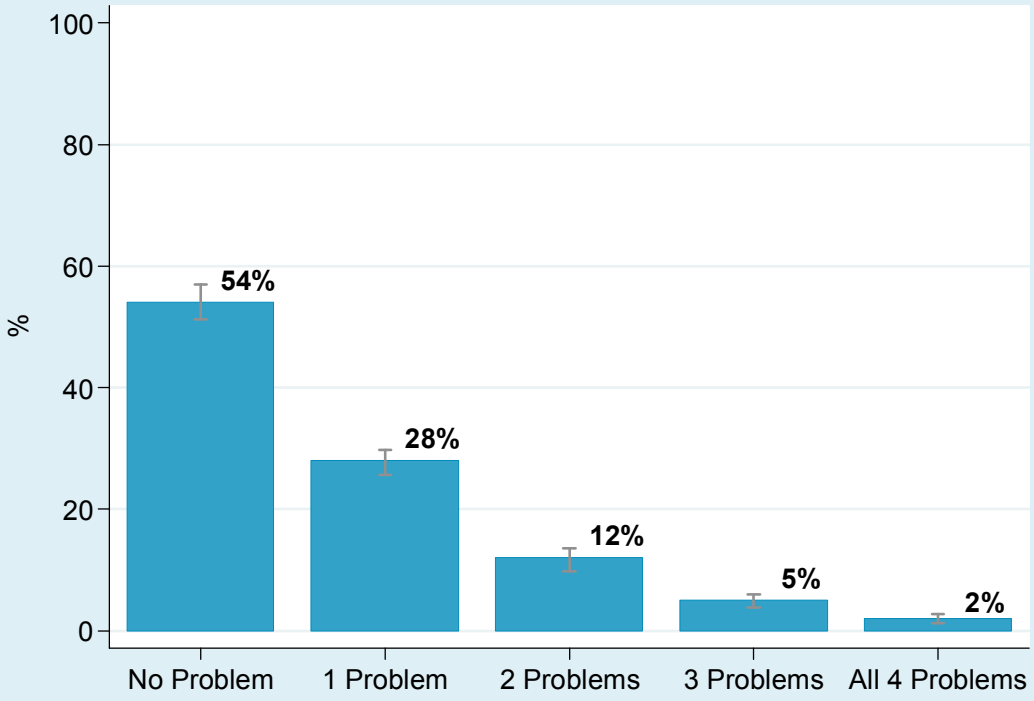
- By far, the most prevalent configuration is psychological distress only, reported by 16% of secondary students. The remaining configurations, such as hazardous/harmful drinking only or drug problem only, are reported by 6% or less.
- An estimated 6.6% (95% CI: 5.2%-8.3%) of 9th to 12th graders, representing about 52,200 students, report three or all four problems.
- There is no significant sex difference in the likelihood of experiencing three or all four of these problems (6.4% for males, 6.8% for females). Although the combined category does not vary by sex, readers should recognize that the component problems do vary by sex (as noted earlier in the findings).
- The likelihood of experiencing three or all four problems significantly increases three-fold with grade, rising from 3.0% of 9th graders to 8.7% of 12th graders.
- Despite some minor variation, the differences among the regions are not statistically significant.

Figure 3.7.1
Coexisting Problems: Psychological Distress, Antisocial Behaviour, Hazardous/Harmful Drinking, and Drug Use Problem, 2013 OSDUHS (Grades 9–12)



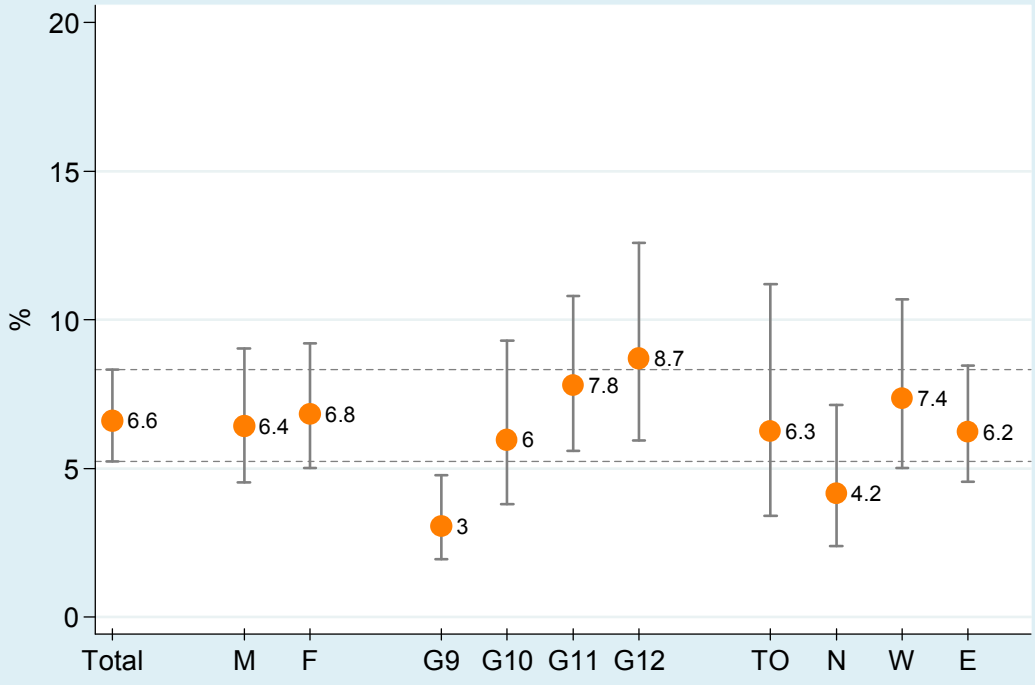
Notes: (1) based on a random half sample (n=3264); (2) not all combinations are shown so percentages do not total 100%.

Figure 3.7.2
Count of Coexisting Problems, 2013 OSDUHS (Grades 9–12, n=3,264)



Note: (1) error bars represent 95% confidence intervals

Figure 3.7.3
Percentage Classified as Having Three or All Four Problems by Sex, Grade, and Region, 2013 OSDUHS (n=3,264)



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

3.8 Overview by Ontario LHIN Areas

In 2006, the province designated 14 geographic areas each to function as health systems that plan, integrate and fund local health services. These areas are called Local Health Integration Networks or LHINs (see http://www.lhins.on.ca). This section provides the 2013 estimates for most mental health and well-being indicators **among secondary school students only (grades 9 through 12)** according to the LHINs. Students in grade 7 and 8 were excluded from the analysis because of a considerable imbalance of the number of elementary/middle schools across the LHINs. For the present analysis, students were assigned to LHINs using the six-digit postal code of the school. Due to small sample sizes, some adjacent LHINs were merged. The ten LHIN areas presented here are as follows:

- Erie St. Clair & South West (merged)
- Waterloo Wellington
- Hamilton Niagara Haldimand Brant
- Central West
- Mississauga Halton
- Toronto Central & Central (merged)
- Central East & North Simcoe Muskoka (merged)
- South East
- Champlain
- North East & North West (merged)

Figure 3.8.1
Local Health Integration Networks of Ontario

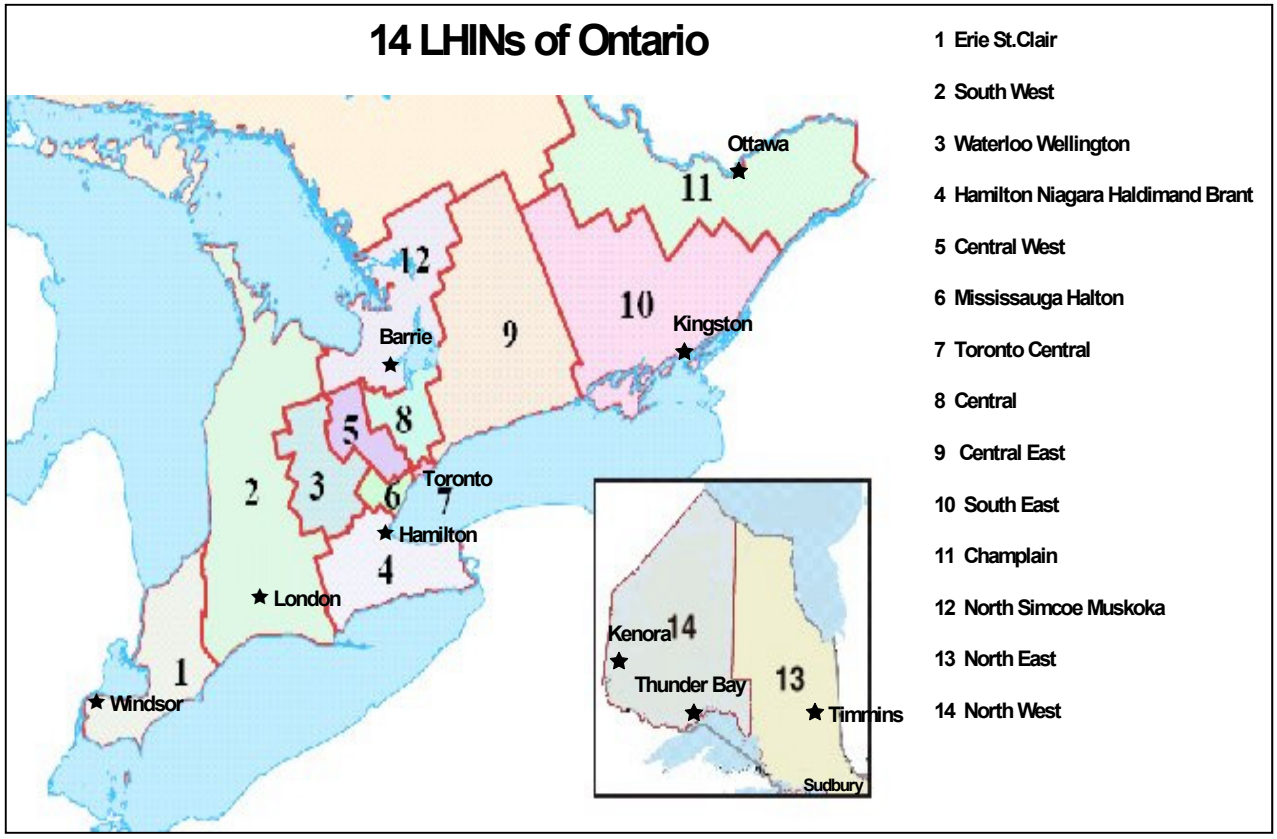


Table 3.8.1: Percentage of Secondary School Students **(Grades 9–12)** Reporting Mental Health and Well-Being Indicators, by Ontario Local Health Integration Network (LHIN) Areas, 2013 OSDUHS

	Erie St. Clair + South West	Waterloo Wellington	Hamilton Niagara Haldimand Brant	Central West	Mississauga Halton	Toronto Central + Central	Central East + North Simcoe Muskoka	South East	Champlain	North East + North West	Ontario
(Student n=)	*(239)*	*(221)*	*(301)*	*(726)*	*(781)*	*(1,305)*	*(832)*	*(247)*	*(833)*	*(674)*	*(6,159)*
(School n=)	*(5)*	*(4)*	*(5)*	*(12)*	*(11)*	*(22)*	*(16)*	*(5)*	*(13)*	*(16)*	*(109)*
Fair/Poor Self-Rated Physical Health	**7.0** (4.2-11.4)	†	**7.5** (6.0-9.4)	**7.3** (5.7-9.3)	**8.1** (5.9-11.0)	**9.4**** (7.6-11.5)	**6.3** (4.6-8.6)	**4.9** (3.1-7.7)	**6.2** (3.9-9.6)	**7.7** (5.4-10.8)	**7.1** (6.2-8.2)
Asthma Diagnosis (current)	†	**11.0** (6.8-17.3)	†	**5.8** (3.9-8.5)	**7.8** (4.9-12.2)	**6.2** (3.7-10.3)	**6.6** (4.0-10.6)	†	**6.4** (3.4-11.8)	**7.6** (4.9-11.5)	**7.7** (6.3-9.4)
Indoor Tanning Device	†	**6.1** (3.9-9.6)	**9.5**** (6.4-14.0)	**2.6**** (1.7-3.8)	**2.5**** (1.7-3.8)	**3.2** (1.9-5.2)	†	**14.3**** (9.6-20.6)	**5.6** (4.1-7.6)	†	**5.0** (3.9-6.4)
Physically Inactive (past week)	†	**6.6** (3.4-12.4)	**7.2** (4.9-10.5)	**11.7*** (8.1-16.7)	**9.1** (7.1-11.5)	**11.8**** (9.6-14.4)	**8.7** (6.3-11.9)	**3.6**** (2.4-5.6)	**8.2** (6.5-10.4)	†	**8.5** (7.4-9.8)
Screen Time Sedentary Behaviour (3+ hours/day)	**53.1**** (49.1-57.1)	**54.4** (45.3-63.2)	**60.0** (55.1-64.6)	**68.1**** (63.2-72.7)	**69.1**** (66.1-72.0)	**67.3**** (63.2-71.1)	**61.6** (54.8-67.9)	**57.2*** (55.5-58.9)	**56.6** (47.2-65.4)	**54.5** (45.9-62.9)	**60.8** (58.5-63.1)
Overweight/Obese	**26.1** (21.8-30.9)	**26.7** (19.1-36.0)	**29.9** (24.4-36.1)	**22.0*** (18.3-26.1)	**24.2** (20.3-28.5)	**22.3*** (18.8-26.2)	**27.3** (22.0-33.5)	**30.2*** (27.6-32.9)	**26.8** (23.8-30.0)	**31.8*** (27.6-36.3)	**26.1** (24.3-28.0)
Medically Treated Injury	**53.5**** (43.6-63.2)	**33.1**** (30.7-35.6)	**46.7** (33.9-59.9)	**39.7** (31.8-48.2)	**30.5**** (26.7-34.5)	**32.3** (23.2-42.9)	**42.1** (34.5-50.1)	**41.9** (31.9-52.7)	**45.0** (40.0-50.0)	**47.8** (38.2-57.6)	**40.2** (36.8-43.7)
Not Always Wear Bicycle Helmet (cyclists)	**88.8** (84.0-92.2)	**82.7** (68.6-91.2)	**85.0** (77.7-90.2)	**87.9** (82.1-91.9)	**92.6**** (87.8-95.6)	**86.0** (81.5-89.6)	**81.4** (72.7-87.8)	**78.7*** (72.2-84.0)	**81.8** (74.2-87.6)	**77.7**** (72.3-82.3)	**84.6** (82.2-86.8)
Not Always Wear Seatbelt in Vehicle	**22.9** (14.1-34.9)	**16.6** (9.8-26.7)	**23.4** (20.0-27.3)	**32.4** (21.0-46.2)	**24.5** (20.6-28.8)	**31.2*** (26.3-36.5)	**26.2** (20.5-32.8)	**14.9*** (12.6-17.4)	**22.9** (20.5-25.5)	**23.6** (16.6-32.4)	**25.5** (22.9-28.2)
Texting While Driving (Drivers in G10–G12)	**37.1** (28.2-47.0)	**47.3** (34.6-60.3)	**37.1** (24.0-52.4)	**33.7** (24.3-44.6)	**32.7** (25.8-40.4)	**23.2**** (16.2-32.1)	**33.6** (28.5-39.2)	**42.0** (28.2-57.1)	**44.0*** (37.9-50.3)	**40.1** (34.3-46.2)	**35.9** (32.2-39.7)
Collision as a Driver (Drivers in G10–G12)	**11.4*** (8.6-14.8)	**4.8** (2.6-8.8)	**5.7** (2.0-15.2)	**9.6** (5.5-16.1)	**7.4** (5.4-10.3)	**6.4** (4.2-9.8)	**7.9** (5.1-12.0)	**10.4** (6.1-17.3)	**8.1** (5.5-11.7)	**7.3** (4.6-11.4)	**7.6** (6.4-9.1)
No Physician Health Care Visit	**28.8** (20.0-39.6)	**27.8** (21.1-35.6)	**24.6** (18.6-31.8)	**32.4** (26.2-39.2)	**25.6** (21.3-30.4)	**28.9** (24.3-34.0)	**28.6** (23.4-34.4)	**32.5** (20.1-48.0)	**16.6**** (11.5-23.2)	**33.5** (26.1-41.8)	**27.3** (24.8-29.9)
Medical Use of Prescr. Opioid Pain Reliever	**20.0** (15.5-25.3)	**17.6** (13.3-23.0)	**24.3** (21.7-27.1)	**21.2** (14.8-29.5)	**22.9** (19.1-27.0)	**22.4** (18.8-26.4)	**27.9**** (24.4-31.8)	**17.4** (10.2-27.9)	**22.6** (20.6-24.6)	**20.8** (16.9-25.4)	**22.7** (21.2-24.3)
Medical Use of Prescr. Tranquillizer (Grades 9–12)	**5.1** (2.7-9.3)	†	†	†	**3.0** (1.8-5.0)	**1.6*** (1.2-2.1)	**3.1** (1.7-5.4)	†	**4.1** (2.2-7.5)	†	**2.9** (2.3-3.7)
Medical Use of Prescr. ADHD Drug	**5.3** (3.0-9.1)	**2.4** (1.4-4.2)	†	†	**2.3** (1.4-3.7)	**2.4** (1.3-4.4)	**1.8** (1.0-3.2)	†	**4.8*** (3.3-6.8)	**3.4** (2.0-5.6)	**3.2** (2.5-4.2)
Mental Health Care Visit	**20.8** (17.7-24.4)	**17.0** (11.6-24.0)	**26.4** (15.9-40.4)	**19.8** (16.2-23.9)	**13.7**** (11.0-17.0)	**23.4** (14.6-35.2)	**19.3** (14.4-25.4)	**16.2** (12.2-21.2)	**24.9** (19.9-30.8)	**22.1** (17.4-27.6)	**21.4** (18.7-24.4)
Unmet Need for Mental Health Support	**34.0** (25.0-44.5)	**21.8** (12.7-35.0)	**24.3** (20.7-28.2)	**24.4** (15.4-36.3)	**25.2** (21.6-29.3)	**30.9** (23.6-39.3)	**33.0** (27.9-38.7)	**35.7** (25.3-47.7)	**27.4** (25.2-29.6)	**27.6** (22.5-33.4)	**28.5** (26.0-31.2)
Fair/Poor Self Rated Mental Health	**16.0** (10.1-24.4)	†	**13.4** (7.8-22.1)	**16.8** (12.8-21.7)	**13.7** (11.2-16.7)	**20.9** (13.8-30.3)	**20.1** (16.2-24.7)	**23.4**** (20.0-27.3)	**14.7** (9.3-22.5)	**13.6** (9.6-19.0)	**16.6** (14.2-19.3)

(continued…)

	Erie St. Clair + South West	Waterloo Wellington	Hamilton Niagara Haldimand Brant	Central West	Mississauga Halton	Toronto Central + Central	Central East + North Simcoe Muskoka	South East	Champlain	North East + North West	Ontario
(Student n=) *(School n=)*	*(239)* *(5)*	*(221)* *(4)*	*(301)* *(5)*	*(726)* *(12)*	*(781)* *(11)*	*(1,305)* *(22)*	*(832)* *(16)*	*(247)* *(5)*	*(833)* *(13)*	*(674)* *(16)*	*(6,159)* *(109)*
Psychological Distress (past month)	**28.0** (20.5-37.0)	**26.1** (16.8-38.3)	**25.3** (17.6-34.8)	**29.5** (21.8-38.6)	**25.5** (21.2-30.3)	**32.5** (24.8-41.2)	**32.8** (24.9-41.8)	**32.8** (25.3-41.2)	**26.1** (22.4-30.3)	**23.8** (16.8-32.6)	**28.4** (25.7-31.3)
Suicidal Ideation	**16.6** (11.3-23.9)	**11.3** (8.6-14.8)	**9.5*** (6.7-13.3)	**14.0** (10.6-18.4)	**11.5** (8.5-15.3)	**17.1** (10.2-27.0)	**16.2** (11.2-22.9)	**19.0** (13.0-26.9)	**13.4** (10.3-17.4)	**13.3** (8.1-21.2)	**14.0** (12.2-16.0)
Suicide Attempt	**7.2**** (3.8-13.2)	†	†	**3.0** (1.6-5.5)	**1.4*** (0.8-2.6)	**2.5** (1.4-4.6)	**5.9*** (3.2-10.4)	†	**3.8** (2.9-5.0)	†	**3.7** (2.9-4.8)
Antisocial Behaviour	**13.2** (6.7-24.3)	†	**8.8** (5.2-14.6)	**12.2** (7.6-19.0)	**7.2** (5.4-9.6)	**7.3** (4.1-12.7)	**8.5** (5.6-12.8)	†	**6.0** (3.6-9.6)	**7.0** (4.4-10.9)	**8.5** (6.8-10.6)
Fire Setting	**11.6** (8.6-15.4)	**10.7** (6.5-17.1)	**10.2** (6.5-15.5)	**10.5** (7.8-14.1)	**8.9** (6.0-13.1)	**11.9** (9.4-14.9)	**11.0** (7.5-15.7)	**14.6** (8.8-23.1)	†	**8.3** (4.4-15.1)	**10.4** (8.8-12.3)
Carried a Weapon	**7.5** (4.5-12.4)	†	**7.8** (4.0-14.6)	†	**4.6** (3.0-6.9)	**6.5** (4.3-9.8)	**4.0** (2.4-6.7)	†	†	**6.7** (3.6-12.1)	**6.2** (4.9-7.8)
School Fight	**5.8*** (4.2-7.9)	†	**13.0*** (8.1-10.2)	**15.0*** (9.2-23.3)	**10.0** (5.5-17.5)	**10.2** (7.9-13.1)	**10.3** (6.6-15.8)	**11.8** (7.0-19.0)	**8.4** (6.7-10.6)	**4.3*** (2.8-6.6)	**9.1** (7.7-10.8)
Worried be Harmed/ Threatened at School	**14.3** (9.0-21.9)	**13.6** (8.2-21.6)	**15.0** (11.0-20.1)	**19.4** (14.2-25.7)	**15.9** (12.3-20.3)	**15.7** (10.2-23.4)	**16.3** (12.6-20.8)	**17.1** (12.2-23.3)	**9.4*** (7.1-12.3)	**12.0** (6.9-20.0)	**14.6** (12.9-16.6)
Threatened/Injured with Weapon at School	†	**3.4** (1.9-6.0)	†	**7.7** (4.4-13.2)	**6.2** (4.4-8.5)	**5.9** (3.8-9.1)	**7.2** (3.7-13.4)	**7.1** (5.2-9.7)	†	**4.2** (2.2-7.8)	**5.8** (4.6-7.5)
Bullied Someone at School (Since September)	**23.7**** (17.9-30.8)	**17.7** (10.7-27.9)	**13.7** (9.9-18.8)	**10.6** (5.5-19.7)	**15.4** (11.8-19.8)	**11.4*** (8.3-15.4)	**20.2** (15.2-26.4)	**20.4** (13.2-30.1)	**12.8** (10.2-15.8)	**16.4** (10.9-24.0)	**15.8** (13.8-18.0)
Been Victim of Bullying at School	**30.6** (19.5-44.5)	**25.0** (21.4-29.0)	**20.9** (10.7-36.9)	**17.9**** (15.3-20.8)	**17.0**** (14.2-20.3)	**18.5**** (16.1-21.2)	**24.9** (18.7-32.4)	**35.4**** (27.7-43.8)	**20.1** (13.5-28.8)	**26.3** (19.7-34.2)	**22.4** (19.8-25.4)
Been Victim of Cyberbullying	**25.1*** (19.3-32.0)	**12.7** (7.8-20.0)	**21.0** (14.6-29.3)	**13.5** (9.6-18.5)	**13.9*** (10.8-17.7)	**18.6** (15.3-22.5)	**19.1** (13.4-26.6)	**21.2** (13.6-31.6)	**17.7** (14.7-21.1)	**17.8** (12.3-25.0)	**18.3** (16.4-20.5)
Any Gambling Activity	**38.1** (32.1-44.5)	**40.3** (30.4-51.0)	**32.8** (26.1-40.1)	**32.0*** (27.8-36.5)	**36.3** (31.9-41.0)	**38.9** (30.1-48.4)	**42.3** (34.8-50.2)	**37.4** (26.4-49.8)	**36.8** (32.0-41.9)	**39.4** (32.3-47.0)	**37.7** (35.1-40.4)
Video Game Playing Problem	**5.4**** (3.7-7.9)	†	†	**12.7** (8.4-18.7)	**14.8**** (11.6-18.7)	**14.6**** (10.6-19.8)	**7.3** (4.1-12.5)	**10.1** (6.4-15.5)	†	**7.0** (4.6-10.5)	**10.0** (7.9-12.5)
3 or all 4 Coexisting Problems (Grades 9–12)	†	†	†	†	**3.1*** (1.6-5.8)	**6.1** (3.9-9.3)	**8.3** (5.6-12.3)	†	**4.8** (2.7-8.4)	**4.2** (2.4-7.1)	**6.6** (5.2-8.3)

Notes: (1) due to small sample sizes, the Erie St. Clair and the South West LHINs were merged, the Toronto Central and Central LHINs were merged, the Central East and North Simcoe Muskoka LHINs were merged, and the North West and the North East LHINs were merged; (2) for indicator definitions, please see Table 2.6 or the individual chapters; (3) most of the indicators refer to the past 12 months (past year); (4) some of the indicators are based on a random half sample; (5) entries in brackets are 95% confidence intervals; (6) † estimate suppressed due to unreliability; (7) *p<.05, **p<.01 significant difference, LHIN area vs. Ontario.

Source: OSDUHS, Centre for Addiction & Mental Health

3.9 Overview of the Greater Toronto Area

In this section, we present estimates of mental health and well-being among students from schools in the Greater Toronto Area (GTA) and comparisons with the province as a whole. The GTA encompasses the City of Toronto, Durham Region, York Region, Peel Region, and Halton Region.

Table 3.9.1: Percentage of Students in the Greater Toronto Area (GTA) Reporting Mental Health and Well-Being Indicators, 2011–2013 OSDUHS (Grades 7–12)

Indicator	2011 GTA % (95% CI) (*n*=3,726)	2013 GTA % (95% CI) (*n*=4,806)		2013 Ontario % (95% CI) (*n*=10,272)
Fair/poor self-rated physical health	16.3 (14.3-18.4)	7.2 (6.2-8.4)		7.0 (6.2-7.9)
Asthma diagnosis (current)	7.2 (6.2-8.5)	7.2 (5.8-9.0)		7.9 (6.6-9.3)
No physician health care visit	29.2 (25.7-32.9)	25.4 (22.4-28.6)		27.4 (25.1-29.8)
Physically inactive (past week)	9.8 (8.2-11.7)	9.0 (7.8-10.3)	*	7.3 (6.4-8.3)
Screen time sedentary behaviour (3+ hours daily)	65.1 (61.2-68.9)	62.4 (60.1-64.6)	*	58.3 (19.8-24.3)
Overweight or obese	23.4 (20.6-26.3)	22.6 (20.3-25.2)	*	25.1 (23.5-26.7)
Use of an indoor tanning device	n/a	3.8 (2.7-5.3)		4.4 (3.6-5.5)
Medically treated injury	38.4 (35.7-41.1)	37.2 (33.0-41.5)	*	41.0 (38.2-43.9)
Not always wear a bike helmet (among bicyclists)	n/a	80.7 (77.8-83.3)		78.7 (76.4-80.8)
Not always wear a seatbelt when in motor vehicle	30.1 (25.7-34.8)	24.9 (22.0-28.0)		23.7 (21.5-26.0)
Texting while driving (among drivers in Grades 10-12)	n/a	29.5 (25.0-34.5)	*	35.9 (32.2-39.7)
Vehicle collision as a driver (among drivers in G10-12)	7.3 (5.2-10.2)	7.9 (6.0-10.2)		7.6 (6.4-9.1)
Mental health care visit	14.3 (12.4-16.3)	21.0 (17.2-25.4)		21.9 (19.8-24.3)
Sought counselling over phone or Internet	2.3 (1.6-3.4)	3.8 (2.8-5.1)		3.0 (2.4-3.7)
Unmet need for mental health support	n/a	29.3 (26.2-32.5)		27.9 (25.8-30.1)
Used tranquillizers/sedatives medically±	3.8 (2.8-5.1)	2.2 (1.5-3.1)		2.9 (2.3-3.7)
Used an ADHD drug medically	1.7 (1.2-2.5)	2.2 (1.6-3.1)	*	3.2 (2.5-4.2)
Prescribed medication for depression/anxiety/both±	2.5 (1.6-3.8)	5.4 (3.6-7.9)		5.5 (4.3-7.1)
Fair/poor self-rated mental health	13.4 (11.8-15.3)	16.7 (14.0-19.7)		15.3 (13.5-17.4)
Psychological distress (past month)	n/a	27.9 (24.5-31.6)		26.0 (23.9-28.3)
Suicidal ideation	9.2 (7.6-11.1)	13.8 (11.1-17.0)		13.4 (11.8-15.1)
Suicide attempt	1.9 (1.2-3.0)	3.1 (2.3-4.1)		3.5 (2.8-4.3)
Antisocial behaviour (3+/9 behaviours)	7.2 (5.9-8.9)	6.6 (5.1-8.5)		7.1 (5.8-8.8)
Carried a weapon	4.0 (3.1-5.3)	4.2 (3.2-5.4)	*	6.0 (5.3-7.6)
Physical fight at school	12.5 (11.0-14.1)	12.2 (10.4-14.2)		10.9 (9.6-12.4)
Worried be harmed/threatened at school	21.1 (18.0-24.5)	17.1 (14.7-19.9)		15.4 (13.8-17.1)
Threatened/injured with weapon at school	7.4 (5.8-9.4)	6.4 (5.0-8.3)		5.8 (4.7-7.1)
Bullied others at school (since September)	16.5 (14.0-19.2)	15.5 (13.1-18.1)		16.0 (14.4-17.8)
Victim of bullying at school (since September)	23.7 (21.1-26.5)	22.7 (20.5-25.0)		25.0 (22.7-27.5)
Victim of cyberbullying	19.8 (17.3-22.7)	17.9 (15.7-20.4)		19.0 (17.2-21.0)
Any gambling activity	39.0 (35.9-42.3)	34.8 (30.9-38.8)		34.9 (32.4-37.4)
Multi-gambling activity	2.7 (1.6-4.6)	2.7 (1.8-4.1)		2.6 (2.0-3.4)
Video gaming problem	13.8 (11.1-17.2)	11.8 (9.9-13.9)		10.3 (8.6-12.2)
3 or all 4 coexisting problems±	n/a	6.2 (4.7-8.2)		6.6 (5.2-8.3)

Notes: (1) for indicator definitions, please see Table 2.6 or the individual chapters; (2) most of the indicators refer to the past 12 months (past year); (3) some of the indicators are based on a random half sample; (4) entries in brackets are 95% confidence intervals; (5) ± results among Grades 9–12 only; (6) * 2013 GTA estimate differs from the 2013 Ontario estimate, p<.05 (not controlling for other factors).
Source: OSDUHS, Centre for Addiction & Mental Health

4. SUMMARY AND 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 matters of prevention. Preventing problems from occurring, or reducing their risk, is far more preferable over 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; tracking changes over time; and identifying risk and protective factors. As well, the OSDUHS provides a knowledge base for designing and targeting preventive and health promotion programs; informing public health policy; evaluating the efficacy of a policy or program 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 sample surveys are the most feasible means to monitor health behaviours and any negative consequences 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. 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, another factor that can affect our estimates is the bias caused by nonrespondents. 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 fairly stable across time, the trends reported here should remain valid. More compelling, our analysis comparing high-responding classes to low-responding classes found few differences in the reporting of our mental health indicators (see the Methods section).

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 settings). 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 these 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., 2010). Adolescents who are not in school and, thus, excluded from our target constitutes about 8% of the total adolescent population between the ages of 12 and 18 in Ontario, based on the 2011 Census figures (Statistics Canada, 2012).

Fifth, the data reflect a snapshot in time and because we do not re-survey the same students across time, we cannot identify causes of individual change or the temporal ordering of risk factors. In addition, we cannot determine from these data whether our findings are adolescent-limited, for example, to what extent antisocial behaviours naturally decline or cease 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 surveillance studies such as the OSDUHS excel at identifying the extent of various health behaviours that have important current and future implications for adolescent well-being. Population health surveys help to identify which population groups are at the greatest risk for 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:

- get along very well with their parents;
- like school and report a positive school climate;
- rate their physical health and mental health as excellent or very good;
- are neither overweight nor obese;
- are satisfied with their weight;
- are not being bullied;
- do not report internalizing indicators (e.g., psychological distress) or externalizing behaviours (e.g., bullying, violence); and
- experience none of the four coexisting problems (psychological distress, antisocial behaviour, hazardous drinking, and drug use problems).

We also found several **improvements over time**:

- Antisocial behaviour has been trending downward during the past two 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.
- Gambling has declined during the past few years, and the proportion of students identifying difficulties due to their gambling also shows a downturn during the past decade.
- Bullying victimization, bullying perpetration, and fighting at school have declined during the past decade.
- The youngest students in our study, that is students in grades 7 and 8, show a decrease in physical inactivity at school during the past few survey cycles. That is, more young students today are engaging in moderate to vigorous physical activity at school in physical education class compared with their counterparts from a few years ago. If this finding holds stable, it could point to an important shift in the physical activity of adolescents.
- More students today report that they like school “very much” or “quite a lot” than students surveyed over a decade ago.

Public Health Concerns

Although the majority of students do not report a problem, an important minority report some form of impaired well-being or functioning. See **Figure 4.1** for an overview.

About **one-in-two** students or more report…

- sustaining an injury that required treatment in the past year
- sedentary behaviour
- not always wearing a bicycle helmet while bicycling

About **one-in-three** students report…

- texting while driving (among drivers)
- gambling in the past year

About **one-in-four** students **…**

- do not always wear a seatbelt in a vehicle
- are classified as overweight or obese
- are bullied at school
- report a moderate to high level of psychological distress
- report an unmet need for mental health support

About **one-in-five** students report…

- being cyberbullied

About **one-in-six** to **one-in-eight** students report…

- suicidal ideation
- fair/poor mental health
- worry about being harmed or threatened at school
- a drug use problem
- hazardous/harmful drinking

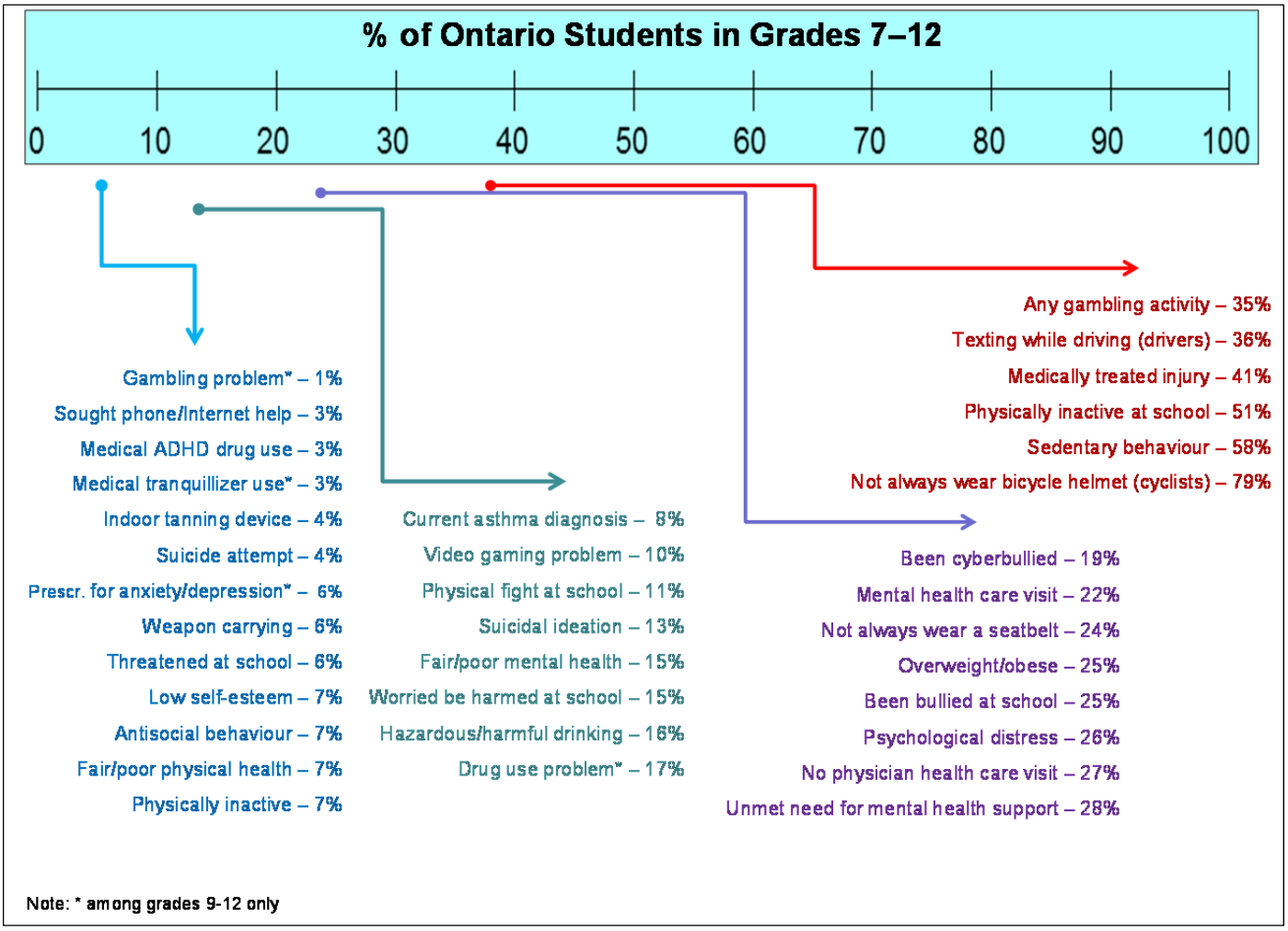
About **one-in-ten** students report…

- a video gaming problem
- fighting at school
- antisocial behaviour
- physical inactivity

Some findings point to **concerning trends**:

- Reports of injuries that require medical attention have increased during the past decade.
- More students today rate their mental health as fair or poor than did students a few years ago. Furthermore, there has been an increase between the last two survey cycles in suicidal ideation.
- Females and the youngest students (7th graders) show an increase in poor body image during the past decade.

Figure 4.1
Overview of Mental Health and Well-Being Indicators, 2013 OSDUHS



Demographic Correlates

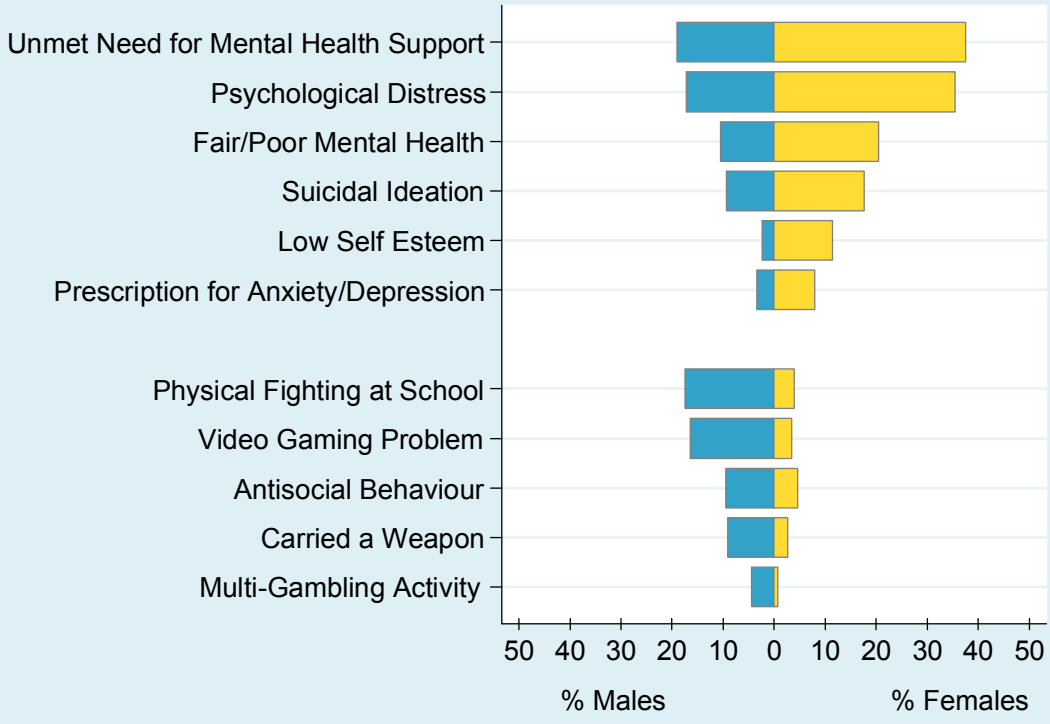
Our report found that mental health and well-being varies by sex, even after controlling for grade and region. As seen in **Figure 4.2** and **Table 4.2**, the general pattern shows that females are more likely to experience internalizing indicators (psychological distress, suicidal ideation), whereas males are more likely to exhibit risk or externalizing behaviours (such as antisocial behaviour, gambling).

Age/grade is also significantly related to mental health and well-being. Generally, poor physical health indicators (e.g., physical inactivity, sedentary behaviour), risk behaviours (e.g., tanning bed use, not wearing a helmet or seatbelt), internalizing indicators (e.g., fair/poor self-rated mental health, distress), antisocial behaviour, gambling, and coexisting problems increase with grade. Bullying and fighting at school are more prevalent in the younger grades and decline in later adolescence.

Only two major indicators significantly differ according to region:

- Compared with the provincial average, **Toronto** students are less likely to be classified as overweight or obese, yet are more likely to report no physical activity in the past seven days.
- Compared with the provincial average, **Northern** Ontario students are more likely to be classified as overweight or obese.
- Students in **Western** Ontario and **Eastern** Ontario do not differ from the provincial average on any indicator.

Figure 4.2
Internalizing and Externalizing Indicators by Sex, 2013 OSDUHS



Note: significant sex difference for each indicator (p<.05)

Conclusion

The purpose of this OSDUHS report was 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 data 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 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 indicators, such as suicidal ideation and psychological distress remain high. One-in-eight Ontario students (an estimated 128,400) report past year suicidal ideation and one-in-twenty-five (about 33,300) report a suicide attempt in the past year. These large population numbers should remind us of the vulnerability of this age group.

While our results show that the level of bullying victimization at school has decreased during the past decade – perhaps due to initiatives such as the safe school policies implemented in Ontario – the level of cyberbullying victimization shows no change. Cyberbullying is a growing concern as electronic media become predominant in the lives of adolescents. This report showed that one-in-five students are cyberbullied. Bullying victimization not only causes immediate adverse consequences, it can also have serious, enduring effects on mental health (Arseneault, Bowes, & Shakoor, 2010; Meltzer, Vostanis, Ford, Bebbington, & Dennis, 2011).

In the past, there has been a lack of focus and priority on adolescent mental health in Canada (Waddell, McEwan, Peters, Hua, & Garland, 2007). However, this is shifting with the release of the recent *Mental Health Strategy for Canada* (Mental Health Commission of Canada, 2012), which seeks to bring mental health issues "out of the shadows" and into the public health domain. One of the *Strategy's* priorities is to promote the mental health of children and adolescents. School-based prevention and treatment programs are an ideal way to reach this age group. Systematic reviews of school programs promoting mental health and reducing behavioural problems have found that universal 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 increases in medically treated injuries – in fact, almost half of Ontario students report a treated injury in the past year. This is especially worrisome given that injuries are the leading cause of morbidity and mortality among Canadian children and adolescents (Navaneelan, 2012; Pan et al., 2007; Public Health Agency of Canada, 2009). Related to this, one-in-four students do not always wear a seatbelt when riding in a vehicle, and over three-quarters of cyclists do not always wear a bicycle helmet. Our report also showed no improvement in the proportion of Ontario students who are overweight or obese, with the level remaining elevated at one-in-four. Continued and enhanced surveillance of these health indicators is clearly needed.

Our findings also showed some encouraging improvements in well-being during the past decade or so, in particular declines in antisocial behaviour, gambling activities, and gambling problems. Ongoing monitoring will determine whether these trends reflect more enduring changes or temporary fluctuations.

The OSDUHS focuses on a wide range of indicators that affect young people's health and well-being. The overarching goal of the study is to stimulate programs and policies 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 adolescents today.

Table 4.1: Period Changes Over Time for Selected Indicators (Grades 7–12)

	Fair/Poor Self-Rated Physical Health	No Physical Activity at School in Phys-Ed	Believe You Are Too Fat	Medically Treated Injury	Mental Health Care Visit	Fair/Poor Self-Rated Mental Health	Suicidal Ideation	Antisocial Behaviour Index	Carried a Weapon	Physical Fighting at School	Victim of Bullying at School	Any Gambling Activity	Gambling Problem (Grades 9-12)
Total	↓▽	△	△	△	↑△	△	↑	▽	▽	▽	▽	▽	▽
Males	↓			△	↑△	△		▽	▽	▽	▽	▽	▽
Females	↓	△	△	△	↑△	△	↑	▽	▽	▽		▽	
Grade 7		▽	△		△			▽	▽	↓▽	▽	▽	
Grade 8		▽		△	↑△			▽				▽	
Grade 9	↓				↑△			▽	▽			▽	▽
Grade 10	↓							▽	▽		▽	▽	▽
Grade 11	↓	△			△			▽	▽			▽	▽
Grade 12	↓				△							▽	▽
Toronto	↓				△	△			▽			▽	▽
North	↓				△			▽		▽		▽	
West	↓				△			▽	▽	▽	▽	▽	▽
East	↓	△			↑△			▽	▽	▽	▽	▽	▽

Notes: (1) for indicator definitions, please see Table 2.6 or individual chapters; (2) ↑↓ significant increase or decrease in 2013 **vs. 2011**, p<.01; (3)△▽ significant increase or decrease in 2013 **vs. 1999**, p<.01 (vs. 2001 for Believe You Are Too Fat; vs. 2003 for Medically Treated Injury, Victim of Bullying at School, and Any Gambling Activity; vs. 2007 for Fair/Poor Mental Health); (4) the following major indicators show no change and, therefore, are not presented: daily physical activity; physical inactivity; screen time sedentary behaviour; overweight/obese; medical tranquillizer use; medical ADHD drug use; suicide attempt; threatened/injured with a weapon at school; and video gaming problem.

Source: OSDUHS, Centre for Addiction & Mental Health

Table 4.2: Subgroup Differences for Selected Indicators, 2013 OSDUHS (Grades 7–12)

	Physically Inactive Past Week	Screen Time Sedentary Behaviour	Overweight or Obese	Indoor Tanning Past Year	Medically Treated Injury	Not Always Wear Bike Helmet	Not Always Wear Seatbelt	Fair/Poor Self-Rated Mental Health	Psycho-logical Distress	Suicidal Ideation	Antisocial Behaviour	Carried a Weapon	Victim of Bullying at School	Victim of Cyber-bullying	Any Gambling Activity	Video Gaming Problem	Coexisting Problems (Grades 9-12)
Sex Difference	*	***	***	***	*	ns	**	***	***	***	***	***	**	***	***	***	ns
	F ↑	M ↑	M ↑	F ↑	M ↑		M ↑	F ↑	F ↑	F ↑	M ↑	M ↑	F ↑	F ↑	M ↑	M ↑	
Grade Difference	***	***	*	***	ns	***	*	*	***	ns	**	*	***	**	***	ns	**
(compared with previous grade)		8 ↑ 7				8 ↑ 7		8 ↑ 7	8 ↑ 7			8 ↑ 7		8 ↑ 7			
						9 ↑ 8											
	10 ↑ 9			10 ↑ 9									10 ↓ 9	10 ↓ 9	10 ↑ 9		10 ↑ 9
			12 ↓ 11										12 ↓ 11	12 ↓ 11	12 ↑ 11		
Region Difference	*	ns	*	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
(region compared with Ontario)	TO ↑		TO ↓														
			N ↑														

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) TO=Toronto, 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, 1991–2013 OSDUHS

	Grades 7, 9, 11 only												Grades 7-12							
	1991	**1993**	**1995**	**1997**	**1999**	**2001**	**2003**	**2005**	**2007**	**2009**	**2011**	**2013**	**1999**	**2001**	**2003**	**2005**	**2007**	**2009**	**2011**	**2013**
(*n*=)	(2961)	(2617)	(2907)	(3072)	(2421)	(2013)	(3389)	(3969)	(3215)	(4424)	(4669)	(5211)	(4447)	(3898)	(6616)	(7726)	(6323)	(9112)	(9288)	(10272)
Usually Receive As (80%-100%) in School	28.4	29.0	32.3	35.5	39.1	37.5	34.8	37.0	43.4	44.3	51.2	50.4	37.8	36.4	36.2	40.5	43.8	45.9	52.1	52.1
Hours of Homework Per Week *																				
0 or less than 1 hour	—	16.9	15.3	17.6	21.2	15.0	19.7	21.4	21.9	22.3	26.1	23.1	22.2	16.3	19.3	20.7	21.1	23.4	24.9	23.0
1–2 hours	—	24.3	27.2	24.6	28.7	28.3	28.6	26.4	29.2	28.4	27.8	28.2	28.4	27.5	27.0	25.7	28.1	26.9	26.7	26.9
3–4	—	27.6	29.4	28.8	26.1	28.6	26.1	26.7	25.8	23.1	24.1	22.6	24.8	28.6	25.8	26.1	25.5	24.2	24.0	21.7
5–6	—	19.5	18.2	18.4	14.9	16.6	14.9	15.7	13.9	16.2	12.4	13.1	15.0	16.6	15.9	16.1	15.3	15.0	13.8	14.2
7+	—	11.7	9.9	10.6	9.1	11.5	10.8	9.9	9.2	10.0	9.5	13.0	9.6	10.9	12.1	11.4	10.0	10.5	10.6	14.1
Feelings About School *																				
like it a lot/very much	—	36.0	34.7	35.6	32.2	28.7	28.6	29.8	33.7	37.5	47.0	44.3	29.6	26.8	28.3	30.6	33.3	35.5	44.1	44.1
like it somewhat	—	51.1	49.7	47.4	50.7	51.6	49.4	49.9	46.7	45.4	39.8	42.0	51.8	52.8	49.9	48.8	48.9	46.6	42.1	41.3
do not like it very much/at all	—	12.9	15.5	17.0	17.2	19.8	22.0	20.4	19.7	17.1	13.2	13.7	18.5	20.4	21.8	20.6	17.8	17.9	13.7	14.6
Relative School Performance *																				
above average	—	28.8	35.3	32.7	30.2	31.2	29.4	30.5	34.2	34.1	—	—	30.6	31.0	30.5	31.7	33.7	34.0	—	—
slightly above	—	27.8	25.5	26.8	25.6	24.8	23.3	23.6	24.4	23.5	—	—	24.2	24.7	23.0	24.1	23.6	25.0	—	—
average	—	35.5	30.8	31.0	32.6	32.5	34.7	33.5	30.9	29.1	—	—	33.8	33.1	33.3	31.6	30.9	27.2	—	—
slightly below	—	5.9	6.6	6.4	7.8	7.8	8.9	8.5	7.0	9.3	—	—	7.7	7.7	8.9	8.2	7.8	9.4	—	—
below average	—	1.9	1.7	3.1	3.8	3.7	3.7	4.0	3.4	4.0	—	—	3.7	3.6	4.3	4.4	3.9	4.4	—	—
Likely to Graduate																				
very likely	83.3	85.2	85.8	84.7	85.6	85.0	84.6	84.1	87.5	81.2	—	—	85.8	86.4	86.3	86.3	89.0	83.3	—	—
fairly likely	15.0	13.1	12.8	13.6	12.0	12.4	12.9	13.7	10.0	17.6	—	—	11.7	11.2	11.6	11.5	8.9	15.5	—	—
not very likely/not at all	1.7	1.7	1.4	1.7	2.4	2.6	2.5	2.2	2.5	1.2	—	—	2.5	2.5	2.1	2.2	2.1	1.2	—	—

Notes: * question asked of a random half sample in each year; n=total number of students surveyed; numbers in cells are percentages; – data not available for that year; † data suppressed due to unreliability.
Qs: "Overall, what marks do you usually get in school?"; "On average, how much time do you spend doing homework each week outside school?"; "How do you feel about going to school?"; "Compared to other students in your school, how do you rate yourself in the school work you do?"; "How likely is it that you will stay in school until you graduate?"
Source: OSDUHS, Centre for Addiction and Mental Health

Table A3.1.2 Percentage Reporting Being Very or Somewhat Worried About Being Harmed or Threatened at School, 1999–2013 OSDUHS (Grades 7–12)

		1999	2001	2003	2005	2007	2009	2011	2013
	(*n*=)	(4447)	(3898)	(6616)	(7726)	(6323)	(9211)	(9288)	(10272)
Total		**14.2**	**13.1**	**12.4**	**12.8**	**11.7**	**12.3**	**18.2**	**15.4** [cd]
(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)
Sex	Males	**11.9**	**11.0**	**12.3**	**12.0**	**11.3**	**11.6**	**16.8**	**13.9**
		(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)
	Females	**16.5**	**15.2**	**12.4**	**13.6**	**12.1**	**13.0**	**19.7**	**16.9**
		(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)
Grade	7	**15.4**	**15.8**	**16.5**	**15.7**	**14.4**	**18.6**	**21.7**	**19.1**
		(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)
	8	**18.6**	**15.7**	**15.2**	**17.4**	**13.7**	**12.2**	**18.9**	**16.3**
		(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	**16.3**	**14.5**	**12.5**	**14.5**	**14.0**	**14.3**	**19.7**	**18.3**
		(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	**15.6**	**12.0**	**12.7**	**11.5**	**11.4**	**12.9**	**19.7**	**16.3**
		(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)
	11	**9.1**	**9.8**	**10.4**	**9.5**	**9.3**	**9.1**	**14.5**	**13.9**
		(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)
	12	**9.6**	**9.6**	**7.6**	**8.6**	**8.2**	**8.8**	**16.4**	**11.5**
		(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)
Region	Toronto	**18.5**	**14.7**	**15.5**	**18.5**	**13.1**	**18.0**	**21.3**	**18.4**
		(14.4-23.4)	(10.5-20.3)	(11.7-20.3)	(16.2-21.0)	(10.4-16.5)	(15.0-21.4)	(17.9-25.2)	(13.2-25.0)
	North	**12.1**	**10.7**	**13.1**	**9.8**	**10.0**	**11.1**	**14.4**	**13.6**
		(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)
	West	**13.9**	**13.7**	**12.0**	**12.7**	**12.7**	**11.9**	**19.4**	**16.2**
		(11.6-16.6)	(11.8-15.9)	(10.3-14.0)	(11.0-14.6)	(10.6-15.1)	(10.4-13.7)	(16.0-23.4)	(14.0-18.7)
	East	**12.5**	**11.8**	**10.6**	**10.4**	**10.0**	**10.2**	**15.7**	**12.7**
		(10.7-14.7)	(9.8-14.2)	(8.8-12.7)	(9.2-11.7)	(8.0-12.3)	(8.5-12.1)	(13.9-17.7)	(10.9-14.6)

Notes: (1) n=total number of students surveyed; (2) entries in brackets are 95% confidence intervals; (3) no significant differences 2013 vs. 2011; no significant differences 2013 vs. 1999; [c] significant linear trend, p<.01; [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/Poor Physical Health, 1991–2013 OSDUHS (Grades 7–12)

	1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013
(n[1])					(4447)	(3898)	(6616)	(7726)	(6323)	(9112)	(9288)	(10272)
(n[2])	(2961)	(2617)	(2907)	(3072)	(2421)	(2013)	(3389)	(3969)	(3215)	(4424)	(4669)	(5211)
Total[1]	—	—	—	—	**8.9**	**10.3**	**12.6**	**13.1**	**12.9**	**14.5**	**15.6**	**7.0** [abd]
(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)
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** [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)
Sex												
Males[1]	—	—	—	—	**8.7**	**8.3**	**9.9**	**10.5**	**9.6**	**10.8**	**12.2**	**7.1** [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)
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**
	(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)
Females[1]	—	—	—	—	**9.2**	**12.3**	**15.2**	**15.9**	**16.6**	**18.5**	**19.2**	**6.9** [a]
					(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)
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**
	(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)
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**
	(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)
8	—	—	—	—	**7.2**	**7.5**	**9.8**	**8.1**	**7.8**	**10.6**	**10.2**	**7.3**
					(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)
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** [a]
	(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)
10	—	—	—	—	**10.0**	**13.0**	**14.8**	**15.3**	**14.1**	**14.5**	**18.3**	**6.2** [a]
					(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)
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** [a]
	(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)
12	—	—	—	—	**10.9**	**15.1**	**14.9**	**15.7**	**18.6**	**19.8**	**19.8**	**7.4** [a]
					(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)
Region												
Toronto[1]	—	—	—	—	**9.2**	**9.3**	**13.7**	**13.6**	**13.3**	**17.8**	**17.9**	**7.8** [a]
					(7.7-10.8)	(7.1-12.2)	(10.8-17.3)	(10.3-17.8)	(9.8-17.8)	(14.0-22.4)	(14.7-21.7)	(5.8-10.5)
Toronto[2]	**6.5**	**6.5**	**7.4**	**7.1**	**7.4**	**7.5**	**13.4**	**15.2**	**13.0**	**16.1**	**15.3**	**8.0**
	(5.1-8.2)	(4.6-9.1)	(3.9-13.8)	(5.5-9.2)	(5.1-10.7)	(5.6-10.0)	(9.8-17.9)	(10.9-20.9)	(9.3-17.9)	(12.4-20.5)	(11.9-19.4)	(5.8-10.9)
North[1]	—	—	—	—	**7.9**	**10.0**	**12.9**	**10.5**	**16.0**	**16.0**	**14.4**	**7.3** [a]
					(6.2-9.9)	(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)
North[2]	**3.4**	**1.8**	**6.3**	**6.3**	**7.0**	**11.0**	**14.2**	**10.7**	**14.0**	**14.0**	**13.0**	**7.8**
	(1.1-10.1)	(1.1-2.8)	(2.6-14.4)	(4.8-8.2)	(4.8-10.0)	(7.8-15.2)	(10.3-19.4)	(7.1-15.6)	(9.3-20.4)	(10.8-17.9)	(9.7-17.2)	(5.8-10.3)
West[1]	—	—	—	—	**9.7**	**11.2**	**13.3**	**14.2**	**13.0**	**14.7**	**16.5**	**7.1** [a]
					(7.8-12.0)	(9.3-13.4)	(12.0-14.6)	(12.6-16.0)	(11.2-15.0)	(12.8-16.7)	(14.3-19.0)	(5.9-8.5)
West[2]	**5.7**	**5.9**	**8.2**	**10.9**	**9.4**	**10.0**	**13.1**	**14.0**	**12.5**	**13.8**	**13.8**	**6.9**
	(4.7-6.8)	(3.7-9.3)	(6.6-10.1)	(8.5-13.9)	(7.3-12.0)	(7.9-12.5)	(11.2-15.3)	(11.8-16.5)	(10.4-14.9)	(11.2-16.8)	(10.2-18.4)	(5.1-9.3)
East[1]	—	—	—	—	**8.0**	**9.7**	**11.0**	**12.0**	**12.1**	**12.3**	**13.4**	**6.3** [a]
					(6.4-9.9)	(7.3-12.8)	(9.3-12.9)	(10.2-14.0)	(10.6-13.8)	(10.8-14.1)	(11.6-15.4)	(5.1-7.7)
East[2]	**6.1**	**8.3**	**6.6**	**9.3**	**8.8**	**8.5**	**8.7**	**11.3**	**10.0**	**10.7**	**13.9**	**6.4**
	(46-8.1)	(7.1-9.6)	(5.6-7.9)	(7.6-11.4)	(6.6-11.7)	(6.6-11.0)	(7.1-10.6)	(9.2-13.8)	(7.6-12.9)	(8.8-12.9)	(11.7-16.5)	(4.5-9.3)

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) [a] 2013 vs. 2011 significant difference, p<.01; [b] 2013 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/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, 2009–2013 OSDUHS (Grades 7–12)

		(*n*=)	**2009** (9112)	**2011** (9288)	**2013** (10272)
Total (95% CI)			**20.8** (19.6-22.2)	**21.3** (19.9-22.8)	**21.8** (20.4-23.2)
Sex	Males		**26.2** (24.3-28.2)	**27.0** (25.1-29.1)	**27.2** (24.9-29.7)
	Females		**15.2** (13.8-16.6)	**15.2** (13.8-16.6)	**16.0** (14.4-17.6)
Grade	7		**28.2** (24.5-32.3)	**27.0** (23.8-30.4)	**31.1** (26.7-35.8)
	8		**26.7** (23.4-30.1)	**27.8** (24.4-31.4)	**27.4** (24.1-30.9)
	9		**23.1** (20.2-26.4)	**24.3** (21.3-27.7)	**25.0** (21.9-28.4)
	10		**19.9** (17.1-22.9)	**22.5** (19.4-26.0)	**20.0** (16.8-23.7)
	11		**17.5** (14.5-21.0)	**15.7** (13.2-18.6)	**19.2** (16.0-22.9)
	12		**14.1** (12.4-16.0)	**15.6** (12.8-18.9)	**15.2** (12.8-18.0)
Region	Toronto		**18.4** (14.9-22.5)	**17.9** (15.4-20.7)	**21.9** (17.9-26.6)
	North		**21.8** (18.3-25.6)	**24.6** (22.4-27.0)	**24.8** (21.4-28.5)
	West		**20.7** (18.8-22.7)	**21.4** (19.0-24.1)	**21.8** (19.7-24.0)
	East		**22.1** (20.1-24.2)	**22.4** (20.2-24.7)	**21.1** (19.2-23.1)

Notes: (1) n=total number of students surveyed; (2) entries in brackets are 95% confidence intervals; (3) no significant changes over time.

Q: "On how many days 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 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."

Source: OSDUHS, Centre for Addiction and Mental Health

Table A3.2.3 Percentage Reporting No Days of Physical Activity in the Past Seven Days, 2009–2013 OSDUHS (Grades 7–12)

		2009	2011	2013
	(*n*=)	(9112)	(9288)	(10272)
Total		**8.5**	**8.4**	**7.3**
(95% CI)		(7.6-9.5)	(7.4-9.6)	(6.4-8.3)
Sex	Males	**7.9**	**8.9**	**6.3**
		(6.6-9.3)	(7.4-10.8)	(5.2-7.7)
	Females	**9.1**	**7.9**	**8.3**
		(8.0-10.4)	(6.6-9.3)	(7.1-9.7)
Grade	7	**6.9**	**7.9**	**4.4**
		(5.4-8.8)	(6.1-10.3)	(3.0-6.3)
	8	**7.3**	**6.5**	**2.4**
		(5.5-9.6)	(4.8-8.8)	(1.2-4.5)
	9	**6.8**	**6.2**	**4.3**
		(5.1-9.0)	(4.4-8.6)	(2.8-6.6)
	10	**7.6**	**7.4**	**7.4**
		(5.7-10.1)	(5.2-10.3)	(5.5-9.8)
	11	**9.5**	**10.6**	**9.0**
		(7.3-12.2)	(8.3-13.6)	(7.3-11.2)
	12	**11.4**	**10.4**	**11.9**
		(9.1-14.3)	(7.8-13.8)	(9.3-15.1)
Region	Toronto	**11.2**	**13.0**	**10.0**
		(8.7-14.3)	(10.2-16.4)	(7.9-12.5)
	North	**7.4**	**6.8**	**7.0**
		(5.7-9.4)	(5.6-8.2)	(3.7-12.8)
	West	**8.3**	**8.0**	**6.2**
		(6.9-10.0)	(6.3-10.1)	(4.8-8.0)
	East	**7.6**	**6.8**	**7.4**
		(6.3-9.0)	(5.7-8.2)	(6.2-8.7)

Notes: (1) n=total number of students surveyed; (2) entries in brackets are 95% confidence intervals; (3) no significant changes over time.
Q: "On how many days 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 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."
Source: OSDUHS, Centre for Addiction and Mental Health

Table A3.2.4 Percentage Reporting No Days of Physical Activity at School in Physical Education Class in the Past Five School Days, 1999–2013 OSDUHS (Grades 7–12)

		1999	2001	2003	2005	2007	2009	2011	2013
	(*n*=)	(2229)	(2061)	(6616)	(7726)	(6323)	(9211)	(9288)	(10272)
Total		**43.8**	**44.2**	**46.4**	**49.5**	**44.5**	**45.5**	**48.1**	**51.0** [bc]
(95% CI)		(40.3-47.4)	(40.4-48.2)	(44.0-48.7)	(47.0-52.1)	(41.6-47.4)	(43.4-47.6)	(44.2-52.1)	(47.7-54.2)
Sex	Males	**41.2**	**39.0**	**43.5**	**45.9**	**40.6**	**42.2**	**43.1**	**47.8**
		(37.0-45.4)	(34.1-44.1)	(40.3-46.7)	(42.9-48.9)	(37.2-44.2)	(39.6-45.0)	(39.5-46.8)	(44.1-51.6)
	Females	**46.5**	**49.4**	**49.0**	**53.4**	**48.6**	**49.0**	**53.5**	**54.3** [b]
		(42.4-50.7)	(44.9-53.8)	(46.3-51.8)	(50.5-56.4)	(45.4-51.8)	(46.3-51.6)	(48.4-58.6)	(50.5-58.0)
Grade	7	**30.0**	**20.0**	**27.9**	**26.4**	**21.6**	**15.4**	**14.2**	**13.5** [b]
		(24.0-36.8)	(15.6-25.3)	(22.6-33.8)	(21.2-32.2)	(16.8-27.2)	(12.9-18.2)	(11.1-18.0)	(10.9-16.6)
	8	**23.9**	**21.8**	**22.3**	**29.9**	**16.5**	**12.8**	**9.8**	**10.0** [b]
		(19.0-29.6)	(16.7-27.8)	(17.7-27.8)	(23.4-37.4)	(12.7-21.1)	(10.2-15.9)	(7.3-12.8)	(7.6-12.9)
	9	**35.6**	**44.9**	**43.5**	**45.1**	**43.1**	**40.9**	**44.4**	**47.5**
		(28.0-44.1)	(34.8-55.5)	(38.5-48.6)	(39.7-50.6)	(38.0-48.4)	(35.4-46.6)	(36.8-52.3)	(41.2-53.8)
	10	**55.7**	**57.6**	**55.9**	**63.3**	**57.4**	**58.9**	**61.2**	**60.9**
		(47.4-63.6)	(50.7-64.1)	(50.3-61.4)	(59.2-67.2)	(51.5-63.1)	(55.1-62.5)	(56.7-65.6)	(55.2-66.3)
	11	**57.2**	**61.3**	**59.8**	**60.8**	**58.3**	**61.8**	**64.9**	**68.4** [b]
		(51.2-62.9)	(50.9-70.8)	(56.4-63.2)	(55.8-65.5)	(52.5-63.9)	(56.4-66.9)	(58.6-70.8)	(64.0-72.4)
	12	**64.7**	**62.2**	**60.8**	**67.7**	**61.6**	**66.3**	**69.2**	**73.0**
		(57.5-71.3)	(55.8-68.2)	(55.1-66.2)	(62.2-72.8)	(55.5-67.4)	(60.8-71.4)	(64.2-73.8)	(67.9-77.5)
Region	Toronto	**44.3**	**39.6**	**48.5**	**49.0**	**41.2**	**46.3**	**44.5**	**46.8**
		(33.7-55.5)	(29.5-50.6)	(43.2-53.8)	(40.4-57.6)	(34.3-48.5)	(38.1-54.8)	(36.0-53.3)	(37.6-56.2)
	North	**49.1**	**46.9**	**45.6**	**42.3**	**47.6**	**49.5**	**51.4**	**52.3**
		(43.1-55.2)	(39.2-54.8)	(41.3-49.9)	(36.2-48.6)	(42.4-52.8)	(45.8-53.2)	(48.3-54.4)	(47.6-57.0)
	West	**45.6**	**44.1**	**46.4**	**51.4**	**43.7**	**47.4**	**48.3**	**51.6**
		(40.2-51.1)	(39.0-49.4)	(43.4-49.5)	(47.7-55.0)	(39.1-48.4)	(44.6-50.3)	(41.2-55.5)	(46.6-56.6)
	East	**39.8**	**46.7**	**45.2**	**49.0**	**46.5**	**41.9**	**49.3**	**52.1** [b]
		(34.2-45.6)	(38.7-54.8)	(39.9-50.6)	(45.2-52.8)	(41.6-51.5)	(39.1-44.8)	(44.1-54.5)	(47.1-57.1)

Notes: (1) n=total number of students surveyed; (2) based on a random half sample in 1999 and 2001; (3) entries in brackets are 95% confidence intervals; (4) no significant differences 2013 vs. 2011; [b] 2013 vs. 1999 significant difference, p<.01; [c] significant linear 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 made you sweat and breathe hard 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 a value of "0 days" and remained in the analysis.)

Source: OSDUHS, Centre for Addiction and Mental Health

Table A3.2.5 Percentage Reporting Three or More Hours Per Day of Recreational Screen Time (Sedentary Behaviour) in the Past Seven Days, 2009–2013 OSDUHS (Grades 7–12)

			2009	2011	2013
		(*n*=)	(8583)	(8827)	(9660)
Total			**57.4**	**60.0**	**58.3**
(95% CI)			(55.7-59.0)	(57.4-62.6)	(56.2-60.4)
Sex	Males		**61.0**	**63.7**	**60.7**
			(58.7-63.2)	(61.3-66.0)	(58.2-63.2)
	Females		**53.5**	**56.1**	**55.7**
			(51.5-55.4)	(52.4-59.7)	(53.3-58.0)
Grade	7		**43.0**	**46.4**	**43.5**
			(39.3-46.8)	(42.0-50.8)	(39.9-47.1)
	8		**51.9**	**54.0**	**56.0**
			(47.8-56.1)	(50.3-57.8)	(50.7-61.3)
	9		**58.6**	**60.7**	**56.8**
			(54.6-62.5)	(55.5-65.6)	(52.6-60.9)
	10		**60.7**	**61.3**	**62.3**
			(56.4-64.8)	(54.8-67.4)	(58.5-65.9)
	11		**63.0**	**65.9**	**62.4**
			(58.3-67.5)	(61.4-70.2)	(58.2-66.4)
	12		**61.6**	**64.7**	**61.4**
			(57.9-65.2)	(58.8-70.2)	(58.2-64.6)
Region	Toronto		**66.8**	**66.2**	**63.1**
			(62.9-70.6)	(61.0-71.0)	(59.4-66.7)
	North		**57.2**	**50.1**	**54.5**
			(53.6-60.7)	(46.2-54.0)	(48.0-60.8)
	West		**55.8**	**61.0**	**57.2**
			(53.2-58.5)	(55.6-66.2)	(53.9-60.5)
	East		**54.7**	**57.2**	**57.8**
			(51.8-57.4)	(54.9-59.4)	(53.8-61.8)

Notes: (1) n=total number of students who did not respond "don't know" to the question; "don't know" responses were treated as missing values (4.7% in 2013) and excluded from the analysis; (2) entries in brackets are 95% confidence intervals; (3) no significant changes over time.

Q: "In the last 7 days, about how many hours a day, on average, did you spend: watching TV/movies, playing video/computer games, on a computer chatting, emailing, or surfing the Internet?" (Note: The Canadian Society for Exercise Physiology's Canadian Sedentary Behaviour Guidelines for Children and Youth recommend a maximum of two hours a day of recreational screen time.)

Source: OSDUHS, Centre for Addiction and Mental Health

Table A3.2.6 Percentage Classified as Overweight or Obese, 2007–2013 OSDUHS (Grades 7–12)

		(*n*=)	**2007** (2935)	**2009** (9112)	**2011** (9288)	**2013** (10272)
Total (95% CI)			**23.2** (21.5-25.1)	**25.2** (23.8-26.7)	**25.5** (23.2-28.0)	**25.1** (23.5-26.7)
Sex	Males		**27.3** (24.6-30.1)	**30.0** (27.6-32.5)	**29.5** (26.8-32.5)	**28.9** (26.3-31.6)
	Females		**18.7** (16.3-21.4)	**20.1** (18.4-21.9)	**21.3** (18.6-24.2)	**21.0** (19.2-23.0)
Grade	7		**22.2** (17.5-27.9)	**23.5** (20.0-27.1)	**19.7** (16.0-24.1)	**21.1** (17.0-25.9)
	8		**17.5** (13.3-22.7)	**27.4** (24.4-30.7)	**20.9** (18.0-24.2)	**22.1** (19.2-25.2)
	9		**23.2** (19.4-27.5)	**26.1** (22.9-29.6)	**27.2** (21.9-33.4)	**24.0** (21.3-27.0)
	10		**26.4** (22.2-31.0)	**25.8** (23.0-28.9)	**27.7** (23.5-32.3)	**27.8** (23.8-32.1)
	11		**25.6** (21.6-30.0)	**25.4** (21.6-29.6)	**28.7** (25.0-32.6)	**28.9** (25.2-33.0)
	12		**23.6** (19.8-27.8)	**23.8** (20.6-27.2)	**25.9** (22.0-30.3)	**24.2** (21.3-27.4)
Region	Toronto		**22.6** (18.2-27.7)	**24.5** (21.4-27.9)	**26.4** (21.9-31.4)	**21.6** (17.8-26.0)
	North		**23.8** (19.5-28.6)	**31.4** (27.7-35.4)	**27.9** (23.8-32.3)	**31.9** (28.5-35.4)
	West		**23.0** (20.5-25.6)	**25.9** (23.5-28.5)	**26.1** (21.5-31.2)	**25.4** (23.0-27.9)
	East		**23.9** (20.6-27.6)	**23.6** (21.6-25.8)	**24.1** (22.2-26.2)	**25.3** (22.8-28.0)

Notes: (1) n=total number of students surveyed; (2) asked of a random half sample in 2007; (3) entries in brackets are 95% confidence intervals; (4) no significant changes over time.

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 using age-by-sex BMI cut-off points created the *International Obesity Task Force* (Cole et al., 2000).

Source: OSDUHS, Centre for Addiction and Mental Health

Table A3.2.7 Body Image and Weight Control, 2001–2013 OSDUHS (Grades 7–12)

		2001	2003	2005	2007	2009	2011	2013
TOTAL SAMPLE	(*n*=)	(1837)	(3152)	(3648)	(2935)	(4261)	(4472)	(4794)
Belief:	**too thin**	**10.3**	**11.1**	**10.8**	**10.3**	**10.0**	**10.9**	**11.8**
	about right weight	**70.9**	**69.0**	**69.9**	**70.0**	**67.3**	**64.8**	**64.7**
	too fat	**18.7**	**19.9**	**19.4**	**19.6**	**22.7**	**24.3**	**23.6** [bc]
Trying to:	**lose weight**	**31.3**	**29.1**	**28.8**	**28.0**	**29.0**	**30.1**	**29.7**
	gain weight	**12.2**	**11.6**	**12.0**	**13.4**	**12.9**	**13.8**	**13.8**
	keep from gaining weight	**18.3**	**20.8**	**22.1**	**22.7**	**22.8**	**22.5**	**22.7**
	not trying to do anything	**38.2**	**38.5**	**37.1**	**35.9**	**35.3**	**33.6**	**33.8**
MALES		(899)	(1509)	(1786)	(1450)	(2055)	(2116)	(2182)
Belief:	too thin	12.9	15.8	14.8	13.4	14.0	14.1	15.9
	about right weight	73.4	70.7	70.8	72.0	68.6	67.3	68.9
	too fat	13.7	13.4	14.5	14.6	17.4	18.6	15.2
Trying to:	lose weight	21.2	18.4	20.8	20.3	20.7	21.1	21.1
	gain weight	18.5	18.4	18.2	20.0	19.8	22.0	21.7
	keep from gaining weight	16.9	14.8	18.6	19.1	19.6	19.0	19.0
	not trying to do anything	43.4	48.4	42.4	40.6	39.8	38.0	38.2
FEMALES		(938)	(1643)	(1862)	(1485)	(2206)	(2356)	(2612)
Belief:	too thin	7.9	6.7	6.4	6.9	5.4	7.4	7.5
	about right weight	68.6	67.3	68.9	67.9	65.8	62.1	60.2
	too fat	23.6	26.0	24.7	25.2	28.7	30.6	32.3 [b]
Trying to:	lose weight	40.9	39.2	37.5	36.7	38.3	40.2	38.8
	gain weight	6.2	5.4	5.2	6.0	5.1	4.7	5.5
	keep from gaining weight	19.6	26.3	26.0	26.7	26.4	26.3	26.6
	not trying to do anything	33.3	29.1	31.3	30.6	30.2	28.7	29.1
GRADE 7		(346)	(450)	(453)	(338)	(749)	(718)	(974)
Belief:	too thin	12.1	9.9	6.2	7.2	9.3	9.5	9.9
	about right weight	76.1	74.3	76.5	79.1	72.2	70.6	68.9
	too fat	11.8	15.8	17.2	13.6	18.5	19.9	21.2 [b]
Trying to:	lose weight	25.7	22.8	25.4	26.1	25.1	25.5	27.7
	gain weight	10.5	8.1	5.5	8.5	9.4	8.6	7.6
	keep from gaining weight	19.2	18.1	22.1	28.0	21.3	21.7	23.8
	not trying to do anything	44.6	51.1	47.0	33.4	44.2	44.1	41.0
GRADE 8		(312)	(464)	(470)	(350)	(784)	(729)	(925)
Belief:	too thin	10.5	9.9	9.4	9.4	5.8	7.0	10.1
	about right weight	68.1	74.3	75.3	72.7	73.9	72.6	69.9
	too fat	21.5	15.8	15.3	17.8	20.3	20.3	20.1
Trying to:	lose weight	32.3	25.2	26.7	25.7	29.8	26.2	25.5
	gain weight	9.7	8.6	9.4	8.2	7.4	9.1	12.1
	keep from gaining weight	22.2	25.1	24.8	23.8	23.8	28.2	20.6
	not trying to do anything	35.8	41.1	39.1	42.3	39.0	36.5	41.8
GRADE 9		(334)	(600)	(691)	(561)	(661)	(805)	(722)
Belief:	too thin	7.3	11.6	12.7	11.3	9.9	10.9	11.1
	about right weight	73.8	70.5	66.8	67.9	65.6	66.1	65.2
	too fat	18.9	17.9	20.5	20.8	24.6	23.0	23.7
Trying to:	lose weight	34.3	29.4	28.3	27.4	29.6	34.2	28.5
	gain weight	9.2	12.3	12.7	13.2	10.5	14.9	8.9
	keep from gaining weight	18.1	19.6	22.5	19.8	22.8	18.8	24.4
	not trying to do anything	38.4	38.7	36.5	39.5	37.2	32.0	38.2

(cont'd)

		2001	2003	2005	2007	2009	2011	2013
GRADE 10		(384)	(559)	(685)	(528)	(720)	(722)	(728)
Belief:	too thin	7.7	11.7	9.9	9.8	8.4	11.3	12.0
	about right weight	73.8	64.2	68.8	68.7	66.5	60.7	66.5
	too fat	18.4	24.1	21.2	21.5	25.1	28.0	21.5
Trying to:	lose weight	34.3	32.2	29.7	28.3	33.6	35.6	33.5
	gain weight	11.0	11.9	11.3	12.4	11.3	14.4	12.5
	keep from gaining weight	16.8	21.6	23.6	20.6	21.1	17.2	20.9
	not trying to do anything	37.8	34.3	35.4	38.7	34.0	32.8	33.1
GRADE 11		(273)	(568)	(718)	(589)	(659)	(731)	(737)
Belief:	too thin	12.2	11.6	13.5	12.0	10.6	10.2	11.9
	about right weight	66.1	65.5	66.1	67.2	64.4	60.2	62.2
	too fat	21.7	23.0	20.3	20.8	24.9	29.6	25.8
Trying to:	lose weight	31.1	31.8	30.1	28.2	28.5	30.6	30.9
	gain weight	17.1	13.9	15.0	18.9	15.8	13.8	16.4
	keep from gaining weight	16.5	20.1	21.5	20.1	26.3	22.7	25.4
	not trying to do anything	35.3	34.2	33.4	32.8	29.4	33.0	27.4
GRADE 12		(188)	(511)	(631)	(569)	(688)	(767)	(708)
Belief:	too thin	15.4	11.8	12.1	11.4	13.6	14.1	13.6
	about right weight	63.0	67.0	67.1	66.7	64.5	62.6	60.3
	too fat	21.6	21.2	20.8	21.9	21.9	23.3	26.1
Trying to:	lose weight	27.4	31.5	31.7	31.2	27.5	27.8	30.2
	gain weight	18.5	13.9	16.7	17.0	18.8	18.2	20.1
	keep from gaining weight	17.6	20.6	18.9	24.2	21.7	25.6	21.3
	not trying to do anything	36.4	34.0	32.7	27.6	32.1	28.4	28.4
TORONTO		(266)	(549)	(595)	(473)	(419)	(622)	(392)
Belief:	too thin	12.4	13.7	14.4	10.6	11.4	13.4	16.4
	about right weight	74.6	69.7	66.7	72.4	71.5	63.1	63.5
	too fat	13.0	16.6	18.8	17.0	17.1	23.5	20.1
Trying to:	lose weight	28.4	26.1	29.9	25.4	30.0	33.0	27.6
	gain weight	13.6	11.5	14.3	16.2	14.9	15.9	13.9
	keep from gaining weight	20.8	18.7	20.4	19.8	19.8	16.9	23.4
	not trying to do anything	37.2	43.7	35.3	38.6	35.2	32.4	35.2
NORTH REGION		(415)	(539)	(517)	(376)	(290)	(771)	(495)
Belief:	too thin	8.3	9.7	10.8	9.7	6.7	8.0	5.9
	about right weight	67.5	70.4	70.8	68.8	68.9	68.8	68.5
	too fat	24.3	19.8	18.4	21.5	24.4	23.2	25.6
Trying to:	lose weight	31.2	26.8	27.3	28.1	31.3	29.0	29.1
	gain weight	11.9	10.6	10.9	9.4	17.1	12..0	11.9
	keep from gaining weight	19.5	19.9	21.9	22.2	19.6	24.2	29.4
	not trying to do anything	37.4	42.7	39.9	40.3	32.0	34.7	29.6
WEST REGION		(707)	(1254)	(1428)	(1316)	(1439)	(1147)	(1619)
Belief:	too thin	9.6	11.4	9.0	11.2	10.6	11.0	10.8
	about right weight	71.3	67.2	70.1	69.0	64.4	61.9	65.0
	too fat	19.1	21.4	20.9	19.8	25.0	27.1	24.2
Trying to:	lose weight	31.4	30.6	31.6	28.6	29.7	31.1	29.3
	gain weight	11.9	11.7	11.3	13.6	12.4	14.2	14.2
	keep from gaining weight	20.0	21.2	20.2	23.4	24.0	22.2	22.5
	not trying to do anything	36.8	36.6	36.8	34.4	33.9	32.5	34.0

(cont'd)

		2001	2003	2005	2007	2009	2011	2013
EAST REGION		(449)	(810)	(1108)	(770)	(2113)	(1932)	(2288)
Belief:	too thin	10.6	9.3	11.0	8.8	8.9	10.1	11.0
	about right weight	68.8	70.9	71.4	70.5	68.8	68.8	64.3
	too fat	20.6	19.8	17.6	20.7	22.3	21.2	24.7
Trying to:	lose weight	33.4	29.5	24.4	28.9	27.1	27.6	32.0
	gain weight	11.7	12.0	11.6	12.1	11.6	12.6	13.5
	keep from gaining weight	13.5	21.7	25.9	23.5	23.5	25.2	21.2
	not trying to do anything	41.4	36.8	38.0	35.5	37.8	34.6	33.2

Notes: (1) n=total number of students surveyed; (2) entries in cells are percentages; (3) data based on a random half sample in each year; (4) no significant differences 2013 vs. 2011; [b] 2013 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 a Medically Treated Injury at Least Once in the Past Year, 2003–2013 OSDUHS (Grades 7–12)

		2003	2005	2007	2009	2011	2013
	(*n*=)	(6616)	(7726)	(2935)	(4261)	(4472)	(4794)
Total		**35.4**	**33.8**	**37.4**	**40.5**	**41.9**	**41.0** [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)
Sex	Males	**38.0**	**37.9**	**39.4**	**43.0**	**44.2**	**43.6** [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)
	Females	**33.0**	**29.5**	**35.2**	**37.6**	**39.3**	**38.4** [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)
Grade	7	**32.5**	**29.6**	**31.3**	**39.1**	**34.9**	**39.5**
		(27.9-37.4)	(26.7-32.6)	(25.3-37.9)	(33.9-44.6)	(30.4-39.8)	(33.4-46.0)
	8	**36.3**	**35.3**	**31.4**	**40.8**	**41.0**	**47.1** [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)
	9	**38.3**	**35.1**	**39.9**	**42.9**	**43.2**	**41.5**
		(34.9-41.8)	(32.2-38.1)	(34.4-45.7)	(38.2-47.7)	(37.9-48.7)	(36.4-46.8)
	10	**35.1**	**33.3**	**37.7**	**42.0**	**45.7**	**39.4**
		(31.6-38.8)	(30.1-36.6)	(33.5-42.1)	(37.8-46.5)	(40.8-50.6)	(33.0-46.1)
	11	**36.0**	**33.1**	**38.9**	**40.8**	**38.5**	**39.7**
		(32.2-40.0)	(30.1-36.4)	(34.7-43.2)	(36.4-45.3)	(33.1-44.1)	(34.4-45.4)
	12	**33.6**	**36.0**	**42.7**	**37.8**	**44.8**	**40.4**
		(30.1-37.4)	(32.1-40.0)	(37.3-48.3)	(33.5-42.4)	(34.9-55.2)	(35.6-45.4)
Region	Toronto	**26.4**	**26.7**	**33.0**	**34.7**	**34.6**	**33.7**
		(22.4-31.0)	(22.7-31.1)	(27.9-38.6)	(28.6-41.4)	(31.0-38.3)	(24.8-43.9)
	North	**41.8**	**39.1**	**40.7**	**34.6**	**49.3**	**47.8**
		(38.1-45.6)	(35.7-42.7)	(33.9-47.8)	(26.3-41.5)	(45.3-53.4)	(40.4-55.3)
	West	**36.2**	**33.5**	**38.4**	**41.7**	**43.6**	**42.0**
		(33.4-39.0)	(31.0-36.2)	(35.6-41.4)	(38.8-44.6)	(38.9-48.4)	(37.8-46.2)
	East	**38.1**	**36.8**	**37.8**	**43.2**	**42.3**	**43.4**
		(35.0-41.3)	(34.5-39.3)	(33.5-42.3)	(40.4-46.0)	(39.5-45.2)	(40.4-46.4)

Notes: (1) n=total number of students surveyed; (2) entries in brackets are 95% confidence intervals; (3) asked of a random half sample since 2007; (4) no significant differences 2013 vs. 2011; [b] 2013 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 A3.3.1 Percentage Reporting No Physician Health Care Visit in the Past Year, 1999–2013 OSDUHS (Grades 7–12)

		1999	2001	2003	2005	2007	2009	2011	2013
	(*n*=)	(4447)	(3898)	(6616)	(7726)	(2935)	(4261)	(4207)	(4794)
Total		**30.0**	**34.0**	**39.8**	**38.9**	**39.0**	**33.6**	**32.7**	**27.4** [acd]
(95% CI)		(28.2-31.9)	(31.8-36.2)	(38.3-41.3)	(37.0-40.8)	(36.6-41.5)	(31.2-36.0)	(30.4-35.0)	(25.1-29.8)
Sex	Males	**34.0**	**38.9**	**46.2**	**43.4**	**44.6**	**39.3**	**36.1**	**30.8**
		(31.7-36.5)	(35.9-41.9)	(44.1-48.4)	(40.6-46.3)	(40.9-48.2)	(35.6-43.1)	(33.2-39.0)	(27.9-34.0)
	Females	**25.9**	**29.2**	**33.8**	**34.0**	**32.8**	**27.2**	**28.9**	**23.7**
		(23.6-28.4)	(27.0-31.6)	(31.9-35.8)	(32.0-36.1)	(30.0-35.8)	(24.3-30.4)	(26.1-31.8)	(20.6-27.2)
Grade	7	**33.6**	**33.8**	**42.6**	**44.8**	**40.9**	**33.6**	**33.4**	**29.0**
		(29.5-38.0)	(29.0-38.9)	(37.9-47.5)	(38.6-51.2)	(34.7-47.3)	(27.8-40.0)	(27.3-40.2)	(21.6-37.7)
	8	**31.5**	**33.0**	**43.2**	**44.0**	**45.5**	**33.4**	**34.7**	**26.3**
		(27.9-35.2)	(28.4-38.0)	(39.4-47.1)	(39.1-49.1)	(38.6-52.6)	(27.7-39.6)	(29.4-40.4)	(20.5-32.9)
	9	**31.4**	**35.3**	**39.4**	**37.1**	**42.4**	**31.1**	**31.2**	**30.5**
		(28.6-34.3)	(31.3-39.5)	(35.7-43.2)	(33.6-40.8)	(37.4-47.5)	(27.0-35.6)	(26.5-36.4)	(25.9-35.5)
	10	**26.9**	**36.0**	**38.4**	**36.7**	**35.4**	**30.3**	**30.8**	**26.7**
		(22.5-31.9)	(31.3-41.0)	(34.8-42.1)	(33.5-40.0)	(30.5-40.7)	(25.0-36.2)	(24.4-38.0)	(21.7-32.5)
	11	**26.9**	**29.3**	**37.8**	**35.8**	**31.1**	**35.0**	**34.9**	**28.1**
		(22.6-31.6)	(24.2-34.9)	(34.4-41.3)	(32.9-38.7)	(27.2-35.2)	(30.4-39.8)	(29.2-41.1)	(24.4-32.0)
	12	**29.6**	**35.0**	**38.6**	**35.9**	**39.7**	**36.9**	**31.9**	**25.0**
		(24.2-35.5)	(29.6-42.8)	(34.5-42.8)	(33.0-39.0)	(35.2-44.4)	(31.7-42.4)	(26.2-38.2)	(19.7-31.2)
Region	Toronto	**25.5**	**30.3**	**38.7**	**36.1**	**39.2**	**35.8**	**31.2**	**24.7**
		(21.7-29.8)	(26.7-34.2)	(36.8-40.6)	(31.5-41.1)	(32.3-46.5)	(30.8-41.0)	(27.2-35.6)	(18.6-32.1)
	North	**39.5**	**39.7**	**45.9**	**49.3**	**47.5**	**39.1**	**40.7**	**34.5**
		(35.4-43.7)	(35.1-44.4)	(43.5-48.2)	(43.8-54.8)	(40.8-54.2)	(29.4-49.8)	(33.6-48.2)	(28.7-40.9)
	West	**32.4**	**37.5**	**42.0**	**41.4**	**40.1**	**33.2**	**33.2**	**29.0**
		(29.2-35.7)	(34.1-41.1)	(39.9-44.2)	(39.0-43.8)	(37.1-43.3)	(29.5-37.2)	(29.1-37.7)	(26.0-32.3)
	East	**26.6**	**29.2**	**35.5**	**35.1**	**35.2**	**31.7**	**31.5**	**25.2**
		(23.8-29.6)	(24.9-33.9)	(31.9-39.2)	(31.6-38.8)	(30.5-40.1)	(27.6-36.1)	(28.5-34.7)	(21.6-29.1)

Notes: (1) n=total number of students surveyed; (3) asked of a random half sample since 2007; (3) entries in brackets are 95% confidence intervals; (4) [a] 2013 vs. 2011 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 about your physical health or for a check-up?" (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 A3.3.2 Percentage Reporting at Least One Mental Health Care Visit in the Past Year, 1999–2013 OSDUHS (Grades 7–12)

		1999	2001	2003	2005	2007	2009	2011	2013
	(*n*=)	(4447)	(3898)	(6616)	(7726)	(3388)	(4851)	(4816)	(5478)
Total		**12.4**	**10.9**	**11.0**	**11.7**	**21.2**	**23.8**	**15.1**	**21.9** [abcd]
(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)
Sex	Males	**9.5**	**8.1**	**8.1**	**8.7**	**19.5**	**22.3**	**11.1**	**17.9** [ab]
		(8.0-11.2)	(6.9-9.5)	(7.1-9.3)	(7.4-10.2)	(17.1-22.1)	(19.6-25.2)	(9.0-13.5)	(15.6-20.4)
	Females	**15.5**	**13.6**	**13.7**	**14.8**	**23.0**	**25.4**	**19.1**	**26.3** [ab]
		(13.6-17.6)	(12.0-15.4)	(12.1-15.4)	(13.3-16.4)	(20.7-25.4)	(23.1-28.0)	(16.4-22.3)	(23.4-29.4)
Grade	7	**8.9**	**7.4**	**10.0**	**9.8**	**23.3**	**28.9**	**15.0**	**20.9** [b]
		(7.0-11.3)	(5.8-9.4)	(8.2-12.1)	(7.4-12.9)	(18.7-28.6)	(24.3-34.0)	(11.7-19.0)	(16.7-25.8)
	8	**11.3**	**9.3**	**10.3**	**11.4**	**18.5**	**23.2**	**13.9**	**26.0** [ab]
		(8.9-14.3)	(7.2-11.9)	(7.5-14.0)	(8.6-15.0)	(14.3-23.6)	(19.4-27.5)	(10.5-18.3)	(19.5-33.7)
	9	**14.4**	**11.0**	**9.0**	**11.2**	**22.4**	**26.1**	**12.1**	**21.7** [ab]
		(11.4-18.1)	(8.9-13.6)	(7.1-11.3)	(9.4-13.1)	(18.8-26.5)	(21.9-30.8)	(9.0-15.9)	(18.3-25.5)
	10	**14.8**	**12.4**	**11.1**	**14.2**	**19.0**	**24.6**	**16.6**	**20.6**
		(11.3-19.1)	(10.6-14.6)	(8.5-14.2)	(12.0-16.7)	(15.4-23.2)	(21.0-28.6)	(11.6-23.0)	(16.0-26.1)
	11	**14.6**	**12.4**	**14.4**	**12.7**	**21.3**	**23.3**	**17.6**	**24.4** [b]
		(11.2-18.8)	(10.6-14.6)	(12.0-17.3)	(10.2-15.8)	(17.6-25.6)	(18.1-29.5)	(10.9-27.1)	(19.7-30.0)
	12	**9.3**	**13.0**	**11.0**	**10.7**	**22.5**	**19.0**	**14.9**	**19.6** [b]
		(7.2-12.1)	(7.8-21.0)	(9.0-13.4)	(8.9-12.8)	(18.5-27.1)	(15.4-23.3)	(12.2-18.1)	(15.4-24.7)
Region	Toronto	**10.5**	**10.8**	**8.3**	**11.2**	**25.2**	**27.0**	**13.3**	**22.1** [b]
		(8.3-13.2)	(9.0-12.8)	(6.4-10.6)	(7.9-15.6)	(20.7-30.3)	(21.5-33.3)	(10.4-16.7)	(14.3-32.5)
	North	**11.7**	**11.0**	**12.0**	**14.6**	**21.2**	**19.8**	**16.5**	**22.8** [b]
		(8.9-15.3)	(8.8-13.6)	(10.0-14.4)	(12.0-17.7)	(15.8-27.8)	(15.6-24.7)	(12.5-21.6)	(19.1-27.0)
	West	**13.5**	**10.8**	**10.6**	**12.1**	**18.9**	**23.1**	**16.5**	**21.3** [b]
		(11.4-16.0)	(8.7-13.2)	(8.9-12.5)	(10.3-14.1)	(16.2-21.8)	(20.4-26.0)	(12.4-21.5)	(18.3-24.6)
	East	**12.3**	**11.2**	**13.2**	**10.7**	**22.0**	**24.1**	**13.8**	**22.7** [ab]
		(10.6-14.2)	(9.6-13.2)	(11.2-15.4)	(9.3-12.3)	(18.9-25.4)	(21.3-27.1)	(11.6-16.5)	(20.0-25.5)

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) [a] 2013 vs. 2011 significant difference, p<.01; [b] 2013 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 A3.3.3 Percentage Reporting Medical Tranquillizer/Sedative Use at Least Once in the Past Year, 1977–2013 OSDUHS (Grades 9–12)

	1977	1979	1981	1983	1985	1987	1989	1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013
(n[1])												(2883)	(2457)	(4693)	(5794)	(4834)	(5783)	(6383)	(6159)
(n[2])	(2640)	(2653)	(1894)	(2075)	(2092)	(2137)	(1919)	(2020)	(1723)	(1980)	(2221)	(1655)	(1263)	(2442)	(3008)	(2494)	(2792)	(3223)	(3111)
Total[1] (95% CI)	—	—	—	—	—	—	—	—	—	—	—	**3.5** (2.8-4.4)	**3.7** (3.0-4.5)	**3.0** (2.4-3.9)	**2.5** (1.9-3.4)	**5.0** (4.1-6.1)	**4.3** (3.3-5.6)	**4.2** (3.4-5.3)	**2.9** (2.3-3.7)
Total[2] (95% CI)	**9.5** (8.4-10.9)	**7.4** (6.4-8.6)	**8.9** (7.6-10.4)	**7.7** (6.4-9.1)	**5.2** (4.5-6.0)	**5.5** (4.0-7.5)	**3.3** (2.3-4.5)	**3.3** (2.4-4.5)	**2.6** (1.7-4.2)	**1.8** (1.2-2.8)	**2.5** (2.0-3.1)	**3.5** (2.6-4.6)	**3.7** (2.7-5.0)	**3.3** (2.2-4.9)	**2.6** (1.8-3.6)	**4.3** (3.2-5.7)	**3.9** (2.8-5.4)	**3.8** (2.6-5.6)	**3.3** (2.4-4.4) [cd]
Sex																			
Males[1]	—	—	—	—	—	—	—	—	—	—	—	**3.3** (2.4-4.6)	**4.7** (3.5-6.2)	**3.7** (2.7-5.1)	**2.8** (1.8-4.2)	**3.4** (2.6-4.5)	**3.3** (2.3-4.7)	**3.5** (2.3-5.2)	**2.6** (1.8-3.7)
Males[2]	**8.5** (7.0-10.3)	**7.4** (6.0-9.0)	**8.5** (6.7-10.6)	**6.5** (5.4-7.6)	**5.4** (4.3-6.7)	**4.6** (2.5-8.4)	**2.9** (1.4-5.7)	**3.4** (2.4-4.7)	**3.1** (2.0-4.7)	**2.0** (1.2-3.2)	**2.6** (1.8-3.7)	**2.9** (1.8-4.7)	**4.4** (2.8-7.0)	**4.4** (2.7-6.9)	**2.5** (1.7-3.8)	**3.1** (2.1-4.7)	**2.8** (1.6-4.7)	**3.5** (1.8-6.3)	**3.1** (1.9-4.8)
Females[1]	—	—	—	—	—	—	—	—	—	—	—	**3.7** (2.6-5.1)	**2.6** (1.9-3.6)	**2.3** (1.5-3.6)	**2.2** (1.5-3.4)	**6.7** (5.2-8.6)	**5.2** (3.8-7.3)	**5.1** (4.2-6.1)	**3.2** (2.4-4.3)
Females[2]	**10.4** (8.9-12.2)	**7.5** (6.1-9.1)	**9.3** (7.6-11.4)	**8.8** (7.0-11.2)	**5.0** (3.9-6.4)	**6.2** (5.1-7.6)	**3.6** (2.9-4.6)	**3.1** (1.8-5.4)	**2.2** (1.3-3.9)	**1.7** (0.9-3.4)	**2.4** (1.4-3.9)	**4.1** (2.7-6.2)	**2.8** (1.7-4.4)	**2.3** (1.1-4.5)	**2.6** (1.5-4.4)	**5.5** (3.9-7.7)	**5.0** (3.4-7.2)	**4.2** (3.2-5.6)	**3.5** (2.3-5.2)
Grade																			
9	**8.9** (7.4-10.7)	**6.2** (4.9-7.7)	**8.1** (6.5-10.0)	**6.4** (4.6-8.9)	**3.7** (2.9-4.7)	**4.7** (3.6-6.2)	**2.3** (1.4-3.6)	**2.8** (1.6-4.9)	**1.8** (0.7-4.4)	**1.0** (0.5-2.0)	**1.8** (1.2-2.6)	**3.8** (2.6-5.4)	**2.3** (1.4-3.8)	**2.8** (1.4-5.4)	**2.0** (1.2-3.3)	**3.4** (2.2-5.3)	**2.3** (1.3-4.1)	**2.7** (1.7-4.3)	**3.7** (2.5-5.4)
10	—	—	—	—	—	—	—	—	—	—	—	**3.1** (2.0-4.7)	**2.6** (1.8-4.0)	**2.3** (1.2-4.2)	**2.7** (1.5-4.8)	**4.0** (2.6-6.2)	**4.5** (2.5-7.7)	**4.5** (3.1-6.7)	**2.7** (1.7-4.1)
11	**10.5** (8.8-12.5)	**9.1** (7.5-11.1)	**9.9** (7.9-12.3)	**9.2** (8.2-10.4)	**6.8** (5.9-7.9)	**6.1** (3.7-9.9)	**4.5** (3.0-6.6)	**3.7** (2.6-5.4)	**3.4** (2.2-5.4)	**2.6** (1.6-4.4)	**3.1** (2.4-4.2)	**3.1** (1.9-5.0)	**5.4** (3.6-8.0)	**3.8** (2.3-6.2)	**3.2** (2.1-4.9)	**5.1** (3.4-7.6)	**5.4** (3.6-8.0)	**4.9** (2.8-8.7)	**2.9** (1.8-4.7)
12	—	—	—	—	—	—	—	—	—	—	—	**4.0** (2.5-6.4)	**5.9** (4.1-8.3)	**3.2** (1.8-5.6)	**2.2** (1.0-4.8)	**7.1** (5.0-10.2)	**4.8** (3.3-6.9)	**4.6** (3.3-6.4)	**2.6** (1.7-3.8)

(cont'd)

	1977	1979	1981	1983	1985	1987	1989	1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013
(n[1])												(2883)	(2457)	(4693)	(5794)	(4834)	(5783)	(6383)	(6159)
(n[2])	(2640)	(2653)	(1894)	(2075)	(2092)	(2137)	(1919)	(2020)	(1723)	(1980)	(2221)	(1655)	(1263)	(2442)	(3008)	(2494)	(2792)	(3223)	(3111)
Region																			
Toronto[1]	—	—	—	—	—	—	—	—	—	—	—	**3.2** (1.7-5.9)	**2.9** (1.6-5.2)	**2.6** (1.4-4.5)	†	**2.4** (1.3-4.4)	†	**2.1** (1.4-3.2)	**2.0** (1.1-3.6)
Toronto[2]	—	—	**7.8** (6.6-9.1)	**4.3** (2.7-6.6)	**4.0** (3.3-4.9)	**4.8** (3.2-7.3)	†	**2.6** (1.6-4.4)	**1.5** (0.7-3.0)	†	†	†	**2.3** (1.6-3.3)	†	†	†	†	†	**3.5** (2.1-5.7)
North[1]	—	—	—	—	—	—	—	—	—	—	—	**2.7** (1.6-4.6)	**4.3** (2.9-6.4)	†	†	**3.8** (2.3-6.2)	†	**5.0** (3.8-6.6)	†
North[2]	—	—	**10.9** (6.5-17.8)	**10.1** (5.8-17.2)	**7.5** (5.6-9.8)	**7.2** (4.2-12.0)	**4.0** (2.8 -5.7)	**5.1** (2.3-10.6)	**2.4** (1.8-3.3)	†	**2.5** (1.9-3.2)	†	**4.7** (2.9-7.5)	†	†	†	†	**5.4** (3.6-7.9)	†
West[1]	—	—	—	—	—	—	—	—	—	—	—	**2.7** (1.8-3.9)	**3.4** (2.5-4.7)	**3.0** (2.0-4.5)	**2.2** (1.3-3.7)	**4.3** (2.9-6.4)	**4.7** (2.8-7.6)	**4.7** (3.1-7.2)	**3.1** (2.1-4.5)
West[2]	—	—	**9.2** (7.6-11.1)	**7.9** (6.4-9.8)	**5.1** (4.1-6.3)	**5.7** (3.2-10.2)	**4.1** (2.4-6.9)	**3.0** 1.5-4.8)	**3.1** (1.6-5.9)	**2.2** (1.3-3.8)	**2.8** (1.9-4.1)	**2.3** (1.3-4.0)	**3.5** (1.8-6.7)	**3.8** (2.2-6.5)	†	**3.6** (2.2-6.1)	**3.9** (2.1-7.2)	†	**2.9** (1.7-4.7)
East[1]	—	—	—	—	—	—	—	—	—	—	—	**5.1** (3.7-7.0)	**4.4** (3.3-5.9)	**3.5** (2.3-5.1)	**3.0** (1.9-4.8)	**7.2** (5.7-9.0)	**4.4** (3.3-5.7)	**4.4** (3.4-5.7)	**3.3** (2.2-4.7)
East[2]	—	—	**8.4** (4.8-14.3)	**8.9** (6.2-12.8)	**5.5** (3.9-7.5)	**5.1** (2.5-10.0)	**3.3** (1.9-5.6)	**3.7** (2.4-5.8)	†	†	**2.8** (2.0-4.0)	**5.7** (3.9-8.3)	**5.1** (3.3-7.8)	†	**3.1** (2.0-4.7)	**6.0** (4.1-8.9)	**4.0** (2.9-5.5)	**4.0** (3.0-5.4)	**3.9** (2.3-6.4)

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) regional stratification differed in 1977 and 1979 and therefore regions are not presented; (7) †=estimate suppressed due to unreliability; (8) no significant changes between 1999 and 2013 (full 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 Valium, Ativan, Xanax) *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 A3.3.4 Percentage Reporting Medical Use of an ADHD Drug at Least Once in the Past Year, 2007–2013 OSDUHS (Grades 7–12)

		2007	2009	2011	2013
	(*n*=)	(6323)	(4851)	(9288)	(10272)
Total (95% CI)		**2.3** (1.9-2.9)	**2.7** (2.1-3.5)	**2.5** (2.1-3.1)	**3.2** (2.5-4.2)
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)
	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)
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)
	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)
	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)
	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)
	11	**1.7** (1.0-2.9)	**2.6** (0.9-7.1)	†	**4.0** (2.7-5.8)
	12	**2.1** (1.2-3.6)	**1.4** (0.6-2.9)	**1.4** (0.8-2.5)	†
Region	Toronto	**1.3** (0.7-2.2)	†	**2.0** (1.2-3.3)	†
	North	**2.7** (1.4-5.1)	†	**3.0** (2.1-4.2)	**3.4** (2.0-5.6)
	West	**2.3** (1.6-3.2)	**2.6** (1.7-3.8)	**2.6** (1.9-3.6)	**3.7** (2.4-5.5)
	East	**2.8** (2.0-4.0)	**3.7** (2.5-5.3)	**2.7** (2.0-3.6)	**3.3** (2.4-4.5)

Notes: (1) n=total number of students surveyed; (2) asked of a random half sample in 2009; (3) entries in brackets are 95% confidence intervals; (4) ADHD=Attention Deficit Hyperactivity Disorder; (5) †=estimate suppressed due to unreliability; (6) no significant changes over time.

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 Ritalin, Concerta, Adderall, Dexedrine) *with a prescription* or because a doctor told you to take it?"

Source: OSDUHS, Centre for Addiction and Mental Health

Table A3.3.5 Percentage Reporting Medical Use of Prescription Opioid Pain Relievers at Least Once in the Past Year, 2007–2013 OSDUHS (Grades 7–12)

		2007	2009	2011	2013
	(*n*=)	(6323)	(9112)	(9288)	(10272)
Total		**40.6**	**31.8**	**21.4**	**20.9** [bcd]
(95% CI)		(39.0-42.1)	(30.3-33.3)	(19.6-23.2)	(19.6-22.3)
Sex	Males	**35.8**	**26.7**	**18.4**	**19.7** [b]
		(33.8-37.9)	(24.7-28.8)	(16.9-20.1)	(17.7-21.9)
	Females	**45.7**	**37.3**	**24.5**	**22.2** [b]
		(43.3-48.1)	(35.2-39.3)	(21.8-27.4)	(20.6-24.0)
Grade	7	**33.4**	**23.9**	**12.5**	**14.2** [b]
		(29.5-37.4)	(20.7-27.3)	(10.3-15.0)	(11.5-17.3)
	8	**39.5**	**28.7**	**16.8**	**16.5** [b]
		(35.7-43.4)	(25.2-32.3)	(14.4-19.7)	(13.7-19.8)
	9	**44.6**	**33.9**	**19.5**	**18.9** [b]
		(41.2-48.0)	(30.1-38.0)	(17.9-21.2)	(16.0-22.2)
	10	**44.0**	**33.6**	**22.8**	**23.7** [b]
		(40.7-47.4)	(30.4-37.1)	(19.4-26.6)	(20.4-27.4)
	11	**41.0**	**33.9**	**24.1**	**22.0** [b]
		(37.7-44.4)	(30.1-38.0)	(19.1-30.0)	(18.8-25.5)
	12	**40.3**	**34.1**	**27.2**	**25.1** [b]
		(36.9-43.8)	(30.6-37.9)	(24.2-30.3)	(21.6-28.8)
Region	Toronto	**36.4**	**26.9**	**15.8**	**20.9** [b]
		(32.5-40.5)	(22.4-31.9)	(13.9-17.8)	(16.4-26.3)
	North	**39.7**	**31.1**	**21.5**	**17.7** [b]
		(35.7-43.9)	(26.7-35.9)	(19.0-24.3)	(14.4-21.5)
	West	**40.9**	**31.9**	**22.8**	**19.9** [b]
		(38.9-42.9)	(29.6-34.3)	(19.7-26.3)	(18.1-21.9)
	East	**42.5**	**34.1**	**22.2**	**23.1** [b]
		(39.3-45.6)	(32.2-36.1)	(20.0-24.5)	(21.4-24.8)

Notes: (1) n=total number of students surveyed; (2) entries in brackets are 95% confidence intervals; (3) no significant differences 2013 vs. 2011; [b] 2013 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, OxyContin, 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 A3.4.1 Percentage Reporting Fair/Poor Mental Health, 2007–2013 OSDUHS (Grades 7–12)

		(*n*=)	2007 (3388)	2009 (4851)	2011 (4816)	2013 (5478)
Total (95% CI)			**11.4** (10.0-12.9)	**11.7** (10.3-13.2)	**13.7** (12.0-15.7)	**15.3** [bc] (13.5-17.4)
Sex	Males		**7.1** (5.7-8.8)	**8.4** (6.9-10.3)	**9.4** (7.7-11.3)	**10.5** [b] (8.8-12.6)
	Females		**15.8** (13.7-18.2)	**15.0** (13.2-17.0)	**18.2** (15.1-21.7)	**20.5** [b] (18.1-23.2)
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)
	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)
	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)
	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)
	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)
	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)
Region	Toronto		**8.8** (5.9-12.9)	**14.4** (11.2-18.4)	**14.7** (11.9-18.1)	**19.8** [b] (13.9-27.2)
	North		**14.6** (10.7-19.7)	**12.3** (9.4-16.0)	**14.2** (10.6-18.9)	**12.2** (8.9-16.4)
	West		**12.3** (10.4-14.5)	**12.2** (10.0-14.8)	**13.2** (9.9-17.4)	**13.9** (11.5-16.7)
	East		**11.0** (8.5-14.1)	**9.7** (7.8-12.1)	**13.9** (12.3-15.6)	**15.8** (12.8-19.4)

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 differences 2013 vs. 2011; [b] 2013 vs. 2007 significant difference, p<.01; [c] significant 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 Suicidal Ideation in the Past Year, 2001–2013 OSDUHS (Grades 7–12)

		2001	2003	2005	2007	2009	2011	2013
	(*n*=)	(2061)	(3464)	(4078)	(3388)	(4851)	(4816)	(5478)
Total		**11.4**	**12.5**	**11.2**	**9.8**	**9.5**	**10.3**	**13.4** [ad]
(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)
Sex	Males	**8.9**	**7.9**	**7.0**	**5.9**	**7.6**	**7.0**	**9.4**
		(7.0-11.3)	(6.4-9.5)	(5.8-8.5)	(4.7-7.5)	(6.1-9.4)	(5.7-8.7)	(7.6-11.6)
	Females	**14.0**	**16.8**	**15.5**	**13.7**	**11.4**	**13.7**	**17.6** [a]
		(11.2-17.3)	(14.6-19.2)	(13.4-17.9)	(11.8-15.9)	(9.7-13.4)	(12.1-15.4)	(15.3-20.2)
Grade	7	**8.4**	**9.8**	**8.4**	**7.9**	**5.9**	**7.2**	**9.1**
		(5.7-12.2)	(6.7-14.0)	(5.7-12.1)	(5.5-11.3)	(3.9-8.9)	(4.7-10.7)	(6.2-13.0)
	8	**12.5**	**16.7**	**11.6**	**9.2**	**8.7**	**8.1**	**13.8**
		(8.2-18.6)	(11.1-24.3)	(8.7-15.2)	(6.6-12.8)	(6.1-12.3)	(5.4-11.9)	(10.2-18.6)
	9	**8.8**	**11.1**	**12.6**	**11.5**	**9.7**	**10.1**	**14.5**
		(4.9-15.3)	(8.9-13.9)	(10.2-15.4)	(8.7-15.2)	(6.9-13.4)	(7.6-13.3)	(11.2-18.6)
	10	**12.8**	**12.4**	**13.1**	**11.4**	**10.6**	**12.4**	**14.9**
		(9.5-17.0)	(9.1-16.8)	(9.8-17.3)	(8.9-14.5)	(8.8-12.8)	(9.0-16.7)	(11.2-19.6)
	11	**13.9**	**14.8**	**12.9**	**10.0**	**10.7**	**14.0**	**16.2**
		(9.8-19.4)	(11.4-18.9)	(10.5-15.8)	(7.8-12.6)	(8.3-13.7)	(11.4-17.2)	(12.8-20.3)
	12	**14.1**	**10.5**	**8.8**	**8.7**	**10.3**	**9.0**	**11.4**
		(9.4-20.5)	(8.1-13.4)	(6.6-11.5)	(6.3-11.8)	(8.0-13.1)	(6.2-12.8)	(8.5-15.0)
Region	Toronto	**11.0**	**9.3**	**10.8**	**6.8**	**11.0**	**9.7**	**15.5**
		(6.7-17.6)	(6.8-12.6)	(8.5-13.5)	(4.8-9.5)	(8.2-14.5)	(7.4-12.6)	(8.2-27.2)
	North	**11.9**	**13.0**	**12.0**	**11.7**	**9.0**	**7.8**	**12.3**
		(9.5-14.8)	(10.2-16.4)	(10.0-14.3)	(8.4-15.9)	(5.4-14.7)	(5.8-10.5)	(8.1-18.2)
	West	**12.1**	**13.8**	**12.8**	**10.1**	**10.1**	**9.9**	**12.9**
		(8.9-16.3)	(11.3-16.7)	(10.5-15.5)	(8.4-12.1)	(7.9-12.8)	(7.6-12.8)	(11.0-15.1)
	East	**10.6**	**12.5**	**9.4**	**10.5**	**8.2**	**11.5**	**13.6**
		(7.6-14.7)	(10.0-15.5)	(7.7-11.5)	(8.3-13.2)	(6.8-9.8)	(9.9-13.5)	(11.6-16.0)

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) [a] 2013 vs. 2011 significant difference, p<.01; [d] significant nonlinear trend, p<.01.
Q: "During the last 12 months, did you ever seriously consider attempting suicide?" (% responding "yes" is shown)
Source: OSDUHS, Centre for Addiction & Mental Health

Table A3.4.3 Percentage Reporting a Suicide Attempt in the Past Year, 2007–2013 OSDUHS (Grades 7–12)

		2007	2009	2011	2013
	(*n*=)	(3388)	(4851)	(4816)	(5478)
Total (95% CI)		**3.3** (2.6-4.2)	**2.8** (2.2-3.4)	**2.8** (2.1-3.6)	**3.5** (2.8-4.3)
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)
	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)
Grade	7	**2.7** (1.4-5.1)	†	†	†
	8	**3.0** (1.8-5.1)	**2.5** (1.4-4.6)	†	**2.6** (1.6-4.2)
	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)
	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)
	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)
	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)
Region	Toronto	†	†	†	†
	North	**3.8** (2.2-6.3)	†	†	**4.7** (2.6-8.4)
	West	**3.4** (2.3-4.8)	**2.4** (1.7-3.6)	**2.7** (1.8-4.2)	**3.3** (2.2-4.9)
	East	**4.2** (2.9-6.0)	**3.7** (2.7-5.0)	**3.5** (2.4-4.9)	**4.0** (3.1-5.1)

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?" (% 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, 1999–2013 OSDUHS (Grades 7–12)

	1999	2001	2003	2005	2007	2009	2011	2013
TOTAL SAMPLE (*n*=)	(2148)	(2061)	(3464)	(4078)	(3388)	(4851)	(4816)	(5478)
fire setting	—	—	—	—	15.9	14.5	10.8	10.4 [b]
ran away from home	8.4	7.4	10.2	9.2	9.7	9.6	10.5	9.7
theft of goods worth $50/less	17.3	14.1	14.7	14.7	14.0	14.1	9.7	8.9 [b]
vandalism	24.1	16.3	15.1	15.3	15.8	13.5	9.8	8.3 [b]
assault	19.9	12.8	11.5	11.7	10.6	9.8	8.7	6.4 [b]
carried a weapon	13.5	10.6	9.6	9.6	8.7	7.3	4.6	6.0 [b]
sold marijuana or hashish	7.8	10.1	8.3	7.6	6.8	6.4	5.2	5.6
car theft/ joyriding	10.2	9.1	9.3	7.8	7.2	6.9	6.0	4.8 [b]
theft of goods worth > $50	6.6	5.8	5.3	5.5	5.1	5.2	3.8	4.1 [b]
break and entering	6.4	5.0	4.4	4.7	4.6	4.4	4.4	3.3 [b]
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 (95% CI)	**16.0** (14.0-18.2)	**13.0** (11.4-14.8)	**12.8** (11.4-14.4)	**11.8** (10.4-13.4)	**12.1** (10.8-13.5)	**10.4** (9.0-11.8)	**8.0** (6.9-9.3)	**7.1** [bc] (5.8-8.8)
MALES	(1101)	(1018)	(1654)	(1934)	(1618)	(2286)	(2218)	(2469)
fire setting	—	—	—	—	19.6	19.5	14.4	13.4 [b]
ran away from home	5.6	7.4	7.9	7.4	6.6	8.0	7.4	8.2
theft of goods worth $50/less	20.9	17.5	17.9	16.5	16.2	17.1	10.8	10.8 [b]
vandalism	29.3	21.2	18.2	18.0	19.1	16.4	10.4	9.6 [b]
assault	29.4	17.1	14.4	15.9	14.3	12.9	11.0	8.7 [b]
carried a weapon	21.5	17.0	14.9	14.9	13.2	11.4	7.6	9.1 [b]
sold marijuana or hashish	11.1	13.8	11.9	9.8	9.0	8.6	7.4	8.4
car theft/ joyriding	12.5	12.5	12.7	8.8	8.3	9.1	7.2	5.6 [b]
theft of goods worth > $50	9.1	8.2	8.0	6.7	6.2	6.6	4.4	5.4 [b]
break and entering	9.6	6.5	6.7	6.0	5.5	5.8	5.4	4.4 [b]
street racing (car/truck)*	—	—	—	—	—	9.3	5.9	5.8
gang fighting*	11.0	9.0	10.0	9.1	7.7	5.0	—	—
sold other drugs*	6.5	5.9	5.1	4.7	5.1	4.4	—	—
carried a handgun*	—	—	—	3.8	3.0	2.7	—	—
% 3+ behaviours /9 (95% CI)	**22.7** (19.7-26.0)	**17.5** (15.1-20.3)	**16.8** (14.8-19.0)	**14.7** (12.5-17.2)	**14.5** (12.5-16.7)	**13.6** (11.5-16.1)	**9.2** (7.3-11.6)	**9.5** [b] (7.5-12.0)
FEMALES	(1047)	(1043)	(1810)	(2144)	(1770)	(2565)	(2598)	(3009)
fire setting	—	—	—	—	12.2	9.4	7.2	7.2 [b]
ran away from home	11.2	7.4	12.3	11.0	13.0	11.4	13.7	11.3
theft of goods worth $50/less	13.7	10.9	11.8	12.9	11.8	11.1	8.7	6.8 [b]
vandalism	18.9	11.6	12.3	12.4	12.6	10.5	9.2	6.9 [b]
assault	10.4	8.6	8.9	7.2	6.8	6.7	6.3	3.8 [b]
carried a weapon	5.5	4.5	4.9	4.0	4.2	3.2	1.6	2.7 [b]
sold marijuana or hashish	4.4	6.5	5.1	5.3	4.5	4.2	3.0	2.6
car theft/ joyriding	7.8	5.9	6.3	6.7	6.0	4.7	4.9	4.0 [b]
theft of goods worth > $50	4.0	3.4	2.9	4.3	4.0	3.8	3.2	5.4
break and entering	3.2	3.5	2.4	3.3	3.7	3.0	3.4	2.0
street racing (car/truck)*	—	—	—	—	—	1.7	1.6	2.0
gang fighting*	4.0	†	3.6	2.7	2.0	†	—	—
sold other drugs*	1.9	†	1.3	2.3	3.1	1.4	—	—
carried a handgun*	—	—	—	†	†	†	—	—
% 3+ behaviours /9 (95% CI)	**9.2** (7.1-11.7)	**8.6** (6.8-10.9)	**9.3** (7.6-11.3)	**8.8** (7.4-10.5)	**9.6** (8.1-11.4)	**7.0** (5.6-8.7)	**6.8** (5.7-8.0)	**4.6** [b] (3.4-6.4)

(cont'd…)

	1999	2001	2003	2005	2007	2009	2011	2013
GRADE 7	(369)	(404)	(497)	(508)	(383)	(883)	(728)	(1126)
fire setting	—	—	—	—	6.1	8.0	5.6	10.2
ran away from home	7.4	7.2	9.7	7.4	5.0	6.3	7.3	4.7
theft of goods worth $50/less	9.3	8.1	9.9	7.7	6.0	6.1	3.8	3.3 [b]
vandalism	18.9	10.3	14.7	9.6	6.7	7.5	5.0	5.0 [b]
assault	17.1	13.5	11.1	8.6	8.1	7.6	7.2	5.2 [b]
carried a weapon	7.8	5.4	9.9	4.4	4.8	4.5	3.1	2.6 [b]
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	†	†	†
break and entering	3.1	2.1	2.7	1.7	1.6	1.2	†	†
% 3+ behaviours /9 (95% CI)	**7.4** (5.1-10.6)	**6.4** (4.0-10.2)	**9.7** (6.3-14.4)	**5.5** (3.4-8.6)	**5.2** (3.2-8.2)	**3.8** (2.6-5.5)	**2.5** (1.3-4.7)	**1.9** [b] (1.0-3.4)
GRADE 8	(391)	(379)	(512)	(501)	(418)	(913)	(730)	(1088)
fire setting	—	—	—	—	15.3	11.0	7.9	10.7
ran away from home	9.2	9.7	9.5	9.8	9.2	9.2	7.5	6.6
theft of goods worth $50/less	15.6	14.3	13.3	11.1	10.5	7.6	5.3	5.0 [b]
vandalism	26.0	19.5	12.6	15.6	16.6	11.1	5.6	9.1 [b]
assault	24.8	15.5	12.3	13.6	12.1	7.4	8.8	6.9 [b]
carried a weapon	15.2	9.6	6.6	8.6	10.2	6.4	6.0	8.2
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	†	† [b]
theft of goods worth > $50	4.8	5.5	2.3	3.8	2.2	2.8	†	† [b]
break and entering	6.8	4.0	2.2	5.3	2.8	3.3	†	†
% 3+ behaviours /9 (95% CI)	**15.8** (11.0-22.2)	**13.8** (10.3-18.2)	**8.5** (5.5-12.9)	**9.3** (6.4-13.5)	**8.4** (5.5-12.6)	**5.5** (3.7-8.0)	**4.7** (2.8-7.8)	**3.9** [b] (2.1-7.2)
GRADE 9	(442)	(368)	(654)	(780)	(660)	(753)	(879)	(815)
fire setting	—	—	—	—	23.8	15.7	13.1	11.1 [b]
ran away from home	7.8	6.9	9.6	10.8	11.9	13.1	8.4	9.4
theft of goods worth $50/less	16.9	15.4	13.7	16.4	17.8	13.7	7.2	6.6 [b]
vandalism	26.8	17.4	16.1	16.6	21.8	13.7	8.8	7.6 [b]
assault	22.6	13.4	11.0	12.9	11.7	9.6	7.7	5.3 [b]
carried a weapon	13.4	12.6	12.2	11.5	11.3	7.7	3.7	6.4 [b]
sold marijuana or hashish	6.5	8.8	7.3	8.2	6.6	5.3	1.7	4.3
car theft/ joyriding	9.4	7.2	7.8	7.5	5.9	3.7	†	2.4 [b]
theft of goods worth > $50	6.3	6.0	5.5	5.3	6.0	4.9	2.2	† [b]
break and entering	4.6	5.0	5.3	6.2	4.8	4.1	3.3	† [b]
street racing (car)	—	—	—	—	—	†	†	†
gang fighting	8.7	6.4	8.0	6.4	6.3	3.7	—	—
sold other drugs	2.0	2.3	2.9	3.4	3.4	2.4	—	—
% 3+ behaviours /9 (95% CI)	**14.8** (11.2-19.3)	**12.8** (9.8-16.5)	**12.1** (9.8-14.8)	**13.0** (9.6-17.5)	**15.2** (11.6-19.8)	**9.3** (6.7-12.7)	**5.3** (3.5-7.9)	**6.0** [b] (4.0-8.8)

(cont'd…)

	1999	2001	2003	2005	2007	2009	2011	2013
GRADE 10	(296)	(422)	(622)	(742)	(577)	(814)	(825)	(816)
fire setting	—	—	—	—	18.8	19.1	9.8	13.0
ran away from home	10.6	7.7	11.6	10.8	11.1	9.8	12.2	10.8
theft of goods worth $50/less	24.8	16.6	17.5	17.1	15.6	17.8	11.3	10.9 [b]
vandalism	34.2	20.0	16.3	17.3	17.0	17.6	14.4	11.7 [b]
assault	23.5	13.5	10.1	14.4	10.4	11.6	7.3	5.7 [b]
carried a weapon	18.3	15.9	8.6	12.6	8.6	10.0	4.6	8.6 [b]
sold marijuana or hashish	12.8	15.5	10.4	10.0	9.3	8.6	6.3	5.9
car theft/ joyriding	12.8	14.5	13.3	7.8	7.0	6.7	2.9	5.0 [b]
theft of goods worth > $50	9.3	8.4	5.1	7.3	6.1	5.4	3.4	4.6
break and entering	8.1	6.7	4.8	7.5	6.1	5.2	4.2	5.0
street racing (car)	—	—	—	—	—	†	†	2.3
gang fighting	10.3	6.7	5.2	7.0	4.1	3.4	—	—
sold other drugs	3.5	4.8	2.3	3.4	3.6	2.0	—	—
carried a handgun	—	—	—	2.7	†	1.8	—	—
% 3+ behaviours /9 (95% CI)	**24.4** (18.6-31.4)	**16.5** (12.9-20.9)	**16.2** (12.6-20.5)	**14.2** (11.0-18.3)	**13.3** (10.7-16.5)	**13.4** (10.8-16.4)	**8.9** (5.8-13.3)	**10.1** [b] (6.5-15.3)
GRADE 11	(357)	(288)	(620)	(819)	(684)	(719)	(808)	(837)
fire setting	—	—	—	—	18.8	17.9	12.5	10.0 [b]
ran away from home	9.8	7.1	12.6	9.9	11.3	10.0	17.0	12.7
theft of goods worth $50/less	20.1	14.0	18.2	19.5	18.0	18.1	18.0	11.6 [b]
vandalism	21.4	16.0	16.6	19.3	18.1	15.2	10.7	7.7 [b]
assault	20.1	9.5	15.1	11.0	11.9	9.7	10.1	6.0 [b]
carried a weapon	16.2	8.5	11.8	11.3	10.1	5.9	6.8	5.7 [b]
sold marijuana or hashish	13.8	16.1	12.6	12.5	10.2	10.6	8.2	7.7 [b]
car theft/ joyriding	20.1	14.3	16.2	13.8	13.7	12.2	10.5	7.1 [b]
theft of goods worth > $50	9.2	5.1	9.1	7.5	7.7	7.5	8.0	7.3
break and entering	10.4	7.2	6.4	4.6	6.6	4.4	6.1	4.1 [b]
street racing (car)	—	—	—	—	—	8.5	5.3	3.6
gang fighting	6.9	2.8	6.8	6.0	6.4	2.2	—	—
sold other drugs	8.3	5.0	3.6	4.0	6.3	3.4	—	—
carried a handgun	—	—	—	2.2	2.6	1.8	—	—
% 3+ behaviours /9 (95% CI)	**19.7** (15.0-25.4)	**14.4** (10.2-20.0)	**16.6** (13.1-20.9)	**16.2** (13.4-19.4)	**17.0** (13.4-21.2)	**13.0** (9.2-18.2)	**13.1** (10.2-16.7)	**8.6** [b] (6.2-11.7)
GRADE 12	(293)	(200)	(559)	(728)	(666)	(769)	(846)	(796)
fire setting	—	—	—	—	12.2	14.4	12.8	8.4
ran away from home	5.6	5.6	7.5	6.5	9.4	9.1	9.3	10.9 [b]
theft of goods worth $50/less	18.0	15.9	14.0	16.2	14.9	18.4	9.7	11.7
vandalism	16.7	11.9	13.3	13.2	14.0	14.4	11.4	7.9 [b]
assault	9.0	9.6	9.0	9.5	9.5	11.8	10.0	6.1
carried a weapon	9.6	8.3	8.0	8.7	7.1	8.7	3.5	4.6
sold marijuana or hashish	10.0	15.5	11.6	10.3	10.0	9.2	9.9	8.6
car theft/ joyriding	12.9	14.4	11.4	12.6	12.0	12.8	14.1	9.1
theft of goods worth > $50	7.5	7.1	5.4	6.8	6.1	7.9	4.1	6.3
break and entering	5.5	4.0	4.3	2.8	5.1	7.0	6.7	4.8
street racing (car)	—	—	—	—	—	9.8	6.0	7.0
gang fighting	4.4	4.9	6.7	4.7	2.9	2.5	—	—
sold other drugs	3.2	5.1	3.7	3.5	3.2	3.7	—	—
carried a handgun	—	—	—	2.1	1.0	1.6	—	—
% 3+ behaviours /9 (95% CI)	**14.3** (9.5-21.0)	**13.4** (7.9-21.8)	**12.0** (9.2-15.7)	**12.2** (9.6-15.3)	**12.3** (9.5-15.8)	**14.6** (11.1-18.8)	**10.2** (7.1-14.4)	**9.1** (5.4-14.9)

(cont'd…)

	1999	2001	2003	2005	2007	2009	2011	2013
TORONTO	(369)	(267)	(548)	(577)	(470)	(417)	(621)	(377)
fire setting	—	—	—	—	11.7	11.8	8.9	13.3
ran away from home	5.4	4.5	6.2	7.6	5.5	7.1	8.3	†
theft of goods worth $50/less	13.0	10.5	14.3	15.8	12.8	12.2	11.0	12.2
vandalism	17.6	13.0	16.1	15.3	14.4	9.1	11.5	9.7 [b]
assault	17.9	9.1	8.8	11.0	9.6	7.5	6.6	5.3 [b]
carried a weapon	11.9	7.9	11.4	7.7	8.5	5.8	4.6	4.6 [b]
sold marijuana or hashish	4.4	5.1	10.6	4.6	4.2	3.3	5.2	†
car theft/ joyriding	8.2	4.1	8.3	8.2	4.6	3.7	3.0	3.2 [b]
theft of goods worth > $50	6.0	5.9	7.4	6.4	6.7	4.8	5.4	6.0
break and entering	3.3	3.6	3.8	3.9	3.9	4.7	4.3	3.2
street racing (car)*	—	—	—	—	—	†	†	†
gang fighting*	10.2	3.1	7.2	7.5	5.1	†	—	—
sold other drugs*	†	†	†	†	†	†	—	—
carried a handgun*	—	—	—	†	†	2.4	—	—
% 3+ behaviours /9 (95% CI)	**10.7** (7.2-15.7)	**9.2** (6.2-13.6)	**13.1** (10.6-16.0)	**11.5** (8.5-15.3)	**9.4** (6.7-13.0)	**7.4** (4.8-11.1)	**7.5** (5.5-10.1)	**8.0** (5.0-12.8)
NORTH REGION	(384)	(599)	(746)	(728)	(421)	(359)	(1022)	(769)
fire setting	—	—	—	—	19.1	10.3	10.5	7.8 [b]
ran away from home	8.2	6.2	14.8	12.9	11.2	11.4	12.8	11.3
theft of goods worth $50/less	16.7	9.6	15.6	15.3	13.4	14.9	12.6	3.8 [ab]
vandalism	23.0	15.7	16.6	15.5	19.2	14.8	10.8	8.3 [b]
assault	16.7	13.1	15.1	12.2	10.7	11.1	8.3	4.8 [b]
carried a weapon	12.1	11.3	9.5	9.6	12.0	7.6	7.0	6.3
sold marijuana or hashish	7.9	5.8	9.8	8.0	9.2	6.9	7.6	3.3
car theft/ joyriding	11.9	8.4	9.4	10.5	8.5	6.2	7.8	6.4
theft of goods worth > $50	4.1	3.8	4.9	4.8	6.9	7.1	5.1	†
break and entering	7.8	5.2	7.6	6.2	6.4	4.2	6.1	†
street racing (car)*	—	—	—	—	—	5.7	5.1	4.3
gang fighting*	3.4	3.8	5.5	7.5	4.7	†	—	—
sold other drugs*	†	2.7	4.6	1.7	†	†	—	—
carried a handgun*	—	—	—	†	†	†	—	—
% 3+ behaviours /9 (95% CI)	**13.8** (10.5-18.1)	**10.1** (7.1-14.0)	**14.4** (11.1-18.4)	**13.3** (10.5-16.8)	**14.6** (10.6-19.8)	**11.5** (8.0-16.3)	**10.4** (6.9-15.5)	**6.1** [b] (4.1-8.9)
WEST REGION	(763)	(718)	(1259)	(1437)	(1323)	(1422)	(1245)	(1686)
fire setting	—	—	—	—	17.1	16.1	10.8	10.4 [b]
ran away from home	8.6	9.7	10.6	9.9	9.2	10.2	12.0	9.7
theft of goods worth $50/less	19.8	16.6	14.4	15.4	15.1	14.4	8.7	8.8 [b]
vandalism	25.6	16.3	14.8	15.5	15.9	14.9	8.8	7.2 [b]
assault	22.2	13.3	12.0	13.2	11.9	10.0	9.4	7.2 [b]
carried a weapon	14.5	9.7	9.5	11.7	8.6	7.8	3.9	7.3 [b]
sold marijuana or hashish	9.3	13.2	7.8	8.7	6.9	7.5	†	7.3
car theft/ joyriding	10.5	10.9	10.4	8.0	7.7	7.4	6.1	5.6
theft of goods worth > $50	7.3	5.8	5.1	6.0	4.6	4.9	3.0	4.0
break and entering	7.5	5.7	4.0	4.8	4.5	3.9	3.1	2.8 [b]
street racing (car)*	—	—	—	—	—	6.8	3.6	3.5
gang fighting*	7.9	5.6	6.7	6.6	4.3	1.8	—	—
sold other drugs*	5.1	6.5	3.2	3.9	3.4	2.2	—	—
carried a handgun*	—	—	—	2.8	1.4	1.8	—	—
% 3+ behaviours /9 (95% CI)	**17.6** (14.2-21.6)	**14.8** (12.4-17.7)	**13.3** (11.2-15.6)	**13.8** (11.8-16.0)	**12.6** (10.8-14.6)	**10.6** (8.9-12.7)	**7.6** (5.8-9.9)	**7.9** [b] (5.5-11.2)

(cont'd…)

	1999	2001	2003	2005	2007	2009	2011	2013
EAST REGION	(632)	(477)	(911)	(1336)	(1174)	(2653)	(1928)	(2646)
fire setting	—	—	—	—	15.9	14.7	11.6	9.6 [b]
ran away from home	10.0	6.5	10.8	8.2	11.8	9.7	9.3	11.2
theft of goods worth $50/less	16.5	14.5	15.2	13.4	13.5	14.5	10.0	8.3 [b]
vandalism	26.1	18.8	14.4	14.9	15.9	13.6	10.3	9.2 [b]
assault	18.6	14.4	11.3	10.2	9.6	10.4	8.8	5.9 [b]
carried a weapon	13.4	13.6	8.8	8.0	8.3	7.5	5.0	4.8 [b]
sold marijuana or hashish	7.5	10.5	7.3	7.7	7.3	6.5	5.5	3.9 [b]
car theft/ joyriding	10.2	10.3	8.3	6.7	7.4	8.0	7.3	4.1 [ab]
theft of goods worth > $50	6.5	6.3	4.5	4.6	4.6	5.5	3.9	3.9
break and entering	6.4	4.7	4.6	4.5	4.7	5.0	5.9	4.1
street racing (car)*	—	—	—	—	—	5.6	4.8	5.0
gang fighting*	7.0	7.5	6.6	4.7	5.3	3.6	—	—
sold other drugs*	4.7	†	2.8	†	5.3	4.1	—	—
carried a handgun*	—	—	—	†	†	1.3	—	—
% 3+ behaviours /9 (95% CI)	**17.3** (14.3-20.8)	**13.9** (10.6-18.0)	**11.6** (8.9-15.1)	**9.4** (6.8-12.8)	**12.3** (10.0-15.0)	**11.2** (8.6-14.3)	**8.4** (6.8-10.4)	**5.8** [b] (4.5-7.4)

Notes: (1) percentages reflect engaging 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) [a] 2013 vs. 2011 significant difference, p<.01; [b] 2013 vs. 1999 (vs. 2007 for fire-setting) significant difference, p<.01; [c] significant linear trend, p<.01.

Source: OSDUHS, Centre for Addiction and Mental Health

Table A3.5.1b Percentage Reporting Antisocial Behaviours at Least Once in the Past Year by Sex, 1991–2013 OSDUHS (based on Grades 7, 9, and 11 only)

	1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013
TOTAL SAMPLE (*n*=)	(2961)	(2617)	(2907)	(1527)	(1168)	(1060)	(1771)	(2107)	(1727)	(2355)	(2415)	(2778)
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
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 [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 [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 [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 [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 [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 [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 [c]
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 [c]
% 3+ behaviours /9 (95% CI)	—	**15.9** (15.0-16.9)	**16.8** (15.4-18.3)	**14.2** (12.7-15.7)	**14.5** (12.3-17.0)	**11.3** (9.5-13.4)	**13.1** (11.3-15.1)	**11.6** (9.8-13.8)	**12.8** (10.8-15.0)	**8.9** (7.1-11.0)	**7.5** (6.3-9.0)	**5.9** [cd] (4.6-7.6)
MALES	(1554)	(1270)	(1412)	(723)	(582)	(529)	(888)	(1024)	(842)	(1107)	(1129)	(1229)
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
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
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
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
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
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
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
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
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
% 3+ behaviours /9 (95% CI)	—	**21.0** (18.3-23.9)	**22.8** (20.7-25.1)	**18.2** (15.6-21.0)	**20.8** (17.4-24.8)	**15.5** (12.4-19.1)	**16.0** (13.2-19.1)	**14.1** (11.2-17.5)	**14.8** (12.1-17.9)	**11.2** (8.8-14.3)	**8.4** (6.3-11.1)	**6.8** (4.8-9.4)
FEMALES	(1407)	(1347)	(1495)	(804)	(586)	(531)	(883)	(1083)	(885)	(1248)	(1286)	(1549)
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
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
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
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
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
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
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
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
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
% 3+ behaviours /9 (95% CI)	—	**11.2** (9.4-13.2)	**11.2** (8.9-13.9)	**10.6** (8.9-12.4)	**8.1** (5.9-11.0)	**7.1** (4.9-10.3)	**10.2** (7.9-13.1)	**9.1** (7.0-11.8)	**10.7** (8.2-13.8)	**6.5** (4.8-8.8)	**6.6** (4.5-9.5)	**5.1** (3.6-7.1)

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 Physical Fighting on School Property at Least Once in the Past Year, 2001–2013 OSDUHS (Grades 7–12)

		2001	2003	2005	2007	2009	2011	2013
	(*n*=)	(2061)	(3464)	(4078)	(3388)	(4851)	(4816)	(5478)
Total		**16.9**	**17.6**	**18.1**	**15.8**	**15.1**	**11.9**	**10.9** [bcd]
(95% CI)		(15.0-18.9)	(15.7-19.6)	(16.6-19.7)	(14.2-17.7)	(13.4-16.9)	(9.9-14.2)	(9.6-12.4)
Sex	Males	**25.2**	**26.8**	**27.1**	**24.0**	**23.3**	**17.4**	**17.5** [b]
		(21.9-28.7)	(24.1-29.8)	(24.9-29.5)	(21.4-26.9)	(20.6-26.1)	(15.3-19.8)	(14.8-20.5)
	Females	**8.8**	**9.2**	**8.7**	**7.5**	**6.7**	**6.4**	**3.9** [b]
		(6.9-11.1)	(7.1-11.9)	(7.2-10.6)	(6.0-9.4)	(5.5-8.1)	(4.6-8.9)	(3.1-5.0)
Grade	7	**23.8**	**29.7**	**30.2**	**22.9**	**21.6**	**24.1**	**15.0** [ab]
		(19.4-28.9)	(23.5-36.8)	(25.4-35.4)	(17.5-29.3)	(17.9-25.8)	(19.2-29.7)	(11.2-19.8)
	8	**25.0**	**26.0**	**23.4**	**26.2**	**21.4**	**20.8**	**18.4**
		(20.0-30.7)	(19.7-33.6)	(17.7-30.3)	(21.2-32.0)	(17.7-25.7)	(17.3-24.7)	(14.5-23.0)
	9	**19.5**	**19.6**	**16.5**	**18.1**	**16.5**	**9.8**	**12.1**
		(15.3-24.7)	(16.5-23.2)	(13.5-20.0)	(14.1-22.8)	(13.5-20.0)	(6.9-13.8)	(8.9-16.3)
	10	**12.2**	**14.5**	**15.4**	**11.6**	**11.8**	**9.1**	**8.6**
		(8.5-17.2)	(11.2-18.7)	(12.7-18.7)	(8.8-15.3)	(9.1-15.3)	(6.1-13.5)	(5.8-12.6)
	11	**8.0**	**11.0**	**13.0**	**12.1**	**12.8**	**7.9**	**9.4**
		(5.7-11.3)	(8.3-14.6)	(10.4-16.1)	(9.4-15.4)	(9.4-17.2)	(5.0-12.3)	(6.8-12.7)
	12	**11.3**	**8.8**	**11.4**	**7.4**	**10.0**	**7.4**	**7.1**
		(5.8-20.7)	(6.4-12.0)	(8.7-14.9)	(4.6-11.7)	(6.8-14.5)	(4.2-12.5)	(4.7-10.6)
Region	Toronto	**13.9**	**14.6**	**21.1**	**17.2**	**15.0**	**13.1**	**13.0**
		(10.8-17.7)	(10.3-20.1)	(15.9-27.4)	(12.5-23.3)	(10.4-21.1)	(10.4-16.3)	(10.6-15.8)
	North	**17.1**	**19.7**	**16.8**	**15.3**	**15.2**	**13.8**	**9.4** [b]
		(13.2-21.8)	(15.2-25.1)	(14.8-19.0)	(11.7-19.7)	(11.7-19.5)	(10.6-17.7)	(7.1-12.4)
	West	**18.4**	**19.0**	**18.5**	**17.3**	**14.9**	**11.5**	**11.3** [b]
		(15.1-22.1)	(15.8-22.7)	(16.3-21.0)	(14.7-20.2)	(12.3-18.0)	(7.9-16.4)	(9.0-14.2)
	East	**16.6**	**16.7**	**16.5**	**13.8**	**15.2**	**11.5**	**9.6** [b]
		(13.5-20.4)	(14.0-19.8)	(14.4-18.8)	(11.4-16.6)	(12.7-18.2)	(9.5-13.9)	(8.0-11.4)

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) [a] 2013 vs. 2011 significant difference, p<.01; [b] 2013 vs. 1999 significant difference, p<.01; [c] significant linear trend, p<.01; [d] significant nonlinear trend, p<.01.

Q: "During the last 12 months, how many times were you in a physical fight on school property?"

Source: OSDUHS, Centre for Addiction and Mental Health

Table A3.5.3 Percentage Reporting Being Threatened or Injured with a Weapon on School Property at Least Once in the Past Year, 2003–2013 OSDUHS (Grades 7–12)

		2003	2005	2007	2009	2011	2013
	(*n*=)	(3464)	(4078)	(3388)	(4851)	(4816)	(5478)
Total		**7.7**	**8.2**	**8.6**	**6.8**	**6.5**	**5.8**
(95% CI)		(6.5-9.0)	(6.9-9.8)	(7.5-9.8)	(5.7-8.1)	(5.2-8.0)	(4.7-7.1)
Sex	Males	**10.1**	**11.6**	**11.0**	**8.5**	**7.4**	**7.7**
		(8.3-12.2)	(9.6-13.9)	(9.3-13.1)	(6.7-10.6)	(5.6-9.9)	(6.1-9.8)
	Females	**5.5**	**4.8**	**6.0**	**5.1**	**5.5**	**3.7**
		(4.0-7.4)	(3.7-6.2)	(4.7-7.7)	(4.0-6.5)	(4.4-7.0)	(2.7-5.0)
Grade	7	**7.3**	**7.0**	**9.3**	**3.9**	**6.5**	**4.9**
		(5.2-10.3)	(3.6-13.0)	(6.9-12.4)	(2.6-5.8)	(3.8-11.0)	(2.7-8.5)
	8	**9.8**	**8.5**	**10.1**	**6.7**	**4.4**	**6.2**
		(6.2-15.1)	(6.5-11.2)	(7.0-14.2)	(4.9-9.3)	(2.8-6.8)	(3.9-9.8)
	9	**7.7**	**9.2**	**10.8**	**8.7**	**8.1**	**5.9**
		(5.8-10.0)	(6.3-13.3)	(8.2-14.2)	(6.2-12.1)	(6.0-10.9)	(3.9-9.0)
	10	**10.0**	**9.2**	**8.2**	**5.5**	**8.0**	**8.2**
		(7.2-13.6)	(6.9-12.2)	(5.5-12.2)	(3.8-7.8)	(5.7-11.1)	(4.7-13.7)
	11	**6.8**	**9.6**	**8.6**	**6.6**	**5.0**	**4.7**
		(4.8-9.6)	(7.1-13.0)	(6.4-11.5)	(4.6-9.5)	(3.1-8.1)	(3.0-7.3)
	12	**4.6**	**6.1**	**5.2**	**8.4**	**6.5**	**5.0**
		(2.8-7.4)	(4.4-8.4)	(3.6-7.4)	(5.7-12.1)	(3.8-10.9)	(2.8-8.7)
Region	Toronto	**7.8**	**9.6**	**7.7**	**6.3**	**7.7**	**8.2**
		(5.6-10.7)	(7.0-13.0)	(5.3-10.9)	(3.3-11.7)	(5.4-10.8)	(5.2-12.6)
	North	**7.4**	**6.4**	**9.0**	**7.7**	**8.0**	**4.5**
		(5.6-9.7)	(4.0-10.0)	(5.8-13.7)	(5.0-11.6)	(5.1-12.3)	(2.8-7.4)
	West	**8.5**	**8.1**	**9.4**	**6.7**	**7.1**	**5.7**
		(6.7-10.8)	(6.5-10.0)	(7.9-11.1)	(5.2-8.5)	(4.7-10.5)	(4.2-7.8)
	East	**6.4**	**8.2**	**7.9**	**7.0**	**4.9**	**4.8**
		(4.5-9.1)	(5.4-12.1)	(6.2-10.2)	(5.1-9.5)	(3.8-6.2)	(3.3-7.1)

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: "During the last 12 months, how many times has someone threatened or injured you with a weapon, such as a gun, knife or club on school property?"

Source: OSDUHS, Centre for Addiction and Mental Health

Table A3.5.4 Percentage Reporting Being Bullied in Any Way at School Since September, 2003–2013 OSDUHS (Grades 7–12)

		2003	2005	2007	2009	2011	2013
	(*n*=)	(3464)	(4078)	(3388)	(4851)	(4816)	(5478)
Total		**32.7**	**30.9**	**29.9**	**28.9**	**28.6**	**25.0** [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)
Sex	Males	**35.3**	**27.8**	**27.7**	**26.5**	**25.8**	**22.2** [b]
		(32.4-38.3)	(25.4-30.4)	(25.1-30.4)	(23.7-29.5)	(23.0-28.8)	(19.3-25.3)
	Females	**30.3**	**34.0**	**32.1**	**31.4**	**31.3**	**28.1**
		(27.4-33.4)	(31.3-36.9)	(29.1-35.2)	(29.1-33.8)	(27.7-35.2)	(25.1-31.3)
Grade	7	**47.1**	**38.3**	**34.2**	**31.6**	**30.4**	**31.6** [b]
		(39.2-55.0)	(33.0-43.8)	(28.4-40.5)	(26.8-36.9)	(24.0-37.7)	(25.2-38.8)
	8	**38.7**	**41.2**	**34.8**	**31.5**	**32.7**	**34.5**
		(33.2-44.6)	(37.0-45.6)	(29.4-40.5)	(27.4-36.0)	(28.3-37.5)	(29.4-40.0)
	9	**32.8**	**34.6**	**36.7**	**32.6**	**30.5**	**28.7**
		(28.6-37.2)	(30.7-38.7)	(31.7-42.0)	(27.6-38.1)	(27.1-34.2)	(24.2-33.6)
	10	**32.6**	**26.3**	**33.0**	**32.8**	**33.0**	**22.6** [b]
		(27.9-37.5)	(22.5-30.4)	(28.8-37.4)	(28.4-37.6)	(26.7-40.1)	(18.3-27.7)
	11	**28.7**	**25.9**	**24.3**	**25.2**	**27.1**	**24.2**
		(24.2-33.7)	(22.7-29.4)	(20.9-28.0)	(21.4-29.5)	(21.7-33.3)	(19.3-29.8)
	12	**19.8**	**20.6**	**19.2**	**22.6**	**21.5**	**16.6**
		(16.4-23.7)	(16.6-25.2)	(15.6-23.4)	(18.6-27.3)	(17.9-25.6)	(13.3-20.5)
Region	Toronto	**24.8**	**30.5**	**23.1**	**23.0**	**21.6**	**20.6**
		(20.4-29.7)	(26.4-35.0)	(18.3-28.8)	(18.3-28.5)	(19.0-24.5)	(17.6-23.9)
	North	**38.1**	**32.2**	**30.3**	**32.1**	**29.2**	**29.6**
		(33.7-42.7)	(27.6-37.2)	(24.8-36.5)	(26.8-37.8)	(24.0-34.9)	(24.1-35.8)
	West	**33.3**	**30.1**	**32.7**	**30.6**	**30.6**	**26.5** [b]
		(30.0-36.8)	(27.3-33.2)	(29.4-36.0)	(27.3-34.1)	(25.5-36.1)	(22.7-30.6)
	East	**34.9**	**31.6**	**29.7**	**29.1**	**29.2**	**24.3** [b]
		(30.9-39.1)	(28.1-35.2)	(26.2-33.3)	(26.1-32.4)	(26.0-32.6)	(20.1-29.1)

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) no significant differences 2013 vs. 2011; [b] 2013 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 as being bullied through either physical attacks, verbal attacks, or theft/vandalism.)

Source: OSDUHS, Centre for Addiction and Mental Health

Table A3.5.5 Percentage Reporting Bullying Others in Any Way at School Since September, 2003–2013 OSDUHS (Grades 7–12)

		2003	2005	2007	2009	2011	2013
	(*n*=)	(3464)	(4078)	(3388)	(4851)	(4816)	(5478)
Total		**29.7**	**27.3**	**24.7**	**25.1**	**20.7**	**16.0** [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)
Sex	Males	**34.9**	**29.4**	**26.0**	**28.1**	**18.6**	**17.5** [b]
		(31.7-38.3)	(26.9-32.0)	(23.4-28.8)	(25.3-31.2)	(16.3-21.2)	(15.0-20.5)
	Females	**25.1**	**25.2**	**23.4**	**22.1**	**22.8**	**14.3** [ab]
		(22.3-28.0)	(22.4-28.1)	(20.8-26.2)	(19.7-24.7)	(17.0-30.0)	(12.0-16.9)
Grade	7	**31.7**	**26.1**	**17.2**	**21.3**	**13.9**	**12.7** [b]
		(25.6-38.6)	(21.0-31.9)	(13.6-21.4)	(17.5-25.8)	(10.5-18.1)	(8.9-17.9)
	8	**32.2**	**30.4**	**30.4**	**25.2**	**22.1**	**20.2** [b]
		(25.9-39.3)	(22.5-40.0)	(25.0-36.3)	(20.3-31.0)	(17.8-27.0)	(15.8-25.5)
	9	**32.7**	**29.3**	**25.9**	**23.9**	**21.4**	**17.6** [b]
		(28.8-36.8)	(25.7-33.3)	(21.6-30.6)	(20.2-28.1)	(14.0-31.3)	(14.3-21.4)
	10	**30.5**	**26.4**	**27.8**	**26.8**	**24.9**	**18.7** [b]
		(26.8-34.6)	(22.4-30.8)	(23.6-32.4)	(23.3-30.5)	(21.2-29.0)	(15.4-22.6)
	11	**29.4**	**30.1**	**24.7**	**27.0**	**22.3**	**15.5** [b]
		(25.7-33.4)	(26.4-34.0)	(21.8-27.9)	(23.1-31.3)	(13.9-33.8)	(12.0-19.8)
	12	**22.1**	**22.2**	**22.2**	**25.7**	**18.7**	**12.7** [b]
		(17.5-27.5)	(18.6-26.3)	(18.4-26.5)	(21.4-30.5)	(14.6-23.6)	(9.3-17.0)
Region	Toronto	**22.0**	**27.9**	**23.9**	**23.8**	**17.3**	**16.1**
		(18.0-26.7)	(23.9-32.2)	(18.9-29.6)	(18.5-30.0)	(13.3-22.2)	(11.9-21.6)
	North	**36.0**	**26.6**	**25.4**	**27.8**	**19.6**	**16.2** [b]
		(31.2-41.2)	(22.6-31.0)	(20.5-31.0)	(21.6-35.0)	(14.7-25.6)	(11.8-21.8)
	West	**30.7**	**28.5**	**27.0**	**27.3**	**22.8**	**17.2** [b]
		(27.7-33.8)	(25.7-31.6)	(23.7-30.5)	(23.9-30.9)	(15.4-32.4)	(14.6-20.2)
	East	**31.1**	**25.8**	**22.5**	**22.8**	**19.8**	**14.0** [ab]
		(26.5-36.1)	(21.7-30.5)	(19.9-25.4)	(20.2-25.7)	(17.4-22.3)	(12.0-16.3)

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) [a] 2013 vs. 2011 significant difference, p<.01; [b] 2013 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 as bullying through either physical attacks, verbal attacks, or stealing/vandalizing someone's property.)

Source: OSDUHS, Centre for Addiction and Mental Health

Table A3.5.6 Percentage Reporting Being Bullied Over the Internet (Cyberbullied) in the Past Year, 2011–2013 OSDUHS (Grades 7–12)

		2011	2013
	(*n*=)	(4816)	(5478)
Total		**21.6**	**19.0**
(95% CI)		(19.5-24.0)	(17.2-21.0)
Sex	Males	**15.2**	**15.8**
		(13.3-17.4)	(13.6-18.2)
	Females	**28.0**	**22.5** [a]
		(24.6-31.6)	(20.2-25.0)
Grade	7	**19.8**	**17.5**
		(15.9-24.3)	(13.8-22.0)
	8	**22.5**	**24.6**
		(17.7-28.1)	(18.5-32.0)
	9	**24.6**	**24.1**
		(19.8-30.2)	(20.0-28.6)
	10	**20.7**	**16.4**
		(17.9-23.8)	(12.5-21.4)
	11	**24.4**	**19.2**
		(20.2-29.2)	(15.5-23.5)
	12	**18.4**	**15.1**
		(15.2-22.0)	(12.3-18.4)
Region	Toronto	**17.2**	**17.8**
		(13.9-21.0)	(14.0-22.2)
	North	**21.3**	**19.8**
		(17.7-25.5)	(15.2-25.4)
	West	**24.6**	**19.4**
		(20.9-28.7)	(16.4-22.9)
	East	**19.9**	**18.9**
		(17.1-22.9)	(16.6-21.5)

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) [a] 2013 vs. 2011 significant difference, p<.01.

Q: "In the last 12 months, how many times did other people bully or pick on you 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 A3.6.1 Percentage Reporting Gambling Activities in the Past Year, 2001–2013 OSDUHS (Grades 7–12)

	2001	2003	2005	2007	2009	2011	2013	
TOTAL (*n*=)	(2061)	(3464)	(4078)	(3388)	(4851)	(4816)	(5478)	
Cards	24.9	24.0	32.7	28.7	20.2	15.9	10.7	abcd
Dice	—	12.7	14.7	10.7	6.1	5.2	4.6	bcd
Other Games of Skill (e.g., pool, darts)	—	—	—	—	—	—	8.3	
Bingo	11.6	9.9	8.6	7.6	7.2	5.1	4.4	bc
Sports Pools	22.3	20.3	17.0	15.6	12.6	13.3	10.2	abc
Sports Lottery Tickets	9.9	7.8	7.2	6.1	5.1	3.6	2.9	bc
Other Lottery Tickets	22.1	22.4	18.5	18.8	15.5	12.7	9.6	bcd
Video Gambling or Slot Machines	6.8	6.7	6.2	4.8	3.9	2.9	3.8	
Casino in Ontario	1.7	1.7	1.1	1.1	1.3	†	0.6	bc
Any Internet Gambling	—	2.5	2.1	3.0	3.0	2.1	3.1	
Other ways not listed above	—	27.1	23.6	24.1	18.8	17.6	13.4	abc
Internet Poker	—	—	—	3.0	2.7	—	—	
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)**	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)**	bc
MALES	(1018)	(1654)	(1934)	(1618)	(2286)	(2218)	(2469)	
Cards	35.4	32.1	44.2	41.0	28.1	21.6	15.1	ab
Dice	—	19.1	22.0	16.5	9.6	7.8	6.5	b
Other Games of Skill (e.g., pool, darts)	—	—	—	—	—	—	12.4	
Bingo	12.5	9.5	7.4	6.7	7.4	4.5	3.9	b
Sports Pools	38.1	32.7	26.1	25.4	20.6	21.3	16.4	b
Sports Lottery Tickets	16.3	13.7	11.2	10.0	8.3	6.0	4.7	b
Other Lottery Tickets	23.2	20.4	18.5	18.0	15.3	12.7	10.4	b
Video Gambling or Slot Machines	8.1	8.9	7.4	5.9	5.0	3.8	4.4	
Casino in Ontario	2.6	2.5	1.6	1.4	1.9	†	0.9	b
Any Internet Gambling	—	3.4	3.0	4.1	4.8	3.1	5.0	
Other ways not listed above	—	32.9	28.8	30.3	24.1	23.2	18.7	b
Internet Poker	—	—	—	4.4	4.5	—	—	
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)	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)	b

(continued…)

	2001	2003	2005	2007	2009	2011	2013
FEMALES	(1043)	(1810)	(2144)	(1770)	(2565)	(2598)	(3009)
Cards	14.8	16.7	20.8	16.2	12.1	10.2	5.8 [ab]
Dice	—	7.0	7.1	4.9	2.5	2.7	2.4 [b]
Other Games of Skill (e.g., pool, darts)	—	—	—	—	—	—	4.0
Bingo	10.6	10.2	9.9	8.4	6.8	5.7	4.9 [b]
Sports Pools	7.3	9.1	7.7	5.6	4.4	5.3	3.4 [b]
Sports Lottery Tickets	3.8	2.4	3.1	2.2	1.9	†	1.0 [b]
Other Lottery Tickets	21.0	24.2	18.4	19.5	15.7	12.7	8.6 [ab]
Video Gambling or Slot Machines	5.7	4.7	4.9	3.8	2.8	2.0	3.2
Casino in Ontario	0.8	1.0	0.6	0.7	†	†	†
Any Internet Gambling	—	1.6	1.2	1.9	1.2	1.1	1.1
Other ways not listed above	—	21.9	18.2	17.8	13.4	11.9	7.7 [ab]
Internet Poker	—	—	—	1.7	0.9	—	—
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) [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) [b]
GRADE 7	(404)	(497)	(508)	(383)	(883)	(728)	(1126)
Cards	17.1	19.1	19.4	15.0	10.9	7.3	6.7 [b]
Dice	—	9.7	†	6.1	2.9	†	3.0 [b]
Other Games of Skill (e.g., pool, darts)	—	—	—	—	—	—	7.0
Bingo	8.9	10.3	7.6	8.1	7.3	6.3	4.3
Sports Pools	10.1	15.8	10.4	9.3	6.5	6.0	†
Sports Lottery Tickets	3.8	4.8	2.7	3.0	3.2	†	†
Other Lottery Tickets	13.8	13.6	10.7	12.4	8.9	5.3	5.2 [b]
Video Gambling or Slot Machines	3.1	7.2	†	†	3.1	†	†
Casino in Ontario	†	†	†	†	†	†	†
Any Internet Gambling	—	†	†	†	†	†	†
Other ways not listed above	—	27.7	20.9	16.6	15.7	14.9	13.0 [b]
Internet Poker	—	—	—	†	†	—	—
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) [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)	†	†

(continued…)

	2001	2003	2005	2007	2009	2011	2013
GRADE 8	(379)	(512)	(501)	(418)	(913)	(730)	(1088)
Cards	24.3	20.0	24.7	24.2	14.7	12.1	9.1 [b]
Dice	—	8.3	9.2	7.9	5.4	†	2.3 [b]
Other Games of Skill (e.g., pool, darts)	—	—	—	—	—	—	5.6
Bingo	11.6	10.0	11.1	6.0	5.7	3.4	4.9
Sports Pools	15.5	14.2	15.2	11.4	7.0	9.8	6.5 [b]
Sports Lottery Tickets	7.9	3.8	4.6	2.5	†	†	† [b]
Other Lottery Tickets	16.2	14.9	13.1	11.5	7.2	6.7	4.4 [b]
Video Gambling or Slot Machines	4.8	6.8	6.0	3.3	2.4	†	†
Casino in Ontario	†	†	†	†	†	†	†
Any Internet Gambling	—	†	†	†	†	†	†
Other ways not listed above	—	28.9	23.7	25.9	14.8	18.3	10.3 [b]
Internet Poker	—	—	—	†	†	—	—
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) [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)	†	† [b]
GRADE 9	(368)	(654)	(780)	(660)	(753)	(879)	(815)
Cards	24.2	24.1	33.9	27.4	18.2	13.6	8.3 [b]
Dice	—	16.7	16.4	12.9	5.3	1.5	4.1 [ab]
Other Games of Skill (e.g., pool, darts)	—	—	—	—	—	—	7.4
Bingo	13.7	9.6	8.9	8.7	8.0	6.4	3.7 [b]
Sports Pools	27.0	23.6	19.3	16.4	10.6	9.7	10.7 [b]
Sports Lottery Tickets	9.4	7.0	6.0	4.7	3.4	2.1	† [b]
Other Lottery Tickets	18.7	15.9	15.4	17.0	10.3	8.6	3.7 [ab]
Video Gambling or Slot Machines	5.1	5.3	7.5	7.2	†	†	†
Casino in Ontario	†	†	†	†	†	†	†
Any Internet Gambling	—	3.5	†	2.6	3.1	†	†
Other ways not listed above	—	31.2	24.9	28.2	21.7	17.1	9.7 [b]
Internet Poker	—	—	—	2.8	3.0	—	—
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) [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)	†	† [b]

(continued…)

	2001	2003	2005	2007	2009	2011	2013
GRADE 10	(422)	(622)	(742)	(577)	(814)	(825)	(816)
Cards	29.6	25.3	36.6	29.8	20.2	14.9	15.5 [b]
Dice	—	12.3	18.5	8.9	7.3	8.8	7.4
Other Games of Skill (e.g., pool, darts)	—	—	—	—	—	—	11.5
Bingo	11.3	9.8	7.6	5.6	5.6	3.4	4.9 [b]
Sports Pools	28.7	24.1	17.4	15.4	15.2	16.9	12.7 [b]
Sports Lottery Tickets	10.0	6.9	7.0	4.4	3.5	†	† [b]
Other Lottery Tickets	23.4	18.2	16.0	14.9	11.5	7.9	6.3 [b]
Video Gambling or Slot Machines	10.4	6.6	6.2	4.9	3.7	†	3.8 [b]
Casino in Ontario	†	†	†	†	†	†	†
Any Internet Gambling	—	3.3	2.8	3.0	2.8	†	†
Other ways not listed above	—	26.9	26.2	23.4	20.9	19.8	15.5 [b]
Internet Poker	—	—	—	2.9	2.5	—	—
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) [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)

GRADE 11	(288)	(620)	(819)	(684)	(719)	(808)	(837)
Cards	28.4	27.0	39.0	36.5	25.2	22.5	8.2 [ab]
Dice	—	14.7	17.2	14.0	9.2	6.4	3.3 [b]
Other Games of Skill (e.g., pool, darts)	—	—	—	—	—	—	7.7
Bingo	9.7	9.5	7.4	7.6	7.7	6.5	3.2 [b]
Sports Pools	23.1	20.5	17.1	19.0	7.3	15.8	10.0 [b]
Sports Lottery Tickets	12.8	9.6	9.4	8.9	18.8	5.3	1.7 [ab]
Other Lottery Tickets	27.8	28.9	21.4	20.3	18.8	18.2	10.4 [ab]
Video Gambling or Slot Machines	7.8	5.2	4.9	5.3	5.7	†	†
Casino in Ontario	†	†	†	1.6	†	†	†
Any Internet Gambling	—	†	†	4.7	†	†	†
Other ways not listed above	—	26.8	22.2	25.6	21.0	20.2	14.6 [b]
Internet Poker	—	—	—	4.6	†	—	—
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) [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) [ab]

(continued…)

	2001	2003	2005	2007	2009	2011	2013
GRADE 12	(200)	(559)	(728)	(666)	(769)	(846)	(796)
Cards	25.0	26.6	40.6	36.0	27.9	19.8	13.4 [b]
Dice	—	12.8	14.7	13.4	6.1	7.3	5.8 [b]
Other Games of Skill (e.g., pool, darts)	—	—	—	—	—	—	9.3
Bingo	14.7	10.3	8.9	9.0	8.1	4.6	5.2 [b]
Sports Pools	28.7	21.3	21.8	20.2	17.9	17.0	11.4 [b]
Sports Lottery Tickets	19.3	13.8	12.5	11.7	9.3	6.2	6.5 [b]
Other Lottery Tickets	40.3	40.5	32.1	32.6	30.1	22.0	20.2 [b]
Video Gambling or Slot Machines	10.9	9.4	6.0	5.2	5.1	4.2	5.9
Casino in Ontario	7.8	4.5	2.6	†	3.3	†	1.7 [b]
Any Internet Gambling	—	†	1.8	2.6	3.9	†	2.8
Other ways not listed above	—	21.2	23.4	24.0	18.4	15.2	15.5
Internet Poker	—	—	—	3.9	2.8	—	—
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) [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)
TORONTO	(267)	(548)	(577)	(470)	(417)	(621)	(377)
Cards	17.8	22.4	30.4	25.9	15.3	16.8	10.2
Dice	—	18.6	17.0	17.4	5.1	7.3	10.4
Other Games of Skill (e.g., pool, darts)	—	—	—	—	—	—	11.6
Bingo	8.7	8.3	7.0	4.9	6.5	4.1	5.1
Sports Pools	23.4	16.9	12.6	12.0	7.0	8.9	9.0 [b]
Sports Lottery Tickets	12.1	8.7	7.4	6.9	6.7	2.6	† [b]
Other Lottery Tickets	18.6	19.0	14.6	15.3	13.4	11.2	11.8
Video Gambling or Slot Machines	5.2	7.9	2.8	3.3	†	3.0	†
Casino in Ontario	†	†	†	†	†	†	†
Any Internet Gambling	—	†	2.4	3.5	†	1.6	4.9
Other ways not listed above	—	28.3	22.0	25.2	14.0	16.0	14.3 [b]
Internet Poker	—	—	—	†	2.7	—	—
Any Gambling Activity (95% CI)	—	53.8 (48.2-59.3)	51.0 (45.2-56.7)	50.7 (44.8-56.6)	35.2 (28.2-42.9)	34.7 (30.3-39.5)	37.1 (28.8-46.3) [b]
5+ Gambling Activities (95% CI)	—	5.6 (3.6-8.5)	5.2 (3.0-9.0)	4.0 (2.3-6.9)	2.7 (1.0-7.0)	†	†

(continued…)

	2001	2003	2005	2007	2009	2011	2013
NORTH REGION	(599)	(746)	(728)	(421)	(359)	(1022)	(769)
Cards	30.1	24.2	38.8	38.0	22.0	20.8	12.0 [ab]
Dice	—	9.0	16.8	9.6	6.5	5.7	2.6 [b]
Other Games of Skill (e.g., pool, darts)	—	—	—	—	—	—	6.4
Bingo	17.8	12.2	14.7	12.5	11.3	6.6	7.3 [b]
Sports Pools	19.8	17.0	19.0	19.6	11.3	14.3	9.8 [b]
Sports Lottery Tickets	9.4	8.0	8.6	8.7	7.0	3.6	†
Other Lottery Tickets	25.5	27.8	25.9	23.7	20.2	16.0	13.6
Video Gambling or Slot Machines	10.5	8.1	13.5	5.6	†	†	†
Casino in Ontario	3.1	†	†	†	†	†	†
Any Internet Gambling	—	2.7	2.5	4.7	†	2.7	2.8
Other ways not listed above	—	27.1	24.6	22.9	17.5	17.6	12.4 [b]
Internet Poker	—	—	—	5.0	†	—	—
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) [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)
WEST REGION	(718)	(1259)	(1437)	(1323)	(1422)	(1245)	(1686)
Cards	26.4	22.8	34.1	30.6	21.7	15.5	9.7 [b]
Dice	—	11.5	14.6	10.8	6.8	†	3.6 [b]
Other Games of Skill (e.g., pool, darts)	—	—	—	—	—	—	7.6
Bingo	11.7	8.9	9.5	7.5	6.9	5.8	3.9 [b]
Sports Pools	21.1	20.4	16.7	17.6	15.4	14.4	10.4 [b]
Sports Lottery Tickets	9.4	6.9	8.5	6.5	5.3	3.9	2.7 [b]
Other Lottery Tickets	22.1	22.2	20.6	20.7	16.6	13.0	8.2 [b]
Video Gambling or Slot Machines	6.9	5.3	5.0	3.7	2.4	†	3.6
Casino in Ontario	†	1.2	1.0	†	†	†	†
Any Internet Gambling	—	2.4	1.9	3.4	2.8	†	1.9
Other ways not listed above	—	26.2	24.1	23.4	20.2	17.3	13.4 [b]
Internet Poker	—	—	—	3.5	2.9	—	—
Any Gambling Activity (95% CI)	—	56.1 (53.2-59.0)	57.0 (53.8-60.2)	54.3 (50.6-58.0)	43.4 (40.0-46.9)	39.4 (34.0-45.1)	33.1 (29.8-36.6) [b]
5+ Gambling Activities (95% CI)	—	5.8 (4.4-7.6)	6.9 (5.5-8.5)	5.2 (3.9-7.0)	3.0 (2.2-4.3)	2.6 (1.5-4.6)	2.2 (1.4-3.2) [b]

(continued…)

	2001	2003	2005	2007	2009	2011	2013
EAST REGION	(477)	(911)	(1336)	(1174)	(2653)	(1928)	(2646)
Cards	25.7	26.6	30.8	26.3	20.4	15.2	12.0 [b]
Dice	—	12.1	13.1	8.1	5.7	4.4	3.5 [b]
Other Games of Skill (e.g., pool, darts)	—	—	—	—	—	—	8.2
Bingo	11.1	11.6	7.0	7.9	7.0	4.4	4.2 [b]
Sports Pools	24.3	22.9	19.0	14.4	12.2	13.8	10.4 [b]
Sports Lottery Tickets	9.1	8.5	5.4	5.1	3.9	3.8	3.1 [b]
Other Lottery Tickets	23.3	23.0	16.2	17.3	14.5	12.4	9.7 [b]
Video Gambling or Slot Machines	6.6	7.5	7.4	6.5	6.0	3.1	†
Casino in Ontario	†	2.5	†	1.6	2.2	†	1.0
Any Internet Gambling	—	2.9	†	2.1	3.1	2.2	†
Other ways not listed above	—	27.8	23.5	24.3	19.6	18.8	13.3 [b]
Internet Poker	—	—	—	2.2	2.7	—	—
Any Gambling Activity (95% CI)	—	60.5 (56.1-64.7)	57.6 (53.2-61.9)	52.4 (48.4-56.4)	43.9 (40.0-47.9)	38.4 (35.3-41.6)	35.7 (32.4-39.3) [b]
5+ Gambling Activities (95% CI)	—	6.8 (4.6-10.0)	4.2 (2.5-7.1)	4.1 (2.7-6.1)	3.0 (1.7-5.3)	2.9 (1.6-4.9)	2.7 (1.6-4.5) [b]

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) [a] 2013 vs. 2011 significant difference, p<.01; [b] 2013 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?; Bought sports lottery tickets (such as Sports Select or Proline)?; Bought any other lottery tickets including instant lottery (such as 6-49, scratch cards, pull-tabs)?; Bet money on video gambling machines, slot machines, or any other gambling machines?; Bet money at a casino in Ontario?; Bet money over the Internet (on any game)?; Bet money in other ways not listed above?"

Source: OSDUHS, Centre for Addiction and Mental Health

Table A3.6.2 Percentage of Secondary School Students Classified as Having a Gambling Problem (Abbreviated SOGS-RA6), 1999–2013 OSDUHS (Grades 9–12)

		1999	2001	2003	2005	2007	2009	2011	2013
	(*n*=)	(1495)	(1278)	(2455)	(3069)	(2587)	(3055)	(3358)	(3264)
Total (95% CI)		**7.7** (6.0-9.9)	**4.0** (2.5-6.1)	**4.2** (3.4-5.3)	**4.7** (3.8-5.8)	**2.8** (2.2-3.6)	**3.3** (2.2-4.9)	**1.9** (1.2-2.9)	**1.1** [bc] (0.7-2.0)
Sex	Males	**11.8** (9.3-14.8)	**6.8** (4.2-10.9)	**7.6** (5.9-9.6)	**7.7** (6.2-9.6)	**4.5** (3.4-5.9)	**5.4** (3.4-8.3)	**2.9** (1.8-4.7)	† [b]
	Females	**3.3** (1.7-6.2)	†	**1.2** (0.6-2.2)	**1.6** (1.1-2.3)	**1.2** (0.6-2.2)	**1.2** (0.7-1.9)	†	†
Grade	9	**7.5** (4.8-11.5)	†	**2.8** (1.7-4.6)	**3.1** (1.6-5.6)	**2.8** (1.6-4.7)	†	†	† [b]
	10	**8.5** (4.6-15.3)	**4.2** (2.3-7.5)	**4.3** (2.8-6.5)	**3.2** (1.9-5.1)	†	**2.1** (1.3-3.6)	†	† [b]
	11	**7.8** (5.0-11.9)	†	**4.2** (2.7-6.5)	**6.6** (4.8-9.0)	**4.1** (2.5-6.7)	†	†	† [b]
	12	**7.2** (4.2-12.2)	†	**5.8** (3.9-8.5)	**6.1** (4.3-8.5)	**3.2** (2.0-5.0)	**4.5** (2.7-7.5)	**2.2** (1.2-4.1)	† [b]
Region	Toronto	**9.1** (5.6-14.5)	†	**4.8** (3.0-7.7)	**4.5** (2.7-7.3)	†	†	**4.1** (2.2-7.6)	† [b]
	North	**7.8** (4.1-14.8)	**4.4** (2.8-7.0)	**3.6** (1.9-6.7)	†	**3.4** (1.9-6.0)	†	**2.1** (1.2-3.8)	†
	West	**6.1** (3.6-10.0)	**4.0** (2.5-6.2)	**4.3** (3.0-6.1)	**5.7** (4.3-7.6)	**1.9** (1.3-2.9)	**2.0** (1.3-3.0)	†	† [b]
	East	**9.4** (6.4-13.7)	†	**4.1** (2.7-6.2)	**4.4** (3.0-6.4)	**3.3** (2.4-4.6)	†	†	† [b]

Notes: (1) "Gambling Problem" is defined as positive responses to 2 or more of the 6 items in the South Oaks Gambling Screen-Revised for Adolescents (SOGS-RA6) (abbreviated scale); (2) n=total number of students surveyed; (3) based on a random half sample in each year; (4) CI=confidence interval; (5) † indicates estimate suppressed due to unreliability; (6) no significant differences 2013 vs. 2011; [b] 2013 vs. 1999 significant difference, p<.01; [c] significant linear trend, p<.01.

Source: OSDUHS, Centre for Addiction and Mental Health

Table A3.6.3 Percentage Classified as Having a Video Gaming Problem (PVP Scale), 2007–2013 OSDUHS (Grades 7–12)

		2007	2009	2011	2013
	(*n*=)	(2935)	(4261)	(4816)	(5478)
Total (95% CI)		**9.4** (8.2-10.8)	**10.3** (9.0-11.7)	**11.9** (9.4-14.9)	**10.3** (8.6-12.2)
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)
	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)
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	**10.8** (7.9-14.8)	**10.9** (7.5-15.4)	**9.0** (6.4-12.5)	**9.4** (6.9-12.8)
	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)
	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)
	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)
	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)
Region	Toronto	**13.0** (9.9-16.7)	**8.0** (5.7-11.1)	**14.6** (10.3-20.4)	**11.0** (7.3-16.3)
	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)
	West	**8.7** (7.0-10.7)	**11.9** (9.8-14.4)	**12.3** (7.6-19.2)	**10.7** (8.2-13.8)
	East	**8.7** (6.4-11.7)	**9.2** (6.9-12.0)	**10.7** (9.2-12.6)	**9.7** (6.9-13.5)

Notes: (1) "Video Gaming Problem" is defined as positive responses to five or more of the nine items in the Problem Video Game Playing (PVP) scale; (2) n=total number of students surveyed; (3) entries in brackets are 95% confidence intervals; (4) based on a random half sample in each year; (5) no significant changes over time.

Source: OSDUHS, Centre for Addiction and Mental Health

Selected Recent OSDUHS Peer-Reviewed Publications

Arbour-Nicitopoulos, K. P., Faulkner, G. E., & Irving, H. M. (2012). Multiple health-risk behaviour and psychological distress in adolescence. *Journal of the Canadian Academy of Child and Adolescent Psychiatry, 21*(3), 171-178.

Arbour-Nicitopoulos, K. P., Faulkner, G. E., Paglia-Boak, A., & Irving, H. M. (2010). Adolescents' attitudes toward wheelchair users: A provincial survey. *International Journal of Rehabilitation Research, 33*(3), 261-263.

Brands, B., Paglia-Boak, A., Sproule, B. A., Leslie, K., & Adlaf, E. M. (2010). Nonmedical use of opioid analgesics among Ontario students. *Canadian Family Physician, 56*(3), 256-262.

Callaghan, R. C., Veldhuizen, S., & Ip, D. (2010). Contraband cigarette consumption among adolescent daily smokers in Ontario, Canada. *Tobacco Control*. doi: 10.1136/tc.2010.037507

Faulkner, G., Irving, H., Paglia-Boak, A., & Adlaf, E. (2010). Adolescent knowledge of schizophrenia and social distancing: A province-wide survey. *Journal of Community Psychology, 38*(8), 933-942.

Fischer, B., Ialomiteanu, A., Boak, A., Adlaf, E. M., Rehm, J., & Mann, R. E. (2013). Prevalence and key covariates of non-medical prescription opioid use among the general secondary student and adult populations in Ontario, Canada. *Drug and Alcohol Review, 32*(3), 276-287.

Hamilton, H. A., Paglia-Boak, A., Wekerle, C., Danielson, A., & Mann, R. (2011). Psychological distress, service utilization, and prescribed medications among youth with and without histories of involvement with child protective services. *International Journal of Mental Health and Addiction, 9*(4), 398-409.

Hamilton, H. A., Boak, A., Ilie, G., & Mann, R. E. (2013). Energy drink consumption and associations with demographic characteristics, drug use and injury among adolescents. *Canadian Journal of Public Health, 104*(7), e496-e501.

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Hamilton, H. A., Mann, R. E., & Noh, S. (2011). Adolescent immigrant generation and stigmatizing attitudes toward drug addiction. *Addiction Research & Theory, 19*(4), 344-351.

Hamilton, H. A., van der Maas, M., Boak, A., & Mann, R. E. (2013). Subjective social status, immigrant generation, and cannabis and alcohol use among adolescents. *Journal of Youth and Adolescence*, 1-13.

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