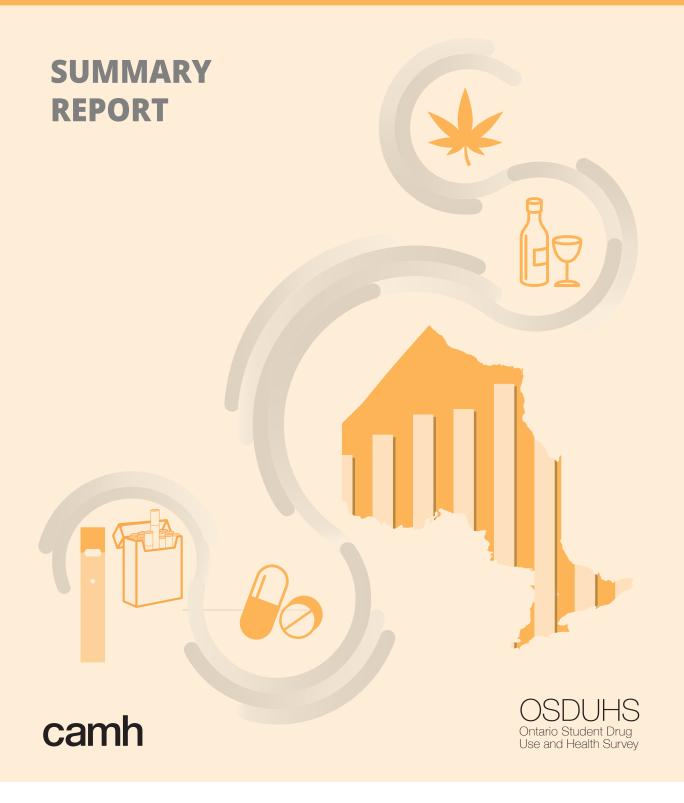
DRUG USE 1977–

Among Ontario Students

Detailed Findings from the Ontario Student Drug Use and Health Survey

1977– 2019



The 2019 OSDUHS Drug Use Report Summary

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

This report describes the 2019 results for use of alcohol, tobacco, cannabis, illicit drugs, prescription drugs, as well as changes over time. Also examined are harms related to drug use, perceptions and attitudes, and exposure to drugs. All data are based on self-reports derived from anonymous questionnaires completed in classrooms. The survey was administered by the Institute for Social Research (at York University) on CAMH's behalf.

Past Year Drug Use (%) for the Total Sample, by Sex, and by Grade, 2019 OSDUHS (N=14,142)

	Total	Males	Females	G7	G8	G9	G10	G11	G12
Grades 7–12									
Alcohol	41.7	40.6	42.8	7.3	15.8	30.3	45.2	57.0	66.0 *
High-Caffeine Energy Drinks	32.6	38.8	26.1 *	18.9	28.9	32.7	32.3	38.1	36.4 *
Electronic Cigarettes (Vapes)	22.7	23.5	21.8	1.9	5.3	19.6	25.1	30.9	34.9 *
Cannabis	22.0	22.6	21.4	1.3	4.7	12.8	21.7	33.1	40.0 *
Binge Drinking (5+ drinks, past month)	14.8	14.9	14.7	1.1	3.0	8.7	13.7	21.3	28.2 *
Prescription Opioid Pain Relievers (NM)	11.0	10.9	11.0	9.9	11.5	10.1	9.9	11.3	12.5
Cough/Cold Medication (NM)	7.8	9.3	6.2 *	6.9	7.0	8.3	6.5	8.4	8.8
Tobacco Cigarettes	5.0	5.6	4.4 *	S	0.7	2.7	3.5	7.5	10.8 *
Waterpipes (Hookahs)	4.4	4.5	4.4	S	S	2.4	3.7	5.3	9.4 *
Smokeless (Chewing) Tobacco	3.9	6.1	1.4 *	S	S	2.7	2.9	5.5	7.2 *
Inhalants (Glue or Solvents)	3.1	2.7	3.6 *	4.5	5.9	3.2	2.9	2.1	1.9 *
ADHD Drugs (NM)	2.7	3.2	2.1 *	0.7	1.3	1.9	2.1	3.1	5.0 *
Synthetic Cannabis ("Spice," "K2")	1.6	2.0	1.2 *	S	S	1.2	2.7	2.3	1.8 *
Grades 9–12 [†]									
Mushrooms (Psilocybin) or Mescaline	4.5	6.4	2.5 *			1.3	2.7	5.9	7.3 *
Tranquillizers/Sedatives (NM)	2.9	3.1	2.6			1.3	1.9	3.9	4.0 *
Cocaine	2.6	3.3	1.8 *			0.9	0.7	2.7	5.2 *
Ecstasy (MDMA)	2.3	2.9	1.6 *			0.7	1.4	2.8	3.7 *
LSD	2.0	2.8	1.2 *			1.0	1.3	2.2	3.3 *
Methamphetamine	0.7	0.9	S			S	S	S	S
Crack	0.5	0.8	S			S	S	S	S
Fentanyl	0.5	S	S			S	S	S	S
Any NM Use of a Prescription Drug	13.4	13.7	13.0			11.3	11.6	13.9	15.8 *
Any Drug Use	20.3	22.5	18.0 *			15.8	17.9	22.0	23.8 *

Notes: † not asked of 7th and 8th graders; * statistically significant sex or grade difference (p<.05), not controlling for other factors; s=estimate suppressed due to unreliability; estimate for alcohol excludes "a sip"; estimates for tobacco cigarettes, electronic cigarettes, and waterpipes exclude smoking a few puffs; binge drinking refers to drinking five or more drinks on one occasion in the past month; NM=nonmedical use, without a doctor's prescription; "Any NM Use of a Prescription Drug" refers to the nonmedical use of opioids, Attention-Deficit/Hyperactivity Disorder (ADHD) drugs, or tranquillizers/ sedatives; "Any Drug Use" refers to use of any one of 14 drugs (excludes alcohol, tobacco, cannabis and energy drinks); estimates for heroin were suppressed due to unreliability.

2019 Subgroup Differences in Drug Use

Differences in past year drug use according to sex, grade, and four regions of the province are presented in the report.

 Among the drugs asked about in the 2019 survey, males are significantly more likely than females to use 10 drugs, as shown in the table below. Females are more likely to use inhalants.

Males are more likely to use	Females are more likely to use
 Energy Drinks Cough/Cold Medication (NM) Tobacco Cigarettes Smokeless Tobacco ADHD Drugs (NM) Synthetic Cannabis Mushrooms/Mescaline Cocaine Ecstasy (MDMA) LSD 	• Inhalants
NM=nonmedical use	

 Past year use of many drugs significantly differs by grade, as shown in the table below.
 Use of most drugs increases with grade, peaking in grade 11 or 12.

Use increases with grade	Use decreases with grade
 Alcohol & Binge Drinking Energy Drinks Electronic Cigarettes Cannabis Tobacco Cigarettes Waterpipes (Hookahs) Smokeless Tobacco ADHD Drugs (NM) Synthetic Cannabis Mushrooms/Mescaline Tranquillizers (NM) Cocaine Ecstasy (MDMA) LSD 	• Inhalants

NM=nonmedical use; binge drinking refers to 5+ drinks on one occasion in the past month

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

There are significant regional differences in drug use. Compared to the provincial average, students in the Greater Toronto Area are less likely to use many drugs, whereas students in the North, West, and East regions are more likely to use several drugs. These regional differences are shown in the table below.

Use in region below	Use in region above			
provincial average	provincial average			
Greater Toronto Area				
 Alcohol & Binge Drinking Energy Drinks Electronic Cigarettes Cannabis Cough/Cold Medication Tobacco Cigarettes Smokeless Tobacco ADHD Drugs (NM) Mushrooms/Mescaline Tranquillizers (NM) Cocaine Ecstasy (MDMA) 				
• LSD North				
	Tobacco CigarettesCocaineEcstasy (MDMA)			
We	est			
	ADHD Drugs (NM)Ecstasy (MDMA)			
East				
NM=nonmedical use: hinge drinkir	Tobacco Cigarettes Cough/Cold Medication ADHD Drugs (NM) refers to 5+ drinks on one			
NM=nonmedical use; binge drinking refers to 5+ drinks on one				

occasion in the past month

Trends in Drug Use

2019 vs. 2017

Among the total sample of students, only one drug use measure showed an increase between the previous survey in 2017 and the 2019 survey. The past year use of electronic cigarettes (also known as "vapes") significantly increased from 10.7% to 22.7%.

Past year use of the following three drugs significantly decreased between 2017 and 2019:

- tobacco cigarettes (from 7.0% in 2017 to 5.0% in 2019),
- waterpipes (from 6.2% to 4.4%), and
- ecstasy (MDMA) (from 3.4% to 2.3%).

	2017 past year use		2019 past year use
Tobacco Cigarettes	7.0%	+	5.0%
Waterpipes (Hookahs)	6.2%	1	4.4%
Ecstasy (MDMA)	3.4%	1	2.3%
Electronic Cigarettes	10.7%	1	22.7%

1999-2019

The study was redesigned in 1999 to include all grades between 7 and 12. As such, 1999 is a key marker in the study's history. In this section, we highlight significant changes during the period between 1999 and 2019.

In general, most past year drug use measures show a significant downward trend over time, with two exceptions. Use of electronic cigarettes has significantly increased since 2015 (the first year of monitoring) from 11.7% to 22.7%. The nonmedical use of ADHD drugs

(e.g., Adderall, Ritalin, Concerta) has significantly increased since 2007 (the first year of monitoring), from 1.0% to 2.7%.

The following drugs or drug use measures show a significant decrease during the period between 1999 and 2019:

alcohol: from 66.0% to 41.7%binge drinking: from 27.6% to 14.8%

energy drinks: from 49.5% (2011) to 32.7%

• cannabis: from 28.0% to 22.0%

• opioids (NM): from 20.6% (2007) to 11.0%

• tobacco cigarettes: from 28.4% to 5.0%

• waterpipes: from 9.7% (2013) to 4.4%

inhalants: from 8.9% to 3.1%mushrooms:* from 17.1% to 4.5%

ecstasy (MDMA):* from 7.9% (2001) to 2.3%cocaine:* from 5.7% (2003) to 2.6%

LSD:* from 8.8% to 2.0%
methamphetamine:*from 6.3% to 0.7%
crack:* from 3.2% to 0.5%
heroin:* from 2.1% to < 0.5%.

- Any nonmedical use of a prescription drug decreased between 2007 and 2019 (from 23.5% to 13.4%) among grades 9-12.
- Any use of at least one of eight drugs measured in all survey cycles (mushrooms, ecstasy, cocaine, LSD, methamphetamine, crack, heroin, and tranquillizers/sedatives) significantly decreased between 1999 and 2019, from 22.8% to 7.8%, among grades 9-12.

Drugs that remained relatively stable and show no dominant trend since their use was first monitored include smokeless tobacco, synthetic cannabis ("spice"), cough/cold medication (nonmedical use), and tranquillizers/sedatives (nonmedical use).

^{*} among grades 9-12 only (not asked of grade 7 and 8 students)

Trends by Sex

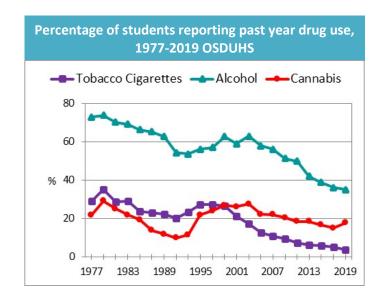
Both males and females show a significant increase in past year use of electronic cigarettes since the previous survey in 2017, as well as since 2015, when monitoring of these products first began. Both sexes also show an increase in the nonmedical use of ADHD drugs since 2007, when monitoring of these drugs first began. However, as shown in the table below, both males and females show many decreases in drug use during the twenty-year period between 1999 and 2019.

Long-Term Trends in Drug Use, 1977–2019 (Grades 7, 9, and 11 only)

The OSDUHS has been monitoring student drug use for over 40 years. Many past year prevalence estimates for the 11 drugs monitored since 1977 show a common pattern of use: a peak in the late 1970s, a decline in the late 1980s or early 1990s, a second peak in the late 1990s or early 2000s, followed by another decline. Most drugs, including alcohol and cannabis, show stability in recent years, whereas tobacco cigarettes continued on a downward trend in 2019.



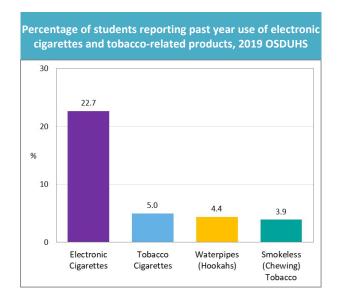
Bolded text indicates a decrease in 2019 vs. 2017 (previous survey); NM=nonmedical use; binge drinking refers to 5+ drinks on one occasion in the past month

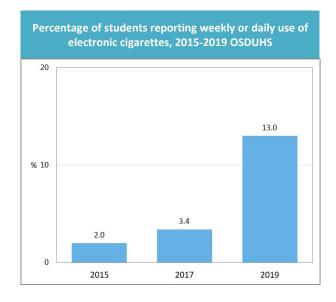


Tobacco and Alternative Smoking Devices

- In 2019, about 5% of students in grades 7– 12 (an estimated 45,600 in Ontario) report smoking tobacco cigarettes (more than just a few puffs) during the past year. About 2% of students (an estimated 14,200) smoke cigarettes daily. After some years of stability, the prevalence of cigarette smoking continued on a downward trend that began decades ago, as it significantly declined to an all-time low in 2019.
- Males (6%) are significantly more likely than females (4%) to smoke tobacco cigarettes. The prevalence of cigarette smoking significantly increases with grade, reaching 11% among 12th graders.
- About one-quarter (23%) of students in grades 7–12 (an estimated 184,200) report using an electronic cigarette (also known as vaping) in the past year (more than just a few puffs). About one-in-eight (13%) students use weekly or daily. Past year electronic cigarette use doubled between 2017 and 2019, from 11% to 23%. Weekly or daily vaping has also significantly increased over time.

- Males (24%) and females (22%) are equally likely to use electronic cigarettes. Use significantly increases with grade, from 2% of 7th graders up to 35% of 12th graders.
- Among those who vaped in the past year in 2019, over half (56%) report using a product containing nicotine. This percentage is significantly higher than in 2017 (28%), when ecigarettes containing nicotine were not legally available for sale in Canada.
- About 4% of students in grades 7–12 (36,100 students in Ontario) report smoking more than just a few puffs from a waterpipe (hookah) in the past year. The 2019 estimate is the lowest since monitoring began in 2013.
- Smokeless tobacco (chewing tobacco, dipping tobacco, snuff) is used by about 4% of students in grades 7–12 (31,400 in Ontario), with males (6%) more likely to use than females (1%).
- Among those who use tobacco cigarettes, as well as among those who use e-cigarettes, friends are reported to be the most common source of these products.





Alcohol

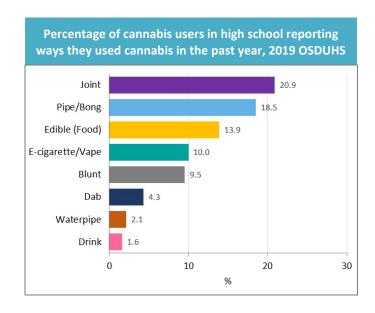
- In 2019, less than half (42%) of students in grades 7–12 (an estimated 374,300 in Ontario) report drinking more than just a few sips of alcohol during the past year.
 While the past year prevalence of drinking has been stable during the past few survey cycles, it has been on a significant decline during the last two decades.
- Males (41%) and females (43%) are equally likely to drink alcohol. Past year drinking significantly varies by grade, increasing from 7% of 7th graders to 66% of 12th graders.
- Over one-quarter (28%) of students report drinking alcohol in the past month.
- About one-in-seven (15%) students in grades 7–12 (an estimated 133,700 in Ontario) report binge drinking (defined as five or more drinks on one occasion) at least once in the past month. A similar percentage report getting drunk at least once in the past month. Males and females are equally likely to binge drink and get drunk. Over one-quarter of 12th graders report binge drinking and getting drunk at least once in the past month.
- Percentage of students reporting alcohol use, **2019 OSDUHS** 50 41.7 40 30 27.6 20 14.8 15.1 10 Past Year Past Month Past Month Past Month Drinking Drinking Binge Drinking Drunkenness

- One-in-six (17%) students report drinking alcohol mixed with an energy drink in the past year. Males (21%) are more likely than females (12%) to do so, as are 11th and 12th graders (about 20%) compared with students in the lower grades.
- One-in-seven (14%) high school students –
 (an estimated 99,100 in grades 9–12) report
 drinking hazardously or harmfully, as
 measured by the AUDIT screener.
 Hazardous/harmful drinking does not
 significantly differ by sex, but does
 significantly differ by grade, increasing to
 22% of 12th graders. One-in-six (17%) high
 school students could not remember what
 had happened when they were drinking on
 at least one occasion during the past year.
- One-quarter (24%) of high school students report that they are allowed to drink alcohol at home during parties or gettogethers with their friends. This estimate increases to 37% of 12th graders.
- Among past year drinkers, the most common source of alcohol is a family member.
- One-third (33%) of high school students believe it would be more difficult for them to buy beer in a LCBO or beer store than in a grocery store in Ontario. Only 6% of high school students believe that it would be more difficult for them to buy beer in a grocery store than in a LCBO or beer store. About 28% believe the level of difficulty would not differ.

Cannabis

- In 2019, about one-in-five (22%) students in grades 7–12 (an estimated 198,300 in Ontario) report using cannabis in the past year. While past year cannabis use did not significantly change since the previous survey in 2017 (19%) which occurred prior to legalization the current prevalence is lower than estimates seen over a decade ago.
- Males (23%) and females (21%) are equally likely to use cannabis. Use increases with grade, from 1% of 7th graders up to 40% of 12th graders.
- About 2% of students in grades 7–12 use cannabis daily, representing about 20,700 students in Ontario. This estimate increases to 5% of 12th graders.
- One-in-seven (14%) students used alcohol and cannabis on the same occasion at least once in the past year. This estimate increases to 27% of 12th graders.
- Among high school students, the most common ways of using cannabis are smoking it in a joint (21%), smoking it in a pipe or bong (19%), and eating it in food products such as brownies or candy (14%).
- Among high school students, consuming cannabis edibles significantly increased between 2017 and 2019, from 11% to 14%. Vaping cannabis significantly increased between 2015 (5%) and 2019 (10%).

- About 3% of high school students (an estimated 20,500 students in grades 9-12) report symptoms of cannabis dependence, as measured by the Severity of Dependence Scale.
- Among past year cannabis users, the most common source of cannabis is friends.
- Over one-quarter (27%) of high school students report that their friends' use of cannabis did not change after legalization. About 14% report that their friends use cannabis more often now that it is legal, and 22% are not sure if their friends' use of cannabis changed after legalization.



Nonmedical Use of Prescription Drugs and Over-the-Counter Drugs

- About 3% of students in grades 7–12 (an estimated 23,000) report using a drug typically used to treat Attention-Deficit/Hyperactivity Disorder (ADHD) in children (e.g., Adderall, Ritalin, Concerta, Dexedrine) without a prescription in the past year. Males are more likely than females to use these drugs nonmedically, as are older students. The nonmedical use of ADHD drugs has significantly increased since 2007, when monitoring first began.

The nonmedical use of prescription opioids declined during the past decade and remained stable in recent years.

The home is the most common source of prescription opioids used nonmedically.

- About 3% of high school students (an estimated 19,700 students in grades 9-12) report using a sedative/tranquillizer without a prescription in the past year. Males and females are equally likely to use these drugs nonmedically. Older students are more likely to use these drugs nonmedically. Nonmedical use of these drugs has remained relatively stable for decades.
- About 8% of students in grades 7–12 (an estimated 70,300) report using cough or cold medication to "get high" during the past year. Males (9%) are significantly more likely than females (6%) to use cough/cold medication to get high. Nonmedical use of these drugs has fluctuated during the past decade, showing no dominant trend.
- Students were asked about their use of highly caffeinated energy drinks (e.g., Red Bull, Monster, Rockstar, Amp) during the past year and the past week. One-third (33%) of students (an estimated 259,500 in grades 7–12) report drinking an energy drink at least once in the past year. One-in-ten (11%) students (an estimated 90,200) report drinking an energy drink at least once during the week before the survey. Males and older students are more likely to drink energy drinks. Energy drink use has decreased since 2011, when monitoring first began.

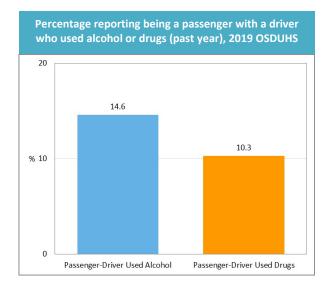
Consequences and Problems Related to Alcohol and Other Drug Use

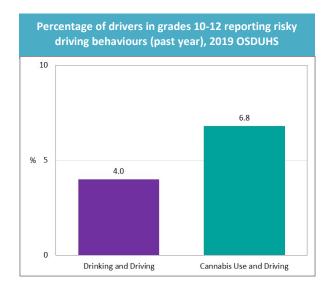
Vehicles

- One-in-seven (15%) students in grades 7– 12 report riding in a vehicle driven by someone who had been drinking alcohol, and one-in-ten (10%) report riding in a vehicle driven by someone who had been using drugs at least once in the past year. The percentage of students reporting these behaviours has significantly decreased during the two decades.
- About 4% of students in grades 10–12 with a G-Class driver's licence report driving a vehicle within an hour of consuming two or more drinks of alcohol at least once during the past year (an estimated 10,900 adolescent drivers in Ontario). Drinking and driving among adolescent drivers has been stable since 2013 at about 4%-7%. However, the current estimate is significantly lower than estimates seen in 1999 and the 2000s (12%-14%), and is substantially lower than estimates from the late 1970s and early 1980s (when almost half of 11th graders reported drinking and driving).
- More drivers in grades 10–12 report driving after cannabis use than driving after drinking alcohol. About 7% of drivers report driving a vehicle within one hour of using cannabis at least once during the past year (an estimated 18,900 adolescent drivers in Ontario). Driving after cannabis use remained stable between 2017 and 2019, but the there has been a significant decline since 2001 (the first year of monitoring), when the estimate was about 20%.

Drug Use Problem

- One-in-seven (15%) high school students (an estimated 115,000 in grades 9–12) report symptoms of a drug use problem, as measured by the CRAFFT screener. This percentage has been stable in recent years, but is currently lower than estimates seen over a decade ago (about 22%).
- A very small proportion (0.7%) of high school students (an estimated 4,600 in grades 9–12) report that they had been in a treatment program during the past year because of their alcohol and/or drug use.





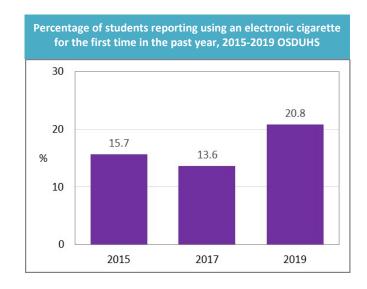
Other Highlights

Abstinence

- About 42% of students in grades 7–12 (an estimated 340,600 in Ontario) report using no drug at all during the past year (this includes alcohol, cigarettes and other smoking devices, but excludes caffeinated drinks). Females are more likely than males to abstain from drug use. Past year abstinence significantly decreases with grade, from two-thirds of 7th graders down to one-quarter of 12th graders. There has been a significant increase in abstinence between 1999 and 2019, from 27% to 42%, with much of the decline occurring during the past few years.
- In 2019, the average age at which 12th-grade smokers reported smoking their first cigarette was 15.2 years. The average age at first alcoholic drink among 12th-grade drinkers was 14.7 years, and the first time they were drunk was at age 15.4. The average age at first cannabis use among 12th-grade users was 15.4 years.
- Students today are initiating substance use at older ages than in the past, as the average age at first tobacco cigarette, first alcoholic drink, and first cannabis use has significantly increased over the decades.

New Users and Early Initiation

- The percentage of students in grades 7–12 reporting first-time drug use during the past year is as follows: 21% for electronic cigarettes, 19% for alcohol, 10% for cannabis, 4% for tobacco cigarettes, and 3% for illicit drugs.
- There has been a significant increase in the incidence of electronic cigarette use. The percentage of students who used ecigarettes for the first time was higher in 2019 (21%) compared to 2017 (14%) and 2015 (16%). The incidence of tobacco cigarette smoking has declined during the past two decades, whereas there has been no significant change in the incidence of alcohol or cannabis use.

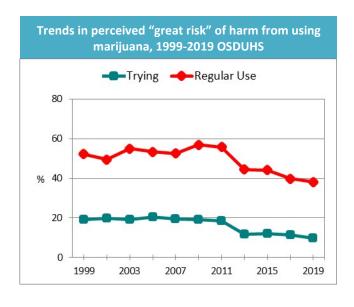


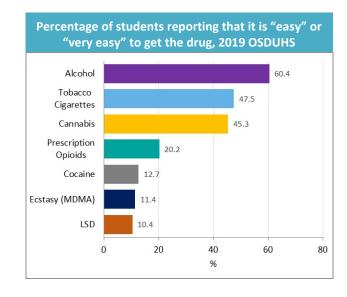
Perceived Risk of Drug Use

- Grade 7 and 8 students were asked about the perceived risk of physical harm associated with using alcohol, tobacco cigarettes, electronic cigarettes, marijuana, and prescription opioids. Of these drugs, these younger students perceive that the greatest risk of physical harm is associated with regular marijuana use. High school students were also asked about the risk associated with these drugs, as well as cocaine and ecstasy (MDMA). High school students believe the greatest risk of harm is associated with trying cocaine. For both elementary school students and high school students, trying marijuana and using electronic cigarettes regularly are considered to be the least risky.
- The percentage of students who perceive a great risk of harm is associated with marijuana use (trying and regular use) has remained stable since the previous survey in 2017, but is currently lower than estimates from 1999 and the 2000s. The perceived risk of harm associated with regular use of electronic cigarettes has increased since 2015, the first year of monitoring.

Perceived Availability of Drugs

- Of the drugs asked about, alcohol is perceived as the most readily available to students (60% report that it would be "fairly easy" or "very easy" to obtain), followed by tobacco cigarettes (48%), and cannabis (45%). The drug that is perceived to be least available is LSD.
- The perceived availability of alcohol, tobacco cigarettes, cannabis, and prescription opioids did not significantly change since the previous survey in 2017. However, the perceived availability of most drugs has declined over the decades.





School and Neighbourhood

- Students in grades 7, 8, and 9 are most likely to report receiving education about alcohol, cannabis, and other drugs.
- One-quarter (26%) of students in grades 7–12 believe that drug use in their school is a "big problem," half (50%) believe that drug use is a "small problem," and another quarter believe that it is "not a problem" in their school.
- One-in-nine (11%) students in grades 7–12 (an estimated 88,700 in Ontario) report having been drunk or high at school at least once in the past year. This percentage is significantly lower than a decade ago.
- One-in-six (17%) students in grades 7–12 (an estimated 133,700 in Ontario) report having been offered, sold, or given an illegal drug at school at least once in the past year. This percentage is significantly lower than a decade ago.
- One-in-five (21%) students in grades 7–12 (an estimated 165,800) report that someone tried to sell them drugs in the past year. The 2019 estimate is among the lowest on record.
- About one-in-five (18%) students in grades 7–12 (an estimated 145,600) report having seen drug selling in their own neighbourhood at least once in the past year. The 2019 estimate is among the lowest on record.

Methodology

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

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

Please visit the OSDUHS webpage for reports, infographics, and FAQs:

www.camh.ca/osduhs