

The 2009 OSDUHS Detailed Drug Use Report

Executive Summary

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 the second longest in North America. The study is based on 17 survey cycles conducted every two years since 1977. A total of 9,112 students (65% of selected students) in grades 7 to 12 from 47 school boards, 181 schools, and 573 classes participated in the 2009 OSDUHS, which was administered by the Institute for Social Research, York University.

This report describes the past year use of alcohol, tobacco, illicit drugs, and the non-medical (NM) use of prescription drugs, and changes since 1977. Results are provided for two analytical groups of students: those in grades 7 to 12, and those in grades 7, 9, and 11 only. The first group is used to assess current drug use and **ten-year trends (1999-2009)**, and the second is used to assess **long-term trends (1977-2009)**. All data are based on self-reports derived from anonymous questionnaires administered in classrooms between November 2008 and June 2009.

Past Year Drug Use (%) for the Total Sample, by Sex, and by Grade, 2009 OSDUHS

	Total	Males	Females		G7	G8	G9	G10	G11	G12	
Alcohol	58.2	59.9	56.3 *		22.7	36.5	51.6	64.5	74.3	82.6 *	
Cannabis	25.6	28.8	22.2 *		1.1	6.4	18.4	30.7	38.6	45.6 *	
Binge Drinking	24.7	25.9	23.4		2.7	5.1	16.3	25.9	35.6	48.5 *	
Opioid Pain Relievers (NM)	17.8	15.8	19.8 *		9.2	14.4	19.2	20.4	21.3	19.5 *	
Cigarettes	11.7	12.9	10.5 *		1.0	3.8	7.5	14.8	17.9	19.8 *	
OTC Cough/Cold Medication	7.2	6.8	7.6		6.0	6.3	6.8	7.9	7.8	7.9	
Solvents	5.3	4.2	6.6 *		8.2	9.0	5.2	4.9	3.3	3.1 *	
Hallucinogens other than LSD, PCP	5.0	6.2	3.7 *		s	s	3.2	5.0	9.3	9.0 *	
Stimulants (NM)	4.8	3.4	6.3 *		1.0	3.6	4.5	5.1	7.5	5.7 *	
Salvia Divinorum	4.4	6.2	2.3 *		s	s	1.1	4.7	8.6	8.4 *	
Ecstasy (MDMA)	3.2	3.1	3.2		s	0.7	2.0	4.2	5.0	5.4 *	
OTC Sleeping Medication	2.6	2.2	3.1		1.6	1.9	2.6	2.8	3.9	2.3	
Cocaine	2.6	2.8	2.3		0.8	1.1	1.1	2.3	3.7	5.1 *	
Jimson Weed	2.3	2.8	1.8		s	s	2.1	2.5	4.2	3.4 *	
Glue	2.1	2.1	2.1		2.7	3.6	3.3	1.5	s	s	
LSD	1.8	2.2	1.5		s	s	1.7	1.8	2.5	3.3 *	
OxyContin (NM)	1.6	1.7	1.6		s	s	1.5	2.4	2.9	1.9 *	
ADHD Drugs (NM)	1.6	1.7	1.6		0.8	1.2	1.8	1.6	2.5	1.7	
Tranquillizers/Sedatives (NM)	1.6	1.3	1.9 *		s	1.0	1.0	2.1	2.0	2.5 *	
Ketamine	1.6	1.8	1.4		s	s	s	1.5	2.3	2.8 *	
Methamphetamine (Speed)	1.4	1.8	1.0 *		s	s	1.2	s	1.7	2.8 *	
Crack	1.1	1.3	0.9		s	s	1.0	0.9	1.7	1.5	
PCP	0.8	1.0	0.5		s	s	s	s	1.3	1.6	
Rohypnol (NM)	0.7	0.7	0.7		s	s	s	s	2.0	s	
Heroin	0.7	0.9	s *		s	s	s	s	s	1.0 *	
Crystal Methamphetamine (Ice)	0.5	0.6	0.5		s	s	s	s	s	s	
GHB	0.5	0.7	s		s	s	s	s	s	s	
Any NM Use of a Prescription Drug	20.3	18.1	22.8 *		10.5	15.7	21.7	23.7	24.7	22.8 *	
Any Illicit Drug Use, incl. NM Prescr. Drug	41.7	42.3	41.0		21.5	26.9	38.1	45.9	51.8	55.4 *	

Notes: binge drinking (5+ drinks on one occasion) refers to the past 4 weeks; NM=non-medical use, without a doctor's prescription; OTC=over-the-counter drug used for non-medical purposes or to "get high"; "Any NM Use of a Prescription Drug" refers to non-medical use of any one of the following classes of prescription drugs: opioids, ADHD drugs, other stimulants, or tranquillizers/sedatives (excludes Rohypnol); "Any Illicit Drug Use, incl. NM Prescription Drug" refers to use of any one of the drugs listed in the table except for alcohol and tobacco; s=estimate suppressed due to unreliability; * indicates a significant sex difference, or grade differences ($p < .05$), not controlling for other factors.

2009 Subgroup Differences (Grades 7 to 12)

- ❑ Males are more likely than females to use:
 - alcohol
 - cannabis
 - cigarettes
 - hallucinogens other than LSD, PCP
 - salvia divinorum
 - methamphetamine
 - heroin

- ❑ Females are more likely than males to use:
 - opioid pain relievers (NM)
 - solvents
 - stimulants (NM), and
 - tranquilizers/sedatives (NM)
 - any prescription drug (NM)

- ❑ Past year use varies by grade for most of the drug measures:
 - alcohol
 - binge drinking
 - cannabis
 - opioid pain relievers (NM)
 - cigarettes
 - solvents
 - stimulants (NM)
 - LSD
 - hallucinogens other than LSD, PCP
 - ecstasy
 - cocaine
 - tranquilizers/sedatives (NM)
 - OxyContin (NM)
 - heroin
 - methamphetamine
 - ketamine
 - any prescription drug (NM)
 - any illicit drug, including NM use of a prescription drug

Use of these drugs tends to increase with grade with the exception of solvents use, which decreases with grade.

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).

- ❑ There are significant regional differences in the past year use of many drugs. Whereas students in the West and East regions do not differ from the provincial average on any drug, students in Toronto and in the North region do show differences from the average, as shown in the table below.

Use in Region Below Provincial Average	Use in Region Above Provincial Average
Toronto	
• Alcohol • Binge Drinking • Cigarettes • Cannabis • Stimulants (NM)	• Glue • Solvents • OTC cough/cold medication
Northern Ontario	
	• Alcohol • Binge Drinking • Cigarettes • Cannabis • Salvia Divinorum • OxyContin (NM) • Stimulants (NM)

OTC=over-the-counter; NM=non-medical use

Changes in Drug Use Between 2007 and 2009 (Grades 7 to 12)

Among the total sample of students, no drug showed a significant change – neither an increase nor a decrease – between 2007 and 2009.

Ten-Year Changes, 1999–2009 (Grades 7 to 12)

Among the total sample of students, there have been many significant changes in past year drug use between 1999 and 2009, all of which have been decreases:

- ❑ alcohol: from 66.0% to 58.2%
 - ❑ cigarettes: from 28.4% to 11.7%
 - ❑ solvents from 7.6% to 5.3%
 - ❑ stimulants (NM): from 7.3% to 4.8%
 - ❑ LSD: from 6.8% to 1.8%
 - ❑ PCP: from 3.0% to 0.8%
 - ❑ hallucinogens (other than LSD, PCP) from 12.8% to 5.0%
 - ❑ glue: from 3.8% to 2.1%
 - ❑ methamphetamine: from 5.0% to 1.4%
 - ❑ crack: from 2.5% to 1.1%
 - ❑ heroin: from 1.9% to 0.7%
 - ❑ ecstasy: from 6.0% (2001) to 3.2%
 - ❑ Rohypnol (NM): from 3.1% (2001) to 0.7%
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- ❑ An index measuring any illicit drug use out of 10 drugs asked about over the years, *including cannabis*, significantly decreased between 1999 and 2009 (from 32.3% down to 27.9%)
 - ❑ A second index similar to that above, but *excluding cannabis*, also significantly decreased between 1999 and 2009 (from 20.5% down to 10.1%)

Subgroup Changes, 1999–2009 (Grades 7 to 12)

With the exception of non-medical OxyContin use (which increased in 2009 compared to 2005 among 10th-graders, and Eastern Ontario students), the subgroup changes within the period from 1999 to 2009 show decreases in use.

Sex: Neither males nor females show any change in drug use since 2007. However, both sexes show many decreases in drug use in 2009 compared to their respective 1999 estimates. These are listed in the table below.

Decreases in Drug Use by Sex 2009 vs. 1999	
Males	Females
• Cigarettes • Alcohol • Binge Drinking • LSD • PCP • Hallucinogens other than LSD and PCP • Methamphetamine • Crack • Heroin • Ecstasy* • Rohypnol (NM)* • Any drug incl. cannabis[‡] • Any drug excl. cannabis[‡]	• Cigarettes • LSD • PCP • Hallucinogens other than LSD and PCP • Crack • Ecstasy* • Rohypnol (NM)* • Stimulants (NM) • Any drug excl. cannabis[‡]

NM=non-medical use; * vs. 2001 estimate; [‡] index based on a limited number of illicit drugs asked about over time

Grade: All grades show significant decreases in drug use over the past decade. These are listed in the table below.

Decreases in Drug Use by Grade 2009 vs. 2007 (bolded) and 2009 vs. 1999	
7th-Graders	
• Cigarettes • Cannabis • Any drug incl. cannabis [‡]	• Alcohol • Methamphetamine
8th-Graders	
• Cigarettes • Binge Drinking • LSD • Other Hallucinogens[†] • Ecstasy* • Any drug incl. cannabis [‡]	• Alcohol • Cannabis • PCP • Methamphetamine • Opioid Pain Relievers (NM) • Any drug excl. cannabis [‡]
9th-Graders	
• Cigarettes • LSD • Other Hallucinogens[†] • Ecstasy* • Any drug excl. cannabis [‡]	• Alcohol • PCP • Methamphetamine • Any drug incl. cannabis [‡]
10th-Graders	
• Cigarettes • LSD • Other Hallucinogens[†] • Crack	• Alcohol • PCP • Methamphetamine • Any drug excl. cannabis [‡]
11th-Graders	
• Cigarettes • PCP • Ecstasy* • Any drug excl. cannabis [‡]	• LSD • Other Hallucinogens[†] • Methamphetamine • Any drug incl. cannabis
12th-Graders	
• Cigarettes • Other Hallucinogens[†] • Any drug excl. cannabis [‡]	• LSD • Methamphetamine • Stimulants (NM)

NM=non-medical use; * vs. 2001 estimate; [†] other than LSD and PCP; [‡] index based on a limited number of illicit drugs asked about over time

Region: All regions show significant decreases in drug use over the past decade. These are listed in the table below.

Decreases in Drug Use by Region 2009 vs. 2007 (bolded) and 2009 vs. 1999	
Toronto	
• Cigarettes • PCP • Methamphetamine	• LSD • Other Hallucinogens[†] • Any drug excl. cannabis [‡]
Northern Ontario	
• Cigarettes • LSD • Other Hallucinogens[†] • Opioid Pain Relievers (NM)	• Alcohol • PCP • Methamphetamine • Any drug excl. cannabis [‡]
Western Ontario	
• Cigarettes • LSD • Other Hallucinogens[†] • Crack • Ecstasy* • Stimulants (NM) • Any drug excl. cannabis [‡]	• Alcohol • PCP • Methamphetamine • Heroin • Rohypnol (NM)* • Any drug incl. cannabis [‡]
Eastern Ontario	
• Cigarettes • Solvents • PCP • Methamphetamine • Heroin	• Glue • LSD • Other Hallucinogens[†] • Crack • Any drug excl. cannabis [‡]

NM=non-medical use; * vs. 2001 estimate; [†] other than LSD and PCP; [‡] index based on a limited number of illicit drugs asked about over time

Long-Term Changes, 1977–2009 (Grades 7, 9, and 11 only)

Many past year prevalence estimates for drugs measured since 1977 show a common pattern: a peak in use during the late 1970s, a decline in use during the late 1980s to early 1990s, followed by a second peak in the late 1990s or early 2000s. The long-term changes can be further characterized into the following four patterns:

Pattern 1: Prevalence reached an all-time low in 2005 and remained stable since that time:

- ◆ cigarettes
- ◆ LSD

Pattern 2: Prevalence shows a steady declining trend since 1979, and use in 2009 is significantly lower compared to the peaks found in the late 1970s and late 1990s (and 2003 for tranquilizers/sedatives):

- ◆ alcohol
- ◆ stimulants (NM)
- ◆ tranquilizers/sedatives (NM)

Pattern 3: Prevalence shows a decline after 1979, a resurgence in the late 1990s (2003 for cocaine), and use in 2009 is significantly lower compared to the two peak periods:

- ◆ cocaine
- ◆ methamphetamine
- ◆ heroin
- ◆ PCP
- ◆ glue

Pattern 4: Pattern 4 is similar to pattern 3, with one important difference. Use in 2009 is significantly lower compared to one or both of the two peak periods, however *current use is significantly higher compared to use in the late 1980s or early 1990s*:

- ◆ cannabis
- ◆ binge drinking
- ◆ solvents
- ◆ hallucinogens other than LSD and PCP
- ◆ ecstasy

Cigarettes Overview

- ❑ In 2009, 12% of students report smoking cigarettes during the past year (representing about 119,600 students in Ontario). About 5% of students (about 52,500) smoke on a daily basis.
- ❑ Males (13%) are more likely than females (11%) to smoke. There are significant differences by grade (ranging from 1% of 7th-graders to 20% of 12th-graders). There are also regional differences, with Northern students (18%) most likely to smoke, while Toronto students (7%) are least likely. Students in the West (13%) and East (11%) fall in between.
- ❑ The most common source for cigarettes reported by students who smoke is a friend or relative.
- ❑ For the first time in 2009, the OSDUHS asked students about their use of contraband cigarettes. About 6% of all students report smoking contraband cigarettes in the past year. This percentage represents about 60,000 students in Ontario. Among only the past year smokers, 53% report smoking contraband cigarettes.

Alcohol Overview

- ❑ In 2009, 58% of all students report drinking alcohol (excluding sips to see what it's like) during the past year. This represents about 591,700 students in Ontario. Males (60%) are more likely than females (56%) to drink. Past year drinking varies by grade (increasing from 23% of 7th-graders to 83% of 12th-graders). Toronto students (45%) are least likely to drink, whereas students in the North (64%) are most likely.
- ❑ Drinking among students occurs mostly on special occasions (22%). Thirteen percent of students report drinking several times a month, while 10% drink once a week or more often.

- ❑ One-quarter (25%) of all students report binge drinking (5+ drinks on one occasion) at least once during the month before the survey. This percentage represents about 250,700 students. About the same percentage (23%) report getting drunk at least once in the past month.
- ❑ Also, 9% of students report binge drinking 2 to 3 times during the past month, and 6% report doing so 4 or more times.
- ❑ About 21% of students (35% of past year drinkers) report drinking at a hazardous or harmful level as measured by the AUDIT screener. This percentage represents about 211,800 students. Males and females are equally likely to drink hazardedly. Hazardous drinking increases with grade (3% of 7th-graders to 42% of 12th-graders). Compared to students in the other three regions, Toronto students (12%) are least likely to drink hazardedly.
- ❑ Ten percent of students report personally being injured or injuring someone else in the past year as a result of their own drinking.

Cannabis Overview

- ❑ One-quarter (26%) of all students report using cannabis in the past year (representing about 261,500 students). Males (29%) are more likely than females (22%) to use cannabis. Use increases with each grade level, increasing from 1% of 7th-graders to 46% of 12th-graders. Among the regions, Toronto students (20%) are least likely to use, whereas students in the North (32%) are most likely.
- ❑ About 3% of students use cannabis daily. This represents about 31,000 students in Ontario.
- ❑ One-in-ten (11%) cannabis users may have a dependence problem (3% of all students), as measured by the Severity of Dependence Scale (SDS).

Non-Medical Use of Prescription Drugs

- ❑ OxyContin is a brand name for a highly addictive prescription painkiller containing the opioid oxycodone. In 2009, about 2% report using OxyContin non-medically (that is, without a prescription) during the past year. This represents about 16,700 students in Ontario. The 2009 estimate of 2% is similar to the estimates from 2007 and 2005. There is no significant difference in use between males and females. Use significantly increases with grade, peaking in grade 11 at 3%. Students in the North (3%) are most likely to report non-medical OxyContin use.
- ❑ The OSDUHS also asks students about use of the general class of prescription opioid pain relievers (e.g., Percocet, Percodan, Tylenol #3, Demerol, codeine) without a prescription. About 18% of students report using a prescription opioid pain reliever non-medically at least once in the past year (about 180,200 students). Females (20%) are more likely than males (16%) to use an opioid pain reliever non-medically. There is significant grade variation, with 7th- and 8th-graders least likely to use compared to the older grades. Use does not significantly vary by region. Three-quarters of those who used an opioid pain reliever non-medically report obtaining it from home.
- ❑ About 1% of students report using a drug typically used to treat Attention Deficit/Hyperactivity Disorder (ADHD) in children (e.g., Ritalin, Concerta, Adderall, Dexedrine) without a prescription (about 16,500 students). There are no significant differences by sex, grade, or region.

Non-Medical Use of Over-the-Counter Drugs

- ❑ The OSDUHS asked students about use of over-the-counter sleeping medication (e.g., Nytol) for purposes other than sleeping.

About 3% report using sleeping medication non-medically at least once during the past year. There are no significant differences by sex, grade, or region.

- ❑ For the first time in 2009, students were asked about their use of over-the-counter cough and cold medications containing the drug dextromethorphan in order to “get high.” Overall, 7% report using this type of medication to get high during the past year. This estimate represents about 70,600 Ontario students in grades 7 to 12. There are no significant differences by sex or grade. However, there is a regional difference showing that students in Toronto (11%) are most likely to report use.

Consequences and Problems Related to Alcohol and Other Drug Use

Alcohol, Drugs and Vehicles

- ❑ One-in-eight (12%) licensed drivers in grades 10 to 12 report driving within an hour of consuming two or more drinks at least once during the past year. Although drinking and driving has remained stable since 1999, the current rate is significantly lower compared to the late 1970s and early 1980s.
- ❑ The percentage of drivers reporting cannabis and driving is higher than the percentage reporting drinking and driving. About one-in-six (17%) drivers in grades 10 to 12 report driving a vehicle within one hour of using cannabis at least once during the past year. The current rate is similar to the estimate from the first year of measurement in 2001.
- ❑ About one-quarter (23%) of students in grades 7 to 12 report riding in a vehicle driven by someone who had been drinking alcohol, and 18% report riding in a vehicle driven by someone who had been using drugs. The proportion of students reporting these behaviours has significantly decreased over recent years.

Potential Drug Use Problem

- ❑ About one-in-six (16%) students may have a drug use problem, as measured by the CRAFFT screener (representing 164,600 Ontario students). Males and older students are more likely to be at risk for a drug use problem. There are no significant regional differences.
- ❑ A small percentage (1.4%) of students report that they had been in a treatment program during the past year because of their alcohol and/or drug use. This estimate represents about 14,100 students.

Coexisting Hazardous Drinking and Elevated Psychological Distress

- ❑ About 8% (85,400 Ontario students) report both hazardous drinking and elevated psychological distress (i.e., symptoms of anxiety and depression).
- ❑ Females are more likely than males to report these coexisting problems (11% vs. 6%, respectively). There is significant variation by grade, peaking in older grades at 15%. There are no significant regional differences.

Other Highlights

- ❑ In 2009, almost one-third (31%) of all students report using no substance at all during the past year – this includes alcohol and tobacco.
- ❑ One-quarter (24%) of students report using only alcohol during the past year. About 6% report using alcohol, tobacco, cannabis *and* at least one other drug during the past year.
- ❑ A very small proportion (under 1%) of students used an illegal drug by injection during the past year. This estimate represents about 6,600 Ontario students.

- ❑ The percentage of students reporting first-time drug use during the past year is as follows: 17% for alcohol, 6% for cigarettes, 9% for cannabis, and 3% for illicit drugs other than cannabis.

Early Initiation

Fewer students today are using alcohol, tobacco and cannabis at an early age compared to students in past decades.

- ❑ Only about 2% of 7th-graders in 2009 smoked their first cigarette by grade 6 (age 11), compared to 27% in 1997, and 41% in 1981.
- ❑ In 2009, 17% of 7th-graders used alcohol by grade 6 (age 11), compared to 31% in 2007, 42% in 2003 and 50% in 1981.
- ❑ In 2009, 2% of 7th-graders used cannabis by grade 7 (age 12), compared to 8% in 2003 and 9% in 1981.
- ❑ In 2009, the mean age at which 11th-grade smokers reported smoking their first cigarette was 13 years. The mean age of first alcoholic drink among 11th-grade drinkers was 13 years, and the first time they were drunk was at age 14. The mean age of first cannabis use among 11th-grade users was 14 years.
- ❑ The average age of initiation for smoking and drinking has increased over the past decade, while the average age of first cannabis use has remained stable.

Perceived Risk Associated with Drug Use

- ❑ Among the drug behaviours surveyed, students feel that the greatest risk of physical harm is associated with regular marijuana use (57%), followed by trying cocaine (44%), trying ecstasy (43%), trying LSD (41%), daily smoking (33%), binge drinking on weekends (28%), and trying marijuana (19%).

- ❑ Over the past decade, there were increases in the perceptions of risk associated with trying cocaine, ecstasy and LSD. Students in 2009 are also more likely to believe there is a great risk of harm in smoking 1 or 2 cigarettes a day, compared to their counterparts from a few years ago.

Perceived Availability of Drugs

- ❑ In 2009, the substance most readily available to students is alcohol (57% report that it would be “fairly easy” or “very easy” to obtain), followed by cigarettes (53%), cannabis (42%), ecstasy (13%), cocaine (13%), OxyContin or other prescription pain relievers (12%), and LSD (11%).
- ❑ Trend data on perceived availability indicate that alcohol, cannabis, cocaine, LSD, and ecstasy are more difficult to obtain in 2009 compared to a decade ago.

School and Neighbourhood

- ❑ Among all the grades, 9th-graders are most likely to report receiving education at school about alcohol, cannabis, and another drug.
- ❑ About 16% of students were drunk or high at school at least once during the 12 months before the survey. This percentage represents about 152,800 Ontario students in grades 7 to 12.
- ❑ About one-quarter (23%) of students report having been offered, sold, or given a drug at school during the 12 months before the survey.
- ❑ One-third (32%) of students report that someone tried to sell them drugs anywhere, at least once during the 12 months before the survey.