DETAILED OSDUHS FINDINGS

# Drug Use Among Ontario Students 1977–2009

Angela Paglia-Boak · Robert E. Mann · Edward M. Adlaf · Jürgen Rehm

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Centre for Addiction and Mental Health
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**OSDUHS**
Ontario Student Drug Use and Health Survey

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# 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
  - tranquillizers/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
  - tranquillizers/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<br>• Binge Drinking<br>• Cigarettes<br>• Cannabis<br>• Stimulants (NM) | • Glue<br>• Solvents<br>• OTC cough/cold medication |
| Northern Ontario | |
| | • Alcohol<br>• Binge Drinking<br>• Cigarettes<br>• Cannabis<br>• Salvia Divinorum<br>• OxyContin (NM)<br>• 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%

- 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 | • Cigarettes |
| • Alcohol | |
| • Binge Drinking | |
| • LSD | • LSD |
| • PCP | • PCP |
| • Hallucinogens other than LSD and PCP | • Hallucinogens other than LSD and PCP |
| • Methamphetamine | |
| • Crack | • Crack |
| • Heroin | |
| • Ecstasy* | • Ecstasy* |
| • Rohypnol (NM)* | • Rohypnol (NM)* |
| | • Stimulants (NM) |
| • Any drug incl. cannabis‡ | |
| • Any drug excl. cannabis‡ | • 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<br>2009 vs. 2007 (**bolded**) and 2009 vs. 1999 | |
|---|---|
| **7th-Graders** | |
| • Cigarettes | • Alcohol |
| • **Cannabis** | • Methamphetamine |
| • Any drug incl. cannabis ‡ | |
| **8th-Graders** | |
| • Cigarettes | • Alcohol |
| • Binge Drinking | • Cannabis |
| • LSD | • PCP |
| • Other Hallucinogens† | • Methamphetamine |
| • Ecstasy* | • **Opioid Pain Relievers** (NM) |
| • Any drug incl. cannabis ‡ | • Any drug excl. cannabis ‡ |
| **9th-Graders** | |
| • Cigarettes | • Alcohol |
| • LSD | • PCP |
| • Other Hallucinogens† | • Methamphetamine |
| • Ecstasy* | • Any drug incl. cannabis ‡ |
| • Any drug excl. cannabis ‡ | |
| **10th-Graders** | |
| • Cigarettes | • Alcohol |
| • LSD | • PCP |
| • Other Hallucinogens† | • Methamphetamine |
| • Crack | • Any drug excl. cannabis ‡ |
| **11th-Graders** | |
| • Cigarettes | • LSD |
| • PCP | • Other Hallucinogens† |
| • Ecstasy* | • Methamphetamine |
| • Any drug excl. cannabis ‡ | • Any drug incl. cannabis |
| **12th-Graders** | |
| • Cigarettes | • LSD |
| • Other Hallucinogens† | • Methamphetamine |
| • Any drug excl. cannabis ‡ | • 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<br>2009 vs. 2007 (**bolded**) and 2009 vs. 1999 | |
|---|---|
| **Toronto** | |
| • Cigarettes | • LSD |
| • PCP | • Other Hallucinogens† |
| • Methamphetamine | • Any drug excl. cannabis ‡ |
| **Northern Ontario** | |
| • Cigarettes | • Alcohol |
| • LSD | • PCP |
| • Other Hallucinogens† | • Methamphetamine |
| • **Opioid Pain Relievers** (NM) | • Any drug excl. cannabis ‡ |
| **Western Ontario** | |
| • Cigarettes | • Alcohol |
| • LSD | • PCP |
| • Other Hallucinogens† | • Methamphetamine |
| • Crack | • Heroin |
| • Ecstasy* | • Rohypnol (NM)* |
| • Stimulants (NM) | • Any drug incl. cannabis ‡ |
| • Any drug excl. cannabis ‡ | |
| **Eastern Ontario** | |
| • Cigarettes | • Glue |
| • Solvents | • LSD |
| • PCP | • Other Hallucinogens† |
| • Methamphetamine | • Crack |
| • Heroin | • 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 tranquillizers/sedatives):

- alcohol
- stimulants (NM)
- tranquillizers/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 hazardously. 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 hazardously.

- 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.

# Résumé du rapport détaillé sur la consommation de drogues – SCDSEO 2009

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 l'étude permanente la plus ancienne menée auprès des adolescents au Canada et se classe au deuxième rang parmi les études les plus anciennes en Amérique du Nord. Cette étude repose sur 17 sondages effectués tous les deux ans depuis 1977. Au total, 9 112 élèves (65 % des élèves choisis) de la 7e à la 12e année répartis dans 47 conseils scolaires, 181 écoles et 573 classes ont participé au SCDSEO 2009, qui a été administré par l'Institut de recherche sociale de l'Université York. Le rapport décrit la consommation actuelle d'alcool, de tabac et de drogues illicites, l'utilisation de médicaments sur ordonnance à des fins non médicales (NM) et les changements survenus depuis 1977. Les données sont fournies pour deux groupes d'élèves constitués à des fins d'analyse : ceux de la 7e à la 12e année, d'une part, et ceux de 7e, 9e et 11e années, d'autre part. Le premier groupe sert à évaluer les tendances actuelles et sur 10 ans (1999-2009) en matière de consommation de drogues, et le second, les tendances à long terme (1977-2009). Toutes les données reposent sur des autoévaluations issues de questionnaires anonymes administrés en classe entre novembre 2008 et juin 2009.

**Consommation de drogues (en pourcentage) au cours de la dernière année parmi l'échantillon total, selon le sexe et l'année d'études, SCDSEO 2009**

| | Total | Garçons | Filles | | 7e | 8e | 9e | 10e | 11e | 12e | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Alcool | **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 | * |
| Excès occasionnels d'alcool | **24,7** | 25,9 | 23,4 | | 2,7 | 5,1 | 16,3 | 25,9 | 35,6 | 48,5 | * |
| Analgésiques opioïdes (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 | * |
| Médicaments contre la toux/le rhume en VL | **7,2** | 6,8 | 7,6 | | 6,0 | 6,3 | 6,8 | 7,9 | 7,8 | 7,9 | |
| Solvants | **5,3** | 4,2 | 6,6 | * | 8,2 | 9,0 | 5,2 | 4,9 | 3,3 | 3,1 | * |
| Hallucinogènes autre que le LSD et le 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 | * |
| Somnifères en VL | **2,6** | 2,2 | 3,1 | | 1,6 | 1,9 | 2,6 | 2,8 | 3,9 | 2,3 | |
| Cocaïne | **2,6** | 2,8 | 2,3 | | 0,8 | 1,1 | 1,1 | 2,3 | 3,7 | 5,1 | * |
| Stramoine | **2,3** | 2,8 | 1,8 | | s | s | 2,1 | 2,5 | 4,2 | 3,4 | * |
| Colle | **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 | * |
| Médicaments pour le THADA (NM) | **1,6** | 1,7 | 1,6 | | 0,8 | 1,2 | 1,8 | 1,6 | 2,5 | 1,7 | |
| Tranquillisants/Sédatifs (NM) | **1,6** | 1,3 | 1,9 | * | s | 1,0 | 1,0 | 2,1 | 2,0 | 2,5 | * |
| Kétamine | **1,6** | 1,8 | 1,4 | | s | s | s | 1,5 | 2,3 | 2,8 | * |
| Méthamphétamine (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 | |
| Héroïne | **0,7** | 0,9 | s | * | s | s | s | s | s | 1,0 | * |
| Méthamphétamine (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 | |
| Tout médicament sur ordonnance (NM) | **20,3** | 18,1 | 22,8 | * | 10,5 | 15,7 | 21,7 | 23,7 | 24,7 | 22,8 | * |
| Toute drogue illicite, y compris les médicaments sur ordonnance (NM) | **41,7** | 42,3 | 41,0 | | 21,5 | 26,9 | 38,1 | 45,9 | 51,8 | 55,4 | * |

Nota : excès occasionnels d'alcool (5 verres ou plus par occasion) se rapporte aux quatre semaines précédentes ; NM = fins non médicales (sans ordonnance d'un médecin) ; VL = médicament en vente libre utilisé à des fins non médicales (pour ressentir un état d'extase) ; « Tout médicament sur ordonnance NM » renvoie à l'utilisation, à des fins non médicales, de l'un ou l'autre de cinq types de médicaments sur ordonnance (sauf le Rohypnol) ; « Toute drogue illicite, y compris les médicaments sur ordonnance NM » renvoie à l'usage de toute drogue indiquée dans le tableau, sauf l'alcool et le tabac ; s = estimation supprimée pour des raisons de fiabilité ; * différence importante entre les sexes ou les années d'études ($p<0,05$), *sans* tenir compte d'autres facteurs.

## Différences entre les sous-groupes pour 2009 (7e à 12e année)

- Les garçons sont plus susceptibles que les filles de :
  - de prendre de l'alcool ;
  - de prendre du cannabis ;
  - de fumer la cigarette ;
  - de prendre des hallucinogènes autres que le LSD et le PCP ;
  - de prendre de la salvia divinorum ;
  - de prendre de la méthamphétamine ;
  - de prendre de l'héroïne.

- Les filles sont plus susceptibles que les garçons de prendre :
  - des analgésiques opioïdes (NM) ;
  - des solvants ;
  - des stimulants (NM) ;
  - des tranquillisants et des sédatifs (NM) ;
  - tout médicament sur ordonnance (NM).

- La consommation de drogues au cours de la dernière année varie selon l'année d'études pour la plupart des substances :
  - alcool ;
  - alcool (excès occasionnels) ;
  - cannabis ;
  - analgésiques opioïdes (NM) ;
  - cigarettes ;
  - solvants ;
  - stimulants (NM) ;
  - LSD ;
  - hallucinogènes autres que le LSD et le PCP ;
  - ecstasy ;
  - cocaïne ;
  - tranquillisants/sédatifs (NM) ;
  - OxyContin (NM) ;
  - héroïne ;
  - méthamphétamine ;
  - kétamine ;
  - tout médicament sur ordonnance (NM) ;
  - toute drogue illicite, y compris l'utilisation d'un médicament sur ordonnance (NM).

L'usage de ces drogues tend à augmenter selon l'année d'études, à l'exception des solvants, dont l'usage diminue d'une année d'études à une autre.

Pour les besoins du sondage, on divise la province en quatre régions : 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).

- Il y a des différences importantes entre les régions sur le plan de la consommation d'un grand nombre de drogues au cours de la dernière année. Les élèves des régions de l'Ouest et de l'Est ne diffèrent pas de la moyenne provinciale pour quelle que drogue que ce soit. Par contre, les élèves de Toronto et de la région du Nord diffèrent de la moyenne provinciale, tel qu'indiqué dans le tableau ci-dessous.

| Consommation de drogues inférieure à la moyenne provinciale | Consommation de drogues supérieure à la moyenne provinciale |
|---|---|
| **Toronto** | |
| • Alcool<br>• Excès occasionnels d'alcool<br>• Cigarettes<br>• Cannabis<br>• Stimulants (NM) | • Colle<br>• Solvants<br>• Médicaments contre la toux/le rhume en VL |
| **Nord de l'Ontario** | |
| | • Alcool<br>• Excès occasionnels d'alcool<br>• Cigarettes<br>• Cannabis<br>• Salvia Divinorum<br>• OxyContin (NM)<br>• Stimulants (NM) |

VL = en vente libre ; NM = utilisation à des fins non médicales.

## Changements importants dans la consommation de drogues de 2007 à 2009 (7e à 12e année)

On n'a relevé de changement important de la consommation pour aucune drogue parmi l'échantillon total d'élèves entre 2007 et 2009 (aucune augmentation ni diminution).

## Changements sur 10 ans, de 1999 à 2009 (7e à 12e année)

On a relevé des changements importants dans la consommation de drogues au cours de la dernière année parmi l'échantillon total d'élèves de 1999 à 2009 ; tous ces changements ont été des baisses :

- alcool : de 66,0 % à 58,2 %
- cigarettes : de 28,4 % à 11,7 %
- solvants : de 7,6 % à 5,3 %
- stimulants (NM) : de 7,3 % à 4,8 %
- LSD : de 6,8 % à 1,8 %
- PCP : de 3,0 % à 0,8 %
- hallucinogènes (autres que le LSD et le PCP) : de 12,8 % à 5,0 %
- colle : de 3,8 % à 2,1 %
- méthamphétamine : de 5,0 % à 1,4 %
- crack : de 2,5 % à 1,1 %
- héroïne : de 1,9 % à 0,7 %
- ecstasy : de 6,0 % (2001) à 3,2 %
- Rohypnol (NM) : de 3,1 % (2001) à 0,7 %

- On a remarqué une diminution importante d'un indice mesurant l'usage de l'une ou l'autre de 10 drogues illicites étudiées, *y compris le cannabis*, entre 1999 et 2009 (cet indice est passé de 32,3 % à 27,9 %).

- On a remarqué une diminution importante d'un autre indice semblable à celui mentionné ci-dessus, mais *excluant le cannabis*, entre 1999 et 2009 (cet indice est passé de 20,5 % à 10,1 %).

## Changements relevés dans les sous-groupes, de 1999 à 2009 (7e à 12e année)

À l'exception de l'utilisation d'OxyContin à des fins non médicales (qui a augmenté en 2009 par rapport à 2005 chez les élèves de 10e année et les élèves de l'Est de l'Ontario), la consommation a diminué dans les sous-groupes de 1999 à 2009.

**Sexe :** On n'a relevé aucun changement sur le plan de la consommation de drogues ni chez les garçons, ni chez les filles depuis 2007. Toutefois, la consommation de drogues a diminué tant chez les garçons que chez les filles en 2009 par rapport aux estimations respectives de 1999. Ces diminutions sont présentées dans le tableau suivant.

Diminutions de la consommation de drogues selon le sexe
2009 par rapport à 1999

| Garçons | Filles |
|---|---|
| • Cigarettes | • Cigarettes |
| • Alcool | |
| • Excès occasionnels d'alcool | |
| • LSD | • LSD |
| • PCP | • PCP |
| • Hallucinogènes autres que le LSD et le PCP | • Hallucinogènes autres que le LSD et le PCP |
| • Méthamphétamine | |
| • Crack | • Crack |
| • Héroïne | |
| • Ecstasy* | • Ecstasy* |
| • Rohypnol (NM)* | • Rohypnol* |
| | • Stimulants (NM) |
| • Toute drogue, y compris le cannabis‡ | |
| • Toute drogue, sauf le cannabis‡ | • Toute drogue, sauf le cannabis‡ |

NM = utilisation à des fins non médicales ; * par rapport aux estimations de 2001 ; ‡ indice basé sur un nombre limité de drogues illicites étudiées au fil des ans.

**Année d'études :** On a relevé des diminutions importantes de la consommation de drogues au cours des 10 dernières années pour toutes les années d'études. Ces diminutions sont présentées dans le tableau suivant.

Diminutions de la consommation de drogues selon l'année d'études
2009 par rapport à 2007 (**en gras**)
et 2009 par rapport à 1999

| Élèves de 7e année | |
|---|---|
| • Cigarettes | • Alcool |
| • **Cannabis** | • Méthamphétamine |
| • Toute drogue, y compris le cannabis‡ | |
| **Élèves de 8e année** | |
| • Cigarettes | • Alcool |
| • Excès occasionnels d'alcool | • Cannabis |
| • LSD | • PCP |
| • Autres hallucinogènes† | • Méthamphétamine |
| • Ecstasy* | • **Analgésiques opioïdes** (NM) |
| • Toute drogue, y compris le cannabis‡ | • Toute drogue, sauf le cannabis‡ |
| **Élèves de 9e année** | |
| • Cigarettes | • Alcool |
| • LSD | • PCP |
| • Autres hallucinogènes† | • Méthamphétamine |
| • Ecstasy* | • Toute drogue, y compris le cannabis‡ |
| • Toute drogue, sauf le cannabis‡ | |
| **Élèves de 10e année** | |
| • Cigarettes | • Alcool |
| • LSD | • PCP |
| • Autres hallucinogènes† | • Méthamphétamine |
| • Crack | • Toute drogue, sauf le cannabis‡ |
| **Élèves de 11e année** | |
| • Cigarettes | • LSD |
| • PCP | • Autres hallucinogènes† |
| • Ecstasy* | • Méthamphétamine |
| • Toute drogue, sauf le cannabis‡ | • Toute drogue, y compris le cannabis |
| **Élèves de 12e année** | |
| • Cigarettes | • LSD |
| • Autres hallucinogènes† | • Méthamphétamine |
| • Toute drogue, sauf le cannabis‡ | • Stimulants (NM) |

NM = utilisation à des fins non médicales ; * par rapport aux estimations de 2001 ; † autres que le LSD et le PCP ; ‡ indice basé sur un nombre limité de drogues illicites étudiées au fil des ans.

**Région :** On a relevé des diminutions importantes de la consommation de drogues au cours des 10 dernières années dans toutes les régions. Ces diminutions sont présentées dans le tableau suivant.

Diminutions de la consommation de drogues selon la région
2009 par rapport à 2007 (**en gras**)
et 2009 par rapport à 1999

| Toronto | |
|---|---|
| • Cigarettes | • LSD |
| • PCP | • Autres hallucinogènes† |
| • Méthamphétamine | • Toute drogue, sauf le cannabis‡ |
| **Nord de l'Ontario** | |
| • Cigarettes | • Alcool |
| • LSD | • PCP |
| • Autres hallucinogènes† | • Méthamphétamine |
| • **Analgésiques opioïdes** (NM) | • Toute drogue, sauf le cannabis‡ |
| **Ouest de l'Ontario** | |
| • Cigarettes | • Alcool |
| • LSD | • PCP |
| • Autres hallucinogènes† | • Méthamphétamine |
| • Crack | • Héroïne |
| • Ecstasy* | • Rohypnol* |
| • Stimulants (NM) | • Toute drogue, y compris le cannabis‡ |
| • Toute drogue, sauf le cannabis‡ | |
| **Est de l'Ontario** | |
| • Cigarettes | • Colle |
| • Solvants | • LSD |
| • PCP | • Autres hallucinogènes† |
| • Méthamphétamine | • Crack |
| • Héroïne | • Toute drogue, sauf le cannabis ‡ |

NM = utilisation à des fins non médicales ; * par rapport aux estimations de 2001 ; † autres que le LSD et le PCP ; ‡ indice basé sur un nombre limité de drogues illicites étudiées au fil des ans.

## Changements à long terme, de 1977 à 2009 (7e, 9e et 11e années seulement)

On a effectué plusieurs estimations de la prévalence de la consommation de drogues depuis 1977. On a constaté que cette consommation a atteint un sommet à la fin des années 1970, a baissé à la fin des années 1980 et au début des années 1990 et a remonté à la fin des années 1990 et au début des années 2000. On a cerné les quatre tendances suivantes sur le plan des changements à long terme :

**1re tendance :** La prévalence de la consommation des drogues suivantes a atteint son niveau le plus bas en 2005 et est demeurée stable depuis :

- cigarettes ;
- LSD.

**2e tendance :** La prévalence de la consommation des drogues suivantes diminue graduellement depuis 1979 et l'usage en 2009 est nettement plus faible que les sommets atteints à la fin des années 1970 et des années 1990 (et en 2003 pour les tranquillisants/sédatifs) :

- alcool ;
- stimulants (NM) ;
- tranquillisants/sédatifs (NM).

**3e tendance :** La prévalence de la consommation des drogues suivantes a diminué après 1979 et a remonté à la fin des années 1990 (en 2003 pour la cocaïne). L'usage en 2009 est nettement inférieur aux deux sommets atteints :

- cocaïne ;
- méthamphétamine ;
- héroïne ;
- PCP ;
- colle.

**4e tendance :** La 4e tendance est semblable à la 3e sauf que, en 2009, l'usage des substances suivantes est nettement inférieur à un des sommets atteints ou aux deux sommets. Toutefois, *la consommation actuelle est nettement supérieure à ce qu'elle était à la fin des années 1980 et au début des années 1990* :

- cannabis ;
- alcool (excès occasionnels) ;
- solvants ;
- hallucinogènes autre que le LSD et le PCP ;
- ecstasy.

## Aperçu de l'usage de cigarettes

- En 2009, 12 % des élèves ont déclaré avoir fumé la cigarette au cours de la dernière année (soit environ 119 600 élèves). Environ 5 % des élèves (quelque 52 500 élèves) fument tous les jours.

- Les garçons (13 %) sont plus susceptibles que les filles (11 %) de fumer. Il y a des différences importantes selon l'année d'études (allant de 1 % des élèves de 7e année à 20 % des élèves de 12e année). On a également relevé des différences régionales. Les élèves du Nord (18 %) sont les plus susceptibles de fumer, tandis que ceux de Toronto (7 %) sont les moins susceptibles de le faire. Les élèves de l'Ouest (13 %) et ceux de l'Est (11 %) se situent entre ces deux groupes.

- Les élèves qui fument ont déclaré que la plupart des cigarettes leur sont fournies par des amis ou des membres de leur famille.

- En 2009, on a demandé pour la première fois aux élèves participant au SCDSEO de répondre à des questions sur leur usage de cigarettes de contrebande. Environ 6 % des élèves ont déclaré avoir fumé des cigarettes de contrebande au cours de la dernière année. Cela représente quelque 60 000 élèves en Ontario. Parmi les élèves ayant fumé au cours de la dernière année, 53 % ont déclaré avoir fumé des cigarettes de contrebande.

## Aperçu de la consommation d'alcool

- En 2009, 58 % des élèves ont dit avoir bu de l'alcool (davantage qu'une petite gorgée prise pour en faire l'essai) au cours des 12 mois ayant précédé le sondage. Cela représente environ 591 700 élèves en Ontario. Les garçons (60 %) sont plus susceptibles que les filles (56 %) de boire. La consommation d'alcool au cours de la dernière année varie selon l'année d'études (passant de 23 % des élèves de 7e année à 83 % des élèves de 12e année). Les élèves de Toronto (45 %) sont les moins susceptibles de boire, tandis que ceux du Nord (64 %) sont les plus susceptibles de le faire.

- La consommation d'alcool chez les élèves se produit surtout lors d'occasions spéciales seulement (22%). Treize pour cent des élèves ont déclaré avoir consommé de l'alcool plusieurs fois

par mois, tandis que 10% boivent une fois par semaine ou plus souvent.

- Le quart des élèves (25 %) ont déclaré avoir fait un excès d'alcool (au moins cinq verres par occasion) au moins une fois pendant le mois qui a précédé le sondage. Cela représente environ 250 700 élèves. Environ la même proportion d'élèves (23 %) ont déclaré s'être enivrés au moins une fois au cours du mois écoulé.

- En outre, environ 9 % des élèves ont dit avoir fait un excès d'alcool deux ou trois fois pendant le mois qui a précédé le sondage, et 6 % ont dit l'avoir fait quatre fois ou plus.

- Environ 21 % des élèves (35 % des buveurs) ont dit que leur consommation d'alcool était dangereuse ou néfaste telle que mesurée à l'aide de l'Épreuve de recherche des troubles liés à l'alcool. Cela représente environ 211 800 élèves. Les filles sont tout aussi susceptibles que les garçons d'avoir une telle consommation. La consommation dangereuse augmente selon l'année d'études (de 3 % des élèves de 7e année à 42 % des élèves de 12e année). Comparativement aux élèves des trois autres régions, ceux de la région de Toronto (12 %) sont les moins susceptibles d'avoir une consommation d'alcool dangereuse.

- Un élève sur 10 (10 %) a dit s'être blessé ou avoir blessé quelqu'un au cours de la dernière année parce qu'il avait bu.

## Aperçu de la consommation de cannabis

- Le quart (26 %) des élèves prennent du cannabis (soit environ 261 500 élèves). Les garçons (29 %) sont plus susceptibles que les filles (22 %) de prendre du cannabis. La consommation augmente à chaque année d'études, passant de 1 % des élèves de 7e année à 46 % de ceux de 12e année. Sur le plan régional, les élèves de Toronto (20 %) sont les moins susceptibles de faire usage de cette drogue, tandis que ceux du Nord (32 %) sont les plus susceptibles de le faire.

- Environ 3 % des élèves prennent du cannabis tous les jours. Cela représente environ 31 000 élèves en Ontario.

- Un usager de cannabis sur dix (11 %) pourrait avoir une dépendance (3 % de tous les élèves), telle que mesurée par le Questionnaire sur la gravité de la dépendance.

## Utilisation de médicaments sur ordonnance à des fins non médicales

- L'OxyContin est le nom de marque d'un analgésique sur ordonnance qui crée très facilement une dépendance et qui contient de l'oxycodone, un opioïde. En 2009, environ 2 % des élèves ont déclaré avoir pris de l'OxyContin à des fins non médicales (c'est-à-dire sans ordonnance) au cours de la dernière année. Cela représente environ 16 700 élèves en Ontario. L'estimation de 2009 (2 %) est semblable aux estimations de 2007 et 2005. On n'a pas relevé de différence majeure entre les garçons et les filles. Toutefois, l'utilisation augmente considérablement selon l'année d'études. Elle atteint son niveau le plus élevé en 11e année (3 %). Les élèves du Nord (3 %) sont les plus susceptibles de prendre de l'OxyContin à des fins non médicales.

- Dans le cadre du SCDSEO, on a également posé des questions aux élèves sur l'utilisation d'analgésiques opioïdes sur ordonnance de catégorie générale (p. ex., Percocet, Percodan, Tylenol 3, Demerol, codéine) sans avoir obtenu d'ordonnance. Environ 18 % des élèves ont déclaré avoir pris un analgésique opioïde sur ordonnance à des fin non médicales au moins une fois au cours de la dernière année (environ 180 200 élèves). Les filles (20 %) sont plus susceptibles que les garçons (16 %) de prendre un analgésique opioïde à des fins non médicales. L'utilisation varie considérablement selon les années d'études. Les élèves de 7e et 8e années sont les moins susceptibles de prendre ces médicaments. Il n'y a pas de variation importante entre les régions. Les trois quarts des élèves qui avaient pris un analgésique opioïde à des fins non médicales ont déclaré se l'être procuré à la maison.

- Environ 1 % des élèves ont déclaré avoir pris, sans ordonnance, un médicament prescrit pour traiter le trouble d'hyperactivité avec déficit de l'attention (THADA) chez les enfants (p. ex., Ritalin, Concerta, Adderall, Dexedrine) (environ 16 500 élèves). Il n'y a pas de différences

importantes selon le sexe, l'année d'études ou la région.

## Utilisation de médicaments en vente libre à des fins non médicales

- Dans le cadre du SCDSEO, on a posé des questions aux élèves sur leur utilisation de somnifères (p. ex., Nytol) offerts en vente libre dans les pharmacies, à des fins autres que pour dormir. Environ 3 % des élèves ont déclaré avoir pris des somnifères à des fins non médicales au moins une fois au cours de la dernière année. Il n'y a pas de différences importantes selon le sexe, l'année d'études ou la région.

- En 2009, pour la première fois, on a posé des questions aux élèves sur leur utilisation de médicaments contre la toux et le rhume en vente libre contenant une drogue appelée dextrométhorphane dans le but d'éprouver un état d'extase. Dans l'ensemble, 7 % des élèves ont déclaré avoir pris ce type de médicament à cette fin au cours de la dernière année. Cela représente environ 70 600 élèves de l'Ontario de la 7e à la 12e année. Il n'y a pas de différences importantes selon le sexe ou l'année d'études. Toutefois il y a une différence régionale : les élèves de Toronto (11 %) sont les plus susceptibles de prendre de tels médicaments à cette fin.

## Conséquences et problèmes liés à la consommation d'alcool et d'autres drogues

### *Drogues et conduite de véhicules automobiles*

- Un élève sur huit (12 %) de la 10e à la 12e année, titulaire d'un permis de conduire, a dit avoir pris le volant une heure ou moins après avoir consommé deux verres ou plus d'alcool au moins une fois au cours de la dernière année. Le pourcentage d'élèves qui ont conduit un véhicule après avoir bu de l'alcool est demeuré stable depuis 1999, mais a diminué considérablement depuis la fin des années 1970 et le début des années 1980.

- Le pourcentage d'élèves qui ont déclaré avoir conduit un véhicule après avoir pris du cannabis est plus élevé que le pourcentage d'élèves qui ont déclaré avoir conduit un véhicule après avoir bu de l'alcool. Environ un conducteur sur six de la 10e à la 12e année (17 %) a dit avoir conduit un véhicule une heure ou moins après avoir consommé du cannabis au moins une fois au cours de la dernière année. Le pourcentage actuel est semblable à l'estimation faite à partir des données de la première année (2001).

- Environ un quart des élèves de la 7e à la 12e année (23 %) ont déclaré avoir été à bord d'un véhicule conduit par une personne qui avait consommé de l'alcool, et 18 % ont déclaré avoir été à bord d'un véhicule conduit par une personne qui avait pris de la drogue. La fréquence de ces comportements a diminué considérablement au cours des 10 dernières années.

### *Problème potentiel lié à l'utilisation de drogues*

- Environ un élève sur six (16 %) pourrait avoir un problème lié à l'utilisation de drogues selon l'échelle CRAFFT. Cela représente 164 600 élèves. Cette estimation est demeurée stable depuis 2003.

- Un faible pourcentage des élèves (1,4 %) ont déclaré avoir suivi un programme de traitement de l'alcoolisme ou de la toxicomanie au cours de la dernière année. Cette estimation représente environ 14 100 élèves.

### *Consommation dangereuse d'alcool et niveau élevé de détresse psychologique*

- Environ 8 % des élèves (85 400 élèves de l'Ontario) ont signalé à la fois une consommation dangereuse d'alcool et un niveau élevé de détresse psychologique (p. ex., symptômes d'angoisse et de dépression).

- Les filles sont plus susceptibles que les garçons d'avoir ces problèmes jumelés (11 % par rapport à 6 %). Il y a des différences importantes à ce chapitre selon l'année d'études. On enregistre un sommet de 15 % au cours des dernières années d'études. Il n'y a pas de différences importantes entre les régions.

## Autres faits saillants

- En 2009, près du tiers des élèves (31 %) ont déclaré n'avoir pris aucune substance au cours de la dernière année, y compris l'alcool et le tabac.

- Le quart des élèves (24 %) ont déclaré qu'ils n'avaient pris que de l'alcool. Environ 6 % des élèves ont déclaré avoir consommé de l'alcool, du tabac, du cannabis *et* au moins une autre drogue au cours de la dernière année.

- Un très faible pourcentage des élèves (moins de 1 %) ont déclaré s'être injectés une drogue illicite au cours de la dernière année. Cette estimation représente environ 6 600 élèves ontariens.

- Les pourcentages d'élèves qui ont déclaré avoir pris de la drogue pour la première fois au cours de la dernière année sont les suivants : 17 % pour l'alcool, 6 % pour la cigarette, 9 % pour le cannabis et 3 % pour les drogues illicites autres que le cannabis.

### *Consommation de drogues à un jeune âge*

De nos jours, moins d'élèves consomment de l'alcool, du tabac et du cannabis à un jeune âge.

- En 2009, seulement 2 % environ des élèves de 7e année avaient commencé à fumer la cigarette en 6e année (à l'âge de 11 ans), par rapport à 27 % en 1997 et 41 % en 1981.

- En 2009, 17 % des élèves de 7e année avaient commencé à consommer de l'alcool en 6e année (à l'âge de 11 ans). Ce pourcentage était de 31 % en 2007, de 42 % en 2003 et de 50 % en 1981.

- En 2009, 2 % des élèves de 7e année avaient commencé à prendre du cannabis en 7e année (à l'âge de 12 ans), par rapport à 8 % en 2003 et 9 % en 1981.

- En 2009, l'âge moyen auquel les fumeurs de 11e année ont fumé leur première cigarette était de 13 ans. L'âge moyen où les buveurs de 11e année ont pris leur première boisson alcoolisée était de 13 ans, et celui où ils ont été ivres pour la première fois était de 14 ans. L'âge moyen de la première consommation de cannabis chez les usagers de 11e année était de 14 ans.

- L'âge moyen où les élèves ont fumé et bu pour la première fois a augmenté au cours des 10 dernières années, tandis que l'âge moyen où ils ont pris du cannabis pour la première fois est demeuré stable.

### *Risque perçu associé à la consommation de drogues*

- Parmi les comportements étudiés qui sont associés à la consommation de drogues, le plus dangereux, selon les élèves, était le fait de fumer régulièrement de la marijuana (57 %), suivi de l'essai de la cocaïne (44 %), de l'essai de l'ecstasy (43 %), de l'essai du LSD (41 %), de l'usage quotidien du tabac (33 %), des excès d'alcool la fin de semaine (28 %) et de l'essai de la marijuana (19 %).

- Au cours des 10 dernières années, on a constaté une hausse de la perception des risques associés à l'essai de la cocaïne, de l'ecstasy et du LSD. En 2009, les élèves étaient plus susceptibles de croire que le fait de fumer 1 ou 2 cigarettes par jour est très risqué que ne le croyaient les élèves il y a quelques années.

### *Disponibilité perçue des drogues*

- En 2009, les substances les plus faciles à obtenir pour les élèves étaient l'alcool (57 % des élèves ont déclaré qu'il serait « assez facile » ou « très facile » de s'en procurer), la cigarette (53 %), le cannabis (42 %), l'ecstasy (13 %), la cocaïne (13 %), l'OxyContin ou d'autres analgésiques sur ordonnance (12 %) et le LSD (11 %).

- Les tendances concernant la disponibilité perçue des drogues laissent croire qu'il est plus difficile de se procurer de l'alcool, du cannabis, de la cocaïne, du LSD et de l'ecstasy en 2009 qu'il y a 10 ans.

### *École et quartier*

- Les élèves de 9e année sont les plus susceptibles d'avoir obtenu des renseignements à l'école sur l'alcool, le cannabis et une autre drogue.

- Environ 16 % des élèves ont déclaré avoir été sous l'influence de l'alcool ou de drogues à l'école au moins une fois au cours des 12 mois qui ont précédé le sondage. Ce pourcentage

représente environ 152 800 élèves ontariens de la 7e à la 12e année.

- Environ 23 % des élèves ont déclaré qu'on leur avait offert, vendu ou donné une drogue à l'école au cours des 12 mois qui ont précédé le sondage.

- Le tiers des élèves (32 %) ont déclaré qu'on avait essayé de leur vendre des drogues à un endroit ou un autre au moins une fois au cours des 12 mois qui ont précédé le sondage.

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# 1. INTRODUCTION

This report describes the extent and patterns of alcohol and other drug use among Ontario students in grades 7 through 12 in 2009, and changes since 1977. The findings are based on the 17th cycle of the *Ontario Student Drug Use and Health Survey* (OSDUHS), the longest systematic study of alcohol and drug use among a youthful population in Canada.

Cross-sectional surveys such as the OSDUHS contribute to an understanding of current and changing patterns of alcohol and other drug use in the general population, the problems stemming from use, and the associated social and demographic factors.

Some main objectives of the OSDUHS are to provide timely data regarding:

- the extent of alcohol, tobacco, and other drug use by students in grades 7 through 12, and trends in use since 1977;
- the extent and nature of alcohol-related and drug-related problems; and
- attitudes and beliefs about alcohol and other drug use.

The 2009 OSDUHS drug use report includes **new materia**l on the following issues:

- past-year use of salvia divinorum;
- past-year use of certain over-the-counter cold and cough medications to get "high";
- source of cigarettes; and
- smoking contraband cigarettes.

This report is restricted to descriptive findings related to alcohol and other drug use. Discussed are the prevalence and the frequency of use, changes in use, and the associations between drug use and selected demographic characteristics.

As well, the OSDUHS has broadened its scope to also include an array of mental and physical indicators and other risk behaviours, which are described in a companion report (Adlaf, Paglia-Boak, Beitchman, & Wolfe, 2008).

**History of the OSDUHS**

The OSDUHS is the longest ongoing school survey 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 Reginald Smart, four surveys from 1968 to 1974 monitored the extent of alcohol, tobacco and other drug use among Toronto students in grades 7, 9, 11 and 13. In 1977, the study was expanded to include students throughout the province of Ontario. In 1999, the study was again expanded to include students in grades 7 through to 13 (OAC). In 2003, grade 13 (OAC) was excluded, and the study was based on students in grades 7 to 12.

Since 1977, the study has surveyed thousands of students every two years, and to date, has interviewed over 70,000 students.

## Why Survey and Monitor Student Drug Use?

There are important reasons for estimating and monitoring drug use among adolescent students.

- The OSDUHS fits into the population health framework promoted by Health Canada and the World Health Organization, which is an evidence-based approach requiring the surveillance of a broad set of health indicators and influences among the general population. The resulting knowledge is applied to develop policies and programs to improve the well-being of the population.

- Monitoring surveys also provide a basis for evaluating objectives established by governmental and non-governmental agencies. Examples include the Drug Prevention Strategy for Canada's Youth (Canadian Centre on Substance Abuse, 2007), and health objectives outlined in "Healthy People 2010" (U.S. Department of Health and Human Services, 2000).

- Drug use among youth is a rapidly changing phenomenon, which requires frequent monitoring. Drugs can rise or fall in popularity from one year to the next, and related problems occur for youth, their families, their schools, and society as a whole. Indeed, in a short period we have seen several public health concerns emerge – for example, crack cocaine in the late 1980s, ecstasy, ketamine, GHB, and other "club drugs" in the 1990s, and more recent concern over the non-medical use of prescription drugs by young people. The emergence of new drugs or new forms of administration also warrants frequent assessment.

- Because population surveys have a scientific basis and a known representativeness, they can provide accurate data that can confirm or challenge anecdotal and media reports regarding the nature of drug use and its consequences. Thus, the results can inform the public and challenge myths. In the absence of reliable prevalence data, substantial misconceptions can develop and resources can be misallocated. For example, while methamphetamine use may be endemic in certain groups, the OSDUHS data have shown that it has not trickled down to the student population. Conversely, the survey has helped draw attention to the problem of cannabis use and driving among youth, stimulating a national public awareness campaign by the Canadian Public Health Association.

- Adolescents are at a pivotal developmental stage in which negative consequences due to drug use could result in negative life trajectories in later adolescence and adulthood.

- Even when the size of the drug-using population is stable, or declining, patterns of drug use among users and associated harms can differ dramatically over time. For example, the same population of users can be using drugs more or less hazardously at one point than another.

## What Do Drug Use Surveys Tell Us?

Drug use surveys provide important information that can be used to evaluate many aspects of drug use:

- the size of the adolescent student drug-using population (both the percentage and estimated number in the population);

- the factors that correlate with drug use;

- the identification of high-risk groups;

- and the changes in use and abuse over time.

But the size of the drug-using population and the pattern of drug use are only two components of

the harm caused by drug use. Whether the use of a given drug causes significant societal or individual problems depends on a host of factors in addition to the number of users. Some of these other factors include the pharmacological hazard of the given drug, purity levels, addictive potential, and economic and social costs of treatment and enforcement. As well, in evaluating the harm caused by drug use it is important to balance the relative number of users (the percentage using a drug) and the absolute number of users. Both pieces of information are important, and in some cases, considering only the percentages or absolute numbers can be misleading.

Consider, for example, that 1% of the OSDUHS sample represents about 10,000 students in grades 7 through 12. Clearly, our evaluation of harm to the public health will differ if this percentage refers to the number of students using cannabis once, versus the number of students sharing needles when injecting drugs or the number of students reporting serious consequences due to their use of alcohol or other drugs.

Because the same students are not surveyed at different times, repeated cross-sectional surveys cannot evaluate developmental patterns or individual change (e.g., how patterns of drug use change with increasing age), nor can they fully resolve issues of causal order (e.g., whether poor grades cause drug use or whether drug use causes poor grades). However, repeated cross-sectional surveys are especially efficient at identifying and measuring period trends (e.g., changes over time in the percentage of the population using alcohol and other drugs) in the population under study.

## What Student Drug Use Surveys Do Not Tell Us?

Because school-based drug use surveys are based on adolescents in school, their data cannot fully measure the totality of substance problems. Student surveys cannot address the following:

- the extent and changes in drug use among non-students such as youth in institutions, drop-outs, and “street youth”;

- the nature and changes in drug problems in the street drug scene. Student drug use typically plays a small role in indicators such as arrests, convictions, deaths, and treatment. Thus, student drug use trends need not be similar to trends in other drug use indicators.

## Strengths and Weaknesses of Student Drug Use Surveys

Although no single indicator can fully describe the contours of the drug problem, in our view, the strengths of the survey method far outweigh the limitations in estimating the size of the drug-using population.

| Strengths | Weaknesses |
|---|---|
| ■ The survey is based on scientific, random (probability) sampling methods that result in representative samples in which the sampling error of drug use estimates can be calculated. | ■ The survey is restricted to adolescent students enrolled in a publicly-funded school. Excluded by design are groups in which drug use is typically higher, such as dropouts and "street youth." |
| ■ Drug use surveys are often the only feasible means to measure the size of the drug-using population since no other official source exists (e.g., sales data). | ■ Because the reporting of drug use is based on self-reports, there is an unmeasurable potential for the underestimation of drug use caused by intentional (i.e., underreporting) and unintentional errors (e.g., memory errors). |
| ■ The survey is widely dispersed throughout Ontario with typically over 40 school boards and over 100 schools participating. | ■ The survey is designed to provide precise estimates of drug use at the provincial level and by grade level. The survey, however, is not designed to provide precise estimates for local geographic areas. |
| ■ The survey is administered on a classroom basis. Not only is this cost-effective, but it tends to increase the rate of student participation. As well, the questionnaire can be completed in an anonymous setting, which is the most critical factor in reducing the underreporting of drug use. Indeed, school administered surveys typically obtain higher reports of drug use than do household surveys. | ■ Highly structured surveys do not allow for the probing of rich qualitative information. |
| ■ Unlike enforcement data (e.g., arrests, convictions) and treatment data, survey data captures the widest population of drug users, from former to active users, or experimenters. | |
| ■ Because surveys are based on individual responses, they can assess the correlates and predictors of drug use and identify the characteristics of high-risk groups. | |

# 2. METHOD

## Sampling Design

### Target Population

For each of the 17 surveys, the target population was composed of all students enrolled in Ontario's public and Catholic regular school systems. Thus it excludes those enrolled in private schools, those institutionalized for correctional or health reasons, those on First Nations reserves, military bases, and in the far northern region of Ontario (a total of about 7% of Ontario students).

Table 2.1 Thirty-Two Years of the OSDUHS

| | 1977 | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **No. Boards** | 20 | 20 | 31 | 31 | 20 | 24 | 25 | 27 | 25 | 20 | 22 | 38 | 41 | 37 | 42 | 43 | 47 |
| **No. Schools** | 104 | 87 | 182 | 227 | 193 | 170 | 171 | 179 | 165 | 137 | 168 | 111 | 106 | 126 | 137 | 119 | 181 |
| **No. Classes** | 196 | 195 | 198 | 261 | 205 | 215 | 224 | 221 | 233 | 223 | 234 | 285 | 272 | 383 | 445 | 385 | 573 |
| **No. Students** | 4686 | 4794 | 3270 | 4737 | 4154 | 4267 | 3915 | 3945 | 3571 | 3870 | 3990 | 4894 | 4211 | 6616 | 7726 | 6323 | 9112 |
| **Design Features** | Multi-stage selection (board; school; class), stratified by grade and region. Grades 7, 9, 11 and 13. Self-weighted estimates. | | Single-stage selection (board clusters), stratified by grade and region. Grades 7, 9, 11 and 13 (OAC). Weighted estimates. | | | | | | | | | Two-stage selection (school, class), stratified by region and school type. North over-sampled. Six public health regions over-sampled in 2009. Weighted estimates. | | | | | |
| | | | | | | | | | | | | Grades 7 to 13 (OAC). | | Grades 7 to 12 (OAC dropped in 2003). | | | |

## Past Survey Designs

As seen in Table 2.1, each survey was based on a random probability design. The 1977 and 1979 surveys were based on a stratified (region by grade) multistage design. The proportional allocation of students by grade and region allowed for self-weighted estimates. To incorporate improvements which would provide estimates with greater precision and efficiency, in 1981 the sample design was modified to a stratified single-stage cluster design, which resulted in the selection of more school boards and schools. Since 1981 this survey has been administered by staff at the Institute for Social Research (ISR), York University.

In survey designs prior to 1999, the allocation of students from Northern Ontario was proportional to population. Thus, the sample for this region was smaller than other regions.

## Current Survey Design [1]

Beginning in 1999, the OSDUHS employs a stratified (region and school type), two-stage (school, class) cluster sample design, and over-samples students in Northern Ontario in order to provide better estimates for that region. Further, rather than surveying students only in grades 7, 9, and 11 (and grade 13 before it was eliminated), the revised design surveys students in grades 7 through to 12, inclusive. This change provides greater age variation, and thus more developmentally-based detail on the relationship between drug use and age. It also allows for more direct grade comparisons to American and other international studies. Another design change incorporated in 1999 was to use a probability sample of schools, regardless of the school board designation, rather than the selection of school board clusters. Consequently, more students per school are sampled. The advantages include a greater geographical dispersion of schools and school boards, and better school-level estimates.

### School Selection

Schools in the public and Catholic school systems in Ontario were eligible to participate. Private schools, schools on Native reserves, Canadian Forces Bases, and certain geographically inaccessible northern schools were excluded. The 2009 school sample is based on a longitudinal sample commencing in 2001. This feature of overlapping schools provides more efficient estimates of change over time (Kish, 1965). Ninety-five (52%) of the schools in the 2009 survey were brand new to the study – that is, they had never participated.

The school sample selection occurred as follows:

a) To select the initial 2001 sample, schools were drawn from Ontario's Ministry of Education and Training's enrolment data, and were stratified according to the four design regions.

b) Within each regional stratum, a random selection of schools was chosen, separately for elementary/middle schools and secondary schools. Schools were selected with probability proportional to enrolment size (meaning that larger schools have a greater probability of being selected). The schools that participated in 2001 were invited to participate in cycles since then, including the 2009 cycle. In addition, in 2009 new schools were also selected for specific regional over-samples (see below).

c) If a selected school could not participate, or if it had closed, a replacement school from the same region was selected. The sampling frame for new schools and replacement schools was based on the Ministry of Education and Training's 2006/2007 enrolment data (most recently available), again with probability of selection proportional to size.

### Class Selection

Within each school, classes were randomly selected by ISR. In elementary/middle schools, two classes were randomly selected – one 7$^{th}$-grade and one 8$^{th}$-grade. In secondary schools, four classes were randomly selected, one in each grade between 9 and 12 from either a list of classes in a required subject (e.g., English), or a required period (e.g., homeroom). All students in the selected classes were eligible to be surveyed. Special education classes, English as a Second Language (ESL) classes, and classes in which there were fewer than five students were excluded from selection. If a selected class was unable to participate, a replacement class was randomly selected whenever possible.

### OSDUHS Regions

Historically, the survey design divided Ontario into four regional strata based on the following boundaries: Toronto (416 area code); Northern

[1] In addition to the authors, the 2009 OSDUHS sample design team, headed by Michael Ornstein, also included John Pollard and David Northrup, all from the Institute for Social Research, York University.

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).

**Over-Sampling for Ontario Public Health Units in 2009**

In addition to the four regions described above, the 2009 OSDUHS incorporated six Ontario public health regions as regional strata. The over-sampling of students in these public health regions was conducted in order to provide better regional estimates for the health units. Schools in the following areas of the province were over-sampled: Haliburton-Kawartha-Pine Ridge, Leeds-Grenville-Lanark, Durham Region, York Region, the City of Ottawa, and the City of Hamilton. The class selection procedure in the secondary school over-samples did not differ from the standard procedure. However, in the elementary 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 less than two classes in each).

## Procedures

The 2009 OSDUHS protocol was approved by the research ethics boards at CAMH, and York University.

For each school board associated with a randomly-selected school, 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 board research review committees (20 reviewed the protocol), as well as school principals, classroom teachers, and parents. If a school board did not allow their schools to participate, replacement schools from the same stratum were randomly selected and the respective boards were contacted again for permission. ISR randomly selected the classes to survey in each school.

All schools were provided with copies of the active parental consent form (see Appendix), which was available in several languages. Consent forms were distributed to students, who, in turn, sought the signature of one parent/guardian if they were under age 18. Students themselves were also required to provide a signature of assent. Those who did not return a signed consent form before the survey date were not allowed to participate. If a student did not participate, no substitution took place. Instead, the data were statistically weighted to correct for nonresponse.

Survey administration procedures were designed to protect students' privacy by allowing for anonymous and voluntary participation. The survey was administered by trained ISR field staff in the classrooms of the randomly-selected classes between November 2008 and June 2009. The data collectors read a standardized script to participating students explaining the history of the study, its purpose, and emphasizing the anonymity of the survey. Students were told that participation was completely voluntary and anonymous, and were instructed not to write their names on the questionnaires. Student responses were recorded directly on to the questionnaire. Teachers were not required to remain in the classrooms during administration, but most chose to do so. Neither schools nor students were paid to participate in the survey.

The ISR field staff collected the completed questionnaires, which were then taken to ISR for data entry. The quality of the data entry was checked by random verification of 10% of all the questionnaires.

## The Questionnaire

In addition to alcohol and other drug use, the OSDUHS covers an array of health-related issues. To cover as many content areas as possible in a fixed time period, we employed two versions of the questionnaire, Form A and Form B (www.camh.net/research/osdus.html). In each classroom, half the students were randomly assigned either Form A or Form B. Form A contained 167 items and Form B contained 169

items, with about two-thirds of the content overlapping. The questionnaire took about 30 to 40 minutes to complete (average time was 32 minutes). Skip patterns were not included in the questionnaire in order to protect students' privacy by ensuring that all students took about the same time to complete the study.

Most of the OSDUHS questionnaire items were derived from other large-scale student surveys such as the American Monitoring the Future (MTF) survey, the American Youth Risk Behavior Survey (YRBS), and the international Health Behaviour of School-Aged Children (HBSC) survey, and have been shown to produce valid and reliable data (Brener et al., 2002; Currie et al., 2008; Johnston, O'Malley, Bachman, & Schulenberg, 2008; O'Malley, Bachman, & Johnston, 1983). Also included were valid and reliable screeners and scales, such as the WHO's Alcohol Use Disorders Identification Test ("AUDIT") to assess drinking problems, and the "CRAFFT" screener to assess drug use problems. All new items in the 2009 questionnaire were pre-tested by ISR, using a small convenience sample of young adolescents. An evaluation of the readability of the 2009 questionnaire showed a Grade 7 level according to the Flesch-Kincaid score. French-translated questionnaires were also available to schools.

**Experiment to Assess Students' Comprehension of the Non-Medical Opioid Pain Reliever Use Question**

In the 2007 cycle, we assessed non-medical use of prescription opioid pain relievers with the question: "*In the last 12 months, how often did you use pain relief pills (such as Percocet, Percodan, Tylenol #3, Demerol, OxyContin, codeine) without a prescription or without a doctor telling you to take them?*" To assess whether students comprehended this question and excluded the use of over-the-counter (OTC) pain relief medication, in 2009 we included an alternative question wording format for comparison purposes. The only difference between the original question (which was placed in questionnaire Form B) and the alternative question (placed in Form A) was an additional statement to clarify that we are not referring to OTC medication ("*We do not mean regular Tylenol or Aspirin that anyone can buy in a drug store*").

Comparing these two wording formats, we found no statistically significant difference in past-year prevalence. Therefore, the responses across both forms were combined to provide one estimate of past-year non-medical use of prescription opioids.

## Data Quality

### 2009 Sample Participation and Characteristics

The target number of students for the 2009 survey was 10,700. To achieve this student sample size, the target number of schools was estimated to be 178. Assuming that about one-third of schools would not be able to participate, 268 schools were originally selected. In the end, a total of 181 schools (80 elementary and 101 secondary), represented by 47 school boards, participated in the survey. The most common reasons for school refusals were that they were too busy, or that they had already committed to other external research projects. Although we could not carry out a systematic follow-up, we do not expect these refusals to have created a considerable bias as this group of schools did not significantly differ from participating schools with respect to region, school type (elementary versus secondary), or public versus Catholic.

A total of 573 classes participated in the survey (207 from elementary schools, 366 from secondary schools). It is important to note here that 84 classes were not randomly selected. Rather, these classes were convenient same-grade replacements, typically identified by principals, for classes that were originally selected but could not participate for logistic reasons.[2]

[2] Drug prevalence data were evaluated with and without the inclusion of the non-random classes, and results did not differ. Thus, all classes remained in the final data file.

Finally, of the 14,196 students enrolled in these classes, 9,241 participated in the survey. The student participation rate was 65%. Thirteen percent (13%) were lost due to absenteeism and 22% were lost due to either unreturned consent forms or parents' refusal.[3] Whereas the proportion of absent students has remained constant over the decades, the proportion of consent form loss has been increasing across all grades and all regions (see Appendix Table A3). The reasons for this are unclear. This problem of declining response rates is common to the survey research field generally and not unique to the OSDUHS (de Leeuw & de Heer, 2002; Dey, 1997; Porter, 2004). Still, our rate of 65% is above average for a student survey with active consent (Courser, Shamblen, Lavrakas, Collins, & Ditterline, 2009; White, Hill, Effendi, 2004), and above the 61% participation rate in Health Canada's 2006/2007 *Youth Smoking Survey*, which was based on a combination of active and passive consent procedures (Centre for Behavioural Research and Program Evaluation, 2008).

It is important to note that a low response rate does not necessarily imply that the data are characterized by a high level of 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). Existing research examining the impact of consent form loss on estimates of student drug use and other risk behaviours has not been conclusive. Some studies have found that students who do not return signed consent forms are more likely to use substances and to engage in risk behaviours than students who return signed forms (Anderman, Cheadle, Curry, & Diehr, 1995; Courser et al., 2009; White et al., 2004), while others have found no such differences (Eaton, Lowry, Brener, Grunbaum, & Kann, 2004).

While we could not compare students who returned a signed consent form with those who did not, we did assess substance use in classes in which the response rate was below 70% and compared these estimates with those from classes in which response rates were above 70%. If students who do not return consent forms are indeed "high-risk" youth, then we would expect classes with low participation rates to have smaller prevalence estimates (less likely) of risk behaviours such as alcohol, tobacco, and illicit drug use compared to classes with high or full participation. We found no significant differences between classes with low and high participation rates regarding substance use or demographic factors, suggesting that students who participated in the survey were not only "low-risk" youth.

As was done in previous OSDUHS cycles, exclusion criteria were established to enhance data quality. Students were excluded from the final analytic sample if they (1) did not report a valid age; (2) did not report a valid sex; (3) reported the use of a fictitious drug; (4) reported using 10 or more of 13 illicit drugs (excluding cannabis) 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 excluded. In 2009, 129 cases were dropped from the data set, which is a similar proportion to past survey cycles. This resulted in **9,112 minimally complete cases** used in the data analyses. Form A was completed by 4,851 students, and Form B was completed by 4,261 students.

Both the single item nonresponse rate and overall item nonresponse rate were low. Item nonresponse averaged less than 1%. Across all the core questions (i.e., both forms), the average proportion of unanswered questions was 1.5%. All core substance use questions were answered by 96% of respondents. Missing responses to questions were not statistically imputed.

We compared our 2009 OSDUHS sample to the most current school enrolment data from the Ministry of Education and Training based on the 2007/2008 academic year. Table 2.2 shows that there were slight discrepancies between the 2009 sex-by-grade weighted total sample distribution and the provincial enrolment numbers. However, larger discrepancies were found within certain

[3] For more details about the 2009 sample selection and participation rates, please see Pollard, Ornstein, & Northrup (2009).

regional strata when compared to the provincial distribution. For example, in certain regions younger males were overrepresented, while in other regions older females were overrepresented. Therefore, post-stratification weights were calculated for the sex-by-grade distributions within each regional stratum separately to restore each region's structure to the population structure. The final post-stratified weighted total sample distribution is shown in Table 2.2 (far-right columns). The OSDUHS weighted total sample is similar to the Ontario population. Table 2.3 shows the demographic characteristics of the final weighted sample.

Table 2.2 The 2009 OSDUHS Sample vs. Ontario 2007/2008 School Enrolment

| | OSDUHS Pre-Adjusted | | Enrolled | | OSDUHS Post-Stratification Adjusted | |
|---|---|---|---|---|---|---|
| | % Male | % Female | % Male | % Female | % Male | % Female |
| **Grade 7** | 7.1 | 8.0 | 7.6 | 7.3 | 7.2 | 6.9 |
| **Grade 8** | 6.6 | 8.6 | 7.8 | 7.4 | 7.4 | 7.0 |
| **Grade 9** | 7.6 | 8.7 | 8.2 | 7.7 | 8.4 | 7.9 |
| **Grade 10** | 8.2 | 8.2 | 8.4 | 7.9 | 8.6 | 8.1 |
| **Grade 11** | 7.3 | 9.2 | 8.4 | 8.1 | 8.6 | 8.2 |
| **Grade 12** | 10.1 | 10.3 | 11.3 | 9.9 | 11.6 | 10.1 |
| **Total** | 46.9 | 53.1 | 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 1,023,900 students enrolled in Ontario's publicly-funded schools in the 2007/2008 academic year.

Table 2.3 Sample Characteristics, 2009 OSDUHS

| | Final Number in the Sample | Weighted % |
|---|---|---|
| **Total** | **9,112** | |
| **Males** | 4,341 | 51.8 |
| **Females** | 4,771 | 48.2 |
| **Grade 7** | 1,632 | 14.1 |
| **Grade 8** | 1,697 | 14.3 |
| **Grade 9** | 1,414 | 16.3 |
| **Grade 10** | 1,534 | 16.7 |
| **Grade 11** | 1,378 | 16.9 |
| **Grade 12** | 1,457 | 21.7 |
| **Toronto** | 836 | 16.7 |
| **North** | 649 | 6.4 |
| **West** | 2,368 | 38.8 |
| **East** | 492 | 12.9 |
| **Ottawa** | 1,200 | 6.5 |
| **Leeds-Grenville-Lanark District** | 872 | 1.3 |
| **Haliburton-Kawartha-Pine Ridge District** | 730 | 1.8 |
| **Durham Region** | 883 | 6.0 |
| **York Region** | 589 | 5.4 |
| **Hamilton** | 493 | 4.2 |

Notes: (1) mean age was 15.0 years (SD=1.9); (2) the 10 regional strata are mutually exclusive; (3) for the regional drug use estimates presented in this report, the "West" region includes Hamilton (combined N=2,861), and the "East" region includes Ottawa, Leeds-Grenville-Lanark District, Haliburton-Kawartha-Pine Ridge District, Durham Region, and York Region (combined N=4,766).

## Data Analysis, Interpretation and Presentation

### Data Weighting

For several reasons, including the over-sampling of schools/students in various regions, the sample design requires weights to ensure the proper representation of students to the Ontario student population. For each student, the weight is based on the product of five factors: (1) the probability of a school being selected, with probability proportional to size; (2) the probability of a class being selected; (3) a student nonresponse correction factor; (4) a regional post-stratification adjustment to restore regional representation; and (5) a final post-stratification adjustment to restore the sex distribution by grade, using the most current provincial enrolment numbers. Therefore, our weighted estimates are representative of all students in grades 7 to 12 enrolled in publicly-funded schools in Ontario. In other words, our sample of 9,112 students represents about 1,023,900 Ontario students in grades 7 to 12.

### Survey Estimates

Before turning to the survey results, it is important to first briefly discuss the meaning, interpretations and limitations of survey results 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 who report using a given drug. Because we do not survey all students in the province, this "true" population percentage is unknown and must be estimated from a sample. Consequently, every estimate from a sample has associated with it some degree of sampling error. The accuracy of a percentage, i.e., the difference between the obtained sample percentage and the "true" population percentage is determined by the degree of precision and bias.

Precision refers to the "probable accuracy" of a percentage; those summarized in the present report include a range, or confidence interval, around percentage values, which indicate the interval within which the true population percentage probably lies. The reason for employing confidence intervals arises from the uncertainty, or sampling error, associated with using the results obtained from a single sample to draw conclusions about the entire population from which the sample was drawn. If we had surveyed another sample, using identical procedures, the results would probably have differed slightly from those we obtained from our present sample.

The confidence interval around a percentage indicates the range of variation in percentage values that would have been obtained from most (in our case, 95 out of 100) of the other equivalent samples that we might have studied. The confidence interval (in our case, a 95% confidence interval is presented) can also be interpreted as being 95% likely to include the percentage value we would have obtained if we had studied every member of the target population. In reporting that the percentage of students who had used alcohol in the past year was 58.2% (55.7%-60.6%), we mean that there is a 95% chance that the actual or true percentage of students in the population of Ontario students who used alcohol falls between 55.7% and 60.6%. Smaller confidence intervals imply greater precision, or less sampling error.

In our case, the size of the interval depends on three factors: the number of students interviewed – other things being equal, the larger the sample size the smaller or more precise is the interval; second, the size of the percentage – other things being equal, percentages around 50% have the largest interval while percentages approaching 0% and 100% have the smallest interval; and third, design effects – in our design, other things being equal, the greater the similarity (or correlation) of responses within schools and classrooms the wider is the interval. Changes in any of these three factors affect the size of the confidence interval. Also, because of this last factor the confidence intervals can vary, even though both the size of sample and percentage remain constant.

Bias, in contrast to precision, refers to sources of error that may inflate or deflate estimates from the true percentage. Such sources of non-sampling error include underreporting of drug use, memory effects, nonresponse, and other sources of systematic error. Thus, a percentage may have a high degree of precision (a small confidence interval) but may still be biased (not covering the true value). The degree of survey error we present in this report is restricted to precision and not bias. That is, the margins of error, or confidence intervals, we present in this report include only sampling error. Confidence intervals do not include errors due to non-sampling factors such as the underreporting of drug use or errors of memory or recall.

We made full effort to elicit truthful responses by repeatedly ensuring students of complete anonymity and confidentiality of the results. Still, the research evidence suggests that self-reported drug use estimates and related problems are generally underreported due to the sensitive and mostly illegal behaviours being studied (Adlaf, 2005; Brener, Billy, & Grady, 2003; Hibell et al., 2003). Further, students absent from class are somewhat more likely to use or have used substances compared with students who are consistently in class (Bovet, Viswanathan, Faeh, & Warren, 2006; Centers for Disease Control and Prevention, 1994; Eaton, Brener, & Kann, 2008; Michaud, Delbos-Piot, & Narring, 1998). Therefore, the survey results should be viewed as conservative. However, assuming that underreporting and absenteeism remains more or less constant across years, then the biases in the estimates will be consistent across time. Therefore, the trends should not be affected by any such biases. Indeed, the steady and consistent nature of our trend curves provides support for this assertion.

## 2009 Analysis

All 2009 confidence intervals were corrected for characteristics of the sampling design (i.e., stratification, clustering and weighting) using *Stata 10.1* Taylor series survey routines (StataCorp, 2007). The analysis was based on a design with 19 strata (region * school type),[4] 181 primary sampling units (schools), and 9,112 students.

The statistical significance of subgroup (i.e., sex, grade, region) differences in 2009 was assessed using univariate Pearson chi-square tests corrected for the survey design, at the $p<.05$ level of significance.

## Trend Analysis

**It is important to note that the tests comparing 2007 and 2009 estimates and also estimates between 1999 and 2009 are based on grades 7 to 12. However, the long-term trend tests (1977-2009) are based on only grades 7, 9 and 11.**

Although we highlight dominant long-term trends, we pay particular attention to changes since the previous survey (i.e., 2009 versus 2007), and since 1999 because this was the year the survey design first included all grades between 7 and 12, inclusive. To allow us to examine the nature of the long-term changes since 1977 in drug use estimates, we used logit models to assess whether the temporal trends display linear or non-linear patterns. All estimates spanning back to 1977 were corrected for the respective survey design effects. Only changes among the total student sample were assessed in the long-term trend analyses.

For all tests comparing percentages across time, we used the more conservative $p<.01$ significance level. Because only a sample of all students in Ontario is surveyed, sampling error is involved in every drug use estimate. Consequently, absolute differences between two percentages cannot necessarily be interpreted as indicating true or real differences in the population. Therefore, if a test comparing estimates from two years reached statistical significance, we also examined whether or not the 95% confidence intervals overlapped. If they did not overlap, this was used to determine that

[4] Elementary/middle schools were not sampled in one regional stratum (York Region).

changes had occurred. For example, 61.2% (58.9%-63.5%) of students reported drinking alcohol in 2007. This percentage decreased to 58.2% (55.7%-60.6%) in 2009, showing a decrease of three percentage points over these years. However, because these two intervals overlap, we cannot be confident that they are different in the population (Fleiss, 1981). Using this conservative approach of non-overlapping confidence intervals increases the validity of our findings about temporal changes.

Readers should also note the following regarding our analyses:

- Statistically significant differences must be carefully evaluated. First, our analysis does not consider the large number of statistical tests performed. For example, for every 20 statistical tests, 1 significant difference could occur by chance. Second, outcomes that are statistically significant tell us only that the difference is probably not due to chance. Whether a difference is of practical importance to public health policy is a matter that requires both statistical and non-statistical evaluation.

- 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 in drug use exists and describe the difference. Because many other factors may cause regional differences (e.g., socio-economic status), we cannot attribute such differences solely to the geographical location of students.

- Small percentages and estimates based on a small number of respondents can produce wide confidence intervals and are likely unstable. In this report, estimates were suppressed due to unreliability (unstable) if they met any one of the following conditions:

(i) the estimate was less than 0.5%;
(ii) the base sample size was less than 50 students; or
(iii) the relative standard error, also known as the coefficient of variation, was greater than a value of 33.3.

Table 2.4 Definition of Terms Used in the Report

| Term | Definition |
|---|---|
| **Past Year Cigarette Use ("Smoker")** | Smoking less than one whole cigarette or more daily during the past 12 months. Excluded are those who "tried a cigarette." |
| **Daily Smoking** | Smoking at least one whole cigarette daily over the past 12 months. |
| **Past Year Alcohol Use ("Drinker")** | Any alcohol consumed during the past 12 months. Use includes consumption on special occasions, but excludes sips. |
| **Heavy Drinking** | Two indicators are used: (1) Binge drinking: drinking 5 or more drinks on the same occasion during the past 4 weeks; (2) Becoming drunk during the past 4 weeks. |
| **Hazardous or Harmful Drinking** | Scoring at least 8 out of 40 (Likert scoring) on the World Health Organization's "Alcohol Use Disorders Identification Test" (AUDIT) screen, which measures heavy drinking and alcohol-related problems during the past 12 months. We restrict the term to "hazardous drinking" for brevity. |
| **Past Year Drug Use ("User")** | Used the drug at least once during the past 12 months. Cases that responded "don't know what [the drug] is" were considered non-users and remained in the denominator. |
| **Non-Medical Use (NM)** | Used the drug without a prescription, or without a doctor's supervision. |
| **Frequent Drug Use** | Used the drug 6 or more times during the past 12 months. Cases that responded "don't know what [the drug] is" were considered non-users and remained in the denominator. |
| **Any Illicit Drug Use, including Non-Medical Prescription Drug Use** | This composite index measures past year use of at least one of the following 24 drugs asked about in the 2009 survey: cannabis, glue, solvents, LSD, PCP, other hallucinogens, cocaine, crack, methamphetamine, crystal methamphetamine, heroin, ecstasy, GHB, Rohypnol, ketamine, jimson weed, salvia divinorum, stimulants (NM), tranquillizers/sedatives (NM), OxyContin (NM), other prescription opioid pain relievers (NM), ADHD drugs (NM), over-the-counter sleeping medication, or over-the-counter cough/cold medication. |
| **Any Illicit Drug Use (for Time Trends)** | To examine trends over time in any illicit drug use we use two composite indices based on drugs that were asked about since 1977. The first composite index measures past year use of at least one of the following ten drugs: cannabis, LSD, PCP, other hallucinogens, methamphetamine, cocaine, crack, heroin, stimulants (NM), or tranquillizers/sedatives (NM). A second composite index for any illicit drug use excludes cannabis from the computation. |
| **Any Non-Medical Prescription Drug Use** | Non-medical use of at least one of the following five prescription drugs or drug classes once or more often during the past 12 months: OxyContin, other prescription opioid pain relievers, ADHD drugs, other stimulants, or tranquillizers/sedatives. |
| **Potential Drug Use Problem** | Reporting experiencing at least 2 of the 6 items on the "CRAFFT" screener, which measures a potential drug use problem that may require treatment (past 12 months time interval). |
| **Potential Cannabis Dependence** | Scoring at least 4 out of 15 (Likert scoring) on the cannabis "Severity of Dependence Scale" (SDS). The SDS is a valid and reliable 5-item scale used to screen for drug dependence in adolescent populations. |
| **Elevated Psychological Distress** | Reporting experiencing at least 3 of the 12 items on the "General Health Questionnaire" (GHQ). The GHQ measures symptoms of anxiety, depression, and social dysfunction over the past few weeks. |

# 3. RESULTS

## 3.1 Overview of Drug Use in 2009

### Drug Use in the Past Year
(Figure 3.1.1; Table 3.1.1)

By far, the most commonly used drug is alcohol, with 58.2% of students reporting use during the 12 months before the survey. Cannabis is the next most common drug, with 25.6% reporting past year use. The non-medical (NM) use of prescription opioid pain relievers, such as codeine, Percocet, Percodan, Demerol, or Tylenol #3, ranks third at 17.8%. Tobacco ranks fourth, with 11.7% reporting smoking cigarettes during the past year.

Past year use of solvents, hallucinogens other than LSD (e.g., psilocybin a.k.a. "magic mushrooms"), stimulants (NM), and over-the-counter cough and cold medication with dextromethorphan (e.g., Robitussin DM) are reported by about 5% to 7% of students. The remaining drugs are used by fewer than 5%. The least common drugs are crystal methamphetamine (Ice), GHB, and heroin, and Rohypnol (NM) which are used by less than 1% of students.

One-fifth (20.3%) of students report using at least one prescription drug non-medically (without a doctor's prescription) during the past year. About 42% of students report using any drug, other than tobacco or alcohol, during the past year.

### Lifetime Drug Use
(Figure 3.1.1; Table 3.1.1)

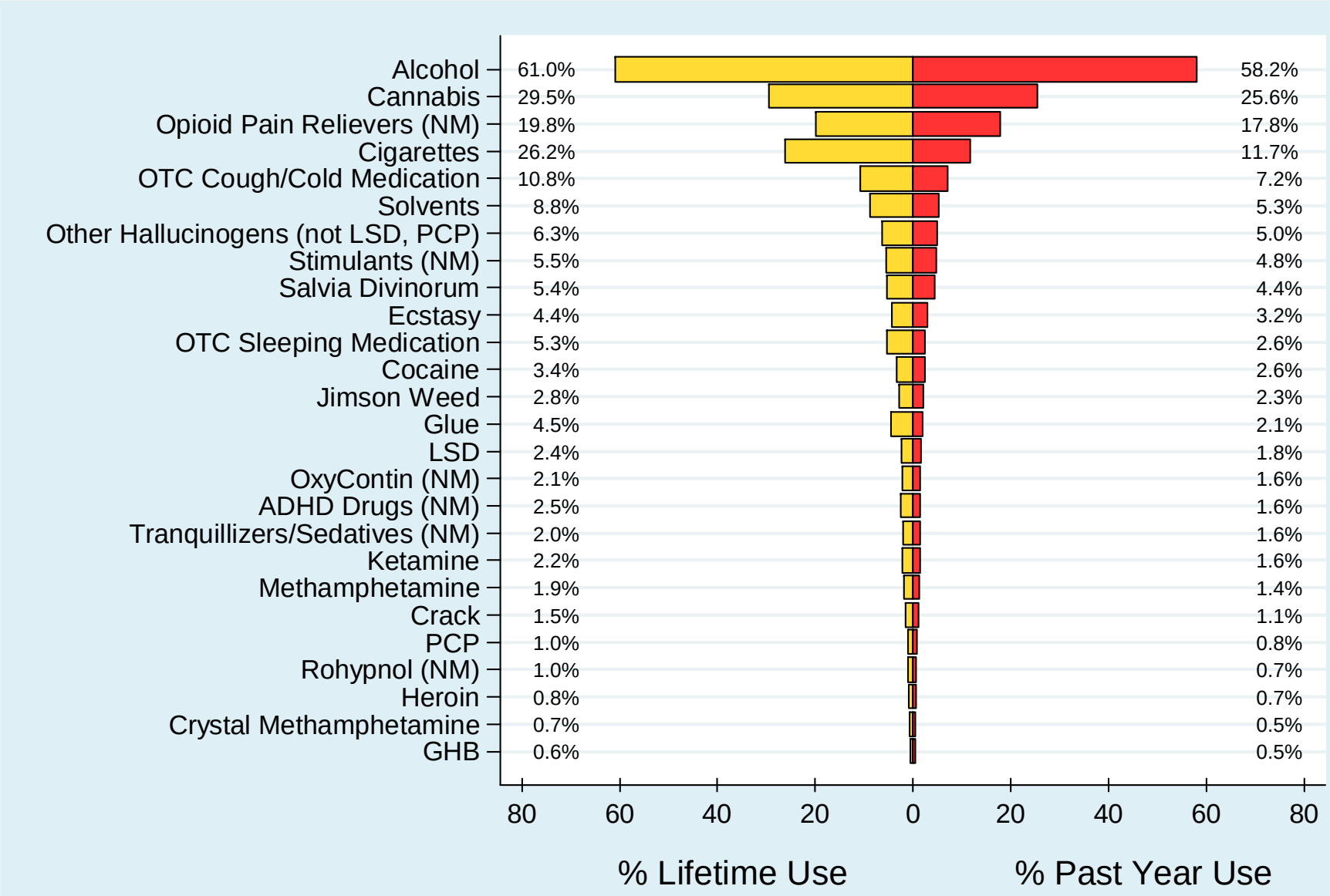
Estimates for lifetime drug use show that alcohol, cannabis, and tobacco are the three most common drugs students have ever tried. About two-thirds (61.0%) have ever used alcohol, and over one-quarter have ever used cannabis, and cigarettes in their lifetime. About one-fifth (19.8%) of students have used prescription opioid pain relievers (e.g., codeine, Percocet, Percodan, Demerol, Tylenol #3) non-medically in their lifetime. About one-in-ten have used over-the-counter cough or cold medication recreationally in their lifetime. The remaining drugs were used by less than 10% of students in their lifetime.

### Frequency of Drug Use
(Figures 3.1.2, 3.1.3)

Frequent drug use, defined as using six or more times during the past 12 months, is shown in Figure 3.1.2. Of all the illicit drugs (which excludes alcohol and tobacco) cannabis is, by far, the most frequently used. About 15% of students report using cannabis six or more times during the past year. Frequent non-medical use of prescription opioid pain relievers is reported by about 7% of all students. All other drugs in the survey are used this frequently by about 2% of students or fewer.

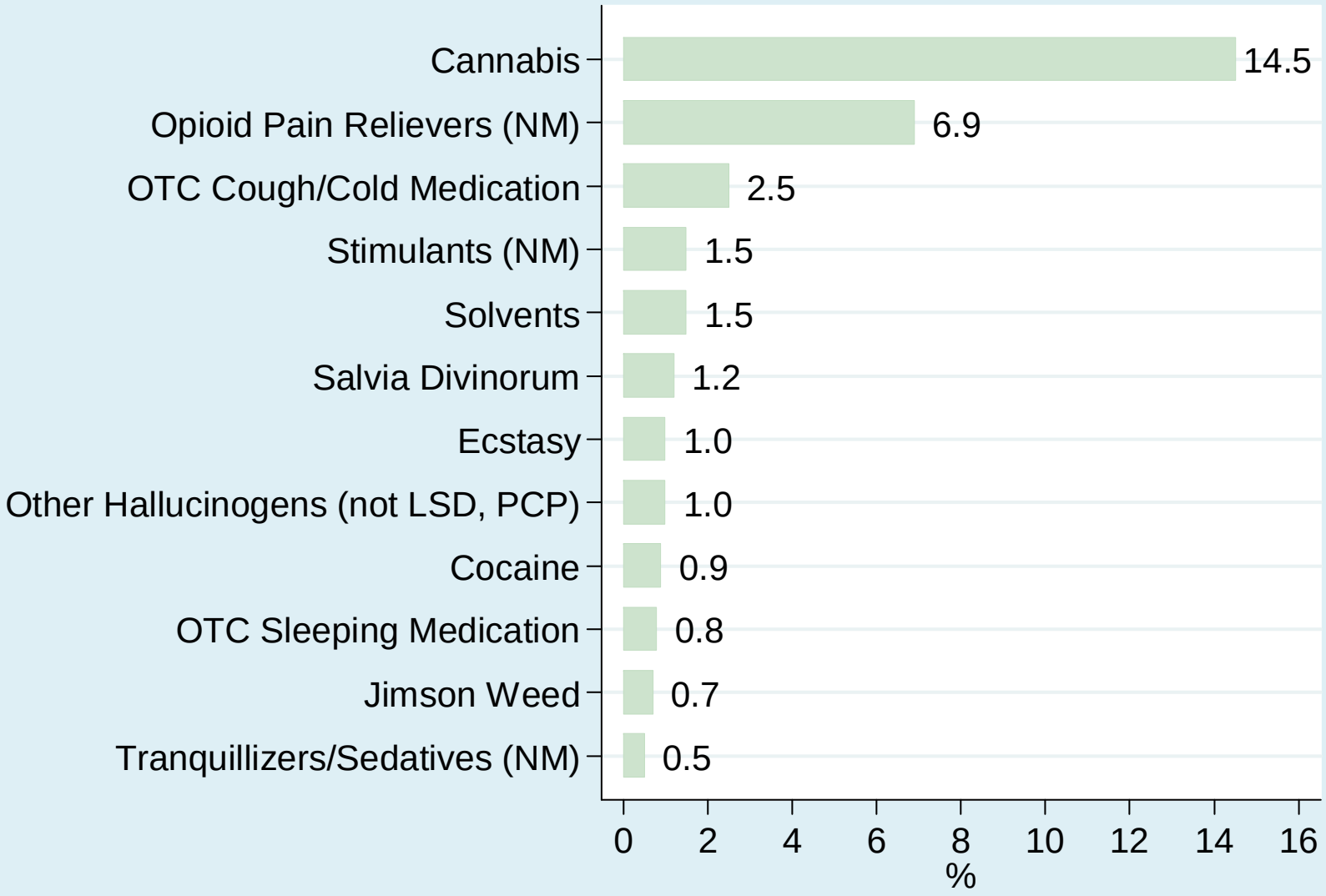
Figure 3.1.3 displays the number of times *past year users* used an illicit drug during the 12 months before the survey (excluded are alcohol and tobacco). Again, we can readily see that use of most drugs is infrequent. For the majority of the 18 drugs shown (those with more than 50 users), use is only once or twice in the past year. Cannabis, however, is used much more frequently.

Figure 3.1.1
Percentage Reporting Lifetime and Past Year Drug Use, 2009 OSDUHS (Grades 7 to 12)



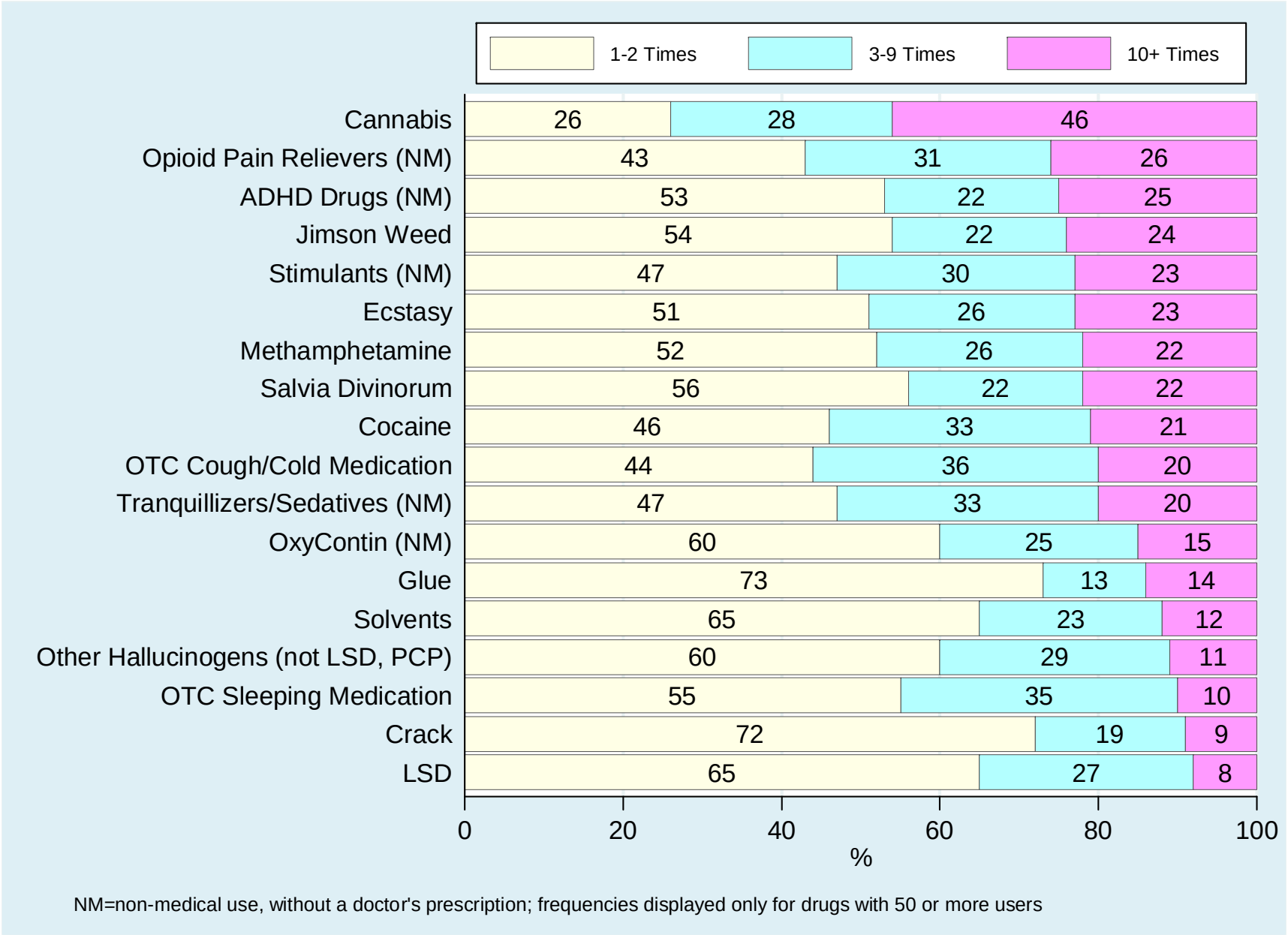

NM=non-medical use, without a doctor's prescription; OTC=over-the-counter

Figure 3.1.2
Percentage Reporting Frequent Drug Use (Six Times or More) During the Past Year, 2009 OSDUHS
(Total Sample, Grades 7 to 12)




NM=non-medical use, without a doctor's prescription; drugs with estimates below 0.5% are not shown

Figure 3.1.3
Frequency of Drug Use During the Past Year, Among Users, 2009 OSDUHS (Grades 7 to 12)




NM=non-medical use, without a doctor's prescription; frequencies displayed only for drugs with 50 or more users

Table 3.1.1: Percentage Reporting Drug Use During Lifetime and During the Past Year, 2009 OSDUHS (Grades 7 to 12)

| | Lifetime Use | | | Past Year Use | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Lower Estimate[a] | % | Upper Estimate[a] | Lower Estimate[a] | % | Upper Estimate[a] | Lower Estimate | **Approx. Users[b]** | Upper Estimate |
| Cigarettes | 24.3 | **26.2** | 28.1 | 10.6 | **11.7** | 13.0 | 105,800 | **119,600** | 133,400 |
| Alcohol | 58.6 | **61.0** | 63.3 | 55.7 | **58.2** | 60.6 | 547,800 | **591,700** | 635,600 |
| Cannabis | 27.7 | **29.5** | 31.4 | 24.0 | **25.6** | 27.3 | 239,800 | **261,500** | 283,200 |
| Glue | 3.8 | **4.5** | 5.4 | 1.6 | **2.1** | 2.8 | 14,400 | **20,700** | 27,000 |
| Solvents | 7.8 | **8.8** | 9.9 | 4.4 | **5.3** | 6.3 | 42,600 | **51,700** | 60,800 |
| LSD | 1.9 | **2.4** | 2.9 | 1.5 | **1.8** | 2.3 | 14,000 | **18,900** | 23,700 |
| PCP | 0.7 | **1.0** | 1.5 | 0.5 | **0.8** | 1.3 | 4,100 | **8,000** | 11,800 |
| Hallucinogens other than LSD, PCP | 5.3 | **6.3** | 7.5 | 4.2 | **5.0** | 5.9 | 42,000 | **51,200** | 60,300 |
| Jimson Weed | 2.2 | **2.8** | 3.5 | 1.8 | **2.3** | 3.1 | 16,500 | **22,600** | 28,700 |
| Salvia Divinorum | 4.3 | **5.4** | 6.7 | 3.3 | **4.4** | 5.7 | 30,900 | **42,600** | 54,200 |
| Methamphetamine (Speed) | 1.3 | **1.9** | 2.6 | 1.0 | **1.4** | 1.9 | 9,500 | **14,200** | 18,900 |
| Crystal Methamphetamine (Ice) | 0.5 | **0.7** | 1.0 | 0.4 | **0.5** | 0.7 | 3,300 | **5,200** | 7,100 |
| Cocaine | 2.7 | **3.4** | 4.1 | 2.1 | **2.6** | 3.2 | 20,400 | **26,200** | 32,000 |
| Crack | 1.2 | **1.5** | 1.9 | 0.8 | **1.1** | 1.4 | 8,200 | **11,200** | 14,200 |
| Heroin | 0.6 | **0.8** | 1.1 | 0.5 | **0.7** | 0.9 | 4,300 | **6,700** | 9,000 |
| Ecstasy (MDMA) | 3.7 | **4.4** | 5.2 | 2.6 | **3.2** | 3.8 | 26,200 | **32,500** | 38,700 |
| GHB | 0.3 | **0.6** | 1.0 | 0.2 | **0.5** | 0.9 | 1,400 | **4,600** | 7,700 |
| Rohypnol (NM) | 0.6 | **1.0** | 1.6 | 0.4 | **0.7** | 1.2 | 2,900 | **6,800** | 10,700 |
| Ketamine | 1.5 | **2.2** | 3.3 | 1.1 | **1.6** | 2.3 | 9,400 | **15,300** | 21,100 |
| OxyContin (NM) | 1.7 | **2.1** | 2.6 | 1.3 | **1.6** | 2.0 | 13,300 | **16,700** | 20,100 |
| Opioid Pain Relievers (NM) | 18.6 | **19.8** | 21.0 | 16.6 | **17.8** | 18.9 | 167,000 | **180,200** | 193,300 |
| ADHD Drugs (NM) | 2.0 | **2.5** | 3.1 | 1.3 | **1.6** | 2.1 | 12,300 | **16,500** | 20,800 |
| Other Stimulants (NM) | 4.8 | **5.5** | 6.3 | 4.1 | **4.8** | 5.5 | 41,200 | **48,500** | 55,700 |
| Tranquillizers/Sedatives (NM) | 1.6 | **2.0** | 2.4 | 1.2 | **1.6** | 2.0 | 12,100 | **16,000** | 20,000 |
| OTC Sleeping Medication | 4.4 | **5.3** | 6.3 | 2.0 | **2.6** | 3.4 | 18,400 | **25,100** | 31,800 |
| OTC Cough/Cold Medication | 9.4 | **10.8** | 12.4 | 6.1 | **7.2** | 8.5 | 58,400 | **70,600** | 82,800 |
| Steroids (lifetime use only) | 0.7 | **1.1** | 1.6 | | | | 6,300 | **10,400** | 14,600 |
| Any NM Use of a Prescription Drug | | | | 19.2 | **20.3** | 21.5 | 193,400 | **208,200** | 222,900 |
| Any Illicit Drug, including NM Prescription Drug | | | | 39.6 | **41.7** | 43.8 | 381,200 | **409,700** | 438,300 |

Notes: (1) [a] Based on 95% confidence interval; (2) [b] Based on a population of approximately 1,023,900 students in grades 7 to 12. Numbers are based on survey weights and have been rounded to the nearest hundred; (3) "Lifetime Use" refers to ever using at least once; (4) "Past Year Use" refers to use at least once during the 12 months before the survey; (5) NM=non-medical use, without a doctor's prescription; (6) OTC=over-the-counter drug used for non-medical purposes or to "get high"; (7) "Any NM Use of a Prescription Drug" refers to non-medical use of any one of five prescription drug types (excludes Rohypnol); (8) "Any Illicit Drug Use, including NM Prescription Drug" refers to use of any one of the drugs listed except for alcohol and tobacco.

Source: OSDUHS, Centre for Addiction & Mental Health

# 3.2 Overview of Drug Use Trends

### 2009 vs. 2007 (Grades 7 to 12)
(Table 3.2.1a)

Overall, of the 25 drug use measures in both the 2009 and 2007 surveys, no drug shows a significant change between these two years.

### Ten-Year Changes, 1999–2009: (Grades 7 to 12)
(Table 3.2.1a)

Table 3.2.1a presents drug use prevalence estimates for the years 1999 to 2009 among all students in grades 7 to 12. There are 16 measures for which decreases were found:

- cigarette smoking significantly decreased between 1999 and 2009 (from 28.4% to 11.7%)
- alcohol (from 66.0% to 58.2%)
- glue (from 3.8% to 2.1%)
- solvents (from 7.6% to 5.3%)
- LSD (from 6.8% to 1.8%)
- PCP (from 3.0% to 0.8%)
- other hallucinogens (from 12.8% to 5.0%)
- 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% in 2001 to 3.2%)
- Rohypnol (NM) (from 3.1% in 2001 to 0.7%)
- stimulants (NM) (from 7.3% to 4.8%)
- lifetime steroid use (from 3.4% to 1.1%).

- 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%).

All other drugs showed no significant changes over the past decade (1999-2009).

### Long-Term Changes, 1977–2009: (Grades 7, 9, 11 only)
(Figures 3.2.1 to 3.2.4; Table 3.2.1b)

Many past year prevalence estimates for drugs measured since 1977 show a common pattern of use: a peak in 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 (2003 for tranquillizers/ sedatives):
- alcohol
- stimulants
- tranquillizers/sedatives

**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 1990s*:
- cannabis
- binge drinking
- solvents
- hallucinogens other than LSD, PCP
- ecstasy

Figure 3.2.1
Pattern 1: Long-Term Drug Use Trends, 1977–2009 OSDUHS
(Grades 7, 9, and 11 only)

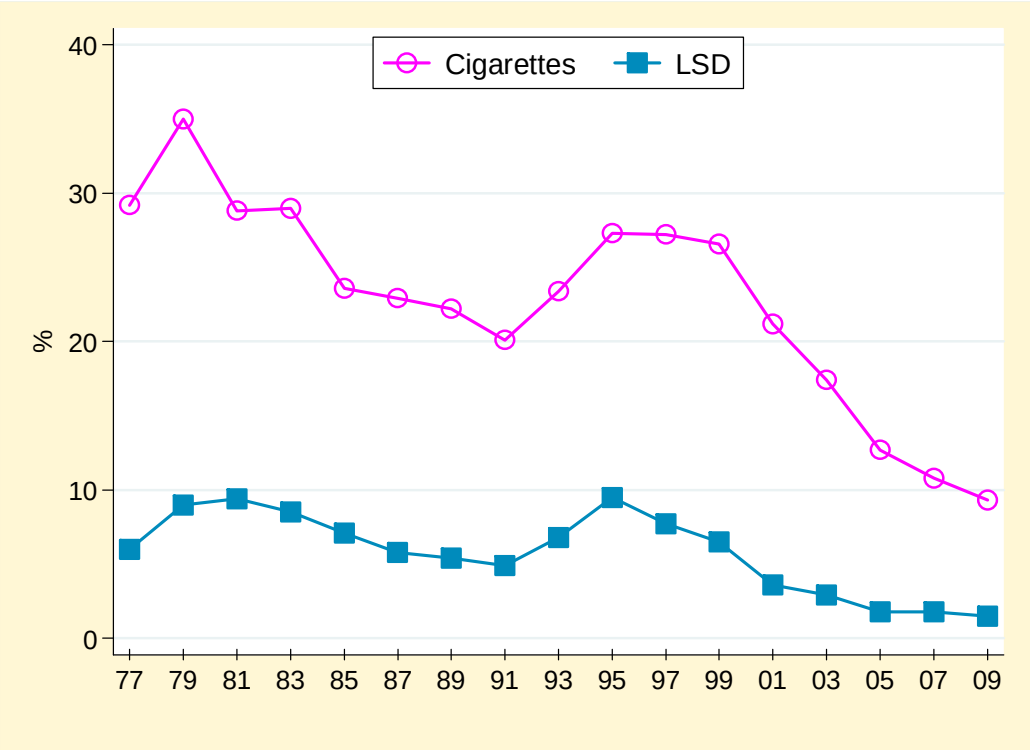



Figure 3.2.2
Pattern 2: Long-Term Drug Use Trends, 1977–2009 OSDUHS
(Grades 7, 9, and 11 only)

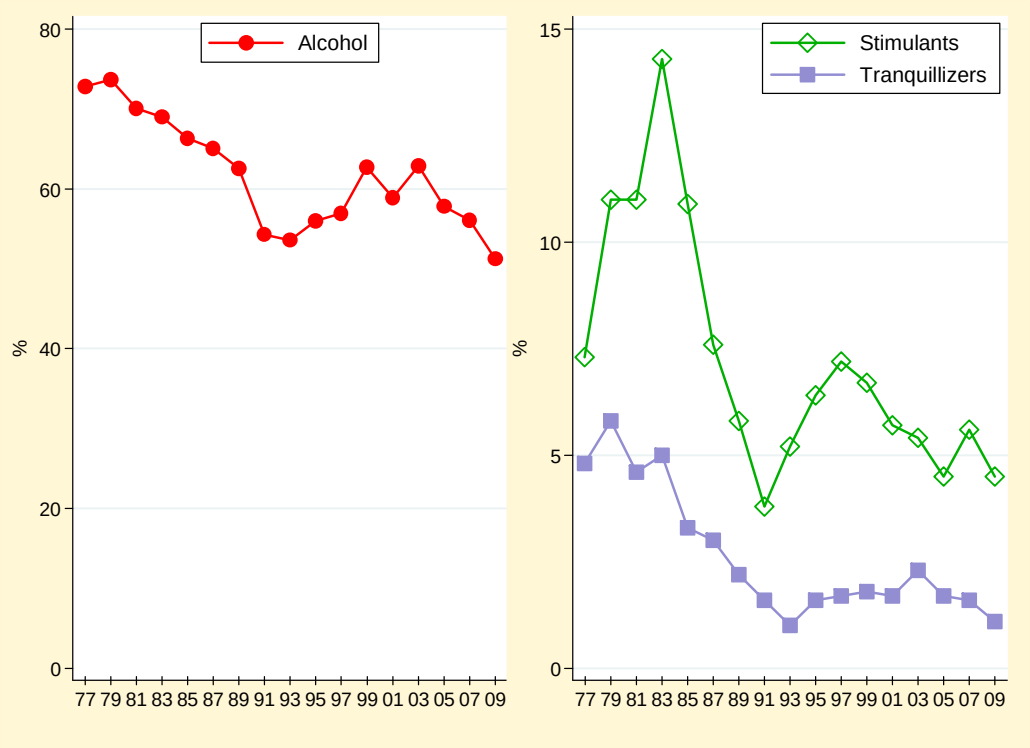


Figure 3.2.3
Pattern 3: Long-Term Drug Use Trends, 1977–2009 OSDUHS
(Grades 7, 9, and 11 only)

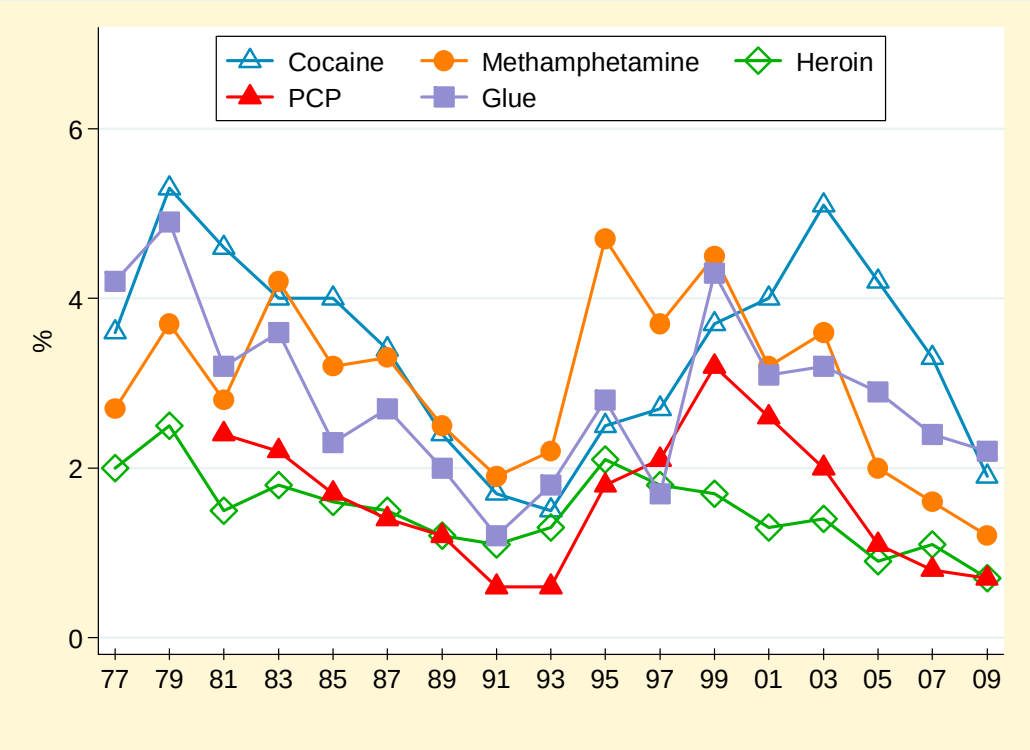



Figure 3.2.4
Pattern 4: Long-Term Drug Use Trends, 1977–2009 OSDUHS
(Grades 7, 9, and 11 only)

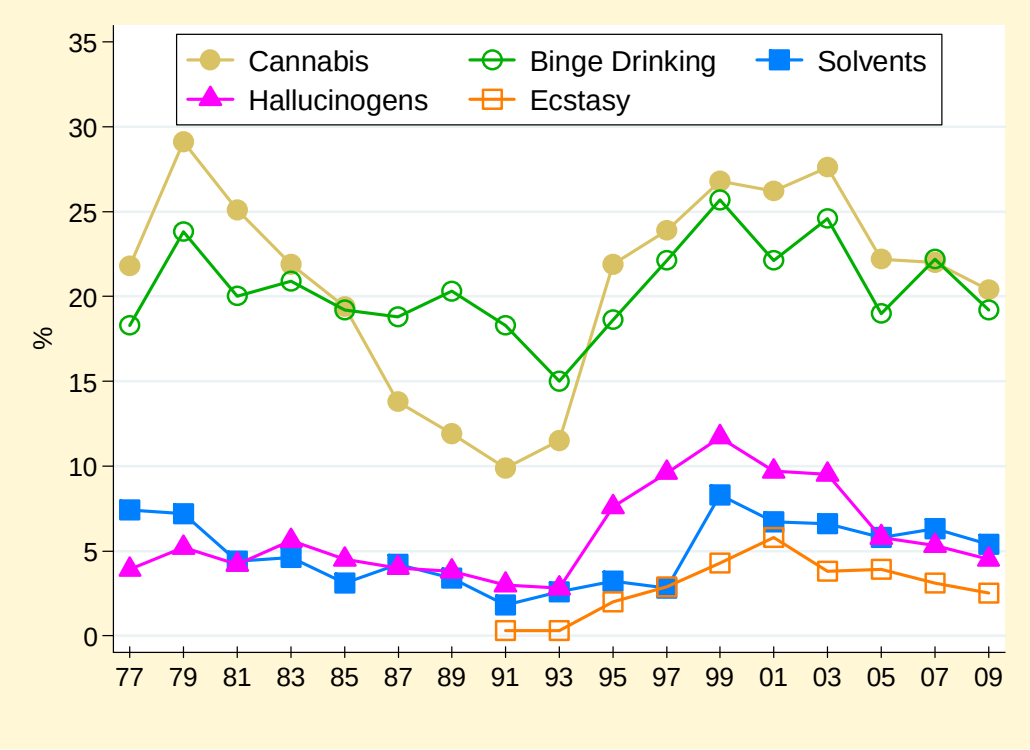


Table 3.2.1a: Percentage Using Drug at Least Once During the Past Year, 1999–2009 (Grades 7 to 12)

| | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|
| (N) | (4447) | (3898) | (6616) | (7726) | (6323) | (9112) |
| Cigarettes | **28.4** (26.1-30.7) | **23.1** (20.3-26.1) | **19.2** (17.7-20.8) | **14.4** (13.0-15.9) | **11.9** (10.7-13.2) | **11.7** [b] (10.6-13.0) |
| Alcohol | **66.0** (63.6-68.3) | **63.9** (60.8-67.0) | **66.2** (64.1-68.4) | **62.0** (59.3-64.7) | **61.2** (58.9-63.5) | **58.2** [b] (55.7-60.6) |
| Cannabis | **28.0** (26.0-30.1) | **28.6** (25.8-31.7) | **29.6** (27.6-31.6) | **26.5** (24.5-28.7) | **25.6** (23.7-27.7) | **25.6** (24.0-27.3) |
| Glue | **3.8** (3.1-4.7) | **3.2** (2.6-4.1) | **2.8** (2.3-3.4) | **2.3** (1.8-2.9) | **2.5** (1.8-3.4) | **2.1** [b] (1.6-2.8) |
| Solvents | **7.6** (6.6-8.8) | **6.4** (5.3-7.9) | **6.1** (5.2-7.2) | **5.3** (4.4-6.4) | **5.8** (4.7-7.0) | **5.3** [b] (4.4-6.3) |
| LSD | **6.8** (6.7-8.1) | **4.8** (3.9-5.9) | **2.9** (2.4-3.5) | **1.7** (1.3-2.3) | **1.6** (1.2-2.2) | **1.8** [b] (1.5-2.3) |
| PCP | **3.0** (2.4-3.9) | **2.8** (2.2-3.7) | **2.2** (1.8-2.7) | **1.1** (0.8-1.5) | **0.7** (0.5-1.0) | **0.8** [b] (0.5-1.3) |
| Hallucinogens (other than LSD, PCP) | **12.8** (11.4-14.4) | **11.1** (9.6-12.9) | **10.0** (8.8-11.4) | **6.7** (5.6-8.0) | **5.5** (4.6-6.5) | **5.0** [b] (4.2-5.9) |
| Jimson Weed | — | — | — | — | **2.6** (1.9-3.4) | **2.3** (1.8-3.1) |
| Methamphetamine (Speed) | **5.0** (4.1-6.2) | **3.9** (3.1-4.9) | **3.3** (2.8-4.0) | **2.2** (1.8-2.6) | **1.4** (1.1-1.9) | **1.4** [b] (1.0-1.9) |
| Crystal Methamphetamine (Ice) | **1.4** (0.8-2.7) | **0.6** (0.3-1.1) | **1.2** (0.8-1.7) | **0.9** (0.6-1.3) | **0.8** (0.6-1.1) | **0.5** (0.4-0.7) |
| Cocaine | **3.4** (2.8-4.2) | **4.4** (3.6-5.4) | **4.8** (4.2-5.5) | **4.4** (3.7-5.2) | **3.4** (2.8-3.9) | **2.6** (2.1-3.2) |
| Crack | **2.5** (1.9-3.2) | **2.1** (1.6-2.8) | **2.7** (2.2-3.3) | **2.0** (1.6-2.4) | **1.0** (0.8-1.4) | **1.1** [b] (0.8-1.4) |
| Heroin | **1.9** (1.5-2.5) | **1.1** (0.8-1.5) | **1.4** (1.1-1.7) | **0.9** (0.7-1.2) | **0.9** (0.7-1.3) | **0.7** [b] (0.5-0.9) |
| Ecstasy (MDMA) | **4.0** (3.1-5.2) | **6.0** (5.0-7.1) | **4.1** (3.5-4.8) | **4.5** (3.7-5.3) | **3.5** (2.9-4.1) | **3.2** [b] (2.6-3.8) |
| GHB | — | **1.3** (0.8-2.1) | **0.7** (0.4-1.1) | **0.5** (0.3-0.9) | **0.5** (0.3-1.0) | **0.5** (0.2-0.9) |
| Rohypnol (NM) | — | **3.1** (2.0-4.8) | **1.6** (1.2-2.2) | **1.0** (0.7-1.4) | **0.6** (0.3-0.9) | **0.7** [b] (0.4-1.2) |
| Ketamine | — | — | **2.2** (1.8-2.9) | **1.3** (0.9-1.7) | **1.1** (0.7-1.7) | **1.6** (1.1-2.3) |
| OxyContin (NM) | — | — | — | **1.0** (0.7-1.5) | **1.8** (0.3-2.4) | **1.6** (1.3-2.0) |
| Opioid Pain Relievers (NM) | — | — | — | — | **20.6** (18.9-23.5) | **17.8** (16.6-18.9) |
| Stimulants (NM) | **7.3** (6.4-8.4) | **6.3** (5.4-7.4) | **5.8** (5.0-6.6) | **4.8** (4.1-5.6) | **5.7** (5.0-6.5) | **4.8** [b] (4.1-5.5) |
| Tranquillizers/Sedatives (NM) | **2.0** (1.6-2.6) | **2.2** (1.6-3.1) | **2.2** (1.8-2.7) | **1.6** (1.3-2.0) | **1.8** (1.4-2.3) | **1.6** (1.2-2.0) |
| OTC Sleeping Medication (NM) | — | — | — | — | **4.0** (3.2-5.0) | **2.6** (2.0-3.4) |
| ADHD Drugs (NM) | — | — | — | — | **1.0** (0.7-1.5) | **1.6** (1.3-2.1) |
| Steroids (lifetime use) | **3.4** (2.7-4.2) | **3.8** (3.0-4.8) | **3.0** (2.4-3.7) | **2.3** (1.9-2.9) | **1.3** (0.9-1.9) | **1.1** [b] (0.7-1.6) |
| Any illicit, including cannabis | **32.3** (30.2-34.4) | **32.5** (29.8-35.3) | **32.2** (30.1-34.3) | **28.7** (26.6-30.9) | **28.7** (26.8-30.8) | **27.9** [b] (26.4-29.6) |
| Any illicit, excluding cannabis | **20.5** (18.8-22.4) | **18.1** (16.6-19.7) | **15.3** (13.9-16.9) | **12.1** (10.8-13.6) | **11.7** (10.6-12.9) | **10.1** [b] (9.2-11.2) |

Notes: (1) entries in brackets are 95% confidence intervals; (2) no significant differences 2009 vs. 2007; (3) [b] 2009 vs. 1999 significant difference, p<.01 (vs. 2001 for ecstasy and Rohypnol); (4) NM = non-medical use, without a doctor's prescription; (5) "Any illicit" drug includes: cannabis, LSD, PCP, other hallucinogens, methamphetamine, cocaine, crack, heroin, stimulants (NM), and tranquillizers/sedatives (NM). The drugs excluded from the indices are: glue, solvents, crystal methamphetamine, ecstasy, GHB, Rohypnol, ketamine, jimson weed, prescription opioid drugs, prescription ADHD drugs, OTC sleeping medication, and steroids.

Source: OSDUHS, Centre for Addiction & Mental Health

Table 3.2.1b: Percentage Using Drug at Least Once During the Past Year, 1977–2009 (Grades 7, 9, and 11 only)

| | 1977 | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N) | (3927) | (3920) | (3010) | (3614) | (3146) | (3376) | (3040) | (2961) | (2617) | (2907) | (3072) | (2421) | (2013) | (3389) | (3969) | (3215) | (4424) |
| Cigarettes | **29.2** (26.7-31.8) | **35.0** (32.3-37.7) | **28.8** (25.4-32.5) | **29.0** (25.6-32.6) | **23.6** (21.1-26.2) | **22.9** (21.1-24.8) | **22.2** (20.3-24.2) | **20.1** (18.4-22.0) | **23.4** (21.8-25.2) | **27.3** (25.2-29.5) | **27.2** (25.4-29.0) | **26.6** (23.5-30.0) | **21.2** (17.7-25.2) | **17.4** (15.3-19.7) | **12.7** (11.1-14.5) | **10.8** (9.3-12.6) | **9.3** (8.0-10.9) |
| Alcohol | **72.8** (70.4-75.1) | **73.7** (71.6-75.8) | **70.1** (67.7-72.3) | **69.0** (66.1-71.9) | **66.3** (64.7-67.9) | **65.1** (63.0-67.3) | **62.6** (58.8-66.3) | **54.3** (51.6-57.0) | **53.6** (50.4-56.6) | **56.0** (53.4-58.4) | **56.9** (53.3-60.4) | **62.7** (59.4-66.0) | **58.9** (54.1-63.5) | **62.9** (60.2-64.4) | **57.8** (54.9-60.5) | **56.1** (53.0-59.0) | **51.2** (47.9-54.4) |
| Cannabis | **21.8** (19.5-24.3) | **29.1** (26.1-32.4) | **25.1** (22.2-28.2) | **21.9** (19.7-24.3) | **19.4** (16.4-22.9) | **13.8** (10.9-17.3) | **11.9** (9.7-14.4) | **9.9** (8.7-11.3) | **11.5** (10.7-12.4) | **21.9** (18.8-25.4) | **23.9** (21.9-26.0) | **26.8** (23.7-30.1) | **26.2** (22.1-30.8) | **27.8** (25.4-30.3) | **22.2** (20.1-24.5) | **22.0** (19.5-24.7) | **20.4** (18.4-22.6) |
| Glue | **4.2** (3.6-5.1) | **4.9** (4.1-5.8) | **3.2** (2.4-4.2) | **3.6** (3.2-4.2) | **2.3** (1.8-2.8) | **2.7** (1.8-4.1) | **2.0** (1.7-2.5) | **1.2** (0.8-1.9) | **1.8** (1.3-2.4) | **2.8** (2.3-3.3) | **1.7** (1.3-2.2) | **4.3** (3.3-5.5) | **3.1** (2.2-4.2) | **3.2** (2.5-4.0) | **2.9** (2.1-4.0) | **2.4** (1.6-3.8) | **2.2** (1.4-3.6) |
| Solvents | **7.4** (6.5-8.5) | **7.2** (6.3-8.2) | **4.4** (3.3-5.8) | **4.6** (3.8-5.5) | **3.1** (2.5-3.7) | **4.2** (3.1-5.6) | **3.4** (2.8-4.3) | **1.8** (1.2-2.7) | **2.6** (2.0-3.2) | **3.2** (2.7-3.9) | **2.8** (2.1-3.7) | **8.3** (6.8-10.1) | **6.7** (5.4-8.4) | **6.6** (5.5-7.8) | **5.8** (4.5-7.5) | **6.3** (4.8-8.2) | **5.4** (4.0-7.1) |
| LSD | **6.0** (5.1-7.1) | **9.0** (7.7-10.5) | **9.4** (7.6-11.6) | **8.5** (7.2-9.9) | **7.1** (5.6-8.9) | **5.8** (4.2-7.9) | **5.4** (3.8-7.4) | **4.9** (4.2-5.9) | **6.8** (5.8-7.9) | **9.5** (7.2-12.5) | **7.7** (7.0-8.5) | **6.5** (4.8-8.6) | **3.6** (2.7-4.7) | **2.9** (2.3-3.6) | **1.8** (1.3-2.6) | **1.8** (1.2-2.5) | **1.5** (1.1-2.2) |
| PCP | — | — | **2.4** (1.7-3.4) | **2.2** (1.6-2.8) | **1.7** (1.3-2.2) | **1.4** (0.8-2.3) | **1.2** (0.8-1.8) | **0.6** (0.3-1.1) | **0.6** (0.3-1.2) | **1.8** (1.0-3.1) | **2.1** (1.4-3.0) | **3.2** (2.2-4.5) | **2.6** (1.9-3.5) | **2.0** (1.6-2.6) | **1.1** (0.7-1.6) | **0.8** (0.5-1.2) | **0.7** (0.4-1.1) |
| Hallucinogens (other than LSD, PCP) | **3.9** (3.2-4.7) | **5.2** (4.3-6.4) | **4.2** (2.9-6.1) | **5.6** (4.4-7.1) | **4.5** (3.5-5.8) | **4.0** (2.6-6.1) | **3.8** (2.7-5.4) | **3.0** (2.4-3.7) | **2.8** (2.2-3.6) | **7.6** (5.5-10.4) | **9.6** (8.3-11.2) | **11.7** (9.4-14.4) | **9.7** (7.7-12.1) | **9.5** (8.0-11.2) | **5.8** (4.7-7.2) | **5.3** (4.4-6.4) | **4.4** (3.4-5.8) |
| Methamphetamine | **2.7** (2.2-3.2) | **3.7** (3.0-4.4) | **2.8** (2.0-3.9) | **4.2** (2.4-7.0) | **3.2** (2.7-3.9) | **3.3** (2.5-4.2) | **2.5** (2.0-3.2) | **1.9** (1.4-2.5) | **2.2** (1.6-3.0) | **4.7** (3.4-6.6) | **3.7** (3.1-4.5) | **4.5** (3.2-6.4) | **3.2** (2.4-4.3) | **3.6** (2.9-4.4) | **2.0** (1.6-2.6) | **1.6** (1.2-2.3) | **1.2** (0.8-1.7) |
| Crystal Meth (Ice) | — | — | — | — | — | — | — | **0.9** (0.5-1.6) | **1.2** (0.5-2.8) | **1.7** (1.2-2.5) | † | **1.6** (0.6-4.1) | **0.5** (0.2-1.5) | **1.2** (0.7-2.0) | **1.1** (0.7-1.7) | **0.9** (0.6-1.4) | **0.5** (0.3-0.9) |
| Cocaine | **3.6** (3.0-4.3) | **5.3** (4.4-6.2) | **4.6** (3.8-5.6) | **4.0** (3.1-5.3) | **4.0** (3.1-5.3) | **3.4** (2.5-4.7) | **2.4** (1.7-3.4) | **1.7** (1.2-2.4) | **1.5** (0.9-2.4) | **2.5** (2.1-3.0) | **2.7** (2.4-3.1) | **3.7** (2.8-4.9) | **4.0** (3.1-5.3) | **5.1** (4.2-6.1) | **4.2** (3.5-5.2) | **3.3** (2.6-4.1) | **1.9** (1.5-2.6) |
| Crack | — | — | — | — | — | **1.5** (1.0-2.2) | **1.3** (0.8-2.0) | **1.1** (0.6-1.9) | **1.1** (0.6-2.0) | **1.8** (1.5-2.3) | **2.4** (1.7-3.3) | **2.5** (1.7-3.6) | **2.4** (1.7-3.2) | **3.0** (2.2-3.8) | **1.9** (1.5-2.5) | **1.3** (1.0-1.8) | **1.0** (0.7-1.5) |
| Heroin | **2.0** (1.6-2.6) | **2.5** (1.9-3.2) | **1.5** (1.0-2.2) | **1.8** (1.3-2.5) | **1.6** (1.2-2.3) | **1.5** (1.0-2.3) | **1.2** (0.8-1.9) | **1.1** (0.7-1.7) | **1.3** (0.9-1.8) | **2.1** (1.4-2.9) | **1.8** (1.6-2.2) | **1.7** (1.2-2.4) | **1.3** (0.9-2.0) | **1.4** (1.0-1.9) | **0.9** (0.7-1.3) | **1.1** (0.8-1.7) | **0.7** (0.4-1.1) |
| Ecstasy (MDMA) | — | — | — | — | — | — | — | † | † | **2.0** (1.2-3.3) | **2.9** (1.7-5.1) | **4.3** (3.0-6.2) | **5.8** (4.7-7.3) | **3.8** (3.2-4.7) | **3.9** (3.0-4.9) | **3.1** (2.4-4.0) | **2.5** (1.9-3.3) |
| Stimulants (NM) | **7.3** (6.4-8.3) | **11.0** (9.5-12.6) | **11.0** (9.4-12.8) | **14.3** (12.2-16.8) | **10.9** (9.4-12.5) | **7.6** (6.4-8.9) | **5.8** (5.0-6.6) | **3.8** (2.9-4.8) | **5.2** (3.7-7.4) | **6.4** (5.3-7.7) | **7.2** (6.2-8.3) | **6.7** (5.3-8.5) | **5.7** (4.6-7.2) | **5.4** (4.6-6.3) | **4.5** (3.6-5.6) | **5.6** (4.8-6.6) | **4.5** (3.7-5.6) |
| Tranquillizers (NM) | **4.8** (4.0-5.7) | **5.8** (5.0-6.8) | **4.6** (3.8-5.6) | **5.0** (3.8-6.4) | **3.3** (2.6-4.2) | **3.0** (2.2-4.0) | **2.2** (1.9-2.7) | **1.6** (1.2-2.2) | **1.0** (0.6-1.7) | **1.6** (1.0-2.4) | **1.7** (1.4-2.2) | **1.8** (1.2-2.6) | **1.7** (1.1-2.7) | **2.3** (1.8-3.0) | **1.7** (1.2-2.3) | **1.6** (1.2-2.2) | **1.1** (0.8-1.5) |
| Steroids (lifetime) | — | — | — | — | — | — | **1.3** (0.9-1.8) | **1.7** (1.4-2.1) | **1.6** (1.1-2.4) | **1.4** (1.0-2.0) | **1.4** (1.0-2.0) | **3.1** (2.2-4.3) | **3.4** (2.4-4.6) | **2.4** (1.8-3.3) | **1.7** (1.2-2.5) | **1.1** (0.6-1.8) | **1.0** (0.5-1.8) |
| Any illicit, incl. cannabis | **26.0** (23.7-28.5) | **33.4** (30.4-36.7) | **28.0** (25.4-30.8) | **26.6** (24.0-29.3) | **24.2** (21.0-27.7) | **19.3** (16.2-22.8) | **16.6** (14.7-18.8) | **14.0** (12.6-15.5) | **16.4** (14.6-18.3) | **25.8** (22.7-29.2) | **28.1** (26.2-30.0) | **30.8** (27.6-34.2) | **30.0** (26.1-34.2) | **30.3** (27.9-32.9) | **24.4** (22.2-26.7) | **25.6** (23.2-28.1) | **22.7** (20.7-24.9) |
| Any illicit, excl. cannabis | **15.1** (13.6-16.7) | **20.4** (18.4-22.5) | **17.0** (15.2-19.0) | **20.0** (17.8-22.3) | **16.6** (14.4-19.0) | **13.7** (11.9-15.8) | **11.8** (10.4-13.3) | **9.8** (8.7-11.0) | **11.8** (9.9-13.9) | **17.0** (14.7-19.6) | **17.5** (16.0-19.0) | **19.2** (16.5-22.3) | **16.4** (14.4-18.7) | **14.3** (12.6-16.2) | **11.2** (9.7-12.9) | **11.4** (10.1-12.9) | **9.2** (7.9-10.6) |

Notes: (1) entries in brackets are 95% confidence intervals; (2) NM = non-medical use, without a doctor's prescription; (3) † estimate suppressed or less than 0.5%; (4) estimates for "Any illicit" drug include cannabis, LSD, PCP, other hallucinogens, methamphetamine (speed), cocaine, crack, heroin, stimulants (NM), and tranquillizers/sedatives (NM). The drugs excluded from the indices are: glue, solvents, crystal methamphetamine, ecstasy, and steroids.

Source: OSDUHS, Centre for Addiction & Mental Health

## Changes in Frequent Drug Use

(Tables 3.2.2a, 3.2.2b)

Frequent drug use, defined as using six or more times during the past year, is shown in Tables 3.2.2a (ten-year changes) and 3.2.2b (long-term changes). Between 1999 and 2009, frequent use of LSD decreased from 1.9% to less than 0.5%. Frequent use of other hallucinogens also decreased, from 4.1% in 1999 to 1.0% in 2009.

Only cannabis has shown marked fluctuations over the long-term. Frequent cannabis use was at an elevated level in the late 1970s, dipped in the 1980s and started to increase again in the late 1990s. Currently, frequent cannabis use is lower than the elevated rate found in 1979, but higher than levels from the mid-1980s and early 1990s.

Table 3.2.2a: Frequent Drug Use: Percentage Using Drug Six Times or More Often During the Past Year, 1999–2009 (Total Sample, Grades 7 to 12)

| | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|
| (N) | (4447) | (3898) | (6616) | (7726) | (6323) | (9112) |
| Cannabis | **15.5** (14.0-17.1) | **16.4** (14.4-18.6) | **16.5** (14.8-18.4) | **14.9** (13.4-16.6) | **14.2** (12.6-15.9) | **14.5** (13.1-16.0) |
| Glue | **0.8** (0.5-1.2) | **0.5** (0.3-0.8) | **0.6** (0.4-0.9) | **0.5** (0.3-0.9) | **0.6** (0.3-1.0) | † |
| Solvents | **1.4** (0.9-2.0) | **0.8** (0.5-1.2) | **1.4** (1.1-1.8) | **1.0** (0.6-1.7) | **1.5** (1.0-2.2) | **0.9** (0.5-1.4) |
| LSD | **1.9** (1.3-2.8) | **0.9** (0.5-1.6) | **0.6** (0.4-1.0) | † | † | † [b] |
| Hallucinogens other than LSD, PCP | **4.1** (3.3-5.1) | **3.1** (2.4-3.8) | **2.6** (2.1-3.1) | **1.4** (1.0-1.9) | **1.0** (0.7-1.3) | **1.0** [b] (0.7-1.5) |
| Jimson Weed | — | — | — | — | **1.0** (0.6-1.6) | **0.7** (0.4-1.2) |
| Methamphetamine (Speed) | **1.2** (0.8-1.6) | **0.6** (0.4-1.0) | **0.9** (0.7-1.2) | **0.6** (0.5-0.9) | † | † |
| Cocaine | **1.1** (0.8-1.6) | **1.0** (0.7-1.6) | **1.6** (1.2-2.1) | **1.6** (1.2-2.1) | **1.3** (0.9-1.8) | **0.9** (0.6-1.2) |
| Ecstasy (MDMA) | **1.0** (0.6-1.6) | **1.6** (1.1-2.4) | **1.2** (0.9-1.5) | **1.5** (1.1-2.1) | **1.2** (0.9-1.5) | **1.0** (0.8-1.4) |
| Opioid Pain Relievers (NM) | — | — | — | — | **8.0** (6.8-9.3) | **6.9** (6.2-7.6) |
| Stimulants (NM) | **2.3** (1.7-3.0) | **1.9** (0.4-2.6) | **2.3** (0.9-2.8) | **1.8** (1.4-2.2) | **1.6** (1.3-2.0) | **1.5** (1.2-2.0) |
| Tranquillizers/Sedatives (NM) | **0.5** (0.3-0.8) | **0.8** (0.4-1.4) | **0.6** (0.4-0.8) | † | **0.5** (0.3-0.8) | **0.5** (0.3-0.7) |
| OTC Sleeping Medication (NM) | — | — | — | — | **0.8** (0.5-1.1) | **0.8** (0.4-1.4) |

Notes: (1) entries in brackets are 95% confidence intervals; (2) no significant differences 2009 vs. 2007; [b] 2009 vs. 1999 significant difference, p<.01; (3) † estimate suppressed (less than 0.5%) due to unreliability; (4) NM = non-medical use, without a doctor's prescription; (5) estimates for heroin, PCP, crystal methamphetamine, crack, GHB, ketamine, Rohypnol, and OxyContin (NM) are not presented, all years 0.5% or less.

Source: OSDUHS, Centre for Addiction & Mental Health

Table 3.2.2b: Frequent Drug Use: Percentage Reporting Using Drug Six or More Times During the Past Year, 1977–2009 (Grades 7, 9, 11 only)

| (N) | 1977 (3927) | 1979 (3920) | 1981 (3010) | 1983 (3614) | 1985 (3146) | 1987 (3376) | 1989 (3040) | 1991 (2961) | 1993 (2617) | 1995 (2907) | 1997 (3072) | 1999 (2424) | 2001 (2013) | 2003 (3389) | 2005 (3969) | 2007 (3215) | 2009 (4424) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Cannabis | **12.8** (11.1-14.7) | **18.0** (15.5-20.8) | **15.2** (12.4-18.5) | **11.6** (10.1-13.3) | **9.4** (7.7-11.5) | **6.2** (4.6-8.2) | **4.8** (3.5-6.4) | **4.6** (3.7-5.7) | **4.9** (3.7-6.6) | **11.4** (9.3-14.0) | **15.2** (13.1-17.7) | **14.9** (12.8-17.3) | **15.4** (12.4-18.8) | **16.0** (13.8-18.4) | **12.8** (11.3-14.6) | **12.0** (10.2-14.0) | **11.2** (9.6-13.1) |
| Glue | **0.7** (0.4-1.1) | **0.9** (0.6-1.4) | **0.5** (0.4-0.7) | † | † | **0.5** (0.2-1.3) | † | † | † | † | † | **1.0** (0.6-1.7) | † | **0.7** (0.4-1.0) | **0.6** (0.3-1.4) | **0.6** (0.3-1.4) | † |
| Solvents | **1.1** (0.8-1.5) | **1.1** (0.7-1.6) | **0.9** (0.6-1.3) | **0.5** (0.4-0.8) | † | **0.5** (0.2-1.2) | † | † | **0.5** (0.3-0.8) | † | **0.6** (0.3-1.1) | **1.6** (1.0-2.4) | **0.8** (0.5-1.5) | **1.6** (1.2-2.1) | **1.2** (0.7-2.1) | **1.6** (1.0-2.5) | **1.1** (0.6-2.3) |
| LSD | **1.6** (1.2-2.0) | **2.4** (1.9-3.2) | **3.4** (2.1-5.4) | **3.5** (2.6-4.6) | **2.4** (1.6-3.8) | **2.2** (1.5-3.1) | **1.6** (1.1-2.4) | **1.8** (1.3-2.5) | **2.7** (2.2-3.3) | **3.3** (2.4-4.7) | **2.6** (1.7-3.8) | **2.2** (1.3-3.7) | † | **0.7** (0.4-1.0) | † | † | † |
| Hallucinogens (other than LSD, PCP) | **0.9** (0.6-1.3) | **1.4** (1.0-1.9) | **1.0** (0.5-2.1) | **1.2** (0.7-2.2) | **0.7** (0.4-1.0) | **0.8** (0.4-1.6) | **0.9** (0.5-1.8) | **0.6** (0.4-0.8) | **0.6** (0.3-1.0) | **1.5** (0.9-2.6) | **2.7** (1.8-4.1) | **4.1** (2.9-5.7) | **3.1** (2.2-4.4) | **2.5** (2.0-3.2) | **1.3** (0.9-1.9) | **1.2** (0.8-1.7) | **0.8** (0.5-1.3) |
| Methamphetamine | **0.6** (0.4-1.0) | **0.7** (0.5-1.1) | **0.6** (0.4-1.0) | **1.3** (0.5-3.0) | **0.5** (0.3-1.0) | **0.8** (0.4-1.6) | **0.5** (0.3-0.8) | **0.5** (0.3-0.9) | **0.6** (0.2-1.4) | **0.8** (0.4-1.4) | **1.1** (0.6-1.7) | **1.0** (0.7-1.7) | † | **1.0** (0.8-1.4) | **0.7** (0.5-1.1) | **0.5** (0.3-0.8) | **0.5** (0.2-0.9) |
| Cocaine | **0.8** (0.6-1.1) | **1.0** (0.7-1.5) | **0.9** (0.6-1.2) | **0.9** (0.6-1.3) | **1.0** (0.7-1.3) | **1.0** (0.6-1.6) | **0.6** (0.4-1.2) | **0.6** (0.3-1.3) | **0.9** (0.5-1.5) | **0.8** (0.5-1.1) | **0.8** (0.4-1.3) | **1.2** (0.7-2.2) | **1.4** (0.8-2.2) | **1.8** (1.3-2.5) | **1.4** (1.1-1.9) | **1.1** (0.8-1.7) | **0.6** (0.4-0.9) |
| Heroin | **0.5** (0.3-0.9) | **0.6** (0.4-1.0) | † | **0.6** (0.4-0.8) | † | † | † | **0.8** (0.5-1.3) | **0.7** (0.5-1.1) | **0.9** (0.6-1.4) | **1.1** (0.9-1.4) | **0.6** (0.4-1.1) | † | **0.5** (0.3-0.8) | † | † | † |
| Ecstasy (MDMA) | — | — | — | — | — | — | — | † | † | † | † | **1.2** (0.7-2.3) | **1.4** (0.8-2.3) | **1.3** (0.9-2.0) | **1.4** (1.0-2.2) | **1.2** (0.8-1.7) | **0.8** (0.5-1.4) |
| Stimulants (NM) | **1.8** (1.4-2.4) | **3.2** (2.6-4.0) | **3.6** (2.5-5.1) | **5.3** (4.1-6.8) | **2.9** (2.3-3.7) | **2.0** (1.4-3.0) | **1.7** (1.3-2.4) | **1.0** (0.7-1.3) | **1.6** (0.7-3.6) | **1.3** (0.9-2.0) | **2.0** (1.7-2.4) | **2.1** (1.3-3.4) | **1.8** (1.2-2.7) | **2.3** (1.8-3.0) | **1.8** (1.2-2.6) | **1.4** (1.0-1.9) | **1.3** (0.9-1.8) |
| Tranquillizers (NM) | **0.9** (0.6-1.3) | **1.0** (0.7-1.5) | **0.8** (0.5-1.5) | **1.3** (0.9-2.0) | **0.5** (0.4-0.7) | **0.7** (0.4-1.3) | † | † | † | † | † | **0.5** (0.3-1.0) | **0.6** (0.2-1.3) | **0.6** (0.3-0.9) | † | † | † |

Notes: (1) entries in brackets are 95% confidence intervals; (2) † estimate suppressed (less than 0.5%) due to unreliability; (3) estimates for ecstasy are based on a half sample between 1991 and 1999; (4) NM = non-medical use, without a doctor's prescription; (5) estimates for PCP, crystal methamphetamine, and crack are not presented, all years 0.5% or less.

Source: OSDUHS, Centre for Addiction & Mental Health

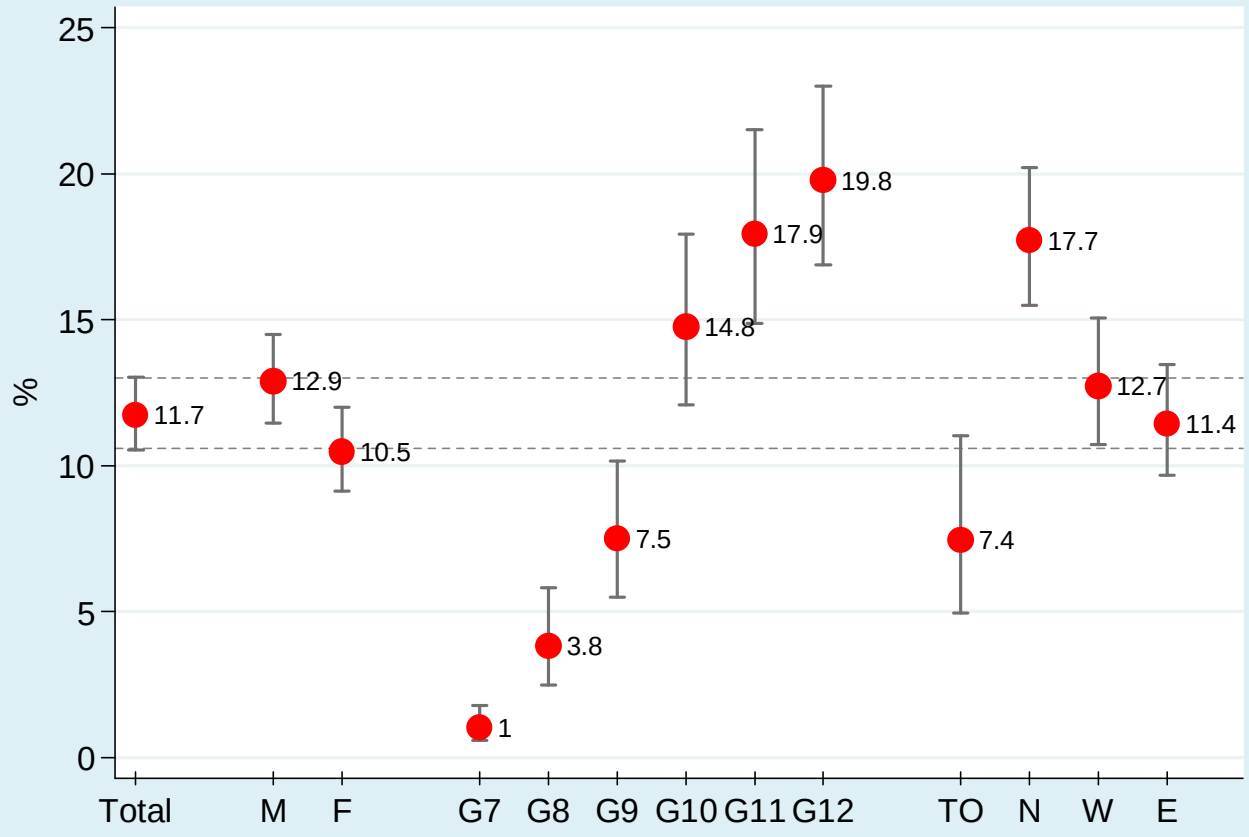
# 3.3 Tobacco Use

## Past Year Cigarette Smoking

(Figures 3.3.1, 3.3.2; Table 3.3.1)

| | Smoking in 2009 (Grades 7 to 12) | Trends in Smoking |
|---|---|---|
| Total Sample | ■ Overall, 11.7% of students report smoking cigarettes during the 12 months before the survey. This estimate includes daily and occasional smoking, but excludes those who tried a cigarette. We estimate that the actual percentage of all students who smoke falls between 10.6% and 13.0%. The percentage of 11.7% smokers represents about 119,600 Ontario students in grades 7 to 12. | ☐ Past year smoking among students in grades 7 to 12 remained stable between 2007 (11.9%) and 2009 (11.7%). The 2009 smoking prevalence rate is significantly lower than that found in 1999 (28.4%), among grades 7 to 12.<br><br>☐ Over the long-term, the highest smoking prevalence rate was found in 1979, at 35% (among grades 7, 9, and 11 only). Smoking decreased in the 1980s, but increased again in the late 1990s. Smoking decreased after 1999, reaching a low in 2005, remaining stable in 2007, and again in 2009. |
| Sex | ■ In 2009, males (12.9%) are significantly more likely than females (10.5%) to smoke cigarettes. | ☐ Between 2007 and 2009, smoking remained stable among males (11.7% and 12.9%, respectively) and females (12.1% and 10.5%, respectively). Smoking has significantly declined compared to the 1999 estimates (males: from 29.0% down to 12.9%; females: from 27.7% down to 10.5%).<br><br>☐ Over the long-term, smoking among males and females was highest in the late 1970s, decreased during the 1980s, and increased in the 1990s. Smoking by both males and females has been on a downward trend since the end of the 1990s. |
| Grade | ■ Rates of smoking significantly increase with grade: from 1.0% of 7th-graders, 3.8% of 8th-graders, 7.5% of 9th-graders, 14.8% of 10th-graders, 17.9% of 11th-graders, up to 19.8% of 12th-graders. | ☐ No grade shows a significant change in smoking between 2007 and 2009. However, smoking is currently significantly lower among students in all grades, compared to their respective estimates from 1999. |
| Region | ■ Smoking significantly differs by region, with students in the North region (17.7%) most likely to smoke, whereas those in Toronto (7.4%) are least likely. | ☐ No region shows a significant change between 2007 and 2009. However, decreases since 1999 are significant in all four regions. |

Figure 3.3.1
Past Year Cigarette Smoking by Sex, Grade and Region, 2009 OSDUHS




Vertical bars represent 95% confidence intervals; horizontal bar represents 95% CI for total estimate

Figure 3.3.2
Past Year Cigarette Smoking, 1977–2009 OSDUHS (Grades 7, 9, 11 only)

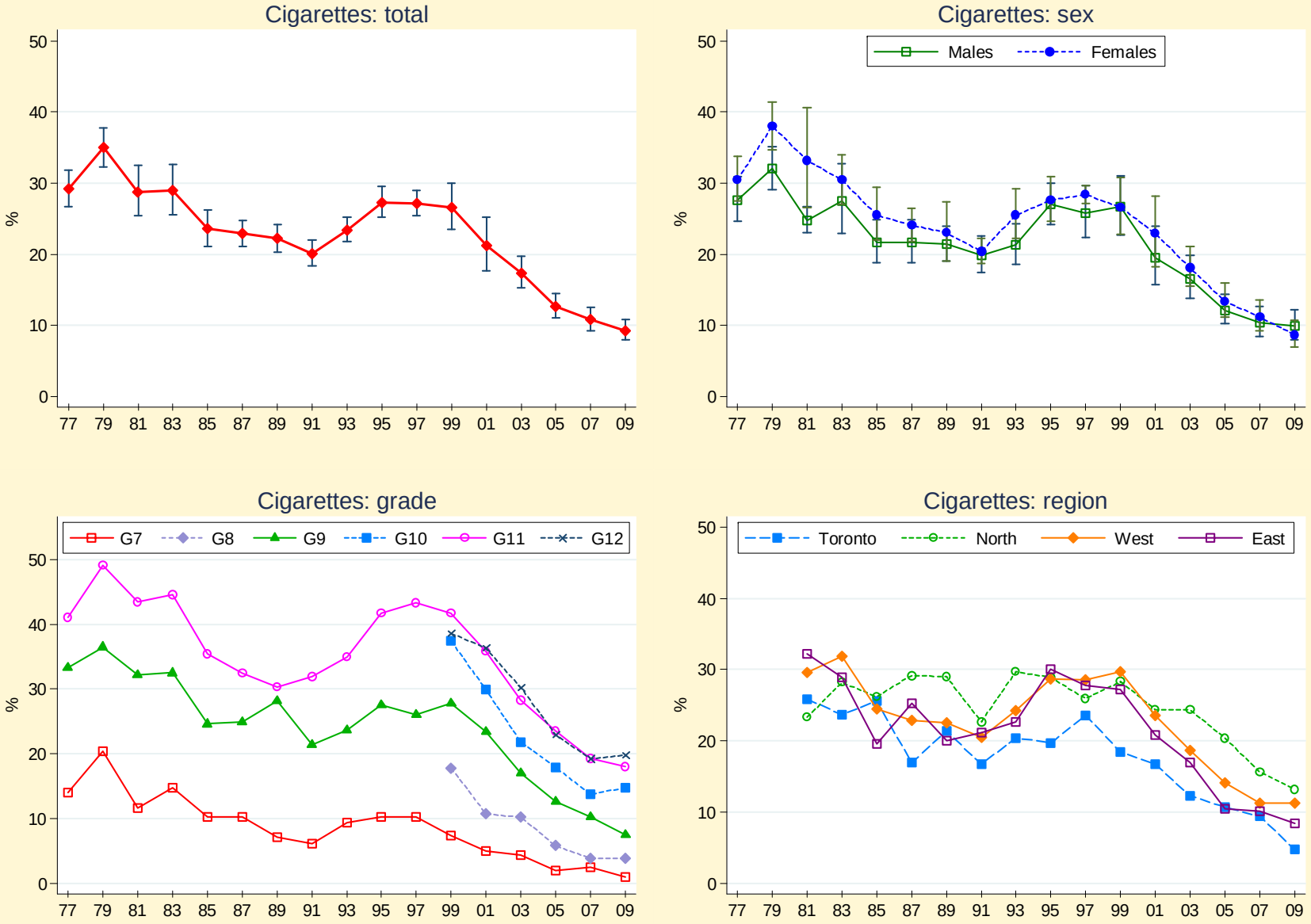


Table 3.3.1: Percentage Reporting Cigarette Smoking During the Past Year, 1977–2009

| | 1977 | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N[1]) | | | | | | | | | | | | (4447) | (3898) | (6616) | (7726) | (6323) | (9112) |
| (N[2]) | (3927) | (3920) | (3010) | (3614) | (3146) | (3376) | (3040) | (2961) | (2617) | (2907) | (3072) | (2421) | (2013) | (3389) | (3969) | (3215) | (4424) |
| Total[1] (95% CI) | — | — | — | — | — | — | — | — | — | — | — | 28.4 (26.1-30.7) | 23.1 (20.4-26.1) | 19.2 (17.7-20.8) | 14.4 (13.0-15.9) | 11.9 (10.7-13.2) | 11.7[b] (10.6-13.0) |
| Total[2] | 29.2 (26.7-31.8) | 35.0 (32.3-37.7) | 28.8 (25.4-32.5) | 29.0 (25.6-32.6) | 23.6 (21.1-26.2) | 22.9 (21.1-24.8) | 22.2 (20.3-24.2) | 20.1 (18.4-22.0) | 23.4 (21.8-25.2) | 27.3 (25.2-29.5) | 27.2 (25.4-29.0) | 26.6 (23.5-30.0) | 21.2 (17.7-25.2) | 17.4 (15.3-19.7) | 12.7 (11.1-14.5) | 10.8 (9.3-12.6) | 9.3[cd] (8.0-10.9) |
| Sex | | | | | | | | | | | | | | | | | |
| Males[1] | — | — | — | — | — | — | — | — | — | — | — | 29.0 (26.0-32.2) | 22.7 (19.4-26.4) | 18.0 (15.9-20.4) | 13.9 (12.4-15.5) | 11.7 (10.2-13.4) | 12.9[b] (11.5-14.5) |
| Males[2] | 27.6 (24.6-30.9) | 32.0 (29.1-35.1) | 24.8 (23.0-26.7) | 27.5 (22.9-32.7) | 21.7 (18.8-24.9) | 21.7 (18.8-24.9) | 21.4 (19.1-23.9) | 19.9 (17.4-22.6) | 21.3 (18.6-24.3) | 27.0 (24.2-30.0) | 25.8 (22.4-29.6) | 26.7 (22.7-31.0) | 19.5 (15.7-24.0) | 16.6 (13.8-19.8) | 12.1 (10.3-14.1) | 10.4 (8.5-12.7) | 9.9 (8.0-12.2) |
| Females[1] | — | — | — | — | — | — | — | — | — | — | — | 27.7 (25.0-30.6) | 23.5 (20.1-27.2) | 20.3 (18.5-22.3) | 14.9 (13.1-16.8) | 12.1 (10.6-13.8) | 10.5[b] (9.1-12.0) |
| Females[2] | 30.5 (27.5-33.8) | 38.0 (34.7-41.4) | 33.2 (26.6-40.6) | 30.4 (27.0-34.0) | 25.5 (22.0-29.4) | 24.1 (21.8-26.5) | 23.0 (19.1-27.4) | 20.4 (18.7-22.2) | 25.5 (22.2-29.2) | 27.6 (24.6-30.9) | 28.4 (27.1-29.7) | 26.6 (22.8-30.8) | 22.9 (18.3-28.2) | 18.1 (15.5-21.1) | 13.4 (11.2-16.0) | 11.2 (9.2-13.6) | 8.7 (7.0-10.7) |
| Grade | | | | | | | | | | | | | | | | | |
| 7 | 14.0 (11.1-17.7) | 20.4 (17.2-23.9) | 11.6 (10.8-12.5) | 14.8 (8.9-23.7) | 10.3 (7.3-14.4) | 10.2 (7.4-13.9) | 7.1 (4.6-11.0) | 6.1 (4.4-8.4) | 9.4 (7.7-11.3) | 10.3 (7.2-14.4) | 10.2 (8.1-12.7) | 7.4 (5.2-10.3) | 5.0 (3.2-7.6) | 4.4 (2.8-6.8) | 2.0 (1.2-3.4) | 2.5 (1.2-5.3) | 1.0[b] (0.6-1.8) |
| 8 | — | — | — | — | — | — | — | — | — | — | — | 17.8 (14.3-21.9) | 10.7 (8.3-13.8) | 10.2 (7.2-14.4) | 5.8 (4.3-7.7) | 3.8 (2.4-6.1) | 3.8[b] (2.5-5.8) |
| 9 | 33.3 (28.9-38.1) | 36.5 (32.2-41.0) | 32.2 (27.0-37.9) | 32.5 (30.8-34.3) | 24.6 (19.8-30.1) | 24.9 (21.3-28.9) | 28.2 (26.2-30.4) | 21.4 (18.5-24.5) | 23.7 (22.8-24.8) | 27.5 (25.8-29.1) | 26.0 (23.5-28.6) | 27.8 (23.6-32.5) | 23.4 (17.5-30.6) | 17.0 (13.9-20.6) | 12.6 (10.4-15.1) | 10.2 (8.1-12.9) | 7.5[b] (5.5-10.2) |
| 10 | — | — | — | — | — | — | — | — | — | — | — | 37.4 (32.0-43.1) | 29.9 (25.6-34.6) | 21.8 (18.4-25.6) | 17.9 (15.2-20.8) | 13.7 (11.4-16.5) | 14.8[b] (12.1-17.9) |
| 11 | 41.1 (36.6-45.7) | 49.1 (44.4-53.9) | 43.5 (37.6-49.5) | 44.6 (38.4-51.0) | 35.4 (31.1-40.0) | 32.4 (28.1-37.0) | 30.3 (26.4-34.5) | 31.9 (28.7-35.3) | 34.9 (30.6-39.5) | 41.7 (36.7-46.8) | 43.4 (39.3-47.6) | 41.7 (35.4-48.4) | 35.8 (29.8-42.2) | 28.3 (24.3-32.6) | 23.5 (20.0-27.2) | 19.3 (16.3-22.7) | 17.9[b] (14.9-21.5) |
| 12 | — | — | — | — | — | — | — | — | — | — | — | 38.6 (33.3-44.2) | 36.3 (27.6-46.1) | 30.2 (25.7-35.2) | 22.9 (19.2-27.1) | 19.2 (16.8-21.8) | 19.8[b] (16.9-23.0) |

(Continued….)

| | 1977 | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N[1]) | | | | | | | | | | | | (4447) | (3898) | (6616) | (7726) | (6323) | (9112) |
| (N[2]) | (3927) | (3920) | (3010) | (3614) | (3146) | (3376) | (3040) | (2961) | (2617) | (2907) | (3072) | (2421) | (2013) | (3389) | (3969) | (3215) | (4424) |
| Region | | | | | | | | | | | | | | | | | |
| Toronto[1] | — | — | — | — | — | — | — | — | — | — | — | **20.6** (15.7-26.6) | **17.2** (11.0-25.7) | **15.5** (12.2-19.4) | **12.6** (10.1-15.7) | **9.9** (6.6-14.5) | **7.4** [b] (5.0-11.0) |
| Toronto[2] | — | — | **25.8** (17.7-36.0) | **23.7** (17.7-31.0) | **25.6** (21.6-30.0) | **16.9** (13.1-21.6) | **21.4** (16.1-27.9) | **16.7** (12.7-21.6) | **20.4** (16.7-24.6) | **19.7** (13.5-27.9) | **23.6** (20.3-27.3) | **18.4** (13.6-24.5) | **16.7** (9.2-28.2) | **12.3** (8.4-17.6) | **10.7** (8.0-14.2) | **9.4** (5.3-16.0) | **4.7** (2.6-8.3) |
| North[1] | — | — | — | — | — | — | — | — | — | — | — | **35.8** (30.3-41.6) | **25.4** (20.3-31.2) | **24.4** (19.7-29.7) | **19.9** (16.4-24.0) | **19.6** (16.4-23.2) | **17.7** [b] (15.5-20.2) |
| North[2] | — | — | **23.3** (14.2-35.8) | **28.2** (22.3-35.0) | **26.2** (22.1-30.6) | **29.2** (21.1-38.9) | **29.0** (22.2-36.8) | **22.7** (15.5-31.9) | **29.7** (22.0-38.9) | **28.9** (19.2-41.0) | **25.9** (23.9-27.9) | **28.3** (19.4-39.2) | **24.4** (17.4-33.2) | **24.3** (18.5-31.1) | **20.4** (15.6-26.3) | **15.6** (11.2-21.3) | **13.2** (9.2-18.5) |
| West[1] | — | — | — | — | — | — | — | — | — | — | — | **31.3** (27.8-35.0) | **25.8** (21.6-30.4) | **20.2** (17.9-22.8) | **16.8** (14.4-19.5) | **11.6** (9.9-13.5) | **12.7** [b] (10.7-15.1) |
| West[2] | — | — | **29.6** (24.3-35.6) | **31.9** (25.2-39.4) | **24.5** (22.8-26.2) | **22.9** (20.3-25.8) | **22.5** (20.2-25.0) | **20.5** (18.2-23.0) | **24.2** (21.9-26.8) | **28.7** (26.0-31.6) | **28.6** (25.5-31.9) | **29.7** (24.3-35.7) | **23.6** (19.2-28.7) | **18.6** (15.7-21.8) | **14.1** (11.5-17.1) | **11.3** (9.0-14.0) | **11.3** (9.0-14.1) |
| East[1] | — | — | — | — | — | — | — | — | — | — | — | **26.7** (22.9-31.0) | **22.4** (17.6-28.1) | **18.7** (16.2-21.6) | **11.1** (9.0-13.6) | **11.9** (10.0-14.1) | **11.4** [b] (9.7-13.5) |
| East[2] | — | — | **32.2** (27.2-37.6) | **28.9** (24.6-33.6) | **19.6** (12.9-28.7) | **25.3** (23.6-27.1) | **20.0** (16.3-24.3) | **21.2** (18.1-24.7) | **22.6** (20.3-25.1) | **30.1** (28.5-31.7) | **27.8** (24.6-31.3) | **27.2** (22.1-33.1) | **20.8** (14.3-29.3) | **17.0** (12.8-22.2) | **10.4** (7.9-13.6) | **10.1** (7.7-13.1) | **8.4** (6.4-11.0) |

Notes: (1) based on Grades 7-12 (full sample); (2) based on Grades 7, 9, and 11 only (long-term sample); (3) regional stratification differed in 1977 and 1979 and therefore regions are not presented; (4) entries in brackets are 95% confidence intervals; (5) no significant differences 2009 vs. 2007; [b] 2009 vs. 1999 significant difference, p<.01; [c] significant long-term linear trend, p<.001; [d] significant long-term non-linear trend, p<.001.

Q: In the last 12 months, how often did you smoke cigarettes? (Smoking excludes trying 1 cigarette in the past 12 months, but includes less than 1 cigarette or more daily.)

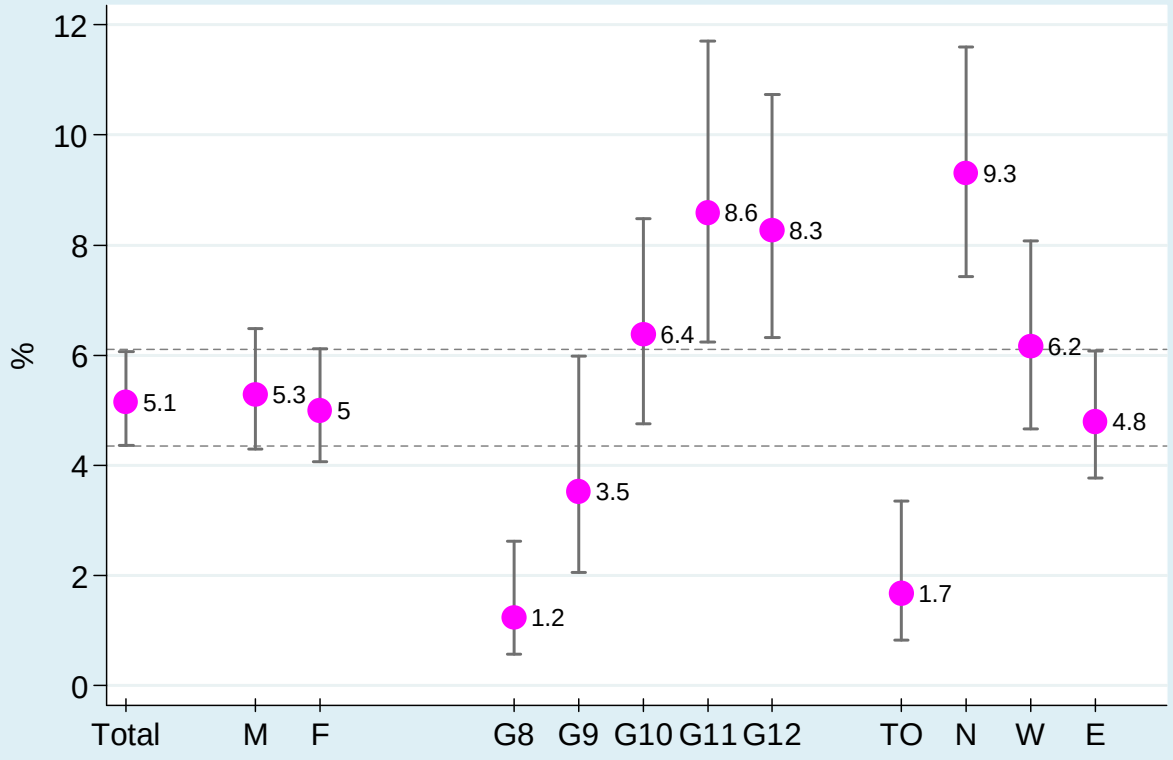
Source: OSDUHS, Centre for Addiction & Mental Health

## Past Year Daily Cigarette Smoking

(Figures 3.3.3, 3.3.4; Table 3.3.2)

| | Daily Smoking in 2009 (Grades 7 to 12) | Trends in Daily Smoking |
|---|---|---|
| Total Sample | ■ Overall, 5.1% (range: 4.4% to 6.1%) of students report smoking one or more cigarettes on a daily basis during the past 12 months. This percentage represents about 52,500 students in grades 7 to 12 across Ontario. | ☐ Overall, daily smoking remained stable between 2007 (5.2%) and 2009 (5.1%). The current estimate is significantly lower than that found in 1999 (22.0%).<br><br>☐ Over the long-term (among grades 7, 9, and 11 only), daily smoking decreased to an all-time low in 2007 and remains stable in 2009. |
| Sex | ■ Daily smoking does not significantly differ between males (5.3%) and females (5.0%). | ☐ The prevalence of daily smoking among both males and females remained stable between 2007 and 2009. However, the current daily smoking rates for both males and females are significantly lower compared to their respective 1999 estimates. |
| Grade | ■ Daily smoking is significantly related to grade level, increasing incrementally between 8$^{th}$-grade (1.2%) and 11$^{th}$-grade (8.6%) and remains stable in 12$^{th}$-grade (8.3%). | ☐ Daily smoking remained stable within all grades between 2007 and 2009. All grades show a significant decrease in 2009 compared to their respective 1999 estimates. |
| Region | ■ Daily smoking significantly differs by region, with students in the North (9.3%) most likely to smoke daily, whereas students in Toronto are the least likely (1.7%). Students in the West (6.2%) and East (4.8%) fall in between. | ☐ Between 2007 and 2009, daily smoking remained stable within all regions. However, rates are significantly lower in 2009 compared to a decade ago. |

Figure 3.3.3
Past Year Daily Smoking by Sex, Grade and Region, 2009 OSDUHS




Vertical bars represent 95% confidence intervals; horizontal bar represents 95% CI for total estimate; estimate for Grade 7 suppressed

Figure 3.3.4
Past Year Daily Smoking, 1977–2009 OSDUHS (Grades 7, 9, 11 only)

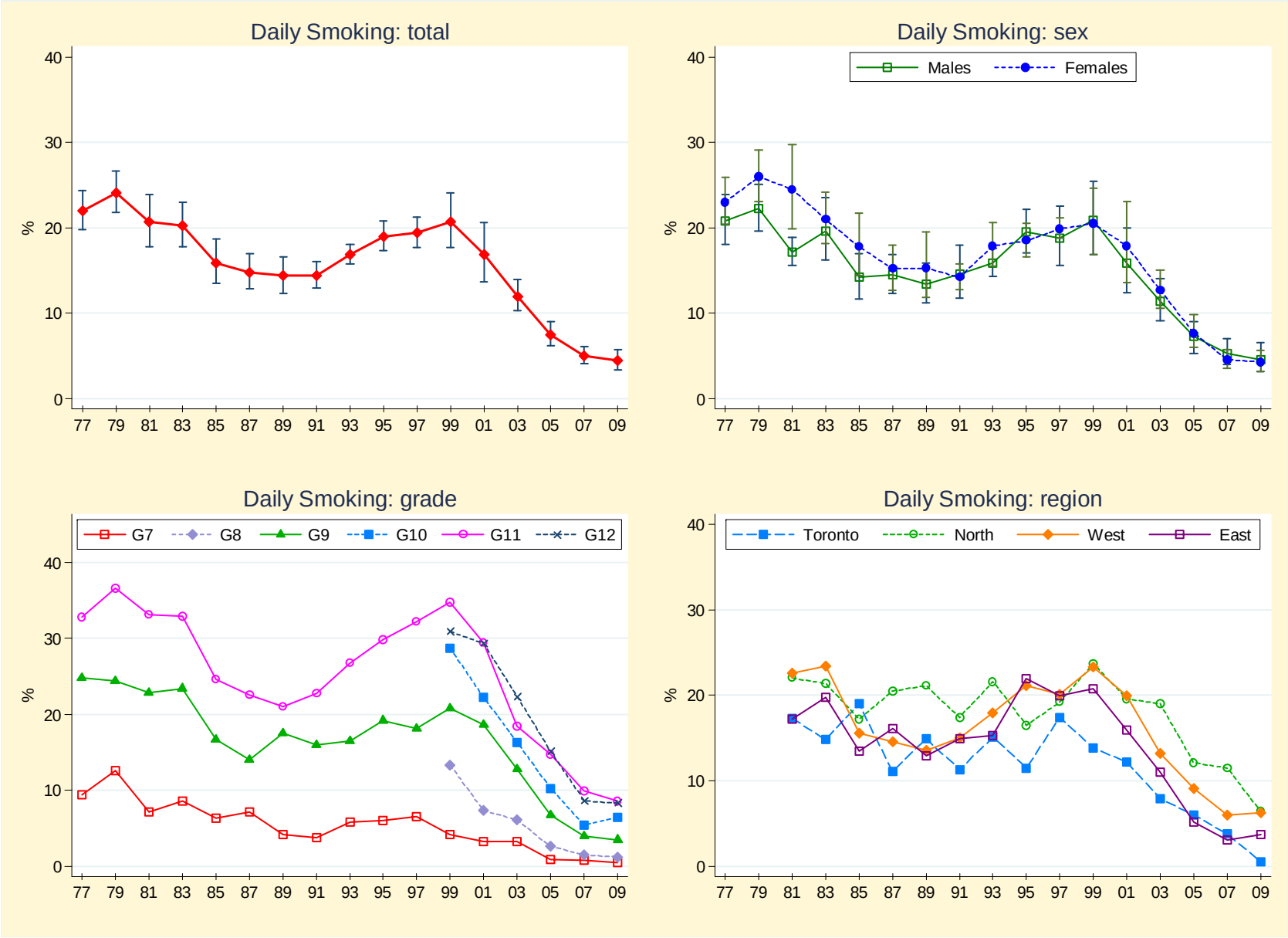


Table 3.3.2: Percentage Reporting Daily Smoking During the Past Year, 1977–2009

| | 1977 | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N[1]) | | | | | | | | | | | | (4447) | (3898) | (6616) | (7726) | (6323) | (9112) |
| (N[2]) | (3927) | (3920) | (3010) | (3614) | (3146) | (3376) | (3040) | (2961) | (2617) | (2907) | (3072) | (2421) | (2013) | (3389) | (3969) | (3215) | (4424) |
| Total[1] (95% CI) | — | — | — | — | — | — | — | — | — | — | — | 22.0 (19.8-24.4) | 17.9 (14.7-21.7) | 13.6 (12.3-15.1) | 8.6 (7.4-9.9) | 5.2 (4.5-6.1) | 5.1[b] (4.4-6.1) |
| Total[2] | 22.0 (19.8-24.4) | 24.1 (21.8-26.6) | 20.7 (17.8-23.9) | 20.3 (17.8-23.0) | 15.9 (13.5-18.7) | 14.8 (12.9-17.0) | 14.4 (12.3-16.6) | 14.4 (13.0-16.1) | 16.9 (15.8-18.1) | 19.0 (17.3-20.8) | 19.4 (17.7-21.3) | 20.7 (17.7-24.1) | 16.9 (13.7-20.6) | 12.0 (10.3-14.0) | 7.5 (6.2-9.0) | 5.0 (4.1-6.1) | 4.5[cd] (3.4-5.8) |
| Sex | | | | | | | | | | | | | | | | | |
| Males[1] | — | — | — | — | — | — | — | — | — | — | — | 22.3 (19.3-25.7) | 17.8 (14.8-21.4) | 13.0 (11.1-15.1) | 8.5 (7.2-10.0) | 5.3 (4.4-6.5) | 5.3[b] (4.3-6.5) |
| Males[2] | 20.8 (18.1-23.9) | 22.3 (19.6-25.1) | 17.2 (15.6-18.9) | 19.6 (16.2-23.5) | 14.2 (11.7-17.0) | 14.5 (12.3-16.9) | 13.4 (11.2-15.9) | 14.6 (11.8-18.0) | 15.9 (14.3-17.6) | 19.5 (17.1-22.2) | 18.8 (15.6-22.5) | 20.9 (16.9-25.5) | 15.9 (12.4-20.0) | 11.4 (9.1-14.1) | 7.3 (5.8-9.0) | 5.3 (4.0-7.0) | 4.6 (3.2-6.6) |
| Females[1] | — | — | — | — | — | — | — | — | — | — | — | 21.7 (19.1-24.6) | 17.9 (14.7-21.7) | 14.3 (12.8-15.9) | 8.6 (7.2-10.2) | 5.1 (4.1-6.3) | 5.0[b] (4.1-6.1) |
| Females[2] | 23.0 (20.4-25.9) | 26.0 (23.1-29.1) | 24.5 (19.9-29.7) | 21.0 (18.2-24.2) | 17.8 (14.4-21.7) | 15.2 (12.7-18.0) | 15.3 (11.9-19.5) | 14.2 (12.8-15.8) | 17.9 (15.5-20.6) | 18.5 (16.6-20.5) | 19.9 (18.8-21.2) | 20.5 (16.9-24.6) | 17.9 (13.6-23.1) | 12.7 (10.6-15.1) | 7.7 (6.0-9.9) | 4.6 (3.6-5.8) | 4.3 (3.2-5.7) |
| Grade | | | | | | | | | | | | | | | | | |
| 7 | 9.4 (7.1-12.4) | 12.6 (10.3-15.4) | 7.1 (5.4-9.2) | 8.6 (4.9-14.9) | 6.3 (3.9-10.0) | 7.1 (4.9-10.2) | 4.2 (2.7-6.3) | 3.8 (1.9-7.6) | 5.8 (4.4-7.7) | 6.0 (3.2-11.0) | 6.5 (4.5-9.3) | 4.2 (2.8-6.2) | 3.2 (1.6-6.0) | 3.2 (1.8-5.6) | 0.9 (0.5-1.7) | 0.8 (0.4-1.8) | †[b] |
| 8 | — | — | — | — | — | — | — | — | — | — | — | 13.3 (10.1-17.2) | 7.3 (5.2-10.2) | 6.1 (4.0-9.4) | 2.6 (1.7-3.7) | 1.5 (0.7-3.2) | 1.2[b] (0.6-2.6) |
| 9 | 24.8 (20.9-29.2) | 24.4 (20.7-28.5) | 22.8 (18.7-27.4) | 23.4 (20.3-26.9) | 16.7 (12.0-22.8) | 14.0 (11.3-17.3) | 17.5 (14.3-21.3) | 16.0 (14.9-17.1) | 16.5 (14.9-18.1) | 19.2 (16.6-22.0) | 18.1 (16.0-20.4) | 20.8 (16.8-25.5) | 18.6 (13.0-25.8) | 12.8 (10.0-16.3) | 6.7 (5.2-8.7) | 4.0 (2.8-5.6) | 3.5[b] (2.1-6.0) |
| 10 | — | — | — | — | — | — | — | — | — | — | — | 28.7 (23.6-34.4) | 22.2 (17.9-27.2) | 16.3 (13.3-20.0) | 10.2 (8.0-12.9) | 5.4 (4.0-7.3) | 6.4[b] (4.8-8.5) |
| 11 | 32.8 (28.6-37.3) | 36.6 (31.6-41.8) | 33.1 (27.5-39.3) | 32.9 (28.4-37.7) | 24.6 (20.1-29.8) | 22.5 (18.1-27.7) | 21.0 (16.8-26.0) | 22.7 (19.4-26.5) | 26.7 (23.6-30.1) | 29.8 (27.4-32.4) | 32.2 (28.1-36.6) | 34.7 (28.5-41.5) | 29.4 (24.1-35.4) | 18.4 (15.0-22.3) | 14.7 (11.6-18.4) | 9.9 (8.0-12.3) | 8.6[b] (6.2-11.7) |
| 12 | — | — | — | — | — | — | — | — | — | — | — | 30.9 (25.9-36.4) | 29.3 (20.3-40.2) | 22.3 (18.0-27.4) | 15.1 (12.1-18.6) | 8.6 (6.8-10.9) | 8.3[b] (6.3-10.7) |

(Continued…)

| | 1977 | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N[1]) | | | | | | | | | | | | (4447) | (3898) | (6616) | (7726) | (6323) | (9112) |
| (N[2]) | (3927) | (3920) | (3010) | (3614) | (3146) | (3376) | (3040) | (2961) | (2617) | (2907) | (3072) | (2421) | (2013) | (3389) | (3969) | (3215) | (4424) |
| Region | | | | | | | | | | | | | | | | | |
| Toronto[1] | — | — | — | — | — | — | — | — | — | — | — | **16.4** (12.2-21.7) | **13.0** (8.3-19.9) | **10.6** (8.2-13.7) | **7.4** (5.6-9.7) | **4.2** (3.2-5.5) | **1.7** [b] (0.8-3.4) |
| Toronto[2] | — | — | **17.3** (12.1-24.1) | **14.8** (10.2-20.9) | **19.0** (14.9-23.8) | **11.1** (7.2-16.7) | **14.9** (10.6-20.6) | **11.3** (7.2-17.2) | **15.1** (12.2-18.6) | **11.5** (8.3-15.9) | **17.4** (14.2-21.0) | **13.8** (9.9-18.9) | **12.2** (6.6-21.6) | **7.9** (5.1-12.2) | **6.0** (4.0-8.8) | **3.8** (2.4-6.0) | † |
| North[1] | — | — | — | — | — | — | — | — | — | — | — | **28.4** (22.9-34.6) | **18.9** (14.1-24.9) | **18.6** (13.4-25.2) | **12.1** (9.0-16.1) | **11.6** (8.9-15.0) | **9.3** [b] (7.4-11.6) |
| North[2] | — | — | **22.0** (17.0-28.0) | **21.4** (16.1-28.0) | **17.2** (15.2-19.5) | **20.5** (9.4-39.1) | **21.1** (13.4-31.7) | **17.4** (14.7-20.6) | **21.6** (14.9-30.1) | **16.5** (12.8-21.0) | **19.2** (17.3-21.2) | **23.7** (15.4-34.7) | **19.6** (13.4-27.9) | **19.0** (13.1-26.8) | **12.1** (8.1-17.7) | **11.5** (8.1-16.1) | **6.4** (3.4-11.9) |
| West[1] | — | — | — | — | — | — | — | — | — | — | — | **24.7** (20.9-29.0) | **21.0** (16.8-26.0) | **14.3** (12.4-16.6) | **10.9** (8.7-13.6) | **5.5** (4.2-7.2) | **6.2** [b] (5.0-8.1) |
| West[2] | — | — | **22.6** (17.8-28.3) | **23.4** (18.2-29.4) | **15.6** (14.2-17.1) | **14.6** (13.6-15.7) | **13.6** (11.0-16.7) | **15.0** (13.8-16.2) | **17.9** (17.4-18.4) | **21.1** (18.5-23.9) | **20.1** (16.8-23.8) | **23.3** (17.9-29.8) | **19.9** (15.2-25.6) | **13.2** (10.6-16.2) | **9.1** (6.7-12.3) | **6.0** (4.3-8.2) | **6.3** (4.2-9.2) |
| East[1] | — | — | — | — | — | — | — | — | — | — | — | **19.8** (16.4-23.7) | **16.1** (11.4-22.3) | **13.1** (10.8-15.7) | **5.5** (4.2-7.3) | **4.2** (3.1-5.7) | **4.8** [b] (3.8-6.1) |
| East[2] | — | — | **17.2** (11.8-24.4) | **19.8** (17.8-21.8) | **13.5** (7.1-24.1) | **16.1** (13.6-18.9) | **12.9** (9.2-17.9) | **14.9** (11.5-19.1) | **15.3** (13.4-17.4) | **21.9** (18.7-25.4) | **19.9** (17.6-22.4) | **20.8** (16.1-26.6) | **15.9** (10.4-23.6) | **11.0** (8.0-14.9) | **5.2** (3.7-7.1) | **3.1** (2.0-4.6) | **3.7** (2.7-5.2) |

Notes: (1) based on Grades 7-12 (full sample); (2) based on Grades 7, 9, and 11 only (long-term sample); (3) regional stratification differed in 1977 and 1979 and therefore regions are not presented; (4) entries in brackets are 95% confidence intervals; (5) † estimate suppressed due to unreliability; (6) no significant differences 2009 vs. 2007; [b] 2009 vs.1999 significant difference, p<.01; [c] significant long-term linear trend, p<.001; [d] significant long-term non-linear trend, p<.001.

Q: In the last 12 months, how often did you smoke cigarettes? (Daily smoking is defined as typically smoking 1 or more cigarettes per day during the past year.)

Source: OSDUHS, Centre for Addiction & Mental Health

## Lifetime Smoking

(Figure 3.3.5)

*2009: Grades 7 to 12*

- Although 12% of all students in grades 7 to 12 are considered to be smokers, about one-quarter (26%) have tried a cigarette at some point in their life. About 10% of students have smoked a few puffs or one whole cigarette, while 10% have consumed less than 100 cigarettes, and 6% have consumed 100 or more cigarettes in their lifetime.

*1991–2009: Grades 7, 9, 11 only*

- Figure 3.3.5 displays the long-term trends in lifetime smoking status. Since 1991, there has been an increase in the percentage of students who have never smoked in their lifetime (from almost half of students in 1991 to over three-quarters of students in 2009).

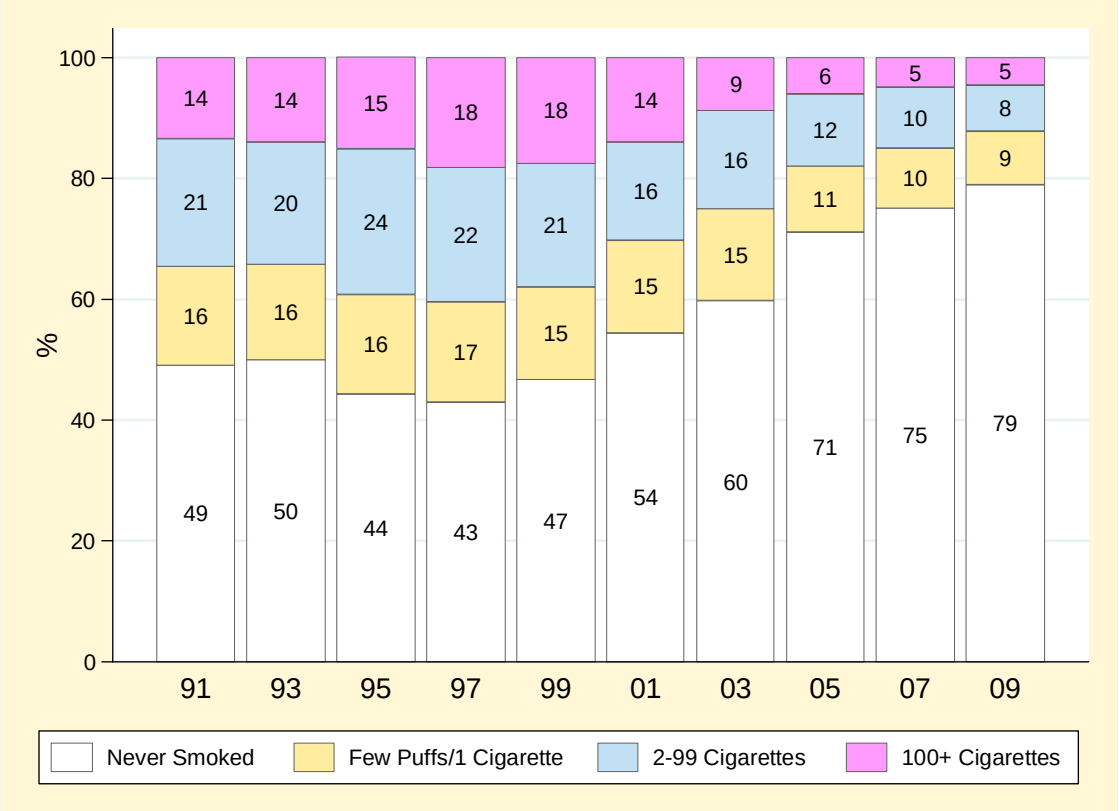
## Smoking Dependence

To estimate smoking dependence, a random half sample of students was asked about time to first cigarette: "*How soon after you wake up do you usually smoke your first cigarette*?" Smokers who have their first cigarette within the first 30 minutes upon waking may be considered nicotine dependent (Heatherton, Kozlowski, Frecker, Rickert, & Robinson, 1989).

*2009: Grades 7 to 12*

- The 2009 survey found that 17.8% of smokers smoke their first cigarette within the first 30 minutes upon waking. Male (16.6%) and female (19.4%) smokers are equally likely to smoke within the first half-hour after waking. While there is some variation by grade, these differences are not statistically significant.

Figure 3.3.5
Trends in Lifetime Smoking, 1991–2009 OSDUHS (Grades 7, 9, 11 only)



## Attempts to Quit Smoking (Among Past Year Smokers)

(Table 3.3.3)

We asked smokers about their attempts to quit smoking. Specifically, among a random half-sample of about 4,200 students, we asked: (1) whether they tried to quit smoking during the 12 months before the survey; and (2) the number of times they tried to quit smoking.

*2009: Grades 7 to 12*

- In 2009, 58% of smokers in all grades reported at least one quit attempt during the 12 months before the survey. Among the 179 smokers who attempted to quit, most report attempting to do so more than once.

*1999–2009: Grades 7 to 12*

- Since 1999, there has been a steady decrease in the percentage of smokers who have attempted to quit smoking (from 66.2% in 1999 down to 53.9% in 2009).

Table 3.3.3: Attempts to Quit Smoking in the Past Year, 1999–2009 (Grades 7 to 12)

| | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|
| **(Among Smokers)** | (N=549) | (N=397) | (N=591) | (N=556) | (N=349) | (N=322) |
| Tried to quit smoking during the past 12 months | 66.2 | 64.1 | 62.4 | 57.6 | 52.7 | 53.9 |
| **(Among Quitters)** | (N=363) | (N=269) | (N=373) | (N=323) | (N=190) | (N=179) |
| Number of times tried to quit: | | | | | | |
| Once | 29.9 | 38.9 | 42.7 | 45.2 | 45.9 | 32.4 |
| Twice | 26.4 | 25.3 | 27.0 | 22.4 | 19.8 | 28.1 |
| Three or more times | 43.6 | 35.8 | 30.3 | 32.4 | 34.3 | 39.5 |

Notes: (1) entries are percentages; (2) based on a random half sample in each year.
Source: OSDUHS, Centre for Addiction & Mental Health

## Contraband Cigarette Smoking

(Figure 3.3.6)

For the first time in 2009, students were asked whether they had smoked any contraband cigarettes originating from native reserves during the 12 months preceding the survey. These cigarettes usually come in clear plastic bags, although some are professionally packaged with standard health warnings. By law, status Natives are entitled to purchase them on reserves without paying provincial taxes, while anyone else purchasing them must pay the requisite federal and provincial taxes. However, these cigarettes are illegally sold outside of reserves without payment of all requisite taxes and their lower price makes them especially attractive to youth.

A random half-sample of about 4,200 students was asked: "*In the last 12 months, how often did you smoke cigarettes made on Native Reserves (such as "DKs", "Natives", "Discount", or unbranded cigarettes packaged in a plastic bag)?*" Use is defined here as smoking at least one whole cigarette (more than just a few puffs).

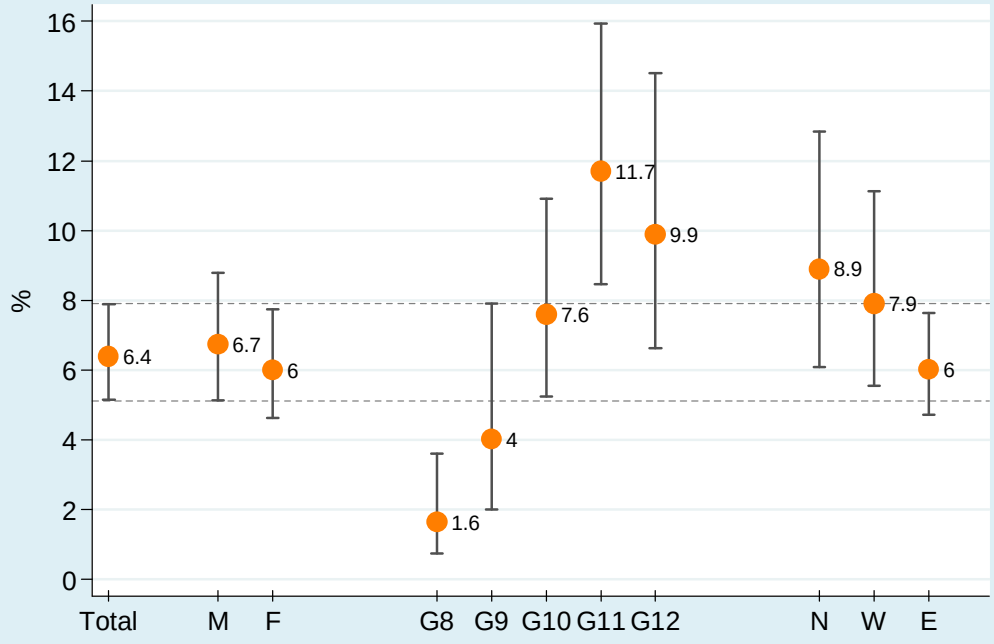
- Among all students, 6.4% (range: 5.1%-7.9%) report smoking contraband cigarettes in the past year. This percentage represents about 60,000 students in Ontario. Among past year smokers only, the proportion reporting smoking contraband cigarettes is 53.4% (range: 45.8%-60.9%).

- Males (6.7%) and females (6.0%) are equally likely to report smoking contraband cigarettes during the past year.

- There is a significant grade effect, with the likelihood of smoking contraband cigarettes increasing between 8th-grade (1.6%) and 11th-grade (11.7%), and remaining stable in 12th-grade (9.9%).

- There are no significant regional differences among students in the North, West, and East regions. (The Toronto estimate was suppressed due to unreliability.)

Figure 3.3.6
Past Year Contraband Cigarette Smoking by Sex, Grade and Region, 2009 OSDUHS




Vertical bars represent 95% confidence intervals; horizontal bar represents 95% CI for total estimate; estimates for Grade 7 and Toronto suppressed

# 3.4 Alcohol Use

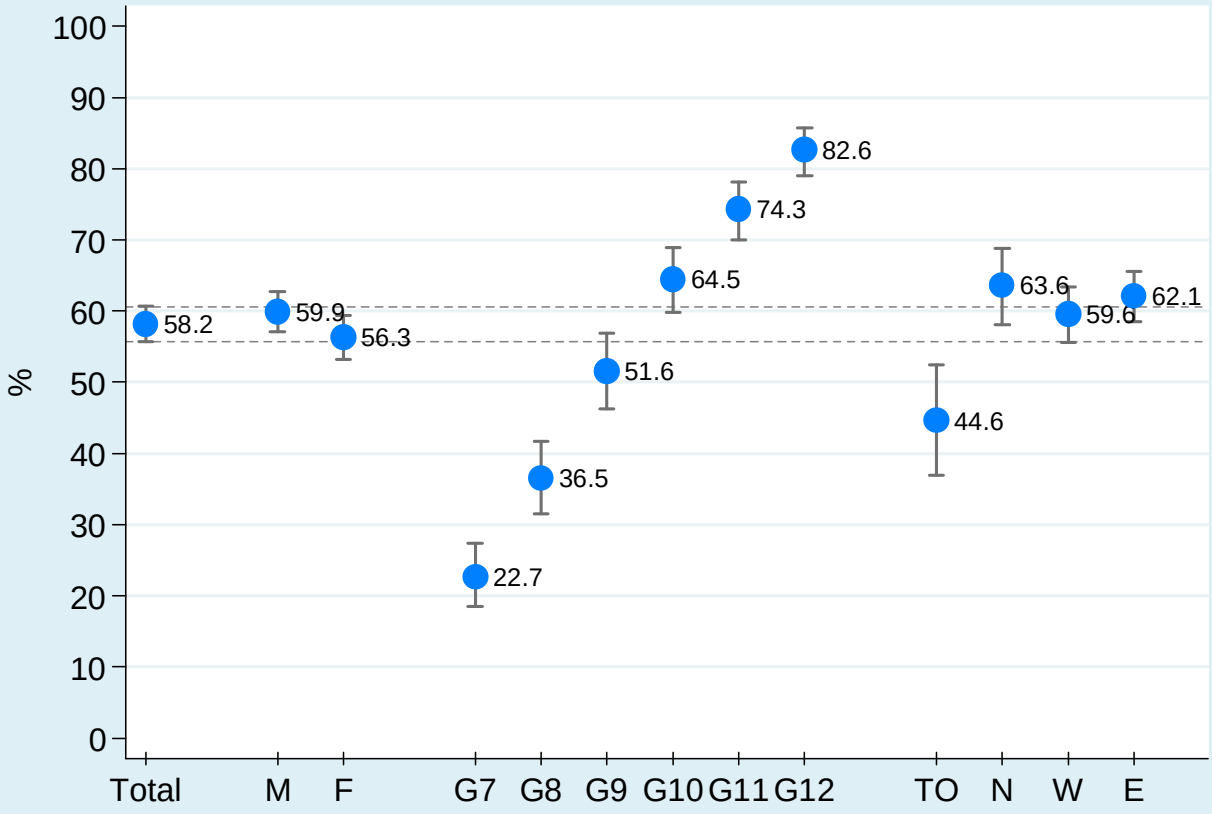
## Past Year Alcohol Use

(Figures 3.4.1, 3.4.2; Table 3.4.1)

| | Past Year Alcohol Use in 2009 (Grades 7 to 12) | Trends in Alcohol Use |
|---|---|---|
| Total Sample | ■ Overall, 58.2% of students report drinking alcohol during the 12 months before the survey. This estimate excludes those who only had a sip/tried alcohol, but includes those who drank only on special occasions. We estimate that between 55.7% and 60.6% of all students drink alcohol. The percentage of 58.2% represents about 591,700 students in grades 7 to 12 in Ontario. | ☐ The percentage of all students drinking in the past year did not significantly change between 2007 (61.2%) and 2009 (58.2%). However, the 2009 estimate is significantly lower than that found in 1999 (66.0%).<br><br>☐ Over the long-term, rates of drinking among grades 7, 9, and 11 declined steadily between 1977 and 1993. Between 1993 and 2003 drinking steadily increased, decreased again in 2005, and has remained stable since then. |
| Sex | ■ The prevalence of drinking significantly differs between males (59.9%) and females (56.3%). | ☐ Between 2007 and 2009, alcohol use did not significantly change among males (61.7% vs 59.9%, respectively) or females (60.7% vs 56.3%, respectively). Males, however, do show a significant decrease in 2009 compared to the 1999 estimate.<br><br>☐ Over the long-term, both sexes show a decline in drinking during the late 1980s, an increase in the late 1990s – especially among males – and subsequent declines. |
| Grade | ■ Drinking significantly increases with grade: rates climb by ten or more percentage points with each grade level, between grades 7 and 11 (from 22.7% to 74.3%). The prevalence climbs again in 12$^{th}$-grade, to 82.6%. | ☐ No grade shows a significant change in drinking between 2007 and 2009. However, drinking among students in grades 7 to 10 is currently lower compared to the 1999 estimates.<br><br>☐ Drinking among 7$^{th}$-, 9$^{th}$-, and 11$^{th}$-graders decreased during the 1980s, increased during the late 1990s, and recently show declines. |

| | | |
|---|---|---|
| Region | ■ Rates of drinking significantly differ by region. Toronto students (44.6%) are least likely to drink compared to students in the North (63.6%), the West (59.6%), and the East (62.1%). | ☐ No region shows a significant change between 2007 and 2009. Students in the North and West regions show a significant decline in drinking in 2009 compared to their respective 1999 estimates.<br><br>☐ Over the long-term, each region exhibits a general decreasing trend during the 1980s and a weak, but steady, increase during the early 1990s up until 1999. Since then, each shows a declining trend. |

Figure 3.4.1
Past Year Alcohol Use by Sex, Grade and Region, 2009 OSDUHS




Vertical bars represent 95% confidence intervals; horizontal bar represents 95% CI for total estimate

Figure 3.4.2
Past Year Alcohol Use, 1977–2009 OSDUHS (Grades 7, 9, 11 only)

Table 3.4.1: Percentage Reporting Alcohol Use During the Past Year, 1977–2009

| | 1977 | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N[1]) | | | | | | | | | | | | (4447) | (3898) | (6616) | (7726) | (6323) | (9112) |
| (N[2]) | (3927) | (3920) | (3010) | (3614) | (3146) | (3376) | (3040) | (2961) | (2617) | (2907) | (3072) | (2421) | (2013) | (3389) | (3969) | (3215) | (4424) |
| Total[1] (95% CI) | — | — | — | — | — | — | — | — | — | — | — | **66.0** (63.6-68.3) | **63.9** (60.8-67.0) | **66.2** (64.1-68.4) | **62.0** (59.4-64.6) | **61.2** (58.9-63.5) | **58.2** [b] (55.7-60.6) |
| Total[2] | **72.8** (70.4-75.1) | **73.7** (71.6-75.8) | **70.1** (67.7-72.3) | **69.0** (66.1-71.9) | **66.3** (64.7-67.9) | **65.1** (63.0-67.3) | **62.6** (58.8-66.3) | **54.3** (51.6-57.0) | **53.6** (50.4-56.6) | **56.0** (53.4-58.4) | **56.9** (53.3-60.4) | **62.7** (59.4-66.0) | **58.9** (54.1-63.5) | **62.9** (60.3-65.4) | **57.8** (54.9-60.5) | **56.1** (53.0-59.0) | **51.2** [cd] (47.9-54.4) |
| Sex | | | | | | | | | | | | | | | | | |
| Males[1] | — | — | — | — | — | — | — | — | — | — | — | **69.7** (66.6-72.6) | **64.6** (61.1-68.0) | **68.3** (65.4-71.1) | **62.3** (58.7-65.7) | **61.7** (58.8-64.5) | **60.0** [b] (57.1-62.8) |
| Males[2] | **75.1** (72.5-77.6) | **75.9** (73.6-78.0) | **70.3** (68.0-72.5) | **69.9** (66.4-73.2) | **68.1** (65.1-71.0) | **65.9** (63.6-68.2) | **65.0** (60.5-69.3) | **54.1** (50.8-57.4) | **53.6** (50.4-56.9) | **56.9** (53.8-59.9) | **56.8** (52.6-60.9) | **65.6** (61.5-69.6) | **59.0** (54.2-63.7) | **67.4** (64.2-70.5) | **58.1** (54.0-62.1) | **56.9** (52.7-61.0) | **52.4** (48.6-56.1) |
| Females[1] | — | — | — | — | — | — | — | — | — | — | — | **62.2** (59.2-65.2) | **63.2** (59.0-67.2) | **64.3** (61.6-67.0) | **61.8** (59.2-64.4) | **60.7** (58.0-63.5) | **56.3** (53.2-59.4) |
| Females[2] | **70.7** (67.5-73.8) | **71.5** (68.6-74.2) | **69.8** (66.0-73.3) | **68.2** (65.4-70.9) | **64.4** (62.1-66.6) | **64.4** (61.2-67.5) | **60.3** (56.3-64.2) | **54.6** (51.4-57.7) | **53.5** (48.5-58.4) | **55.1** (51.6-58.6) | **57.0** (53.3-60.6) | **59.8** (55.5-63.9) | **58.8** (52.2-65.1) | **58.5** (54.9-61.9) | **57.4** (54.3-60.4) | **55.2** (51.6-58.7) | **49.9** (46.0-53.8) |
| Grade | | | | | | | | | | | | | | | | | |
| 7 | **57.3** (53.5-61.0) | **57.0** (53.6-60.4) | **51.1** (48.5-53.7) | **53.0** (46.3-60.0) | **43.1** (39.6-46.6) | **43.6** (39.5-47.8) | **42.5** (38.5-46.6) | **30.1** (26.8-33.6) | **32.0** (25.6-39.1) | **30.5** (27.8-33.3) | **31.9** (26.1-38.3) | **39.7** (33.8-45.9) | **36.1** (29.6-43.1) | **39.1** (35.0-43.4) | **31.4** (28.1-35.0) | **28.1** (23.7-33.1) | **22.7** [b] (18.6-27.4) |
| 8 | — | — | — | — | — | — | — | — | — | — | — | **53.7** (49.2-58.3) | **52.0** (45.5-58.4) | **48.9** (44.5-53.4) | **44.3** (39.4-49.4) | **40.1** (34.8-45.7) | **36.5** [b] (31.5-41.7) |
| 9 | **75.5** (72.7-78.1) | **75.6** (72.9-78.1) | **75.3** (71.4-78.9) | **71.5** (68.6-74.3) | **68.0** (65.8-70.1) | **64.8** (59.0-70.2) | **64.5** (58.1-70.5) | **56.0** (52.1-59.8) | **52.0** (49.2-54.7) | **57.8** (54.5-61.0) | **55.3** (47.4-63.0) | **63.1** (58.0-67.9) | **60.9** (54.3-67.1) | **65.1** (60.5-69.3) | **64.8** (60.4-68.9) | **58.9** (53.8-63.8) | **51.6** [b] (46.3-56.8) |
| 10 | — | — | — | — | — | — | — | — | — | — | — | **74.9** (69.2-79.8) | **76.8** (73.0-80.2) | **75.1** (71.1-78.7) | **69.6** (65.7-73.3) | **69.6** (65.2-73.6) | **64.5** [b] (59.8-68.9) |
| 11 | **87.4** (85.1-89.3) | **89.9** (87.0-92.2) | **83.9** (80.3-87.0) | **88.9** (86.3-91.1) | **87.4** (84.7-89.7) | **84.8** (81.1-87.9) | **81.8** (73.1-88.2) | **75.0** (69.7-79.6) | **73.2** (68.7-77.3) | **75.8** (69.3-81.3) | **80.6** (76.3-84.3) | **82.0** (77.7-85.6) | **81.0** (75.1-85.8) | **79.9** (76.3-83.1) | **76.1** (72.3-79.5) | **79.2** (75.5-82.4) | **74.3** (70.0-78.2) |
| 12 | — | — | — | — | — | — | — | — | — | — | — | **84.6** (80.8-87.8) | **80.0** (72.5-85.9) | **82.5** (77.7-86.4) | **81.8** (77.7-85.4) | **83.0** (79.5-86.0) | **82.6** (79.0-85.8) |

(Continued…)

| | 1977 | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ($N^1$) | | | | | | | | | | | | **(4447)** | **(3898)** | **(6616)** | **(7726)** | **(6323)** | **(9112)** |
| ($N^2$) | **(3927)** | **(3920)** | **(3010)** | **(3614)** | **(3146)** | **(3376)** | **(3040)** | **(2961)** | **(2617)** | **(2907)** | **(3072)** | **(2421)** | **(2013)** | **(3389)** | **(3969)** | **(3215)** | **(4424)** |
| Region | | | | | | | | | | | | | | | | | |
| Toronto[1] | — | — | — | — | — | — | — | — | — | — | — | **56.1** (49.4-62.5) | **56.3** (44.7-67.3) | **61.5** (55.8-66.9) | **51.3** (43.8-58.8) | **55.1** (46.9-63.1) | **44.6** (37.0-52.4) |
| Toronto[2] | — | — | **68.2** (60.5-75.0) | **68.8** (61.1-75.6) | **66.6** (62.0-71.0) | **64.1** (58.1-69.7) | **55.5** (40.9-69.2) | **50.4** (44.1-56.8) | **47.3** (41.3-53.4) | **49.4** (40.3-58.5) | **49.8** (39.5-60.1) | **55.0** (47.6-62.2) | **56.4** (41.4-70.3) | **57.6** (50.1-64.7) | **48.4** (40.5-56.4) | **48.9** (38.2-59.7) | **36.2** (27.1-46.5) |
| North[1] | — | — | — | — | — | — | — | — | — | — | — | **75.9** (69.3-81.5) | **72.3** (68.2-76.0) | **70.0** (65.7-73.9) | **69.0** (64.8-73.0) | **70.6** (65.1-75.6) | **63.6** [b] (58.1-68.8) |
| North[2] | — | — | **72.6** (61.9-81.2) | **70.8** (65.7-75.4) | **68.8** (64.6-72.7) | **66.3** (62.1-70.2) | **70.9** (58.2-81.0) | **59.4** (50.4-67.8) | **64.4** (50.3-76.4) | **54.5** (49.4-59.6) | **59.5** (54.7-64.1) | **69.7** (60.6-77.5) | **66.1** (60.6-71.3) | **65.7** (60.3-70.8) | **64.5** (59.0-69.7) | **64.0** (55.9-71.3) | **58.3** (52.164.3) |
| West[1] | — | — | — | — | — | — | — | — | — | — | — | **69.7** (66.1-73.2) | **66.2** (62.3-70.0) | **67.3** (63.4-71.0) | **65.6** (62.1-69.0) | **61.5** (58.2-64.7) | **59.6** [b] (55.6-63.4) |
| West[2] | — | — | **70.9** (68.4-73.3) | **69.0** (64.9-72.9) | **67.1** (64.5-69.6) | **63.1** (59.2-66.8) | **62.7** (57.5-67.7) | **54.4** (51.9-57.0) | **54.0** (48.2-60.0) | **56.0** (52.8-59.2) | **58.3** (52.9-63.5) | **66.4** (61.1-71.4) | **59.8** (54.6-64.8) | **63.8** (59.3-68.1) | **60.0** (56.4-63.5) | **57.0** (52.4-61.5) | **52.5** (47.3-57.5) |
| East[1] | — | — | — | — | — | — | — | — | — | — | — | **63.9** (59.8-67.8) | **63.0** (58.7-67.2) | **66.6** (63.9-69.2) | **61.8** (56.5-66.9) | **62.2** (58.7-65.6) | **62.1** (58.5-65.6) |
| East[2] | — | — | **68.7** (64.7-72.4) | **68.7** (62.4-74.3) | **63.9** (61.6-66.2) | **68.8** (66.7-70.8) | **64.4** (60.6-68.0) | **55.3** (48.6-61.8) | **54.0** (50.7-57.3) | **60.9** (57.4-64.3) | **58.8** (52.8-64.6) | **61.3** (55.5-66.8) | **57.8** (50.8-64.4) | **64.0** (60.8-67.0) | **58.4** (52.9-63.6) | **57.0** (52.4-61.5) | **55.5** (50.5-60.4) |

Notes: (1) based on Grades 7-12 (full sample); (2) based on Grades 7, 9, and 11 only (long-term sample); (3) regional stratification differed in 1977 and 1979 and therefore regions are not presented; (4) entries in brackets are 95% confidence intervals; (5) no significant differences 2009 vs. 2007; [b] 2009 vs. 1999 significant difference, p<.01; [c] significant long-term linear trend, p<.001; [d] significant long-term non-linear trend , p<.001.

Q: In the last 12 months, how often did you drink alcohol - liquor (rum, whiskey, etc.), wine, beer, or coolers? (Use includes drinking at a special event, but excludes a sip.)

Source: OSDUHS, Centre for Addiction & Mental Health

## Frequency of Drinking Alcohol in the Past Year

(Figure 3.4.3; Tables 3.4.2)

*2009: Grades 7 to 12*

- As seen in Table 3.4.2, 21.5% of all students restrict their drinking to special occasions. About one-tenth of students drink alcohol at least once a week or more often.

*1987–2009: Grades 7, 9, 11*

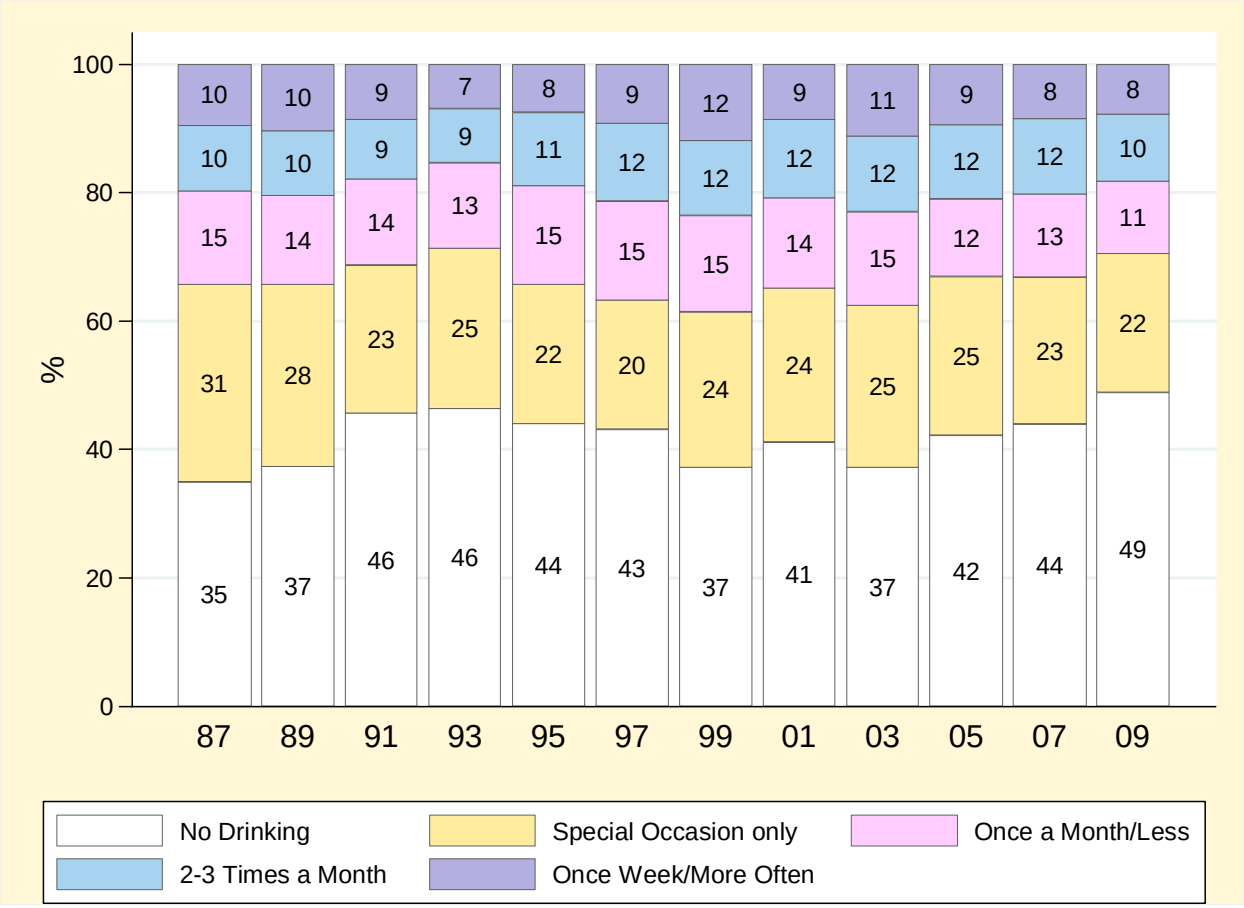
- Figure 3.4.3 presents trends in the frequency of past year drinking between 1987 and 2009 among the total sample. Despite some minor fluctuations, there are no dominant long-term changes regarding high frequency drinking.

Table 3.4.2: Frequency of Drinking Alcohol During the Past Year Among the Total Sample, 1999–2009 (Grades 7 to 12)

| | | Percentage of Total Sample | | | | | |
|---|---|---|---|---|---|---|---|
| | | **1999** | **2001** | **2003** | **2005** | **2007** | **2009** |
| | (N) | (4447) | (3898) | (6616) | (7726) | (6323) | (9112) |
| **None** | | | | | | | |
| Total | | **34.0** | **36.1** | **33.8** | **38.0** | **38.8** | **41.8** |
| Sex | Males | 30.3 | 35.4 | 31.7 | 37.7 | 38.3 | 40.0 |
| | Females | 37.8 | 36.8 | 35.7 | 38.2 | 39.3 | 43.7 |
| **On Special Occasions only** | | | | | | | |
| Total | | **23.7** | **24.6** | **25.1** | **24.3** | **23.0** | **21.5** |
| Sex | Males | 23.8 | 22.4 | 25.2 | 24.0 | 23.3 | 22.0 |
| | Females | 23.6 | 26.9 | 24.9 | 24.6 | 22.8 | 21.0 |
| **Once a Month or Less Often** | | | | | | | |
| Total | | **16.1** | **14.7** | **16.0** | **13.9** | **15.1** | **14.0** |
| Sex | Males | 16.0 | 14.1 | 14.9 | 12.4 | 13.3 | 13.4 |
| | Females | 16.3 | 15.4 | 17.3 | 15.5 | 17.1 | 14.6 |
| **2-3 Times a Month** | | | | | | | |
| Total | | **13.0** | **14.2** | **13.0** | **13.5** | **12.9** | **13.0** |
| Sex | Males | 13.3 | 14.8 | 11.9 | 12.8 | 13.6 | 12.8 |
| | Females | 12.6 | 13.6 | 14.2 | 14.2 | 12.1 | 13.3 |
| **At Least Once a Week** | | | | | | | |
| Total | | **12.3** | **10.0** | **11.7** | **10.1** | **9.8** | **9.5** |
| Sex | Males | 15.1 | 13.0 | 14.0 | 12.7 | 11.0 | 11.4 |
| | Females | 9.4 | 7.1 | 9.6 | 7.3 | 8.6 | 7.4 |
| **Almost Daily** | | | | | | | |
| Total | | **0.9** | † | † | † | † | † |
| Sex | Males | 1.5 | † | † | † | † | † |
| | Females | † | † | † | † | † | † |

Notes: (1) † estimate suppressed due to unreliability
Q: In the last 12 months, how often did you drink alcohol - liquor (rum, whiskey, etc.), wine, beer, or coolers?
Source: OSDUHS, Centre for Addiction & Mental Health

Figure 3.4.3
Frequency of Drinking Alcohol During the Past Year, 1987–2009 OSDUHS
(Grades 7, 9, 11 only)



## Frequency of Drinking Alcohol in the Past Month

(Figure 3.4.4; Table 3.4.3)

Students were also asked about their use of alcohol during the four weeks before the survey.

*2009: Grades 7 to 12*

- As seen in Table 3.4.3, 58.1% of students did not drink alcohol during the month before the survey (thus, 41.9% did drink). Just over one-quarter (28.4%) of students drank only once or twice in past month; 9.4% drank once or twice per week; while 4.0% drank 3 or more times per week during the past month.

- Males are slightly more likely to report drinking frequently during the past month. For example, 5.3% of males drank 3 or more times per week, compared to 2.6% of females.

- As expected, the older students are more likely to report drinking more frequently during the past month.

*1999–2009: Grades 7 to 12*

☐ Table 3.4.3 also presents the past month drinking frequencies from 1999 to 2009. Apart from a decline in any drinking in the past month (e.g., 48.3% did not drink during the past month in 1999 vs. 58.1% in 2009), there has been no significant shift in drinking frequency over the past decade.

*1987–2009: Grades 7, 9, 11*

☐ Figure 3.4.4 presents the past month drinking frequency from 1987 to 2009, among grades 7, 9, and 11 only. Over the long-term, any past month drinking has declined, but there has been no major shift in frequent drinking (e.g., 3+ times per week).

Figure 3.4.4
Frequency of Drinking Alcohol During the Past Month, 1987–2009 OSDUHS (Grades 7, 9, 11 only)

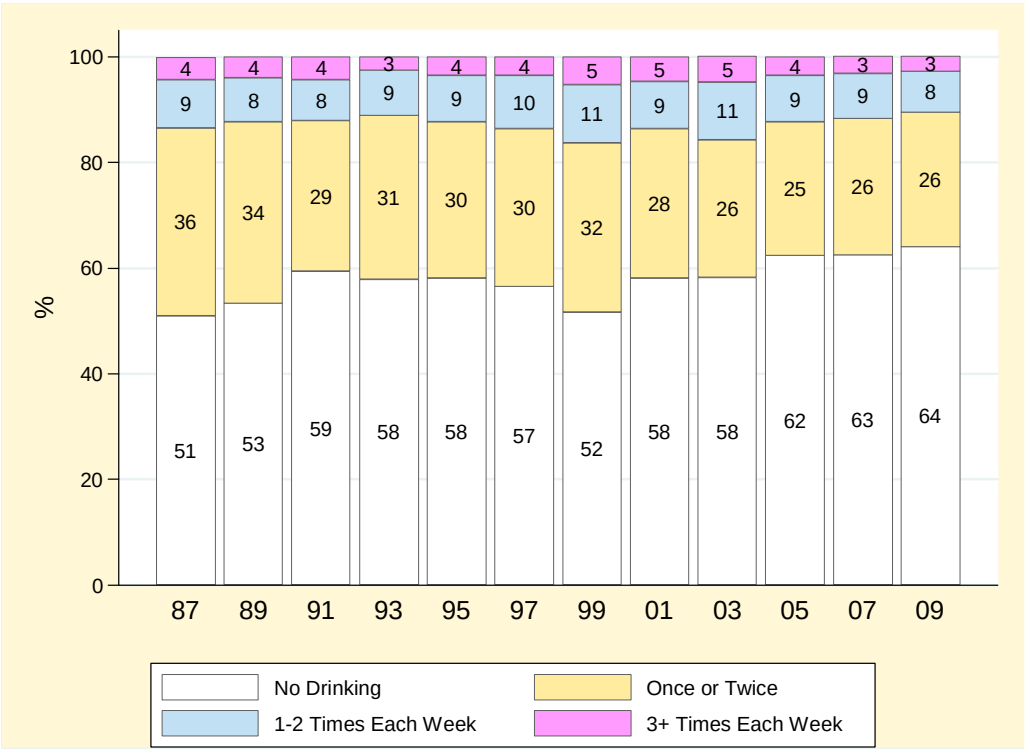


Table 3.4.3: Frequency of Drinking Alcohol During the Past Month Among the Total Sample, 1999–2009 (Grades 7 to 12)

| | Percentage of Total Sample | | | | | |
|---|---|---|---|---|---|---|
| | **1999** | **2001** | **2003** | **2005** | **2007** | **2009** |
| (N) | (4447) | (3898) | (6616) | (7726) | (6323) | (9112) |
| **Total** | | | | | | |
| Not in Past 4 Weeks | **48.3** | **53.7** | **54.7** | **57.3** | **57.5** | **58.1** [b] |
| Once or Twice | **33.5** | **30.0** | **28.7** | **28.6** | **28.6** | **28.4** |
| Once or Twice a Week | **12.5** | **11.5** | **11.6** | **10.2** | **9.9** | **9.4** |
| 3 + Times a Week | **5.7** | **4.8** | **5.0** | **3.9** | **4.0** | **4.0** |
| **Males** | | | | | | |
| Not in Past 4 Weeks | 44.3 | 50.7 | 53.4 | 56.0 | 57.5 | 56.2 |
| Once or Twice | 33.9 | 28.6 | 27.6 | 27.3 | 27.2 | 28.2 |
| Once or Twice a Week | 13.5 | 14.5 | 12.7 | 11.3 | 10.5 | 10.2 |
| 3 + Times a Week | 8.3 | 6.2 | 6.3 | 5.4 | 4.7 | 5.3 |
| **Females** | | | | | | |
| Not in Past 4 Weeks | 52.5 | 56.6 | 56.0 | 58.7 | 57.4 | 60.1 |
| Once or Twice | 33.1 | 31.4 | 29.7 | 30.1 | 30.1 | 28.7 |
| Once or Twice a Week | 11.4 | 8.6 | 10.6 | 8.9 | 9.2 | 8.5 |
| 3 + Times a Week | 3.1 | 3.4 | 3.7 | 2.3 | 3.3 | 2.6 |
| **Grade 7** | | | | | | |
| Not in Past 4 Weeks | 76.4 | 83.0 | 82.4 | 85.4 | 85.6 | 88.6 |
| Once or Twice | 20.1 | 14.2 | 13.0 | 13.1 | 12.4 | 9.8 |
| Once or Twice a Week | 2.7 | 1.3 | 2.8 | 1.0 | 0.9 | 1.4 |
| 3 + Times a Week | 0.8 | 1.5 | 1.8 | † | 1.1 | † |
| **Grade 8** | | | | | | |
| Not in Past 4 Weeks | 58.8 | 69.2 | 74.9 | 72.6 | 77.4 | 79.9 |
| Once or Twice | 31.7 | 24.5 | 20.1 | 22.6 | 18.3 | 17.0 |
| Once or Twice a Week | 6.2 | 4.7 | 3.5 | 2.7 | 2.7 | 1.9 |
| 3 + Times a Week | 3.3 | 1.6 | 1.5 | 2.1 | 1.6 | 1.2 |
| **Grade 9** | | | | | | |
| Not in Past 4 Weeks | 50.8 | 54.9 | 55.7 | 59.9 | 62.4 | 63.0 |
| Once or Twice | 33.4 | 32.9 | 30.2 | 28.0 | 26.7 | 28.9 |
| Once or Twice a Week | 10.3 | 9.0 | 8.9 | 8.7 | 7.7 | 5.7 |
| 3 + Times a Week | 5.5 | 3.2 | 5.2 | 3.4 | 3.2 | 2.3 |
| **Grade 10** | | | | | | |
| Not in Past 4 Weeks | 42.0 | 40.9 | 47.3 | 52.1 | 51.0 | 54.3 |
| Once or Twice | 34.9 | 33.2 | 34.5 | 33.6 | 33.3 | 32.3 |
| Once or Twice a Week | 15.0 | 19.4 | 13.1 | 10.4 | 11.1 | 9.7 |
| 3 + Times a Week | 8.0 | 6.6 | 5.1 | 3.9 | 4.6 | 3.6 |
| **Grade 11** | | | | | | |
| Not in Past 4 Weeks | 31.6 | 35.6 | 41.0 | 42.3 | 41.2 | 44.5 |
| Once or Twice | 40.5 | 37.6 | 32.5 | 34.2 | 37.1 | 35.1 |
| Once or Twice a Week | 19.1 | 16.8 | 19.4 | 16.5 | 16.4 | 15.1 |
| 3 + Times a Week | 8.8 | 9.9 | 7.1 | 6.9 | 5.3 | 5.3 |
| **Grade 12** | | | | | | |
| Not in Past 4 Weeks | 29.2 | 34.9 | 34.1 | 35.5 | 35.6 | 34.0 |
| Once or Twice | 40.2 | 39.8 | 38.3 | 38.5 | 39.4 | 39.5 |
| Once or Twice a Week | 22.6 | 18.9 | 19.4 | 19.9 | 17.6 | 17.6 |
| 3 + Times a Week | 8.0 | 6.4 | 8.2 | 6.1 | 7.4 | 8.9 |

Notes: (1) † estimate suppressed due to unreliability; (2) [b] 2009 vs. 1999 significant difference p<.01.
Q: During the last 4 weeks have often did you drink alcohol (liquor, wine, beer, or coolers)?
Source: OSDUHS, Centre for Addiction & Mental Health

## Heavy Drinking in the Past Month

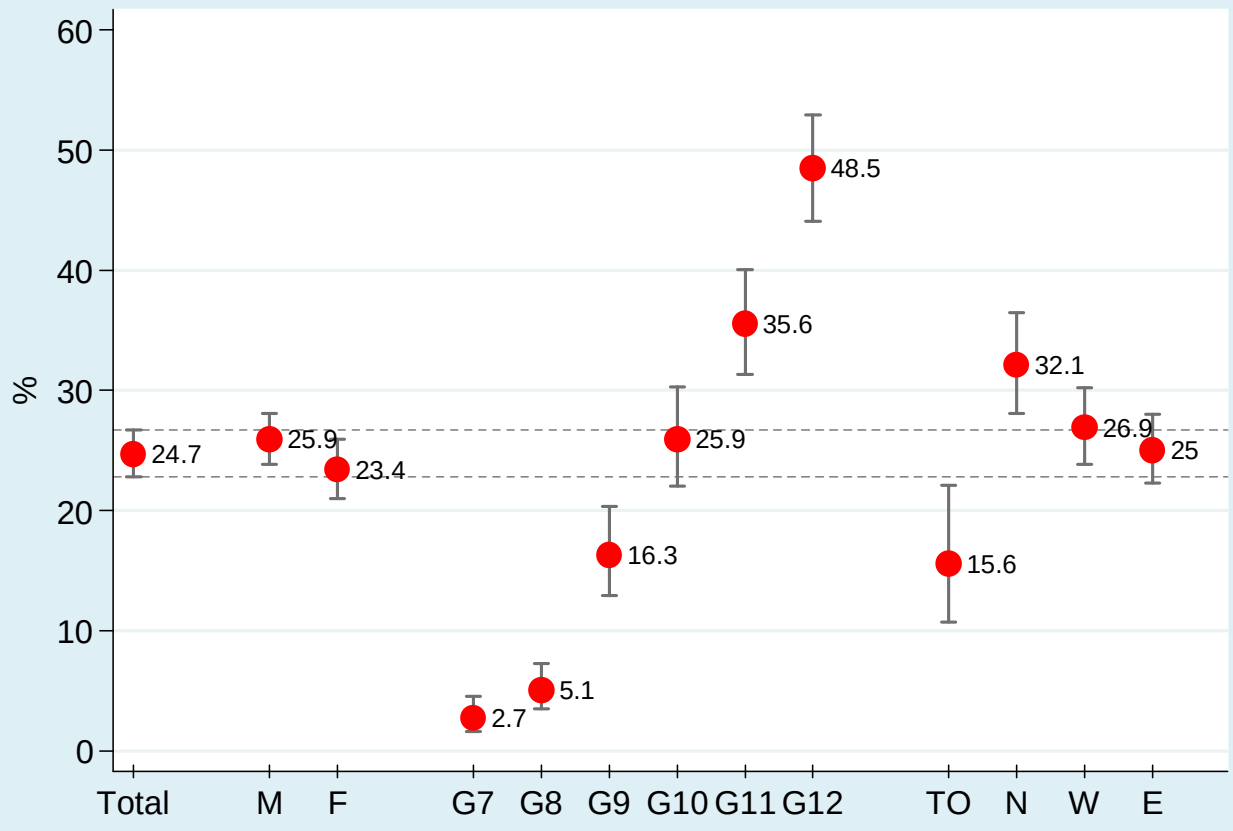
(Figures 3.4.5 to 3.4.8; Tables 3.4.4 to 3.4.6)

We use two indicators of heavy drinking in this report: consuming 5 or more drinks on a single occasion ("binge drinking"), and becoming drunk (i.e., drinking until becoming ill). Both refer to the past-4-week period (past month). We also examine the frequency of binge drinking.

| | Heavy Drinking in 2009 (Grades 7 to 12) | Trends in Heavy Drinking |
|---|---|---|
| Total Sample | ■ Overall, about one-quarter (24.7%) of students report binge drinking at least once during the 4 weeks before the survey. This percentage represents about 250,700 students in grades 7 to 12 in Ontario.<br><br>■ A similar proportion (22.6%) reported becoming drunk at least once during the past 4 weeks, representing about 237,400 students in Ontario.<br><br>■ About 9.2% of all students report binge drinking 2 to 3 times during month before the survey. Another 5.8% report binge drinking 4 or more times (see Table 3.4.5a). | ☐ In 2009, the overall percentage of students reporting binge drinking during the past 4 weeks, as well as the percentage reporting becoming drunk, did not significantly change compared to 2007, or compared to 1999. The frequency of binge drinking has not changed over the past decade.<br><br>☐ Over the long-term, binge drinking among grades 7, 9, and 11 climbed steadily during the late 1990s (from an all-time low of 15% in 1993 to an all-time high of 26% in 1999), and has slightly declined since then. Still, the current level of binge drinking is higher than the low level found in 1993. Frequent binge drinking has not significantly changed over the long-term (see Figure 3.4.7).<br><br>☐ Over the long-term, drunkenness increased during the 1990s, peaked between 1999 and 2003, and has declined since then. |
| Sex | ■ Binge drinking does not significantly differ between males (25.9%) and females (23.4%). Nor is there a difference in reported drunkenness between males (22.3%) and females (22.8%). | ☐ Between 1999 and 2009, males show a significant decrease in binge drinking, from 32.1% down to 25.9%. Heavy drinking among females remained steady over the past decade. |
| Grade | ■ Heavy drinking significantly increases with grade level: binge drinking is lowest among 7th-graders (2.7%) and climbs to a high of 48.5% among 12th-graders. Drunkenness is lowest among 7th-graders (3.8%) and peaks in grade 12 (43.3%). | ☐ Between 1999 and 2009, a significant decrease in binge drinking was found for 8th-graders (from 13.8% in 1999 down to 5.1% in 2009). Only 11th-graders show a significant change in reported drunkenness, from in 41.7% in 1999 down to 21.4% in 2009. |

| | | |
|---|---|---|
| Region | ■ Heavy drinking varies significantly by region. Toronto students are the least likely to report binge drinking (15.6%) and drunkenness (12.5%). Northern students are the most likely to report binge drinking (32.1%) and drunkenness (27.8%). | □ Despite some fluctuations, no region shows a significant change in 2009 compared to the 2007 or the 1999 estimates. |

Figure 3.4.5
Binge Drinking in the Past Month by Sex, Grade and Region, 2009 OSDUHS




Vertical bars represent 95% confidence intervals; horizontal bar represents 95% CI for total estimate

Figure 3.4.6
Percentage Reporting Binge Drinking at Least Once During the Past Month, 1977–2009 OSDUHS (Grades 7, 9, 11 only)

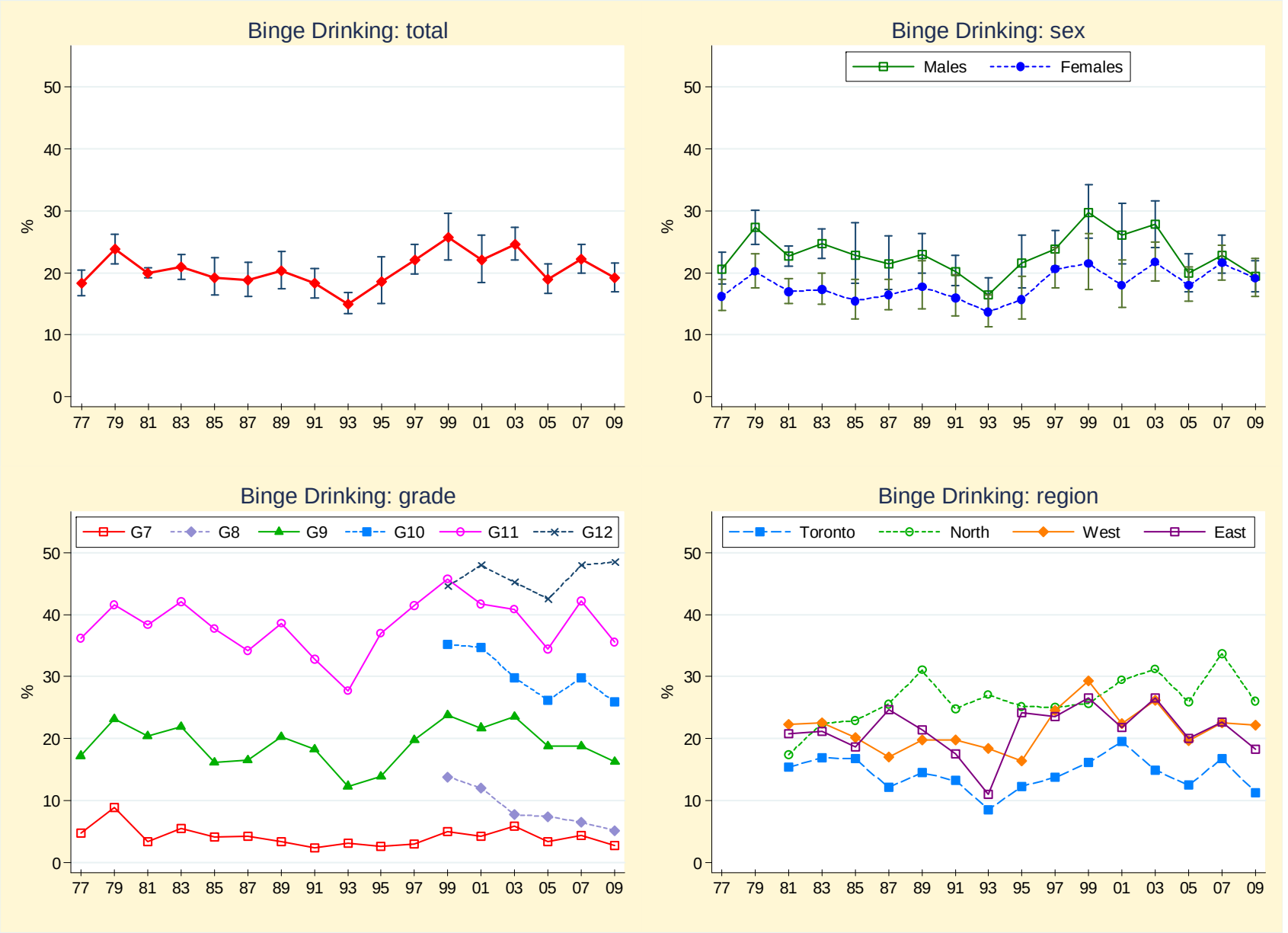


Figure 3.4.7
Frequency of Binge Drinking During the Past Month, 1979–2009 OSDUHS
(Grades 7, 9, 11 only)

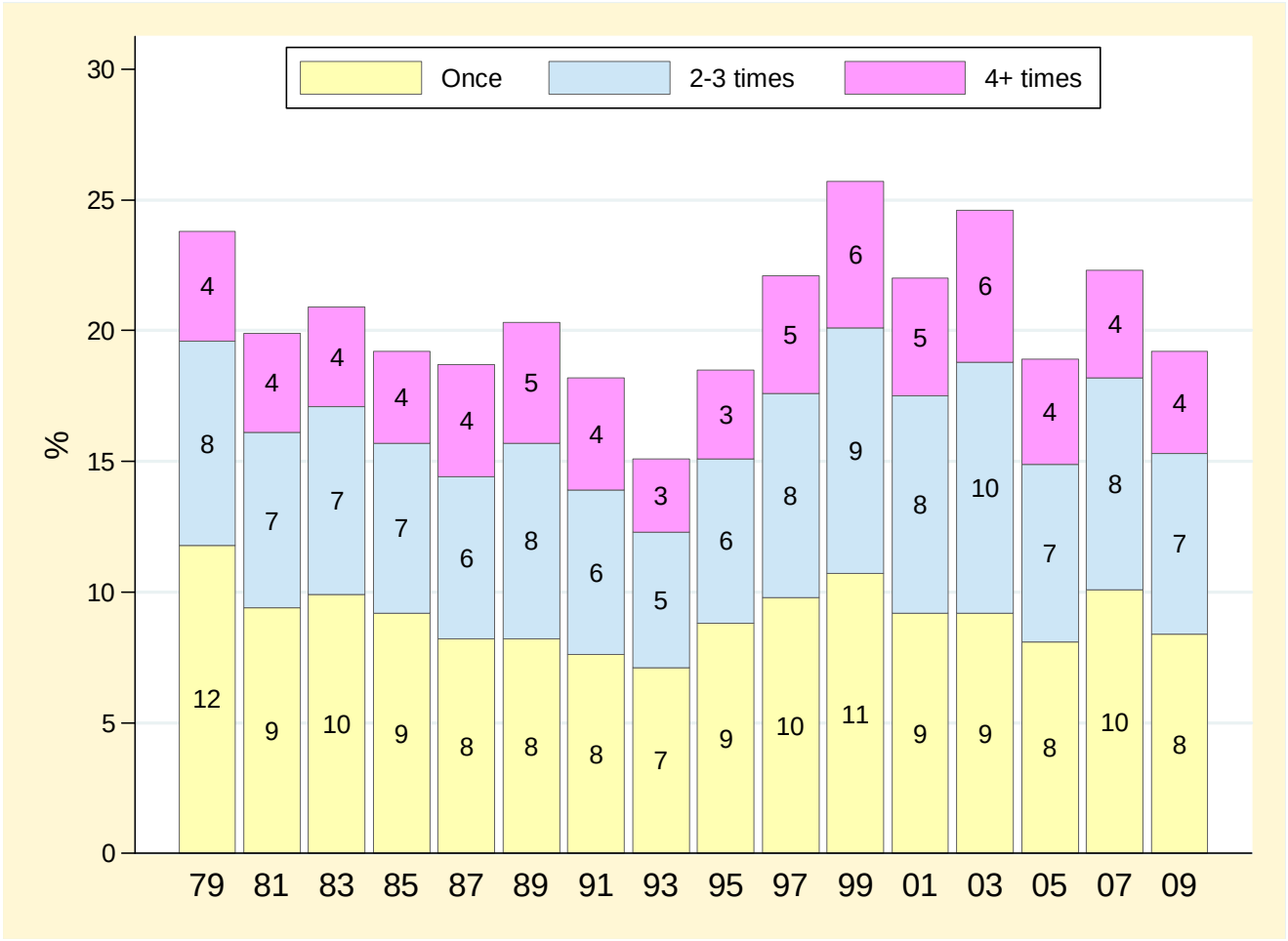


Figure 3.4.8
Percentage Reporting Becoming Drunk at Least Once During the Past Month, 1977–2009 OSDUHS (Grades 7, 9, 11 only)

Table 3.4.4: Percentage Reporting Binge Drinking at Least Once During the Past Month, 1977–2009

| | 1977 | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N[1]) | | | | | | | | | | | | (4447) | (3898) | (6616) | (7726) | (6323) | (9112) |
| (N[2]) | (3927) | (3920) | (3010) | (3614) | (3146) | (3376) | (3040) | (2961) | (2617) | (2907) | (3072) | (2421) | (2013) | (3389) | (3969) | (3215) | (4424) |
| Total[1] (95% CI) | — | — | — | — | — | — | — | — | — | — | — | 27.6 (25.1-30.3) | 26.0 (23.3-28.8) | 26.5 (24.4-28.7) | 22.7 (20.4-25.2) | 26.3 (24.4-28.2) | 24.7 (22.8-26.7) |
| Total[2] | 18.3 (16.3-20.4) | 23.8 (21.5-26.2) | 20.0 (19.2-20.8) | 20.9 (19.0-23.0) | 19.2 (16.4-22.5) | 18.8 (16.2-21.7) | 20.3 (17.5-23.5) | 18.3 (16.0-20.7) | 15.0 (13.4-16.8) | 18.6 (15.1-22.6) | 22.1 (19.8-24.6) | 25.7 (22.1-29.6) | 22.1 (18.5-26.1) | 24.6 (22.1-27.4) | 19.0 (16.7-21.5) | 22.2 (20.0-24.6) | 19.2 (17.0-21.6) [d] |
| Sex | | | | | | | | | | | | | | | | | |
| Males[1] | — | — | — | — | — | — | — | — | — | — | — | 32.1 (29.2-35.1) | 29.4 (25.5-33.6) | 29.4 (26.4-32.6) | 25.1 (22.1-28.2) | 27.1 (24.7-29.7) | 25.9 (23.9-28.1) [b] |
| Males[2] | 20.6 (18.2-23.3) | 27.3 (24.6-30.1) | 22.7 (21.1-24.4) | 24.7 (22.4-27.1) | 22.9 (18.3-28.1) | 21.4 (17.3-26.0) | 23.0 (20.0-26.4) | 20.2 (17.9-22.8) | 16.4 (13.9-19.2) | 21.6 (17.6-26.1) | 23.8 (21.1-26.8) | 29.7 (25.6-34.2) | 26.1 (21.5-31.3) | 27.7 (24.1-31.6) | 19.9 (17.0-23.1) | 22.9 (19.9-26.1) | 19.4 (17.0-22.0) |
| Females[1] | — | — | — | — | — | — | — | — | — | — | — | 23.0 (19.7-26.8) | 22.6 (20.1-25.4) | 23.8 (21.5-26.2) | 20.2 (17.9-22.7) | 25.4 (23.1-27.7) | 23.4 (21.0-26.0) |
| Females[2] | 16.2 (13.9-18.9) | 20.2 (17.6-23.1) | 17.0 (15.1-19.1) | 17.3 (14.9-19.9) | 15.5 (12.5-19.0) | 16.4 (14.0-19.0) | 17.7 (14.2-21.9) | 16.0 (13.0-19.7) | 13.7 (11.3-16.5) | 15.7 (12.6-19.4) | 20.6 (17.6-24.1) | 21.5 (17.3-26.4) | 18.0 (14.4-22.1) | 21.7 (18.7-25.0) | 18.0 (15.4-21.0) | 21.6 (18.8-24.5) | 19.1 (16.2-22.4) |
| Grade | | | | | | | | | | | | | | | | | |
| 7 | 4.7 (3.4-6.5) | 8.8 (6.8-11.2) | 3.4 (2.5-4.5) | 5.5 (2.9-10.3) | 4.1 (1.9-8.4) | 4.2 (2.5-6.9) | 3.3 (2.4-4.5) | 2.4 (1.5-4.0) | 3.1 (2.1-4.6) | 2.6 (2.2-3.1) | 3.0 (2.3-3.9) | 5.0 (3.5-7.1) | 4.2 (2.7-6.7) | 5.8 (4.0-8.4) | 3.4 (2.1-5.5) | 4.4 (2.9-6.6) | 2.7 (1.6-4.5) |
| 8 | — | — | — | — | — | — | — | — | — | — | — | 13.8 (11.1-16.9) | 12.0 (8.5-16.8) | 7.7 (5.6-10.5) | 7.4 (5.8-9.5) | 6.5 (4.5-9.4) | 5.0 (3.5-7.2) [b] |
| 9 | 17.2 (14.3-20.6) | 23.1 (20.0-26.5) | 20.4 (19.1-21.7) | 21.9 (19.6-24.3) | 16.1 (10.6-23.7) | 16.5 (12.6-21.3) | 20.3 (17.7-23.2) | 18.3 (13.8-23.8) | 12.3 (9.7-15.4) | 13.9 (9.1-20.6) | 19.8 (15.6-24.9) | 23.8 (18.7-29.7) | 21.7 (17.0-27.2) | 23.5 (20.3-27.0) | 18.8 (15.4-22.7) | 18.8 (15.6-22.4) | 16.3 (12.9-20.4) |
| 10 | — | — | — | — | — | — | — | — | — | — | — | 35.2 (29.7-41.0) | 34.7 (30.6-39.0) | 29.8 (25.7-34.3) | 26.2 (22.8-30.0) | 29.8 (26.2-33.6) | 25.9 (22.0-30.3) |
| 11 | 36.2 (32.2-40.5) | 41.6 (36.8-46.5) | 38.3 (32.3-44.9) | 42.1 (38.8-45.4) | 37.7 (32.5-43.2) | 34.2 (26.2-43.2) | 38.6 (30.8-47.1) | 32.8 (28.5-37.4) | 27.7 (24.5-31.2) | 36.9 (28.5-45.2) | 41.4 (36.3-46.6) | 45.7 (39.1-52.5) | 41.7 (36.1-47.5) | 40.9 (36.0-46.0) | 34.5 (30.4-38.8) | 42.2 (37.7-47.0) | 35.6 (31.3-40.0) |
| 12 | — | — | — | — | — | — | — | — | — | — | — | 44.6 (38.6-50.7) | 48.0 (37.1-59.0) | 45.2 (39.9-50.6) | 42.5 (37.8-47.4) | 48.0 (44.1-51.9) | 48.5 (44.1-52.9) |

(Continued…)

| | 1977 | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N[1]) | | | | | | | | | | | | (4447) | (3898) | (6616) | (7726) | (6323) | (9112) |
| (N[2]) | (3927) | (3920) | (3010) | (3614) | (3146) | (3376) | (3040) | (2961) | (2617) | (2907) | (3072) | (2421) | (2013) | (3389) | (3969) | (3215) | (4424) |
| Region | | | | | | | | | | | | | | | | | |
| Toronto[1] | — | — | — | — | — | — | — | — | — | — | — | **16.3** (13.0-20.3) | **18.1** (12.0-26.4) | **17.8** (14.5-21.7) | **14.8** (11.4-19.1) | **22.0** (16.4-28.7) | **15.6** (10.7-22.1) |
| Toronto[2] | — | — | **15.4** (13.1-17.9) | **16.9** (12.4-22.5) | **16.7** (10.1-26.2) | **12.1** (8.5-16.8) | **14.5** (7.4-26.3) | **13.2** (10.3-16.7) | **8.5** (6.4-11.1) | **12.3** (6.9-21.1) | **13.7** (11.8-15.8) | **16.1** (12.6-20.4) | **19.5** (11.7-30.8) | **14.9** (11.0-19.7) | **12.5** (9.7-15.8) | **16.7** (11.0-24.4) | **11.3** (5.9-20.5) |
| North[1] | — | — | — | — | — | — | — | — | — | — | — | **37.4** (31.1-44.2) | **30.9** (26.0-36.3) | **32.6** (28.2-37.3) | **32.8** (28.5-37.4) | **35.4** (31.3-39.6) | **32.1** (28.1-36.5) |
| North[2] | — | — | **17.4** (14.2-21.3) | **22.4** (18.2-27.4) | **22.9** (18.6-27.9) | **25.6** (17.0-36.6) | **31.0** (22.2-41.4) | **24.8** (15.8-36.9) | **27.0** (21.5-33.2) | **25.2** (18.4-33.4) | **25.0** (20.4-30.2) | **25.7** (19.0-33.8) | **29.4** (23.4-36.1) | **31.2** (25.6-37.3) | **25.9** (21.6-30.7) | **33.7** (27.2-41.0) | **26.0** (20.2-32.7) |
| West[1] | — | — | — | — | — | — | — | — | — | — | — | **32.4** (27.9-37.3) | **28.8** (24.6-33.4) | **27.9** (24.3-31.8) | **24.0** (20.5-27.8) | **26.2** (23.5-29.1) | **26.9** (23.8-30.2) |
| West[2] | — | — | **22.3** (21.5-23.1) | **22.5** (18.9-26.6) | **20.1** (17.0-23.8) | **17.0** (12.5-22.6) | **19.8** (15.3-25.3) | **19.8** (16.9-23.2) | **18.4** (15.4-21.9) | **16.4** (10.0-25.7) | **24.5** (22.1-27.1) | **29.3** (22.6-37.0) | **22.4** (17.8-27.9) | **26.2** (22.1-30.8) | **19.6** (16.2-23.5) | **22.5** (19.6-25.6) | **22.1** (18.6-26.2) |
| East[1] | — | — | — | — | — | — | — | — | — | — | — | **24.8** (21.1-28.9) | **25.6** (21.5-30.3) | **28.0** (24.2-32.1) | **23.2** (18.5-28.8) | **26.7** (23.9-29.7) | **25.1** (22.3-28.0) |
| East[2] | — | — | **20.8** (18.9-22.9) | **21.2** (18.9-23.6) | **18.6** (12.5-26.8) | **24.6** (21.2-28.4) | **21.4** (18.6-24.5) | **17.5** (13.0-23.1) | **11.0** (8.9-13.6) | **24.2** (22.0-26.5) | **23.5** (17.3-31.2) | **26.6** (21.1-33.0) | **21.8** (15.2-30.3) | **26.5** (21.6-32.2) | **20.0** (15.3-25.9) | **22.6** (18.7-26.9) | **18.3** (15.2-21.7) |

Notes: (1) based on Grades 7-12 (full sample); (2) based on Grades 7, 9, and 11 only (long-term sample); (3) regional stratification differed in 1977 and 1979 and therefore regions are not presented; (4) entries in brackets are 95% confidence intervals; (5) no significant differences 2009 vs. 2007; [b] 2009 vs. 1999 significant difference, p<.01; [d] significant long-term non-linear trend, p<.001.

Q: How many times in the last 4 weeks have you had 5 or more drinks of alcohol on the same occasion?

Source: OSDUHS, Centre for Addiction & Mental Health

Table 3.4.5a: Frequency of Binge Drinking During the Past Month, 1999–2009 (Grades 7 to 12)

| | Percentage of Total Sample | | | | | |
|---|---|---|---|---|---|---|
| | **1999** | **2001** | **2003** | **2005** | **2007** | **2009** |
| (N) | (4447) | (3898) | (6616) | (7726) | (6323) | (9112) |
| **Total** | | | | | | |
| Never | **72.4** | **74.0** | **73.5** | **77.3** | **73.7** | **75.3** |
| Once | **11.3** | **10.7** | **10.1** | **9.3** | **11.4** | **9.7** |
| 2 to 3 times | **10.2** | **9.9** | **9.9** | **8.5** | **9.6** | **9.2** |
| 4 + times | **6.1** | **5.4** | **6.4** | **4.9** | **5.2** | **5.8** |
| **Males** | | | | | | |
| Never | 67.9 | 70.6 | 70.6 | 74.9 | 72.9 | 74.1 |
| Once | 11.0 | 10.8 | 10.7 | 9.1 | 11.3 | 9.4 |
| 2 to 3 times | 12.8 | 11.4 | 10.2 | 9.6 | 9.5 | 9.6 |
| 4 + times | 8.3 | 7.1 | 8.4 | 6.3 | 6.3 | 6.9 |
| **Females** | | | | | | |
| Never | 77.0 | 77.4 | 76.2 | 79.8 | 74.6 | 76.6 |
| Once | 11.7 | 10.6 | 9.6 | 9.5 | 11.5 | 10.0 |
| 2 to 3 times | 7.5 | 8.4 | 9.6 | 7.3 | 9.7 | 8.8 |
| 4 + times | 3.9 | 3.6 | 4.5 | 3.4 | 4.1 | 4.6 |
| **Grade 7** | | | | | | |
| Never | 95.0 | 95.8 | 94.2 | 96.6 | 95.6 | 97.3 |
| Once | 3.2 | 2.2 | 3.2 | 2.6 | 2.7 | 1.5 |
| 2 to 3 times | 1.1 | 1.5 | 2.3 | 0.6 | 1.2 | † |
| 4 + times | † | † | † | † | † | † |
| **Grade 8** | | | | | | |
| Never | 86.2 | 88.0 | 92.3 | 92.6 | 93.5 | 95.0 |
| Once | 7.6 | 8.7 | 5.0 | 3.4 | 4.1 | 2.8 |
| 2 to 3 times | 4.4 | 2.8 | 2.0 | 3.1 | 1.8 | 1.7 |
| 4 + times | 1.8 | † | † | † | † | † |
| **Grade 9** | | | | | | |
| Never | 76.2 | 78.3 | 76.5 | 81.2 | 81.2 | 83.7 |
| Once | 11.4 | 10.6 | 10.3 | 8.5 | 8.8 | 9.0 |
| 2 to 3 times | 8.8 | 7.9 | 9.3 | 7.2 | 6.6 | 5.0 |
| 4 + times | 3.6 | 3.2 | 3.9 | 3.0 | 3.3 | 2.3 |
| **Grade 10** | | | | | | |
| Never | 64.8 | 65.3 | 70.2 | 73.8 | 70.2 | 74.1 |
| Once | 12.6 | 12.9 | 11.5 | 11.9 | 14.0 | 10.9 |
| 2 to 3 times | 16.3 | 14.6 | 11.0 | 10.2 | 10.7 | 10.4 |
| 4 + times | 6.4 | 7.1 | 7.3 | 4.1 | 5.2 | 4.7 |
| **Grade 11** | | | | | | |
| Never | 54.3 | 58.3 | 59.1 | 65.5 | 57.8 | 64.4 |
| Once | 16.3 | 15.0 | 13.0 | 13.1 | 18.2 | 13.6 |
| 2 to 3 times | 17.1 | 16.1 | 15.8 | 12.5 | 15.9 | 13.5 |
| 4 + times | 12.3 | 10.5 | 12.1 | 8.9 | 8.2 | 8.4 |
| **Grade 12** | | | | | | |
| Never | 55.4 | 52.0 | 54.8 | 57.5 | 52.0 | 51.6 |
| Once | 17.4 | 16.5 | 16.2 | 15.5 | 18.0 | 16.0 |
| 2 to 3 times | 14.2 | 18.5 | 16.6 | 15.9 | 18.4 | 18.3 |
| 4 + times | 13.1 | 13.0 | 12.4 | 11.1 | 11.6 | 14.1 |

Notes: (1) † estimate suppressed due to unreliability; (2) no significant changes over time.
Q: How many times in the last 4 weeks have you had 5 or more drinks of alcohol on the same occasion?
Source: OSDUHS, Centre for Addiction & Mental Health

Table 3.4.5b: Frequency of Binge Drinking During the Past Month, 1987–2009 (Grades 7, 9, 11 only)

| | | Percentage of Total Sample | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | **1987** | **1989** | **1991** | **1993** | **1995** | **1997** | **1999** | **2001** | **2003** | **2005** | **2007** | **2009** |
| | (N) | (3376) | (3040) | (2961) | (2617) | (2907) | (3072) | (2421) | (2013) | (3389) | (3969) | (3215) | (4424) |
| **Total** | | | | | | | | | | | | | |
| | Never | **81.2** | **79.7** | **81.7** | **85.0** | **81.4** | **77.9** | **74.3** | **77.9** | **75.4** | **81.0** | **77.7** | **80.8** |
| | Once | **8.2** | **8.2** | **7.6** | **7.1** | **8.8** | **9.8** | **10.7** | **9.2** | **9.2** | **8.1** | **10.1** | **8.4** |
| | 2 to 3 times | **6.2** | **7.5** | **6.3** | **5.2** | **6.3** | **7.8** | **9.4** | **8.3** | **9.6** | **6.8** | **8.1** | **6.9** |
| | 4 + times | **4.3** | **4.6** | **4.3** | **2.8** | **3.4** | **4.5** | **5.6** | **4.5** | **5.8** | **4.0** | **4.1** | **3.9** |
| **Males** | | | | | | | | | | | | | |
| | Never | 78.6 | 77.0 | 79.8 | 83.6 | 78.4 | 76.2 | 70.3 | 73.9 | 72.3 | 80.1 | 77.1 | 80.6 |
| | Once | 8.3 | 8.9 | 8.0 | 7.3 | 9.4 | 8.6 | 10.2 | 10.1 | 9.8 | 7.4 | 10.4 | 8.0 |
| | 2 to 3 times | 7.5 | 8.3 | 6.2 | 4.9 | 7.2 | 8.8 | 11.9 | 9.6 | 10.3 | 7.1 | 8.3 | 6.7 |
| | 4 + times | 5.5 | 5.8 | 6.1 | 4.2 | 4.9 | 6.4 | 7.6 | 6.4 | 7.6 | 5.4 | 4.2 | 4.7 |
| **Females** | | | | | | | | | | | | | |
| | Never | 83.6 | 82.3 | 84.0 | 86.3 | 84.3 | 79.4 | 78.5 | 82.0 | 78.3 | 82.0 | 78.4 | 80.9 |
| | Once | 8.1 | 7.6 | 7.2 | 6.8 | 8.3 | 10.8 | 11.1 | 8.3 | 8.6 | 8.8 | 9.8 | 8.9 |
| | 2 to 3 times | 5.0 | 6.6 | 6.5 | 5.5 | 5.5 | 7.0 | 6.8 | 7.0 | 9.0 | 6.6 | 7.8 | 7.1 |
| | 4 + times | 3.2 | 3.5 | 2.4 | 1.4 | 1.9 | 2.9 | 3.6 | 2.6 | 4.1 | 2.6 | 3.9 | 3.1 |
| **Grade 7** | | | | | | | | | | | | | |
| | Never | 95.8 | 97.0 | 97.5 | 96.9 | 97.4 | 97.0 | 95.0 | 95.8 | 94.2 | 96.6 | 95.6 | 97.3 |
| | Once | 2.1 | 1.7 | 1.4 | 2.0 | 1.6 | 1.2 | 3.2 | 2.2 | 3.2 | 2.6 | 2.7 | 1.5 |
| | 2 to 3 times | 1.2 | 0.9 | † | † | † | 1.2 | 1.1 | 1.5 | 2.3 | † | 1.2 | † |
| | 4 + times | † | † | † | † | † | † | † | † | † | † | † | † |
| **Grade 9** | | | | | | | | | | | | | |
| | Never | 83.5 | 80.0 | 81.7 | 87.7 | 86.1 | 80.2 | 76.2 | 78.3 | 76.5 | 81.2 | 81.2 | 83.7 |
| | Once | 7.8 | 9.0 | 9.3 | 7.0 | 8.2 | 10.4 | 11.4 | 10.6 | 10.3 | 8.5 | 8.8 | 9.0 |
| | 2 to 3 times | 5.3 | 8.2 | 5.8 | 4.6 | 4.2 | 6.4 | 8.8 | 7.9 | 9.3 | 7.2 | 6.6 | 5.0 |
| | 4 + times | 3.3 | 3.1 | 3.2 | † | † | 2.9 | 3.6 | 3.2 | 3.9 | 3.0 | 3.3 | 2.3 |
| **Grade 11** | | | | | | | | | | | | | |
| | Never | 65.8 | 61.4 | 67.2 | 72.3 | 63.1 | 58.6 | 54.3 | 58.3 | 59.1 | 65.5 | 57.8 | 64.4 |
| | Once | 14.1 | 14.2 | 11.7 | 11.4 | 15.8 | 16.7 | 16.3 | 15.0 | 13.0 | 13.1 | 18.2 | 13.6 |
| | 2 to 3 times | 11.6 | 13.6 | 11.9 | 9.6 | 13.3 | 15.1 | 17.1 | 16.1 | 15.8 | 12.5 | 15.9 | 13.5 |
| | 4 + times | 8.4 | 10.9 | 9.2 | 6.7 | 7.9 | 9.6 | 12.3 | 10.5 | 12.1 | 8.9 | 8.2 | 8.4 |

Note: † estimate suppressed due to unreliability
Q: How many times in the last 4 weeks have you had 5 or more drinks of alcohol on the same occasion?
Source: OSDUHS, Centre for Addiction & Mental Health

Table 3.4.6: Percentage Reporting Becoming Drunk at Least Once During the Past Month, 1977–2009

| | 1977 | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N[1]) | | | | | | | | | | | | (2148) | (1837) | (3152) | (3648) | (2935) | (4851) |
| (N[2]) | (3927) | (3920) | (3010) | (3614) | (3146) | (3376) | (3040) | (2961) | (2617) | (2907) | (3072) | (1168) | (953) | (1618) | (1862) | (1488) | (2355) |
| Total[1] (95% CI) | — | — | — | — | — | — | — | — | — | — | — | **25.0** (22.6-27.7) | **26.0** (23.1-29.2) | **23.9** (21.4-26.6) | **22.5** (19.9-25.3) | **24.4** (22.3-26.7) | **22.6** (20.6-24.6) |
| Total[2] | **15.5** (13.8-17.4) | **18.6** (16.8-20.5) | **15.4** (13.6-17.5) | **15.9** (14.1-18.0) | **15.0** (12.8-17.3) | **16.2** (13.3-19.6) | **15.0** (13.5-16.6) | **16.7** (14.8-18.7) | **14.4** (13.0-15.9) | **19.6** (16.2-23.6) | **22.4** (20.8-24.0) | **23.3** (20.0-27.0) | **23.3** (19.4-27.7) | **23.6** (20.7-26.8) | **19.4** (16.8-22.4) | **19.0** (16.4-21.9) | **16.8** [d] (14.8-19.0) |
| Sex | | | | | | | | | | | | | | | | | |
| Males[1] | — | — | — | — | — | — | — | — | — | — | — | **27.4** (24.6-30.3) | **28.5** (24.4-32.9) | **25.8** (22.6-29.3) | **23.3** (20.3-26.5) | **24.7** (21.8-27.8) | **22.3** (19.9-24.8) |
| Males[2] | **17.1** (15.0-19.3) | **20.0** (17.7-22.7) | **16.5** (14.8-18.5) | **19.0** (16.4-22.0) | **16.3** (13.6-19.3) | **17.1** (13.5-21.4) | **15.6** (13.7-17.7) | **17.6** (15.7-19.6) | **14.3** (12.8-15.9) | **21.4** (17.9-25.4) | **22.4** (20.3-24.7) | **25.3** (21.2-29.8) | **25.3** (20.6-30.7) | **26.8** (22.8-31.1) | **19.4** (16.1-23.3) | **17.8** (14.7-21.4) | **14.9** (12.4-17.6) |
| Females[1] | — | — | — | — | — | — | — | — | — | — | — | **22.6** (19.4-26.2) | **23.7** (20.3-27.4) | **22.2** (19.0-25.7) | **21.6** (18.8-24.7) | **24.2** (21.6-26.9) | **22.8** (20.0-25.8) |
| Females[2] | **14.1** (12.1-16.4) | **17.1** (14.9-19.6) | **14.3** (11.4-17.7) | **12.9** (11.3-14.7) | **13.6** (10.7-17.1) | **15.4** (12.8-18.2) | **14.4** (12.0-17.2) | **15.6** (12.9-18.8) | **14.5** (12.2-17.0) | **17.9** (14.3-22.3) | **22.4** (20.6-24.2) | **21.3** (17.4-25.8) | **21.2** (16.3-27.1) | **20.7** (16.8-25.3) | **19.4** (16.4-22.9) | **20.3** (16.7-24.5) | **18.7** (15.3-22.6) |
| Grade | | | | | | | | | | | | | | | | | |
| 7 | **6.5** (4.9-8.5) | **7.8** (6.0-10.1) | **4.4** (3.8-5.1) | **6.0** (3.8-9.4) | **4.3** (2.6-7.2) | **4.3** (2.8-6.6) | **2.9** (2.3-3.6) | **4.2** (3.5-5.1) | **4.3** (2.8-6.6) | **3.8** (3.0-4.9) | **4.8** (3.1-7.4) | **4.3** (2.8-6.6) | **4.8** (2.8-8.1) | **3.6** (2.0-6.5) | **3.4** (2.1-5.3) | **3.2** (1.6-6.6) | **3.8** (2.4-5.9) |
| 8 | — | — | — | — | — | — | — | — | — | — | — | **12.8** (9.7-16.6) | **12.8** (6.5-23.5) | **6.2** (4.3-9.0) | **7.0** (5.0-9.7) | **7.9** (4.9-12.5) | **7.1** (4.7-10.5) |
| 9 | **15.5** (12.8-18.6) | **19.8** (17.0-22.9) | **16.7** (13.6-20.4) | **19.1** (17.7-20.5) | **14.6** (11.1-19.2) | **16.4** (12.4-21.4) | **18.3** (15.2-21.8) | **17.4** (13.9-21.5) | **13.8** (11.0-17.0) | **16.1** (10.9-23.1) | **20.2** (17.7-22.8) | **21.5** (16.7-27.1) | **24.5** (19.2-30.8) | **24.5** (20.6-28.8) | **20.4** (16.4-25.0) | **17.1** (13.2-22.0) | **15.9** (12.5-20.1) |
| 10 | — | — | — | — | — | — | — | — | — | — | — | **31.7** (26.4-37.4) | **36.0** (31.2-41.2) | **25.8** (21.0-31.2) | **26.9** (22.8-31.4) | **29.0** (24.4-33.9) | **25.2** (21.1-29.8) |
| 11 | **26.3** (22.9-30.0) | **29.0** (25.4-33.0) | **26.5** (20.2-33.8) | **26.3** (21.4-31.8) | **25.8** (21.5-30.7) | **26.7** (18.5-36.9) | **23.7** (21.3-26.2) | **27.4** (23.9-31.1) | **23.4** (20.6-26.4) | **36.7** (28.9-45.5) | **40.2** (37.0-43.4) | **41.7** (35.3-48.4) | **40.7** (32.5-49.4) | **39.6** (33.4-46.1) | **33.6** (28.7-39.0) | **35.8** (30.8-41.1) | **29.4** [b] (25.3-34.0) |
| 12 | — | — | — | — | — | — | — | — | — | — | — | **40.0** (33.5-46.8) | **38.3** (25.4-53.1) | **38.7** (32.7-45.1) | **39.3** (33.9-44.9) | **45.8** (40.8-50.9) | **43.3** (38.5-48.2) |

(Continued…)

| | 1977 | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N[1]) | | | | | | | | | | | | **(2148)** | **(1837)** | **(3152)** | **(3648)** | **(2935)** | **(4851)** |
| (N[2]) | **(3927)** | **(3920)** | **(3010)** | **(3614)** | **(3146)** | **(3376)** | **(3040)** | **(2961)** | **(2617)** | **(2907)** | **(3072)** | **(1168)** | **(953)** | **(1618)** | **(1862)** | **(1488)** | **(2355)** |
| Region | | | | | | | | | | | | | | | | | |
| Toronto[1] | — | — | — | — | — | — | — | — | — | — | — | **12.2** (8.8-16.6) | **17.2** (10.8-26.2) | **13.7** (8.9-20.5) | **15.1** (10.4-21.2) | **20.7** (14.5-28.7) | **12.5** (7.8-19.5) |
| Toronto[2] | — | — | **10.8** (7.8-14.5) | **12.7** (7.4-20.8) | **14.3** (11.4-17.7) | **11.0** (7.2-16.4) | **10.1** (6.4-15.6) | **11.1** (7.0-17.0) | **8.6** (6.5-11.2) | **13.2** (6.8-24.2) | **14.7** (14.2-15.2) | **11.5** (7.9-16.5) | **17.8** (9.5-30.8) | **12.5** (7.6-20.1) | **12.7** (8.1-19.2) | **12.4** (7.0-21.1) | **8.4** (4.0-16.9 |
| North[1] | — | — | — | — | — | — | — | — | — | — | — | **33.8** (28.6-39.3) | **29.4** (25.2-33.9) | **29.8** (24.2-36.0) | **32.3** (27.0-38.0) | **35.0** (30.0-40.4) | **27.8** (22.6-33.6) |
| North[2] | — | — | **13.3** (9.2-19.0) | **18.8** (15.2-22.9) | **17.7** (12.6-24.3) | **20.9** (16.4-26.3) | **20.9** (14.3-29.4) | **24.4** (14.9-37.2) | **22.5** (16.6-29.7) | **25.8** (19.1-34.0) | **26.6** (22.9-30.7) | **25.4** (18.0-34.4) | **27.8** (23.1-33.1) | **32.1** (25.0-40.1) | **26.6** (21.2-32.8) | **32.5** (25.5-40.4) | **23.4** (17.0-31.2) |
| West[1] | — | — | — | — | — | — | — | — | — | — | — | **30.1** (25.6-35.0) | **29.4** (24.8-34.6) | **26.2** (22.0-30.9) | **22.6** (19.0-26.6) | **24.2** (21.5-27.1) | **24.4** (21.3-27.8) |
| West[2] | — | — | **18.0** (15.3-21.0) | **17.5** (14.9-20.5) | **16.6** (14.6-18.8) | **15.0** (10.2-21.6) | **15.1** (13.4-17.0) | **17.4** (15.2-19.8) | **17.1** (15.3-19.1) | **18.5** (12.4-26.6) | **22.5** (21.2-23.9) | **27.8** (21.9-34.6) | **24.4** (19.5-30.1) | **26.3** (21.6-31.7) | **19.0** (15.3-23.3) | **19.3** (15.9-23.3) | **18.4** (15.3-21.9) |
| East[1] | — | — | — | — | — | — | — | — | — | — | — | **23.0** (19.3-27.2) | **26.2** (22.0-31.0) | **25.7** (21.9-29.8) | **25.3** (20.2-31.0) | **24.7** (20.8-29.2) | **23.9** (21.1-27.0) |
| East[2] | — | — | **15.6** (14.9-16.4) | **15.3** (13.1-17.8) | **12.0** (6.8-20.4) | **20.5** (15.1-27.3) | **16.0** (13.5-19.0) | **17.2** (14.0-20.8) | **11.9** (8.9-15.8) | **24.0** (20.5-27.9) | **26.1** (21.6-31.2) | **24.1** (18.6-30.6) | **25.9** (18.8-34.6) | **24.6** (19.8-30.2) | **22.8** (17.5-29.2) | **19.5** (14.5-25.7) | **17.4** (14.2-21.2) |

Notes: (1) based on Grades 7-12 (full sample); (2) based on Grades 7, 9, and 11 only (long-term sample); (3) regional stratification differed in 1977 and 1979 and therefore regions are not presented; (4) entries in brackets are 95% confidence intervals; (5) question asked of a random half sample starting in 1999; (6) no significant differences 2009 vs. 2007; [b] 2009 vs. 1999 significant difference, p<.01; [d] significant long-term non-linear trend, p<.001.

Q: How many times in the last 4 weeks has drinking alcohol made you drunk (that is, you had so much that you could not do what you wanted to do, or you threw up)?

Source: OSDUHS, Centre for Addiction & Mental Health

## Hazardous Drinking (AUDIT Screener)

(Figure 3.4.9; Tables 3.4.7, 3.4.8)

Starting in 1999, the OSDUHS included the Alcohol Use Disorders Identification Test (AUDIT) developed by the World Health Organization (Saunders, Aasland, Babor, De La Fuente, & Grant, 1993). This 10-item instrument is designed to detect problem drinkers at the less severe end of the spectrum of alcohol problems. The AUDIT assesses hazardous and harmful drinking. *Hazardous* drinking refers to an established pattern of drinking that increases the likelihood of future medical and physical problems (e.g., accidents), whereas *harmful* drinking refers to a pattern of drinking that is already causing damage to one's health (e.g., alcohol-related injuries) and indications of dependence. Those with a score of 8 or more (out of 40) are considered to be drinking at a hazardous or harmful level (Cronbach's α=.87). We restrict the term to "hazardous drinking" here for brevity.

*2009: Grades 7 to 12*

The ten AUDIT items are presented in Table 3.4.7, while Figure 3.4.9 presents the percentage of the total sample drinking at a hazardous level (that is, scoring 8 or more on the screener).

- As presented in Table 3.4.7, about one-fifth (21.4%) of all students could not remember what had happened when they were drinking, on at least one occasion during the past 12 months. Also worrisome is that one-tenth (10.1%) of students report that they were injured or someone else was injured because of their drinking, during the past 12 months.

- Overall, 20.8% (range: 18.8%-22.9%) of students report drinking at a hazardous level (that is, scoring 8 or more). This represents about 211,800 students in grades 7 to 12 in Ontario. Among past-year drinkers, 34.8% drink at this hazardous level.

- Males (20.9%) and females (20.6%) are equally likely to report hazardous drinking.

- There is significant variation by grade: as grade increases so does the likelihood of hazardous drinking, with a large increase in each grade between grade 7 and grade 12 (from 2.6% up to 41.5%).

- There is significant variation among the regions, with Toronto students (11.9%) least likely to drink hazardously.

*1999–2009: Grades 7 to 12*

Table 3.4.10 presents trends in hazardous drinking between 1999 and 2009, broken down by subgroup.

- ☐ There was no significant change in hazardous drinking between 2007 (18.6%) and 2009 (20.8%). The 2009 percentage is also similar to that found in 1999 (18.0%).

- ☐ Neither sex shows a statistically significant change in 2009 compared to their respective 2007 estimates, or their respective 1999 estimates.

- ☐ Only grade 12 students show a significant change in hazardous drinking, increasing from 28.2% in 1999 up to 41.5% in 2009.

- ☐ None of the four regions shows a significant change over the past decade.

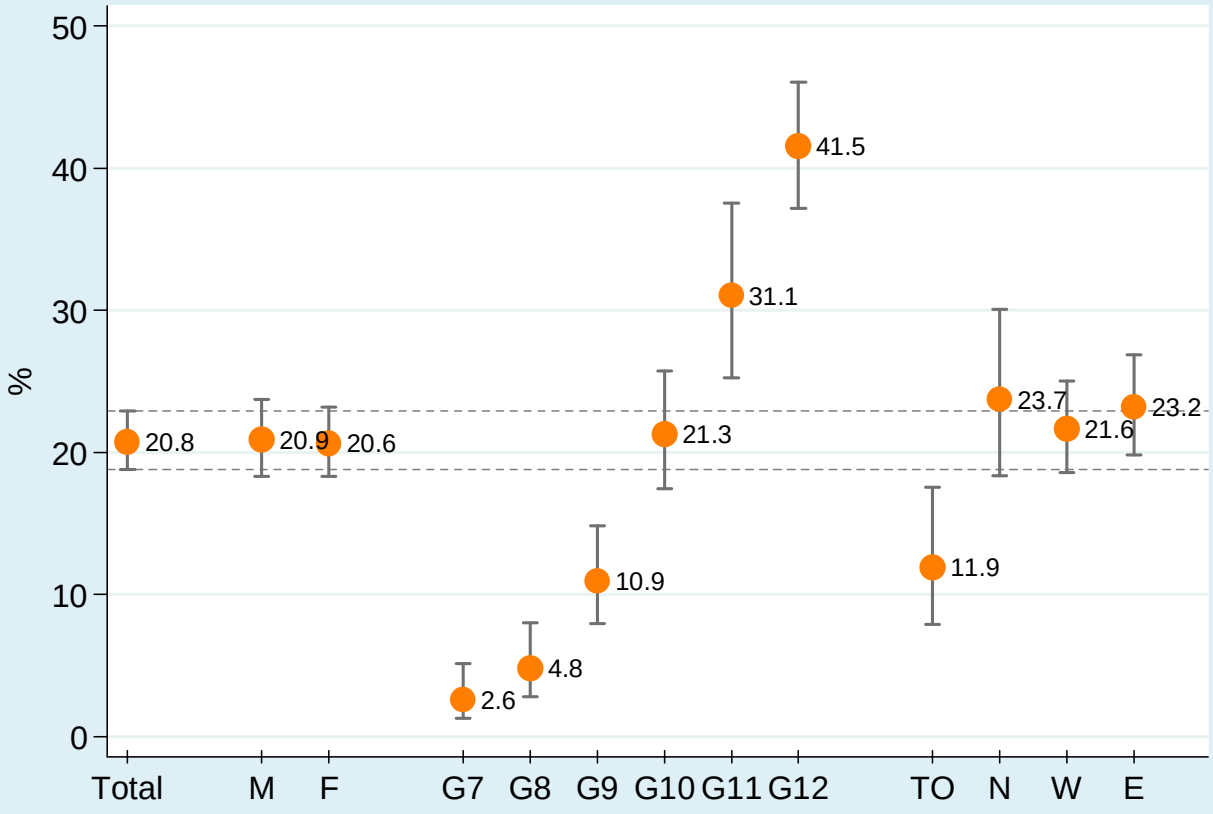
Table 3.4.7: Percentage of the Total Sample, and of Past Year Drinkers, Reporting Hazardous Drinking Indicators (AUDIT), 2009 OSDUHS (Grades 7 to 12)

| AUDIT Item | % "yes" | |
|---|---|---|
| | Total Sample (N=4851) | Past Year Drinkers (N=2636) |
| ***Alcohol Intake*** | | |
| 1. Consumed alcohol during the past 12 months | 59.3 | -- |
| 2. Number of drinks usually have on typical day when drink (% reporting 2+ drinks) | 37.4 | 62.0 |
| 3. Consumed 5 or more drinks on one occasion during the past 12 months | 34.4 | 56.7 |
| ***Dependence Indicators (past 12 months)*** | | |
| 4. Were not able to stop drinking once you had started | 12.5 | 20.6 |
| 5. Failed to do what was normally expected from you because of your drinking | 13.9 | 23.1 |
| 6. Needed a first alcoholic drink in the morning to get yourself going after a heavy drinking session | 3.6 | 6.0 |
| ***Adverse Consequences*** | | |
| 7. Had a feeling of guilt or remorse after drinking, during the past 12 months | 12.2 | 19.8 |
| 8. Been unable to remember what happened the night before because you had been drinking, during the past 12 months | 21.4 | 35.6 |
| 9. You or someone else been injured as a result of your drinking | | |
| Yes, but not in the past 12 months: | 5.4 | 7.6 |
| Yes, in the past 12 months: | 10.1 | 16.1 |
| 10. A relative/friend or a doctor/health worker has been concerned about your drinking or suggested that you cut down | | |
| Yes, but not in the past 12 months: | 1.0 | 1.6 |
| Yes, in the past 12 months: | 2.0 | 3.4 |
| **AUDIT 8+ Score** (95% CI) | 20.8 (18.8-22.9) | 34.8 (31.9-37.8) |

Notes: (1) The AUDIT is a screener that measures hazardous and harmful drinking, as indicated by a score of 8 or more out of 40; (2) "Past Year Drinkers" are those who drank alcohol, excluding a sip, at least once during the past 12 months; (3) based on a random half sample.

Source: OSDUHS, Centre for Addiction & Mental Health

Figure 3.4.9
Percentage of the Total Sample of Students Reporting Hazardous Drinking (AUDIT 8+) by Sex, Grade and Region, 2009 OSDUHS




Vertical bars represent 95% confidence intervals; horizontal bar represents 95% CI for total estimate

Table 3.4.8: Percentage of the Total Sample of Students Reporting Hazardous Drinking (AUDIT 8+), 1999–2009 (Grades 7 to 12)

| | | Percentage of Total Sample | | | | | |
|---|---|---|---|---|---|---|---|
| | | **1999** | **2001** | **2003** | **2005** | **2007** | **2009** |
| | (N) | (2299) | (2061) | (3464) | (4078) | (3388) | (4851) |
| Total | | **18.0** | **14.6** | **18.8** | **15.9** | **18.6** | **20.8** |
| (95% CI) | | (15.8-20.4) | (12.2-17.3) | (16.7-21.1) | (13.6-18.5) | (16.8-20.6) | (18.8-22.9) |
| Sex | | | | | | | |
| | Males | **20.3** | **17.3** | **21.1** | **17.7** | **18.8** | **20.9** |
| | | (17.3-23.6) | (14.0-21.1) | (17.8-24.9) | (14.4-21.5) | (16.5-21.4) | (18.3-23.7) |
| | Females | **15.7** | **11.9** | **16.7** | **14.1** | **18.4** | **20.6** |
| | | (13.0-18.7) | (9.6-14.6) | (14.6-19.0) | (12.0-16.4) | (16.2-20.8) | (18.3-23.2) |
| Grade | | | | | | | |
| | 7 | **2.3** | † | **4.0** | **2.1** | † | **2.6** |
| | | (1.0-5.1) | | (2.0-7.7) | (1.0-4.6) | | (1.3-5.1) |
| | 8 | **8.5** | **5.3** | **5.6** | **5.5** | **4.0** | **4.8** |
| | | (6.4-11.3) | (3.0-9.2) | (2.5-12.1) | (3.2-9.4) | (2.2-7.0) | (2.8-8.0) |
| | 9 | **15.1** | **10.4** | **13.2** | **11.3** | **15.3** | **10.9** |
| | | (10.6-21.0) | (7.2-14.8) | (10.8-16.2) | (8.0-15.5) | (11.6-20.0) | (8.0-14.8) |
| | 10 | **25.5** | **21.2** | **23.3** | **17.7** | **19.7** | **21.3** |
| | | (19.5-32.6) | (16.0-27.4) | (18.8-28.5) | (14.4-21.6) | (16.6-23.2) | (17.4-25.7) |
| | 11 | **29.5** | **27.0** | **29.6** | **26.3** | **31.8** | **31.1** |
| | | (23.8-36.0) | (20.5-34.5) | (24.5-35.2) | (22.3-30.8) | (27.0-37.0) | (25.2-37.6) |
| | 12 | **28.2** | **28.0** | **32.6** | **30.2** | **33.5** | **41.5** [b] |
| | | (21.1-36.6) | (21.9-34.9) | (27.0-38.7) | (25.2-35.6) | (28.9-38.4) | (37.2-46.1) |
| Region | | | | | | | |
| | Toronto | **7.8** | **6.1** | **13.7** | **9.4** | **13.2** | **11.9** |
| | | (5.4-11.0) | (2.5-13.9) | (10.1-18.4) | (7.0-12.6) | (8.6-19.8) | (7.9-17.6) |
| | North | **30.7** | **20.9** | **21.7** | **22.2** | **26.4** | **23.7** |
| | | (24.5-37.6) | (16.5-26.1) | (17.7-26.4) | (19.4-25.3) | (21.0-32.7) | (18.4-30.0) |
| | West | **20.0** | **16.4** | **20.5** | **17.4** | **19.0** | **21.6** |
| | | (16.2-24.4) | (12.6-21.1) | (17.2-24.3) | (14.2-21.3) | (16.1-22.2) | (18.6-25.0) |
| | East | **17.6** | **15.3** | **18.6** | **15.8** | **19.3** | **23.2** |
| | | (14.0-22.0) | (11.2-20.5) | (14.6-23.4) | (11.2-21.8) | (16.7-22.2) | (19.8-26.8) |

Notes: (1) based on a random half-sample in each year; (2) entries in brackets are 95% confidence intervals; (3) † estimate suppressed due to unreliability; (4) no significant differences 2009 vs. 2007; [b] 2009 vs. 1999 significant difference, p<.01.
Source: OSDUHS, Centre for Addiction & Mental Health

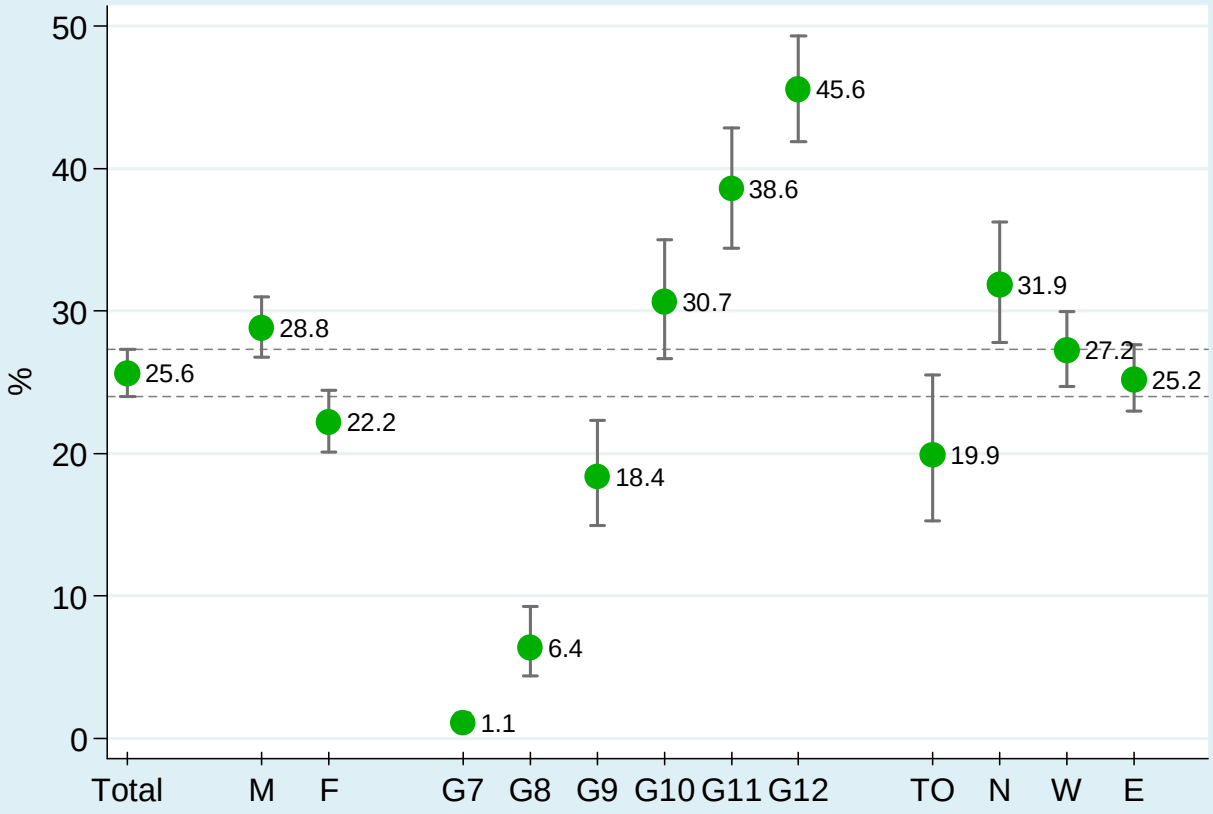
# 3.5 Cannabis Use

## Past Year Cannabis Use

(Figures 3.5.1, 3.5.2; Table 3.5.1)

| | Past Year Cannabis Use in 2009 (Grades 7 to 12) | Trends in Cannabis Use |
|---|---|---|
| Total Sample | ■ Overall, 25.6% of students report using cannabis at least once during the 12 months before the survey. With the sampling error, we estimate that between 24.0% and 27.3% of Ontario students in grades 7 to 12 use cannabis. The percentage of 25.6% represents about 261,500 students. | ☐ The overall prevalence of cannabis use in 2009 (25.6%) among grades 7 to 12 is the same as that found in 2007 (25.6%), and is also similar to the estimate from 1999 (28.0%).<br><br>☐ Over the long-term (grades 7, 9, 11 only), the 2009 rate is significantly is lower than the historical peak years in the late 1970s and in1999/early 2000s, but is higher than the lows found in the late 1980s/early 1990s. |
| Sex | ■ Males (28.8%) are significantly more likely than females (22.2%) to use cannabis. | ☐ The 2009 estimates for both males and females are not significantly different than the estimates from 2007, or from 1999.<br><br>☐ Over the long-term, for both males and females, cannabis use is currently significantly lower than the peaks found in the late 1970s and in1999/early 2000s, but is higher than the lows found in the late 1980s/early 1990s. |
| Grade | ■ Cannabis use shows large increases with each grade, increasing from 1.1% among 7th-graders to 45.6% among 12th-graders. | ☐ Only 7th-graders show a significant decline in cannabis use between 2007 (3.6%) and 2009 (1.1%). Use is currently significantly lower among students in grades 7 and 8, compared to their respective estimates from 1999. |
| Region | ■ There are significant regional differences, with students in Toronto (19.9%) least likely to use, whereas students in the North (31.9%) are most likely. | ☐ No region shows a significant change over the past decade in the prevalence of cannabis use. |

Figure 3.5.1
Past Year Cannabis Use by Sex, Grade and Region, 2009 OSDUHS




Vertical bars represent 95% confidence intervals; horizontal bar represents 95% CI for total estimate

Figure 3.5.2
Past Year Cannabis Use, 1977–2009 OSDUHS (Grades 7, 9, 11 only)

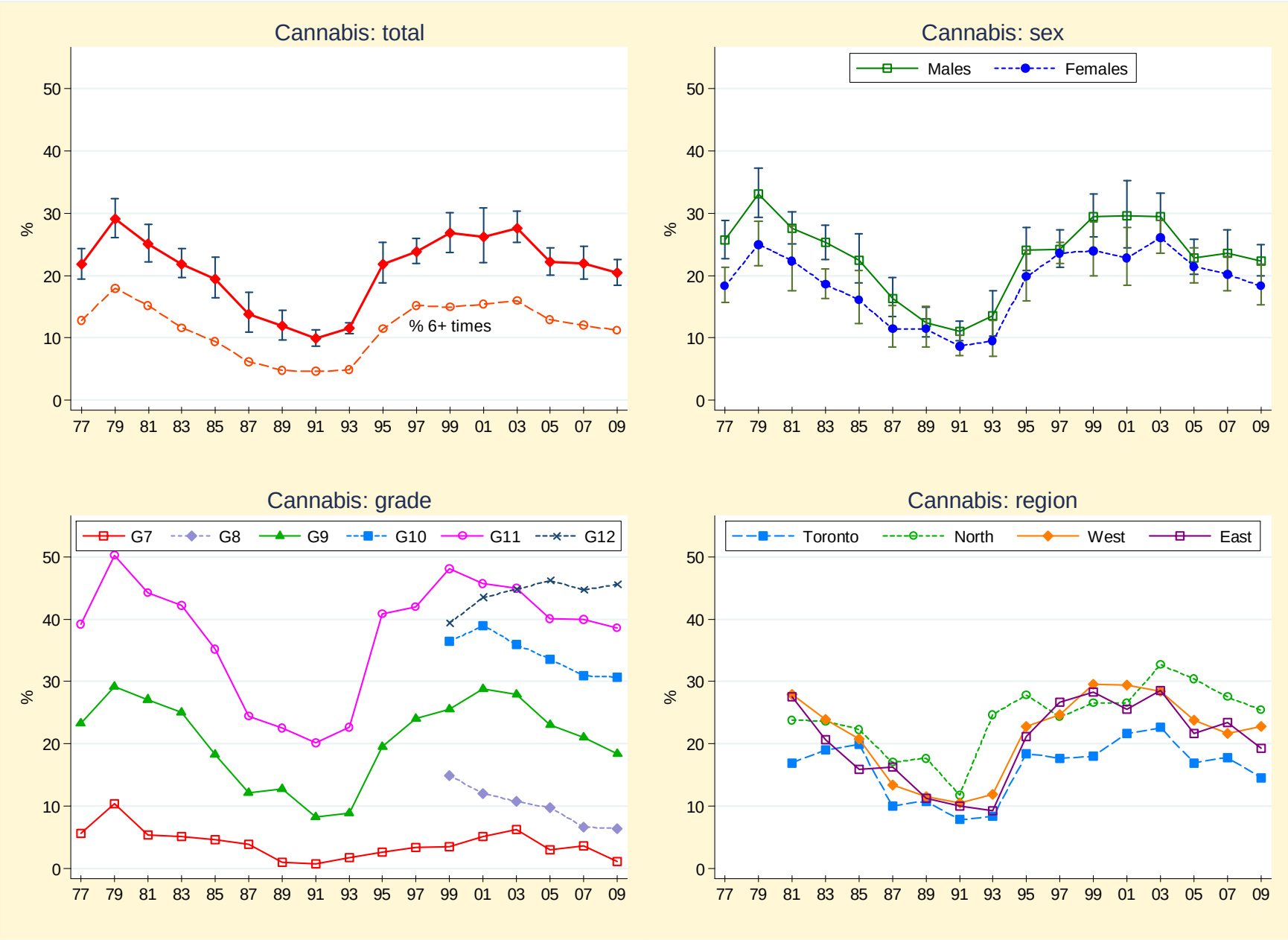


Table 3.5.1: Percentage Reporting Cannabis Use During the Past Year, 1977–2009

| | 1977 | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N[1]) | | | | | | | | | | | | (4447) | (3898) | (6616) | (7726) | (6323) | (9112) |
| (N[2]) | (3927) | (3920) | (3010) | (3614) | (3146) | (3376) | (3040) | (2961) | (2617) | (2907) | (3072) | (2421) | (2013) | (3389) | (3969) | (3215) | (4424) |
| Total[1] (95% CI) | — | — | — | — | — | — | — | — | — | — | — | 28.0 (26.0-30.0) | 28.6 (25.8-31.7) | 29.6 (27.6-31.6) | 26.5 (24.5-28.7) | 25.6 (23.7-27.7) | 25.6 (24.0-27.3) |
| Total[2] | 21.8 (19.5-24.3) | 29.1 (26.1-32.4) | 25.1 (22.2-28.2) | 21.9 (19.7-24.3) | 19.4 (16.4-22.9) | 13.8 (10.9-17.3) | 11.9 (9.7-14.4) | 9.9 (8.7-11.3) | 11.5 (10.7-12.4) | 21.9 (18.8-25.4) | 23.9 (21.9-26.0) | 26.8 (23.7-30.1) | 26.2 (22.1-30.8) | 27.8 (25.4-30.3) | 22.2 (20.1-24.5) | 22.0 (19.5-24.7) | 20.4 (18.4-22.6) [cd] |
| Sex | | | | | | | | | | | | | | | | | |
| Males[1] | — | — | — | — | — | — | — | — | — | — | — | 31.9 (29.4-34.4) | 32.5 (28.6-36.6) | 30.9 (28.1-34.0) | 27.9 (25.4-30.6) | 26.9 (24.3-29.6) | 28.8 (26.7-31.0) |
| Males[2] | 25.7 (22.7-28.9) | 33.1 (29.3-37.2) | 27.6 (25.1-30.2) | 25.3 (22.6-28.1) | 22.5 (18.8-26.7) | 16.3 (13.4-19.7) | 12.4 (10.2-14.9) | 11.0 (9.6-12.7) | 13.6 (10.3-17.6) | 24.1 (20.8-27.7) | 24.2 (21.3-27.4) | 29.5 (26.2-33.1) | 29.6 (24.5-35.2) | 29.5 (25.9-33.3) | 22.9 (20.2-25.8) | 23.6 (20.3-27.4) | 22.4 (20.0-25.0) |
| Females[1] | — | — | — | — | — | — | — | — | — | — | — | 23.9 (21.0-27.1) | 24.8 (22.0-27.8) | 28.3 (26.2-30.4) | 25.1 (22.9-27.3) | 24.3 (22.2-26.6) | 22.2 (20.1-24.4) |
| Females[2] | 18.3 (15.7-21.3) | 25.0 (21.6-28.7) | 22.4 (17.6-28.0) | 18.6 (16.3-21.1) | 16.1 (12.3-20.8) | 11.4 (8.5-15.2) | 11.4 (8.5-15.0) | 8.7 (7.2-10.4) | 9.5 (7.0-12.8) | 19.8 (16.0-24.1) | 23.6 (21.9-25.4) | 24.0 (19.9-28.6) | 22.8 (18.5-27.7) | 26.1 (23.6-28.9) | 21.5 (18.8-24.5) | 20.2 (17.6-23.1) | 18.3 (15.3-21.8) |
| Grade | | | | | | | | | | | | | | | | | |
| 7 | 5.6 (4.1-7.5) | 10.4 (8.2-13.0) | 5.4 (4.3-6.7) | 5.1 (2.8-9.1) | 4.6 (3.1-6.8) | 3.8 (2.4-6.0) | 0.9 (0.5-1.5) | 0.7 (0.2-2.1) | 1.7 (0.9-3.0) | 2.6 (1.2-5.6) | 3.4 (1.4-8.1) | 3.5 (2.2-5.6) | 5.1 (3.4-7.6) | 6.2 (4.3-8.7) | 3.0 (1.9-4.9) | 3.6 (2.2-5.8) | 1.1 (0.6-1.8) [ab] |
| 8 | — | — | — | — | — | — | — | — | — | — | — | 14.9 (11.6-18.9) | 12.0 (9.4-15.1) | 10.7 (6.8-16.4) | 9.7 (7.3-12.8) | 6.6 (4.7-9.4) | 6.4 (4.4-9.2) [b] |
| 9 | 23.3 (19.3-27.8) | 29.2 (24.1-34.8) | 27.1 (24.0-30.4) | 25.0 (22.1-28.3) | 18.3 (13.1-25.0) | 12.1 (6.0-23.0) | 12.7 (8.8-18.0) | 8.2 (6.6-10.0) | 8.8 (7.5-10.2) | 19.5 (14.1-26.2) | 24.0 (21.6-26.5) | 25.5 (21.7-29.7) | 28.8 (23.8-34.2) | 27.9 (24.5-31.5) | 23.0 (20.2-26.1) | 21.0 (17.2-25.4) | 18.4 (15.0-22.3) |
| 10 | — | — | — | — | — | — | — | — | — | — | — | 36.4 (30.7-42.6) | 39.0 (35.0-43.1) | 35.9 (31.4-40.8) | 33.6 (30.2-37.1) | 30.9 (27.4-34.6) | 30.7 (26.6-35.0) |
| 11 | 39.2 (34.4-44.1) | 50.2 (44.3-56.1) | 44.2 (36.6-52.2) | 42.2 (36.8-47.7) | 35.2 (28.6-42.4) | 24.4 (19.9-29.4) | 22.5 (18.5-27.0) | 20.1 (17.3-23.2) | 22.6 (20.5-24.8) | 40.8 (34.1-47.9) | 42.0 (37.5-46.7) | 48.1 (42.8-53.4) | 45.7 (37.7-53.9) | 45.0 (40.6-49.5) | 40.1 (36.2-44.1) | 40.0 (35.9-44.2) | 38.6 (34.4-42.9) |
| 12 | — | — | — | — | — | — | — | — | — | — | — | 39.4 (33.2-45.9) | 43.5 (33.1-54.5) | 44.8 (39.4-50.4) | 46.2 (42.0-50.5) | 44.7 (40.8-48.7) | 45.6 (41.9-49.3) |

(Continued….)

| | 1977 | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N[1]) | | | | | | | | | | | | (4447) | (3898) | (6616) | (7726) | (6323) | (9112) |
| (N[2]) | (3927) | (3920) | (3010) | (3614) | (3146) | (3376) | (3040) | (2961) | (2617) | (2907) | (3072) | (2421) | (2013) | (3389) | (3969) | (3215) | (4424) |
| Region | | | | | | | | | | | | | | | | | |
| Toronto[1] | — | — | — | — | — | — | — | — | — | — | — | **19.2** (16.2-22.6) | **20.8** (13.2-31.3) | **24.7** (20.3-29.8) | **20.1** (16.2-24.6) | **21.8** (14.9-30.8) | **19.9** (15.2-25.5) |
| Toronto[2] | — | — | **16.9** (12.8-21.9) | **19.0** (12.8-27.2) | **19.9** (16.8-23.4) | **10.0** (4.8-19.8) | **10.8** (5.1-21.3) | **7.8** (7.3-8.2) | **8.3** (7.8-8.6) | **18.4** (10.5-30.2) | **17.7** (14.1-21.9) | **18.0** (14.2-22.6) | **21.6** (11.4-37.1) | **22.6** (16.9-29.6) | **16.9** (12.8-22.0) | **17.8** (9.4-31.2) | **14.5** (8.7-23.2) |
| North[1] | — | — | — | — | — | — | — | — | — | — | — | **31.9** (26.2-38.2) | **27.6** (22.4-33.6) | **33.2** (27.9-39.0) | **33.0** (29.6-36.6) | **33.1** (28.9-37.7) | **31.9** (27.8-36.2) |
| North[2] | — | — | **23.8** (18.5-30.1) | **23.6** (18.6-29.4) | **22.3** (18.0-27.4) | **17.0** (8.9-29.9) | **17.7** (14.2-22.0) | **11.8** (6.6-20.2) | **24.7** (18.9-31.6) | **27.8** (22.5-33.8) | **24.3** (23.1-25.5) | **26.6** (16.6-39.7) | **26.6** (18.8-36.2) | **32.7** (26.8-39.2) | **30.4** (25.6-35.8) | **27.5** (21.2-35.0) | **25.4** (19.6-32.4) |
| West[1] | — | — | — | — | — | — | — | — | — | — | — | **31.1** (27.6-34.8) | **32.6** (28.5-37.1) | **30.0** (26.7-33.5) | **29.3** (26.0-32.8) | **24.8** (22.6-27.3) | **27.2** (24.7-29.9) |
| West[2] | — | — | **27.9** (22.7-33.7) | **23.9** (20.3-28.0) | **20.8** (17.1-25.0) | **13.4** (8.8-20.0) | **11.5** (8.5-15.3) | **10.5** (9.0-12.2) | **11.9** (10.8-13.1) | **22.8** (18.0-28.4) | **24.7** (21.8-28.0) | **29.6** (24.0-35.8) | **29.4** (24.6-34.6) | **28.5** (24.8-32.6) | **23.8** (20.4-27.4) | **21.7** (18.9-24.7) | **22.8** (19.9-26.1) |
| East[1] | — | — | — | — | — | — | — | — | — | — | — | **27.6** (24.1-31.4) | **28.4** (24.1-33.1) | **30.9** (28.2-33.8) | **25.3** (21.7-29.2) | **27.2** (24.1-30.4) | **25.2** (22.9-27.6) |
| East[2] | — | — | **27.5** (23.2-32.3) | **20.7** (18.6-23.1) | **15.9** (8.4-28.0) | **16.2** (13.2-19.7) | **11.3** (8.0-15.6) | **10.0** (7.2-13.8) | **9.2** (7.6-11.1) | **21.2** (16.8-26.5) | **26.7** (22.4-31.5) | **28.3** (23.9-33.3) | **25.6** (18.7-33.9) | **28.5** (24.6-32.7) | **21.3** (17.7-25.3) | **23.4** (19.8-27.3) | **19.3** (16.5-22.5) |

Notes: (1) based on Grades 7-12 (full sample); (2) based on Grades 7, 9, and 11 only (long-term sample); (3) regional stratification differed in 1977 and 1979 and therefore regions are not presented; (4) entries in brackets are 95% confidence intervals; (5) [a] 2009 vs. 2007 significant difference, p<.01; [b] 2009 vs. 1999 significant difference, p<.01; [c] significant long-term linear trend, p<.01; [d] significant long-term non-linear trend, p<.01.

Q: In the last 12 months, how often did you use cannabis (also known as marijuana, “weed”, “grass”, “pot”, hashish, “hash”, hash oil, etc)?

Source: OSDUHS, Centre for Addiction & Mental Health

## Frequency of Cannabis Use During the Past Year, and During the Past Month

(Figures 3.5.2 to 3.5.4; Tables 3.2.3a, 3.2.3b, 3.5.2a to 3.5.3b)

*2009: Grades 7 to 12*

- Among all students, 14.5% report using cannabis six times or more during the past year (see Tables 3.2.3a and 3.2.3b for trends). About 11.2% of students report using between 1 and 5 times during the past year.

- During the month (4 weeks) before the survey, 17.2% (range: 15.7%-18.8%) of students used cannabis. More specifically, 2.5% used three to six times each week, while 2.9% used on a daily basis – representing about 31,100 Ontario students.

- Males use cannabis more frequently than do females. For example, 3.8% of all male students use cannabis daily compared to 2.1% of females.

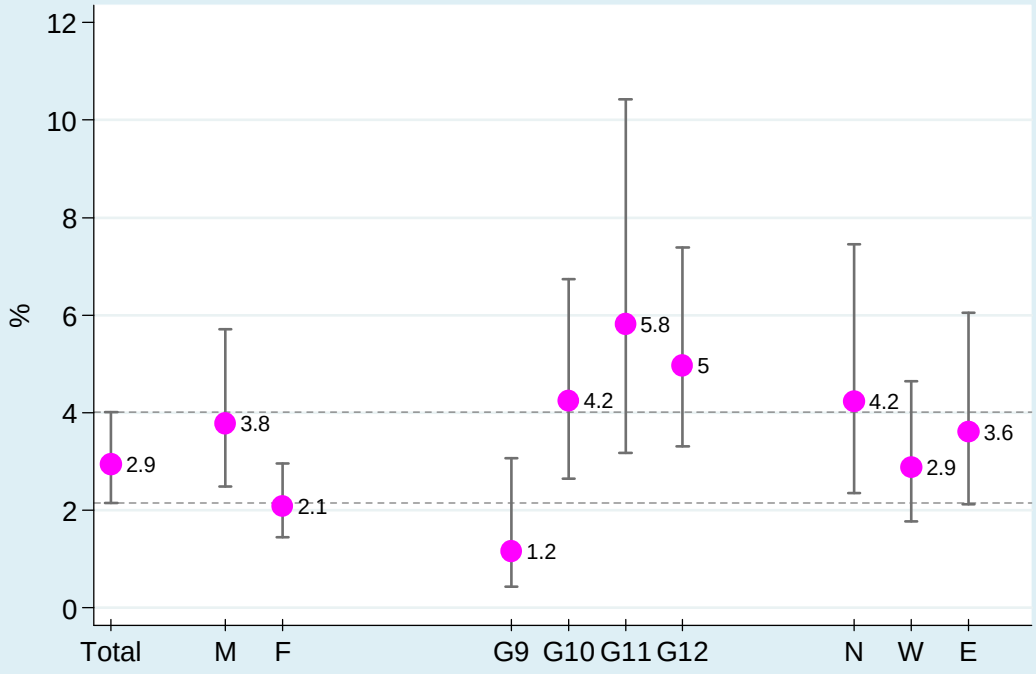
*1999–2009: Grades 7 to 12*

- Over the past decade, there have been no significant changes in the frequency of cannabis use among students.

*1981–2009: Grades 7, 9, 11*

- Among students in grades, 7, 9, and 11 only, frequent use is currently higher compared to the late 1980s and early 1990s. For example, using cannabis six times or more over the past year is currently at an elevated level – resembling the rates of the late 1970s and early 1980s – compared to the lowest rate in 1991 (4.6%) (see Table 3.2.3b and Figure 3.5.2). Further, as seen in the bottom panel of Table 3.5.3b, daily cannabis use in 2009 is significantly higher compared to the 1980s and early 1990s.

Figure 3.5.3
Daily Cannabis Use During the Past Month by Sex, Grade, and Region, 2009 OSDUHS




Vertical bars represent 95% confidence intervals; horizontal bar represents 95% CI for total estimate; estimates for grade7, grade 8, and Toronto were suppressed due to unreliability

Table 3.5.2a: Frequency of Cannabis Use During the Past Year, 1999–2009 (Grades 7 to 12)

| | | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|
| | (N) | (4447) | (3898) | (6616) | (7726) | (6323) | (9112) |
| Frequency: | | | | | | | |
| **Not Used** | | 72.0 | 71.4 | 70.4 | 73.5 | 74.4 | 74.4 |
| **1-2 times** | | 8.1 | 7.0 | 8.6 | 7.4 | 6.9 | 6.6 |
| **3-5 times** | | 4.3 | 5.2 | 4.5 | 4.2 | 4.6 | 4.6 |
| **6-9 times** | | 3.6 | 3.5 | 3.4 | 2.6 | 3.0 | 2.7 |
| **10-19 times** | | 3.4 | 3.6 | 3.3 | 3.3 | 3.2 | 3.3 |
| **20-39 times** | | 2.8 | 2.8 | 2.6 | 2.3 | 2.2 | 2.3 |
| **40+ times** | | 5.8 | 6.6 | 7.2 | 6.7 | 5.7 | 6.2 |

Q: In the last 12 months, how often did you use cannabis (also known as marijuana, “weed”, “grass”, “pot”, hashish, “hash”, hash oil, etc)?
Source: OSDUHS, Centre for Addiction & Mental Health

Table 3.5.2b: Frequency of Cannabis Use During the Past Year, 1981–2009 (Grades 7, 9, 11 only)

| | | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (N) | (3010) | (3614) | (3146) | (3376) | (3040) | (2961) | (2617) | (2907) | (3072) | (2421) | (2013) | (3389) | (3969) | (3215) | (4424) |
| Frequency: | | | | | | | | | | | | | | | | |
| **Not Used** | | 75.0 | 78.1 | 80.6 | 86.2 | 88.1 | 90.1 | 88.5 | 78.1 | 72.2 | 73.2 | 73.8 | 72.2 | 77.8 | 78.0 | 79.6 |
| **1-2 times** | | 6.8 | 7.1 | 6.6 | 5.5 | 5.0 | 3.6 | 4.5 | 6.7 | 8.0 | 8.0 | 6.0 | 8.2 | 6.1 | 6.2 | 5.4 |
| **3-5 times** | | 3.1 | 3.2 | 3.3 | 2.2 | 2.1 | 1.7 | 2.1 | 3.7 | 4.5 | 3.8 | 4.8 | 3.6 | 3.2 | 3.8 | 3.8 |
| **6-9 times** | | 3.5 | 2.8 | 2.3 | 1.2 | 1.2 | 1.1 | 1.2 | 2.1 | 3.3 | 3.8 | 2.9 | 3.2 | 1.8 | 2.5 | 2.3 |
| **10-19 times** | | 3.3 | 2.5 | 2.0 | 2.1 | 1.4 | 1.1 | 0.9 | 2.8 | 3.5 | 3.4 | 4.1 | 3.4 | 3.2 | 3.0 | 2.5 |
| **20-39 times** | | 2.8 | 1.9 | 1.7 | 0.9 | 1.0 | 1.0 | 1.1 | 2.0 | 2.8 | 2.7 | 2.6 | 2.5 | 2.0 | 1.6 | 1.7 |
| **40+ times** | | 5.5 | 4.3 | 3.5 | 2.0 | 1.2 | 1.4 | 1.6 | 4.4 | 5.7 | 5.1 | 5.8 | 6.8 | 5.9 | 4.8 | 4.7 |

Q: In the last 12 months, how often did you use cannabis (also known as marijuana, “weed”, “grass”, “pot”, hashish, “hash”, ash oil, etc)?
Source: OSDUHS, Centre for Addiction & Mental Health

Table 3.5.3a: Frequency of Cannabis Use During the Past Month, 1999–2009 (Grades 7 to 12)

| | | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|
| | (N) | (4447) | (1837) | (3152) | (4078) | (3388) | (4851) |
| **Not Used in the Past 4 Weeks** | | | | | | | |
| Total | | **79.1** | **78.4** | **79.4** | **83.9** | **83.9** | **82.8** |
| Sex | Males | 75.2 | 75.4 | 76.2 | 82.1 | 82.5 | 81.0 |
| | Females | 83.2 | 81.4 | 82.4 | 85.8 | 85.3 | 84.6 |
| **1-2 Times** | | | | | | | |
| Total | | **10.2** | **10.1** | **8.8** | **7.8** | **8.8** | **8.9** |
| Sex | Males | 10.6 | 10.0 | 8.4 | 7.1 | 8.2 | 8.8 |
| | Females | 9.8 | 10.3 | 9.3 | 8.5 | 9.4 | 8.9 |
| **1-2 Times Each Week** | | | | | | | |
| Total | | **4.3** | **3.9** | **3.7** | **2.4** | **2.9** | **2.9** |
| Sex | Males | 5.2 | 5.1 | 4.1 | 2.6 | 2.6 | 3.1 |
| | Females | 3.3 | 2.7 | 3.2 | 2.1 | 3.2 | 2.7 |
| **3-6 Times Each Week** | | | | | | | |
| Total | | **3.8** | **4.5** | **4.0** | **2.8** | **1.9** | **2.5** |
| Sex | Males | 5.2 | 4.6 | 5.1 | 3.4 | 2.6 | 3.3 |
| | Females | 2.5 | 4.4 | 3.8 | 2 | 1.2 | 1.6 |
| **Daily in the Past 4 Weeks** | | | | | | | |
| Total | | **2.5** | **3.1** | **4.2** | **3.2** | **2.5** | **2.9** |
| Sex | Males | 3.8 | 5.0 | 6.2 | 4.8 | 4.1 | 3.8 |
| | Females | 1.2 | 1.2 | 2.2 | 1.6 | 1.0 | 2.1 |

Notes: (1) estimates since 2001 based on a random half sample in each year; (2) no significant changes over time.
Q: During the last 4 weeks how often (if ever) did you use cannabis (also known as marijuana, "weed", "grass", "pot", hashish, "hash", hash oil)?
Source: OSDUHS, Centre for Addiction & Mental Health

Figure 3.5.4
Frequency of Cannabis Use During the Past Month, 1983–2009
OSDUHS (Grades 7, 9, 11 only)

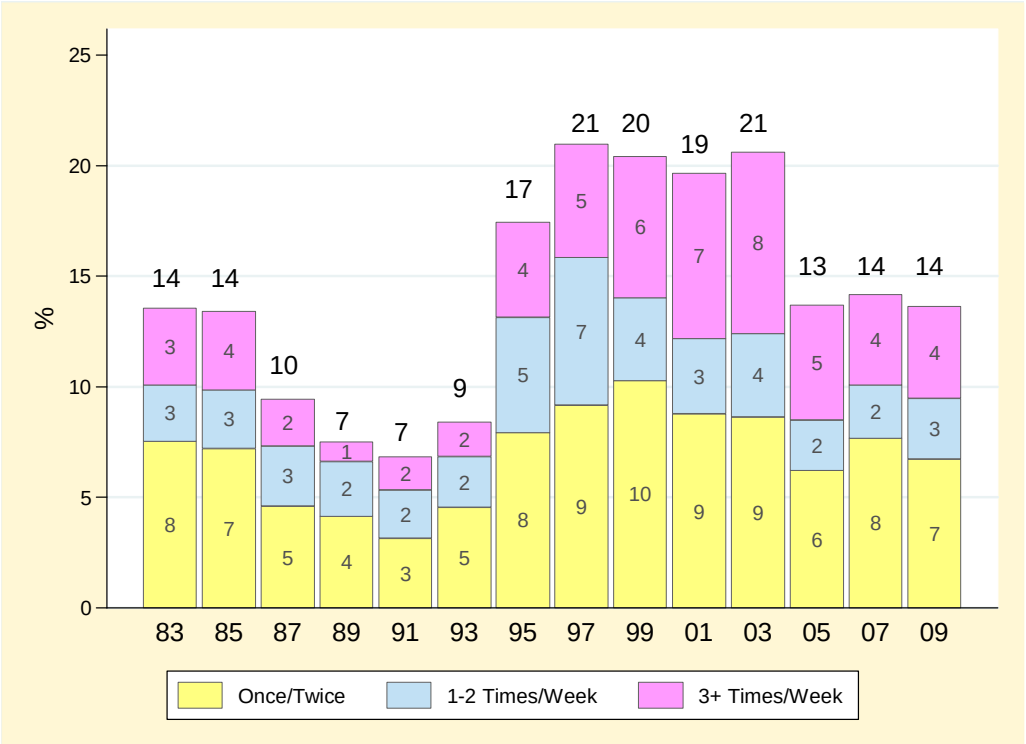


Table 3.5.3b: Frequency of Cannabis Use During the Past Month, 1983–2009 (Grades 7, 9, 11 only)

| | | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (N) | (3614) | (3146) | (3376) | (3040) | (2961) | (2617) | (2907) | (2544) | (2421) | (953) | (1618) | (2107) | (1727) | (2355) |
| **Not Used in Past 4 Weeks** | | | | | | | | | | | | | | | |
| Total | | **86.4** | **86.6** | **90.6** | **92.5** | **93.2** | **91.6** | **82.6** | **79.0** | **79.6** | **80.3** | **79.4** | **86.3** | **85.8** | **86.4** |
| Sex | Males | 82.9 | 84.6 | 88.6 | 92.1 | 92.1 | 89.0 | 80.1 | 77.0 | 76.8 | 76.2 | 74.7 | 84.5 | 85.0 | 84.9 |
| | Females | 89.9 | 88.7 | 92.4 | 92.9 | 94.4 | 94.1 | 85.0 | 80.1 | 82.4 | 84.6 | 83.8 | 88.2 | 86.7 | 87.8 |
| **1-2 Times** | | | | | | | | | | | | | | | |
| Total | | **7.5** | **7.2** | **4.6** | **4.1** | **3.1** | **4.5** | **7.9** | **9.2** | **10.3** | **8.8** | **8.6** | **6.2** | **7.7** | **6.7** |
| Sex | Males | 8.3 | 7.4 | 4.9 | 3.9 | 3.2 | 5.2 | 8.2 | 8.0 | 10.3 | 9.6 | 8.9 | 6.1 | 6.8 | 6.9 |
| | Females | 6.8 | 7.0 | 4.3 | 4.4 | 3.0 | 3.9 | 7.7 | 10.2 | 10.3 | 7.8 | 8.3 | 6.4 | 8.6 | 6.6 |
| **1-2 Times Each Week** | | | | | | | | | | | | | | | |
| Total | | **2.6** | **2.7** | **2.7** | **2.4** | **2.2** | **2.3** | **5.2** | **6.7** | **3.8** | **3.4** | **3.8** | **2.2** | **2.4** | **2.7** |
| Sex | Males | 3.4 | 3.1 | 3.2 | 2.6 | 2.3 | 3.3 | 6.1 | 7.0 | 4.1 | 4.1 | 4.5 | 2.4 | 2.1 | 2.8 |
| | Females | 1.8 | 2.2 | 2.3 | 2.4 | 2.0 | 1.3 | 4.3 | 6.4 | 3.4 | 2.7 | 3.0 | 2.1 | 2.8 | 2.7 |
| **3-6 Times Each Week** | | | | | | | | | | | | | | | |
| Total | | **2.6** | **2.5** | **1.5** | **†** | **†** | **1.2** | **2.9** | **3.5** | **4.0** | **4.8** | **3.9** | **2.4** | **1.8** | **1.8** |
| Sex | Males | 4.0 | 3.4 | 2.2 | † | † | 2.0 | 3.5 | 5.2 | 5.5 | 5.3 | 5.5 | 2.7 | 2.9 | 2.2 |
| | Females | † | 1.5 | † | † | † | † | 2.4 | 2.1 | 2.0 | 4.2 | 2.3 | 1.9 | † | 1.4 |
| **Daily in the Past 4 Weeks** | | | | | | | | | | | | | | | |
| Total | | **0.9** | **†** | **0.6** | **†** | **0.7** | **†** | **1.4** | **1.6** | **2.5** | **2.7** | **4.3** | **2.8** | **2.3** | **2.4** |
| Sex | Males | † | † | † | † | † | † | 2.1 | 2.8 | 3.3 | 4.8 | 6.3 | 4.2 | 3.2 | 3.2 |
| | Females | † | † | † | † | † | † | † | † | 1.6 | † | 2.4 | 1.4 | 1.4 | 1.6 |

Notes: (1) † estimate suppressed due to unreliability; (2) estimates since 2001are based on a random half sample in each year.
Q: During the last 4 weeks how often (if ever) did you use cannabis (also known as marijuana, “weed”, “grass”, “pot”, hashish, “hash”, hash oil)?
Source: OSDUHS, Centre for Addiction & Mental Health

## Quantity of Marijuana Joints Consumed (Among Past Year Users)

(Table 3.5.4)

*2009: Grades 7 to 12*

- In 2009, about 17% of past year cannabis users in grades 7 to 12 smoked less than one joint per occasion during the past 4 weeks; about 25% smoked about one joint; 17.3% smoked two to three joints; and 11.5% smoked four or more joints. Just under one-third of past year users did not use marijuana during the 4 weeks before the survey.

*1999–2009: Grades 7 to 12*

- The typical quantity of marijuana consumed per occasion has decreased slightly over the past decade. For example, users in 2009 are less likely to smoke 2 or more joints per occasion compared to users in 1999 and 2001.

Table 3.5.4: Number of Marijuana Joints Smoked Per Occasion During the Past Month, *Among Cannabis Users*, 1999–2009 (Grades 7 to 12)

| | Percentage of Past-Year Cannabis Users | | | | | |
|---|---|---|---|---|---|---|
| | **1999** | **2001** | **2003** | **2005** | **2007** | **2009** |
| (N) | (1137) | (497) | (930) | (1180) | (950) | (1117) |
| No marijuana in the past 4 weeks | 13.1 | 26.4 | 29.4 | 32.8 | 32.9 | 29.2 |
| Less than 1 joint | 23.8 | 13.8 | 14.9 | 15.6 | 18.6 | 17.1 |
| About 1 joint | 23.8 | 19.6 | 21.9 | 22.2 | 22.3 | 24.9 |
| 2 to 3 joints | 24.9 | 23.6 | 18.4 | 18.3 | 17.7 | 17.3 |
| 4 + joints | 14.4 | 16.6 | 15.4 | 11.1 | 8.6 | 11.5 |

Note: Item asked of a random half-sample since 2001.
Q: During the last 4 weeks, on occasions when you have used marijuana, how many joints did you typically smoke? (If you shared joints with others, count only the amount that ***you*** smoked.)
Source: OSDUHS, Centre for Addiction & Mental Health

## Potential Cannabis Dependence

(Table 3.5.5)

Starting in 2007, the OSDUHS included the Severity of Dependence Scale (SDS) for cannabis use (Martin, Copeland, Gates, & Gilmour, 2006). The SDS is a valid and reliable 5-item scale used to screen for dependence in adolescent populations.

The five questions used were: (1) "*In the last 3 months, how often was your use of cannabis out of control?*"; (2) "*In the last 3 months, how often did the idea of missing a smoke of cannabis make you very anxious or worried?*"; (3) "*In the last 3 months, how much did you worry about your use of cannabis?*"; (4) "*In the last 3 months, how often did you wish you could stop using cannabis?*"; and (5) "*How difficult would it be for you to stop or go without using cannabis*?

The response options for items #1, 2 and 4 were: never used, did not use in the last 3 months, never, sometimes, often, always. Responses for item #3 were: never used, did not use in the last 3 months, not at all, a little, quite a lot, a great deal. Responses for item #5 were: don't use, not difficult, quite difficult, very difficult, impossible. Each item was scored on a 4-point scale and scores were summed. A total score of 4 or more (out of 15) indicates potential cannabis dependence (α=0.81).

*2009: Grades 7 to 12 (among the Total Sample)*

- About 2.8% (range: 2.2%-3.7%) of students in grades 7 to 12 may have a cannabis dependence problem. This percentage represents about 29,400 Ontario students. There is no significant difference between males (3.5%) and females (2.2%).

*2009: Grades 7 to 12 (among Cannabis Users)*

- When we look at results among users only, about 10.6% (range: 8.2%-13.6%) of past year cannabis users in grades 7 to 12 may have a dependence problem.

*2009 vs. 2007: Grades 7 to 12*

- ☐ The percentage of students who may have a cannabis problem did not change between 2007 (2.7%) and 2009 (2.8%). Looking at cannabis users only, the estimate remained stable (10.2% in 2007 and 10.6% in 2009).

Table 3.5.5: Percentage of the Total Sample, and of Past Year Cannabis Users, Reporting Severity of Dependence (SDS) Indicators Experienced During the Past 3 Months, 2009 OSDUHS (Grades 7 to 12)

| | Total Sample (N=4851) | Past Year Users (N=1117) |
|---|---|---|
| 1. Your cannabis use was out of control * | 3.3 | 12.6 |
| 2. Idea of missing a smoke of cannabis made you very anxious or worried * | 5.5 | 20.9 |
| 3. Worried about your use of cannabis † | 6.2 | 22.9 |
| 4. Wished you could stop using cannabis * | 5.3 | 19.7 |
| 5. Would be difficult for you to stop or go without using cannabis ‡ | 3.6 | 13.2 |
| **SDS Score 4+** (95 % CI) | 2.8 (2.2-3.7) | 10.6 (8.2-13.6) |

Notes: based on a random half sample; * percentage reporting sometimes, often, or always/nearly always; † percentage reporting a little, quite a lot, or a great deal; ‡ percentage reporting quite difficult, very difficult, or impossible

Source: OSDUHS, Centre for Addiction & Mental Health

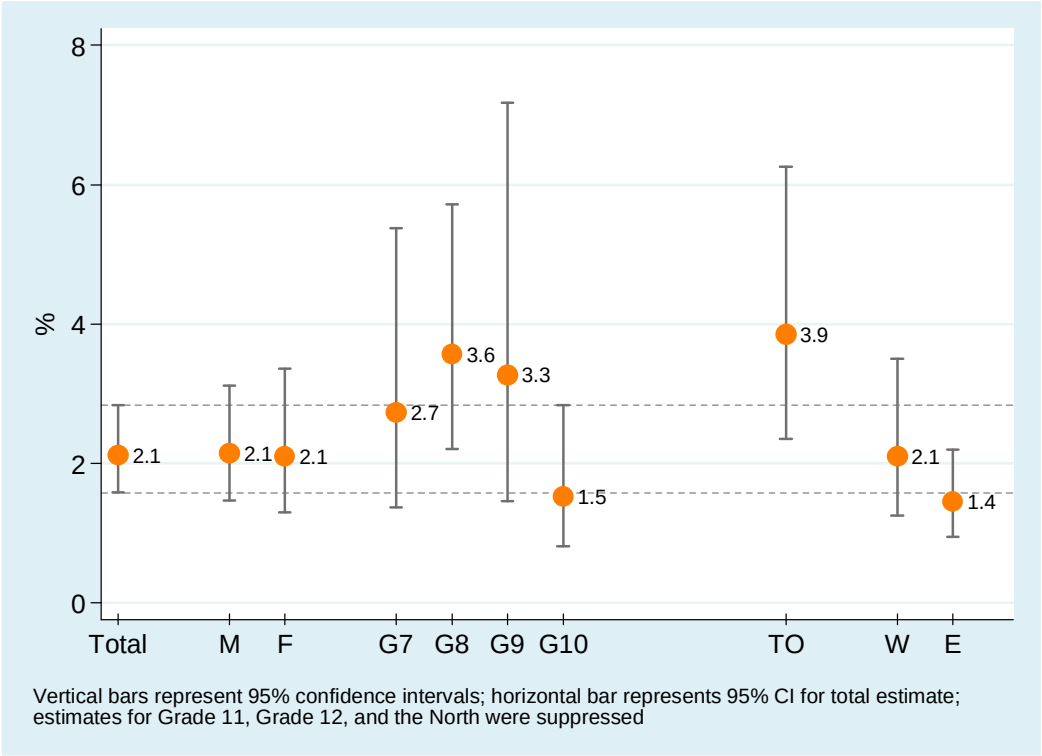
# 3.6 Illicit Drug Use

## Past Year Use of Inhalants: Glue and Other Solvents

(Figures 3.6.1-3.6.3; Tables 3.6.1, 3.6.2)

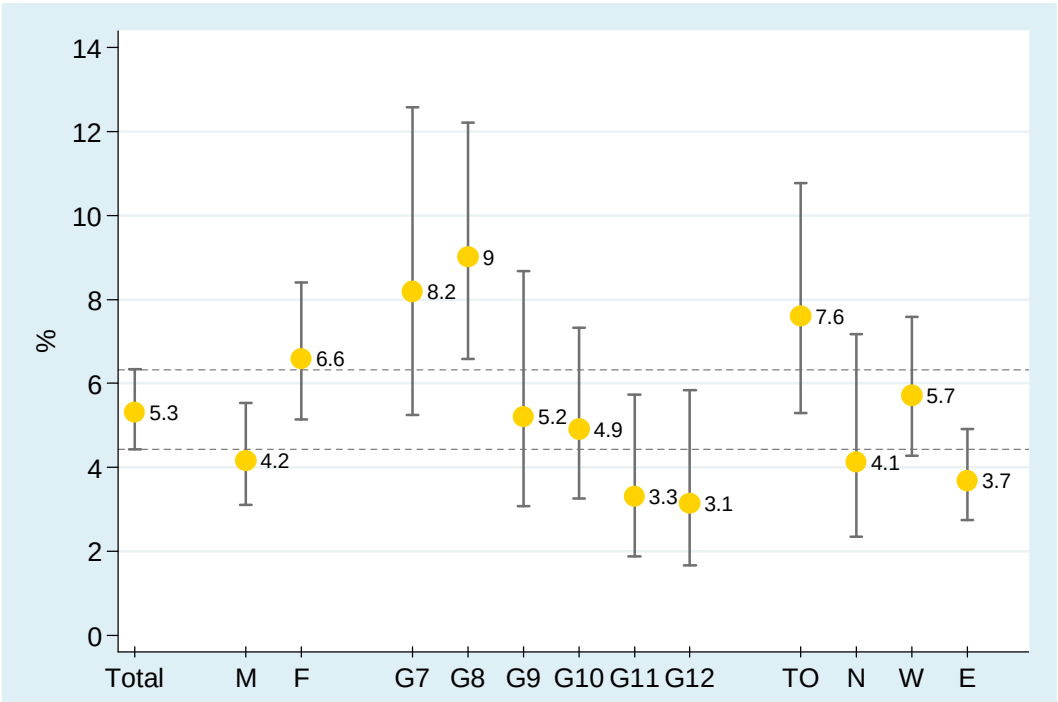
| | Inhalant Use in 2009 (Grades 7 to 12) | Trends in Inhalant Use |
|---|---|---|
| Total Sample | ■ Overall, 2.1% of Ontario students report inhaling glue and 5.3% report inhaling other solvents in order to get high during the 12 months before the survey. With the sampling error, we estimate that between 1.6% and 2.8% of students inhaled glue, and between 4.4% and 6.3% inhaled solvents. The estimated number of students in grades 7 to 12 inhaling glue is 20,700, and the number for other solvents is 51,700. | ☐ The percentages of students in grades 7 to 12 that inhale glue and inhale other solvents have not significantly changed compared to 2007. However, glue use in 2009 (2.1%) is significantly lower compared to the 1999 estimate (3.8%). Solvent use in 2009 (5.3%) is significantly lower than in 1999 (7.6%).<br><br>☐ Over the long-term, glue use is currently lower compared to the peak years of use seen in the late 1970s and the late 1990s (among grades 7, 9, and 11 only).<br><br>☐ Solvent use is currently lower than the peak years of use seen in 1977 and 1999. However, current use remains higher compared to the levels found in the late 1980s and early 1990s. |
| Sex | ■ Males and females are equally likely to report inhaling glue to get high. However, females are more likely than males to report inhaling other solvents to get high (6.6% vs. 4.2%, respectively). | ☐ Neither sex shows a significant change in inhalant use over the past decade. |
| Grade | ■ Inhaling glue does not significantly differ by grade. However, inhaling solvents varies by grade, from 8% to 9% of 7th- and 8th-graders down to 3.1% of 12th-graders. | ☐ Despite some fluctuations, no grade shows any significant change in inhalant use over the past decade. |
| Region | ■ Students in Toronto are most likely to report inhaling glue (3.9%) and inhaling other solvents (7.6%), compared to students in the other regions. | ☐ Only students in the East region show a significant change over the past decade: glue use declined from 3.8% in 1999 down to 1.4% in 2009; solvent use declined from 7.8% in 1999 to 3.7% in 2009. |
| Frequent Use | ■ Inhaling solvents 6 or more times in the past year was reported by 1.5% of the total sample (see Figure 3.1.2). Most users report using inhalants only once or twice in the past year (see Figure 3.1.3). | |

Figure 3.6.1
Past Year Glue Use by Sex, Grade and Region, 2009 OSDUHS



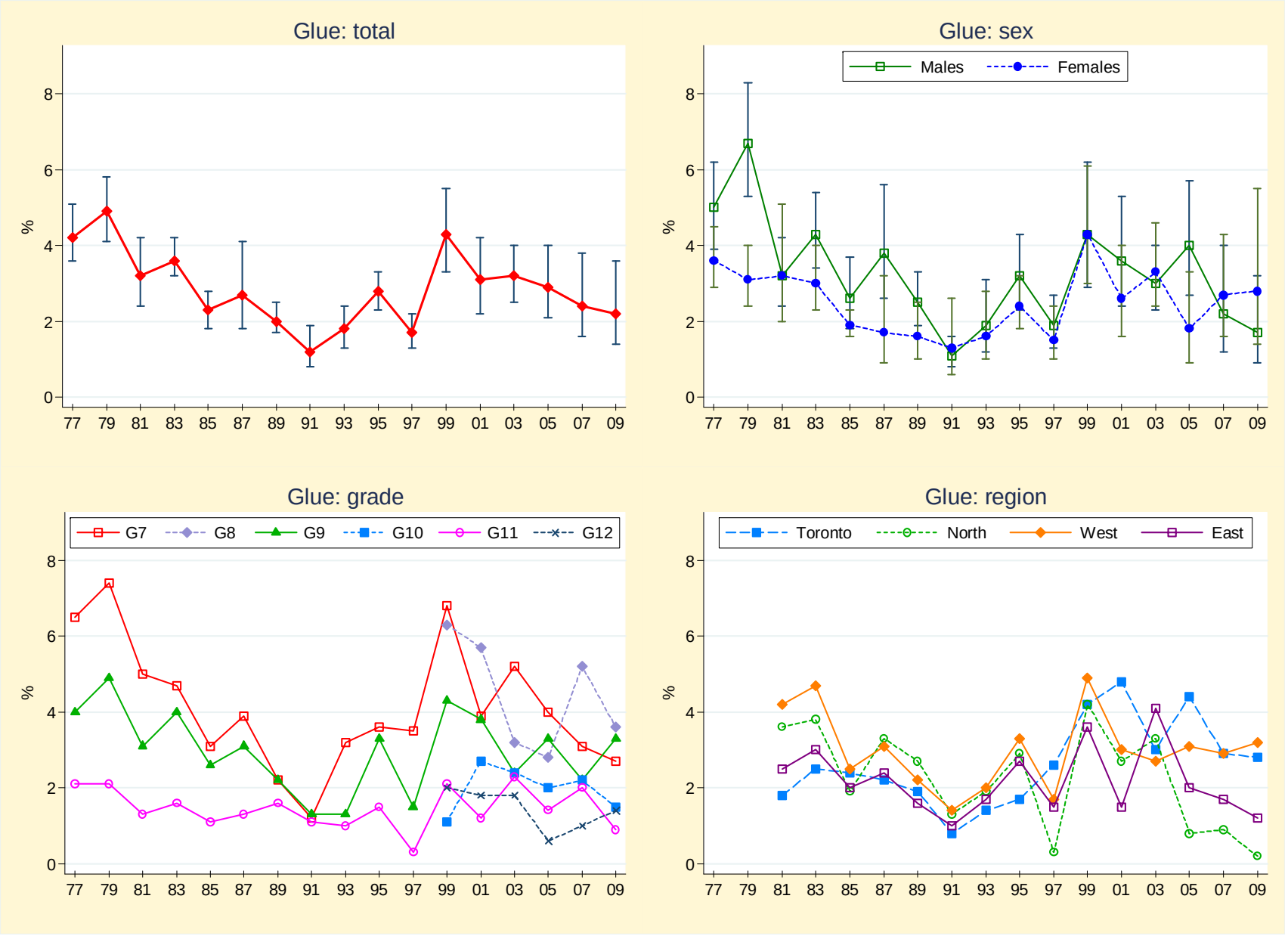

Vertical bars represent 95% confidence intervals; horizontal bar represents 95% CI for total estimate; estimates for Grade 11, Grade 12, and the North were suppressed

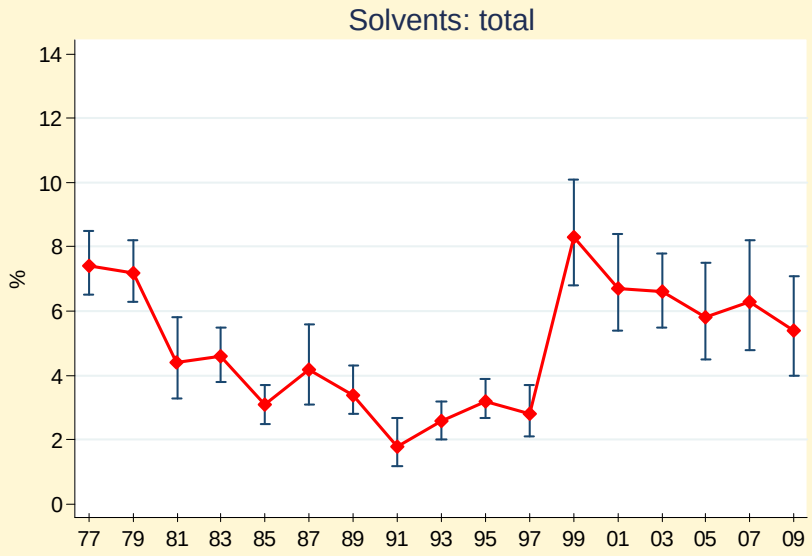
Figure 3.6.2
Past Year Solvent Use by Sex, Grade and Region, 2009 OSDUHS

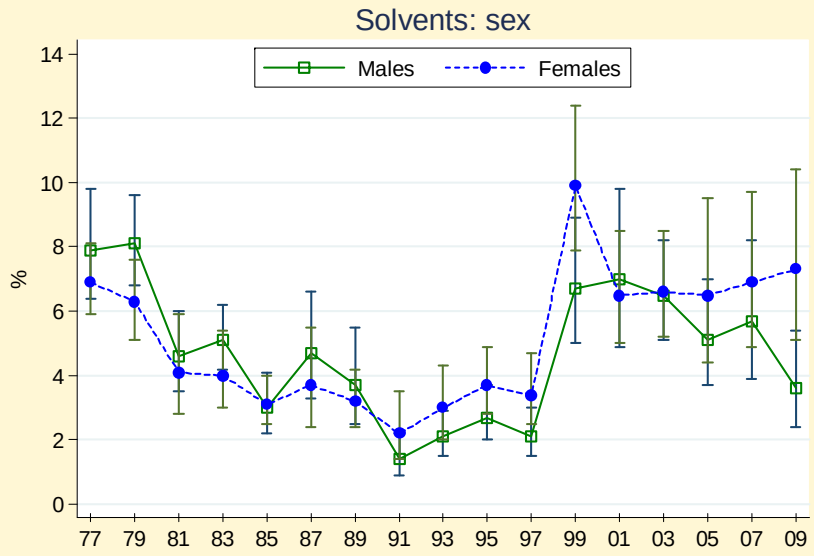


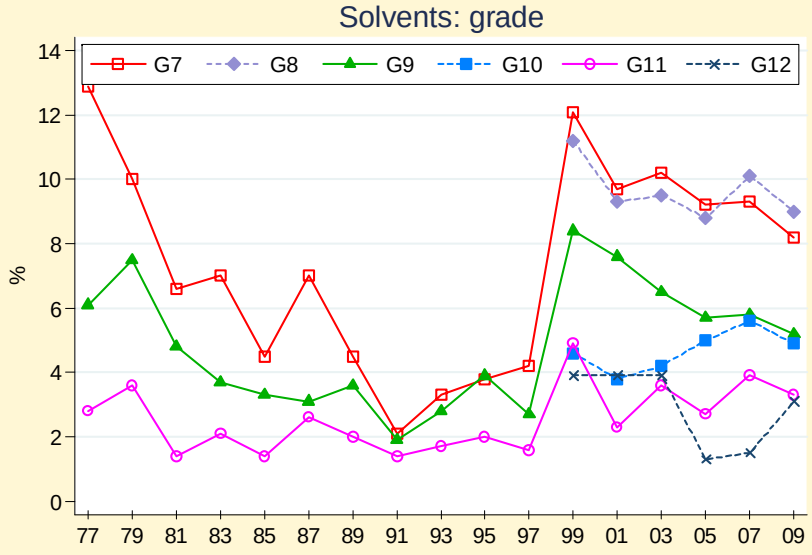

Vertical bars represent 95% confidence intervals; horizontal bar represents 95% CI for total estimate

Figure 3.6.3
Past Year Inhalant Use, 1977–2009 OSDUHS (Grades 7, 9, 11 only)




Solvents: total
%
0
2
4
6
8
10
12
14
77 79 81 83 85 87 89 91 93 95 97 99 01 03 05 07 09


Solvents: sex
Males
Females
%
0
2
4
6
8
10
12
14
77 79 81 83 85 87 89 91 93 95 97 99 01 03 05 07 09


Solvents: grade
G7
G8
G9
G10
G11
G12
%
0
2
4
6
8
10
12
14
77 79 81 83 85 87 89 91 93 95 97 99 01 03 05 07 09

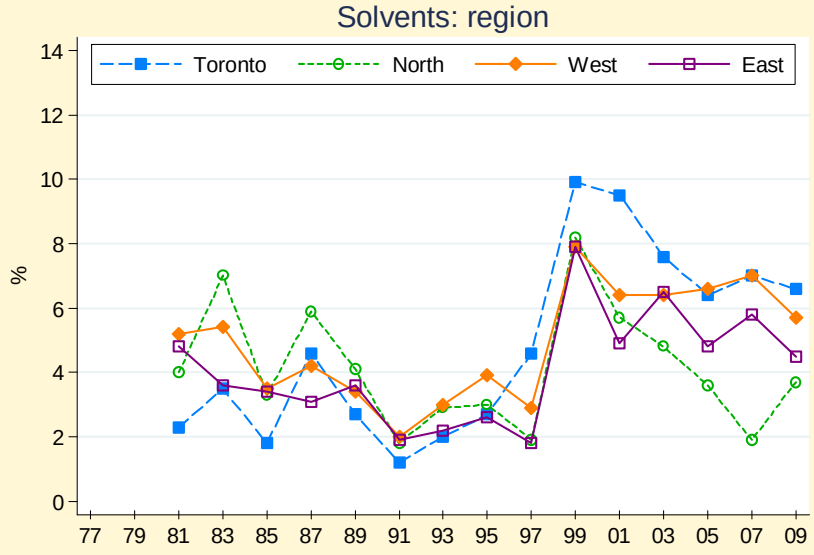

Solvents: region
Toronto
North
West
East
%
0
2
4
6
8
10
12
14
77 79 81 83 85 87 89 91 93 95 97 99 01 03 05 07 09

Table 3.6.1: Percentage Reporting Glue Use During the Past Year, 1977–2009

| | 1977 | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N[1]) | | | | | | | | | | | | (4447) | (3898) | (6616) | (3648) | (2935) | (4261) |
| (N[2]) | (3927) | (3920) | (3010) | (3614) | (3146) | (3376) | (3040) | (2961) | (2617) | (2907) | (3072) | (2421) | (2013) | (3389) | (1862) | (1488) | (2069) |
| Total[1] | — | — | — | — | — | — | — | — | — | — | — | 3.8 (3.1-4.7) | 3.2 (2.6-4.1) | 2.8 (2.3-3.4) | 2.3 (1.8-2.9) | 2.5 (1.8-3.4) | 2.1 (1.6-2.8) [b] |
| Total[2] (95% CI) | 4.2 (3.6-5.1) | 4.9 (4.1-5.8) | 3.2 (2.4-4.2) | 3.6 (3.2-4.2) | 2.3 (1.8-2.8) | 2.7 (1.8-4.1) | 2.0 (1.7-2.5) | 1.2 (0.8-1.9) | 1.8 (1.3-2.4) | 2.8 (2.3-3.3) | 1.7 (1.3-2.2) | 4.3 (3.3-5.5) | 3.1 (2.2-4.2) | 3.2 (2.5-4.0) | 2.9 (2.1-4.0) | 2.4 (1.6-3.8) | 2.2 (1.4-3.6) [cd] |
| Sex | | | | | | | | | | | | | | | | | |
| Males[1] | — | — | — | — | — | — | — | — | — | — | — | 3.9 (2.9-5.1) | 4.0 (3.0-5.2) | 3.0 (3.8-2.4) | 2.8 (2.1-3.7) | 2.1 (1.4-3.1) | 2.1 (1.5-3.1) |
| Males[2] | 5.0 (3.9-6.2) | 6.7 (5.3-8.3) | 3.2 (2.4-4.2) | 4.3 (3.4-5.4) | 2.6 (1.8-3.7) | 3.8 (2.6-5.6) | 2.5 (1.9-3.3) | 1.1 (0.8-1.6) | 1.9 (1.2-3.1) | 3.2 (2.3-4.3) | 1.9 (1.3-2.7) | 4.3 (2.9-6.2) | 3.6 (2.4-5.3) | 3.0 (2.3-4.0) | 4.0 (2.7-5.7) | 2.2 (1.2-4.0) | 1.7 (0.9-3.2) |
| Females[1] | — | — | — | — | — | — | — | — | — | — | — | 3.8 (2.8-5.1) | 2.5 (1.8-3.5) | 2.6 (2.0-3.4) | 1.7 (1.0-2.9) | 3.0 (2.0-4.4) | 2.1 (1.3-3.4) |
| Females[2] | 3.6 (2.9-4.5) | 3.1 (2.4-4.0) | 3.2 (2.0-5.1) | 3.0 (2.3-4.0) | 1.9 (1.6-2.3) | 1.7 (0.9-3.2) | 1.6 (1.0-2.5) | 1.3 (0.6-2.6) | 1.6 (1.0-2.8) | 2.4 (1.8-3.2) | 1.5 (1.0-2.4) | 4.3 (3.0-6.1) | 2.6 (1.6-4.0) | 3.3 (2.4-4.6) | 1.8 (0.9-3.3) | 2.7 (1.6-4.3) | 2.8 (1.4-5.5) |
| Grade | | | | | | | | | | | | | | | | | |
| 7 | 6.5 (5.1-8.2) | 7.4 (5.9-9.3) | 5.0 (3.2-7.8) | 4.7 (3.9-5.7) | 3.1 (2.2-4.3) | 3.9 (2.4-6.4) | 2.2 (1.5-3.2) | 1.2 (0.3-4.2) | 3.2 (2.2-4.5) | 3.6 (2.4-5.2) | 3.5 (2.7-4.5) | 6.8 (4.8-9.6) | 3.9 (2.5-6.0) | 5.2 (3.5-7.8) | 4.0 (2.2-7.0) | 3.1 (1.3-7.2) | 2.7 (1.4-5.4) |
| 8 | — | — | — | — | — | — | — | — | — | — | — | 6.3 (4.6-8.6) | 5.7 (3.9-8.3) | 3.2 (1.9-5.3) | 2.8 (1.5-4.9) | 5.2 (3.2-8.3) | 3.6 (2.2-5.7) |
| 9 | 4.0 (3.0-5.1) | 4.9 (3.7-6.4) | 3.1 (2.2-4.4) | 4.0 (3.2-5.0) | 2.6 (1.6-4.0) | 3.1 (1.4-6.7) | 2.2 (1.6-3.1) | 1.3 (0.9-1.9) | 1.3 (0.8-2.2) | 3.3 (2.8-4.0) | 1.5 (1.0-2.4) | 4.3 (2.9-6.4) | 3.8 (2.5-5.6) | 2.4 (1.7-3.5) | 3.3 (2.1-5.1) | 2.3 (1.2-4.0) | 3.3 (1.4-7.2) |
| 10 | — | — | — | — | — | — | — | — | — | — | — | 1.1 (0.6-2.3) | 2.7 (1.5-4.8) | 2.4 (1.6-3.8) | 2.0 (1.0-4.0) | 2.2 (1.1-4.1) | 1.5 (0.8-2.8) |
| 11 | 2.1 (1.2-3.4) | 2.1 (1.2-3.4) | 1.3 (0.8-2.2) | 1.6 (0.9-3.0) | 1.1 (0.7-1.7) | 1.3 (0.6-2.9) | 1.6 (1.2-2.2) | 1.1 (0.7-1.8) | 1.0 (0.4-2.7) | 1.5 (0.9-2.5) | † | 2.1 (0.9-4.6) | 1.2 (0.3-5.3) | 2.3 (1.5-3.6) | 1.4 (0.6-3.2) | 2.0 (1.1-3.7) | † |
| 12 | — | — | — | — | — | — | — | — | — | — | — | 2.0 (1.1-3.8) | 1.8 (0.8-4.2) | 1.8 (0.9-3.3) | 0.6 (0.2-1.4) | 1.0 (0.4-2.2) | † |

(Continued…)

| | 1977 | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N[1]) | | | | | | | | | | | | (4447) | (3898) | (6616) | (3648) | (2935) | (4261) |
| (N[2]) | (3927) | (3920) | (3010) | (3614) | (3146) | (3376) | (3040) | (2961) | (2617) | (2907) | (3072) | (2421) | (2013) | (3389) | (1862) | (1488) | (2069) |
| Region | | | | | | | | | | | | | | | | | |
| Toronto[1] | — | — | — | — | — | — | — | — | — | — | — | **4.1** (2.7-6.1) | **4.6** (2.8-7.7) | **3.5** (2.5-5.0) | **3.3** (2.1-5.2) | **3.7** (2.4-5.7) | **3.9** (2.4-6.3) |
| Toronto[2] | — | — | **1.8** (1.2-2.8) | **2.5** (1.1-5.4) | **2.4** (1.1-5.2) | **2.2** (1.2-4.0) | **1.9** (0.8-4.3) | **0.8** (0.2-3.1) | **1.4** (0.9-2.1) | **1.7** (0.7-3.8) | **2.6** (1.6-4.2) | **4.2** (2.4-7.4) | **4.8** (2.8-8.3) | **3.0** (1.7-5.1) | **4.4** (2.4-7.8) | **2.9** (1.4-5.6) | † |
| North[1] | — | — | — | — | — | — | — | — | — | — | — | **3.0** (1.8-5.0) | **2.3** (1.5-3.5) | **2.3** (1.5-3.5) | **1.0** (0.4-3.1) | **1.8** (0.8-4.1) | † |
| North[2] | — | — | **3.6** (1.1-10.8) | **3.8** (2.0-6.8) | **1.9** (0.8-4.7) | **3.3** (2.9-3.9) | **2.7** (1.2-6.0) | **1.3** (0.3-5.3) | **1.9** (0.5-6.8) | **2.9** (1.6-5.0) | † | **4.2** (2.0-8.8) | **2.7** (1.7-4.2) | **3.3** (2.0-5.6) | **0.8** (0.2-3.9) | **0.9** (0.3-2.8) | † |
| West[1] | — | — | — | — | — | — | — | — | — | — | — | **4.0** (2.7-5.7) | **3.3** (2.3-4.8) | **2.4** (1.7-3.5) | **2.1** (1.4-3.2) | **2.4** (1.5-4.0) | **2.1** (1.3-3.5) |
| West[2] | — | — | **4.2** (2.9-6.0) | **4.7** (4.2-5.2) | **2.5** (2.0-3.0) | **3.1** (1.5-6.5) | **2.2** (1.8-2.8) | **1.4** (0.7-3.0) | **2.0** (1.2-3.2) | **3.3** (2.8-3.9) | **1.7** (1.1-2.6) | **4.9** (3.2-7.2) | **3.0** (1.8-5.1) | **2.7** (1.8-4.0) | **3.1** (2.0-4.9) | **2.9** (1.4-5.9) | **3.0** (1.5-6.1) |
| East[1] | — | — | — | — | — | — | — | — | — | — | — | **3.8** (2.8-5.2) | **2.4** (1.6-3.6) | **3.1** (2.2-4.4) | **2.0** (1.2-3.4) | **2.1** (1.0-4.1) | **1.4** [b] (1.0-2.2) |
| East[2] | — | — | **2.5** (1.5-4.0) | **3.0** (2.4-3.9) | **2.0** (1.5-2.7) | **2.4** (1.2-4.4) | **1.6** (1.4-1.8) | **1.0** (0.8-1.5) | **1.7** (0.9-3.2) | **2.7** (1.6-4.3) | **1.5** (1.2-1.9) | **3.6** (2.2-5.6) | **1.5** (0.7-3.3) | **4.1** (2.7-6.1) | **2.0** (1.0-4.4) | **1.7** (0.8-3.9) | **1.2** (0.6-2.2) |

Notes: (1) based on Grades 7-12 (full sample); (2) based on Grades 7, 9, and 11 only (long-term sample); (3) question asked of a random half-sample starting in 2005; (4) regional stratification differed in 1977 and 1979 and therefore regions are not presented; (5) entries in brackets are 95% confidence intervals; (6) † estimate suppressed due to unreliability; (7) no significant differences 2009 vs. 2007; [b] 2009 vs. 1999 significant difference, p<.01; [c] significant long-term linear trend, p<.01; [d] significant long-term non-linear trend, p<.01.

Q: In the last 12months, how often did you sniff glue (for example, airplane glue, contact cement, etc.) in order to get high?

Source: OSDUHS, Centre for Addiction & Mental Health

Table 3.6.2: Percentage Reporting Solvent Use During the Past Year, 1977–2009

| | 1977 | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N[1]) | | | | | | | | | | | | (4447) | (3898) | (6616) | (3648) | (2935) | (4261) |
| (N[2]) | (3927) | (3920) | (3010) | (3614) | (3146) | (3376) | (3040) | (2961) | (2617) | (2907) | (3072) | (2421) | (2013) | (3389) | (1862) | (1488) | (2069) |
| Total[1] (95% CI) | — | — | — | — | — | — | — | — | — | — | — | 7.6 (6.6-8.8) | 6.4 (5.3-7.9) | 6.1 (5.2-7.2) | 5.3 (4.4-6.4) | 5.8 (4.7-7.0) | 5.3 [b] (4.4-6.3) |
| Total[2] | 7.4 (6.5-8.5) | 7.2 (6.3-8.2) | 4.4 (3.3-5.8) | 4.6 (3.8-5.5) | 3.1 (2.5-3.7) | 4.2 (3.1-5.6) | 3.4 (2.8-4.3) | 1.8 (1.2-2.7) | 2.6 (2.0-3.2) | 3.2 (2.7-3.9) | 2.8 (2.1-3.7) | 8.3 (6.8-10.1) | 6.7 (5.4-8.4) | 6.6 (5.5-7.8) | 5.8 (4.5-7.5) | 6.3 (4.8-8.2) | 5.3 [d] (4.0-7.1) |
| Sex | | | | | | | | | | | | | | | | | |
| Males[1] | — | — | — | — | — | — | — | — | — | — | — | 6.5 (5.3-7.8) | 5.9 (4.6-7.6) | 5.9 (4.8-7.3) | 4.7 (3.6-6.2) | 4.9 (3.6-6.6) | 4.2 (3.1-5.5) |
| Males[2] | 7.9 (6.4-9.8) | 8.1 (6.8-9.6) | 4.6 (3.5-6.0) | 5.1 (4.2-6.2) | 3.0 (2.2-4.1) | 4.7 (3.3-6.6) | 3.7 (2.5-5.5) | 1.4 (0.9-2.2) | 2.1 (1.5-2.9) | 2.7 (2.0-3.7) | 2.1 (1.5-3.0) | 6.7 (5.0-8.9) | 7.0 (4.9-9.8) | 6.5 (5.1-8.2) | 5.1 (3.7-7.0) | 5.7 (3.9-8.2) | 3.6 (2.4-5.4) |
| Females[1] | — | — | — | — | — | — | — | — | — | — | — | 8.8 (7.2-10.7) | 6.4 (5.3-7.9) | 6.3 (5.2-7.6) | 5.9 (4.6-7.6) | 6.8 (5.3-8.7) | 6.6 (5.1-8.4) |
| Females[2] | 6.9 (5.9-8.1) | 6.3 (5.1-7.6) | 4.1 (2.8-5.9) | 4.0 (3.0-5.4) | 3.1 (2.5-4.0) | 3.7 (2.4-5.5) | 3.2 (2.4-4.2) | 2.2 (1.4-3.5) | 3.0 (2.0-4.3) | 3.7 (2.8-4.9) | 3.4 (2.5-4.7) | 9.9 (7.9-12.4) | 6.5 (5.0-8.5) | 6.6 (5.2-8.5) | 6.5 (4.4-9.5) | 6.9 (4.9-9.7) | 7.3 (5.1-10.4) |
| Grade | | | | | | | | | | | | | | | | | |
| 7 | 12.9 (10.9-15.2) | 10.0 (8.4-11.8) | 6.6 (3.9-11.0) | 7.0 (5.9-8.3) | 4.5 (3.1-6.3) | 7.0 (4.4-11.0) | 4.5 (2.9-6.9) | 2.1 (1.0-4.5) | 3.3 (2.0-5.3) | 3.8 (3.1-4.6) | 4.2 (2.4-7.2) | 12.1 (9.3-15.7) | 9.7 (7.6-12.4) | 10.2 (7.3-14.0) | 9.2 (6.4-13.2) | 9.3 (6.0-14.0) | 8.2 (5.2-12.6) |
| 8 | — | — | — | — | — | — | — | — | — | — | — | 11.2 (8.5-14.5) | 9.3 (7.1-12.0) | 9.5 (6.8-13.0) | 8.8 (6.6-11.6) | 10.1 (7.5-13.4) | 9.0 (6.6-12.2) |
| 9 | 6.1 (4.9-7.5) | 7.5 (6.1-9.3) | 4.8 (3.7-6.0) | 3.7 (2.1-6.4) | 3.3 (2.7-4.1) | 3.1 (2.6-3.8) | 3.6 (2.7-4.7) | 1.9 (1.3-2.7) | 2.8 (2.3-3.4) | 3.9 (2.9-5.3) | 2.7 (2.2-3.3) | 8.4 (6.3-11.0) | 7.6 (5.6-10.3) | 6.5 (5.2-8.2) | 5.7 (3.7-8.7) | 5.8 (3.4-9.6) | 5.2 (3.1-8.7) |
| 10 | — | — | — | — | — | — | — | — | — | — | — | 4.6 (2.9-7.1) | 3.8 (2.2-6.6) | 4.2 (3.0-5.8) | 5.0 (3.3-7.5) | 5.6 (3.7-8.3) | 4.9 (3.3-7.3) |
| 11 | 2.8 (2.0-4.0) | 3.6 (2.5-5.1) | 1.4 (0.8-2.4) | 2.1 (1.2-3.5) | 1.4 (0.8-2.4) | 2.6 (1.5-4.4) | 2.0 (1.5-2.7) | 1.4 (0.6-3.4) | 1.7 (1.0-2.7) | 2.0 (1.2-3.5) | 1.6 (1.1-2.4) | 4.9 (3.0-8.0) | 2.3 (1.0-5.2) | 3.6 (2.5-5.2) | 2.7 (1.6-4.7) | 3.9 (2.3-6.5) | 3.3 (1.9-5.7) |
| 12 | — | — | — | — | — | — | — | — | — | — | — | 3.9 (2.2-6.6) | 3.9 (2.2-6.6) | 3.9 (2.6-5.7) | 1.3 (0.6-2.7) | 1.5 (0.7-3.2) | 3.1 (1.7-5.8) |

(Continued…)

| | 1977 | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N[1]) | | | | | | | | | | | | (4447) | (3898) | (6616) | (3648) | (2935) | (4261) |
| (N[2]) | (3927) | (3920) | (3010) | (3614) | (3146) | (3376) | (3040) | (2961) | (2617) | (2907) | (3072) | (2421) | (2013) | (3389) | (1862) | (1488) | (2069) |
| Region | | | | | | | | | | | | | | | | | |
| Toronto[1] | — | — | — | — | — | — | — | — | — | — | — | **9.4** (6.8-12.8) | **9.6** (6.4-14.0) | **7.7** (5.2-11.2) | **5.5** (3.8-8.0) | **6.9** (5.5-8.8) | **7.6** (5.3-10.8) |
| Toronto[2] | — | — | **2.3** (1.1-4.7) | **3.5** (2.2-5.5) | **1.8** (1.0-3.2) | **4.6** (3.6-5.7) | **2.7** (2.3-3.2) | **1.2** (0.3-4.5) | **2.0** (1.1-3.7) | **2.7** (1.1-6.3) | **4.6** (3.8-5.6) | **9.9** (6.9-14.0) | **9.5** (5.6-15.6) | **7.6** (4.7-12.2) | **6.4** (4.0-10.0) | **7.0** (4.1-11.5) | **6.6** (3.6-11.8) |
| North[1] | — | — | — | — | — | — | — | — | — | — | — | **6.0** (4.0-8.8) | **4.5** (3.1-6.4) | **4.1** (3.1-5.4) | **3.2** (1.6-6.4) | **2.5** (1.4-4.5) | **4.1** (2.3-7.2) |
| North[2] | — | — | **4.0** (1.3-12.3) | **7.0** (4.3-10.4) | **3.3** (2.2-4.8) | **5.9** (4.2-8.2) | **4.1** (2.2-7.6) | **1.8** (0.6-5.0) | **2.9** (1.1-7.6) | **3.0** (2.0-4.5) | **1.9** (1.2-3.0) | **8.2** (4.2-15.3) | **5.7** (3.7-8.8) | **4.8** (3.3-7.0) | **3.6** (1.1-10.8) | **1.9** (0.8-4.3) | **3.7** (1.3-9.8) |
| West[1] | — | — | — | — | — | — | — | — | — | — | — | **7.1** (5.6-8.9) | **6.0** (4.8-7.5) | **6.3** (4.9-8.1) | **6.2** (4.7-8.3) | **6.2** (4.4-8.7) | **5.7** (4.3-7.6) |
| West[2] | — | — | **5.2** (3.3-8.1) | **5.4** (3.8-7.5) | **3.5** (2.7-4.4) | **4.2** (2.1-8.2) | **3.4** (2.3-5.2) | **2.0** (1.2-3.5) | **3.0** (2.3-3.8) | **3.9** (3.2-4.8) | **2.9** (1.6-5.1) | **7.9** (5.6-11.0) | **6.4** (4.8-8.6) | **6.4** (4.9-8.4) | **6.6** (4.3-9.9) | **7.0** (4.4-10.7) | **5.7** (3.7-8.7) |
| East[1] | — | — | — | — | — | — | — | — | — | — | — | **7.8** (5.9-10.1) | **4.6** (3.2-6.6) | **5.4** (4.1-7.1) | **4.2** (3.0-5.8) | **5.1** (3.6-7.2) | **3.7** [b] (2.7-4.9) |
| East[2] | — | — | **4.8** (4.4-5.3) | **3.6** (3.1-4.2) | **3.4** (2.2-5.4) | **3.1** (2.4-4.0) | **3.6** (2.7-4.9) | **1.9** (0.9-3.9) | **2.2** (1.3-3.9) | **2.6** (2.2-3.2) | **1.8** (1.2-2.5) | **7.9** (5.6-11.0) | **4.9** (3.0-7.9) | **6.5** (4.8-8.8) | **4.8** (3.1-7.6) | **5.8** (3.8-8.7) | **4.4** (2.7-7.3) |

Notes: (1) based on Grades 7-12 (full sample); (2) based on Grades 7, 9, and 11 only (long-term sample); (3) question asked of a random half-sample starting in 2005; (4) regional stratification differed in 1977 and 1979 and therefore regions are not presented; (5) entries in brackets are 95% confidence intervals; (6) no significant differences 2009 vs. 2007; [b] 2009 vs. 1999 significant difference, p<.01; [d] significant long-term non-linear trend, p<.01.

Q: In the last 12 months, how often did you sniff solvents (such as nail polish remover, paint thinner or gasoline, etc.) in order to get high?

Source: OSDUHS, Centre for Addiction & Mental Health

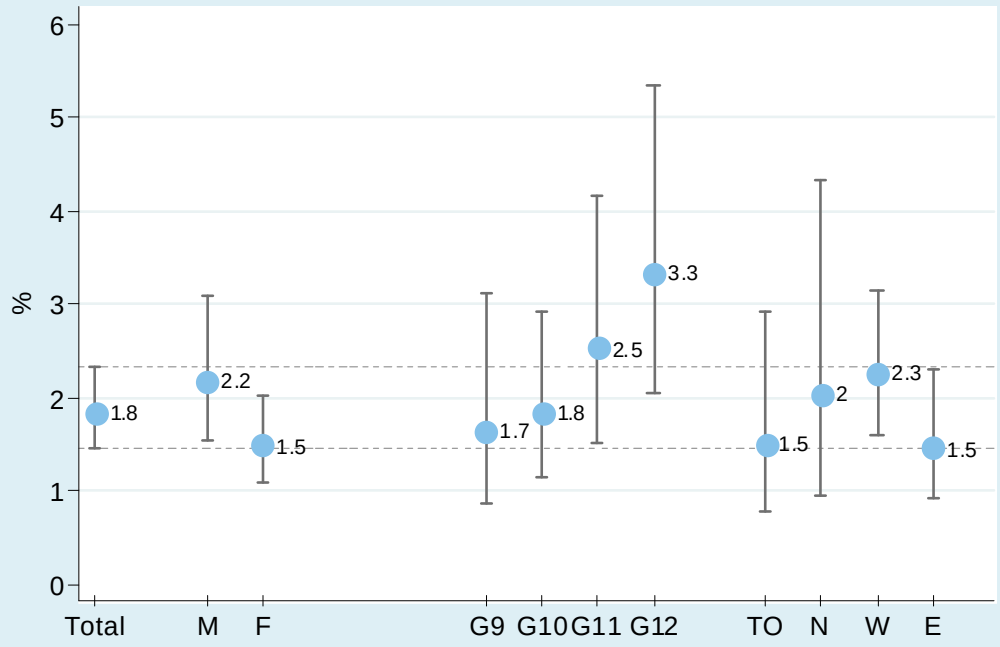
## Past Year Use of Hallucinogens: LSD, PCP, and Other Hallucinogens

(Figures 3.6.4 to 3.6.6; Tables 3.6.3 to 3.6.5)

| | Hallucinogen Use in 2009 (Grades 7 to 12) | Trends in Hallucinogen Use |
|---|---|---|
| Total Sample | ■ The most commonly used hallucinogens are substances other than LSD or PCP, such as mescaline and psilocybin ("magic mushrooms"), reported by 5.0% of students. LSD use is reported by 1.8% of students, and 0.8% reported using PCP during the past year. These percentages represent about 51,200, 18,900 and 8,000 Ontario students in grades 7 through 12, respectively. | ☐ The prevalence of all three hallucinogenic drug types did not significantly change between 2007 and 2009. However, use of all three is currently lower compared to the 1999 estimates. LSD use significantly declined from 6.8% in 1999 down to the current rate of 1.8%. PCP use is significantly lower in 2009 (0.8%) compared to 1999 (3.0%). Other hallucinogen use is significantly lower in 2009 (5.0%) compared to 1999 (12.8%).<br><br>☐ Over the long-term, LSD use decreased in the 1980s and early 1990s, made a brief comeback between 1991 and 1995, and has been moving downward since then. Indeed, the lowest point was reached in 2005 and estimates have been stable since then (among grades 7, 9, 11).<br><br>☐ Over the long-term, PCP use was elevated in the early 1980s and again in the mid-1990s, but has since decreased to very low levels.<br><br>☐ Over the long-term, other hallucinogen use remained low and stable during the 1980s, increased in the 1990s, reaching an all-time peak in 1999, and has subsequently been on a steady decline. |
| Sex | ■ LSD use and PCP use does not significantly differ between males and females. However, males (6.2%) are more likely than females (3.7%) to use other hallucinogens. | ☐ Between 1999 and 2009, use of all three drugs among both males and females significantly decreased.<br><br>☐ Over the long-term, the general trends in hallucinogenic drug use have occurred similarly among both males and females. Both sexes have reduced their use of LSD, PCP and other hallucinogens over the past decade, and current rates are lower than the peaks of the late 1970s and the late 1990s. |

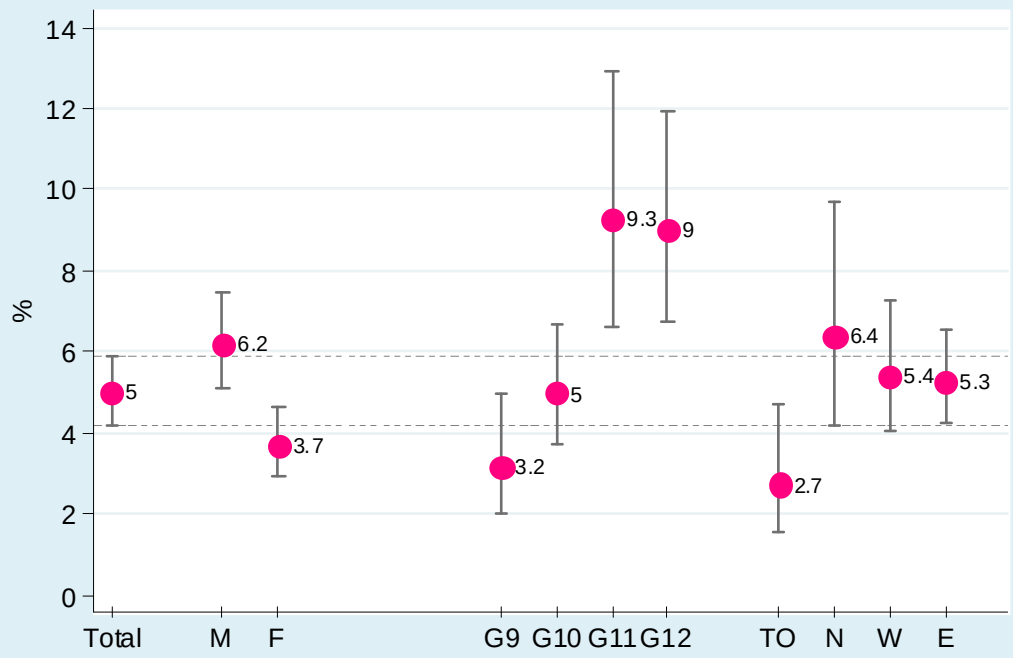
| | | |
|---|---|---|
| Grade | ■ Use of LSD and other hallucinogens significantly differs by grade. LSD use ranges from about 2% among 9th- and 10th-graders up to 3.3% of 12th- graders. Other hallucinogen use ranges from less than 3.2% of 9th-graders to 9% of 11th- and 12th-graders. PCP use does not significantly vary by grade. | ☐ All grades, except 7th-graders, show a significant decline in use of each drug in 2009, compared to their corresponding 1999 estimates (except for 12th-graders' use of PCP, which has remained low and stable). |
| Region | ■ Use of none of the three substances significantly differs by region. | ☐ Use of all three drugs is significantly lower in 2009 compared to the 1999 estimates among students in all regions. |
| Frequent Use | ■ About 1% of students used hallucinogens other than LSD, PCP frequently (see Figure 3.1.2).<br>■ The majority of users report using these substances only once or twice during the past year (see Figure 3.1.3). | ☐ Frequent use of other hallucinogens (6 or more times in the past year) remained low from the late 1970s until the mid-1990s, peaked in 1999, and has since decreased. |

Figure 3.6.4
Past Year LSD Use by Sex, Grade and Region, 2009 OSDUHS



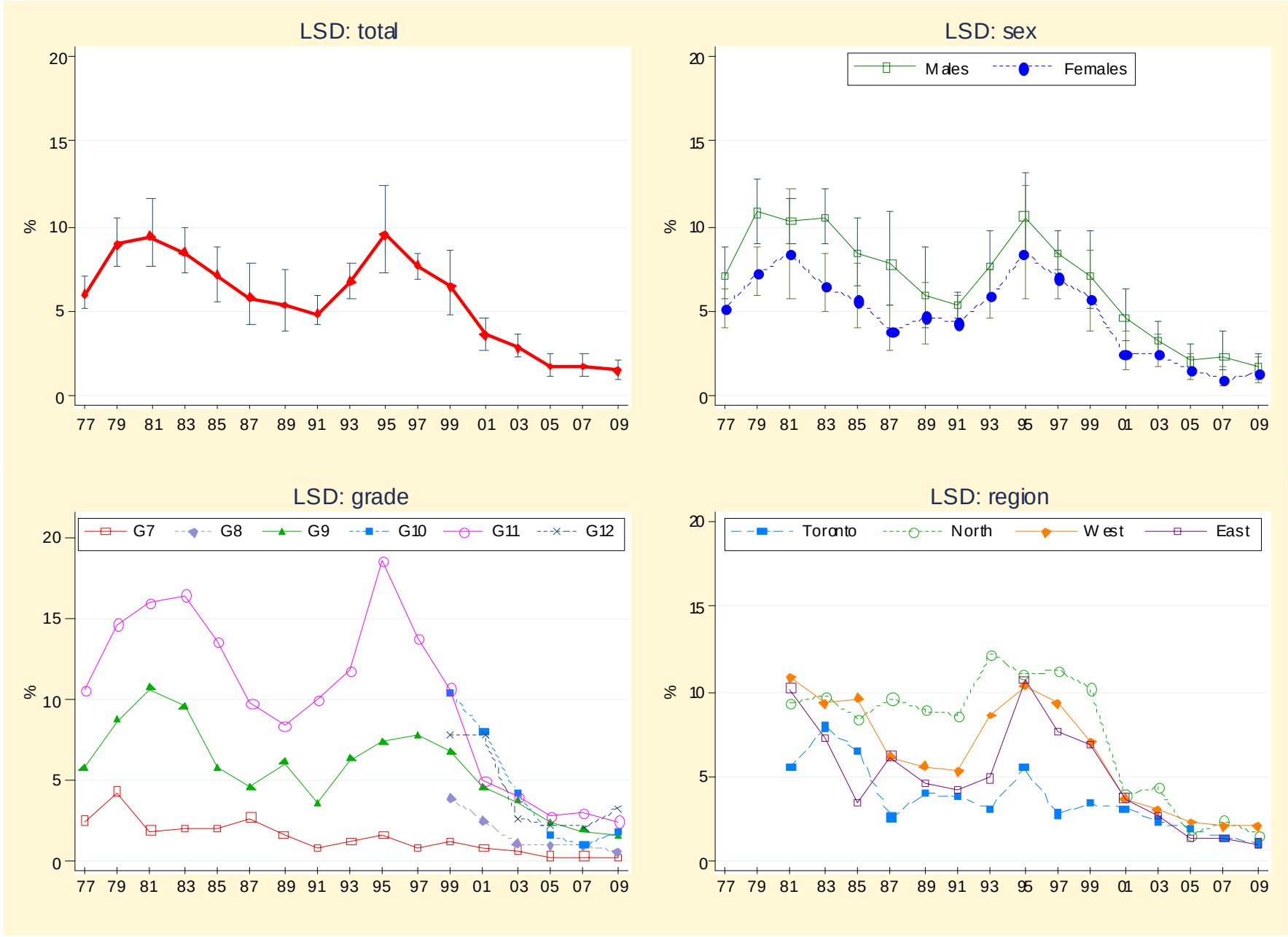

Vertical bars represent 95% confidence intervals; horizontal bar represents 95% CI for total estimate; estimates for grade 7 and grade 8 were suppressed

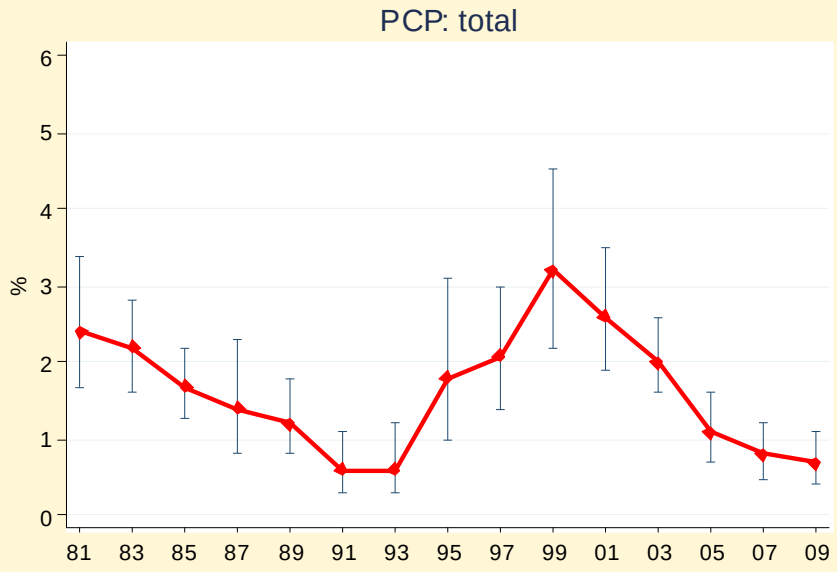
Figure 3.6.5
Past Year Use of Hallucinogens other than LSD, PCP by Sex, Grade and Region, 2009 OSDUHS

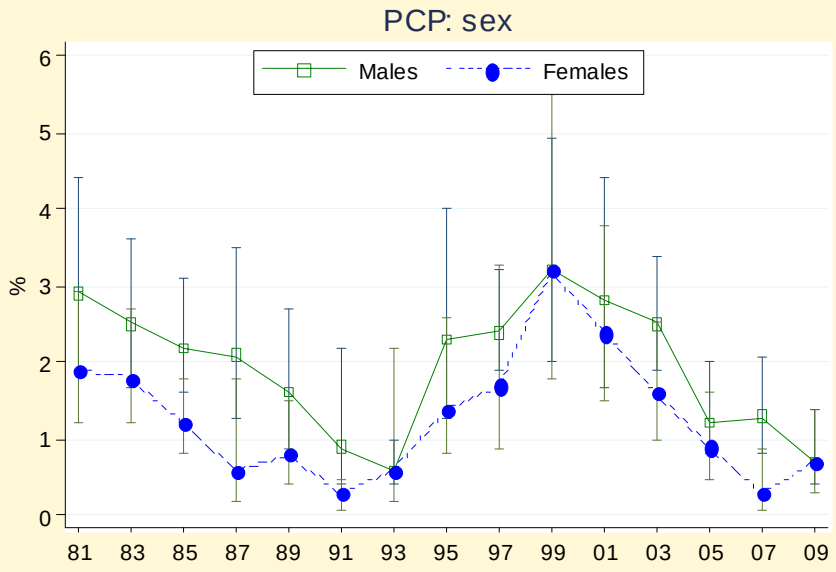


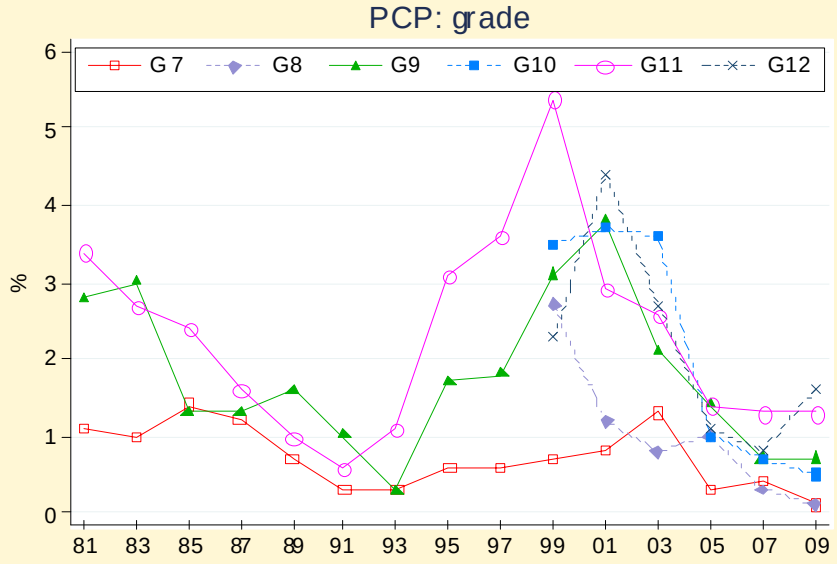

Vertical bars represent 95% confidence intervals; horizontal bar represents 95% CI for total estimate; estimates for grade 7 and grade 8 were suppressed

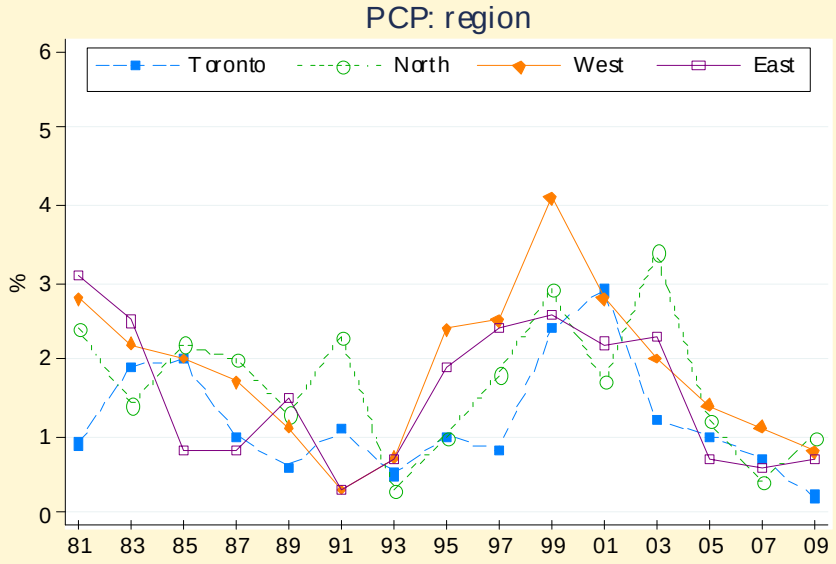
Figure 3.6.6
Past Year Use of Hallucinogenic Drugs, 1977–2009 OSDUHS (Grades 7, 9, 11 only)

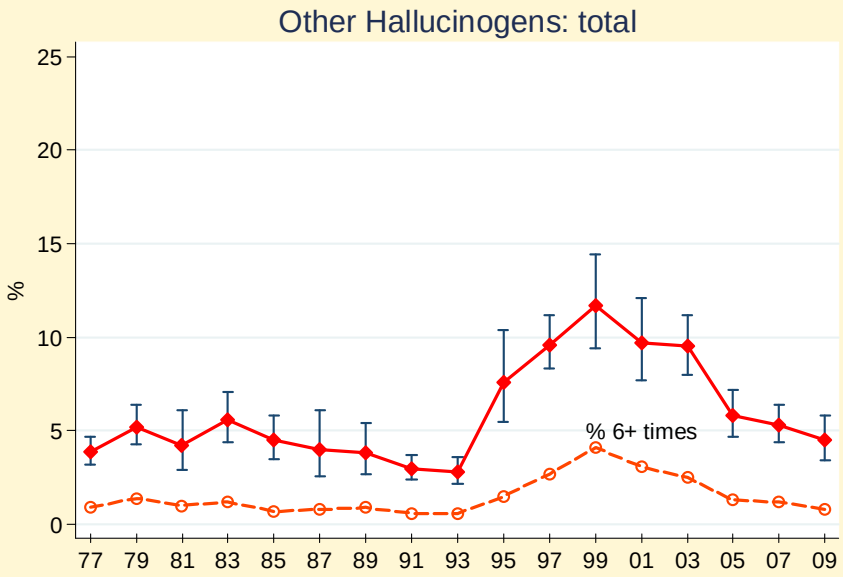


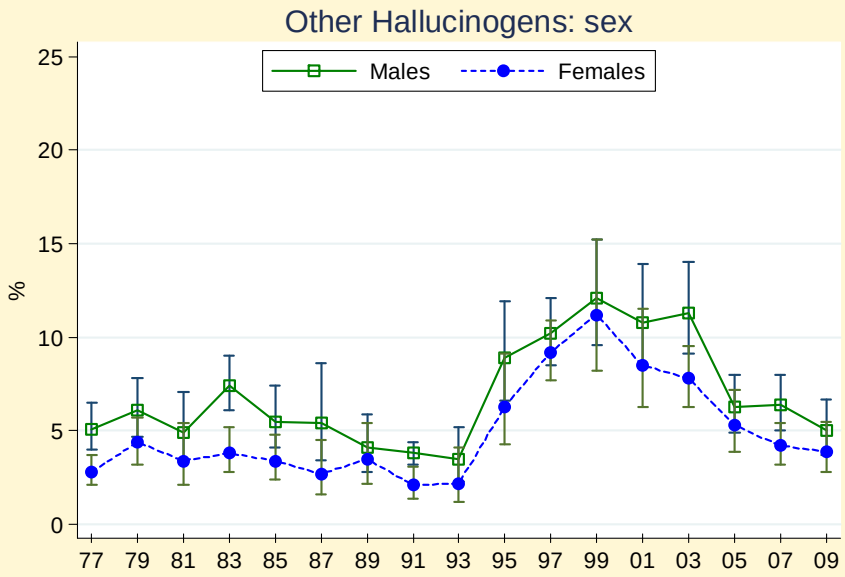

PCP: total
%
0
1
2
3
4
5
6
81
83
85
87
89
91
93
95
97
99
01
03
05
07
09

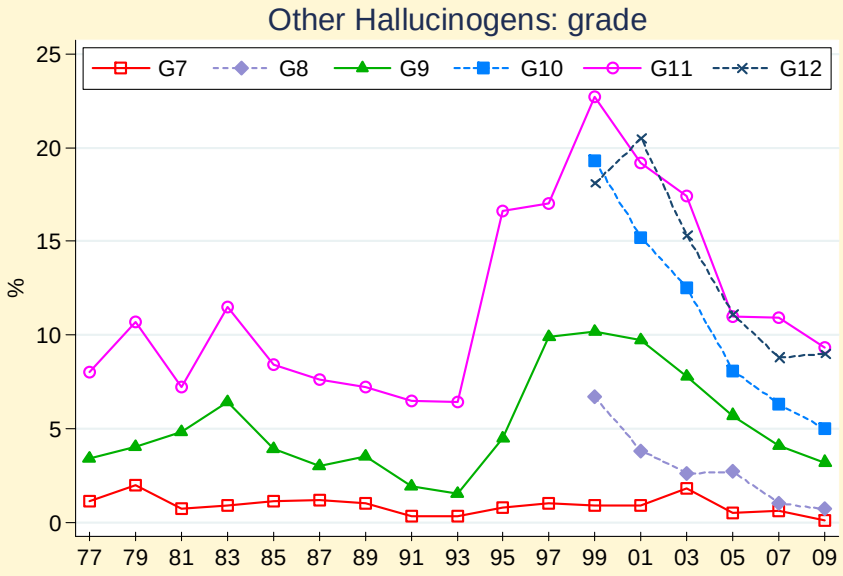

PCP: sex
Males
Females
%
0
1
2
3
4
5
6
81
83
85
87
89
91
93
95
97
99
01
03
05
07
09


PCP: grade
G7
G8
G9
G10
G11
G12
%
0
1
2
3
4
5
6
81
83
85
87
89
91
93
95
97
99
01
03
05
07
09


PCP: region
Toronto
North
West
East
%
0
1
2
3
4
5
6
81
83
85
87
89
91
93
95
97
99
01
03
05
07
09


Other Hallucinogens: total
%
% 6+ times


Other Hallucinogens: sex
Males
Females
%


Other Hallucinogens: grade
G7
G8
G9
G10
G11
G12
%

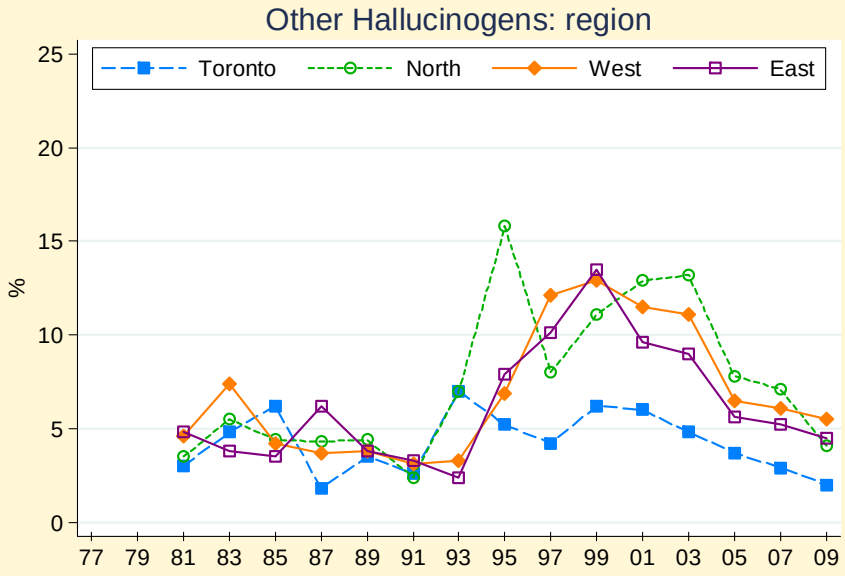

Other Hallucinogens: region
Toronto
North
West
East
%

Table 3.6.3: Percentage Reporting LSD Use During the Past Year, 1977–2009

| | 1977 | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N[1]) | | | | | | | | | | | | (4447) | (3898) | (6616) | (7726) | (6323) | (9112) |
| (N[2]) | (3927) | (3920) | (3010) | (3614) | (3146) | (3376) | (3040) | (2961) | (2617) | (2907) | (3072) | (2421) | (2013) | (3389) | (3969) | (3215) | (4424) |
| Total[1] (95% CI) | — | — | — | — | — | — | — | — | — | — | — | 6.8 (6.7-8.1) | 4.8 (3.9-5.9) | 2.9 (2.4-3.5) | 1.7 (1.3-2.3) | 1.6 (1.2-2.2) | 1.8 (1.4-2.3) [b] |
| Total[2] | 6.0 (5.1-7.1) | 9.0 (7.7-10.5) | 9.4 (7.6-11.6) | 8.5 (7.2-9.9) | 7.1 (5.6-8.9) | 5.8 (4.2-7.9) | 5.4 (3.8-7.4) | 4.9 (4.2-5.9) | 6.8 (5.8-7.9) | 9.5 (7.2-12.5) | 7.7 (7.0-8.5) | 6.5 (4.8-8.6) | 3.6 (2.7-4.7) | 2.9 (2.3-3.6) | 1.8 (1.3-2.6) | 1.8 (1.2-2.5) | 1.5 (1.1-2.2) [cd] |
| Sex | | | | | | | | | | | | | | | | | |
| Males[1] | — | — | — | — | — | — | — | — | — | — | — | 7.8 (6.5-9.5) | 6.3 (5.0-7.9) | 3.5 (2.8-4.4) | 2.1 (1.5-2.8) | 2.1 (1.5-3.0) | 2.2 (1.5-3.1) [b] |
| Males[2] | 7.1 (5.7-8.8) | 10.8 (9.0-12.8) | 10.3 (9.1-11.6) | 10.5 (9.0-12.2) | 8.4 (6.6-10.6) | 7.8 (5.5-10.8) | 6.0 (4.1-8.8) | 5.4 (4.6-6.2) | 7.6 (6.0-9.8) | 10.6 (8.5-13.1) | 8.5 (7.4-9.8) | 7.1 (5.2-9.7) | 4.6 (3.3-6.4) | 3.3 (2.5-4.4) | 2.1 (1.4-3.1) | 2.4 (1.6-3.8) | 1.7 (1.1-2.6) |
| Females[1] | — | — | — | — | — | — | — | — | — | — | — | 5.7 (4.3-7.5) | 3.3 (2.3-4.6) | 2.3 (1.7-3.0) | 1.4 (0.9-2.1) | 1.1 (0.7-1.6) | 1.5 (1.1-2.0) [b] |
| Females[2] | 5.1 (4.1-6.4) | 7.3 (5.9-8.9) | 8.4 (5.7-12.2) | 6.5 (5.0-8.5) | 5.7 (4.1-7.8) | 3.9 (2.8-5.5) | 4.7 (3.2-6.8) | 4.4 (4.2-5.9) | 5.9 (4.6-7.5) | 8.5 (5.8-12.4) | 7.0 (5.8-8.5) | 5.8 (3.9-8.6) | 2.5 (1.6-3.9) | 2.5 (1.8-3.6) | 1.6 (1.0-2.6) | 1.0 (0.6-1.8) | 1.4 (0.8-2.3) |
| Grade | | | | | | | | | | | | | | | | | |
| 7 | 2.5 (1.6-4.0) | 4.3 (3.3-5.6) | 1.9 (0.9-3.9) | 2.0 (1.1-3.7) | 2.0 (1.1-3.8) | 2.7 (1.6-4.3) | 1.6 (1.2-2.2) | 0.8 (0.4-1.7) | 1.2 (0.6-2.3) | 1.6 (0.9-2.9) | 0.9 (0.7-1.2) | 1.2 (0.6-2.4) | 0.9 (0.4-1.8) | 0.7 (0.3-1.6) | † | † | † |
| 8 | — | — | — | — | — | — | — | — | — | — | — | 3.9 (2.3-6.5) | 2.5 (1.3-4.6) | 1.1 (0.6-2.2) | 1.0 (0.5-2.0) | 1.0 (0.4-2.1) | † [b] |
| 9 | 5.8 (4.4-7.6) | 8.7 (6.9-11.1) | 10.7 (8.5-13.4) | 9.6 (8.2-11.1) | 5.8 (4.0-8.2) | 4.6 (2.3-8.9) | 6.1 (3.4-10.8) | 3.6 (2.9-4.6) | 6.3 (5.0-8.0) | 7.4 (4.4-12.2) | 7.8 (6.3-9.8) | 6.8 (4.8-9.4) | 4.6 (3.3-6.4) | 3.7 (2.6-5.2) | 2.4 (1.6-3.6) | 1.9 (1.2-3.0) | 1.7 (0.9-3.1) [b] |
| 10 | — | — | — | — | — | — | — | — | — | — | — | 10.4 (7.4-14.3) | 8.0 (5.7-11.2) | 4.2 (2.8-6.3) | 1.6 (1.0-2.6) | 1.0 (0.5-2.1) | 1.8 (1.1-2.9) [b] |
| 11 | 10.6 (8.5-13.3) | 14.7 (11.6-18.5) | 16.0 (11.7-21.5) | 16.5 (12.9-20.7) | 13.6 (10.1-18.0) | 9.8 (6.0-15.5) | 8.4 (5.5-12.5) | 10.0 (8.2-12.1) | 11.8 (9.2-15.0) | 18.5 (12.9-25.7) | 13.7 (12.3-15.2) | 10.7 (7.2-15.6) | 5.0 (2.9-8.6) | 4.0 (2.8-5.5) | 2.8 (1.8-4.3) | 3.0 (1.8-4.9) | 2.5 (1.5-4.1) [b] |
| 12 | — | — | — | — | — | — | — | — | — | — | — | 7.8 (5.9-10.2) | 7.8 (4.1-14.3) | 2.7 (1.7-4.2) | 2.2 (1.2-3.9) | 2.1 (1.2-3.7) | 3.3 (2.1-5.3) [b] |

(Continued…)

| | 1977 | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N[1]) | | | | | | | | | | | | (4447) | (3898) | (6616) | (7726) | (6323) | (9112) |
| (N[2]) | (3927) | (3920) | (3010) | (3614) | (3146) | (3376) | (3040) | (2961) | (2617) | (2907) | (3072) | (2421) | (2013) | (3389) | (3969) | (3215) | (4424) |
| Region | | | | | | | | | | | | | | | | | |
| Toronto[1] | — | — | — | — | — | — | — | — | — | — | — | **4.0** (2.7-5.9) | **2.9** (1.5-5.5) | **2.8** (1.7-4.7) | **1.3** (0.8-2.3) | **0.9** (0.5-1.7) | **1.5** [b] (0.8-2.9) |
| Toronto[2] | — | — | **5.5** (2.5-11.5) | **7.9** (4.3-14.2) | **6.5** (4.4-9.4) | **2.6** (0.9-7.6) | **4.0** (3.0-5.4) | **3.8** (2.1-6.8) | **3.1** (1.7-5.6) | **5.5** (1.7-16.0) | **2.8** (2.0-3.9) | **3.4** (1.9-5.9) | **3.1** (1.8-5.3) | **2.4** (1.4-4.4) | **1.9** (1.0-3.4) | **1.4** (0.7-2.8) | † |
| North[1] | — | — | — | — | — | — | — | — | — | — | — | **11.0** (7.0-16.8) | **4.3** (2.9-6.2) | **4.0** (2.8-5.6) | **1.6** (1.0-2.5) | **1.8** (0.9-3.6) | **2.0** [b] (0.9-4.3) |
| North[2] | — | — | **9.3** (6.3-13.6) | **9.8** (7.0-13.7) | **8.4** (6.1-11.6) | **9.6** (3.8-22.1) | **8.9** (4.2-17.7) | **8.6** (4.6-15.4) | **12.2** (7.2-20.0) | **11.0** (8.1-14.8) | **11.3** (8.5-14.7) | **10.2** (4.2-23.1) | **3.9** (2.3-6.5) | **4.4** (3.0-6.4) | **1.5** (0.8-2.9) | **2.4** (1.0-5.7) | † |
| West[1] | — | — | — | — | — | — | — | — | — | — | — | **7.5** (5.4-10.4) | **5.9** (4.4-7.8) | **3.0** (2.2-4.0) | **2.1** (1.3-3.3) | **1.9** (1.2-3.1) | **2.3** [b] (1.6-3.2) |
| West[2] | — | — | **10.8** (7.6-15.1) | **9.3** (8.1-10.8) | **9.6** (6.8-13.4) | **6.2** (3.6-10.7) | **5.6** (3.2-9.8) | **5.3** (4.5-6.2) | **8.6** (7.7-9.5) | **10.4** (6.3-16.7) | **9.3** (8.1-10.8) | **7.0** (4.1-11.9) | **3.7** (2.4-5.8) | **3.0** (2.2-4.1) | **2.3** (1.4-3.9) | **2.1** (1.3-3.5) | **2.1** (1.3-3.3) |
| East[1] | — | — | — | — | — | — | — | — | — | — | — | **6.2** (5.1-7.5) | **4.6** (3.1-6.8) | **2.4** (1.6-3.5) | **1.6** (1.0-2.4) | **1.5** (0.9-2.4) | **1.5** [b] (0.9-2.3) |
| East[2] | — | — | **10.2** (8.3-12.4) | **7.3** (5.4-9.6) | **3.5** (1.7-6.9) | **6.2** (5.4-7.1) | **4.6** (2.3-8.9) | **4.2** (2.7-6.4) | **4.9** (2.9-8.1) | **10.7** (8.5-13.2) | **7.6** (6.3-9.2) | **6.9** (5.0-9.5) | **3.7** (2.1-6.3) | **2.7** (1.7-4.4) | **1.4** (0.8-2.4) | **1.4** (0.6-2.8) | **1.1** (0.6-2.0) |

Notes: (1) based on Grades 7-12 (full sample); (2) based on Grades 7, 9, and 11 only (long-term sample); (3) regional stratification differed in 1977 and 1979 and therefore regions are not presented; (4) entries in brackets are 95% confidence intervals; (5) † estimate suppressed due to unreliability; (6) no significant differences 2009 vs. 2007, p<.01; [b] 2009 vs. 1999 significant difference, p<.01; [c] significant long-term linear trend, p<.01; [d] significant long-term non-linear trend, p<.01.

Q: In the last 12 months, how often did you use LSD or "acid"?

Source: OSDUHS, Centre for Addiction & Mental Health

Table 3.6.4: Percentage Reporting PCP Use During the Past Year, 1981–2009

| | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N[1]) | | | | | | | | | | (4447) | (3898) | (6616) | (7726) | (6323) | (9112) |
| (N[2]) | (3010) | (3614) | (3146) | (3376) | (3040) | (2961) | (2617) | (2907) | (3072) | (2421) | (2013) | (3389) | (3969) | (3215) | (4424) |
| Total[1] (95% CI) | — | — | — | — | — | — | — | — | — | **3.0** (2.4-3.9) | **2.8** (2.2-3.7) | **2.2** (1.9-2.7) | **1.1** (0.8-1.5) | **0.7** (0.5-1.0) | **0.8** (0.5-1.3) [b] |
| Total[2] | **2.4** (1.7-3.4) | **2.2** (1.6-2.8) | **1.7** (1.3-2.2) | **1.4** (0.8-2.3) | **1.2** (0.8-1.8) | **0.6** (0.3-1.1) | **0.6** (0.3-1.2) | **1.8** (1.0-3.1) | **2.1** (1.4-3.0) | **3.2** (2.2-4.5) | **2.6** (1.9-3.5) | **2.0** (1.6-2.6) | **1.1** (0.7-1.6) | **0.8** (05-1.2) | **0.7** (0.4-1.1) [cd] |
| Sex | | | | | | | | | | | | | | | |
| Males[1] | — | — | — | — | — | — | — | — | — | **3.2** (2.4-4.2) | **3.3** (2.3-4.6) | **2.9** (2.4-3.6) | **1.4** (0.9-2.0) | **0.9** (0.6-1.3) | **1.0** (0.6-1.9) [b] |
| Males[2] | **2.9** (1.9-4.4) | **2.5** (1.7-3.6) | **2.2** (1.6-3.1) | **2.1** (1.3-3.5) | **1.6** (0.9-2.7) | **0.9** (0.4-2.2) | **0.6** (0.4-1.0) | **2.3** (1.3-4.0) | **2.4** (1.9-3.2) | **3.2** (2.0-4.9) | **2.8** (1.7-4.4) | **2.5** (1.9-3.4) | **1.2** (0.8-2.0) | **1.3** (0.8-2.1) | **0.7** (0.4-1.4) |
| Females[1] | — | — | — | — | — | — | — | — | — | **2.9** (1.9-4.2) | **2.3** (1.6-3.4) | **1.6** (1.2-2.2) | **0.7** (0.4-1.2) | **0.5** (0.3-0.9) | **0.5** (0.3-0.9) [b] |
| Females[2] | **1.9** (1.2-2.9) | **1.8** (1.2-2.7) | **1.2** (0.8-1.8) | **0.6** (0.2-1.8) | **0.8** (0.4-1.5) | † | **0.6** (0.2-2.2) | **1.4** (0.8-2.6) | **1.7** (0.9-3.3) | **3.2** (1.8-5.5) | **2.4** (1.5-3.8) | **1.6** (1.0-2.5) | **0.9** (0.5-1.6) | † | **0.7** (0.3-1.4) |
| Grade | | | | | | | | | | | | | | | |
| 7 | **1.1** (0.5-2.6) | **1.0** (0.6-1.6) | **1.4** (0.6-3.6) | **1.2** (0.4-3.3) | **0.7** (0.4-1.1) | † | † | **0.6** (0.1-3.6) | **0.6** (0.2-2.0) | **0.7** (0.3-1.6) | **0.8** (0.3-1.8) | **1.3** (0.6-2.6) | † | † | † |
| 8 | — | — | — | — | — | — | — | — | — | **2.7** (1.6-4.4) | **1.2** (0.5-2.7) | **0.8** (0.4-1.5) | **1.0** (0.3-3.2) | † | † [b] |
| 9 | **2.8** (1.4-5.4) | **3.0** (2.8-3.4) | **1.3** (1.1-1.6) | **1.3** (0.5-3.5) | **1.6** (0.9-2.8) | **1.0** (0.3-2.8) | † | **1.7** (0.8-3.2) | **1.8** (0.7-4.4) | **3.1** (1.9-5.1) | **3.8** (2.5-5.8) | **2.1** (1.4-3.1) | **1.5** (0.9-2.4) | **0.7** (0.3-1.5) | † [b] |
| 10 | — | — | — | — | — | — | — | — | — | **3.5** (2.0-6.0) | **3.7** (2.0-6.7) | **3.6** (2.4-5.2) | **1.0** (0.6-1.9) | **0.7** (0.3-1.4) | † [b] |
| 11 | **3.4** (2.6-4.5) | **2.7** (1.2-5.7) | **2.4** (2.0-3.0) | **1.6** (0.7-3.2) | **1.0** (0.4-3.0) | **0.6** (0.2-1.4) | **1.1** (0.5-2.8) | **3.1** (1.4-6.6) | **3.6** (2.4-5.3) | **5.4** (3.3-8.7) | **2.9** (1.9-4.5) | **2.6** (1.8-3.8) | **1.4** (0.8-2.8) | **1.3** (0.7-2.4) | **1.3** (0.7-2.3) [b] |
| 12 | — | — | — | — | — | — | — | — | — | **2.3** (1.3-4.2) | **4.4** (2.4-8.0) | **2.7** (1.8-4.0) | **1.1** (0.6-2.0) | **0.8** (0.4-1.6) | **1.6** (0.8-3.1) |

(Continued….)

| | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N[1]) | | | | | | | | | | **(4447)** | **(3898)** | **(6616)** | **(7726)** | **(6323)** | **(9112)** |
| (N[2]) | **(3010)** | **(3614)** | **(3146)** | **(3376)** | **(3040)** | **(2961)** | **(2617)** | **(2907)** | **(3072)** | **(2421)** | **(2013)** | **(3389)** | **(3969)** | **(3215)** | **(4424)** |
| Region | | | | | | | | | | | | | | | |
| Toronto[1] | — | — | — | — | — | — | — | — | — | **2.4** (1.4-4.2) | **2.3** (1.4-3.8) | **1.6** (0.9-2.8) | **1.4** (0.6-3.4) | **0.6** (0.2-1.6) | † [b] |
| Toronto[2] | **0.9** (0.3-2.9) | **1.9** (0.8-4.2) | **2.0** (1.8-2.2) | **1.0** (0.2-4.1) | **0.6** (0.1-3.8) | **1.1** (0.3-4.3) | **0.5** (0.1-2.1) | **1.0** (0.6-1.6) | **0.8** (0.2-3.1) | **2.4** (1.1-5.3) | **2.9** (2.0-4.2) | **1.2** (0.5-2.7) | **1.0** (0.4-3.0) | **0.7** (0.2-2.2) | † |
| North[1] | — | — | — | — | — | — | — | — | — | **2.6** (1.7-3.9) | **2.0** (1.1-3.5) | **3.1** (2.2-4.2) | **1.2** (0.6-2.3) | **0.8** (0.3-2.3) | † [b] |
| North[2] | **2.4** (0.7-7.8) | **1.4** (0.3-6.3) | **2.2** (0.7-6.8) | **2.0** (1.1-3.7) | **1.3** (0.5-3.6) | **2.3** (1.0-5.3) | † | **1.0** (0.1-8.4) | **1.8** (0.4-8.5) | **2.9** (1.7-5.0) | **1.7** (0.7-4.0) | **3.4** (2.1-5.6) | **1.2** (0.4-3.0) | † | † |
| West[1] | — | — | — | — | — | — | — | — | — | **3.5** (2.3-5.1) | **3.0** (2.1-4.3) | **2.0** (1.6-2.6) | **1.3** (0.8-1.9) | **0.7** (0.4-1.0) | **1.0** [b] (0.5-2.0) |
| West[2] | **2.8** (1.6-4.8) | **2.2** (1.7-2.8) | **2.0** (1.3-3.1) | **1.7** (0.8-3.6) | **1.1** (0.6-2.1) | † | **0.7** (0.4-1.3) | **2.4** (1.0-5.5) | **2.5** (1.5-4.0) | **4.1** (2.4-6.9) | **2.8** (1.8-4.4) | **2.0** (1.4-2.8) | **1.4** (0.8-2.5) | **1.1** (0.6-1.8) | **0.8** (0.4-1.6) |
| East[1] | — | — | — | — | — | — | — | — | — | **2.9** (1.9-4.4) | **3.2** (1.7-5.6) | **2.7** (1.9-3.8) | **0.6** (0.3-1.2) | **0.8** (0.4-1.3) | **0.7** [b] (0.3-1.7) |
| East[2] | **3.1** (2.0-5.0) | **2.5** (1.5-4.2) | **0.8** (0.4-1.4) | **0.8** (0.2-3.0) | **1.5** (0.8-2.8) | † | **0.7** (0.1-3.8) | **1.9** (0.8-4.2) | **2.4** (1.2-4.7) | **2.6** (1.4-4.5) | **2.2** (0.9-5.1) | **2.3** (1.4-3.6) | **0.7** (0.3-1.3) | **0.6** (0.2-1.8) | **0.7** (0.3-1.6) |

Notes: (1) based on Grades 7-12 (full sample); (2) based on Grades 7, 9, and 11 only (long-term sample); (3) entries in brackets are 95% confidence intervals; (4) † estimate suppressed due to unreliability; (5) no significant differences 2009 vs. 2007; [b] 2007 vs. 1999 significant difference, p<.01; [c] significant long-term linear trend, p<.01; [d] significant long-term non-linear trend, p<.01.

Q: In the last 12 months, how often did you use the drug PCP (also known as “angel dust”, “dust”, “horse tranquillizer”, etc.)?

Source: OSDUHS, Centre for Addiction & Mental Health

Table 3.6.5: Percentage Reporting Other Hallucinogen Use During the Past Year, 1977–2009

| | 1977 | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N[1]) | | | | | | | | | | | | (4447) | (3898) | (6616) | (7726) | (6323) | (9112) |
| (N[2]) | (3927) | (3920) | (3010) | (3614) | (3146) | (3376) | (3040) | (2961) | (2617) | (2907) | (3072) | (2421) | (2013) | (3389) | (3969) | (3215) | (4424) |
| Total[1] (95% CI) | — | — | — | — | — | — | — | — | — | — | — | 12.8 (11.4-14.4) | 11.1 (9.6-12.9) | 10.0 (8.8-11.4) | 6.7 (5.6-8.0) | 5.5 (4.6-6.5) | 5.0 (4.2-5.9) [b] |
| Total[2] | 3.9 (3.2-4.7) | 5.2 (4.3-6.4) | 4.2 (2.9-6.1) | 5.6 (4.4-7.1) | 4.5 (3.5-5.8) | 4.0 (2.6-6.1) | 3.8 (2.7-5.4) | 3.0 (2.4-3.7) | 2.8 (2.2-3.6) | 7.6 (5.5-10.4) | 9.6 (8.3-11.2) | 11.7 (9.4-14.4) | 9.7 (7.7-12.1) | 9.5 (8.0-11.2) | 5.8 (4.7-7.2) | 5.3 (4.4-6.4) | 4.4 (3.4-5.8) [d] |
| Sex | | | | | | | | | | | | | | | | | |
| Males[1] | — | — | — | — | — | — | — | — | — | — | — | 14.9 (12.9-17.2) | 12.8 (10.8-15.1) | 12.1 (10.5-14.0) | 7.6 (6.3-9.3) | 6.6 (5.5-8.0) | 6.2 (5.1-7.5) [b] |
| Males[2] | 5.1 (4.0-6.5) | 6.1 (4.7-7.8) | 4.9 (3.4-7.1) | 7.4 (6.1-9.0) | 5.5 (4.1-7.4) | 5.4 (3.4-8.6) | 4.1 (2.8-5.9) | 3.8 (3.2-4.4) | 3.5 (2.3-5.2) | 8.9 (6.6-11.9) | 10.2 (8.5-12.1) | 12.1 (9.6-15.2) | 10.8 (8.4-13.9) | 11.3 (9.1-14.0) | 6.3 (4.9-8.0) | 6.4 (5.0-8.0) | 5.0 (3.7-6.7) |
| Females[1] | — | — | — | — | — | — | — | — | — | — | — | 10.6 (8.7-12.9) | 9.4 (7.6-11.6) | 8.0 (6.8-9.5) | 5.6 (4.6-6.9) | 4.3 (3.5-5.3) | 3.7 (3.0-4.6) [b] |
| Females[2] | 2.8 (2.1-3.7) | 4.4 (3.2-5.7) | 3.4 (2.1-5.4) | 3.8 (2.8-5.2) | 3.4 (2.4-4.8) | 2.7 (1.6-4.5) | 3.5 (2.2-5.4) | 2.1 (1.4-3.1) | 2.2 (1.2-4.1) | 6.3 (4.3-9.1) | 9.2 (7.7-10.9) | 11.2 (8.2-15.2) | 8.5 (6.3-11.5) | 7.8 (6.3-9.5) | 5.3 (3.9-7.2) | 4.2 (3.2-5.4) | 3.9 (2.8-5.5) |
| Grade | | | | | | | | | | | | | | | | | |
| 7 | 1.1 (0.7-1.7) | 2.0 (1.1-3.4) | 0.7 (0.6-1.0) | 0.9 (0.3-2.8) | 1.1 (0.8-1.6) | 1.2 (0.7-2.1) | 1.0 (0.7-1.2) | † | † | 0.8 (0.3-2.1) | 1.0 (0.4-2.8) | 0.9 (0.4-2.0) | 0.9 (0.4-1.8) | 1.8 (0.9-3.7) | † | † | † |
| 8 | — | — | — | — | — | — | — | — | — | — | — | 6.7 (4.4-10.1) | 3.8 (2.4-6.0) | 2.6 (1.6-4.2) | 2.7 (1.9-4.0) | 1.0 (0.5-2.2) | † [b] |
| 9 | 3.4 (2.4-4.6) | 4.0 (3.0-5.3) | 4.8 (2.4-9.2) | 6.4 (4.6-8.8) | 3.9 (2.5-6.0) | 3.0 (1.2-6.9) | 3.5 (1.5-7.8) | 1.9 (1.5-2.4) | 1.5 (0.6-3.6) | 4.5 (3.1-6.4) | 9.9 (6.9-14.1) | 10.2 (7.6-13.5) | 9.7 (7.0-13.4) | 7.8 (6.1-10.0) | 5.7 (4.4-7.5) | 4.1 (2.9-5.7) | 3.2 (2.0-5.0) [b] |
| 10 | — | — | — | — | — | — | — | — | — | — | — | 19.3 (15.0-24.4) | 15.2 (11.9-19.2) | 12.5 (9.9-15.7) | 8.1 (6.0-10.7) | 6.3 (4.7-8.4) | 5.0 (3.7-6.7) [b] |
| 11 | 8.0 (6.2-10.3) | 10.7 (8.2-14.0) | 7.2 (4.9-10.5) | 11.5 (8.1-16.0) | 8.4 (6.1-11.5) | 7.6 (4.3-13.1) | 7.2 (5.4-9.6) | 6.5 (5.0-8.4) | 6.4 (5.1-7.9) | 16.6 (11.0-24.1) | 17.0 (14.9-19.2) | 22.7 (17.9-28.3) | 19.2 (14.9-24.5) | 17.4 (14.3-21.0) | 11.1 (8.8-13.9) | 10.9 (8.8-13.5) | 9.3 (6.6-12.9) [b] |
| 12 | — | — | — | — | — | — | — | — | — | — | — | 18.1 (14.1-22.9) | 20.5 (13.9-29.2) | 15.3 (12.3-18.8) | 11.1 (8.7-14.0) | 8.8 (6.7-11.5) | 9.0 (6.7-12.0) [b] |

(Continued….)

| | 1977 | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ($N^1$) | | | | | | | | | | | | **(4447)** | **(3898)** | **(6616)** | **(7726)** | **(6323)** | **(9112)** |
| ($N^2$) | **(3927)** | **(3920)** | **(3010)** | **(3614)** | **(3146)** | **(3376)** | **(3040)** | **(2961)** | **(2617)** | **(2907)** | **(3072)** | **(2421)** | **(2013)** | **(3389)** | **(3969)** | **(3215)** | **(4424)** |
| Region | | | | | | | | | | | | | | | | | |
| Toronto[1] | — | — | — | — | — | — | — | — | — | — | — | **7.4** (5.4-10.0) | **5.3** (2.3-11.7) | **6.3** (4.6-8.5) | **4.0** (2.5-6.4) | **3.7** (2.3-5.8) | **2.7** [b] (1.6-4.7) |
| Toronto[2] | — | — | **3.0** (0.8-10.6) | **4.8** (2.9-7.7) | **6.2** (3.6-10.5) | **1.8** (0.3-9.6) | **3.5** (2.0-6.3) | **2.6** (1.7-4.0) | **0.7** (0.2-3.6) | **5.2** (1.9-13.4) | **4.2** (3.1-5.7) | **6.2** (3.9-9.8) | **6.0** (2.5-13.7) | **4.8** (2.8-8.2) | **3.7** (2.4-5.8) | **2.9** (1.6-5.1) | † |
| North[1] | — | — | — | — | — | — | — | — | — | — | — | **14.4** (11.4-18.0) | **12.3** (9.4-16.0) | **12.2** (9.3-15.8) | **8.6** (6.7-10.9) | **8.4** (6.4-11.1) | **6.4** [b] (4.2-9.7) |
| North[2] | — | — | **3.5** (1.1-10.4) | **5.5** (3.3-9.2) | **4.4** (3.0-6.4) | **4.3** (2.5-7.2) | **4.4** (2.0-9.3) | **2.4** (0.6-9.4) | **7.0** (4.5-10.5) | **15.8** (4.5-42.4) | **8.0** (4.2-14.6) | **11.1** (7.4-16.4) | **12.9** (9.5-17.4) | **13.2** (9.9-17.4) | **7.8** (5.1-11.9) | **7.1** (4.0-12.1) | **4.1** (1.6-9.9) |
| West[1] | — | — | — | — | — | — | — | — | — | — | — | **15.2** (12.6-18.1) | **14.3** (11.8-17.2) | **11.2** (9.2-13.5) | **7.9** (6.0-10.3) | **6.0** (4.5-8.1) | **5.4** [b] (4.0-7.2) |
| West[2] | — | — | **4.6** (2.6-7.9) | **7.4** (5.0-10.8) | **4.2** (2.6-6.8) | **3.7** (2.4-5.6) | **3.8** (2.2-6.4) | **3.1** (2.8-3.4) | **3.3** (2.3-4.7) | **6.9** (4.5-10.5) | **12.1** (9.8-15.0) | **12.9** (8.9-18.2) | **11.5** (8.4-15.5) | **11.1** (8.9-13.8) | **6.5** (4.5-9.5) | **6.1** (4.5-8.2) | **5.5** (3.7-7.9) |
| East[1] | — | — | — | — | — | — | — | — | — | — | — | **12.3** (10.0-15.0) | **10.0** (7.7-12.8) | **10.0** (7.6-13.0) | **6.2** (4.5-8.5) | **5.2** (4.1-6.5) | **5.3** [b] (4.2-6.6) |
| East[2] | — | — | **4.8** (2.9-8.0) | **3.8** (2.5-5.8) | **3.5** (2.6-4.8) | **6.2** (2.7-13.6) | **3.8** (1.7-8.2) | **3.3** (1.9-5.7) | **2.4** (1.6-3.4) | **7.9** (5.6-11.2) | **10.1** (7.7-13.0) | **13.5** (10.0-18.0) | **9.6** (6.5-13.9) | **9.0** (6.2-12.9) | **5.6** (4.1-7.5) | **5.2** (3.8-7.1) | **4.5** (2.8-7.0) |

Notes: (1) based on Grades 7-12 (full sample); (2) based on Grades 7, 9, and 11 only (long-term sample); (3) entries in brackets are 95% confidence intervals; (4) regional stratification differed in 1977 and 1979 and therefore regions are not presented; (5)† estimate suppressed or less than 0.5%; (6) [a] 2009 vs. 2007 significant difference, p<.01; [b] 2009 vs. 1999 significant difference, p<.01; [d] significant long-term non-linear trend, p<.01.

Q: In the last 12 months, how often did you use hallucinogens, other than LSD or PCP (such as mescaline or psilocybin, also known as “magic mushrooms”, “shrooms”, “mesc”, etc.)?

Source: OSDUHS, Centre for Addiction & Mental Health

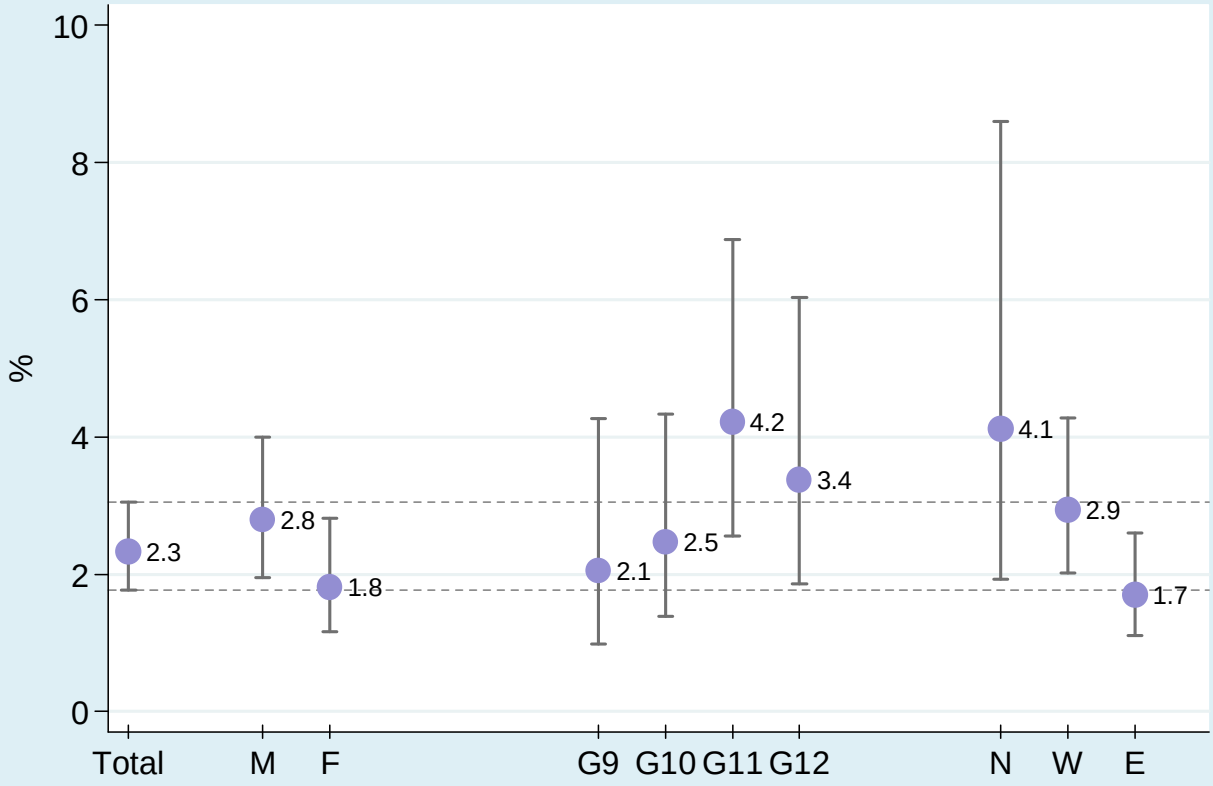
## Past Year Use of Jimson Weed

(Figure 3.6.7)

Jimson weed (also known as "stinkweed" or "locoweed") is a legal, yet poisonous plant with hallucinogenic properties. Users can ingest the seeds, brew the leaves as tea, or smoke the dried leaves. The use of jimson weed was first surveyed in 2007. The question used was "*In the last 12 months, how often did you use jimson weed (also known as 'locoweed', 'stinkweed', 'mad apple')*?"

| | Jimson Weed Use in 2009 (Grades 7 to 12) | Changes in Jimson Weed Use, 2009 vs. 2007 |
|---|---|---|
| Total Sample | ■ Overall, 2.3% (range: 1.8%-3.1%) of students report using jimson weed during the past year. This represents about 22,600 Ontario students in grades 7 to 12. | ☐ The 2009 (2.3%) estimate for jimson weed use is not significantly different from that found in 2007 (2.6%, range: 1.9%-3.4%). |
| Sex | ■ There is no significant difference in use between males (2.8%) and females (1.8%). | ☐ Use did not significantly change among males or females between 2007 and 2009. |
| Grade | ■ There is significant grade variation, showing that students in grade 11 (4.2%) and grade 12 (3.4%) most likely to use jimson weed compared to younger students. | ☐ No grade shows a significant change in jimson weed use between 2007 and 2009. |
| Region | ■ Despite some variation, there are no significant differences in jimson weed use among the regions. | ☐ No region shows a significant change in jimson weed use. |
| Frequent Use | ■ Use of jimson weed 6 or more times in the past year is reported by less than 1% of all students (see Figure 3.1.2).<br>■ The majority (54%) of jimson weed users report using once or twice in the past year (see Figure 3.1.3). | |

Figure 3.6.7
Past Year Jimson Weed Use by Sex, Grade and Region, 2009 OSDUHS




Vertical bars represent 95% confidence intervals; horizontal bar represents 95% CI for total estimate; estimates for grade 7, grade 8, and Toronto were suppressed

## Past Year Use of Salvia Divinorum

(Figure 3.6.8)

Salvia divinorum is a legal plant, which can be purchased online or in "head shops," that causes hallucinations and delusions. This drug can be ingested by chewing the fresh leaves, drinking their extracted juices, or smoking the dried leaves. For the first time in 2009, students were asked about their use of this drug with the question: "*In the last 12 months, how often did you use salvia divinorum (also known as 'sally-D', 'magic mint', 'sadi')?"*

*2009: Grades 7 to 12*

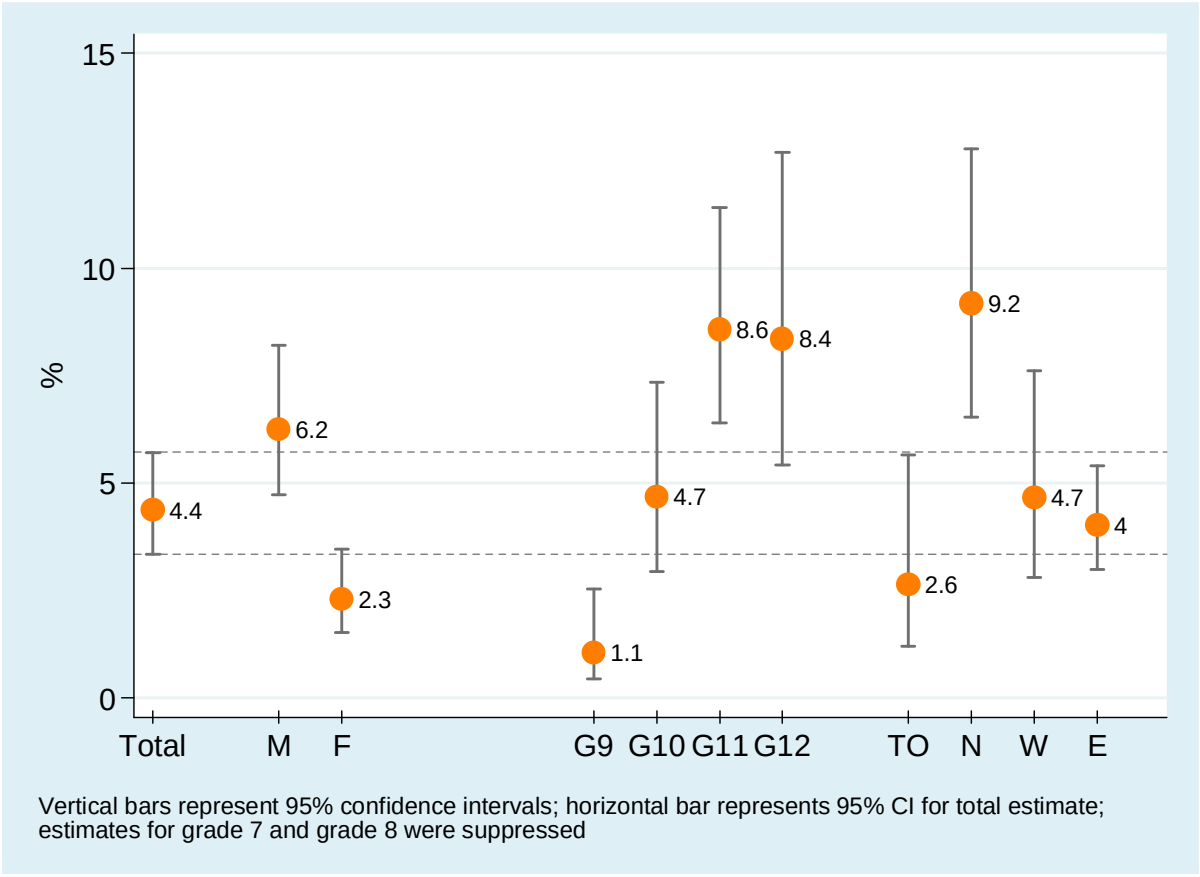
- Among all students in 2009, 4.4% (range: 3.3%-5.7%) report using salvia divinorum at least once in the past year. This percentage represents about 42,600 students in Ontario.

- Males (6.2%) are significantly more likely than females (2.3%) to use salvia divinorum.

- There is significant grade variation, with salvia use most likely among 11th-graders (8.6%) and 12th-graders (8.4%).

- There is significant regional variation, with students in the North (9.2%) most likely to use salvia.

Figure 3.6.8
Past Year Salvia Divinorum Use by Sex, Grade and Region, 2009 OSDUHS



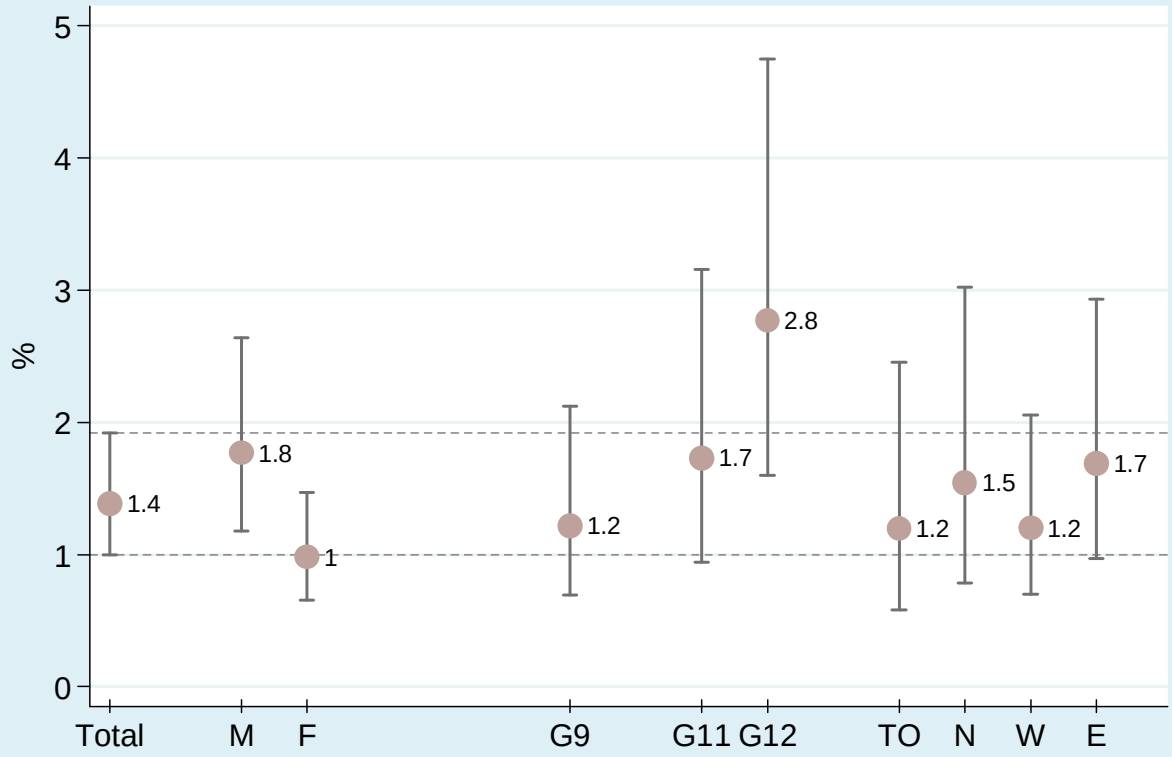

Vertical bars represent 95% confidence intervals; horizontal bar represents 95% CI for total estimate; estimates for grade 7 and grade 8 were suppressed

## Past Year Use of Methamphetamine ("Speed")

(Figures 3.6.9, 3.6.10; Table 3.6.6)

| | Methamphetamine Use in 2009 (Grades 7 to 12) | Trends in Methamphetamine Use |
|---|---|---|
| Total Sample | ■ Overall, 1.4% of students report using methamphetamine at least once during the 12 months before the survey. We estimate that between 1.0% and 1.9% of Ontario students use methamphetamine. The percentage of 1.4% represents about 14,200 students in grades 7 to 12. | ☐ Methamphetamine use did not change between 2009 (1.4%) and 2007 (1.4%). However, use is currently lower in 2009 than in 1999 (5.0%).<br><br>☐ Over the long-term, methamphetamine use was elevated in 1979, decreased in the late 1980s, peaked again in the late 1990s, and has subsequently declined (among students in grades 7, 9, and 11). |
| Sex | ■ Males (1.8%) are more likely than females (1.0%) to report methamphetamine use. | ☐ Methamphetamine use among males and females did not change since 2007. However, both sexes show a significant decline in 2009 compared to their respective 1999 estimates. |
| Grade | ■ There is significant grade variation, with methamphetamine use most likely among 12th-graders (2.8%). | ☐ None of the grades shows a significant change in 2009 compared to 2007. However, all of the grades show a significant decline compared to their respective 1999 estimates. |
| Region | ■ There is no significant regional variation in methamphetamine use. | ☐ No region shows a significant change since 2007. However, students in all regions, show declines compared to their respective 1999 estimates. |
| Frequent Use | ■ The majority (52%) of users report using once or twice in the past year (see Figure 3.1.3). | |

Figure 3.6.9
Past Year Methamphetamine (“Speed”) Use by Sex, Grade and Region, 2009 OSDUHS




Vertical bars represent 95% confidence intervals; horizontal bar represents 95% CI for total estimate; estimates for grade 7, grade 8, and grade 10 were suppressed

Figure 3.6.10
Past Year Methamphetamine (“Speed”) Use, 1977–2009 OSDUHS (Grades 7, 9, 11 only)

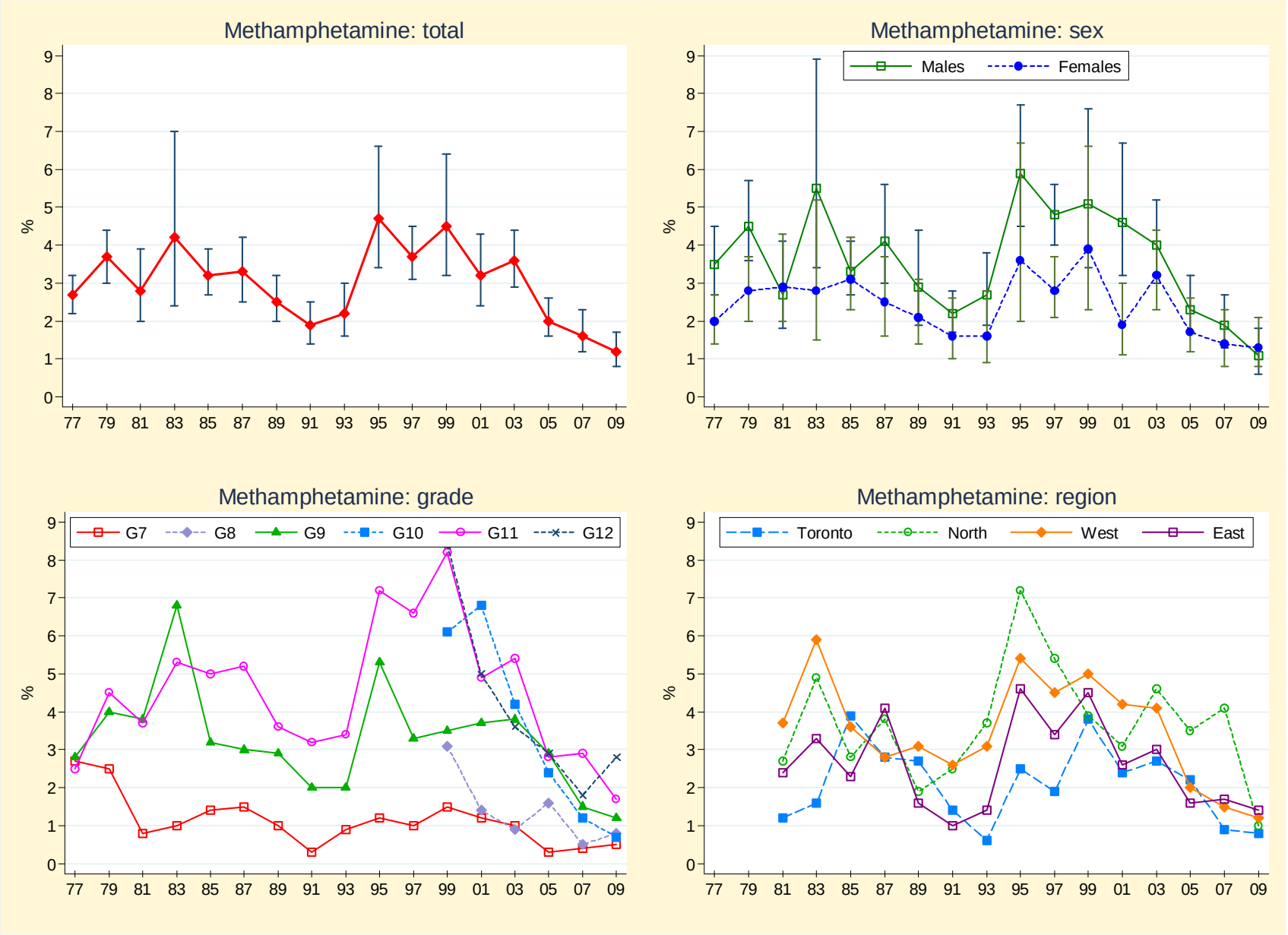


Table 3.6.6: Percentage Reporting Methamphetamine (“Speed”) Use During the Past Year, 1977–2009

| | 1977 | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N[1]) | | | | | | | | | | | | (4447) | (3898) | (6616) | (7726) | (6323) | (9112) | |
| (N[2]) | (3927) | (3920) | (3010) | (3614) | (3146) | (3376) | (3040) | (2961) | (2617) | (2907) | (3072) | (2421) | (2013) | (3389) | (3969) | (3215) | (4424) | |
| Total[1] (95% CI) | — | — | — | — | — | — | — | — | — | — | — | 5.0 (4.1-6.2) | 3.9 (3.1-4.9) | 3.3 (2.8-4.0) | 2.2 (1.8-2.6) | 1.4 (1.1-1.9) | 1.4 (1.0-1.9) | b |
| Total[2] | 2.7 (2.2-3.2) | 3.7 (3.0-4.4) | 2.8 (2.0-3.9) | 4.2 (2.4-7.0) | 3.2 (2.7-3.9) | 3.3 (2.5-4.2) | 2.5 (2.0-3.2) | 1.9 (1.4-2.5) | 2.2 (1.6-3.0) | 4.7 (3.4-6.6) | 3.7 (3.1-4.5) | 4.5 (3.2-6.4) | 3.2 (2.4-4.3) | 3.6 (2.9-4.4) | 2.0 (1.6-2.6) | 1.6 (1.2-2.3) | 1.2 (0.8-1.7) | cd |
| Sex | | | | | | | | | | | | | | | | | | |
| Males[1] | — | — | — | — | — | — | — | — | — | — | — | 6.2 (4.9-7.8) | 5.1 (3.9-6.6) | 3.8 (3.1-4.6) | 2.6 (2.1-3.3) | 1.5 (1.1-2.0) | 1.8 (1.2-2.6) | b |
| Males[2] | 3.5 (2.7-4.5) | 4.5 (3.6-5.7) | 2.7 (1.8-4.1) | 5.5 (3.4-8.9) | 3.3 (2.7-4.1) | 4.1 (3.0-5.6) | 2.9 (1.9-4.4) | 2.2 (1.7-2.8) | 2.7 (1.9-3.8) | 5.9 (4.5-7.7) | 4.8 (4.0-5.6) | 5.1 (3.4-7.6) | 4.6 (3.2-6.7) | 4.0 (3.0-5.2) | 2.3 (1.7-3.2) | 1.9 (1.3-2.7) | 1.1 (0.6-1.8) | |
| Females[1] | — | — | — | — | — | — | — | — | — | — | — | 3.9 (2.7-5.6) | 2.8 (1.9-4.3) | 2.9 (2.2-3.8) | 1.7 (1.3-2.2) | 1.4 (1.0-2.0) | 1.0 (0.6-1.5) | b |
| Females[2] | 2.0 (1.4-2.7) | 2.8 (2.0-3.7) | 2.9 (2.0-4.3) | 2.8 (1.5-5.2) | 3.1 (2.3-4.2) | 2.5 (1.6-3.7) | 2.1 (1.4-3.1) | 1.6 (1.0-2.6) | 1.6 (0.9-2.8) | 3.6 (2.0-6.7) | 2.8 (2.1-3.7) | 3.9 (2.3-6.6) | 1.9 (1.1-3.0) | 3.2 (2.3-4.4) | 1.7 (1.2-2.6) | 1.4 (0.8-2.3) | 1.3 (0.8-2.1) | |
| Grade | | | | | | | | | | | | | | | | | | |
| 7 | 2.7 (2.1-3.4) | 2.5 (1.6-3.8) | 0.8 (0.4-1.7) | 1.0 (0.6-1.8) | 1.4 (1.0-2.0) | 1.5 (0.8-2.8) | 1.0 (0.6-1.6) | † | 0.9 (0.4-2.4) | 1.2 (0.5-3.2) | 1.0 (0.4-2.8) | 1.5 (0.8-2.8) | 1.2 (0.6-2.4) | 1.0 (0.5-1.8) | † | † | † | b |
| 8 | — | — | — | — | — | — | — | — | — | — | — | 3.1 (1.8-5.3) | 1.4 (0.6-3.2) | 0.9 (0.5-1.6) | 1.6 (0.8-3.2) | † | † | b |
| 9 | 2.8 (2.1-3.8) | 4.0 (3.0-5.3) | 3.8 (2.1-6.7) | 6.8 (2.7-16.2) | 3.2 (2.6-4.0) | 3.0 (1.9-4.6) | 2.9 (2.0-4.3) | 2.0 (1.4-2.7) | 2.0 (1.0-3.8) | 5.3 (2.5-10.9) | 3.3 (2.7-4.1) | 3.5 (2.5-5.0) | 3.7 (2.6-5.2) | 3.8 (2.8-5.2) | 2.9 (2.0-4.1) | 1.5 (0.7-2.9) | 1.2 (0.7-2.1) | b |
| 10 | — | — | — | — | — | — | — | — | — | — | — | 6.1 (4.0-9.2) | 6.8 (4.6-9.9) | 4.2 (2.8-6.2) | 2.4 (1.6-3.5) | 1.2 (0.7-2.0) | † | b |
| 11 | 2.5 (1.6-4.0) | 4.5 (3.4-5.9) | 3.7 (2.6-5.2) | 5.3 (3.8-7.0) | 5.0 (3.6-7.0) | 5.2 (3.5-7.7) | 3.6 (2.7-4.8) | 3.2 (2.1-4.8) | 3.4 (2.4-4.6) | 7.2 (5.6-9.2) | 6.6 (5.2-8.2) | 8.2 (5.2-12.7) | 4.9 (2.9-8.2) | 5.4 (4.0-7.3) | 2.8 (2.0-4.0) | 2.9 (2.0-4.2) | 1.7 (0.9-3.2) | b |
| 12 | — | — | — | — | — | — | — | — | — | — | — | 8.4 (5.7-12.3) | 5.0 (3.2-7.8) | 3.6 (2.6-5.0) | 2.9 (2.1-4.1) | 1.8 (1.1-3.0) | 2.8 (1.6-4.8) | b |

(Continued…)

| | 1977 | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N[1]) | | | | | | | | | | | | (4447) | (3898) | (6616) | (7726) | (6323) | (9112) |
| (N[2]) | (3927) | (3920) | (3010) | (3614) | (3146) | (3376) | (3040) | (2961) | (2617) | (2907) | (3072) | (2421) | (2013) | (3389) | (3969) | (3215) | (4424) |
| Region | | | | | | | | | | | | | | | | | |
| Toronto[1] | — | — | — | — | — | — | — | — | — | — | — | **4.0** (2.8-5.7) | **2.0** (0.8-4.6) | **2.3** (1.4-3.8) | **2.3** (1.5-3.5) | † | **1.2** [b] (0.6-2.4) |
| Toronto[2] | — | — | **1.2** (0.5-3.1) | **1.6** (0.7-3.8) | **3.9** (2.4-6.4) | **2.8** (2.0-4.1) | **2.7** (1.6-4.5) | **1.4** (0.8-2.7) | **0.6** (0.2-1.9) | **2.5** (1.7-3.6) | **1.9** (1.0-3.6) | **3.8** (2.2-6.4) | **2.4** (1.2-4.8) | **2.7** (1.4-5.2) | **2.2** (1.1-4.3) | † | † |
| North[1] | — | — | — | — | — | — | — | — | — | — | — | **5.0** (3.6-7.0) | **4.4** (2.6-7.3) | **4.5** (3.1-6.4) | **2.8** (1.9-4.0) | **3.6** (1.6-7.7) | **1.5** [b] (0.8-3.0) |
| North[2] | — | — | **2.7** (1.9-4.0) | **4.9** (2.6-9.1) | **2.8** (2.6-3.1) | **3.8** (2.4-5.9) | **1.9** (0.6-6.2) | **2.5** (1.8-3.6) | **3.7** (1.3-9.9) | **7.2** (2.9-16.8) | **5.4** (2.8-10.1) | **3.9** (2.3-6.4) | **3.1** (1.6-5.8) | **4.6** (2.3-9.1) | **3.5** (2.2-5.6) | **4.1** (1.5-10.7) | † |
| West[1] | — | — | — | — | — | — | — | — | — | — | — | **6.0** (4.2-8.5) | **5.2** (3.9-6.9) | **3.5** (2.6-4.7) | **2.3** (1.8-3.1) | **1.2** (0.8-1.9) | **1.2** [b] (0.7-2.0) |
| West[2] | — | — | **3.7** (2.3-6.0) | **5.9** (2.4-13.9) | **3.6** (2.7-4.7) | **2.8** (1.7-4.6) | **3.1** (2.3-4.2) | **2.6** (1.7-3.9) | **3.1** (2.3-4.3) | **5.4** (3.0-9.6) | **4.5** (3.5-5.8) | **5.0** (2.6-9.3) | **4.2** (2.9-6.2) | **4.1** (3.0-5.6) | **2.0** (1.4-3.0) | **1.5** (1.0-2.3) | **1.2** (0.6-2.4) |
| East[1] | — | — | — | — | — | — | — | — | — | — | — | **4.3** (3.2-6.0) | **3.2** (1.9-5.4) | **3.3** (2.3-4.7) | **1.8** (1.3-2.6) | **1.7** (1.1-2.7) | **1.7** [b] (1.0-2.9) |
| East[2] | — | — | **2.4** (1.7-3.3) | **3.3** (2.2-4.9) | **2.3** (1.7-3.1) | **4.1** (2.6-6.4) | **1.6** (0.9-2.7) | **1.0** (0.6-1.7) | **1.4** (0.5-3.8) | **4.6** (3.0-6.9) | **3.4** (2.6-4.3) | **4.5** (2.7-7.4) | **2.6** (1.2-5.3) | **3.0** (2.1-4.3) | **1.6** (1.0-2.7) | **1.7** (0.9-3.3) | **1.4** (0.8-2.3) |

Notes: (1) based on Grades 7-12 (full sample); (2) based on Grades 7, 9, and 11 only (long-term sample); (3) entries in brackets are 95% confidence intervals; (4) regional stratification differed in 1977 and 1979 and therefore regions are not presented; (5) † estimate suppressed due to unreliability; (6) no significant differences 2009 vs. 2007; [b] 2009 vs. 1999 significant difference, p<.01; [c] significant long-term linear trend, p<.01; [d] significant long-term non-linear trend, p<.01.

Q: In the last 12 months, how often did you use methamphetamine or "speed"?

Source: OSDUHS, Centre for Addiction & Mental Health

## Past Year Use of Crystal Methamphetamine ("Ice")

(Figure 3.6.11; Table 3.6.7)

"Ice" or crystal methamphetamine comes in crystallized form, resembling pieces of ice, and can be smoked, snorted, taken orally, or injected. Ice made its first appearance in Canada in 1989. The use of Ice among students was first surveyed in 1991.

| | Ice Use in 2009 (Grades 7 to 12) | Trends in Ice Use |
|---|---|---|
| Total Sample | ■ In 2009, 0.5% of students in grades 7 to 12 report using crystal methamphetamine (Ice) at least once during the past year. This represents about 5,200 students in Ontario. | ☐ Ice use has not significantly changed over the past decade. The annual prevalence has hovered around 1% or less between 1999 and 2009.<br><br>☐ Similarly, the use of Ice has not changed over the long-term, remaining under 2% (among grades 7, 9, 11) since 1991. |
| Sex | ■ Males (0.6%) and females (0.5%) are equally likely to report Ice use. | ☐ Neither males nor females show a significant change in Ice use over time. |
| Grade | ■ No significant grade differences exist for Ice use, as use is reported by a very small proportion in each grade. | ☐ There is no significant change in Ice use over time among any of the grades. |
| Region | ■ No significant regional differences exist, as use is very uncommon in all regions. | ☐ Despite some fluctuation, there has been no significant change in Ice use over time within any of the regions. |

Figure 3.6.11
Past Year Crystal Methamphetamine (“Ice”) Use, 1991–2009 OSDUHS
(Grades 7, 9, 11 only)

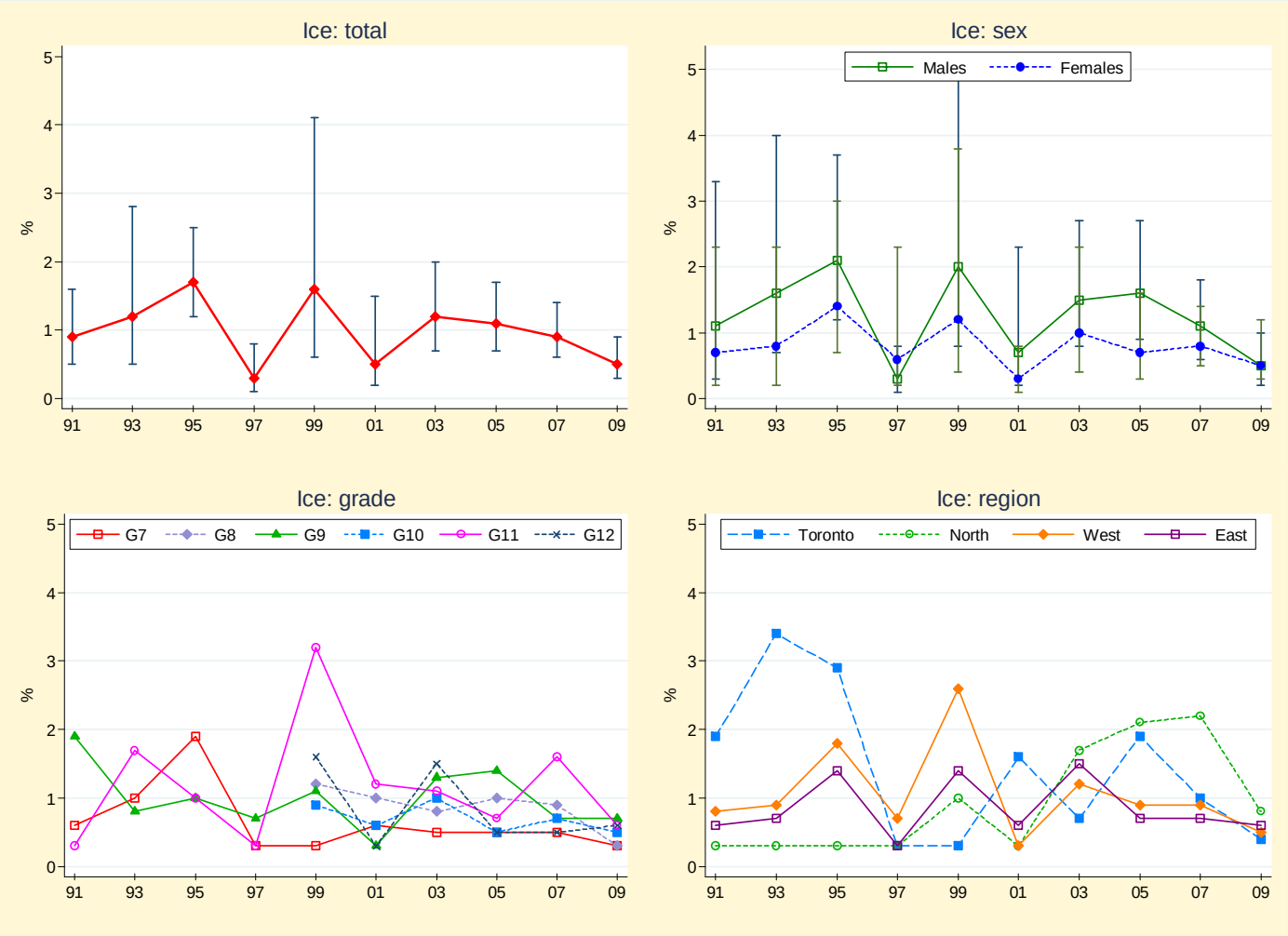


Table 3.6.7: Percentage Reporting Crystal Methamphetamine ("Ice") Use During the Past Year, 1991–2009

| | 1991 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|
| (N[1]) | | | | | (2299) | (2061) | (3152) | (3648) | (6323) | (9112) |
| (N[2]) | (1405) | (1376) | (1454) | (1545) | (1253) | (1060) | (1618) | (1862) | (3215) | (4424) |
| Total[1] (95% CI) | — | — | — | — | **1.4** (0.8-2.7) | **0.6** (0.3-1.1) | **1.2** (0.8-1.7) | **0.9** (0.6-1.3) | **0.8** (0.6-1.1) | **0.5** (0.4-0.7) |
| Total[2] | **0.9** (0.5-1.6) | **1.2** (0.5-2.8) | **1.7** (1.2-2.5) | † | **1.6** (0.6-4.1) | **0.5** (0.2-1.5) | **1.2** (0.7-2.0) | **1.1** (0.7-1.7) | **0.9** (0.6-1.4) | **0.5** (0.3-0.9) |
| Sex | | | | | | | | | | |
| Males[1] | — | — | — | — | **1.9** (1.0-3.6) | **0.6** (0.3-1.5) | **1.3** (0.8-2.1) | **1.2** (0.8-2.0) | **0.8** (0.5-1.3) | **0.6** (0.3-0.9) |
| Males[2] | **1.1** (0.3-3.3) | **1.6** (0.7-4.0) | **2.1** (1.2-3.7) | † | **2.0** (0.8-5.2) | **0.7** (0.2-2.3) | **1.5** (0.8-2.7) | **1.6** (0.9-2.7) | **1.1** (0.6-1.8) | **0.5** (0.2-1.0) |
| Females[1] | — | — | — | — | **0.9** (0.4-2.3) | **0.5** (0.2-1.5) | **1.0** (0.6-1.8) | **0.5** (0.2-0.9) | **0.8** (0.5-1.3) | **0.5** (0.3-0.8) |
| Females[2] | **0.7** (0.2-2.3) | **0.8** (0.2-2.3) | **1.4** (0.7-3.0) | **0.6** (0.2-2.3) | **1.2** (0.4-3.8) | † | **1.0** (0.4-2.3) | **0.7** (0.3-1.6) | **0.8** (0.5-1.4) | **0.5** (0.3-1.2) |
| Grade | | | | | | | | | | |
| 7 | **0.6** (0.3-1.2) | **1.0** (0.2-4.8) | **1.9** (1.0-4.4) | † | † | **0.6** (0.1-2.8) | † | † | † | † |
| 8 | — | — | — | — | **1.2** (0.5-3.0) | **1.0** (0.3-3.3) | **0.8** (0.3-2.2) | **1.0** (0.3-3.6) | † | † |
| 9 | **1.9** (0.7-5.4) | **0.8** (0.2-3.8) | **1.0** (0.7-3.2) | **0.7** | **1.1** (0.4-3.3) | † | **1.3** (0.6-2.9) | **1.4** (0.8-2.6) | **0.7** (0.4-1.5) | † |
| 10 | — | — | — | — | **0.9** (0.3-2.5) | **0.6** (0.2-2.2) | **1.0** (0.4-2.8) | **0.5** (0.2-1.6) | **0.7** (0.4-1.5) | † |
| 11 | † | **1.7** (0.5-6.2) | **1.0** (0.4-2.4) | † | **3.2** (0.8-1.8) | **1.2** (0.3-4.5) | **1.1** (0.4-2.8) | **0.7** (0.2-1.7) | **1.6** (1.0-2.6) | † |
| 12 | — | — | — | — | **1.6** (0.6-4.1) | † | **1.5** (0.7-3.2) | **0.5** (0.2-1.8) | **0.5** (0.2-1.1) | † |
| Region | | | | | | | | | | |
| Toronto[1] | — | — | — | — | † | **1.1** (0.3-3.8) | **0.8** (0.2-2.7) | **1.6** (0.8-3.2) | † | † |
| Toronto[2] | **1.9** (0.9-3.8) | **3.4** (0.8-13.5) | **2.9** (2.0-4.4) | † | † | **1.6** (0.4-5.4) | **0.7** (0.1-3.2) | **1.9** (0.9-3.9) | † | † |
| North[1] | — | — | — | — | **1.1** (0.4-2.6) | † | **1.2** (0.6-2.2) | **1.2** (0.5-2.8) | **1.2** (0.6-2.6) | † |
| North[2] | † | † | † | † | **1.0** (0.3-3.9) | † | **1.7** (0.7-4.0) | **2.1** (0.8-5.4) | **2.2** (1.0-4.9) | † |
| West[1] | — | — | — | — | **2.2** (0.9-5.2) | **0.5** (0.2-1.3) | **1.3** (0.7-2.2) | **0.9** (0.5-1.6) | **1.0** (0.6-1.5) | † |
| West[2] | **0.8** (0.3-2.3) | **0.9** (0.4-1.7) | **1.8** (1.0-3.0) | **0.7** (0.2-2.4) | **2.6** (0.7-9.2) | † | **1.2** (0.5-2.5) | **0.9** (0.4-2.0) | **0.9** (0.5-1.7) | † |
| East[1] | — | — | — | — | **1.2** (0.4-3.2) | **0.6** (0.1-2.2) | **1.2** (0.6-2.4) | † | † | † |
| East[2] | **0.6** (0.1-3.5) | **0.7** (0.1-5.6) | **1.4** (0.6-3.7) | † | **1.4** (0.4-5.3) | **0.6** (0.1-3.9) | **1.5** (0.6-3.6) | **0.7** (0.2-2.3) | † | † |

Notes: (1) based on Grades 7-12 (full sample); (2) based on Grades 7, 9, and 11 only (long-term sample); (3) entries in brackets are 95% confidence intervals; (4) based on a random half-sample between 1991 and 2005; (5) † estimate suppressed due to unreliability; (6) no significant changes over time.

Q: In the last 12 months, how often did you use "Ice", the crystallized form of methamphetamine (also known as "crystal meth", "crank")?

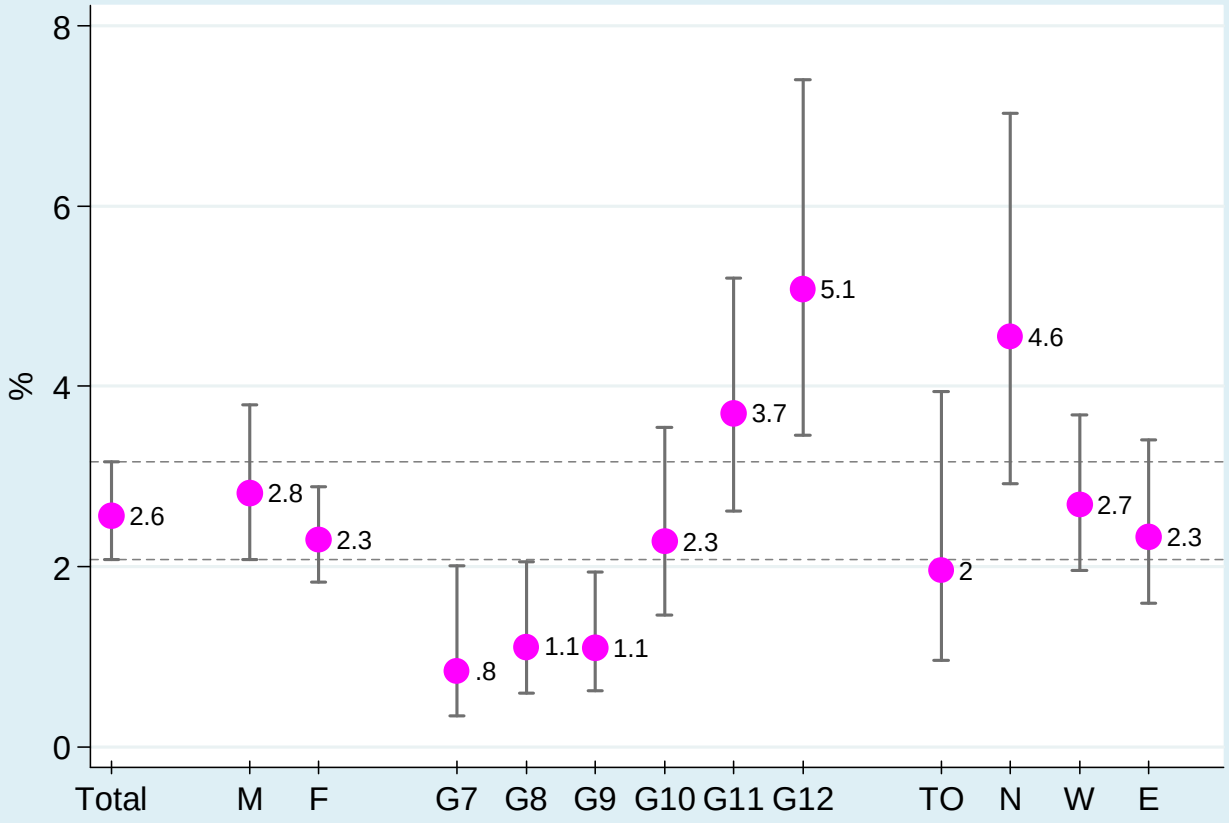
Source: OSDUHS, Centre for Addiction & Mental Health

## Past Year Use of Cocaine

(Figures 3.6.12, 3.6.13; Table 3.6.8)

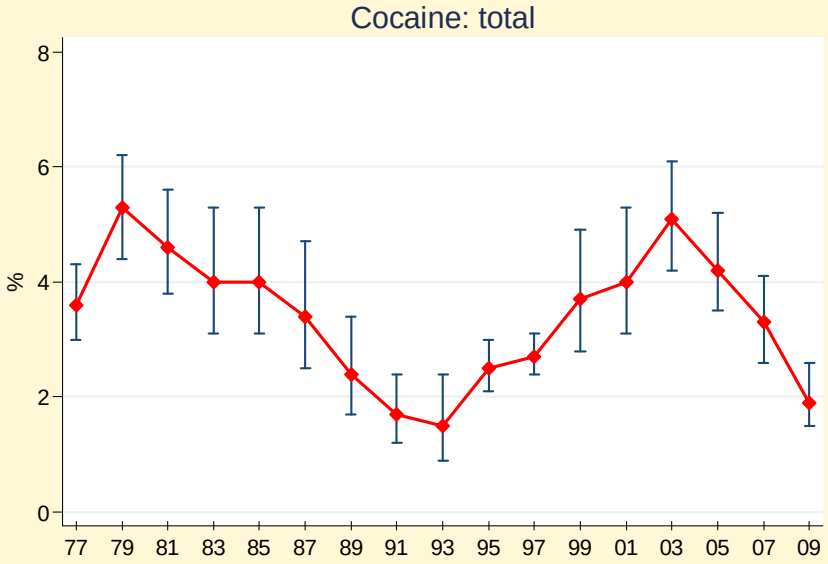
| | Cocaine Use in 2009 (Grades 7 to 12) | Trends in Cocaine Use |
|---|---|---|
| Total Sample | ■ Overall, 2.6% of students report using cocaine at least once during the 12 months before the survey. We project that between 2.1% and 3.2% of all Ontario students use cocaine. The 2.6% estimate represents about 26,200 students in grades 7 to 12. | ☐ Cocaine use did not significantly change between 2007 (3.4%) and 2009 (2.6%). There was a significant increase between 1999 (3.4%) and 2003 (4.8%), but the level has since dropped back down.<br><br>☐ Over the long-term (among grades 7, 9, and 11 only), cocaine use was highest in 1979, and then gradually decreased over the 1980s and early 1990s. Use began a significant upswing in 1993, peaking again in 2003, and has subsequently declined. The current estimate of use is lower than the peak years of 1979 and 2003. |
| Sex | ■ Cocaine use does not significantly differ between males (2.8%) and females (2.3%). | ☐ Neither males nor females show a significant change in cocaine use between 2007 and 2009. However, both sexes show a significant decline compared to their respective 2003 estimates.<br><br>☐ Over the long-term, cocaine use among both sexes decreased during the 1980s, increased between 1993 and 2003, and has subsequently decreased. |
| Grade | ■ Cocaine use significantly varies by grade. Use is lowest among grades 7 to 9 (about 1%), and highest among 12$^{th}$-graders (5.1%). | ☐ Most of the grades show a significant decrease in cocaine use since 2003. |
| Region | ■ Despite some variation, there are no significant differences among the regions. | ☐ Cocaine use peaked in the West region in 2005 (6.2%), decreased in 2007 and has remained stable since then. No other region showed a significant change. |
| Frequent Use | ■ Use of cocaine 6 or more times over the past year is reported by less than 1% of all students (see Figure 3.1.2). Almost half (46%) of cocaine users report using once or twice during the past year, while one-fifth (22%) report using ten or more times (see Figure 3.1.3). | |

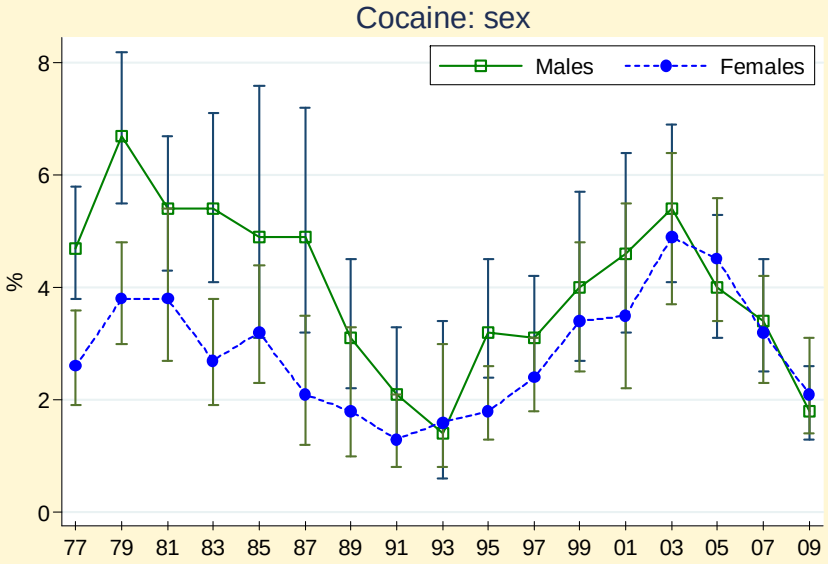
Figure 3.6.12
Past Year Cocaine Use by Sex, Grade and Region, 2009 OSDUHS

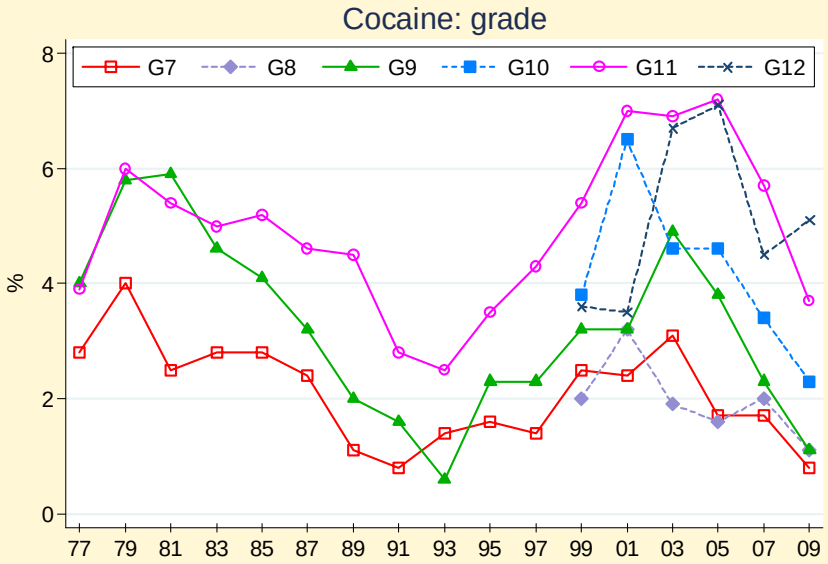



Vertical bars represent 95% confidence intervals; horizontal bar represents 95% CI for total estimate

Figure 3.6.13
Past Year Cocaine Use, 1977–2009 OSDUHS (Grades 7, 9, 11 only)



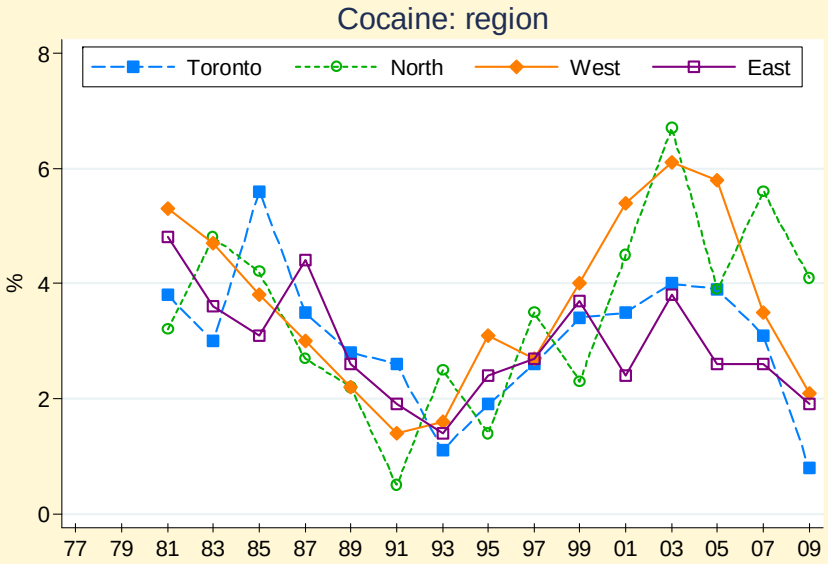



Table 3.6.8: Percentage Reporting Cocaine Use During the Past Year, 1977–2009

| | 1977 | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N[1]) | | | | | | | | | | | | (4447) | (3898) | (6616) | (7726) | (6323) | (9112) |
| (N[2]) | (3927) | (3920) | (3010) | (3614) | (3146) | (3376) | (3040) | (2961) | (2617) | (2907) | (3072) | (2421) | (2013) | (3389) | (3969) | (3215) | (4424) |
| Total[1] (95% CI) | — | — | — | — | — | — | — | — | — | — | — | 3.4 (2.8-4.2) | 4.4 (3.6-5.4) | 4.8 (4.2-5.5) | 4.4 (3.7-5.2) | 3.4 (2.8-3.9) | 2.6 (2.1-3.2) |
| Total[2] | 3.6 (3.0-4.3) | 5.3 (4.4-6.2) | 4.6 (3.8-5.6) | 4.0 (3.1-5.3) | 4.0 (3.1-5.3) | 3.4 (2.5-4.7) | 2.4 (1.7-3.4) | 1.7 (1.2-2.4) | 1.5 (0.9-2.4) | 2.5 (2.1-3.0) | 2.7 (2.4-3.1) | 3.7 (2.8-4.9) | 4.0 (3.1-5.3) | 5.1 (4.2-6.1) | 4.2 (3.5-5.2) | 3.3 (2.6-4.1) | 1.9 (1.5-2.6) [cd] |
| Sex | | | | | | | | | | | | | | | | | |
| Males[1] | — | — | — | — | — | — | — | — | — | — | — | 3.8 (3.0-4.9) | 4.6 (3.6-5.9) | 5.4 (4.4-6.5) | 4.5 (3.7-5.5) | 3.6 (2.9-4.4) | 2.8 (2.1-3.8) |
| Males[2] | 4.7 (3.8-5.8) | 6.7 (5.5-8.2) | 5.4 (4.3-6.7) | 5.4 (4.1-7.1) | 4.9 (3.1-7.6) | 4.9 (3.2-7.2) | 3.1 (2.2-4.5) | 2.1 (1.3-3.3) | 1.4 (0.6-3.4) | 3.2 (2.4-4.5) | 3.1 (2.4-4.2) | 4.0 (2.7-5.7) | 4.6 (3.2-6.4) | 5.4 (4.1-6.9) | 4.0 (3.1-5.3) | 3.4 (2.5-4.5) | 1.8 (1.2-2.6) |
| Females[1] | — | — | — | — | — | — | — | — | — | — | — | 3.0 (2.4-3.9) | 4.2 (3.1-5.6) | 4.3 (3.5-5.2) | 4.3 (3.4-5.4) | 3.1 (2.5-3.8) | 2.3 (1.8-2.9) |
| Females[2] | 2.6 (1.9-3.6) | 3.8 (3.0-4.8) | 3.8 (2.7-5.4) | 2.7 (1.9-3.8) | 3.2 (2.3-4.4) | 2.1 (1.2-3.5) | 1.8 (1.0-3.3) | 1.3 (0.8-2.1) | 1.6 (0.8-3.0) | 1.8 (1.3-2.6) | 2.4 (1.8-3.1) | 3.4 (2.5-4.8) | 3.5 (2.2-5.5) | 4.9 (3.7-6.4) | 4.5 (3.4-5.8) | 3.2 (2.4-4.2) | 2.1 (1.4-3.1) |
| Grade | | | | | | | | | | | | | | | | | |
| 7 | 2.8 (2.0-3.9) | 4.0 (2.8-5.5) | 2.5 (1.8-3.3) | 2.8 (1.7-4.5) | 2.8 (1.2-6.2) | 2.4 (1.7-3.2) | 1.1 (0.6-1.8) | 0.8 (0.2-2.9) | 1.4 (0.6-3.4) | 1.6 (1.2-2.3) | 1.4 (1.0-2.0) | 2.5 (1.4-4.3) | 2.4 (1.3-4.1) | 3.1 (2.0-5.0) | 1.7 (1.0-2.8) | 1.7 (0.9-3.2) | 0.8 (0.3-2.0) |
| 8 | — | — | — | — | — | — | — | — | — | — | — | 2.0 (1.1-3.6) | 3.2 (2.0-5.1) | 1.9 (1.1-3.1) | 1.7 (1.0-2.7) | 2.0 (1.0-3.8) | 1.1 (0.6-2.0) |
| 9 | 4.0 (3.1-5.3) | 5.8 (4.3-7.6) | 5.9 (4.6-7.6) | 4.6 (3.0-7.1) | 4.1 (2.6-6.5) | 3.2 (1.6-6.6) | 2.0 (1.0-3.7) | 1.6 (1.0-2.5) | 0.6 (0.3-1.1) | 2.3 (1.5-3.5) | 2.3 (2.0-2.7) | 3.2 (2.1-4.7) | 3.2 (2.0-5.2) | 4.9 (3.6-6.8) | 3.8 (2.8-5.1) | 2.3 (1.6-3.5) | 1.1 (0.6-1.9) |
| 10 | — | — | — | — | — | — | — | — | — | — | — | 3.8 (2.4-5.9) | 6.5 (4.4-9.6) | 4.6 (3.3-6.2) | 4.6 (3.4-6.2) | 3.4 (2.4-4.8) | 2.3 (1.4-3.5) |
| 11 | 3.9 (2.8-5.6) | 6.0 (4.6-7.8) | 5.4 (3.7-7.9) | 5.0 (3.1-8.1) | 5.2 (3.8-6.9) | 4.6 (2.9-7.3) | 4.5 (2.9-6.9) | 2.8 (1.7-4.4) | 2.5 (1.3-4.8) | 3.5 (2.7-4.5) | 4.3 (3.6-5.1) | 5.4 (3.4-8.4) | 7.0 (4.4-10.9) | 6.9 (5.1-9.2) | 7.2 (5.6-9.2) | 5.7 (4.3-7.6) | 3.7 (2.6-5.2) |
| 12 | — | — | — | — | — | — | — | — | — | — | — | 3.6 (2.3-5.7) | 3.5 (1.9-6.2) | 6.7 (5.1-8.8) | 7.1 (5.1-9.7) | 4.5 (3.3-6.1) | 5.1 (3.5-7.4) |

(Continued…)

| | 1977 | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N[1]) | | | | | | | | | | | | (4447) | (3898) | (6616) | (7726) | (6323) | (9112) |
| (N[2]) | (3927) | (3920) | (3010) | (3614) | (3146) | (3376) | (3040) | (2961) | (2617) | (2907) | (3072) | (2421) | (2013) | (3389) | (3969) | (3215) | (4424) |
| Region | | | | | | | | | | | | | | | | | |
| Toronto[1] | — | — | — | — | — | — | — | — | — | — | — | **3.5** (2.1-5.6) | **2.6** (1.4-4.8) | **4.6** (3.2-6.7) | **3.3** (2.2-4.8) | **3.2** (2.2-4.7) | **2.0** (1.0-3.9) |
| Toronto[2] | — | — | **3.8** (1.7-8.1) | **3.0** (1.7-5.3) | **5.6** (3.8-8.1) | **3.5** (1.5-8.1) | **2.8** (1.5-5.4) | **2.6** (1.2-5.6) | **1.1** (0.4-3.0) | **1.9** (1.1-3.4) | **2.6** (1.8-3.9) | **3.4** (1.8-6.4) | **3.5** (1.8-6.6) | **4.0** (2.6-6.0) | **3.9** (2.4-6.1) | **3.1** (1.8-5.3) | **0.8** (0.2-3.5) |
| North[1] | — | — | — | — | — | — | — | — | — | — | — | **3.1** (1.8-5.1) | **3.1** (1.9-5.3) | **6.1** (4.6-8.0) | **4.3** (3.0-6.1) | **6.0** (4.0-9.0) | **4.6** (2.9-7.0) |
| North[2] | — | — | **3.2** (1.8-5.7) | **4.8** (3.8-6.1) | **4.2** (2.1-8.2) | **2.7** (1.7-4.2) | **2.2** (0.8-6.0) | **0.5** (0.1-3.6) | **2.5** (0.5-11.1) | **1.4** (0.2-7.2) | **3.5** (1.7-7.0) | **2.3** (0.8-6.2) | **4.5** (2.2-9.1) | **6.7** (4.7-9.4) | **3.9** (2.2-6.6) | **5.6** (3.0-10.2) | **4.1** (2.4-6.9) |
| West[1] | — | — | — | — | — | — | — | — | — | — | — | **3.6** (2.6-5.0) | **5.8** (4.4-7.6) | **5.3** (4.3-6.5) | **6.2** (5.0-7.7) | **3.5** (2.7-4.7) | **2.7** (1.9-3.7) |
| West[2] | — | — | **5.3** (4.2-6.6) | **4.7** (2.8-7.7) | **3.8** (2.3-6.3) | **3.0** (2.2-4.1) | **2.2** (1.7-2.9) | **1.4** (0.7-2.7) | **1.6** (0.8-3.1) | **3.1** (2.7-3.5) | **2.7** (2.3-3.1) | **4.0** (2.5-6.5) | **5.4** (3.7-7.9) | **6.1** (4.6-8.2) | **5.8** (4.4-7.6) | **3.5** (2.4-5.1) | **2.1** (1.4-3.2) |
| East[1] | — | — | — | — | — | — | — | — | — | — | — | **3.2** (2.4-4.3) | **3.9** (2.6-5.9) | **3.9** (2.9-5.1) | **2.8** (1.9-4.1) | **2.6** (2.0-3.4) | **2.3** (1.6-3.4) |
| East[2] | — | — | **4.8** (3.1-7.3) | **3.6** (2.5-5.2) | **3.1** (1.6-5.9) | **4.4** (2.2-8.5) | **2.6** (1.0-6.7) | **1.9** (1.3-2.7) | **1.4** (0.5-3.7) | **2.4** (1.5-3.9) | **2.7** (2.4-3.0) | **3.7** (2.5-5.4) | **2.4** (1.5-3.7) | **3.8** (2.8-5.2) | **2.6** (1.6-3.9) | **2.6** (1.8-3.8) | **1.9** (1.2-2.9) |

Notes: (1) based on Grades 7-12 (full sample); (2) based on Grades 7, 9, and 11 only (long-term sample); (3) entries in brackets are 95% confidence intervals; (4) regional stratification differed in 1977 and 1979 and therefore regions are not presented; (5) no significant differences 2009 vs. 2007; no significant differences 2009 vs. 1999; [c] significant long-term linear trend, p<.01; [d] significant long-term non-linear trend, p<.01.

Q: In the last 12 months, how often did you use cocaine (also known as “coke”, “snow”, “snort”, “blow”, etc.)?

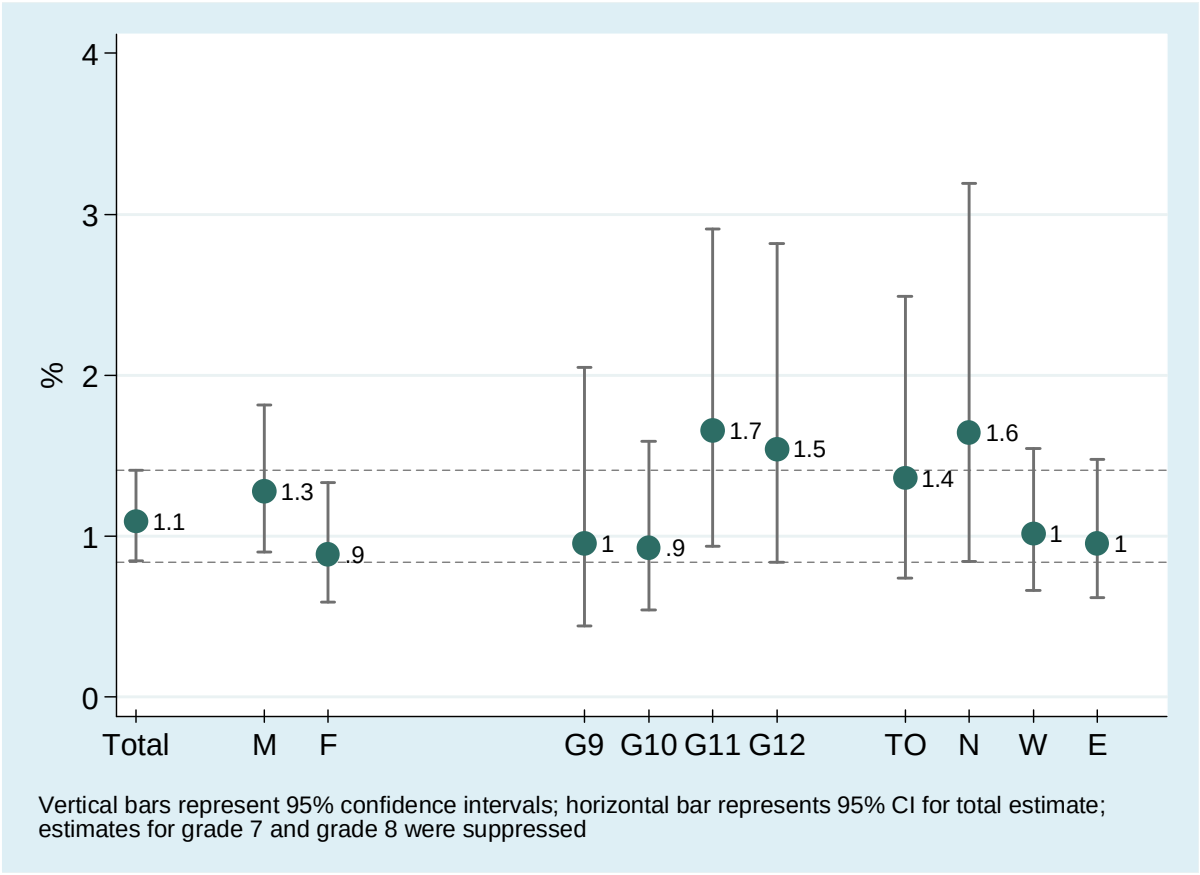
Source: OSDUHS, Centre for Addiction & Mental Health

## Past Year Use of Crack Cocaine

(Figures 3.6.14, 3.6.15; Table 3.6.9)

| | Crack Cocaine Use in 2009 (Grades 7 to 12) | Trends in Crack Cocaine Use |
|---|---|---|
| Total Sample | ■ Among all students, 1.1% used crack during the past year. With the sampling error, we estimate that between 0.8% and 1.4% of students in grades 7 to 12 use crack. The percentage 1.1% represents about 11,200 students in Ontario. | ☐ Crack use in 2009 (1.1%) is similar to the 2007 estimate (1.0%), but significantly lower than the estimates from 1999 (2.5%), 2001 (2.1%) and 2003 (2.7%).<br>☐ Over the long-term (among grades 7, 9, and 11 only), there was a small, but significant, increase in crack use between 1991 and 2003, followed by a recent decline. |
| Sex | ■ Use of crack does not differ between males (1.3%) and females (0.9%). | ☐ Crack use has declined over the past decade for both males and females. For both sexes, the 2009 rates of use are significantly lower than the respective rates from 1999. |
| Grade | ■ There is no significant grade variation. All grades are below 2%. | ☐ Between 1999 and 2009, crack use significantly declined only among 10$^{th}$-graders. |
| Region | ■ There is no significant regional variation in crack use. | ☐ Only students in the West and East regions show a significant decline in crack use over the past decade. |
| Frequent Use | ■ Among crack users, the majority (72%) used only once or twice in the past year (see Figure 3.1.3). | |

Figure 3.6.14
Past Year Crack Cocaine Use by Sex, Grade and Region, 2009 OSDUHS




Vertical bars represent 95% confidence intervals; horizontal bar represents 95% CI for total estimate; estimates for grade 7 and grade 8 were suppressed

Figure 3.6.15
Past Year Crack Cocaine Use, 1987–2009 OSDUHS (Grades 7, 9, 11 only)

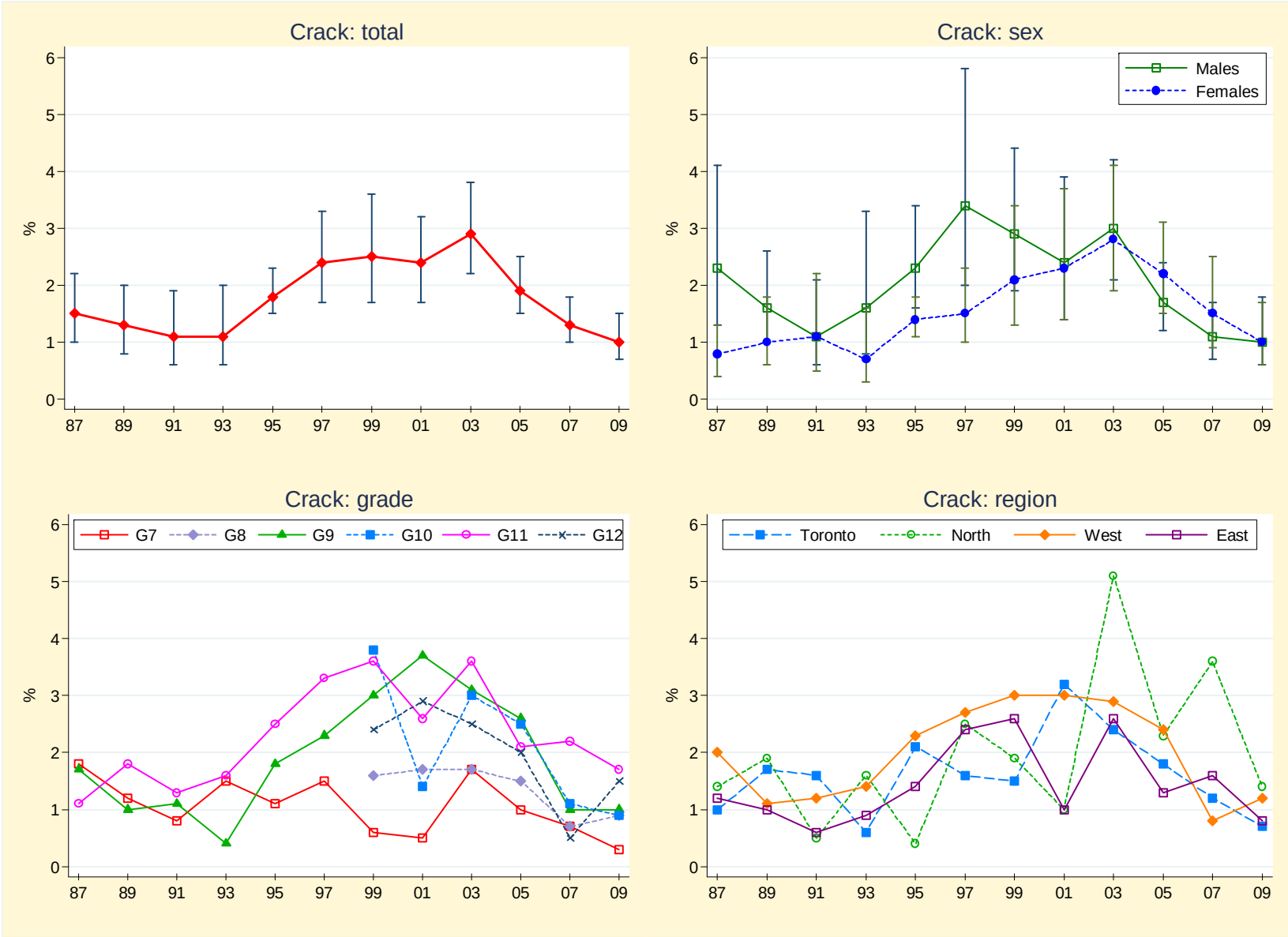


Table 3.6.9: Percentage Reporting Crack Cocaine Use During the Past Year, 1987–2009

| | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N[1]) | | | | | | | (4447) | (3898) | (6616) | (7726) | (6323) | (9112) |
| (N[2]) | (3376) | (3040) | (2961) | (2617) | (2907) | (3072) | (2421) | (2013) | (3389) | (3969) | (3215) | (4424) |
| Total[1] (95% CI) | — | — | — | — | — | — | 2.5 (1.9-3.2) | 2.1 (1.6-2.8) | 2.7 (2.2-3.3) | 2.0 (1.5-2.4) | 1.0 (0.8-1.4) | 1.1 (0.8-1.4) [b] |
| Total[2] | 1.5 (1.0-2.2) | 1.3 (0.8-2.0) | 1.1 (0.6-1.9) | 1.1 (0.6-2.0) | 1.8 (1.5-2.3) | 2.4 (1.7-3.3) | 2.5 (1.7-3.6) | 2.4 (1.7-3.2) | 2.9 (2.2-3.8) | 1.9 (1.5-2.5) | 1.3 (1.0-1.8) | 1.0 (0.7-1.5) [d] |
| Sex | | | | | | | | | | | | |
| Males[1] | — | — | — | — | — | — | 3.0 (2.2-4.1) | 2.5 (1.6-3.8) | 2.8 (2.1-3.6) | 2.1 (1.6-2.6) | 0.9 (0.6-1.4) | 1.3 (0.9-1.8) [b] |
| Males[2] | 2.3 (1.3-4.1) | 1.6 (1.0-2.6) | 1.1 (0.6-2.1) | 1.6 (0.8-3.3) | 2.3 (1.6-3.4) | 3.4 (2.0-5.8) | 2.9 (1.9-4.4) | 2.4 (1.4-3.9) | 3.0 (2.1-4.2) | 1.7 (1.2-2.4) | 1.1 (0.7-1.7) | 1.0 (0.6-1.8) |
| Females[1] | — | — | — | — | — | — | 2.0 (1.4-2.8) | 1.8 (1.2-2.6) | 2.6 (1.9-3.5) | 1.9 (1.5-2.4) | 1.1 (0.8-1.7) | 0.9 (0.6-1.3) [b] |
| Females[2] | 0.8 (0.4-1.3) | 1.0 (0.6-1.8) | 1.1 (0.5-2.2) | 0.7 (0.3-1.6) | 1.4 (1.1-1.8) | 1.5 (1.0-2.3) | 2.1 (1.3-3.4) | 2.3 (1.4-3.7) | 2.8 (1.9-4.1) | 2.2 (1.5-3.1) | 1.5 (0.9-2.5) | 1.0 (0.6-1.7) |
| Grade | | | | | | | | | | | | |
| 7 | 1.8 (1.3-2.4) | 1.2 (0.7-1.9) | 0.8 (0.2-3.0) | 1.5 (0.6-3.8) | 1.1 (0.7-1.8) | 1.5 (0.4-5.3) | 0.6 (0.2-1.5) | 0.5 (0.2-1.5) | 1.7 (0.9-3.2) | 1.0 (0.5-2.1) | † | † |
| 8 | — | — | — | — | — | — | 1.6 (0.8-3.0) | 1.7 (0.8-3.5) | 1.7 (1.0-3.0) | 1.5 (0.9-2.6) | † | † |
| 9 | 1.7 (1.0-2.9) | 1.0 (0.4-2.6) | 1.1 (0.4-3.4) | † | 1.8 (1.1-3.0) | 2.3 (1.4-3.7) | 3.0 (1.9-4.6) | 3.7 (2.3-6.0) | 3.1 (2.2-4.5) | 2.6 (1.8-3.8) | 1.0 (0.6-1.8) | 1.0 (0.4-2.0) |
| 10 | — | — | — | — | — | — | 3.8 (2.1-6.6) | 1.4 (0.7-2.8) | 3.0 (2.0-4.5) | 2.5 (1.7-3.8) | 1.1 (0.6-2.0) | 0.9 (0.5-1.6) [b] |
| 11 | 1.1 (0.3-3.4) | 1.8 (0.8-3.8) | 1.3 (0.7-2.4) | 1.6 (0.7-3.6) | 2.5 (2.0-3.2) | 3.3 (2.4-4.4) | 3.6 (1.9-6.8) | 2.6 (1.6-4.0) | 3.6 (2.4-5.4) | 2.1 (1.4-3.1) | 2.2 (1.4-3.4) | 1.7 (0.9-2.9) |
| 12 | — | — | — | — | — | — | 2.4 (1.2-4.8) | 2.9 (1.3-6.7) | 2.5 (1.7-3.7) | 2.1 (1.3-3.2) | 0.5 (0.2-1.4) | 1.5 (0.8-2.8) |

(Continued)

| | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N[1]) | | | | | | | **(4447)** | **(3898)** | **(6616)** | **(7726)** | **(6323)** | **(9112)** |
| (N[2]) | **(3376)** | **(3040)** | **(2961)** | **(2617)** | **(2907)** | **(3072)** | **(2421)** | **(2013)** | **(3389)** | **(3969)** | **(3215)** | **(4424)** |
| Region | | | | | | | | | | | | |
| Toronto[1] | — | — | — | — | — | — | **1.8** (0.9-3.6) | **2.7** (2.0-3.6) | **2.2** (1.2-4.0) | **1.4** (0.8-2.3) | † | **1.4** (0.7-2.5) |
| Toronto[2] | **1.0** (0.4-2.4) | **1.7** (0.4-7.4) | **1.6** (0.7-3.8) | **0.6** (0.3-1.3) | **2.1** (1.2-3.7) | **1.6** (0.5-4.9) | **1.5** (0.7-3.3) | **3.2** (2.1-4.9) | **2.4** (1.2-5.0) | **1.8** (0.9-3.4) | **1.2** (0.5-2.7) | † |
| North[1] | — | — | — | — | — | — | **2.8** (1.6-4.8) | **1.0** (0.5-2.0) | **4.6** (3.3-6.2) | **2.1** (1.3-3.3) | **3.0** (1.7-5.0) | **1.6** (0.8-3.2) |
| North[2] | **1.4** (0.9-2.2) | **1.9** (0.6-5.8) | **0.5** (0.1-3.6) | **1.6** (0.2-12.6) | † | **2.5** (0.8-7.5) | **1.9** (0.6-6.1) | **1.0** (0.3-2.8) | **5.1** (3.5-7.4) | **2.3** (1.1-4.6) | **3.6** (2.0-6.7) | † |
| West[1] | — | — | — | — | — | — | **2.9** (1.8-4.4) | **2.7** (1.7-4.1) | **2.6** (1.8-3.8) | **2.6** (2.0-3.3) | **0.8** (0.4-1.4) | **1.0** [b] (0.7-1.5) |
| West[2] | **2.0** (1.0-3.6) | **1.1** (0.8-1.6) | **1.2** (0.5-3.3) | **1.4** (0.7-2.9) | **2.3** (1.8-2.9) | **2.7** (1.6-4.6) | **3.0** (1.6-5.5) | **3.0** (1.8-4.9) | **2.9** (1.8-4.4) | **2.4** (1.7-3.6) | **0.8** (0.5-1.4) | **1.2** (0.6-2.3) |
| East[1] | — | — | — | — | — | — | **2.3** (1.7-3.2) | **1.3** (0.7-2.2) | **2.6** (1.7-3.8) | **1.5** (1.0-2.2) | **1.0** (0.6-1.7) | **1.0** [b] (0.6-1.5) |
| East[2] | **1.2** (0.6-2.2) | **1.0** (0.4-2.7) | **0.6** (0.4-1.1) | **0.9** (0.2-3.0) | **1.4** (0.8-2.5) | **2.4** (1.8-3.2) | **2.6** (1.6-4.2) | **1.0** (0.5-2.2) | **2.6** (1.6-4.3) | **1.3** (0.8-2.0) | **1.6** (0.9-2.8) | **0.8** (0.4-1.7) |

Notes: (1) based on Grades 7-12 (full sample); (2) based on Grades 7, 9, and 11 only (long-term sample); (3) entries in brackets are 95% confidence intervals; (4) † estimate suppressed due to unreliability; (5) no significant differences 2009 vs. 2007; [b] 2009 vs. 1999 significant difference, p<.01; [d] significant long-term non-linear trend, p<.01.

Q: In the last 12 months, how often have you used cocaine in the form of "crack"?

Source: OSDUHS, Centre for Addiction & Mental Health

## Past Year Use of Heroin

(Figure 3.6.16; Table 3.6.10)

| | Heroin Use in 2009 (Grades 7 to 12) | Trends in Heroin Use |
|---|---|---|
| Total Sample | ■ Overall, 0.7% of students report using heroin at least once during the 12 months before the survey. We project that between 0.5% and 0.9% of all Ontario students use heroin. The percentage of 0.7% represents 6,700 students in grades 7 through 12. | ☐ Heroin use in 2009 (0.7%) is similar to the estimate from 2007 (0.9%), but is significantly lower than the 1999 estimate (1.9%).<br><br>☐ Between 1977 and 2009, the use of heroin was elevated in 1979, decreased over the 1980s, increased in the mid-1990s, and subsequently decreased to very low levels. The 2009 rate is significantly lower than the peaks in use found in 1979 and 1995 (among grades 7, 9, and 11 only). |
| Sex | ■ Heroin use is significantly more likely among males compared to females. | ☐ Only males show a significant change in heroin use over the past decade, declining from 2.5% in 1999 to 0.9% in 2009. |
| Grade | ■ Heroin use significantly varies by grade, with use most likely among 12$^{th}$-graders (1.0%). | ☐ All grades show only minimal variation in use since 1999. |
| Region | ■ There is no significant regional variation in heroin use. | ☐ Only students in the West and East regions show a significant decline in use over the past decade. |

Figure 3.6.16
Past Year Heroin Use, 1977–2009 OSDUHS (Grades 7, 9, 11 only)

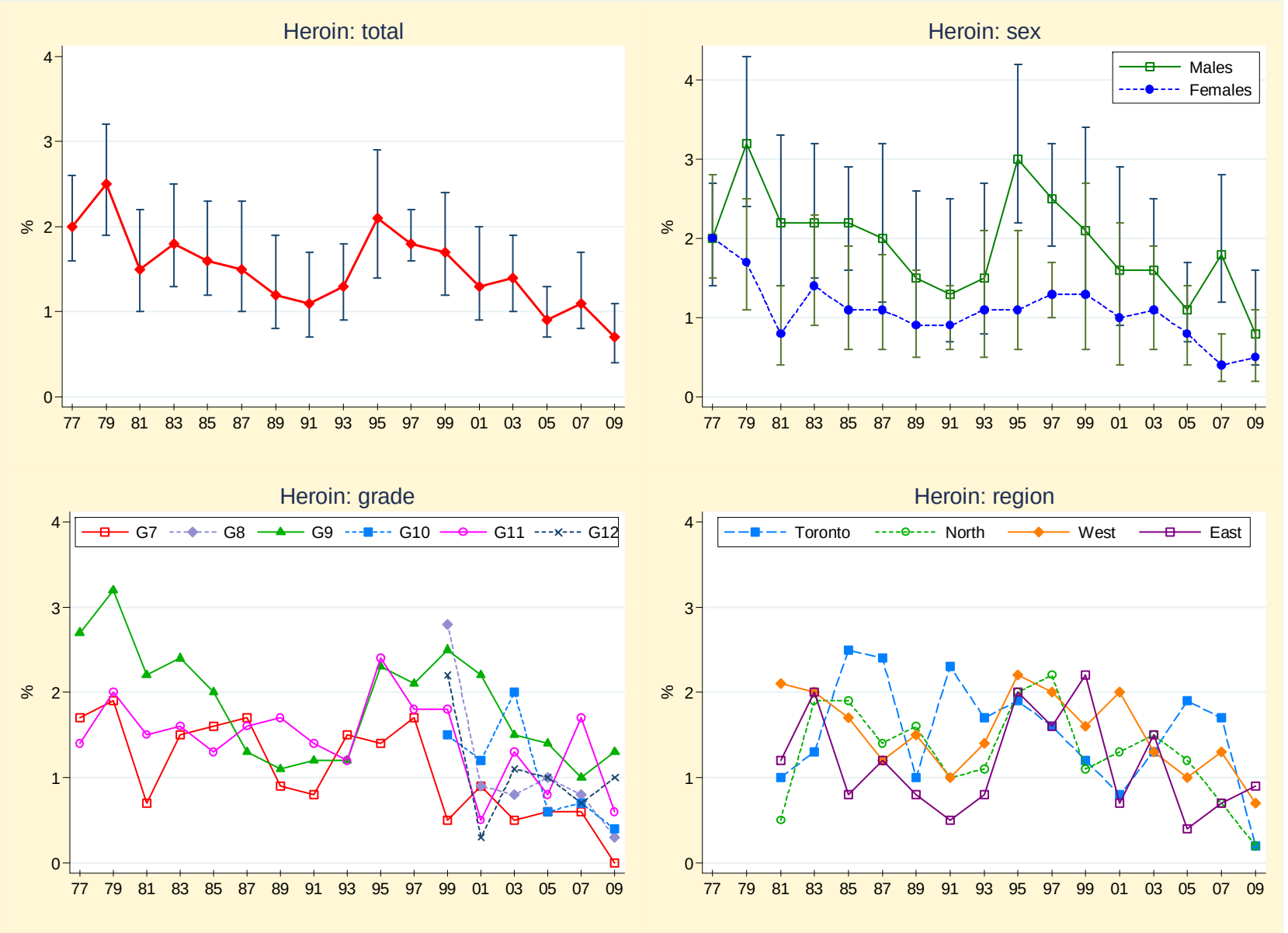


Table 3.6.10: Percentage Reporting Heroin Use During the Past Year, 1977–2009

| | 1977 | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N[1]) | | | | | | | | | | | | (4447) | (3898) | (6616) | (7726) | (6323) | (9112) |
| (N[2]) | (3927) | (3920) | (3010) | (3614) | (3146) | (3376) | (3040) | (2961) | (2617) | (2907) | (3072) | (2421) | (2013) | (3389) | (3969) | (3215) | (4424) |
| Total[1] (95% CI) | — | — | — | — | — | — | — | — | — | — | — | 1.9 (1.5-2.5) | 1.1 (0.8-1.5) | 1.4 (1.1-1.7) | 0.9 (0.7-1.2) | 0.9 (0.7-1.3) | 0.7 (0.5-0.9) [b] |
| Total[2] | 2.0 (1.6-2.6) | 2.5 (1.9-3.2) | 1.5 (1.0-2.2) | 1.8 (1.3-2.5) | 1.6 (1.2-2.3) | 1.5 (1.0-2.3) | 1.2 (0.8-1.9) | 1.1 (0.7-1.7) | 1.3 (0.9-1.8) | 2.1 (1.4-2.9) | 1.8 (1.6-2.2) | 1.7 (1.2-2.4) | 1.3 (0.9-2.0) | 1.4 (1.0-1.9) | 0.9 (0.7-1.3) | 1.1 (0.8-1.7) | 0.7 (0.4-1.1) [cd] |
| Sex | | | | | | | | | | | | | | | | | |
| Males[1] | — | — | — | — | — | — | — | — | — | — | — | 2.5 (1.8-3.4) | 1.4 (1.0-2.1) | 1.9 (1.4-2.5) | 1.1 (0.8-1.5) | 1.3 (0.9-1.8) | 0.9 (0.6-1.5) [b] |
| Males[2] | 2.0 (1.4-2.7) | 3.2 (2.4-4.3) | 2.2 (1.4-3.3) | 2.2 (1.5-3.2) | 2.2 (1.6-2.9) | 2.0 (1.2-3.2) | 1.5 (0.9-2.6) | 1.3 (0.7-2.5) | 1.5 (0.8-2.7) | 3.0 (2.2-4.2) | 2.5 (1.9-3.2) | 2.1 (1.3-3.4) | 1.6 (0.9-2.9) | 1.6 (1.1-2.5) | 1.1 (0.7-1.7) | 1.8 (1.2-2.8) | 0.8 (0.4-1.6) |
| Females[1] | — | — | — | — | — | — | — | — | — | — | — | 1.4 (0.8-2.1) | 0.7 (0.4-1.4) | 0.9 (0.6-1.3) | 0.7 (0.5-1.1) | 0.6 (0.3-1.0) | † |
| Females[2] | 2.0 (1.5-2.8) | 1.7 (1.1-2.5) | 0.8 (0.4-1.4) | 1.4 (0.9-2.3) | 1.1 (0.6-1.9) | 1.1 (0.6-1.8) | 0.9 (0.5-1.6) | 0.9 (0.6-1.4) | 1.1 (0.5-2.1) | 1.1 (0.6-2.1) | 1.3 (1.0-1.7) | 1.3 (0.6-2.7) | 1.0 (0.4-2.2) | 1.1 (0.6-1.9) | 0.8 (0.4-1.4) | † | † |
| Grade | | | | | | | | | | | | | | | | | |
| 7 | 1.7 (1.1-2.5) | 1.9 (1.2-3.1) | 0.7 (0.2-1.8) | 1.5 (0.8-2.6) | 1.6 (0.7-3.5) | 1.7 (1.1-2.6) | 0.9 (0.4-1.9) | 0.8 (0.2-2.9) | 1.5 (1.1-2.0) | 1.4 (0.5-3.7) | 1.7 (1.3-2.2) | 0.5 (0.2-1.4) | 0.9 (0.4-1.9) | 1.4 (0.7-2.9) | 0.6 (0.3-1.4) | † | † |
| 8 | — | — | — | — | — | — | — | — | — | — | — | 2.8 (1.6-4.9) | 0.9 (0.4-1.7) | 0.8 (0.4-1.6) | 1.0 (0.4-2.9) | 0.8 (0.4-1.9) | † |
| 9 | 2.7 (2.0-3.8) | 3.2 (2.3-4.6) | 2.2 (1.3-3.8) | 2.4 (1.6-3.8) | 2.0 (1.2-3.2) | 1.3 (0.5-3.4) | 1.1 (0.5-2.4) | 1.2 (0.6-2.4) | 1.2 (0.6-2.2) | 2.3 (1.7-3.2) | 2.1 (1.6-2.7) | 2.5 (1.7-3.8) | 2.2 (1.3-3.6) | 1.5 (0.9-2.4) | 1.4 (0.8-2.3) | 1.0 (0.6-1.8) | † |
| 10 | — | — | — | — | — | — | — | — | — | — | — | 1.5 (0.6-3.6) | 1.2 (0.6-2.2) | 2.0 (1.2-3.5) | † | † | † |
| 11 | 1.4 (0.8-2.4) | 2.0 (1.3-3.1) | 1.5 (1.0-2.2) | 1.6 (0.8-3.1) | 1.3 (0.9-2.0) | 1.6 (0.8-3.2) | 1.7 (0.9-3.3) | 1.4 (0.8-2.2) | 1.2 (0.6-2.4) | 2.4 (1.3-4.6) | 1.8 (1.2-2.5) | 1.8 (0.8-3.9) | † | 1.3 (0.7-2.2) | 0.8 (0.4-1.5) | 1.7 (1.0-2.9) | † |
| 12 | — | — | — | — | — | — | — | — | — | — | — | 2.2 (1.2-4.0) | † | 1.1 (0.6-2.0) | 1.0 (0.6-1.7) | 0.7 (0.3-1.7) | 1.0 (0.5-2.0) |

(Continued…)

| | 1977 | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ($N^1$) | | | | | | | | | | | | (4447) | (3898) | (6616) | (7726) | (6323) | (9112) |
| ($N^2$) | (3927) | (3920) | (3010) | (3614) | (3146) | (3376) | (3040) | (2961) | (2617) | (2907) | (3072) | (2421) | (2013) | (3389) | (3969) | (3215) | (4424) |
| Region | | | | | | | | | | | | | | | | | |
| Toronto[1] | — | — | — | — | — | — | — | — | — | — | — | 1.4 (0.7-2.7) | 0.6 (0.2-1.9) | 1.1 (0.6-2.1) | 1.6 (0.9-2.9) | 1.1 (0.6-2.0) | † |
| Toronto[2] | — | — | 1.0 (0.2-4.3) | 1.3 (0.7-2.4) | 2.5 (1.4-4.5) | 2.4 (1.0-5.8) | 1.0 (0.2-4.8) | 2.3 (1.1-4.8) | 1.7 (0.9-3.3) | 1.9 (1.2-3.0) | 1.6 (1.0-2.5) | 1.2 (0.5-2.9) | 0.8 (0.2-2.6) | 1.3 (0.7-2.7) | 1.9 (1.0-3.5) | 1.7 (0.9-3.3) | † |
| North[1] | — | — | — | — | — | — | — | — | — | — | — | 1.3 (0.8-2.1) | 1.0 (0.4-2.2) | 1.1 (0.6-2.1) | 0.9 (0.5-1.7) | 1.0 (0.5-2.0) | † |
| North[2] | — | — | 0.5 (0.1-2.4) | 1.9 (1.0-3.7) | 1.9 (1.0-3.6) | 1.4 (0.6-3.1) | 1.6 (0.4-5.6) | 1.0 (0.1-7.1) | 1.1 (0.5-2.4) | 2.0 (0.5-7.0) | 2.2 (1.2-4.3) | 1.1 (0.4-2.7) | 1.3 (0.5-3.2) | 1.5 (0.7-3.5) | 1.2 (0.6-2.4) | 0.7 (0.3-1.7) | † |
| West[1] | — | — | — | — | — | — | — | — | — | — | — | 1.9 (1.2-2.9) | 1.7 (1.1-2.4) | 1.4 (1.0-2.1) | 1.0 (0.7-1.4) | 1.0 (0.6-1.8) | 0.7 [b] (0.4-1.1) |
| West[2] | — | — | 2.1 (1.4-3.1) | 2.0 (1.1-3.5) | 1.7 (0.9-3.1) | 1.2 (0.6-2.6) | 1.5 (0.9-2.5) | 1.0 (0.6-1.8) | 1.4 (0.8-2.2) | 2.2 (1.2-4.3) | 2.0 (1.6-2.6) | 1.6 (0.9-3.1) | 2.0 (1.2-3.3) | 1.3 (0.8-2.1) | 1.0 (0.5-1.7) | 1.3 (0.7-2.3) | 0.7 (0.4-1,5) |
| East[1] | — | — | — | — | — | — | — | — | — | — | — | 2.5 (1.8-3.5) | 0.6 (0.2-1.3) | 1.4 (1.0-2.2) | † | 0.7 (0.4-1.2) | 0.5 [b] (0.3-1.0) |
| East[2] | — | — | 1.2 (0.8-2.0) | 2.0 (1.3-3.2) | 0.8 (0.4-1.6) | 1.2 (0.6-2.4) | 0.8 (0.4-1.7) | 0.5 (0.2-1.0) | 0.8 (0.5-1.5) | 2.0 (1.2-3.0) | 1.6 (1.3-2.0) | 2.2 (1.2-3.8) | 0.7 (0.2-2.0) | 1.5 (0.8-3.0) | † | 0.7 (0.3-1.8) | 0.9 (0.4-1.9) |

Notes: (1) based on Grades 7-12 (full sample); (2) based on Grades 7, 9, and 11 only (long-term sample); (3) entries in brackets are 95% confidence intervals; (4) regional stratification differed in 1977 and 1979 and therefore regions are not presented; (5) † estimate suppressed due to unreliability; (6) no significant changes 2009 vs. 2007; [b] 2009 vs. 1999 significant difference, p<.01; [c] significant long-term linear trend, p<.01; [d] significant long-term non-linear trend, p<.01.

Q: In the last 12 months, how often did you use heroin (also known as "H", "junk", or "smack")?

Source: OSDUHS, Centre for Addiction & Mental Health

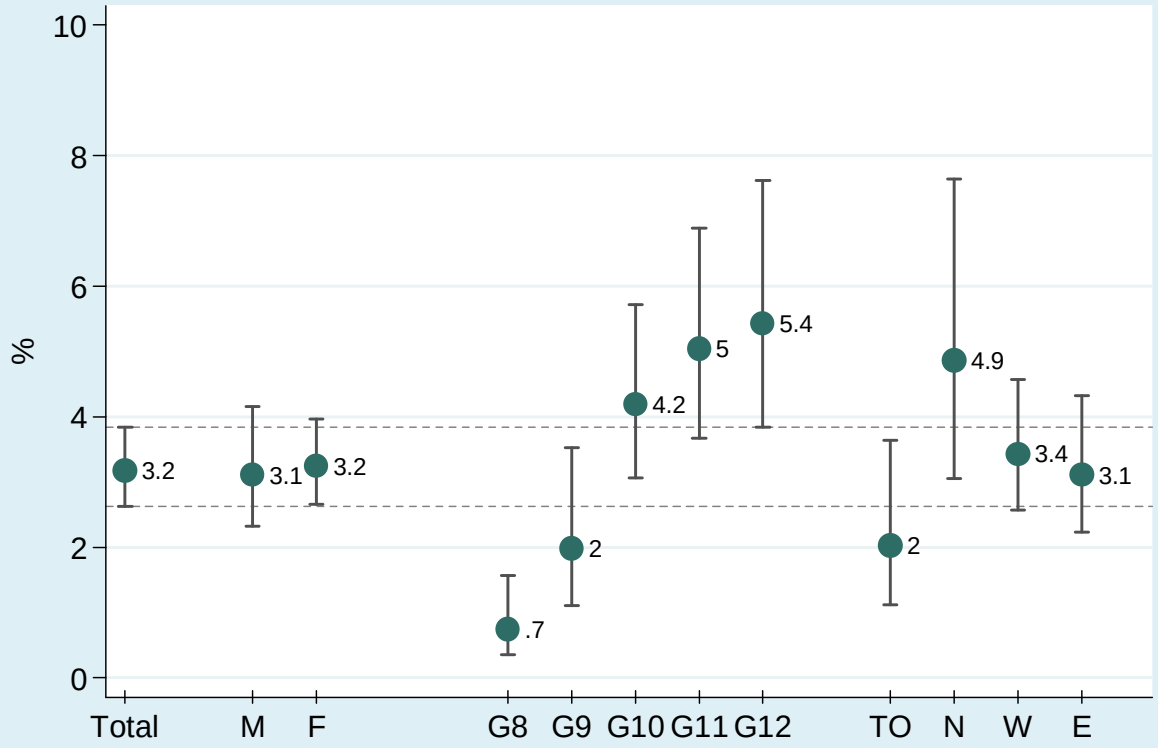
## Past Year Use of Ecstasy (MDMA)

(Figures 3.6.17, 3.6.18; Table 3.6.11)

"Ecstasy" (MDMA, methylenedioxymethamphetamine), which first appeared in Canada in 1989, is a synthetic substance with both stimulant and hallucinogenic properties. The OSDUHS began to monitor ecstasy use in 1991.

| | Ecstasy Use in 2009 (Grades 7 to 12) | Trends in Ecstasy Use |
|---|---|---|
| Total Sample | ■ In 2009, 3.2% of students in grades 7 through 12 report using ecstasy during the 12 months before the survey. With the sampling error, we estimate that between 2.6% and 3.8% of students use ecstasy. The estimated number of students in Ontario who use ecstasy is about 32,500. | ☐ The 2009 estimate (3.2%) for ecstasy use among students in grades 7 to 12 is not significantly different from that found in 2007 (3.5%) or in 2005 (4.5%), but is lower than the peak found in 2001 (6.0%).<br><br>☐ Since monitoring began in 1991, ecstasy use steadily increased from under 0.5% to about 6% in 2001 (grades 7, 9 11 only). Since then, there has been a significant decline, yet current use remains significantly higher than use in the early 1990s. |
| Sex | ■ There is no significant sex difference regarding ecstasy use (3.1% of males, 3.2% of females). | ☐ Both males and females show a significant decline in 2009 compared to their respective 2001 estimates. |
| Grade | ■ Among the grades, 11th-graders (5.0%) and 12th-graders (5.2%) are the most likely to report ecstasy use. | ☐ Students in grades 8, 9 and 11 show a significant decline in 2009 compared to their respective 2001 estimates. |
| Region | ■ There is no significant variation among the regions. | ☐ Among the four regions, students in the West show a significant decline in use since 2001. There have been no significant changes over the past few years among students in the other regions. |
| Frequent Use | ■ About 1.0% of all students report using ecstasy 6 times or more in the past year (see Figure 3.1.2).<br><br>■ Just about half (51%) of ecstasy users report using once or twice in the past year. About one-quarter (23%) used 10 or more times (see Figure 3.1.3). | |

Figure 3.6.17
Past Year Ecstasy Use by Sex, Grade and Region, 2009 OSDUHS




Vertical bars represent 95% confidence intervals; horizontal bar represents 95% CI for total estimate; estimate for Grade 7 was suppressed

Figure 3.6.18
Past Year Ecstasy Use, 1991–2009 OSDUHS (Grades 7, 9, 11 only)

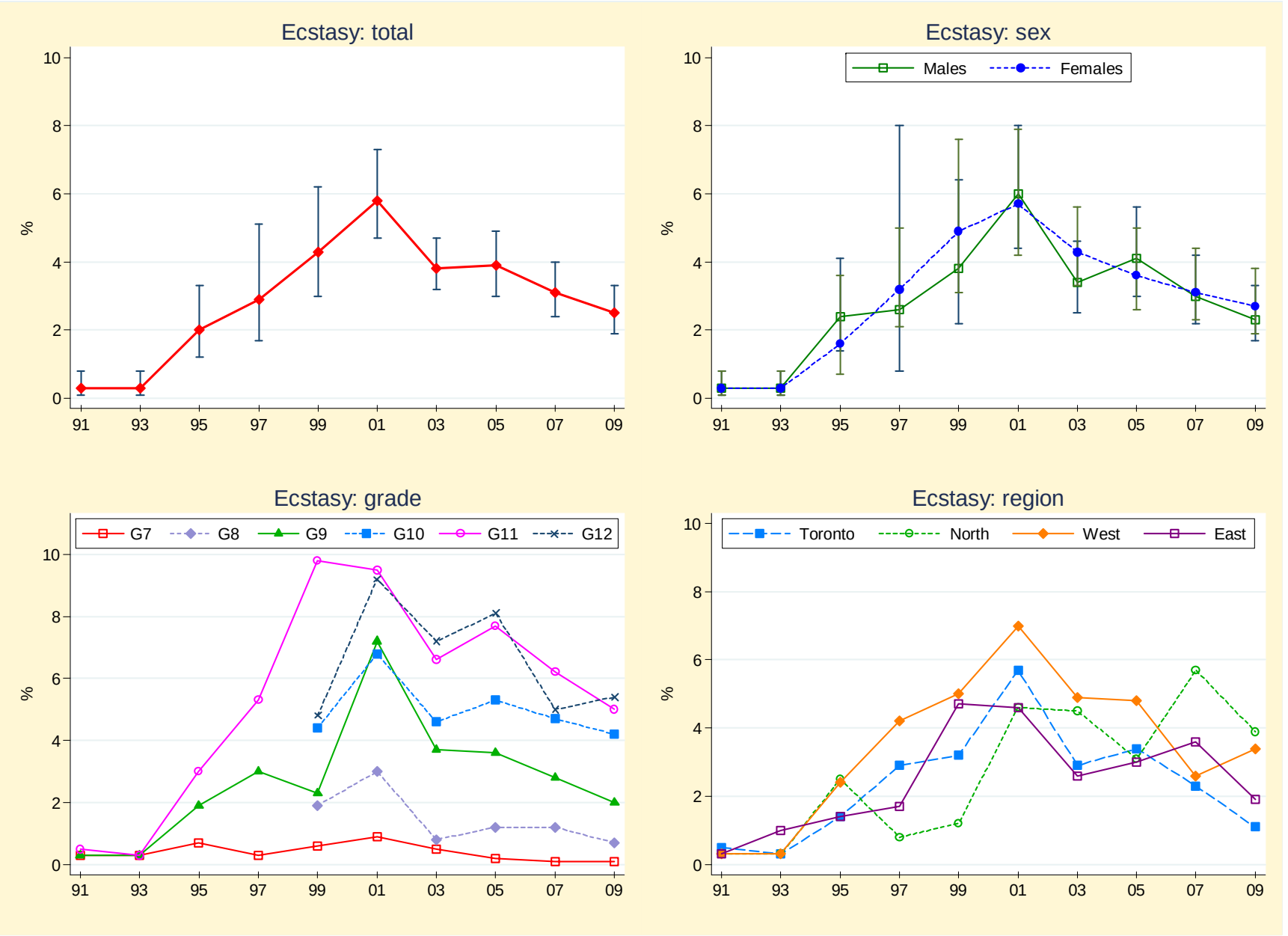


Table 3.6.11: Percentage Reporting Ecstasy Use During the Past Year, 1991–2009

| | 1991 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|
| (N[1]) | | | | | (2299) | (3898) | (6616) | (7726) | (6323) | (9112) |
| (N[2]) | (1405) | (1376) | (1454) | (1545) | (1253) | (2013) | (3389) | (3969) | (3215) | (4424) |
| Total[1] (95% CI) | — | — | — | — | **4.0** (3.1-5.2) | **6.0** (5.0-7.1) | **4.1** (3.5-4.8) | **4.5** (3.7-5.3) | **3.5** (2.9-4.1) | **3.2** (2.6-3.8) [b] |
| Total[2] | † | † | **2.0** (1.2-3.3) | **2.9** (1.7-5.1) | **4.3** (3.0-6.2) | **5.8** (4.7-7.3) | **3.8** (3.2-4.7) | **3.9** (3.0-4.9) | **3.1** (2.4-4.0) | **2.5** (1.9-3.3) [cd] |
| Sex | | | | | | | | | | |
| Males[1] | — | — | — | — | **4.1** (2.8-5.9) | **6.7** (5.3-8.5) | **4.2** (3.4-5.3) | **4.6** (3.7-5.7) | **3.4** (2.6-4.4) | **3.1** (2.3-4.2) [b] |
| Males[2] | † | † | **2.4** (1.4-4.1) | **2.6** (0.8-8.0) | **3.8** (2.2-6.4) | **6.0** (4.4-8.0) | **3.4** (2.5-4.6) | **4.1** (3.0-5.6) | **3.0** (2.2-4.2) | **2.3** (1.6-3.2) |
| Females[1] | — | — | — | — | **4.0** (2.7-5.7) | **5.3** (4.2-6.6) | **3.9** (3.2-4.8) | **4.3** (3.5-5.4) | **3.5** (2.9-4.2) | **3.2** (2.7-4.0) [b] |
| Females[2] | † | † | **1.6** (0.7-3.6) | **3.2** (2.1-5.0) | **4.9** (3.1-7.6) | **5.7** (4.2-7.9) | **4.3** (3.3-5.6) | **3.6** (2.6-5.0) | **3.1** (2.3-4.4) | **2.7** (1.9-3.8) |
| Grade | | | | | | | | | | |
| 7 | † | † | **0.7** (0.1-5.7) | † | **0.6** (0.2-1.9) | **0.9** (0.4-1.8) | † | † | † | † |
| 8 | — | — | — | — | **1.9** (0.9-4.2) | **3.0** (1.7-5.3) | **0.8** (0.4-1.4) | **1.2** (0.6-2.2) | **1.2** (0.6-2.4) | **0.7** (0.4-1.6) [b] |
| 9 | † | † | **1.9** (0.7-5.1) | **3.0** (2.2-4.2) | **2.3** (1.0-5.0) | **7.2** (5.0-10.1) | **3.7** (2.7-5.1) | **3.6** (2.6-4.9) | **2.8** (1.9-4.1) | **2.0** (1.1-3.5) [b] |
| 10 | — | — | — | — | **4.4** (2.5-7.8) | **6.8** (4.6-9.9) | **4.6** (3.2-6.4) | **5.3** (3.9-7.0) | **4.7** (3.5-6.4) | **4.2** (3.1-5.7) |
| 11 | **0.5** (0.2-1.1) | † | **3.0** (1.7-5.6) | **5.3** (2.2-12.1) | **9.8** (6.4-14.8) | **9.5** (6.9-12.9) | **6.6** (4.9-9.0) | **7.7** (5.7-40.5) | **6.2** (4.6-8.2) | **5.0** (3.7-6.9) [b] |
| 12 | — | — | — | — | **4.8** (2.6-8.8) | **9.2** (6.0-14.1) | **7.2** (5.5-9.4) | **8.1** (6.3-10.5) | **5.0** (3.8-6.7) | **5.4** (3.8-7.6) |
| Region | | | | | | | | | | |
| Toronto[1] | — | — | — | — | **3.8** (2.0-7.4) | **4.8** (3.1-7.4) | **3.6** (2.3-5.5) | **3.4** (2.2-5.5) | **2.4** (1.7-3.3) | **2.0** (1.1-3.6) |
| Toronto[2] | **0.5** (0.4-0.6) | † | **1.4** (0.3-6.1) | **2.9** (1.8-4.6) | **3.2** (1.2-8.2) | **5.7** (3.6-8.9) | **2.9** (1.5-5.8) | **3.4** (2.0-5.7) | **2.3** (1.4-3.8) | † |
| North[1] | — | — | — | — | **1.9** (1.0-3.4) | **4.2** (3.0-5.9) | **4.4** (3.5-5.5) | **4.1** (3.2-5.2) | **6.8** (4.5-10.1) | **4.9** (3.0-7.6) |
| North[2] | † | † | **2.5** (0.4-13.7) | **0.8** (0.1-6.2) | **1.2** (0.3-4.4) | **4.6** (2.6-7.9) | **4.5** (3.3-6.2) | **3.1** (2.0-4.8) | **5.7** (2.6-11.9) | **3.9** (1.9-7.8) |
| West[1] | — | — | — | — | **4.6** (3.1-6.6) | **8.1** (6.5-10.0) | **4.8** (3.8-6.1) | **5.6** (4.3-7.2) | **3.0** (2.2-4.1) | **3.4** (2.6-4.6) [b] |
| West[2] | † | † | **2.4** (1.4-4.3) | **4.2** (2.0-8.6) | **5.0** (3.0-8.3) | **7.0** (5.2-9.4) | **4.9** (3.7-6.4) | **4.8** (3.2-7.2) | **2.6** (1.7-3.8) | **3.4** (2.3-5.0) |
| East[1] | — | — | — | — | **4.0** (2.5-6.5) | **4.2** (2.6-6.8) | **3.2** (2.4-4.3) | **3.7** (2.7-5.0) | **3.9** (2.9-5.4) | **3.1** (2.2-4.3) |
| East[2] | † | **1.0** (0.3-3.1) | **1.4** (0.3-6.7) | **1.7** (0.3-9.6) | **4.7** (2.4-8.8) | **4.6** (2.5-8.4) | **2.6** (1.8-3.9) | **3.0** (2.1-4.3) | **3.6** (2.3-5.8) | **1.9** (1.2-2.9) |

Notes: (1) based on Grades 7-12 (full sample); (2) based on Grades 7, 9, and 11 only (long-term sample); (3) entries in brackets are 95% confidence intervals; (4) based on random half-sample between 1991 and 1999; (5) † estimate suppressed due to unreliability; (6) no significant differences 2009 vs. 2007; [b] 2009 vs. **2001** significant difference, p<.01; [c] significant long-term linear trend, p<.01; [d] significant long-term non-linear trend, p<.01.

Q: In the last 12 months, how often did you use MDMA or "ecstasy"?

Source: OSDUHS, Centre for Addiction & Mental Health

## Past Year Use of GHB, Rohypnol, and Ketamine

(Table 3.6.12)

Questions about the use of GHB and Rohypnol were first included in the survey in 2001. **GHB** (gamma-hydroxybutyrate, also called "liquid ecstasy," "G") is an odourless central nervous system depressant, taken for its euphoric and relaxing effects. **Rohypnol** (brand name for flunitrazepam, also called "roofies," "roach") is a benzodiazepine, which is odourless and tasteless and can produce severe drowsiness, visual disturbances, and amnesia. Rohypnol is usually taken with other drugs, such as alcohol, to increase the effect, and is sometimes taken to decrease the after-effects of stimulant drugs such as cocaine. Starting in 2003, the OSDUHS asked about the use of **ketamine** (also called "vitamin K", "special K"), which is a dissociative anesthetic drug usually used in veterinary medicine and sometimes in human anesthesia. Ketamine can produce feelings of detachment and can distort perceptions of sight and sound.

| | Use in 2009 (Grades 7 to 12) | Trends in Use |
|---|---|---|
| Total Sample | ■ Use of these three substances is very rare among students. GHB is used by 0.5%; Rohypnol is used by 0.7%; and ketamine is used by 1.6% of students in grades 7 to 12. | ☐ Use of GHB did not change between 2007 and 2009, nor has use changed compared to the first year of tracking in 2001. Rohypnol use in 2009 is similar to use in 2007, but is significantly lower than the rate from 2001 (3.1%). Ketamine use in 2009 is similar to the estimates from prior years. |
| Sex | ■ None of these three substances significantly differs by sex. | ☐ Among males, the use of Rohypnol in 2009 (0.7%) is lower than the estimate from 2001 (3.5%). Males' use of GHB and Ketamine has not significantly changed over time.<br><br>☐ Similarly, among females, only Rohypnol use has significantly decreased over time, from 2.7% in 2001 to 0.7% in 2009. |
| Grade | ■ Only ketamine use significantly varies by grade, increasing with grade and peaking in grade 12 at 2.8%. | ☐ Despite some downward trends, no grade shows a significant change for any drug over the past few years. |
| Region | ■ Use of none of the three drugs significantly varies by region. | ☐ Rohypnol use among students in the West is significantly lower in 2009 than in 2001. |

Table 3.6.12: Percentage Reporting GHB Use, Rohypnol Use, and Ketamine Use During the Past Year, 2001–2009

| | | GHB | | | | | Rohypnol | | | | | Ketamine | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | **2001** | **2003** | **2005** | **2007** | **2009** | **2001** | **2003** | **2005** | **2007** | **2009** | **2003** | **2005** | **2007** | **2009** |
| | (N) | (1837) | (3152) | (3648) | (2935) | (4261) | (1837) | (3152) | (3648) | (2935) | (4261) | (3152) | (3648) | (2935) | (4261) |
| Total (95% CI) | | **1.3** (0.8-2.1) | **0.7** (0.4-1.1) | **0.5** (0.3-0.9) | **0.5** (0.3-1.0) | **0.5** (0.3-0.9) | **3.1** (2.0-4.8) | **1.6** (1.2-2.2) | **1.0** (0.7-1.4) | **0.6** (0.3-0.9) | **0.7** (0.4-1.2) | **2.2** (1.8-2.9) | **1.3** (0.9-1.7) | **1.1** (0.7-1.7) | **1.6** (1.1-2.3) |
| Sex | Males | **1.8** (1.0-3.4) | **0.8** (0.4-1.5) | **0.6** (0.3-1.3) | † | **0.7** (0.3-1.6) | **3.5** (1.6-7.3) | **1.7** (1.1-2.8) | **1.2** (0.8-1.9) | † | **0.7** (0.4-1.4) | **3.0** (2.1-4.1) | **1.6** (1.1-2.4) | **1.3** (0.8-2.1) | **1.8** (1.2-2.6) |
| | Females | **0.7** (0.3-1.5) | **0.6** (0.3-1.2) | **0.5** (0.3-0.9) | **0.7** (0.3-1.6) | † | **2.7** (1.6-4.7) | **1.5** (1.0-2.3) | **0.7** (0.4-1.2) | **0.8** (0.4-1.4) | **0.7** (0.3-1.5) | **1.6** (1.0-2.4) | **0.9** (0.5-1.4) | **1.0** (0.5-1.9) | **1.4** (0.7-2.5) |
| Grade | 7 | † | † | † | † | † | **1.6** (0.6-4.4) | **1.2** (0.5-2.9) | **0.6** (0.2-1.9) | † | † | **1.0** (0.3-3.3) | **0.6** (0.2-1.6) | † | † |
| | 8 | † | † | † | † | † | **2.6** (1.0-6.5) | **1.2** (0.5-2.7) | **1.1** (0.3-3.6) | † | † | † | **0.6** (0.2-2.0) | † | † |
| | 9 | **1.2** (0.4-3.3) | † | **0.7** (0.3-1.6) | † | † | **5.2** (3.4-7.9) | **1.4** (0.8-2.8) | **2.1** (1.2-3.6) | **0.7** (0.2-1.9) | † | **1.7** (0.8-3.2) | **1.5** (0.8-2.8) | **0.8** (0.3-2.1) | † |
| | 10 | **3.6** (1.7-7.1) | **0.9** (0.3-2.3) | **0.5** (0.2-1.2) | † | † | **3.0** (1.3-6.9) | **2.0** (1.0-4.0) | **1.4** (0.7-2.5) | † | † | **1.6** (0.8-3.2) | **1.6** (0.7-3.7) | † | **1.5** (0.7-3.1) |
| | 11 | † | **1.7** (0.8-3.4) | **0.6** (0.3-1.5) | **1.0** (0.4-2.3) | † | **1.2** (0.4-3.5) | **2.3** (1.3-4.0) | **0.6** (0.2-1.6) | **0.8** (0.3-1.8) | **2.0** (0.8-5.0) | **4.7** (3.1-6.9) | **1.9** (1.1-3.3) | **2.0** (1.1-3.8) | **2.3** (1.4-4.0) |
| | 12 | **1.2** (0.3-3.8) | † | **0.5** (0.2-1.6) | **1.0** (0.3-2.9) | † | **5.4** (1.3-19.9) | **1.3** (0.5-3.2) | † | † | † | **3.7** (2.1-6.5) | **1.4** (0.7-2.5) | **2.5** (1.4-4.4) | **2.8** (1.6-5.1) |
| Region | Toronto | **1.6** (0.6-4.2) | **0.8** (0.3-2.1) | † | † | † | **2.9** (1.6-5.1) | **0.9** (0.4-2.0) | **0.8** (0.2-2.8) | † | † | **1.2** (0.5-3.1) | † | **1.6** (0.5-4.7) | † |
| | North | **0.7** (0.2-2.0) | **1.2** (0.6-2.6) | **0.7** (0.3-1.5) | **0.6** (0.1-4.2) | † | **1.6** (0.6-4.1) | **3.5** (1.9-6.5) | **1.5** (0.7-3.3) | **1.7** (0.6-4.4) | † | **3.5** (1.8-6.9) | **1.5** (0.8-2.9) | **1.9** (0.8-4.7) | † |
| | West | **1.5** (0.7-3.1) | **0.5** (0.2-1.0) | **0.6** (0.3-1.1) | **0.5** (0.2-1.6) | † | **4.2** (2.1-8.1) | **1.4** (0.8-2.3) | **1.4** (0.9-2.1) | **0.6** (0.3-1.1) | **0.9** (0.4-2.0) | **2.7** (2.0-3.8) | **1.8** (1.2-2.7) | **0.9** (0.5-1.6) | **1.8** (0.9-3.4) |
| | East | **0.9** (0.3-2.3) | **0.8** (0.3-1.9) | † | **0.6** (0.3-1.5) | **0.9** (0.3-2.3) | **2.0** (0.9-4.5) | **2.0** (1.1-3.4) | † | **0.6** (0.2-1.6) | **0.7** (0.3-1.9) | **1.8** (1.1-2.8) | **0.9** (0.5-1.8) | **1.0** (0.5-2.3) | **1.4** (0.8-2.6) |

Notes: (1) entries in brackets are 95% confidence intervals; (2) † estimate suppressed due to unreliability; (3) each drug based on a random half-sample in each year; (4) ketamine not asked about in 2001; (5) no significant differences, 2009 vs. 2007; for Rohypnol significant difference 2009 vs. 2001 ($p<.01$) for the total sample, males, females, and west region.

Q: In the last 12 months, how often did you use GHB (also known as "G", "goop", "grevious bodily harm", "liquid ecstasy")?

Q: In the last 12 months, how often did you use Rohypnol (also known as "roach", "roofies")?

Q: In the last 12 months, how often did you use the drug Ketamine (also knows as "special K")?

Source: OSDUHS, Centre for Addiction & Mental Health

# 3.7 Non-Medical Use of Prescription Drugs and Over-the-Counter Drugs

The non-medical use (i.e., use without a doctor's prescription) of controlled psychoactive prescription drugs among adolescents is a growing concern in Canada and the United States. Some of the more popular prescription drugs that are being abused include opioid pain relievers (e.g., OxyContin), stimulant drugs prescribed for Attention Deficit/Hyperactivity Disorder (ADHD) such as Ritalin, and tranquillizer/sedatives (e.g., Valium) that are usually prescribed to reduce stress or anxiety. Over-the-counter medication such as cough and cold medicine containing dextromethorphan (DXM), and sleeping pills also have the potential to be abused.

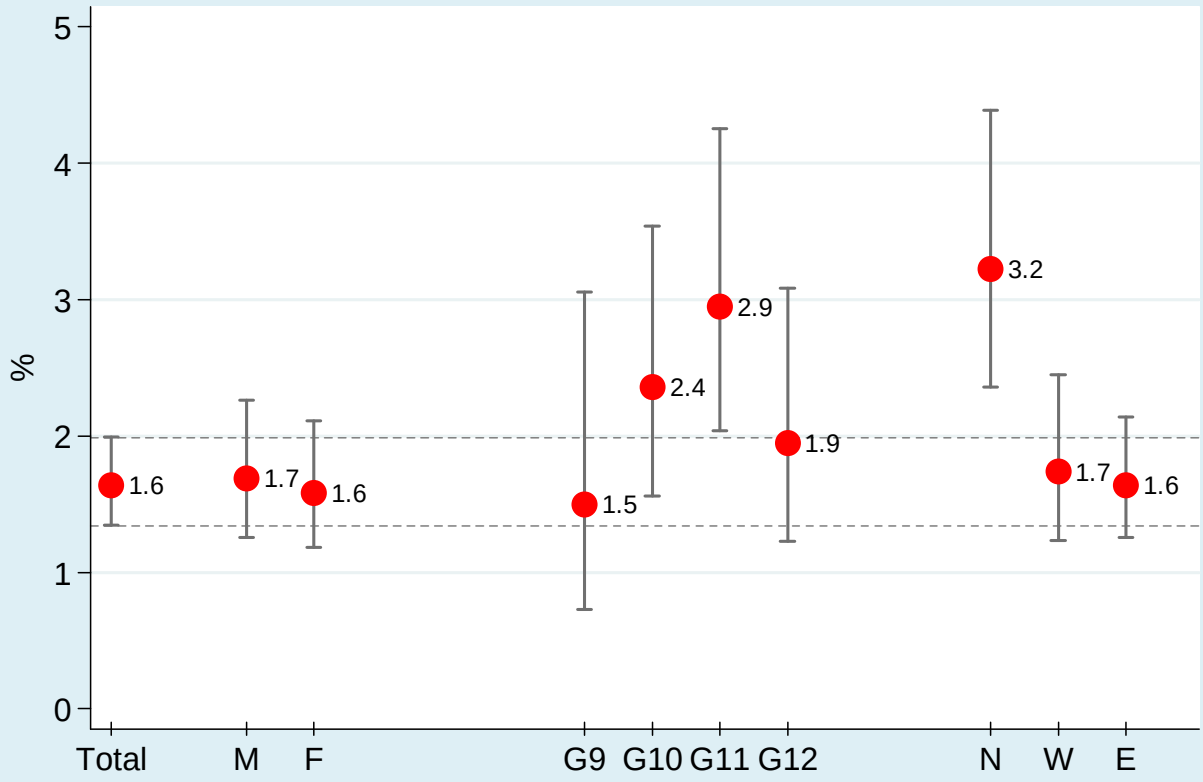
## Past Year Non-Medical Use of OxyContin

(Figure 3.7.1; Table 3.7.1)

OxyContin is a brand name for a highly addictive prescription painkiller containing the opioid oxycodone. It is an analgesic drug, and also delivers an initial rush of euphoria, much like heroin. Starting in 2005, the OSDUHS asked students about using OxyContin non-medically during the previous year.

| | NM OxyContin Use in 2009 (Grades 7 to 12) | Trends in NM OxyContin Use |
|---|---|---|
| Total Sample | ■ In 2009, 1.6% of all students report using OxyContin non-medically during the past year. With the sampling error, we estimate that between 1.3% and 2.0% of students use OxyContin. The estimate of 1.6% represents about 16,700 students in Ontario. | ☐ Among the total sample of students, non-medical OxyContin use in 2009 (1.6%) is similar to the estimate from 2007 (1.8%), and from 2005 (1.0%). |
| Sex | ■ There is no significant difference in non-medical OxyContin use between males (1.7%) and females (1.6%). | ☐ There has been no significant change in use among males or females between 2005 and 2009. |
| Grade | ■ OxyContin use significantly increases with grade, peaking in grade 11 at 2.9%. | ☐ Use has significantly increased among 10$^{th}$-graders, from 0.7% in 2005 up to 2.4% in 2009. |
| Region | ■ There is significant regional variation, with use most likely in the North (3.2%). | ☐ Among the regions, only students in the East showed a significant change in use, from 0.6% in 2005 to 1.9% in 2007, and remains higher in 2009 at 1.6%. |
| Frequent Use | ■ Most (60%) OxyContin users report using once or twice in the past year. About 15% of users used 10 or more times (see Figure 3.1.3). | |

Figure 3.7.1
Past Year Non-Medical OxyContin Use by Sex, Grade and Region, 2009 OSDUHS




Vertical bars represent 95% confidence intervals; horizontal bar represents 95% CI for total estimate; estimates for Grade 7, Grade 8, and Toronto were suppressed

Table 3.7.1: Percentage Reporting Non-Medical Use of OxyContin During the Past Year, 2005–2009

| | (N) | 2005 (7726) | 2007 (6323) | 2009 (9112) |
|---|---|---|---|---|
| Total | | **1.0** | **1.8** | **1.6** |
| (95% CI) | | (0.7-1.5) | (1.3-2.4) | (1.3-2.0) |
| Sex | | | | |
| | Males | **0.9** | **1.7** | **1.7** |
| | | (0.6-1.4) | (1.2-2.3) | (1.3-2.3) |
| | Females | **1.2** | **1.9** | **1.6** |
| | | (0.7-1.9) | (1.3-2.8) | (1.2-2.1) |
| Grade | | | | |
| | 7 | **0.9** | † | † |
| | | (0.4-2.3) | | |
| | 8 | **0.7** | **1.5** | † |
| | | (0.3-1.6) | (0.8-3.0) | |
| | 9 | **1.3** | **0.8** | **1.5** |
| | | (0.6-2.8) | (0.4-1.4) | (0.7-3.1) |
| | 10 | **0.7** | **1.9** | **2.4** [b] |
| | | (0.3-1.5) | (1.2-3.2) | (1.6-3.5) |
| | 11 | **1.2** | **3.2** | **2.9** |
| | | (0.7-2.3) | (1.9-5.3) | (2.0-4.2) |
| | 12 | **1.4** | **2.2** | **1.9** |
| | | (0.7-2.7) | (1.3-3.6) | (1.2-3.1) |
| Region | | | | |
| | Toronto | **0.8** | **1.3** | † |
| | | (0.2-2.6) | (0.8-2.2) | |
| | North | **3.3** | **3.2** | **3.2** |
| | | (1.8-6.1) | (1.8-5.5) | (2.4-4.4) |
| | West | **1.2** | **1.7** | **1.7** |
| | | (0.7-1.9) | (1.1-2.7) | (1.2-2.4) |
| | East | **0.6** | **1.9** | **1.6** [b] |
| | | (0.3-1.0) | (1.3-2.4) | (1.2-2.1) |

Notes: (1) entries in brackets are 95% confidence intervals; (2) † estimate suppressed due to unreliability; (3) no significant differences 2009 vs. 2007; [b] 2009 vs. 2005 significant difference, p<.01.

Q: In the last 12 months, how often did you use "OxyContin" (also known as "oxy", "OC") without a prescription or without a doctor telling you to take it?

Source: OSDUHS, Centre for Addiction & Mental Health

## Past Year Non-Medical Use of Prescription Opioid Pain Relievers

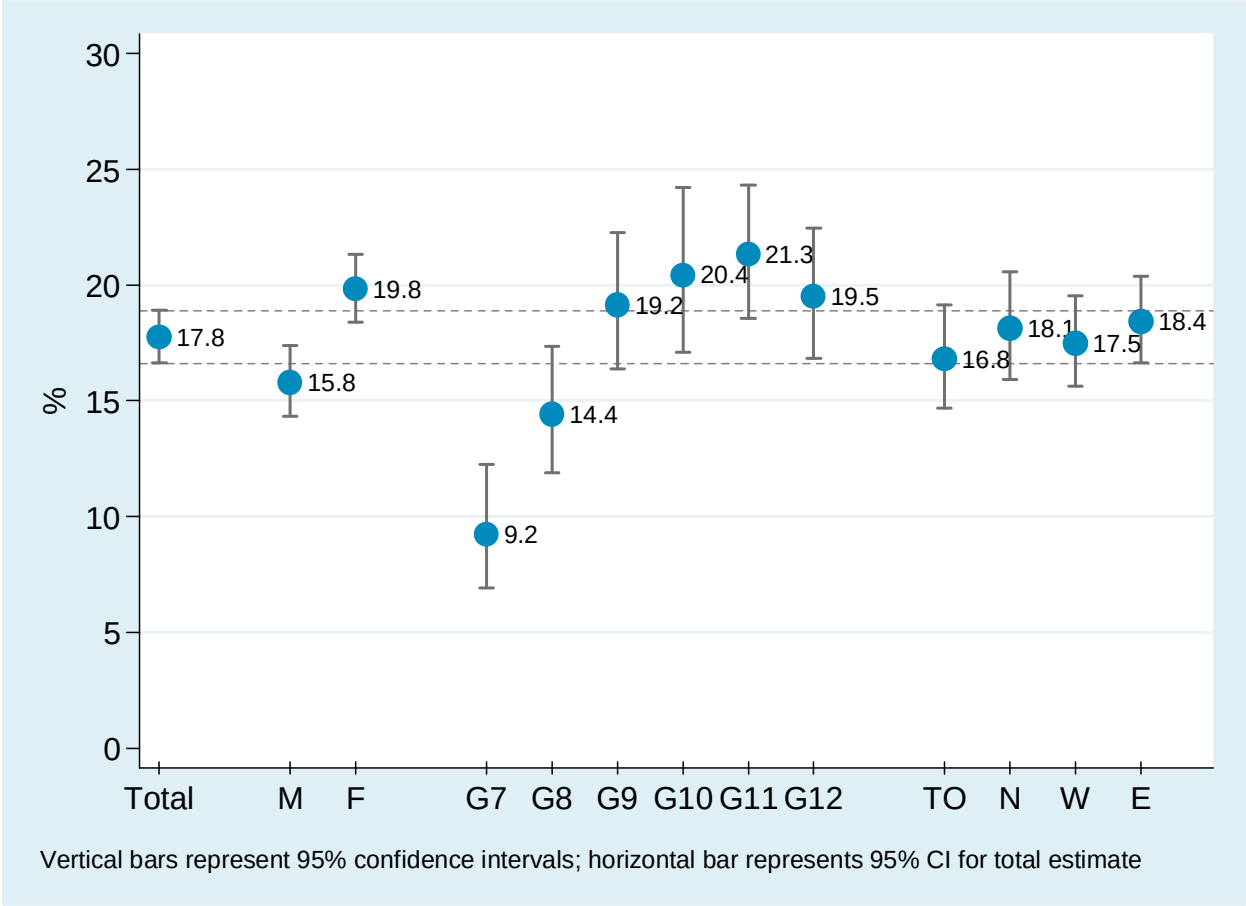
(Figure 3.7.2; Table 3.7.2)

Starting in 2007, students were asked about their non-medical use of the general class of prescription opioid pain relievers, such as Percocet and Tylenol #3. In addition to suppressing pain, these drugs may also cause a relaxed or euphoric feeling. Opioids can be dangerous when used without medical supervision because if taken with other depressant drugs (e.g., alcohol) or in large quantities they can slow one's breathing. Chronic use/abuse of opioids can lead to dependence. Students were asked "*In the last 12 months, how often did you use pain relief pills (such as Percocet, Percodan, Tylenol #3, Demerol, OxyContin, codeine) without a prescription or without a doctor telling you to take them? (We do not mean regular Tylenol or Aspirin that anyone can buy in a drugstore.*)"*

| | NM Use of an Opioid Pain Reliever in 2009 (Grades 7 to 12) | Changes in Use, 2009 vs. 2007 |
|---|---|---|
| Total Sample | ■ Among all students, 17.8% (range, 16.6%-18.9%) report using a prescription opioid pain reliever non-medically at least once during the year before the survey. This estimate represents about 180,200 Ontario students in grades 7 to 12. | ☐ Among the total sample of students, there has been no statistically significant change in use between 2007 (20.6%) and 2009 (17.8%), despite the numerical decrease. |
| Sex | ■ Females (19.8%) are significantly more likely than males (15.8%) to use an opioid pain reliever without a prescription. | ☐ Use has not changed since 2007 among males or females. |
| Grade | ■ There is significant grade variation, with 7th-graders and 8th-graders least likely to report use compared to the older grades. | ☐ Use among grade 8 students significantly decreased between 2007 (22.1%) and 2009 (14.4%). |
| Region | ■ Use does not significantly vary by region. | ☐ Use among Northern students significantly decreased between 2007 (27.0%) and 2009 (18.1%). |
| Frequent Use | ■ About 7% of all students report using an opioid pain reliever non-medically 6 times or more in the past year (see Figure 3.1.2).<br>■ About 43% of past year users report using once or twice in the past year. One-quarter (26%) used 10 or more times (see Figure 3.1.3). | |

* A question wording experiment was conducted in 2009.
See Method section for details.

Figure 3.7.2
Past Year Non-Medical Use of a Prescription Opioid Pain Reliever by Sex, Grade and Region, 2009 OSDUHS




Vertical bars represent 95% confidence intervals; horizontal bar represents 95% CI for total estimate

Table 3.7.2: Percentage Reporting Non-Medical Use of a Prescription Opioid Pain Reliever During the Past Year, 2007–2009

| | | (N) | **2007** (2935) | **2009** (9112) |
|---|---|---|---|---|
| Total | | | **20.6** | **17.8** |
| (95% CI) | | | (18.9-22.3) | (16.6-18.9) |
| Sex | | | | |
| | Males | | **18.0** | **15.8** |
| | | | (15.8-20.3) | (14.3-17.4) |
| | Females | | **23.5** | **19.8** |
| | | | (20.8-26.3) | (18.4-21.3) |
| Grade | | | | |
| | 7 | | **12.5** | **9.2** |
| | | | (8.4-18.2) | (6.9-12.2) |
| | 8 | | **22.1** | **14.4** [a] |
| | | | (17.7-27.2) | (11.9-17.4) |
| | 9 | | **24.0** | **19.2** |
| | | | (19.5-29.1) | (16.4-22.3) |
| | 10 | | **21.8** | **20.4** |
| | | | (18.1-25.9) | (17.1-24.2) |
| | 11 | | **22.0** | **21.3** |
| | | | (18.4-26.2) | (18.6-24.3) |
| | 12 | | **20.5** | **19.5** |
| | | | (16.6-25.1) | (16.8-22.5) |
| Region | | | | |
| | Toronto | | **17.9** | **16.8** |
| | | | (14.5-21.9) | (14.7-19.2) |
| | North | | **27.0** | **18.1** [a] |
| | | | (21.6-33.1) | (15.9-20.6) |
| | West | | **21.5** | **17.5** |
| | | | (18.8-24.4) | (15.6-19.5) |
| | East | | **19.3** | **18.4** |
| | | | (16.8-22.1) | (16.6-20.4) |

Notes: (1) entries in brackets are 95% confidence intervals; (2) [a] 2009 vs. 2007 significant difference, 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) without a prescription or without a doctor telling you to take them? We do not mean regular Tylenol or Aspirin that anyone can buy in a drugstore." (Note that the last sentence was added in 2009 for evaluation purposes – see Method section for details.)
Source: OSDUHS, Centre for Addiction & Mental Health

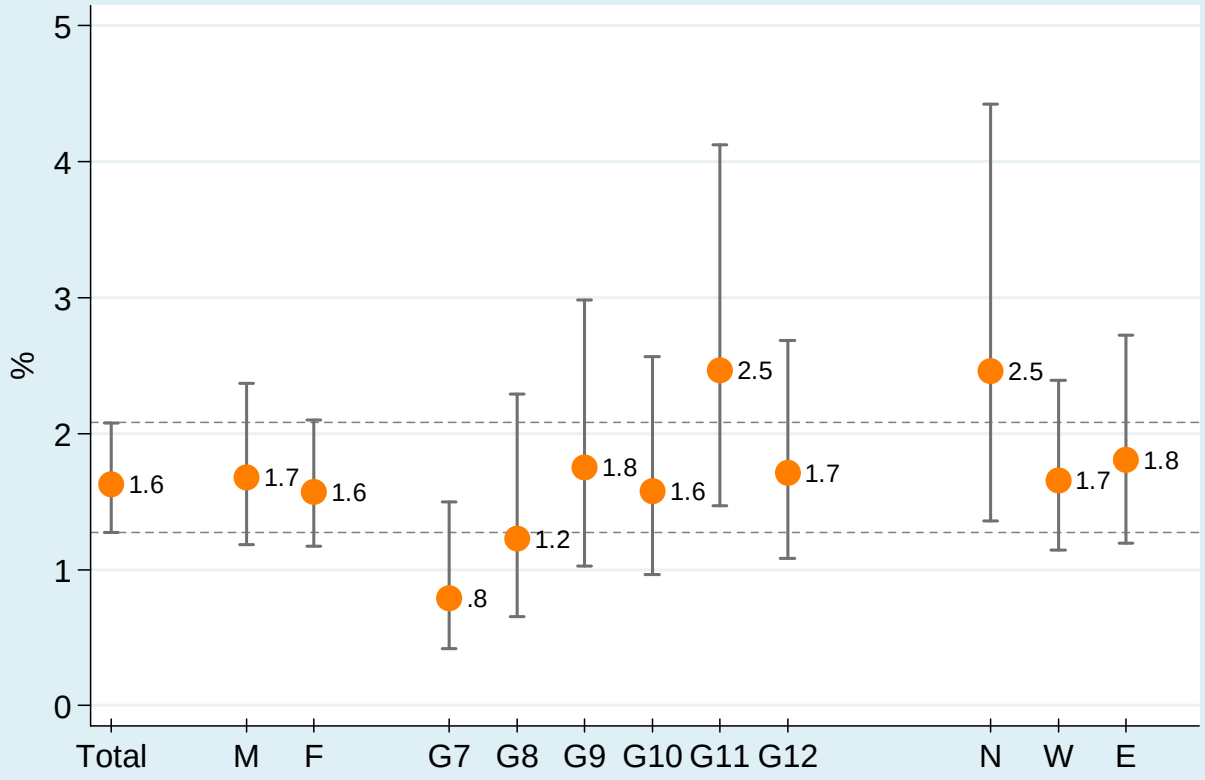
## Past Year Non-Medical Use of ADHD Drugs

(Figure 3.7.3; Table 3.7.3)

Ritalin (methylphenidate), Concerta, and Adderall are stimulant drugs, similar to amphetamines, used to treat Attention Deficit/Hyperactivity Disorder (ADHD) in children. However, some people take these drugs without a prescription (i.e., abuse) for various purposes including appetite suppression, wakefulness, increased focus, and euphoria. Starting in 2007, students were asked about the non-medical use of this class of drugs. The question used was: "*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 that is usually used to treat ADHD (such as Ritalin, Concerta, Adderall, Dexedrine) without a prescription or without a doctor telling you to take it?*"

| | NM ADHD Drug Use in 2009 (Grades 7 to 12) | Changes in Use, 2009 vs. 2007 |
|---|---|---|
| Total Sample | ■ Among all students, 1.6% (range, 1.3%-2.1%) report using an ADHD drug for non-medical purposes in the past 12 months. This represents about 16,500 Ontario students. | ☐ Among the total sample of students, the non-medical use of an ADHD drug did not significantly change between 2007 (1.0%) and 2009 (1.6%). |
| Sex | ■ There is no significant difference between males (1.7%) and females (1.6%) regarding non-medical use of an ADHD drug. | ☐ Use has not changed among males or females between 2007 and 2009. |
| Grade | ■ Despite some variation, there are no significant differences among the grades. | ☐ No grade shows a significant change in use. |
| Region | ■ There are no significant differences among the regions. | ☐ No region shows a significant change in use. |
| Frequent Use | ■ Most (53%) past year users report using once or twice in the past year. One-quarter (25%) used 10 or more times (see Figure 3.1.3). | |

Figure 3.7.3
Past Year Non-Medical Use of an ADHD Drug by Sex, Grade and Region, 2009 OSDUHS




Vertical bars represent 95% confidence intervals; horizontal bar represents 95% CI for total estimate; estimate for Toronto was suppressed

Table 3.7.3: Percentage Reporting Non-Medical Use of an ADHD Drug During the Past Year, 2007–2009

| | | 2007 | 2009 |
|---|---|---|---|
| | (N) | (2935) | (9112) |
| Total | | **1.0** | **1.6** |
| (95% CI) | | (0.7-1.5) | (1.3-2.1) |
| Sex | | | |
| | Males | **1.1** | **1.7** |
| | | (0.7-1.8) | (1.2-2.4) |
| | Females | **1.0** | **1.6** |
| | | (0.5-1.9) | (1.2-2.1) |
| Grade | | | |
| | 7 | † | **0.8** |
| | | | (0.4-1.5) |
| | 8 | † | **1.2** |
| | | | (0.7-2.3) |
| | 9 | **1.7** | **1.8** |
| | | (0.6-4.6) | (1.0-3.0) |
| | 10 | **1.1** | **1.6** |
| | | (0.5-2.4) | (1.0-2.6) |
| | 11 | **2.2** | **2.5** |
| | | (1.3-3.7) | (1.5-4.1) |
| | 12 | † | **1.7** |
| | | | (1.1-2.7) |
| Region | | | |
| | Toronto | **1.1** | † |
| | | (0.4-2.9) | |
| | North | † | **2.5** |
| | | | (1.4-4.4) |
| | West | **1.1** | **1.7** |
| | | (0.6-1.7) | (1.1-2.4) |
| | East | † | **1.8** |
| | | | (1.2-2.7) |

Notes: (1) entries in brackets are 95% confidence intervals; (2) † estimate suppressed due to unreliability; (3) no significant differences 2009 vs. 2007.

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 that is usually used to treat ADHD (such as Ritalin, Concerta, Adderall, Dexedrine) without a prescription or without a doctor telling you to take it?"

Source: OSDUHS, Centre for Addiction & Mental Health

## Past Year Non-Medical Use of Other Stimulants

(Figures 3.7.4, 3.7.5; Table 3.7.4)

This section presents use of other stimulants, also known as amphetamines, such as Benzedrine and Dexedrine. These are drugs that some use to lose weight, feel more energetic, or stay awake. Stimulants speed up the central nervous system, reducing hunger, increasing breathing, heart rate and blood pressure. Here, we look at non-medical use – that is, use without a prescription or not under a doctor's supervision.

| | NM Stimulant Use in 2009 (Grades 7 to 12) | Trends in NM Stimulant Use |
|---|---|---|
| Total Sample | ■ The non-medical use of stimulants (e.g., diet pills, stay-awake pills) is reported by 4.8% (range: 4.1%-5.5%) of students. This percentage represents about 48,500 Ontario students in grades 7 to 12. | ☐ Stimulant use in 2009 (4.8%) is similar to use in 2007 (5.7%), but significantly lower than use in 1999 (7.3%).<br><br>☐ Over the long-term (among grades 7, 9, 11 only), stimulant use peaked in 1983, steadily decreased over the next decade, and remained low and stable since then. |
| Sex | ■ Females (6.3%) are significantly more likely to use stimulants than males (3.4%). | ☐ Males show no change in stimulant use between 1999 and 2009. However, females' stimulant use is currently significantly lower in 2009 (6.3%) compared to the estimate from 1999 (9.4%).<br><br>☐ For both males and females, current rates of use are significantly lower compared to the peaks in the early 1980s. |
| Grade | ■ Stimulant use is significantly associated with grade, increasing from 1.0% of 7th-graders to 7.5% of 11th-graders. | ☐ Only 12th-graders show a significant change in stimulant use over the past decade, with use in 2009 (5.7%) significantly lower than in 1999 (10.0%).<br><br>☐ For both 9th- and 11th-graders, current use is significantly lower compared to levels found in the early 1980s. |
| Region | ■ Stimulant use significantly varies by region, with use most likely among Northern students (7.0%) and least likely among Toronto students (2.8%). | ☐ Only the West shows a significant decrease in use in 2009 (5.3%) compared to 1999 (8.6%).<br><br>☐ Over the long-term, all four regions show decreases in use over the late 1980s, and a levelling-off since then. |
| Frequent Use | ■ Frequent use (6 times or more in the past year) is below 2% among the total sample of students (see Figure 3.1.2). Most past year users (47%) report using stimulants only once or twice in the past year. However, 23% of users report using at least 10 times (see Figure 3.1.3). | |

Figure 3.7.4
Past Year Non-Medical Stimulant Use by Sex, Grade and Region, 2009 OSDUHS

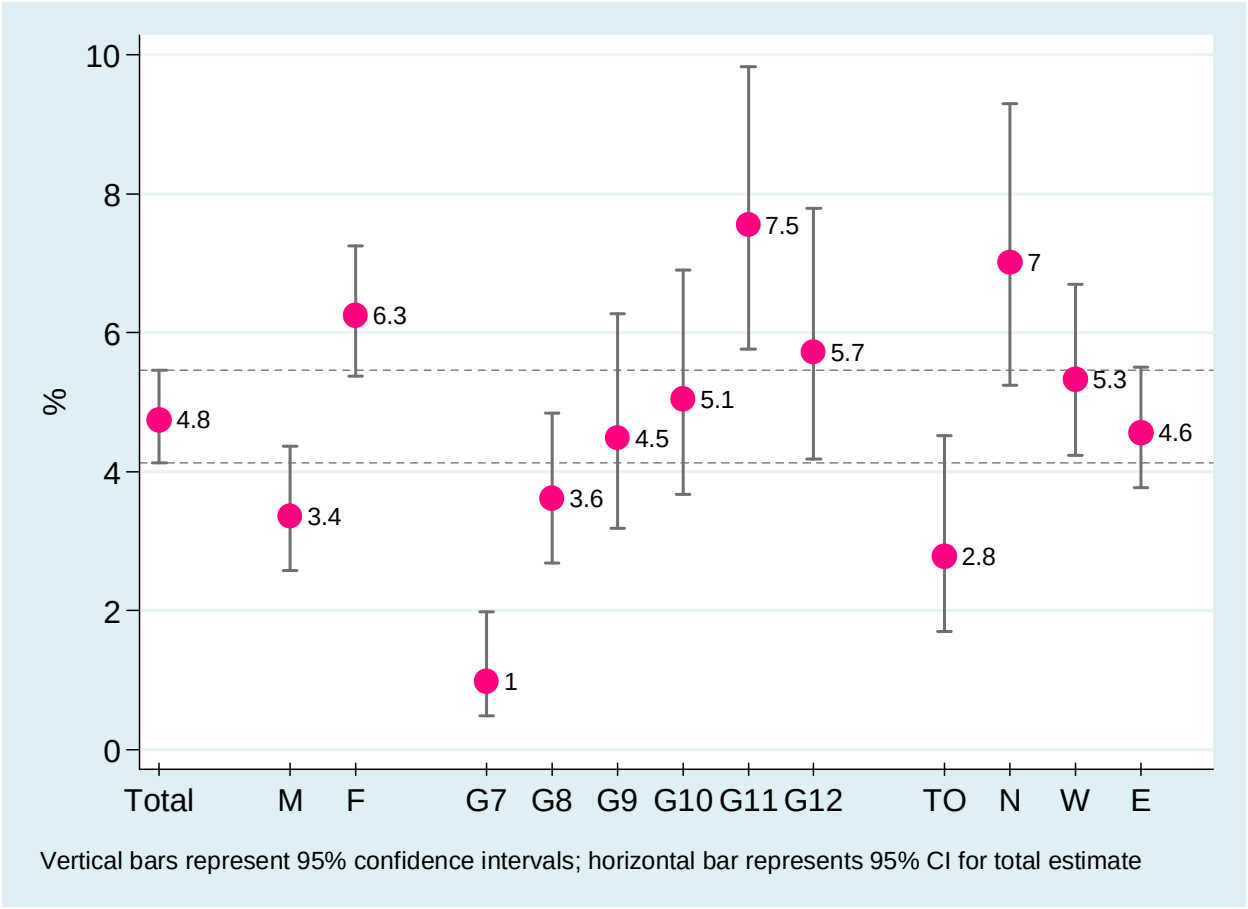


Figure 3.7.5
Past Year Non-Medical Stimulant Use, 1977–2009 OSDUHS (Grades 7, 9, 11 only)

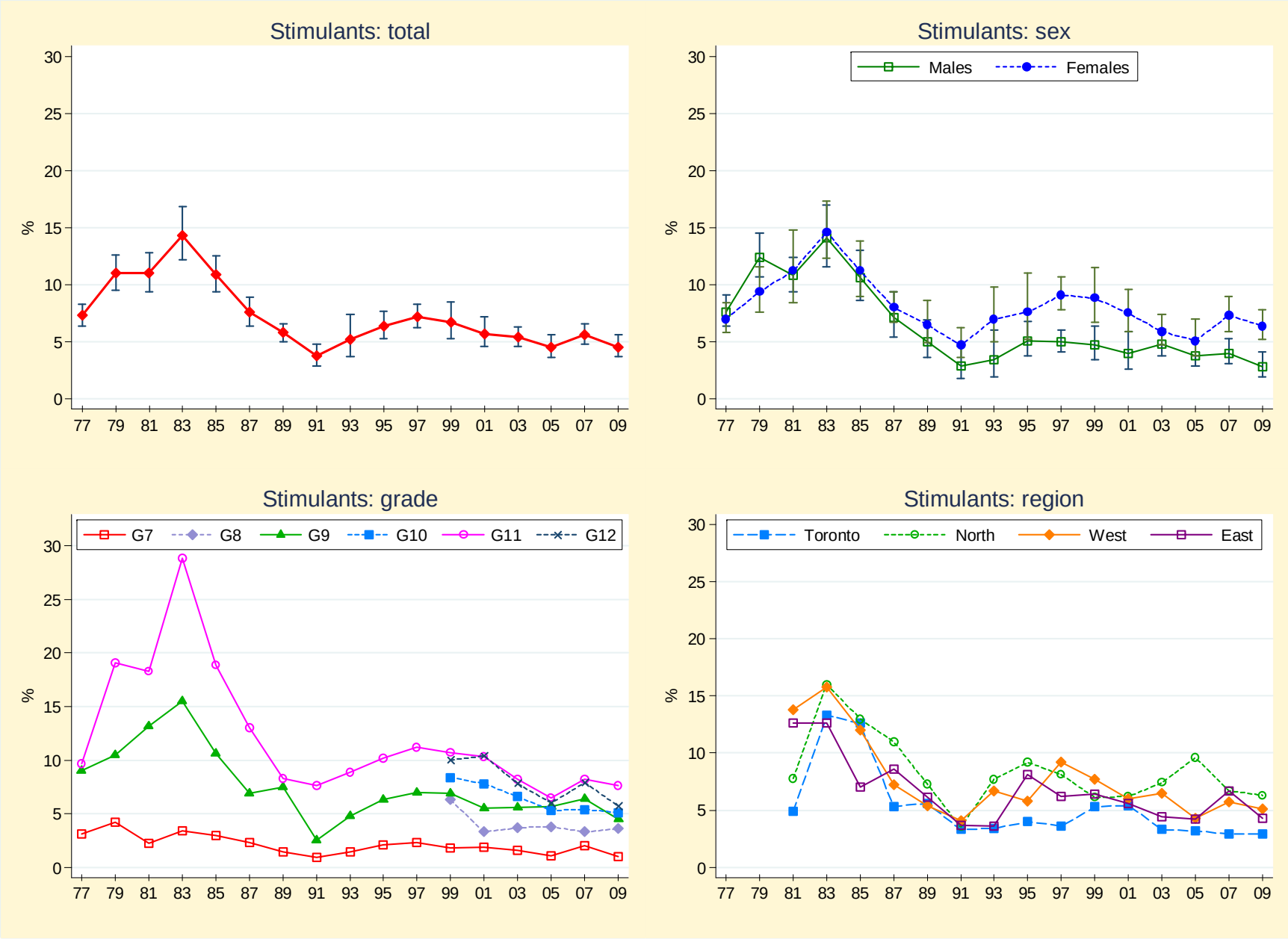


Table 3.7.4: Percentage Reporting Non-Medical Stimulant Use During the Past Year, 1977–2009

| | 1977 | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N[1]) | | | | | | | | | | | | (4447) | (3898) | (6616) | (7726) | (6323) | (9112) |
| (N[2]) | (3927) | (3920) | (3010) | (3614) | (3146) | (3376) | (3040) | (2961) | (2617) | (2907) | (3072) | (2421) | (2013) | (3389) | (3969) | (3215) | (4424) |
| Total[1] (95% CI) | — | — | — | — | — | — | — | — | — | — | — | 7.3 (6.4-8.4) | 6.3 (5.4-7.4) | 5.8 (5.0-6.6) | 4.8 (4.1-5.6) | 5.7 (5.0-6.5) | 4.8 (4.1-5.5) [b] |
| Total[2] | 7.3 (6.4-8.3) | 11.0 (9.5-12.6) | 11.0 (9.4-12.8) | 14.3 (12.2-16.8) | 10.9 (9.4-12.5) | 7.6 (6.4-8.9) | 5.8 (5.0-6.6) | 3.8 (2.9-4.8) | 5.2 (3.7-7.4) | 6.4 (5.3-7.7) | 7.2 (6.2-8.3) | 6.7 (5.3-8.5) | 5.7 (4.6-7.2) | 5.4 (4.6-6.3) | 4.5 (3.6-5.6) | 5.6 (4.8-6.6) | 4.5 (3.7-5.6) [c] |
| Sex | | | | | | | | | | | | | | | | | |
| Males[1] | — | — | — | — | — | — | — | — | — | — | — | 5.3 (4.3-6.6) | 4.5 (3.4-6.0) | 4.7 (4.0-5.7) | 4.3 (3.5-5.2) | 4.0 (3.2-5.0) | 3.4 (2.6-4.4) |
| Males[2] | 7.6 (6.4-9.1) | 12.4 (10.7-14.5) | 10.8 (9.4-12.4) | 14.1 (11.6-17.0) | 10.6 (8.6-13.0) | 7.1 (5.4-9.4) | 5.0 (3.6-6.9) | 2.9 (1.8-4.6) | 3.4 (1.9-6.0) | 5.1 (3.8-6.8) | 5.0 (4.1-6.0) | 4.7 (3.4-6.4) | 4.0 (2.6-5.9) | 4.8 (3.8-6.1) | 3.9 (2.9-5.1) | 4.0 (3.1-5.3) | 2.8 (1.9-4.1) |
| Females[1] | — | — | — | — | — | — | — | — | — | — | — | 9.4 (8.0-11.0) | 8.0 (6.7-9.6) | 6.7 (5.7-7.8) | 5.4 (4.5-6.5) | 7.5 (6.3-8.8) | 6.3 (5.4-7.2) [b] |
| Females[2] | 7.0 (5.8-8.4) | 9.4 (7.6-11.6) | 11.2 (8.4-14.8) | 14.6 (12.3-17.3) | 11.2 (9.0-13.8) | 8.0 (6.7-9.4) | 6.5 (4.9-8.6) | 4.7 (3.6-6.2) | 7.0 (5.0-9.8) | 7.6 (5.2-11.0) | 9.1 (7.8-10.7) | 8.8 (6.7-11.5) | 7.5 (5.9-9.6) | 5.9 (4.7-7.4) | 5.1 (3.8-7.0) | 7.3 (5.9-8.9) | 6.4 (5.2-7.8) |
| Grade | | | | | | | | | | | | | | | | | |
| 7 | 3.1 (2.2-4.4) | 4.2 (3.2-5.6) | 2.2 (1.5-3.1) | 3.4 (2.2-5.3) | 3.0 (1.3-6.7) | 2.3 (1.6-3.2) | 1.4 (0.9-2.1) | 0.9 (0.3-2.5) | 1.4 (0.8-2.4) | 2.1 (1.3-3.5) | 2.3 (0.6-8.5) | 1.8 (1.1-3.0) | 1.9 (1.1-3.3) | 1.6 (0.9-2.6) | 1.1 (0.5-2.1) | 1.9 (1.0-3.6) | 1.0 (0.5-2.0) |
| 8 | — | — | — | — | — | — | — | — | — | — | — | 6.3 (4.1-9.4) | 3.3 (2.2-5.0) | 3.7 (2.5-5.5) | 3.9 (2.5-5.8) | 3.3 (2.1-5.0) | 3.6 (2.7-4.8) |
| 9 | 9.0 (7.5-10.8) | 10.5 (8.6-12.7) | 13.2 (12.5-14.0) | 15.5 (12.6-18.9) | 10.6 (9.1-12.3) | 6.9 (4.6-10.2) | 7.5 (6.0-9.4) | 2.5 (1.9-3.2) | 4.8 (3.4-6.8) | 6.3 (4.2-9.2) | 7.0 (6.0-8.1) | 6.9 (5.3-9.0) | 5.5 (3.6-8.3) | 5.6 (4.2-7.5) | 5.7 (4.0-8.2) | 6.4 (5.1-8.2) | 4.5 (3.2-6.3) |
| 10 | — | — | — | — | — | — | — | — | — | — | — | 8.4 (6.2-11.3) | 7.8 (5.7-10.6) | 6.6 (4.8-9.1) | 5.3 (3.9-7.2) | 5.4 (3.9-7.4) | 5.1 (3.7-6.9) |
| 11 | 9.7 (7.6-12.3) | 19.1 (15.5-23.4) | 18.3 (13.8-23.9) | 28.9 (22.8-35.9) | 18.9 (15.8-22.4) | 13.0 (10.2-16.2) | 8.3 (7.5-9.1) | 7.6 (5.6-10.3) | 8.9 (5.1-15.0) | 10.2 (8.2-12.6) | 11.2 (9.9-12.8) | 10.7 (7.5-14.9) | 10.3 (7.4-14.1) | 8.2 (6.4-10.4) | 6.5 (4.9-8.4) | 8.2 (6.7-10.0) | 7.5 (5.8-9.8) |
| 12 | — | — | — | — | — | — | — | — | — | — | — | 10.0 (7.9-12.7) | 10.4 (6.9-15.4) | 7.8 (5.9-10.1) | 6.0 (4.6-7.9) | 7.9 (6.0-10.4) | 5.7 (4.2-7.8) [b] |

(Continued…)

| | 1977 | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N[1]) | | | | | | | | | | | | (4447) | (3898) | (6616) | (7726) | (6323) | (9112) |
| (N[2]) | (3927) | (3920) | (3010) | (3614) | (3146) | (3376) | (3040) | (2961) | (2617) | (2907) | (3072) | (2421) | (2013) | (3389) | (3969) | (3215) | (4424) |
| Region | | | | | | | | | | | | | | | | | |
| Toronto[1] | — | — | — | — | — | — | — | — | — | — | — | **5.3** (3.9-7.2) | **5.0** (4.0-6.3) | **3.8** (2.8-5.2) | **2.9** (2.0-4.2) | **3.8** (2.4-6.0) | **2.8** (1.7-4.5) |
| Toronto[2] | — | — | **4.9** (3.3-7.4) | **13.3** (8.6-20.1) | **12.6** (11.1-14.4) | **5.3** (3.3-8.4) | **5.6** (3.1-9.7) | **3.3** (1.8-6.1) | **3.4** (1.4-7.9) | **4.0** (2.1-7.5) | **3.6** (2.5-5.2) | **5.3** (3.5-8.0) | **5.4** (3.6-8.0) | **3.3** (2.0-5.5) | **3.2** (1.8-5.8) | **2.9** (1.5-5.6) | **2.9** (1.2-6.9) |
| North[1] | — | — | — | — | — | — | — | — | — | — | — | **8.4** (6.5-10.8) | **6.6** (4.9-8.8) | **7.8** (6.1-10.0) | **7.5** (4.5-12.2) | **7.2** (5.7-9.1) | **7.0** (5.2-9.3) |
| North[2] | — | — | **7.8** (5.0-11.8) | **16.0** (14.7-17.3) | **13.0** (8.7-19.1) | **11.0** (7.1-16.7) | **7.3** (3.9-13.5) | **3.5** (1.1-10.5) | **7.7** (1.6-29.5) | **9.2** (5.2-15.6) | **8.1** (4.8-13.3) | **6.1** (4.3-8.6) | **6.2** (3.9-9.7) | **7.4** (5.3-10.1) | **9.6** (4.9-18.2) | **6.7** (4.3-10.3) | **6.3** (3.8-10.5) |
| West[1] | — | — | — | — | — | — | — | — | — | — | — | **8.6** (6.8-10.9) | **7.2** (5.5-9.3) | **6.3** (5.1-7.6) | **5.5** (4.4-6.9) | **5.8** (4.8-7.2) | **5.3** [b] (4.2-6.7) |
| West[2] | — | — | **13.8** (11.0-17.3) | **15.8** (12.5-19.8) | **12.0** (9.1-15.7) | **7.2** (5.3-9.6) | **5.4** (4.8-5.9) | **4.1** (3.0-5.6) | **6.7** (4.3-10.2) | **5.8** (4.2-8.0) | **9.2** (7.4-11.4) | **7.7** (5.1-11.6) | **6.0** (4.0-8.7) | **6.5** (5.1-8.2) | **4.3** (3.0-6.1) | **5.7** (4.6-6.9) | **5.1** (3.7-7.0) |
| East[1] | — | — | — | — | — | — | — | — | — | — | — | **6.4** (5.0-8.1) | **5.8** (4.1-8.0) | **5.6** (4.3-7.3) | **4.3** (3.3-5.8) | **6.1** (4.9-7.6) | **4.6** (3.8-5.5) |
| East[2] | — | — | **12.6** (11.7-13.6) | **12.6** (8.7-18.0) | **7.0** (5.4-8.9) | **8.6** (7.2-10.4) | **6.1** (5.2-7.0) | **3.7** (2.2-6.3) | **3.6** (1.9-6.7) | **8.1** (6.2-10.6) | **6.2** (5.1-7.5) | **6.4** (4.6-8.8) | **5.6** (3.5-8.9) | **4.4** (3.3-5.8) | **4.2** (3.2-5.6) | **6.7** (5.1-8.8) | **4.3** (3.2-5.8) |

Notes: (1) based on Grades 7-12 (full sample); (2) based on Grades 7, 9, and 11 only (long-term sample); (3) regional stratification differed in 1977 and 1979 and therefore regions are not presented; (4) entries in brackets are 95% confidence intervals; (5) no significant differences 2009 vs. 2007 ; [b] 2009 vs. 1999 significant difference, p<.01; [c] significant long-term linear trend.

Q: In the last 12 months, how often did you use stimulants such as diet pills and stay-awake pills (also known as “uppers”, “bennies”, “dexies”, “pep pills”, etc.) without a prescription or without a doctor telling you to take them?

Source: OSDUHS, Centre for Addiction & Mental Health

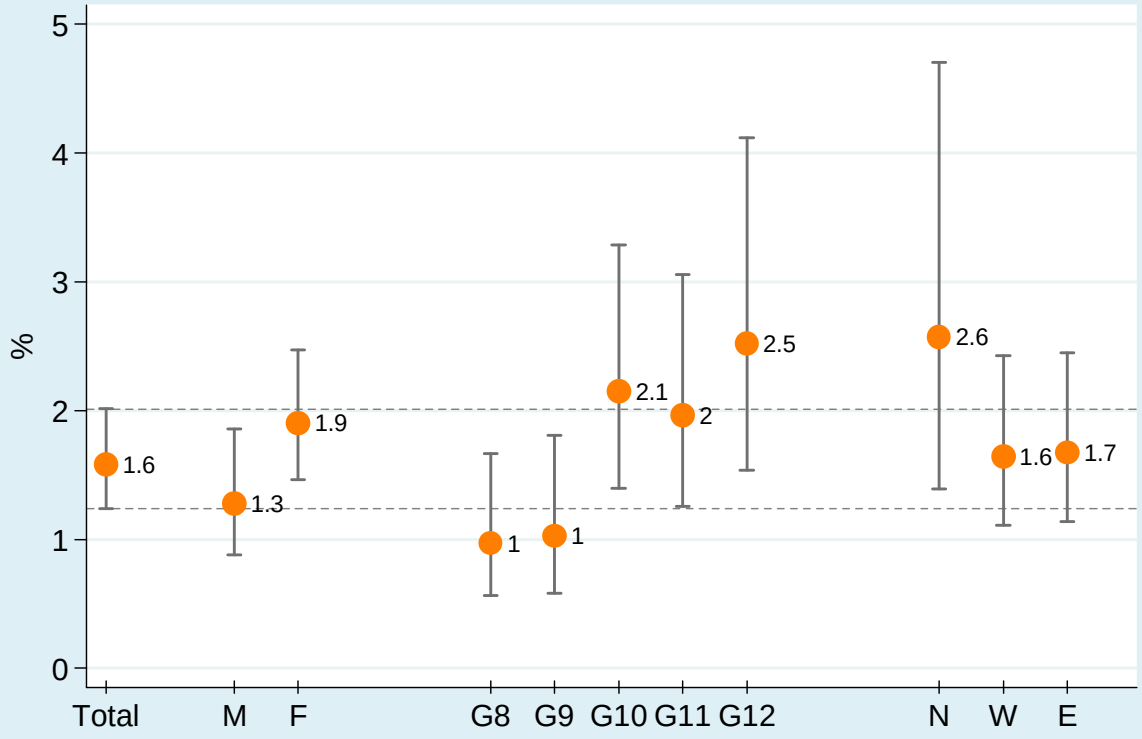
## Past Year Non-Medical Use of Tranquillizers/Sedatives

(Figures 3.7.6, 3.7.7; Table 3.7.5)

This section focuses on tranquilizer/sedative use (e.g., Valium) without a prescription or doctor's supervision. These types of drugs are depressants that can decrease anxiety and induce sleep.

| | Non-Medical Tranquillizer Use in 2009 (Grades 7 to 12) | Trends in Use |
|---|---|---|
| Total Sample | ■ Non-medical tranquillizer use is reported by 1.6% (range: 1.2%-2.0%) of all students. This percentage represents about 16,000 students in grades 7 to 12. | ☐ Among the total sample, there has been no change in tranquillizer use over the past decade, hovering around 2%.<br><br>☐ Over the long-term (among grades 7, 9, 11 only), rates of use peaked in the late 1970s and early 1980s, and have declined since then. |
| Sex | ■ Tranquillizer use significantly differs between males (1.3%) and females (1.9%). | ☐ Neither males nor females show significant changes in tranquillizer use over the past decade.<br><br>☐ For both sexes, current rates of use are significantly lower compared to the late 1970s/early 1980s. |
| Grade | ■ Tranquillizer use significantly varies by grade, with older students more likely to use. | ☐ No grade shows a significant change in tranquillizer use over the past decade.<br><br>☐ For both 9th- and 11th-graders, current use is significantly lower compared to levels found in the late 1970s/early 1980s. |
| Region | ■ Despite some variation, tranquillizer use does not significantly vary by region. | ☐ No region shows a significant change in tranquillizer use over the past decade.<br><br>☐ Over the long-term, all four regions show declines in use occurring in the 1980s, and a levelling-off since then. |
| Frequent Use | ■ Frequent use (6 times or more) during the past year is reported by less than 1% of students (see Figure 3.1.2).<br><br>■ Almost half (47%) of users report using only once or twice during the past year (see Figure 3.1.3). | |

Figure 3.7.6
Past Year Non-Medical Tranquillizer/Sedative Use by Sex, Grade and Region, 2009 OSDUHS




Vertical bars represent 95% confidence intervals; horizontal bar represents 95% CI for total estimate; estimates for Grade 7 and Toronto were suppressed

Figure 3.7.7
Past Year Non-Medical Tranquillizer/Sedative Use, 1977–2009 OSDUHS (Grades 7, 9, 11 only)

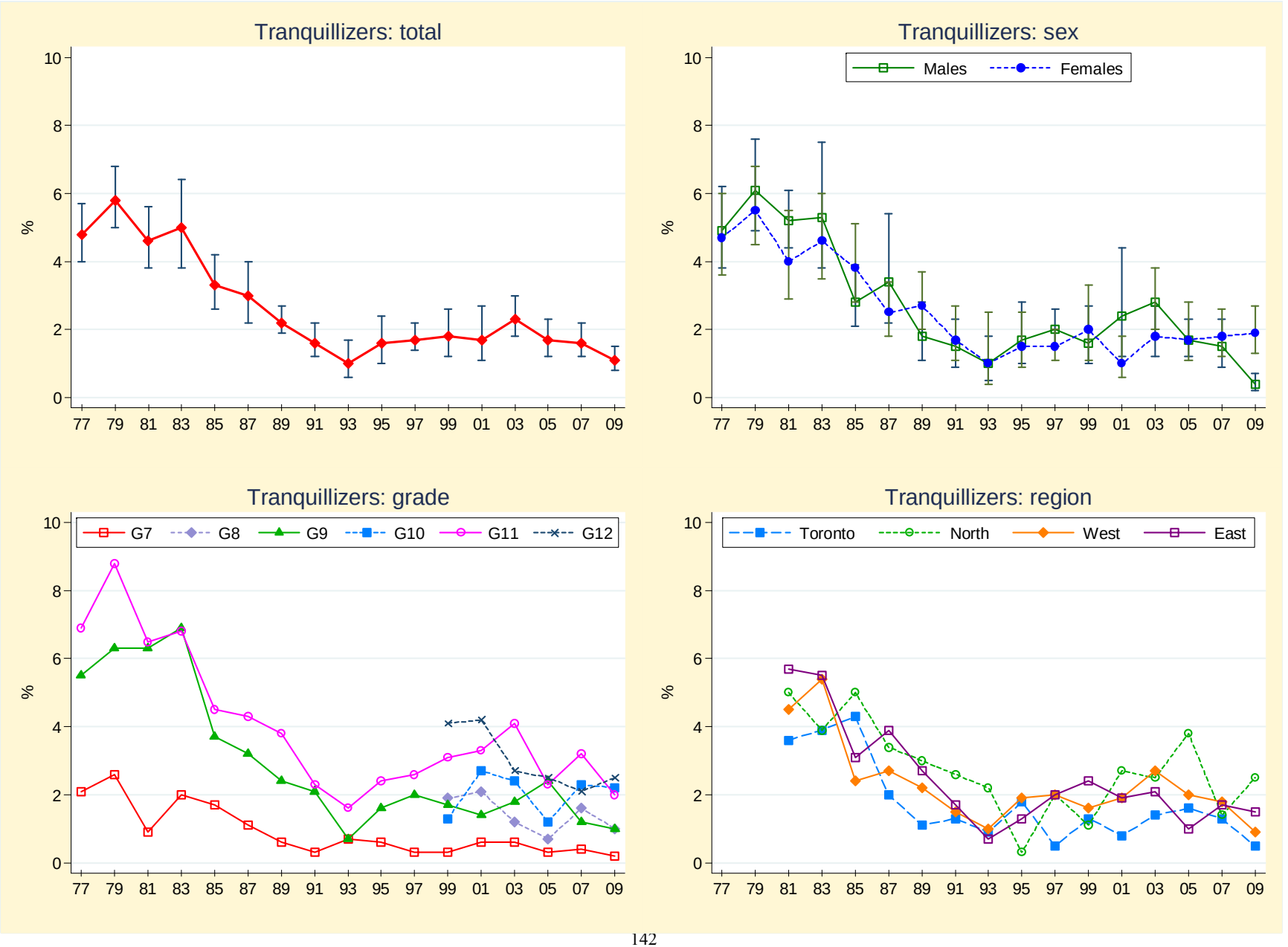


Table 3.7.5: Percentage Reporting Non-Medical Tranquillizer/Sedative Use During the Past Year, 1977–2009

| | 1977 | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N[1]) | | | | | | | | | | | | (4447) | (3898) | (6616) | (7726) | (6323) | (9112) |
| (N[2]) | (3927) | (3920) | (3010) | (3614) | (3146) | (3376) | (3040) | (2961) | (2617) | (2907) | (3072) | (2421) | (2013) | (3389) | (3969) | (3215) | (4424) |
| Total[1] (95% CI) | — | — | — | — | — | — | — | — | — | — | — | 2.0 (1.6-2.6) | 2.2 (1.6-3.1) | 2.2 (1.8-2.7) | 1.6 (1.3-2.0) | 1.8 (1.4-2.3) | 1.6 (1.2-2.0) |
| Total[2] | 4.8 (4.0-5.7) | 5.8 (5.0-6.8) | 4.6 (3.8-5.6) | 5.0 (3.8-6.4) | 3.3 (2.6-4.2) | 3.0 (2.2-4.0) | 2.2 (1.9-2.7) | 1.6 (1.2-2.2) | 1.0 (0.6-1.7) | 1.6 (1.0-2.4) | 1.7 (1.4-2.2) | 1.8 (1.2-2.6) | 1.7 (1.1-2.7) | 2.3 (1.8-3.0) | 1.7 (1.1-2.8) | 1.6 (1.2-2.2) | 1.1 (0.8-1.5) cd |
| Sex | | | | | | | | | | | | | | | | | |
| Males[1] | — | — | — | — | — | — | — | — | — | — | — | 1.9 (1.4-2.7) | 2.7 (1.8-3.9) | 2.7 (2.1-3.5) | 1.5 (1.1-2.0) | 1.7 (1.2-2.4) | 1.3 (0.9-1.8) |
| Males[2] | 4.9 (3.8-6.2) | 6.1 (4.9-7.6) | 5.2 (4.4-6.1) | 5.3 (3.8-7.5) | 2.8 (2.1-3.9) | 3.4 (2.2-5.4) | 1.8 (1.1-2.8) | 1.5 (0.9-2.3) | 1.0 (0.5-1.8) | 1.7 (1.0-2.8) | 2.0 (1.5-2.6) | 1.6 (1.0-2.7) | 2.4 (1.2-4.4) | 1.8 (1.2-2.7) | 1.7 (1.2-2.3) | 1.5 (0.9-2.3) | † |
| Females[1] | — | — | — | — | — | — | — | — | — | — | — | 2.1 (1.5-3.1) | 1.8 (1.1-2.9) | 1.8 (1.3-2.4) | 1.8 (1.3-2.4) | 1.9 (1.5-2.5) | 1.9 (1.5-2.5) |
| Females[2] | 4.7 (3.6-6.0) | 5.5 (4.5-6.8) | 4.0 (2.9-5.5) | 4.6 (3.5-6.0) | 3.8 (2.8-5.1) | 2.5 (1.8-3.4) | 2.7 (2.0-3.7) | 1.7 (1.1-2.7) | 1.0 (0.4-2.5) | 1.5 (0.9-2.5) | 1.5 (1.1-2.0) | 2.0 (1.1-3.3) | 1.0 (0.6-1.8) | 2.8 (2.0-3.8) | 1.7 (1.1-2.8) | 1.8 (1.2-2.6) | 1.9 (1.3-2.7) |
| Grade | | | | | | | | | | | | | | | | | |
| 7 | 2.1 (1.5-3.0) | 2.6 (1.8-3.9) | 0.9 (0.4-1.8) | 2.0 (1.2-3.4) | 1.7 (1.0-2.8) | 1.1 (0.6-2.1) | 0.6 (0.3-1.3) | † | 0.7 (0.4-1.2) | 0.6 (0.2-2.4) | † | † | 0.6 (0.2-1.8) | 0.6 (0.3-1.4) | † | † | † |
| 8 | — | — | — | — | — | — | — | — | — | — | — | 1.9 (1.1-3.3) | 2.1 (1.1-4.2) | 1.2 (0.7-2.0) | 0.7 (0.3-1.7) | 1.6 (0.9-3.0) | 1.0 (0.6-1.7) |
| 9 | 5.5 (4.3-7.1) | 6.3 (5.0-8.0) | 6.3 (5.0-8.1) | 6.9 (5.2-9.0) | 3.7 (2.8-4.9) | 3.2 (1.7-6.0) | 2.4 (1.8-3.1) | 2.1 (1.4-3.0) | 0.7 (0.3-1.6) | 1.6 (1.0-2.6) | 2.0 (1.3-3.1) | 1.7 (1.0-2.9) | 1.4 (0.6-3.2) | 1.8 (1.1-2.9) | 2.5 (1.5-3.9) | 1.2 (0.6-2.4) | 1.0 (0.6-1.8) |
| 10 | — | — | — | — | — | — | — | — | — | — | — | 1.3 (0.7-2.3) | 2.7 (1.6-4.6) | 2.4 (1.7-3.5) | 1.2 (0.7-2.2) | 2.3 (1.4-3.6) | 2.1 (1.4-3.3) |
| 11 | 6.9 (5.1-9.3) | 8.8 (6.9-11.1) | 6.5 (5.0-8.4) | 6.8 (4.0-11.4) | 4.5 (3.0-6.7) | 4.3 (2.7-6.8) | 3.8 (3.1-4.6) | 2.3 (1.4-3.6) | 1.6 (0.6-3.8) | 2.4 (1.2-4.8) | 2.6 (2.0-3.4) | 3.1 (1.8-5.2) | 3.3 (1.7-6.4) | 4.1 (2.9-5.9) | 2.3 (1.5-3.3) | 3.2 (2.2-4.6) | 2.0 (1.3-3.1) |
| 12 | — | — | — | — | — | — | — | — | — | — | — | 4.1 (2.7-6.2) | 4.2 (2.0-8.4) | 2.7 (1.8-4.2) | 2.5 (1.7-3.8) | 2.1 (1.2-3.5) | 2.5 (1.5-4.1) |

(Continued….)

| | 1977 | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N[1]) | | | | | | | | | | | | (4447) | (3898) | (6616) | (7726) | (6323) | (9112) |
| (N[2]) | (3927) | (3920) | (3010) | (3614) | (3146) | (3376) | (3040) | (2961) | (2617) | (2907) | (3072) | (2421) | (2013) | (3389) | (3969) | (3215) | (4424) |
| Region | | | | | | | | | | | | | | | | | |
| Toronto[1] | — | — | — | — | — | — | — | — | — | — | — | **2.0** (1.1-3.5) | **1.0** (0.2-5.5) | **1.4** (0.8-2.5) | **1.2** (0.7-2.2) | **1.0** (0.5-2.0) | † |
| Toronto[2] | — | — | **3.6** (2.4-5.2) | **3.9** (3.2-4.7) | **4.3** (3.5-5.2) | **2.0** (0.6-6.6) | **1.1** (0.3-4.2) | **1.3** (0.7-2.2) | **0.9** (0.2-4.6) | **1.8** (0.4-6.7) | **0.5** (0.1-2.2) | **1.3** (0.5-3.4) | **0.8** (0.1-5.8) | **1.4** (0.6-3.5) | **1.6** (0.9-2.7) | † | † |
| North[1] | — | — | — | — | — | — | — | — | — | — | — | **2.7** (1.6-4.4) | **3.0** (1.8-4.7) | **2.8** (1.9-4.1) | **3.4** (1.8-6.3) | **2.3** (1.4-3.7) | **2.6** (1.4-4.7) |
| North[2] | — | — | **5.0** (2.7-9.0) | **3.9** (2.6-5.9) | **5.0** (3.0-8.2) | **3.4** (2.5-4.8) | **3.0** (1.9-5.0) | **2.6** (1.1-6.1) | **2.2** (0.4-11.0) | † | **2.0** (1.4-2.8) | **1.1** (0.4-2.8) | **2.7** (1.3-5.3) | **2.5** (1.3-4.9) | **3.8** (1.6-9.0) | **1.4** (0.7-2.8) | **2.5** (1.0-6.1) |
| West[1] | — | — | — | — | — | — | — | — | — | — | — | **1.8** (1.1-2.7) | **2.8** (1.7-4.5) | **2.4** (1.8-3.3) | **2.0** (1.5-2.8) | **1.6** (1.1-2.4) | **1.6** (1.1-2.4) |
| West[2] | — | — | **4.5** (3.6-5.6) | **5.4** (3.5-8.2) | **2.4** (1.3-4.6) | **2.7** (1.6-4.6) | **2.2** (2.0-2.6) | **1.5** (0.8-2.6) | **1.0** (0.5-1.9) | **1.9** (1.1-3.3) | **2.0** (1.5-2.7) | **1.6** (1.0-3.0) | **1.9** (1.0-3.7) | **2.7** (1.9-3.9) | **2.0** (1.3-2.9) | **1.8** (1.1-2.8) | **0.9** (0.5-1.5) |
| East[1] | — | — | — | — | — | — | — | — | — | — | — | **2.3** (1.4-3.6) | **2.0** (1.2-3.6) | **2.2** (1.5-3.3) | **0.9** (0.6-1.4) | **2.4** (1.6-3.6) | **1.7** (1.1-2.4) |
| East[2] | — | — | **5.7** (3.5-9.0) | **5.5** (3.4-8.8) | **3.1** (2.2-4.4) | **3.9** (2.7-5.6) | **2.7** (2.0-3.5) | **1.7** (1.1-2.7) | **0.7** (0.3-1.5) | **1.3** (0.8-2.2) | **2.0** (1.4-3.0) | **2.4** (1.2-4.5) | **1.9** (0.8-4.4) | **2.1** (1.3-3.2) | **1.0** (0.5-1.9) | **1.7** (1.0-2.7) | **1.4** (1.0-2.2) |

Notes: (1) based on Grades 7-12 (full sample); (2) based on Grades 7, 9, and 11 only (long-term sample); (3) regional stratification differed in 1977 and 1979 and therefore regions are not presented; (4) entries in brackets are 95% confidence intervals; (5) † estimate suppressed due to unreliability; (6) no significant changes between 1999 and 2009; [c] significant long-term linear trend; [d] significant long-term non-linear trend.

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, also known as "tranqs", "downers", etc.) without a prescription or without a doctor telling you to take them? (Note that "sedatives" was added to the question in 2007.)

Source: OSDUHS, Centre for Addiction & Mental Health

## Past Year Non-Medical Use of Over-the-Counter Sleeping Medication

(Figure 3.7.8)

Starting in 2007, the OSDUHS asked students about using over-the-counter sleeping medication for non-sleeping purposes. A random-half sample of students was asked was "*In the last 12 months, how often did you use sleeping medicine from a drugstore, such as Nytol, Sleep-Eze D, Unisom or Sominex, for purposes other than sleeping?*"

*2009: Grades 7 to 12*

- Among all students, 2.6% (range: 2.0%-3.4%) report using sleeping medication non-medically at least once during the past year. This percentage represents about 25,100 Ontario students.

- There is no significant sex difference (2.2% for males, 3.1% for females).

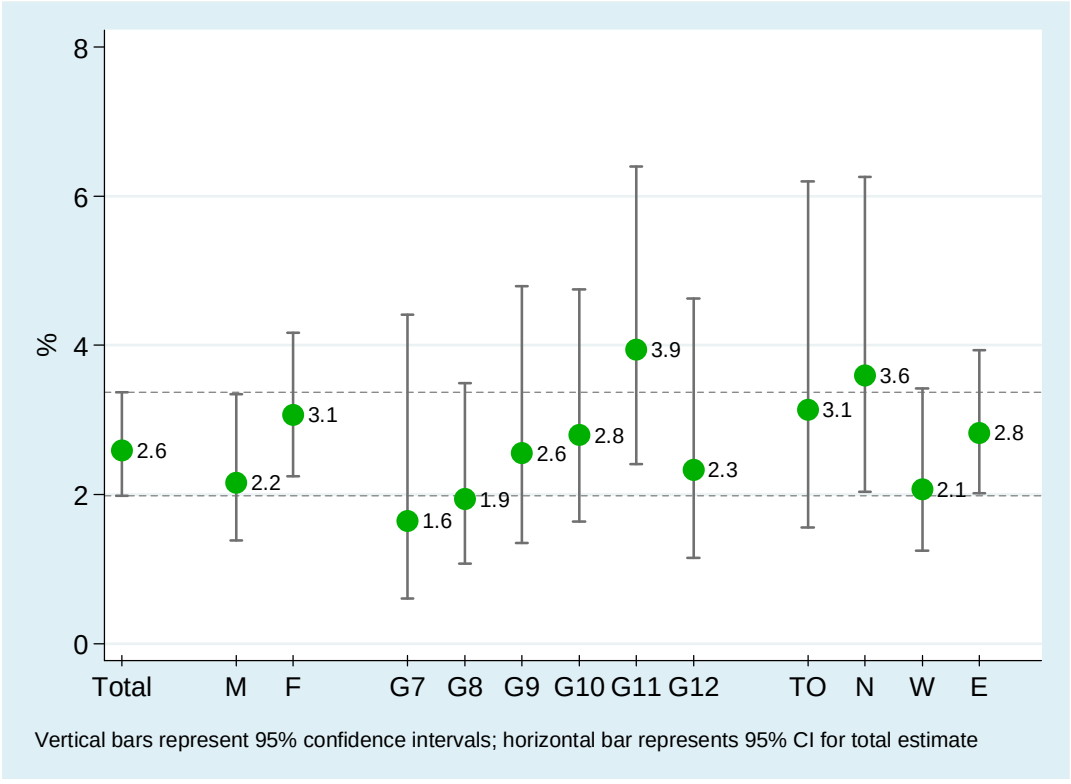
- Despite some variation among the grades, there are no significant differences in using sleeping medication for purposes other than sleeping.

- Regional estimates do not significantly differ.

*2009 vs. 2007: Grades 7 to 12*

☐ Among the total sample, there has been no statistically significant change in the past year non-medical use of sleeping medication between 2007 (4.0%) and 2009 (2.6%), despite the numeric decrease.

Figure 3.7.8
Past Year Non-Medical Use of Over-the-Counter Sleeping Medication by Sex, Grade and Region, 2009 OSDUHS




Vertical bars represent 95% confidence intervals; horizontal bar represents 95% CI for total estimate

## Past Year Non-Medical Use of Over-the-Counter Cough or Cold Medication

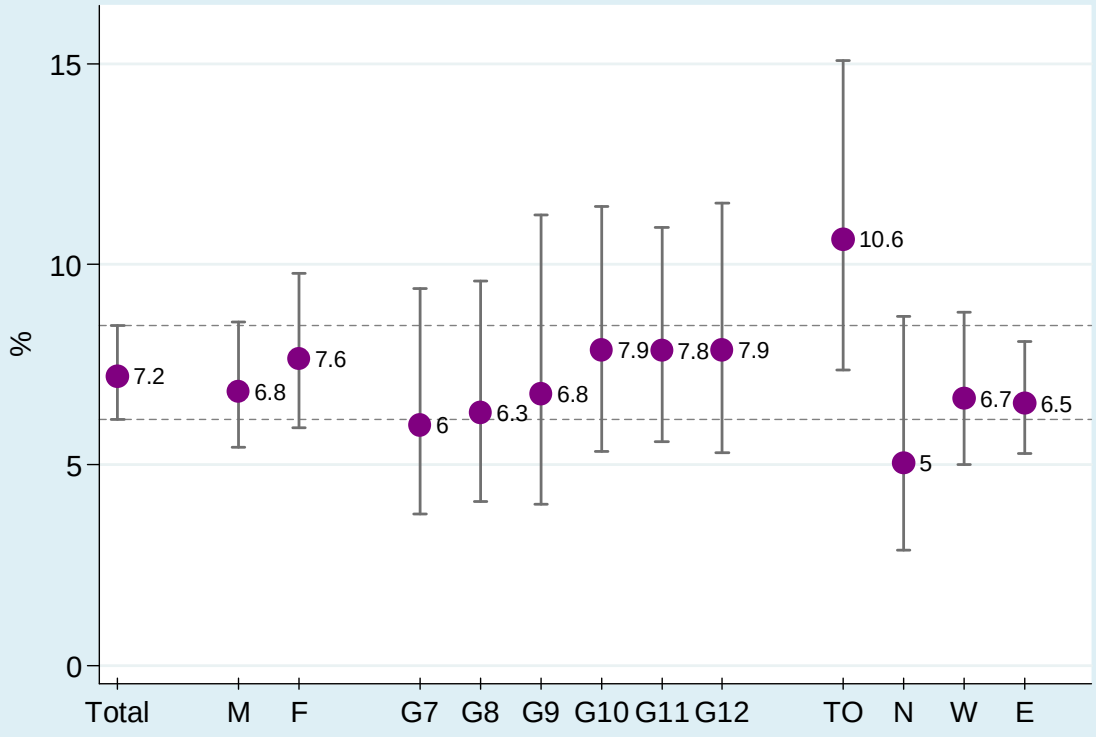
(Figure 3.7.9)

For the first time in 2009, the OSDUHS asked a random half sample of about 4,200 students about using over-the-counter cough or cold medication that contains the drug dextromethorphan (DXM) in order to "get high." When abused, DXM takes on qualities of a dissociative drug such as ketamine, producing feelings of detachment and distorting perceptions of sight and sound. Students were asked "*In the last 12 months, how often did you use a cough or cold medicine from a drug store, such as Robitussin DM, Benylin DM (also known as 'robos', 'dex', 'DXM') in order to get high?*"

*2009: Grades 7 to 12*

- In 2009, 7.2% (range: 6.1%-8.5%) of students report using cough/cold medication to get high in the past year. This estimate represents about 70,600 students in Ontario.
- Males (6.8%) and females (7.6%) are equally likely to report use.
- Despite some variation, there are no significant grade differences.
- There is significant regional variation, with Toronto students (10.6%) most likely to report use compared to students in the other regions.

Figure 3.7.9
Past Year Non-Medical Use of Over-the-Counter Cough or Cold Medication by Sex, Grade and Region, 2009 OSDUHS




Vertical bars represent 95% confidence intervals; horizontal bar represents 95% CI for total estimate

## Lifetime Use of Steroids

(Figure 3.7.10; Table 3.7.6)

In 1989 we began asking students whether they had ever used steroids (e.g., body builders, testosterone, androgens, durabolin, growth hormones) to enhance their athletic performance or to change their physical appearance.

| | Lifetime Steroid Use (Grades 7 to 12) | Trends in Lifetime Steroid Use |
|---|---|---|
| Total Sample | ■ In 2009, 1.1% of students (range: 0.7%-1.6%) in grades 7 to 12 report ever using steroids to increase performance or change their physical appearance. | ☐ Among the total sample of students, lifetime steroid use reported in 2009 (1.1%) is similar to the estimate from 2007 (1.3%), but significantly lower than that found in 1999 (3.4%).<br><br>☐ For most of the past two decades, rates of steroid use have hovered between 1% and 2%, with the exceptions of 1999 and 2001 when rates reached about 3%. |
| Sex | ■ Males are significantly more likely than females to report ever using steroids. | ☐ The use of steroids among males significantly declined between 1999 (5.4%) and 2007 (1.7%). There was no change among females over the past decade. |
| Grade | ■ Despite some variation, steroid use does not significantly differ by grade. | ☐ Grade 11 and 12 students show significant declines in 2009 compared to their respective 1999 and 2001 estimates. |
| Region | ■ There are no significant differences in steroid use among the regions. | ☐ Among the regions, Northern students and Eastern students show a significant decline in use in 2009, compared to their respective 1999 estimates. |

Figure 3.7.10
Lifetime Steroid Use, 1989–2009 OSDUHS (Grades 7, 9, 11 only)

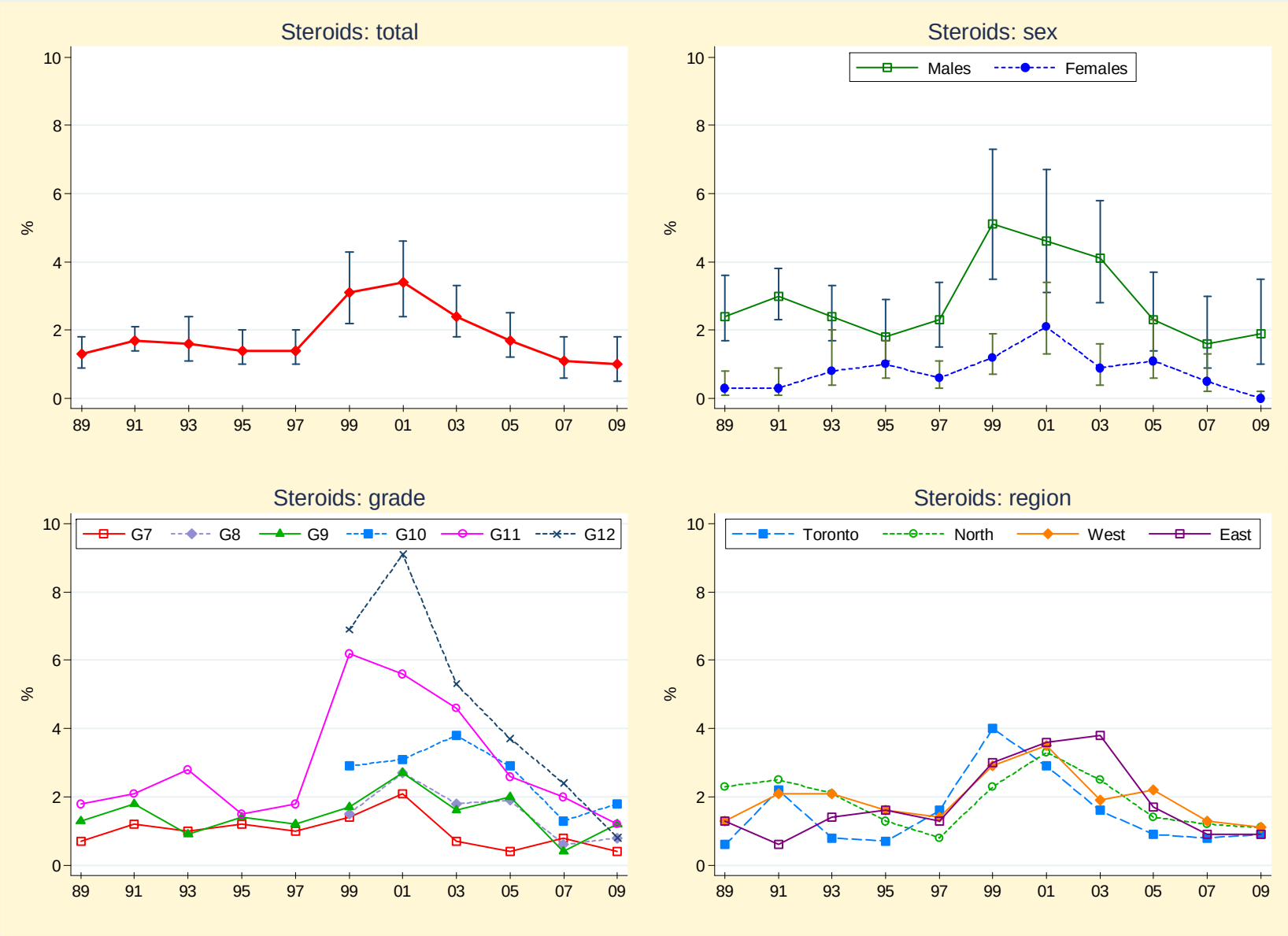


Table 3.7.6: Percentage Reporting Steroid Use in Lifetime, 1989–2009

| | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| (N[1]) | | | | | | (4447) | (3898) | (3152) | (3648) | (2935) | (4261) |
| (N[2]) | (3040) | (2961) | (2617) | (2907) | (3072) | (2421) | (2013) | (1618) | (1862) | (1488) | (2069) |
| Total[1] (95% CI) | — | — | — | — | — | **3.4** (2.7-4.2) | **3.8** (3.0-4.8) | **3.0** (2.4-3.7) | **2.3** (1.9-2.9) | **1.3** (0.9-1.9) | **1.1** [b] (0.7-1.6) |
| Total[2] | **1.3** (0.9-1.8) | **1.7** (1.4-2.1) | **1.6** (1.1-2.4) | **1.4** (1.0-2.0) | **1.4** (1.0-2.0) | **3.1** (2.2-4.3) | **3.4** (2.4-4.6) | **2.4** (1.8-3.3) | **1.8** (1.2-2.5) | **1.1** (0.6-1.8) | **1.0** (0.5-1.8) |
| Sex | | | | | | | | | | | |
| Males[1] | — | — | — | — | — | **5.4** (4.2-6.9) | **5.4** (4.0-7.3) | **4.4** (3.5-5.6) | **3.2** (2.4-4.2) | **2.0** (1.3-3.1) | **1.7** [b] (1.1-2.6) |
| Males[2] | **2.4** (1.7-3.6) | **3.0** (2.3-3.8) | **2.4** (1.7-3.3) | **1.8** (1.1-2.9) | **2.3** (1.5-3.4) | **5.1** (3.5-7.3) | **4.6** (3.1-6.7) | **4.1** (2.8-5.8) | **2.3** (1.4-3.7) | **1.6** (0.9-3.0) | **1.9** (1.0-3.4) |
| Females[1] | — | — | — | — | — | **1.3** (0.9-1.8) | **2.2** (1.6-3.0) | **1.7** (1.1-2.7) | **1.4** (0.9-2.2) | **0.5** (0.2-1.1) | † |
| Females[2] | † | **0.3** (0.1-0.9) | **0.8** (0.4-2.0) | **1.0** (0.6-1.7) | **0.6** (0.3-1.1) | **1.2** (0.7-1.9) | **2.1** (1.3-3.4) | **0.9** (0.4-1.6) | **1.2** (0.6-2.3) | **0.5** (0.2-1.3) | † |
| Grade | | | | | | | | | | | |
| 7 | **0.7** (0.3-1.4) | **1.2** (1.0-1.3) | **1.0** (0.4-2.5) | **1.2** (0.5-3.0) | **1.0** (0.8-1.4) | **1.4** (0.8-2.5) | **2.1** (1.3-3.4) | **0.7** (0.3-1.8) | † | † | † |
| 8 | — | — | — | — | — | **1.5** (0.8-3.1) | **2.7** (1.3-5.4) | **1.8** (0.8-4.4) | **1.9** (0.9-3.8) | † | † |
| 9 | **1.3** (0.6-2.9) | **1.8** (1.2-2.5) | **0.9** (0.3-2.6) | **1.4** (1.3-1.6) | **1.2** (0.5-2.7) | **1.7** (0.8-3.8) | **2.7** (1.4-5.1) | **1.6** (0.9-2.9) | **2.0** (1.1-3.8) | † | **1.2** (0.4-3.5) |
| 10 | — | — | — | — | — | **2.9** (1.8-4.7) | **3.1** (2.0-4.8) | **3.8** (2.4-6.1) | **2.9** (1.8-4.4) | **1.3** (0.5-3.3) | **1.8** (1.0-3.4) |
| 11 | **1.8** (1.2-2.8) | **2.1** (1.5-3.1) | **2.8** (1.8-4.2) | **1.5** (0.7-3.0) | **1.8** (1.1-3.1) | **6.2** (4.2-9.1) | **5.6** (3.4-9.1) | **4.6** (3.2-6.6) | **2.6** (1.6-4.3) | **2.0** (1.1-3.7) | **1.2** [b] (0.6-2.7) |
| 12 | — | — | — | — | — | **6.9** (4.9-9.7) | **9.1** (5.7-14.3) | **5.3** (3.4-8.0) | **3.7** (2.5-5.5) | **2.4** (1.2-4.7) | **0.8** [b] (0.3-2.1) |
| Region | | | | | | | | | | | |
| Toronto[1] | — | — | — | — | — | **3.6** (2.2-5.9) | **3.8** (2.6-5.5) | **2.3** (1.2-4.4) | **2.1** (1.2-3.5) | **1.6** (0.8-2.9) | † |
| Toronto[2] | **0.6** (0.1-2.9) | **2.2** (1.8-2.8) | **0.8** (0.2-2.8) | **0.7** (0.2-1.9) | **1.6** (0.8-3.2) | **4.0** (2.0-7.9) | **2.9** (1.8-4.5) | **1.6** (0.5-5.0) | **0.9** (0.3-2.5) | **0.8** (0.3-2.3) | † |
| North[1] | — | — | — | — | — | **4.4** (2.4-7.8) | **4.0** (2.8-5.7) | **3.8** (2.5-5.6) | **1.4** (0.6-3.1) | **0.7** (0.3-1.7) | † [b] |
| North[2] | **2.3** (0.9-5.7) | **2.5** (1.1-5.4) | **2.1** (0.4-10.8) | **1.3** (0.2-7.0) | **0.8** (0.7-0.8) | **2.3** (1.0-5.2) | **3.3** (2.0-5.4) | **2.5** (1.3-4.7) | **1.4** (0.7-3.0) | **1.2** (0.4-3.4) | † |
| West[1] | — | — | — | — | — | **3.3** (2.2-4.8) | **4.1** (2.9-5.6) | **2.7** (1.9-3.7) | **2.4** (1.7-3.3) | **1.5** (0.8-2.6) | **1.2** (0.6-2.2) |
| West[2] | **1.3** (0.9-1.8) | **2.1** (1.5-2.8) | **2.1** (1.3-3.4) | **1.6** (1.0-2.6) | **1.4** (0.8-2.6) | **2.9** (1.6-5.2) | **3.5** (2.0-5.9) | **1.9** (1.0-3.4) | **2.2** (1.3-3.6) | **1.3** (0.6-2.8) | **1.1** (0.4-2.8) |
| East[1] | — | — | — | — | — | **3.0** (2.1-4.4) | **3.4** (1.9-5.9) | **3.9** (2.7-5.6) | **2.6** (1.8-3.7) | **1.1** (0.5-2.3) | **0.8** [b] (0.4-1.8) |
| East[2] | **1.3** (0.4-3.5) | **0.6** (0.4-1.0) | **1.4** (0.8-2.3) | **1.6** (0.9-2.9) | **1.3** (0.7-2.4) | **3.0** (1.8-4.9) | **3.6** (1.7-7.5) | **3.8** (2.6-5.5) | **1.7** (0.9-3.2) | **0.9** (0.3-2.3) | **0.8** (0.4-1.9) |

Notes: (1) based on Grades 7-12 (full sample); (2) based on Grades 7, 9, and 11 only (long-term sample); (3) entries in brackets are 95% confidence intervals; (4) † estimate suppressed due to unreliability; (5) based on random half samples from 2005 to 2009; (6) no significant differences 2009 vs. 2007; [b] 2009 vs. 1999 significant difference, p<.01.

Q: Have you ever used steroids, body builders (e.g. testosterone and other androgens, durabolin, growth hormones, etc.) to increase your performance in some sport or activity and/or to change your physical appearance?

Source: OSDUHS, Centre for Addiction & Mental Health

# 3.8 Any Drug Use and Multiple Drug Use

This chapter presents an overview of drug use among Ontario students by examining: (1) the percentage that used any illicit drug, including the non-medical use of a prescription drug, during the past year; (2) the percentage that used any prescription drug non-medically during the past year; (3) trends in any illicit drug use since 1977 (based on limited number of drugs); (4) the percentage that used any illicit drug by injection; (5) the overlap of alcohol, tobacco, cannabis and other drug use; and (6) the percentage that used no substance at all during the past year.

## Any Illicit Drug Use, including Non-Medical Prescription Drug Use, in 2009

(Figure 3.8.1)

This composite index measures use of at least one of the following 24 drugs asked about in the 2009 survey: cannabis, glue, solvents, LSD, PCP, other hallucinogens, cocaine, crack, methamphetamine, crystal methamphetamine, heroin, ecstasy, GHB, Rohypnol (NM), ketamine, jimson weed, salvia divinorum, stimulants (NM), tranquillizers/sedatives (NM), OxyContin (NM), other prescription opioid pain relievers (NM), ADHD drugs (NM), over-the-counter sleeping medication, and over-the-counter cough/cold medication. Excluded from this index are tobacco and alcohol.

*2009: Grades 7 to 12*

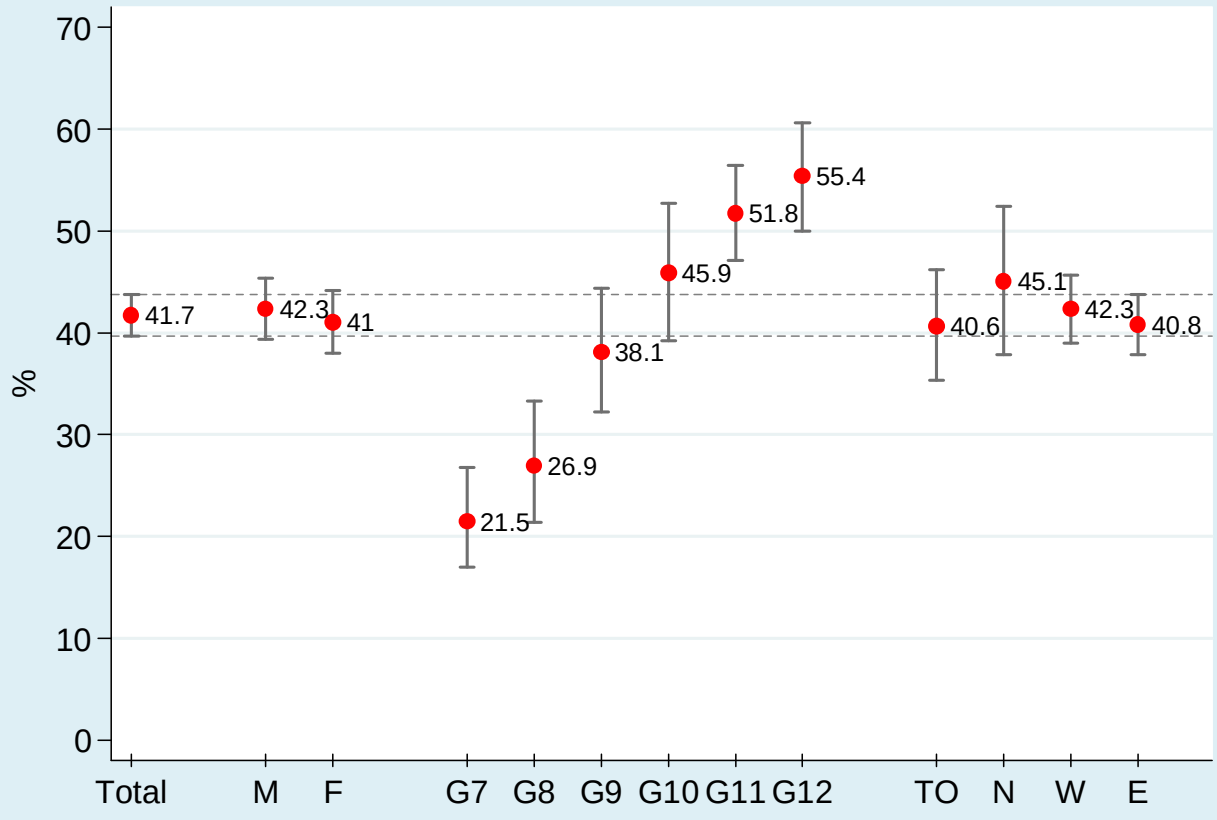
- Among the total sample, 41.7% (range: 39.6%-43.8%) report using at least one illicit drug in the past year. This estimate represents about 409,700 Ontario students in grades 7 to 12.

- Males (42.3%) and females (41.0%) are equally likely to report the use of at least one drug in the past year.

- There is a significant grade effect, with use increasing between 7th-grade (21.5%) and 11th-grade (51.8%), and then remaining stable in grade 12 (55.4%).

- There are no significant differences among the regions.

Figure 3.8.1
Past Year Use of Any Illicit Drug (including Non-Medical Prescription Drug Use) by Sex, Grade and Region, 2009 OSDUHS




Vertical bars represent 95% confidence intervals; horizontal bar represents 95% CI for total estimate

## Any Non-Medical Prescription Drug Use in 2009

(Figure 3.8.2)

This section presents the non-medical use of at least one of the following five prescription drugs or drug classes once or more often during the past 12 months: OxyContin, other opioid pain relievers, ADHD drugs, other stimulants, tranquillizers/sedatives. (Non-medical use is defined as use without a doctor's prescription).

*2009: Grades 7 to 12*

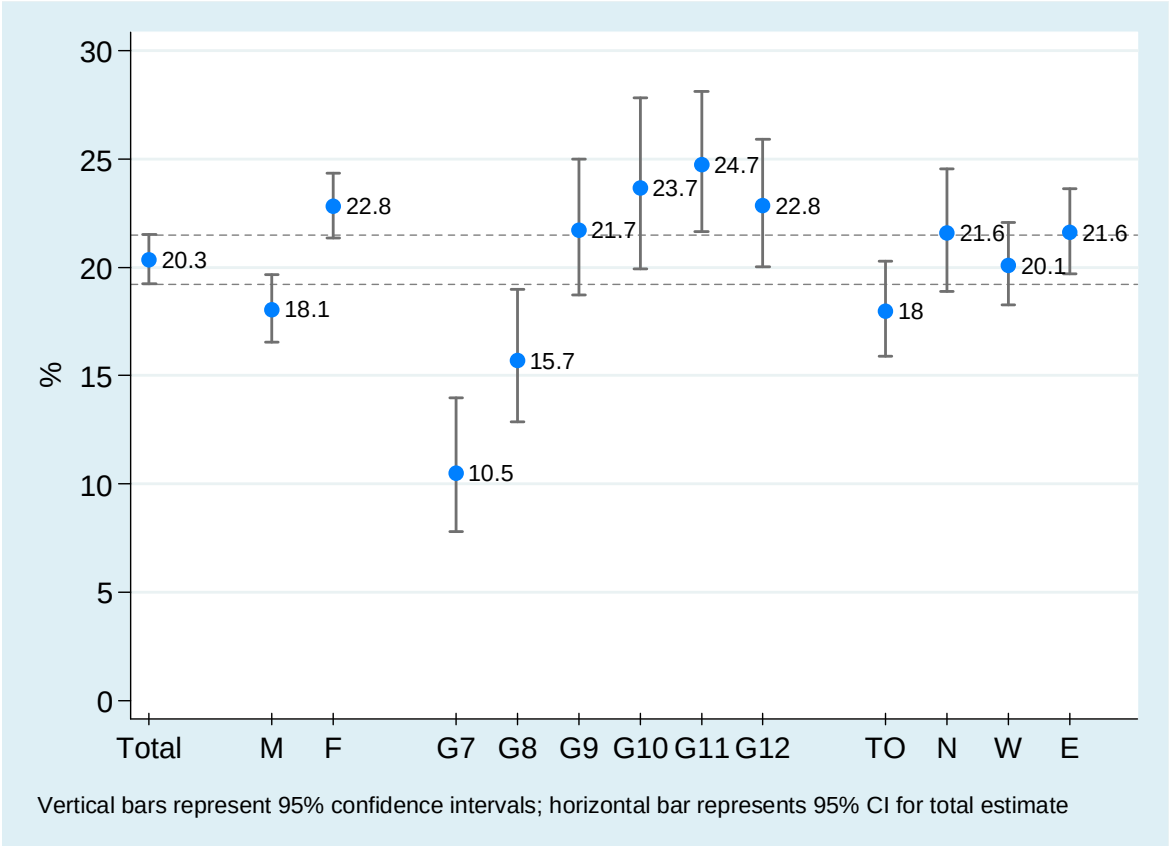
- Among the total sample, 20.3% (range: 19.2%-21.5%) report using at least one prescription drug non-medically in the past year. This estimate represents about 208,200 Ontario students in grades 7 to 12.

- Females (22.8%) are more likely than males (18.1%) to report using at least one prescription drug non-medically in the past year.

- There is significant grade variation, with use increasing between 7th-grade (10.5%) and 9th-grade (21.7%), and then remaining stable in the older grades at around 23%-25%.

- There are no significant differences among the regions.

Figure 3.8.2
Past Year Non-Medical Use of a Prescription Drug by Sex, Grade and Region, 2009 OSDUHS



## Trends in Any Illicit Drug Use

(Figures 3.8.3, 3.8.4; Tables 3.8.1, 3.8.2)

In this section, we report on changes over time in two estimates of any illicit drug use. The first estimate measures use of any drug out of ten drugs that are common to most OSDUHS cycles since 1977: cannabis, heroin, methamphetamine, stimulants (NM), tranquillizers/sedatives (NM), LSD, PCP, other hallucinogens, cocaine, and crack. Because crack use was not asked about before the 1987 survey, and PCP use was not asked in 1977 or 1979, these two drugs are excluded from the computation for those years. The drugs excluded in this measure across all years are: inhalants, jimson weed, salvia divinorum, crystal methamphetamine, ecstasy, GHB, Rohypnol (NM), ketamine, ADHD drugs (NM), OxyContin (NM), other prescription opioid pain relievers (NM), and over-the-counter medication.

The second measure of any illicit drug use is similar to the first, but also excludes cannabis.

*1999–2009: Grades 7 to 12*

☐ Neither index changed significantly between 2007 and 2009. However, significant changes are evident for both indices when compared to the 1999 estimates. Among all students, the 2009 estimate (27.9%) for any illicit drug use including cannabis is significantly lower than the 1999 estimate (32.3%). Similarly, any drug use excluding cannabis is significantly lower in 2009 (10.1%) compared to 1999 (20.5%).

☐ Compared to 1999, any illicit drug use including cannabis significantly declined in 2009 among the following subgroups:

- males (30.4% in 2009 vs 35.4% in 1999)
- 7th-graders (3.3% in 2009 vs 9.1% in 1999)
- 8th-graders (9.1% in 2009 vs 19.8% in 1999)
- 9th-graders (21.0% in 2009 vs 29.4% in 1999)
- 11th-graders (40.6% in 2009 vs 51.0% in 1999).

☐ Regarding any illicit drug use excluding cannabis, all subgroups show significant decreases in 2009 compared to their respective 1999 estimates.

*1977–2009: Grades 7, 9, 11 only*

☐ Any illicit drug use including cannabis began to decline during the 1980s after peaking in 1979. Rates increased again after 1991 (which was an all-time low) up until the early 2000s. The estimate declined in 2005 and has levelled off since then. This pattern is evident for all subgroups.

☐ The same general pattern holds true for any illicit drug use excluding cannabis.

Figure 3.8.3
Past Year Use of Any Illicit Drug *Including* Cannabis, 1977–2009 OSDUHS (Grades 7, 9, 11 only)

Figure 3.8.4
Past Year Use of Any Illicit Drug *Excluding* Cannabis, 1977–2009 OSDUHS (Grades 7, 9, 11 only)

Table 3.8.1: Percentage Reporting Any Illicit Drug Use *Including* Cannabis During the Past Year, 1977–2009

| | 1977 | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N[1]) | | | | | | | | | | | | (2299) | (2061) | (6616) | (7726) | (6323) | (9112) | |
| (N[2]) | (3927) | (3920) | (3010) | (3614) | (3146) | (3376) | (3040) | (2961) | (2617) | (2907) | (3072) | (2421) | (2013) | (3389) | (3969) | (3215) | (4424) | |
| Total[1] (95% CI) | — | — | — | — | — | — | — | — | — | — | — | 32.3 (30.2-34.4) | 32.5 (29.8-35.3) | 32.2 (30.1-34.3) | 28.7 (26.6-30.9) | 28.7 (26.8-30.8) | 27.9 (26.4-29.6) | b |
| Total[2] | 26.0 (23.7-28.5) | 33.4 (30.4-36.7) | 28.0 (25.4-30.8) | 26.6 (24.0-29.3) | 24.2 (21.0-27.7) | 19.3 (16.2-22.8) | 16.6 (14.7-18.8) | 14.0 (12.6-15.5) | 16.4 (14.6-18.3) | 25.8 (22.7-29.2) | 28.1 (26.2-30.0) | 30.8 (27.6-34.2) | 30.0 (26.1-34.2) | 30.3 (27.9-32.9) | 24.4 (22.2-26.7) | 25.6 (23.2-28.1) | 22.7 (20.7-24.9) | cd |
| Sex | | | | | | | | | | | | | | | | | | |
| Males[1] | — | — | — | — | — | — | — | — | — | — | — | 35.4 (32.7-38.1) | 35.5 (31.6-39.6) | 33.1 (30.2-36.1) | 29.9 (27.3-32.6) | 29.3 (26.9-31.9) | 30.4 (28.2-32.6) | b |
| Males[2] | 29.9 (27.0-33.1) | 37.6 (33.8-41.5) | 30.0 (27.7-32.3) | 29.2 (26.2-32.5) | 25.7 (21.9-29.9) | 20.6 (16.8-25.0) | 16.4 (14.2-18.9) | 14.7 (13.3-16.2) | 16.7 (12.9-21.3) | 27.1 (24.0-30.4) | 27.8 (25.5-30.4) | 33.0 (29.6-36.6) | 32.1 (27.2-37.5) | 32.0 (28.3-35.9) | 24.5 (21.8-27.5) | 26.2 (22.9-29.7) | 24.0 (21.5-26.6) | |
| Females[1] | — | — | — | — | — | — | — | — | — | — | — | 29.1 (26.2-32.2) | 29.5 (26.8-32.4) | 31.3 (29.2-33.5) | 27.4 (25.3-29.7) | 28.1 (25.9-30.4) | 25.3 (23.3-27.5) | |
| Females[2] | 22.6 (19.8-25.6) | 29.2 (25.8-32.8) | 25.9 (21.4-31.0) | 24.0 (21.5-26.7) | 22.6 (18.8-26.8) | 18.0 (15.3-21.1) | 16.8 (13.7-20.5) | 13.2 (11.3-15.2) | 16.0 (13.3-19.2) | 24.6 (20.7-28.9) | 28.2 (26.4-30.1) | 28.6 (24.3-33.3) | 27.9 (23.7-32.5) | 28.8 (26.3-31.4) | 24.2 (21.3-27.3) | 24.9 (22.3-27.7) | 21.4 (18.3-24.8) | |
| Grade | | | | | | | | | | | | | | | | | | |
| 7 | 10.5 (8.5-12.8) | 14.8 (12.7-17.3) | 8.2 (7.4-9.1) | 9.9 (6.6-14.6) | 8.8 (5.8-13.0) | 9.4 (7.2-12.0) | 4.6 (3.7-5.6) | 3.6 (1.9-6.6) | 5.7 (4.0-7.9) | 6.4 (4.8-8.6) | 7.2 (4.0-12.8) | 9.1 (6.7-12.1) | 10.0 (7.6-13.0) | 10.1 (7.6-13.4) | 5.5 (3.8-7.9) | 6.9 (4.9-9.6) | 3.3 (2.3-4.8) | b |
| 8 | — | — | — | — | — | — | — | — | — | — | — | 19.8 (16.2-24.0) | 17.2 (14.2-20.7) | 13.9 (9.8-19.2) | 12.4 (9.6-15.9) | 10.0 (7.6-12.9) | 9.1 (6.9-11.8) | b |
| 9 | 28.1 (24.1-32.4) | 33.8 (28.6-39.5) | 31.0 (28.1-34.0) | 30.6 (27.4-34.0) | 23.3 (18.3-29.3) | 17.3 (10.6-27.2) | 17.4 (14.1-21.3) | 12.2 (11.0-13.6) | 14.5 (12.6-16.6) | 23.7 (18.0-30.7) | 28.4 (25.7-31.3) | 29.4 (25.3-34.0) | 32.4 (28.2-36.9) | 29.6 (26.1-33.4) | 25.2 (22.4-28.2) | 25.3 (21.6-29.5) | 21.0 (17.2-25.3) | b |
| 10 | — | — | — | — | — | — | — | — | — | — | — | 40.5 (35.1-46.1) | 42.5 (38.7-46.4) | 38.6 (33.7-43.6) | 35.5 (32.0-39.2) | 33.2 (29.4-37.2) | 33.3 (29.3-37.6) | |
| 11 | 41.8 (37.0-46.7) | 54.2 (48.1-60.1) | 46.7 (39.8-53.7) | 45.8 (40.5-51.3) | 40.4 (33.6-47.6) | 30.1 (25.1-35.7) | 28.8 (24.7-33.2) | 25.2 (22.1-28.6) | 27.2 (22.6-32.4) | 44.6 (38.2-51.2) | 46.3 (43.7-49.0) | 51.0 (45.8-56.2) | 48.6 (40.7-56.6) | 47.5 (43.1-51.9) | 42.0 (38.3-45.8) | 43.3 (39.3-47.3) | 40.6 (36.6-44.8) | b |
| 12 | — | — | — | — | — | — | — | — | — | — | — | 44.5 (38.6-50.6) | 46.1 (35.0-57.6) | 47.1 (41.6-52.7) | 48.2 (43.9-52.6) | 47.3 (43.4-51.2) | 47.7 (43.9-51.4) | |

(Continued…)

| | 1977 | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N[1]) | | | | | | | | | | | | (2299) | (2061) | (6616) | (7726) | (6323) | (9112) |
| (N[2]) | (3927) | (3920) | (3010) | (3614) | (3146) | (3376) | (3040) | (2961) | (2617) | (2907) | (3072) | (2421) | (2013) | (3389) | (3969) | (3215) | (4424) |
| Region | | | | | | | | | | | | | | | | | |
| Toronto[1] | — | — | — | — | — | — | — | — | — | — | — | **23.0** (19.8-26.5) | **25.0** (17.9-33.9) | **27.4** (22.5-33.0) | **22.9** (19.1-27.1) | **25.1** (18.3-33.3) | **22.4** (17.5-28.2) |
| Toronto[2] | — | — | **19.5** (14.8-25.2) | **24.7** (18.6-31.9) | **23.8** (19.0-29.4) | **15.6** (9.5-24.4) | **16.1** (10.2-24.4) | **12.9** (11.9-14.0) | **13.3** (10.4-16.8) | **22.5** (14.6-33.2) | **21.9** (19.6-24.4) | **22.0** (18.8-25.6) | **26.3** (16.3-39.5) | **25.1** (19.0-32.5) | **18.9** (14.5-24.3) | **21.0** (12.5-33.0) | **17.1** (11.0-25,7) |
| North[1] | — | — | — | — | — | — | — | — | — | — | — | **37.6** (31.0-44.7) | **32.3** (27.0-38.1) | **35.6** (30.1-41.6) | **34.7** (30.6-39.1) | **35.8** (31.3-40.6) | **33.9** (29.8-38.3) |
| North[2] | — | — | **26.5** (20.2-33.8) | **29.1** (24.8-33.8) | **27.9** (23.8-32.4) | **23.5** (16.1-32.8) | **23.0** (18.0-29.0) | **14.9** (7.6-27.2) | **27.9** (18.6-39.7) | **29.9** (25.6-34.6) | **29.8** (27.1-32.6) | **32.2** (21.2-45.6) | **30.9** (22.7-40.5) | **35.3** (29.4-41.7) | **32.5** (26.9-38.7) | **29.5** (23.0-36.8) | **27.8** (21.7-34.9) |
| West[1] | — | — | — | — | — | — | — | — | — | — | — | **35.4** (31.8-39.0) | **36.1** (32.2-40.2) | **32.6** (29.2-36.2) | **31.5** (28.2-35.0) | **28.5** (26.2-31.0) | **29.6** (27.2-32.2) |
| West[2] | — | — | **30.5** (25.9-35.5) | **28.9** (23.9-34.6) | **25.9** (20.8-31.6) | **18.7** (13.7-25.0) | **16.3** (13.7-19.2) | **15.0** (13.1-17.0) | **17.4** (14.6-20.5) | **26.4** (21.5-32.0) | **29.2** (25.7-33.0) | **33.0** (27.0-39.5) | **33.1** (28.5-38.1) | **31.4** (27.8-35.4) | **26.2** (22.8-29.9) | **26.1** (23.3-29.1) | **25.2** (22.3-28.4) |
| East[1] | — | — | — | — | — | — | — | — | — | — | — | **31.9** (28.5-35.6) | **32.3** (28.3-36.5) | **33.5** (30.7-36.4) | **27.1** (23.3-31.2) | **29.5** (26.6-32.6) | **27.4** (25.3-29.6) |
| East[2] | — | — | **31.8** (27.1-36.8) | **24.1** (22.5-25.8) | **20.5** (13.6-29.7) | **21.7** (17.5-26.4) | **15.5** (12.3-19.3) | **12.9** (10.0-16.6) | **13.5** (11.0-16.4) | **26.0** (21.6-30.9) | **30.0** (27.1-33.0) | **32.9** (28.0-38.3) | **28.6** (21.9-36.5) | **30.6** (26.8-34.6) | **23.1** (19.5-27.2) | **26.4** (23.0-30.0) | **21.3** (18.5-24.3) |

Notes: (1) based on Grades 7-12 (full sample); (2) based on Grades 7, 9, and 11 only (long-term sample); (3) entries in brackets are 95% confidence intervals; (4) 10 illicit drugs included are: cannabis, heroin, methamphetamine, stimulants, tranquillizers, LSD, PCP (except 1977 and 1979), other hallucinogens, cocaine, and crack (except before 1987); excluded are glue, solvents, crystal methamphetamine, ecstasy, jimson week, salvia divinorum, GHB, Rohypnol (NM), ketamine, ADHD drugs (NM), OxyContin or other prescription opioid pain relievers (NM), and over-the-counter medication; (5) no significant differences 2009 vs. 2007; [b] 2009 vs. 1999 significant difference, p<.01; [c] significant long-term linear trend; [d] significant long-term non-linear trend.

Source: OSDUHS, Centre for Addiction & Mental Health

Table 3.8.2: Percentage Reporting Any Illicit Drug Use *Excluding* Cannabis During the Past Year, 1977–2009

| | 1977 | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N[1]) | | | | | | | | | | | | (2299) | (2061) | (6616) | (7726) | (6323) | (9112) | |
| (N[2]) | (3927) | (3920) | (3010) | (3614) | (3146) | (3376) | (3040) | (2961) | (2617) | (2907) | (3072) | (2421) | (2013) | (3389) | (3969) | (3215) | (4424) | |
| Total[1] (95% CI) | — | — | — | — | — | — | — | — | — | — | — | **20.5** (18.8-22.4) | **18.1** (16.6-19.7) | **15.3** (13.9-16.9) | **12.1** (10.8-13.6) | **11.7** (10.6-12.9) | **10.1** (9.2-11.2) | b |
| Total[2] | **15.1** (13.6-16.7) | **20.4** (18.4-22.5) | **17.0** (15.2-19.0) | **20.0** (17.8-22.3) | **16.6** (14.4-19.0) | **13.7** (11.9-15.8) | **11.8** (10.4-13.3) | **9.8** (8.7-11.0) | **11.8** (9.9-13.9) | **17.0** (14.7-19.6) | **17.5** (16.0-19.0) | **19.2** (16.5-22.3) | **16.4** (14.4-18.7) | **14.3** (12.6-16.2) | **11.2** (9.7-12.9) | **11.4** (10.1-12.9) | **9.2** (7.9-10.6) | cd |
| Sex | | | | | | | | | | | | | | | | | | |
| Males[1] | — | — | — | — | — | — | — | — | — | — | — | **21.5** (19.2-24.0) | **19.2** (17.0-21.5) | **16.6** (14.7-18.6) | **12.6** (10.9-14.5) | **11.7** (10.3-13.2) | **10.2** (9.1-11.5) | b |
| Males[2] | **16.2** (14.2-18.4) | **22.9** (20.5-25.5) | **17.7** (16.5-19.0) | **21.0** (18.5-23.7) | **16.9** (14.2-20.0) | **14.2** (11.3-17.6) | **11.0** (8.6-13.8) | **9.7** (8.5-11.1) | **11.1** (8.6-14.3) | **17.1** (15.2-19.1) | **16.9** (15.0-19.0) | **19.4** (16.3-22.9) | **16.9** (14.2-20.0) | **15.8** (13.2-18.8) | **10.9** (9.1-13.0) | **10.9** (9.2-12.9) | **8.6** (7.0-10.5) | |
| Females[1] | — | — | — | — | — | — | — | — | — | — | — | **19.5** (17.1-22.1) | **17.1** (15.1-19.3) | **14.2** (12.6-16.0) | **11.6** (10.3-13.2) | **11.6** (10.3-13.2) | **10.0** (8.7-11.5) | b |
| Females[2] | **14.1** (12.2-16.3) | **17.8** (15.5-20.3) | **16.2** (13.2-19.7) | **19.0** (16.4-21.8) | **16.2** (13.6-19.2) | **13.3** (11.7-15.1) | **12.6** (10.1-15.6) | **9.8** (8.1-11.8) | **12.4** (10.0-15.3) | **17.0** (14.0-20.4) | **17.9** (16.1-19.9) | **19.1** (15.5-23.3) | **16.0** (13.0-19.4) | **12.8** (11.0-14.9) | **11.6** (9.6-13.9) | **12.0** (10.2-14.0) | **9.8** (8.1-11.7) | |
| Grade | | | | | | | | | | | | | | | | | | |
| 7 | **8.4** (6.8-10.4) | **10.2** (8.5-12.2) | **5.6** (5.2-5.9) | **8.1** (5.6-11.7) | **7.1** (4.5-11.1) | **7.6** (6.2-9.3) | **4.3** (3.6-5.2) | **3.5** (1.9-6.2) | **5.4** (3.9-7.5) | **5.5** (4.3-6.9) | **6.0** (3.4-10.6) | **7.3** (5.2-10.0) | **6.8** (5.2-9.0) | **6.6** (4.7-9.2) | **3.8** (2.5-5.7) | **4.4** (3.0-6.5) | **2.4** (1.5-3.9) | b |
| 8 | — | — | — | — | — | — | — | — | — | — | — | **13.0** (9.8-17.0) | **10.7** (8.6-13.3) | **8.0** (6.1-10.6) | **7.2** (5.4-9.5) | **5.9** (4.3-8.0) | **5.1** (4.0-6.4) | b |
| 9 | **16.5** 13.9-19.4) | **20.8** (17.8-24.2) | **19.9** (17.6-22.3) | **22.9** (21.1-24.7) | **15.6** (12.7-19.0) | **12.4** (8.5-17.8) | **12.5** (10.1-15.4) | **8.1** (7.6-8.6) | **11.6** (9.2-14.6) | **14.7** (10.6-20.1) | **17.2** (14.5-20.3) | **19.0** (15.7-22.8) | **16.6** (14.0-20.0) | **13.0** (10.7-15.8) | **11.6** (9.5-14.1) | **11.0** (8.9-13.6) | **8.5** (6.4-11.0) | b |
| 10 | — | — | — | — | — | — | — | — | — | — | — | **27.2** (22.8-32.2) | **23.9** (20.5-27.7) | **18.0** (14.7-21.8) | **14.2** (11.9-16.9) | **12.1** (10.0-14.7) | **11.0** (8.8-13.8) | b |
| 11 | **21.2** (17.9-24.9) | **31.4** (26.7-36.5) | **26.3** (22.2-30.8) | **33.6** (28.2-39.4) | **27.2** (22.6-32.3) | **20.6** (16.7-25.0) | **19.0** (16.5-21.7) | **17.2** (14.9-19.7) | **17.2** (12.8-22.7) | **29.3** (24.7-34.3) | **27.9** (27.0-28.8) | **29.7** (24.5-35.6) | **26.6** (21.5-32.3) | **21.7** (18.2-25.8) | **18.1** (15.4-21.2) | **18.4** (15.9-21.2) | **15.5** (12.6-18.9) | b |
| 12 | — | — | — | — | — | — | — | — | — | — | — | **27.8** (23.6-32.5) | **25.4** (18.4-33.8) | **22.3** (19.0-25.9) | **17.0** (14.2-20.3) | **16.3** (13.5-19.6) | **14.9** (12.3-17.9) | b |

(Continued…)

| | 1977 | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N[1]) | | | | | | | | | | | | (2299) | (2061) | (6616) | (7726) | (6323) | (9112) |
| (N[2]) | (3927) | (3920) | (3010) | (3614) | (3146) | (3376) | (3040) | (2961) | (2617) | (2907) | (3072) | (2421) | (2013) | (3389) | (3969) | (3215) | (4424) |
| Region | | | | | | | | | | | | | | | | | |
| Toronto[1] | — | — | — | — | — | — | — | — | — | — | — | **14.7** (12.2-17.6) | **12.2** (10.0-14.8) | **12.0** (9.2-15.5) | **8.3** (6.6-10.5) | **8.8** (6.6-11.8) | **6.7** [b] (4.7-9.6) |
| Toronto[2] | — | — | **10.2** (6.0-16.8) | **18.6** (13.2-25.7) | **17.4** (13.2-22.5) | **10.7** (6.7-16.8) | **11.8** (9.2-15.0) | **8.8** (7.2-10.6) | **8.8** (5.0-15.1) | **13.6** (7.8-22.5) | **10.4** (8.4-12.9) | **13.8** (11.0-17.1) | **13.1** (10.5-16.2) | **10.9** (7.6-15.4) | **7.4** (5.1-10.7) | **7.8** (5.4-11.0) | **6.6** (3.5-12.0) |
| North[1] | — | — | — | — | — | — | — | — | — | — | — | **24.7** (20.1-30.0) | **19.2** (15.3-23.8) | **17.8** (14.6-21.5) | **14.8** (11.4-19.0) | **15.0** (12.2-18.2) | **14.5** [b] (11.7-17.8) |
| North[2] | — | — | **15.2** (10.7-21.1) | **23.3** (20.9-26.0) | **19.8** (14.1-27.2) | **17.9** (12.4-25.1) | **15.6** (9.8-23.9) | **10.9** (5.2-21.5) | **19.1** (12.8-27.7) | **24.2** (14.5-37.5) | **18.5** (15.8-21.6) | **22.8** (14.8-33.5) | **19.3** (13.8-26.3) | **18.5** (15.0-22.6) | **15.2** (10.3-21.8) | **13.3** (8.6-20.2) | **12.6** (8.4-18.4) |
| West[1] | — | — | — | — | — | — | — | — | — | — | — | **22.5** (19.3-26.0) | **21.1** (18.6-23.9) | **16.2** (13.8-19.0) | **14.4** (12.2-17.0) | **12.3** (10.4-14.5) | **10.9** [b] (9.2-12.9) |
| West[2] | — | — | **19.1** (16.3-22.3) | **22.1** (18.7-25.8) | **18.0** (13.8-23.2) | **12.6** (10.5-15.2) | **11.8** (10.0-14.0) | **10.6** (9.2-12.1) | **13.4** (11.1-16.1) | **16.6** (13.7-20.1) | **20.7** (18.1-23.7) | **19.6** (14.6-25.7) | **18.9** (15.4-23.1) | **15.6** (13.0-18.7) | **13.2** (10.7-16.2) | **12.3** (10.2-14.8) | **9.9** (7.9-12.3) |
| East[1] | — | — | — | — | — | — | — | — | — | — | — | **20.0** (17.4-22.9) | **17.3** (14.6-20.4) | **15.4** (13.0-18.3) | **12.1** (10.8-13.6) | **11.6** (10.1-13.4) | **10.0** [b] (9.0-11.1) |
| East[2] | — | — | **20.1** (17.6-22.9) | **17.0** (13.6-21.4) | **12.7** (11.0-14.6) | **16.3** (12.4-21.3) | **10.5** (8.2-13.4) | **9.0** (7.0-11.4) | **9.2** (5.8-14.2) | **17.9** (14.9-21.2) | **17.1** (14.7-19.8) | **21.3** (17.0-26.5) | **15.0** (11.0-20.1) | **13.2** (10.2-16.9) | **9.8** (7.6-12.6) | **11.8** (9.7-14.3) | **8.9** (7.1-11.0) |

Notes: (1) based on Grades 7-12 (full sample); (2) based on Grades 7, 9, and 11 only (long-term sample); (3) entries in brackets are 95% confidence intervals; (4) 9 drugs included in all years are: heroin, methamphetamine, stimulants, tranquillizers, LSD, PCP (except 1977 and 1979), other hallucinogens, cocaine, and crack (except before 1987); drugs excluded are cannabis, glue, solvents, crystal methamphetamine, ecstasy, GHB, Rohypnol (NM), ketamine, ADHD drugs (NM), OxyContin or other prescription opioid pain relievers (NM), and over-the-counter medication; (5) no significant differences 2009 vs. 2007; [b] 2009 vs. 1999 significant difference, p<.01; [c] significant long-term linear trend; [d] significant long-term non-linear trend.

Source: OSDUHS, Centre for Addiction & Mental Health

## Past Year Injection Drug Use

The OSDUHS has been asking students about injection drug use for years. The question used is "*In the last 12 months, have you used any illegal drug by injection or needle?*"

*2009: Grades 7 to 12*

- Among all students in 2009, 0.7% (range: 0.5%-1.1%) report using an illegal drug by injection during the past year. This estimate represents about 6,600 Ontario students in grades 7 to 12. Because of the small percentage, no further breakdown by subgroup is presented.

*1999–2009: Grades 7 to 12*

- The 2009 estimate (0.7%) for injection drug is similar to those from previous years: 2007 (1.0%), 2005 (1.0%), 2003 (1.4%), and 2001 (1.1%). However, the 2009 estimate is significantly lower than that found in 1999 (2.7%).

## Multiple Substance Use in the Past Year: Alcohol, Tobacco, Cannabis, and Other Drugs

(Figure 3.8.5)

*2009: Grades 7 to 12*

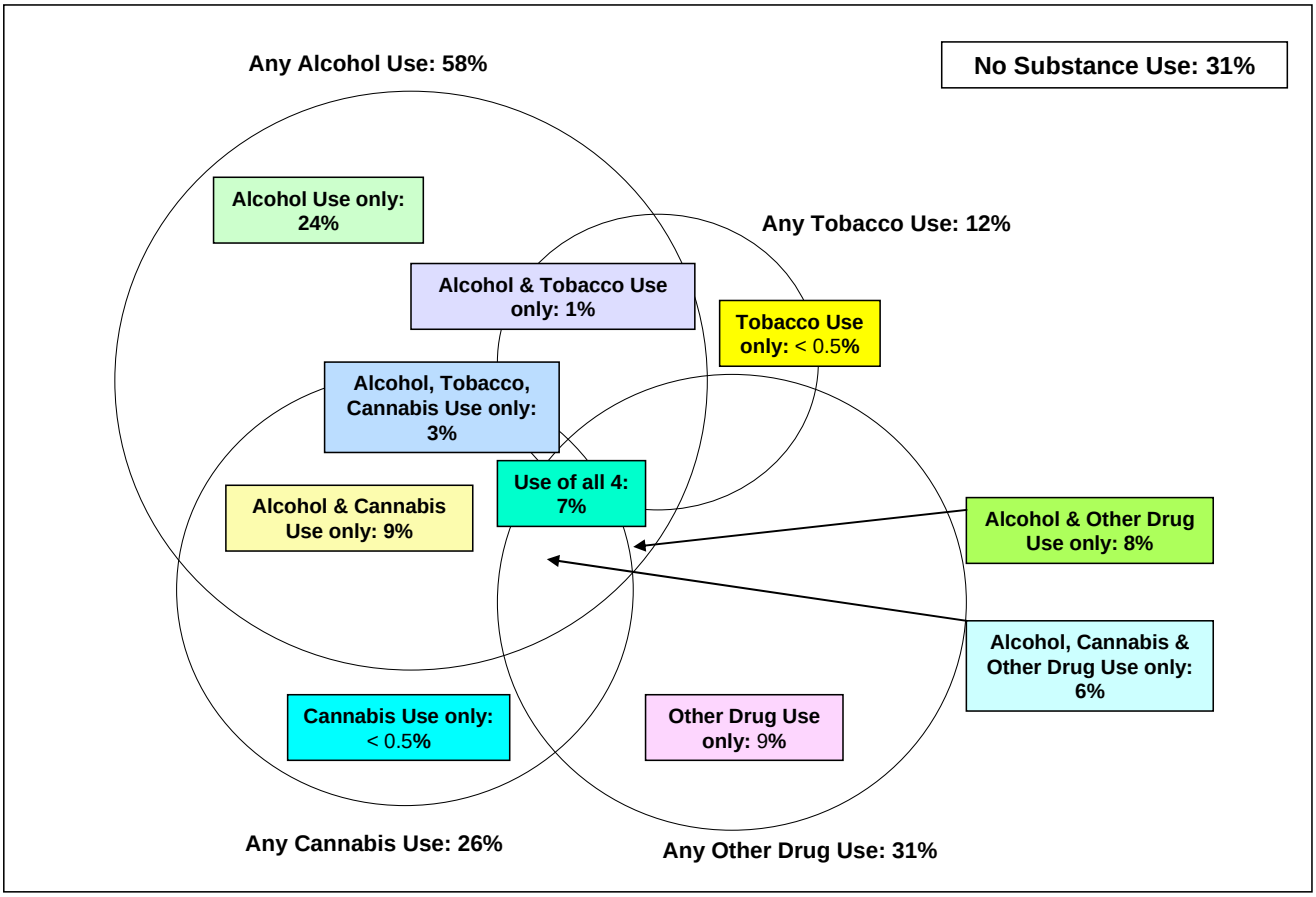
- Figure 3.8.5 presents the overlap of past year use of all substances asked about in the 2009 survey. As seen in the figure, most students use alcohol either exclusively, or in addition to other substances.

- About one-quarter (24%) of students use only alcohol. About 9% use only alcohol and cannabis. About 6% use alcohol, cannabis, and another drug.

- Very small proportions (below 0.5%) of students use either tobacco or cannabis exclusively.

- About 7% of students use alcohol, tobacco, cannabis, *and* at least one other drug. This percentage represents about 65,600 Ontario students.

Figure 3.8.5
The Overlap of Alcohol, Tobacco, Cannabis and Other Drug Use During the Past Year, 2009 OSDUHS (Grades 7 to 12)




Notes: (1) based on a random half sample of students (N=4,261); (2) "Other Drug Use" refers to use of at least one of 23 drugs: glue, solvents, LSD, PCP, other hallucinogens, jimson weed, salvia divinorum, heroin, stimulants (NM), tranquillizers/sedatives (NM), cocaine, crack, methamphetamine, crystal methamphetamine, ecstasy, GHB, Rohypnol (NM), ketamine, OxyContin (NM), other prescription opioid pain relievers (NM), ADHD drugs (NM), OTC sleeping medication (NM), and over-the-counter cough/cold medication (NM).

## No Substance Use in the Past Year

(Figures 3.8.6, 3.8.7; Table 3.8.3)

In this section, we report trends in no substance use – including alcohol and tobacco. Readers should note that the number of substances asked about varies from survey to survey, as new drugs are introduced. Generally speaking, the number of substances asked about in the survey has increased over time.

*2009: Grades 7 to 12*

- Almost one-third (30.8%) of students in grades 7 through 12 report using no substance at all during the past year – this includes alcohol and tobacco.

- Females (33.0%) are more likely than males (28.9%) to report no substance use.

- Abstinence significantly decreases with grade, from 55.5% of 7th-graders down to 15.4% of 12th-graders.

- Among the regions, students in Toronto (22.4%) are most likely to report using no substance in the past year.

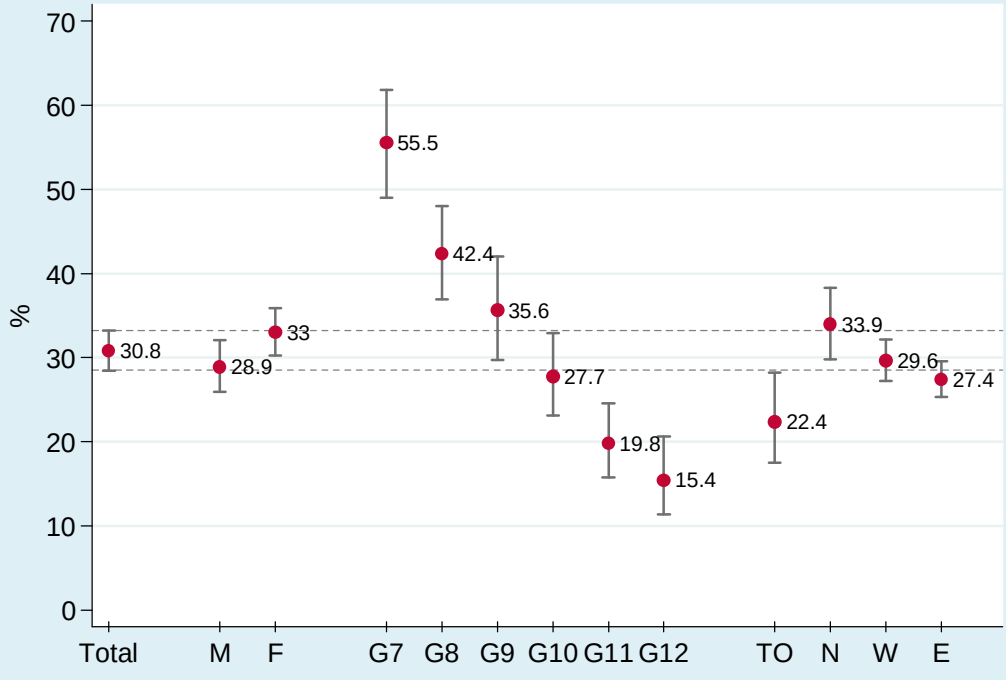
*1999–2009: Grades 7 to 12*

☐ As seen in Table 3.8.3, the 2009 percentage of students reporting no substance use is similar to estimates found since 1999.

*1977–2009: Grades 7, 9, 11*

☐ As seen in Figure 3.8.7, the lowest period for no substance use was in the late 1970s, as only about 20% of students in grade 7, 9, and 11 reported no use. The percentage reporting no substance use peaked in 1991 at about 40%, significantly declined by 1995, and has since increased once again.

Figure 3.8.6
Percentage Reporting No Substance Use at All During the Past Year, by Sex, Grade, and Region, 2009 OSDUHS



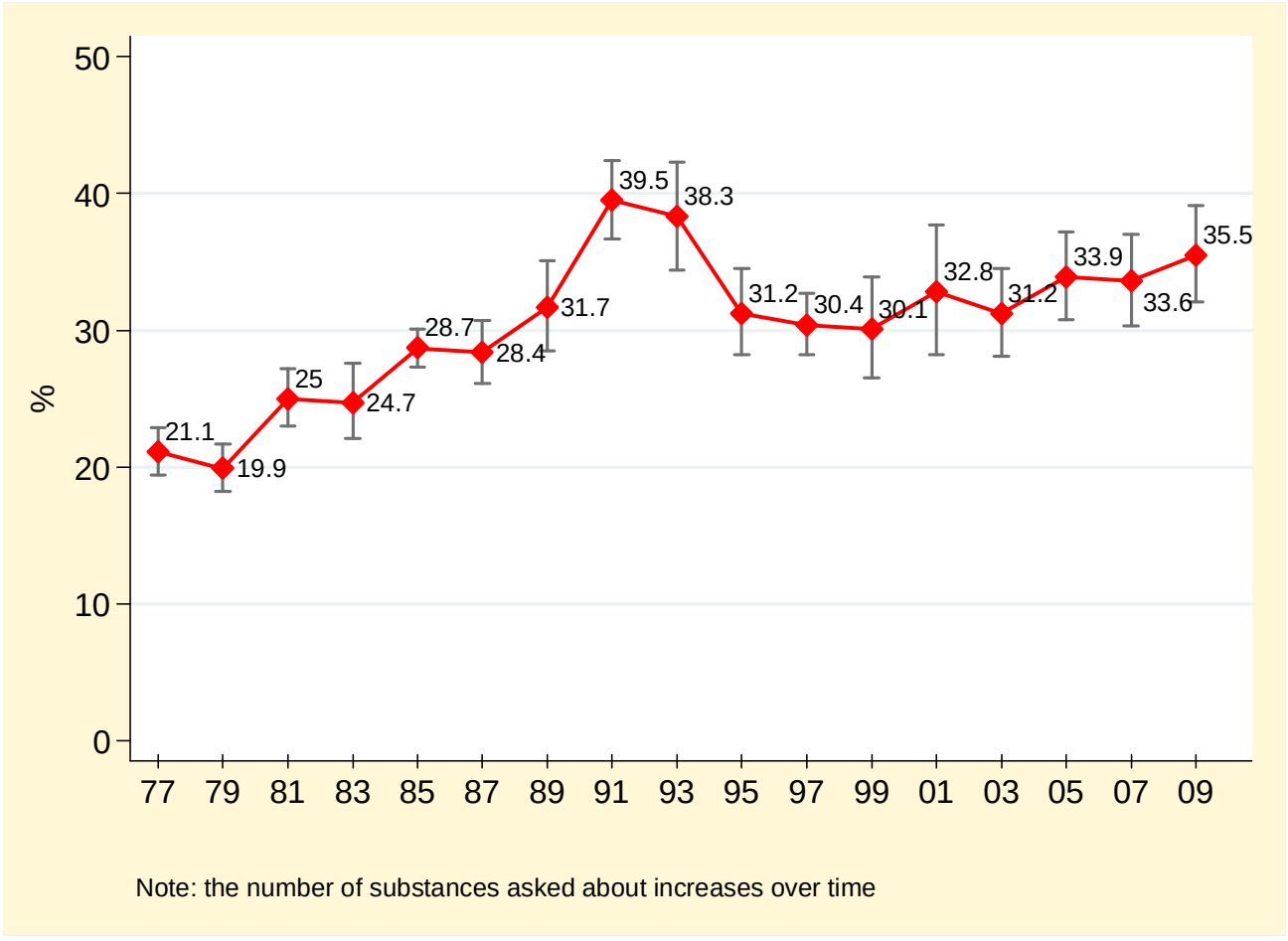

Vertical bars represent 95% confidence intervals; horizontal bar represents 95% CI for total estimate

Table 3.8.3: Percentage Reporting No Substance Use at All During the Past Year, 1999–2009 (Grades 7 to 12)

| | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|
| (N) | (2229) | (1837) | (3152) | (3648) | (2395) | (4261) |
| **Used No Substance** | **27.2** (24.4-30.2) | **28.1** (24.9-31.6) | **28.8** (26.4-31.4) | **31.1** (28.8-33.6) | **28.5** (26.4-30.8) | **30.8** (28.5-33.2) |

Notes: (1) based on a random half sample in each year; (2) entries in brackets are 95% confidence intervals; (3) the number of substances asked about increases over time; (3) no significant changes between 1999 and 2009.
Source: OSDUHS, Centre for Addiction & Mental Health

Figure 3.8.7
Percentage Reporting No Substance Use at All During the Past Year, 1977–2009 OSDUHS (Grades 7, 9, 11 only)




Note: the number of substances asked about increases over time

# 3.9 New Users and Early Initiation

## Incidence: First-Time Use in the Past Year

(Figure 3.9.1; Table 3.9.1)

*2009: Grades 7 to 12*

Students were asked whether they used certain substances for the very first time during the past 12 months. We evaluated the incidence of four substances – alcohol, cigarettes, cannabis, and illicit drugs other than cannabis. We also compared these results to those from past surveys.

- Among all students, 6.1% smoked cigarettes for the first time during the 12 months before the survey. This estimate represents about 59,500 students in Ontario. About 16.8% of students drank alcohol for the first time (representing about 163,900 students). About 8.5% used cannabis (83,000 students); and 3.3% used another illicit drug for the first time (32,400 students).

- Only first-time cannabis use significantly differs by sex (9.7% of males vs. 7.2% of females). There are no significant differences among the regions for any substance.

- Grade level is significantly associated with incidence. First-time use of cigarettes significantly increases between grade 7 (1.3%) and grade 10 (7.6%), and levels off thereafter at about 8% or 9%. First use of alcohol increases between grades 7 and 8, and again in grade 9 (23.0%), and then significantly decreases to 11.5% by grade 12. The incidence of cannabis use is lowest among students in the younger grades, jumps significantly by grade 9 (11.8%), and remains steady in grades 10 to 12 (about 10%-13%).

*1999–2009: Grades 7 to 12*

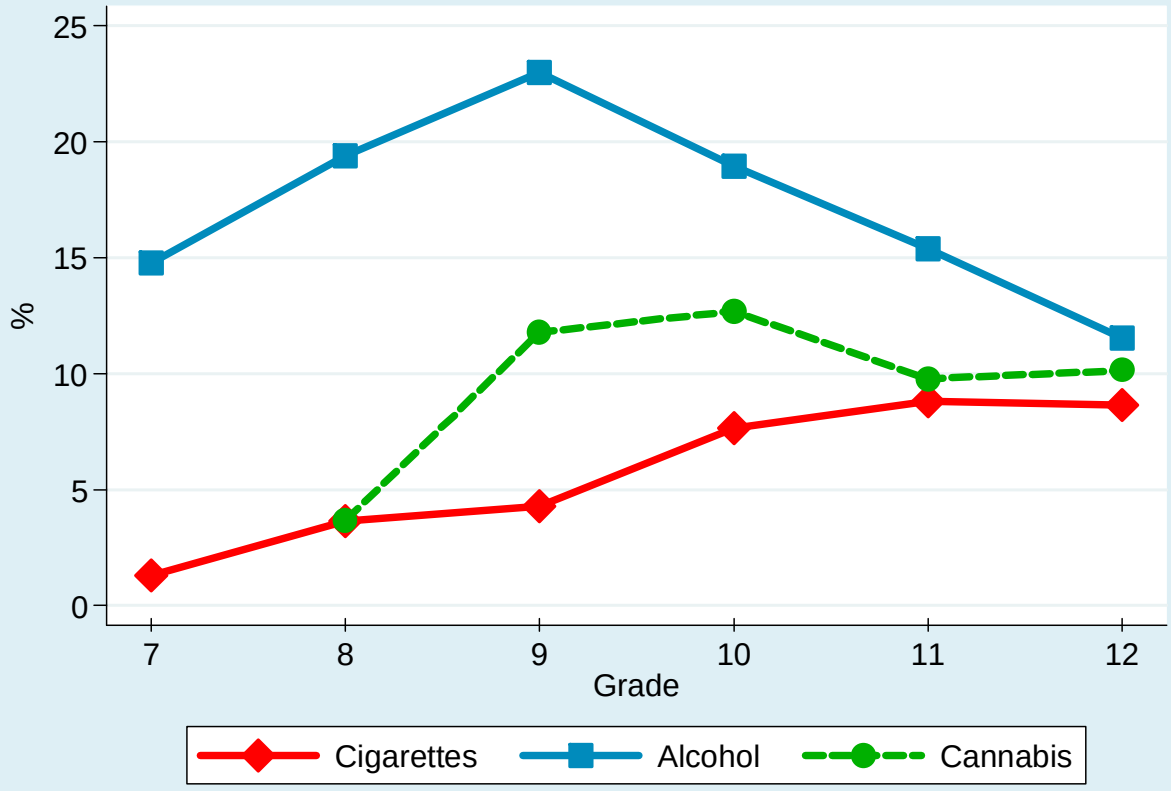
- The percentage of students who smoked a cigarette for the first time was significantly lower in 2009 (6.1%) compared to estimates from 1999 to 2003 (range 9% to 11%), but similar to the estimates from 2005 and 2007.

- A similar trend was found for first-time alcohol use: the rate was significantly lower in 2009 (16.8%) compared to the estimate from 2001(21.1%), but similar to estimates since then.

- There was no significant change in the percentage of first-time users of cannabis over this time period (hovering between 8% and 10%).

- First-time use of any other illicit drug was significantly lower in 2009 (3.3%) compared to estimates found between 1999 and 2003 (about 5%-6%; data not shown).

Figure 3.9.1
Percentage of Students Reporting First-Time Use of the Substance During the Past Year by Grade, 2009 OSDUHS




Note: estimate for 'Cannabis' suppressed for Grade 7

Table 3.9.1: Percentage Reporting First-Time Use During the Past 12 Months, 1999–2009 (Grades 7 to 12)

| | Tobacco | | | | | | Alcohol | | | | | | Cannabis | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **1999** | **2001** | **2003** | **2005** | **2007** | **2009** | **1999** | **2001** | **2003** | **2005** | **2007** | **2009** | **1999** | **2001** | **2003** | **2005** | **2007** | **2009** |
| (N) | (4447) | (3898) | (6616) | (3648) | (2935) | (4261) | (4447) | (3898) | (6616) | (3648) | (2935) | (4261) | (4447) | (3898) | (6616) | (3648) | (2935) | (4261) |
| Total | **10.9** | **10.1** | **9.3** | **7.3** | **6.3** | **6.1** | **20.0** | **21.1** | **19.4** | **17.7** | **16.1** | **16.8** | **10.0** | **10.3** | **10.4** | **8.8** | **8.5** | **8.5** |
| (95% CI) | (9.7-12.4) | (9.0-11.4) | (8.4-10.3) | (6.4-8.3) | (5.2-7.7) | (5.1-7.4) | (18.3-21.8) | (19.1-23.3) | (18.1-20.8) | (16.2-19.3) | (14.3-18.0) | (15.2-18.6) | (9.1-11.1) | (9.2-11.4) | (9.6-11.2) | (7.6-10.2) | (7.3-9.9) | (7.3-9.9) |
| Sex | | | | | | | | | | | | | | | | | | |
| Males | 11.0 | 10.0 | 8.1 | 6.9 | 6.6 | 6.9 | 20.1 | 21.9 | 20.4 | 17.5 | 16.1 | 16.3 | 10.7 | 11.2 | 10.8 | 8.8 | 8.8 | 9.7 |
| Females | 10.8 | 10.3 | 10.5 | 7.8 | 6.1 | 5.2 | 19.8 | 20.3 | 18.4 | 17.8 | 16.0 | 17.5 | 9.4 | 9.3 | 10.0 | 8.8 | 8.2 | 7.2 |
| Grade | | | | | | | | | | | | | | | | | | |
| 7 | 7.9 | 7.8 | 5.8 | 2.9 | 1.5 | 1.3 | 20.3 | 21.5 | 21.4 | 17.9 | 15.0 | 14.8 | 2.0 | 4.2 | 3.2 | 2.9 | 2.9 | † |
| 8 | 11.2 | 8.6 | 8.1 | 5.3 | 5.2 | 3.6 | 23.4 | 24.7 | 21.7 | 20.2 | 19.0 | 19.4 | 7.6 | 6.0 | 5.4 | 4.2 | 4.4 | 3.7 |
| 9 | 14.6 | 14.2 | 12.3 | 7.7 | 6.6 | 4.3 | 25.6 | 25.6 | 23.4 | 20.1 | 19.0 | 23.0 | 15.3 | 14.9 | 13.1 | 11.8 | 9.5 | 11.8 |
| 10 | 12.2 | 11.0 | 9.8 | 10.3 | 8.2 | 7.6 | 20.7 | 22.5 | 20.4 | 19.9 | 17.9 | 18.9 | 11.2 | 12.6 | 14.8 | 12.8 | 10.2 | 12.7 |
| 11 | 9.2 | 9.2 | 10.6 | 8.8 | 7.6 | 8.8 | 13.5 | 15.1 | 16.1 | 16.5 | 14.0 | 15.4 | 13.5 | 11.4 | 12.8 | 9.1 | 13.2 | 9.8 |
| 12 | 9.6 | 7.5 | 8.2 | 8.1 | 8.0 | 8.6 | 15.0 | 12.4 | 13.5 | 12.2 | 12.4 | 11.5 | 8.2 | 10.7 | 10.4 | 11.1 | 10.0 | 10.1 |
| Region | | | | | | | | | | | | | | | | | | |
| Toronto | 10.3 | 9.2 | 7.3 | 6.4 | 6.6 | 5.6 | 23.4 | 20.8 | 19.7 | 16.6 | 14.2 | 20.4 | 7.8 | 9.5 | 8.5 | 9.1 | 7.3 | 7.9 |
| North | 12.1 | 12.5 | 9.8 | 9.6 | 5.2 | 10.7 | 18.5 | 19.4 | 22.2 | 19.2 | 14.8 | 19.2 | 11.5 | 9.2 | 13.2 | 10.4 | 12.2 | 10.8 |
| West | 11.5 | 10.3 | 9.2 | 7.2 | 6.0 | 6.1 | 19.4 | 19.6 | 18.4 | 18.8 | 16.3 | 14.4 | 10.1 | 10.9 | 9.8 | 7.7 | 7.5 | 9.3 |
| East | 10.1 | 9.7 | 10.6 | 7.6 | 7.0 | 5.6 | 19.2 | 24.2 | 19.9 | 16.4 | 17.1 | 17.9 | 10.9 | 10.2 | 11.6 | 9.9 | 10.1 | 7.3 |

Notes: (1) entries in brackets are 95% confidence intervals; (2) † estimates suppressed due to unreliability; (3) questions asked of a random half sample in each year since 2005.

Qs: During the last 12 months, have you smoked one whole cigarette for the very first time?
During the last 12 months, have you tried alcohol (beer, wine or liquor) for the very first time?
During the last 12 months, have you tried cannabis (marijuana or hashish) for the very first time?

Source: OSDUHS, Centre for Addiction & Mental Health

## Early Initiation Among 7th-Graders, 1981–2009

(Figures 3.9.2 to 3.9.4)

One of the most consistent factors associated with future substance problems is the early initiation of use. Much research has shown that those who begin using drugs at an early age (i.e., before age 13 or 14) are more likely to develop dependence and other problems later on in life (Agrawal et al., 2006; Behrendt, Wittchen, Höfler, Lieb, & Beesdo, 2009; Chen, O'Brien, & Anthony, 2005; Dawson, Goldstein, Chou, Ruan, & Grant, 2008; DeWit, Adlaf, Offord, & Ogborne, 2000; Hingson, Heeren, & Winter, 2006).

One way of monitoring changes in early initiation is to examine initiation of drug use among the youngest cohort of students, namely the 7th-graders (ages 12-13). We asked students in which grade did they first smoke a whole cigarette, drink an alcoholic drink, and try cannabis. The grade of first drug use among the 7th-graders is profiled in Figures 3.9.2 to 3.9.4 for the years 2009, 2007, 2005, 2003, 2001, 1997, 1993 and 1981.

### Tobacco

- As seen in Figure 3.9.2, there is a trend of decreasing early initiation of cigarette smoking, with fewer 7th-graders today reporting smoking at an early age. Most notably, about 2% of 7th-graders in 2009 reported smoking their first whole cigarette by grade 6 (ages 11-12), compared to 9% in 2003, 27% in 1997, and 41% in 1981.

### Alcohol

- Early initiation of alcohol use also decreases over time (see Figure 3.9.3). For example, 17% of 7th-graders in 2009 used alcohol by grade 6 compared to 31% in 2007, 42% in 2003, and 50% in 1981.
- The OSDUHS also asked students in which grade they first drank enough alcohol to feel drunk. About 2% of 7th-graders experienced drunkenness by grade 6 (data not presented).

### Cannabis

- As seen in Figure 3.9.4, early initiation of cannabis use – defined as using for the first time before the end of grade 7 (ages 12-13) – was at 9% in 1981. Early use decreased by 1993 (3.5%), increased again in 1997 and remained elevated up until 2003 (8%). In 2009, the estimate is lower at 2%.

## Drug Use Trends Among 7th-Graders, 1977–2009

(Figure 3.9.5)

Another method of assessing potential future trends in adolescent drug use is to closely monitor prevalence among the 7th-graders (ages 12-13), the youngest students in our sample. We present the past year prevalence rates for tobacco, alcohol, and cannabis among 7th-graders only in Figure 3.9.5. An overview of these data shows that current use of these substances is lower compared to use in the late 1970s (the peak years of use on record), and the elevated rates found in the mid-to-late 1990s.

Figure 3.9.2
Grade of First Whole Cigarette Smoked Among All 7th-Graders, by Year of Survey, 1981–2009 OSDUHS

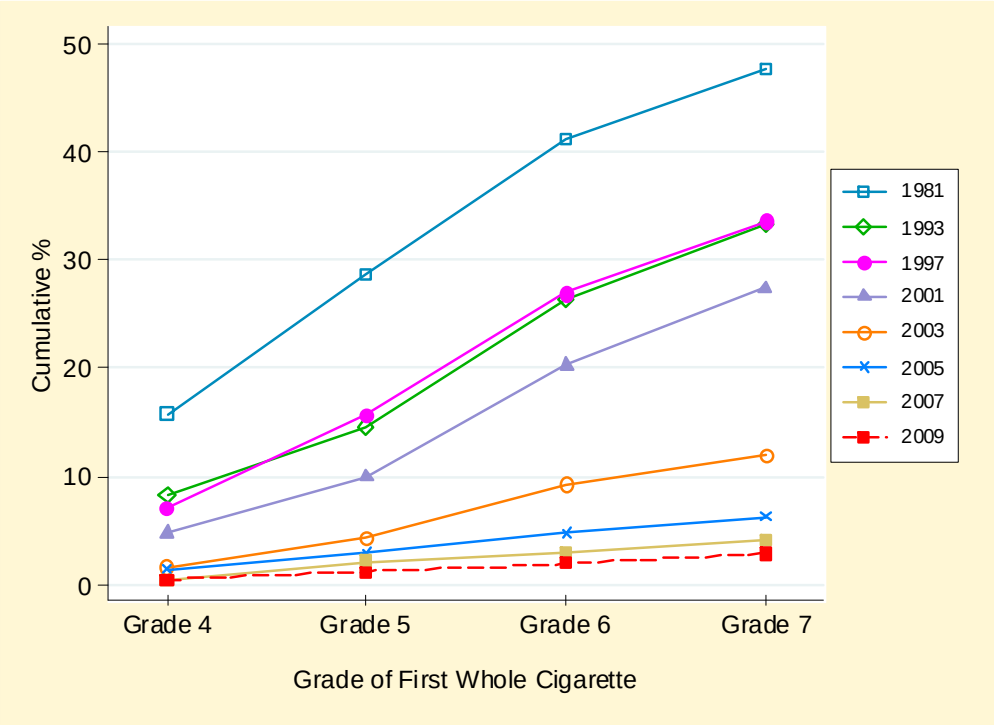



Figure 3.9.3
Grade of First Alcohol Use Among All 7th-Graders, by Year of Survey, 1981–2009 OSDUHS

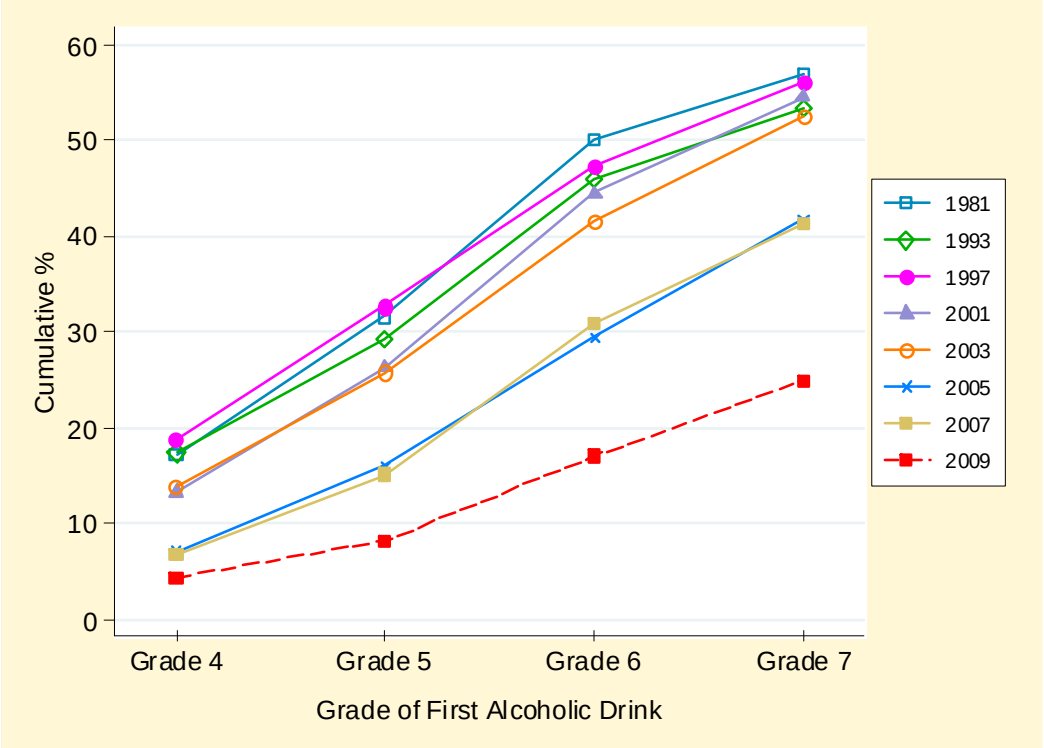


Figure 3.9.4
Grade of First Cannabis Use Among All 7th-Graders, by Year of Survey, 1981–2009 OSDUHS

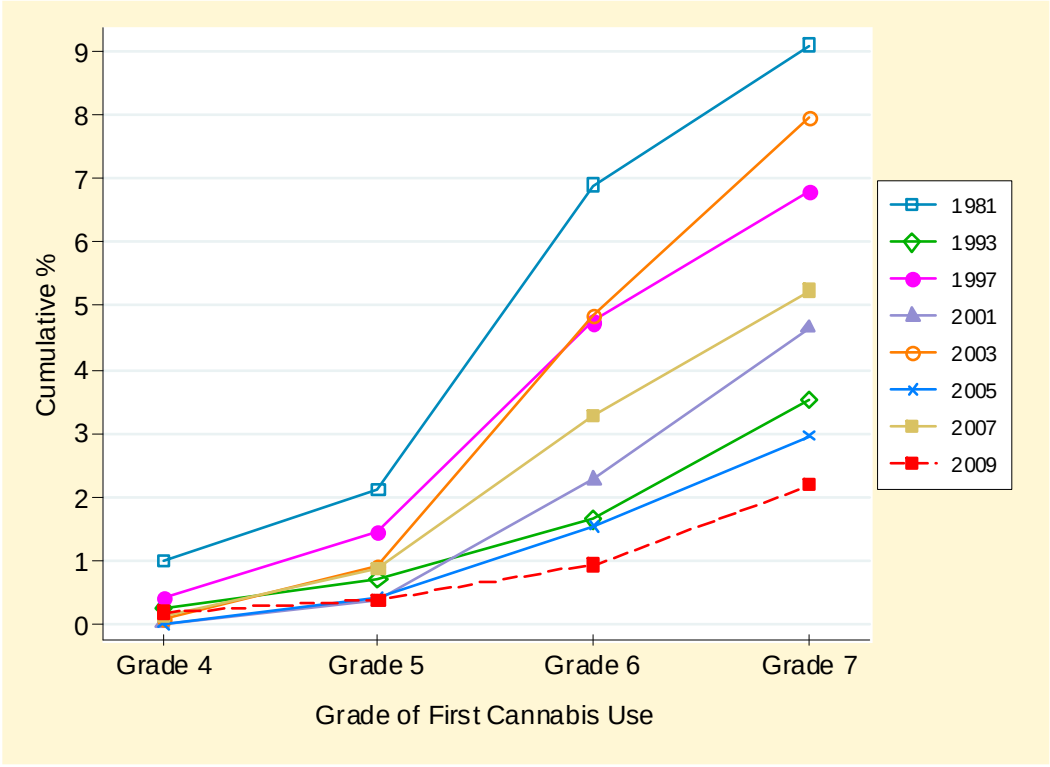
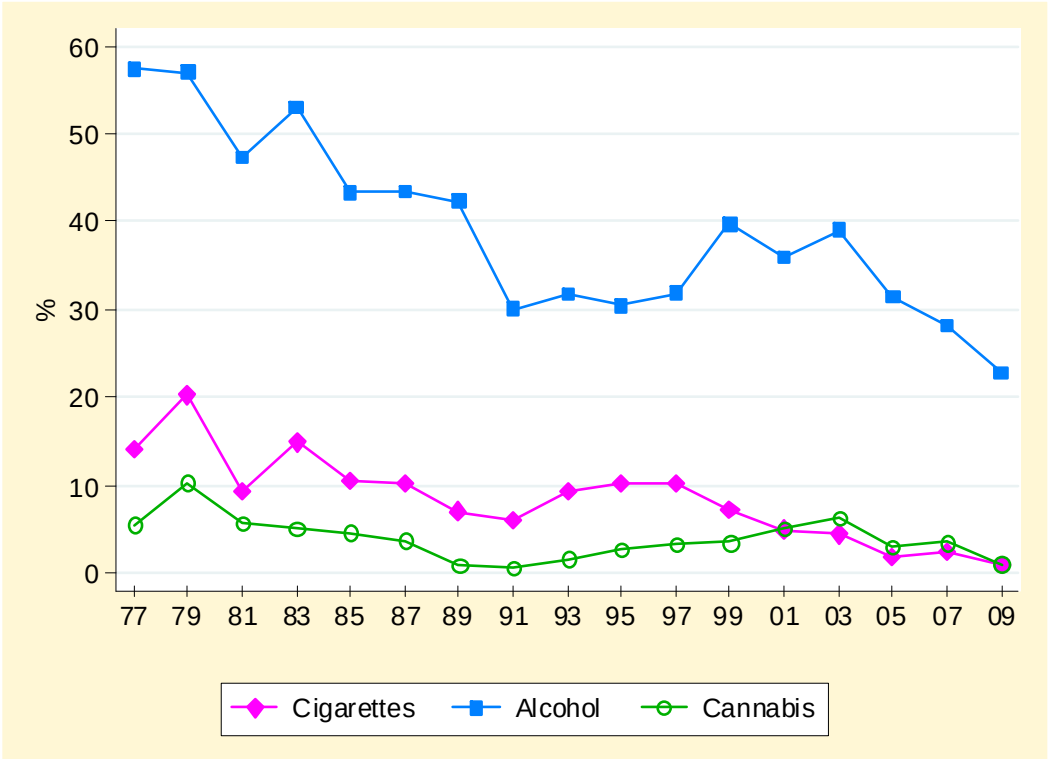



Figure 3.9.5
Percentage of 7th-Graders Reporting Smoking, Alcohol Use, and Cannabis Use During the Past Year, 1977–2009 OSDUHS



## Age of Initiation for Smoking, Drinking, and Cannabis Use, 1981–2009

(Figures 3.9.6 to 3.9.9)

As previously mentioned, early initiation of substance use is a risk factor for dependence and other problems later in life. In this section we present the average age of initiation for cigarette, alcohol, and cannabis use among grade 11 users (ages 16-17). We provide this analysis for the years between 1981 and 2009. We selected grade 11 for two reasons: (1) it is the oldest grade for which we have data spanning back the furthest, and (2) grade 11 is typically the peak grade of most substance use.

### Mean Ages

- In 2009, the average age of first use of cigarettes (smoking one whole cigarette) among grade 11 smokers was 13 years. The average age of first drink of alcohol among grade 11 drinkers was 13 years, and the average age of first drunkenness among 11$^{th}$-grade drinkers was 14 years. The average age of first cannabis use among grade 11 users was 14 years.

- Also notable in Figure 3.9.6 is that the pattern of use of these three substances has generally been constant since the beginning of the survey. That is, smoking a cigarette typically occurs first, followed by drinking alcohol, and then trying cannabis.

### Smoking

- As seen in Figures 3.9.6 and 3.9.7, the average initiation age for smoking increased between 1981 and 1995, decreased slightly in the late 1990s, and has increased over the past decade.

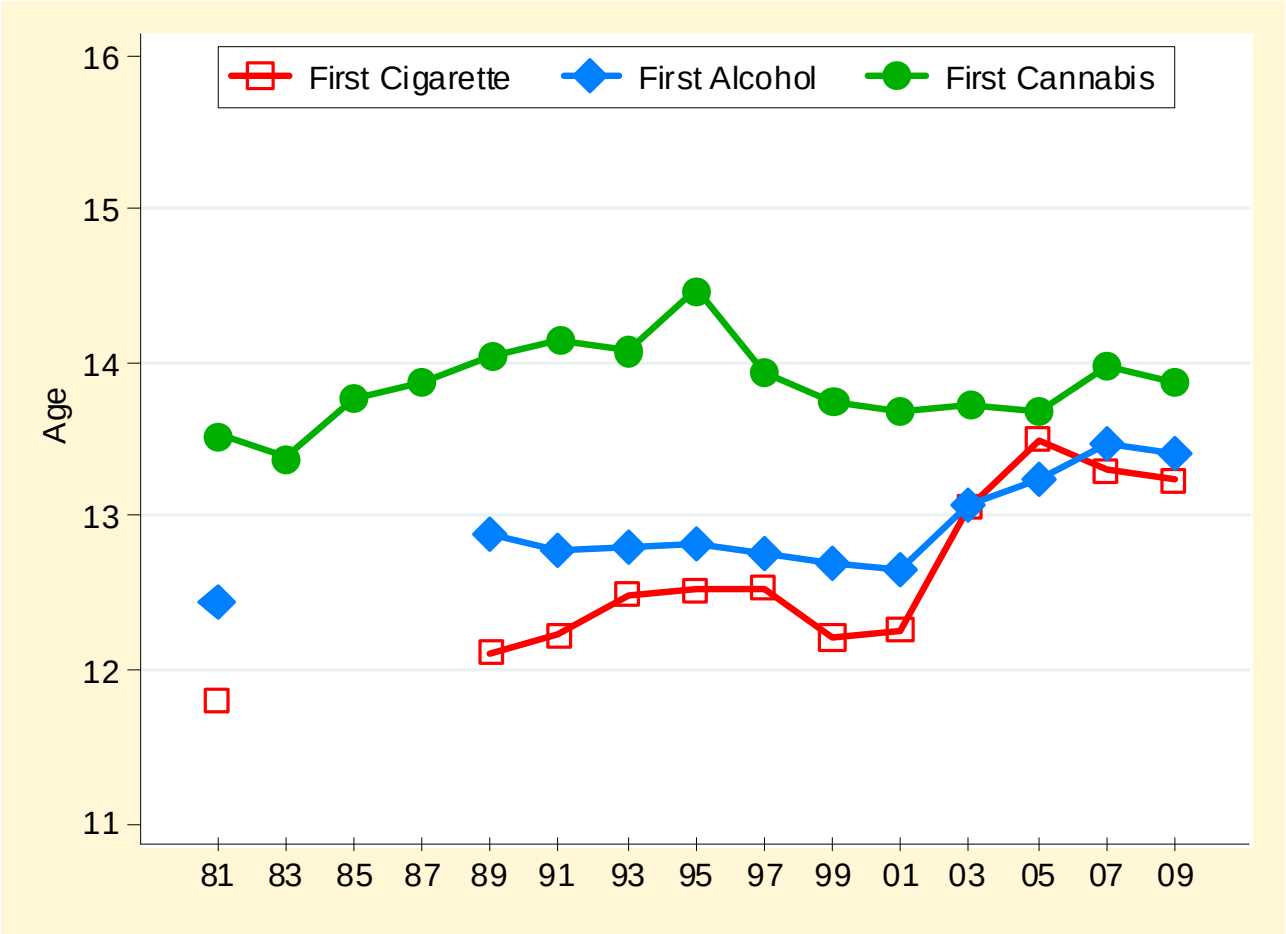
### Drinking

- As seen in Figures 3.9.6 and 3.9.8, the average initiation age for drinking was stable over the 1990s, and has increased over the past decade.

### Cannabis Use

- The average age of initiation for cannabis use has not dramatically changed over the decades, hovering at about 14 years of age. However, the current average age is somewhat higher than the estimates found decades ago in 1981 and 1983 (see Figures 3.9.6 and 3.9.9).

Figure 3.9.6
Mean Age of First Cigarette Among 11th-Grade Smokers, First Alcoholic Drink Among 11th-Grade Drinkers, and First Cannabis Use Among 11th-Grade Users, 1981–2009 OSDUHS




| | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Cigarettes | 11.85 | -- | -- | -- | 12.11 | 12.22 | 12.49 | 12.52 | 12.53 | 12.21 | 12.26 | 13.06 | 13.50 | 13.30 | 13.23 |
| Alcohol | 12.45 | -- | -- | -- | 12.88 | 12.77 | 12.80 | 12.81 | 12.76 | 12.70 | 12.66 | 13.08 | 13.24 | 13.47 | 13.40 |
| Cannabis | 13.53 | 13.38 | 13.77 | 13.88 | 14.04 | 14.14 | 14.08 | 14.47 | 13.94 | 13.75 | 13.69 | 13.73 | 13.69 | 13.98 | 13.87 |

Note: age (grade) of first cigarette and of first alcoholic drink were not asked between 1983 and 1987

Figure 3.9.7
Grade of First Cigarette Among 11th-Grade Smokers, by Year of Survey, 1981–2009 OSDUHS

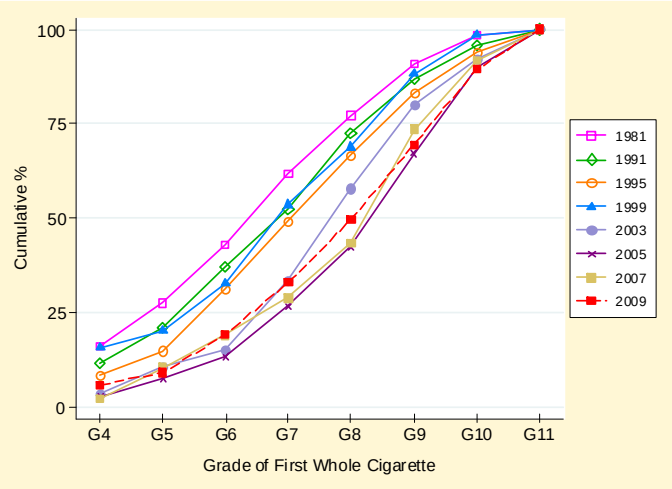



Figure 3.9.8
Grade of First Alcoholic Drink Among 11th-Grade Drinkers, by Year of Survey, 1981–2009 OSDUHS

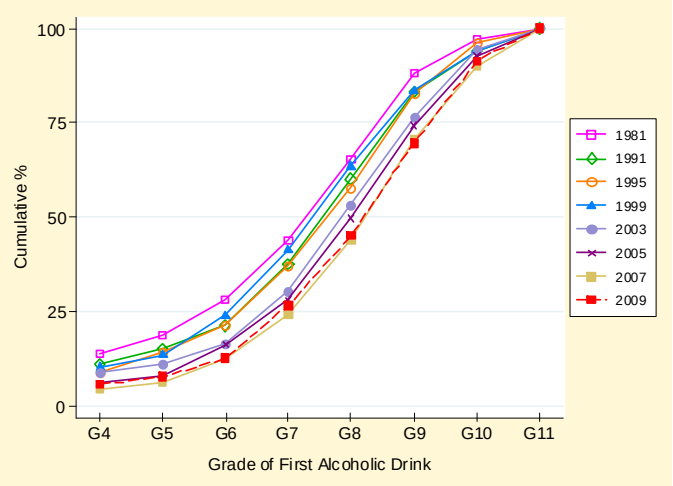
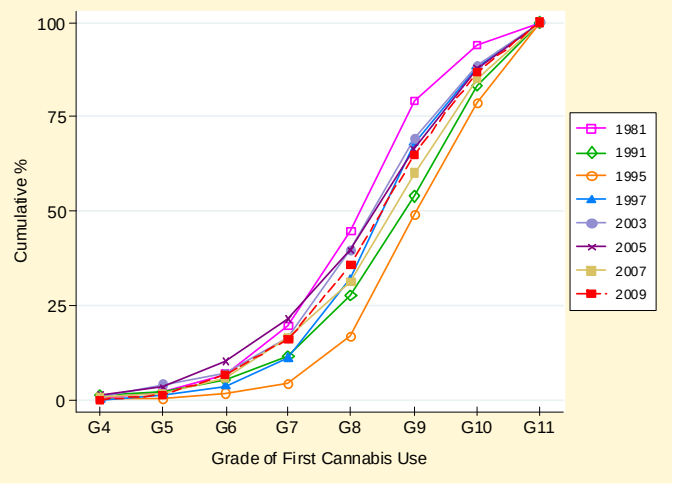



Figure 3.9.9
Grade of First Cannabis Use Among 11th-Grade Users, by Year of Survey, 1981–2009 OSDUHS



# 3.10 Consequences and Problems Related to Substance Use

## Drinking and Driving

(Figures 3.10.1, 3.10.2; Table 3.10.1)

*2009: Grades 10 to 12*

- In 2009, 11.9% of drivers in grades 10 to 12 drove within an hour after consuming two or more alcoholic drinks at least one time during the past 12 months. This estimate represents about 34,700 drivers in grades 10 to 12.

- Male drivers are more likely than female drivers to drink and drive (14.9% vs 8.3%).

- Despite some variation, there are no significant grade differences.

- There is no significant regional variation.

*1999–2009: Grades 10 to 12*

☐ As seen in Table 3.10.1, there has been no significant change in the rate of drinking and driving among the total sample of adolescent drivers between 1999 and 2009.

☐ Among the subgroups, only students in the North show a significantly lower rate in 2009 (12.5%) compared to 1999 (26.0%).

*1977 –2009: Grade 11 only*

☐ Figure 3.10.2 shows trends in the frequency of drinking and driving among grade 11 licensed drivers (including graduated licences). Drinking and driving has significantly declined over the long-term among 11th-graders, especially since the late 1970s when monitoring first began.

Figure 3.10.1
Percentage of Drivers in Grades 10 to 12 Reporting Drinking and Driving at Least Once in the Past Year, by Sex, Grade and Region, 2009 OSDUHS

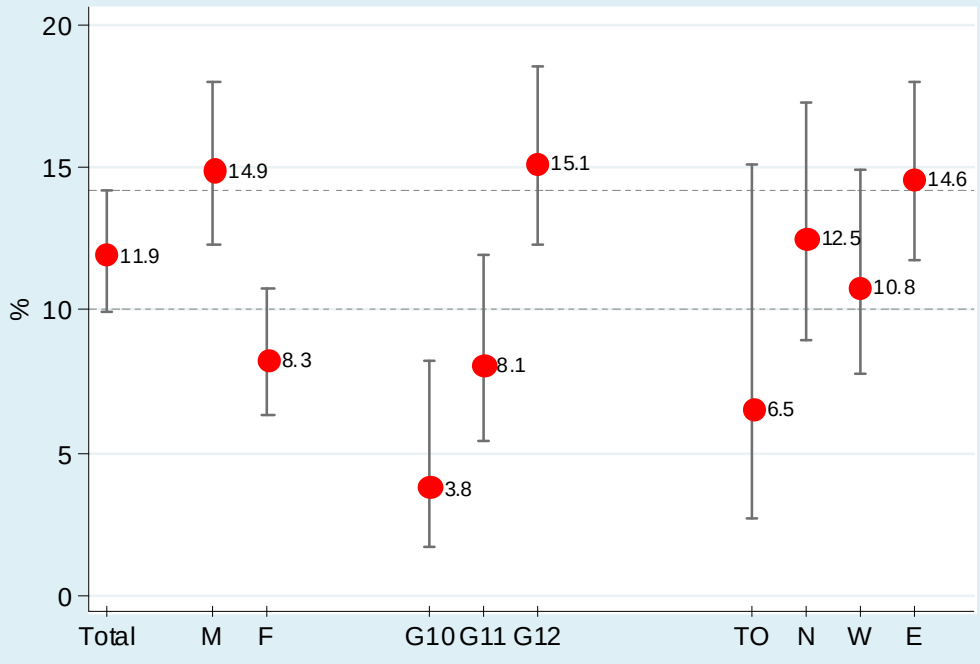
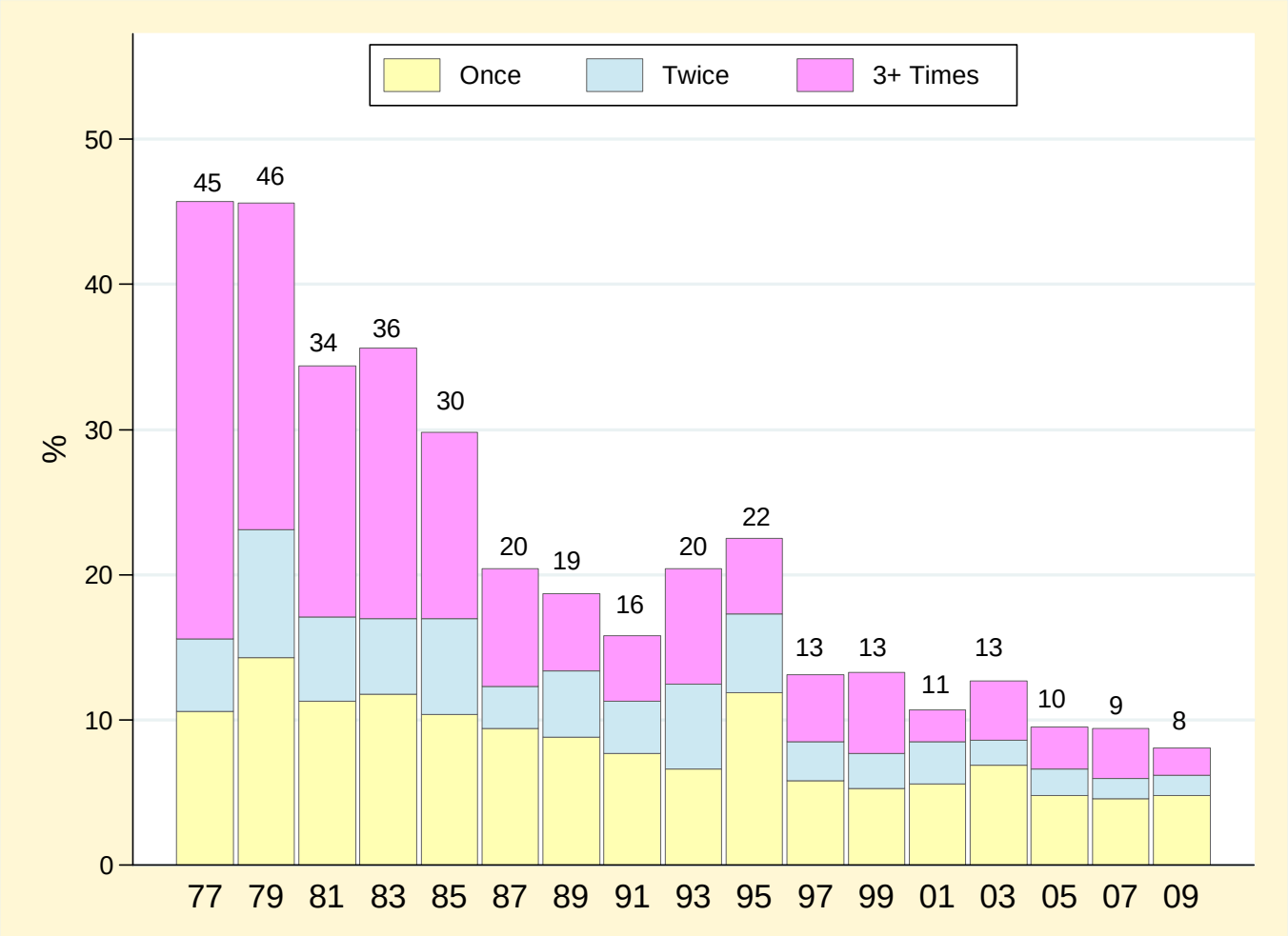


Figure 3.10.2
Driven within an Hour of Drinking Two or More Drinks (11th-Grade Licensed Drivers only), 1977–2009 OSDUHS




| | 1977 | 1979 | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample N | 314 | 558 | 436 | 556 | 563 | 638 | 578 | 646 | 401 | 560 | 614 | 451 | 374 | 824 | 965 | 794 | 856 |
| Never (%) | 54 | 54 | 66 | 64 | 70 | 79 | 81 | 84 | 80 | 77 | 87 | 87 | 89 | 87 | 90 | 91 | 92 |
| Once | 11 | 14 | 11 | 12 | 10 | 9 | 9 | 8 | 7 | 12 | 6 | 5 | 6 | 7 | 5 | 5 | 5 |
| Twice | 5 | 9 | 6 | 5 | 7 | 3 | 5 | 4 | 6 | 5 | 3 | 2 | 3 | 2 | 2 | 1 | 1 |
| 3+ Times | 31 | 22 | 18 | 19 | 12 | 8 | 5 | 5 | 8 | 5 | 5 | 5 | 2 | 2 | 3 | 3 | 2 |

Table 3.10.1: Percentage of Students in Grades 10 to 12 with a Driver's Licence Reporting Drinking and Driving at Least Once During the Past Year, 1999–2009

| | | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|
| | (N) | (1009) | (847) | (1973) | (2280) | (1897) | (2219) |
| Total | | **14.0** | **14.2** | **13.8** | **13.6** | **11.6** | **11.9** |
| (95% CI) | | (11.1-17.6) | (11.1-17.9) | (11.9-16.0) | (11.8-15.6) | (9.9-13.5) | (10.0-14.2) |
| Sex | | | | | | | |
| | Males | **17.6** | **19.0** | **19.5** | **17.7** | **14.1** | **14.9** |
| | | (14.0-21.8) | (14.2-25.1) | (16.5-22.9) | (15.0-20.7) | (11.5-17.2) | (12.3-18.0) |
| | Females | **9.8** | **7.4** | **7.8** | **8.5** | **8.4** | **8.3** |
| | | (6.4-14.7) | (4.6-11.8) | (6.0-10.0) | (6.7-10.7) | (6.5-10.9) | (6.3-10.7) |
| Grade | | | | | | | |
| | 10 | **8.1** | **9.8** | **9.8** | **7.6** | **9.0** | **3.8** |
| | | (4.0-15.5) | (4.4-20.6) | (6.1-15.4) | (4.2-13.3) | (5.0-15.8) | (1.7-8.2 |
| | 11 | **13.4** | **10.7** | **12.7** | **9.5** | **9.3** | **8.1** |
| | | (9.1-19.4) | (8.0-14.2) | (10.3-15.6) | (7.3-12.4) | (6.9-12.6) | (5.4-12.0) |
| | 12 | **16.3** | **20.9** | **16.2** | **17.4** | **13.4** | **15.1** |
| | | (11.4-22.8) | (15.4-27.7) | (13.1-19.8) | (14.7-20.6) | (11.2-15.9) | (12.3-18.5) |
| Region | | | | | | | |
| | Toronto | **7.3** | **13.2** | **12.4** | **9.8** | **11.0** | **6.5** |
| | | (3.0-16.9) | (10.7-16.2) | (8.5-17.9) | (5.7-16.1) | (6.1-19.1) | (2.7-15.1) |
| | North | **26.0** | **12.5** | **16.8** | **16.8** | **12.7** | **12.5** [b] |
| | | (17.3-37.2) | (9.0-17.0) | (12.0-23.0) | (12.9-21.5) | (8.4-18.8) | (8.9-17.2) |
| | West | **13.6** | **18.5** | **13.9** | **15.6** | **11.7** | **10.8** |
| | | (9.8-18.6) | (13.1-25.6) | (10.6-18.0) | (12.9-18.7) | (9.1-14.8) | (7.8-14.9) |
| | East | **12.9** | **8.2** | **13.6** | **12.1** | **11.5** | **14.6** |
| | | (7.7-21.0) | (4.8-13.5) | (11.0-16.7) | (9.1-15.9) | (9.1-14.3) | (11.8-18.0) |

Notes: (1) entries in brackets are 95% confidence intervals; (2) no significant differences 2009 vs. 2007; [b] 2009 vs. 1999 significant difference, p<.01.
Q: How often in the last 12 months, have you driven within an hour of drinking two or more drinks of alcohol?
Source: OSDUHS, Centre for Addiction & Mental Health

## Cannabis Use and Driving

(Figure 3.10.3; Table 3.10.2)

Beginning in 2001, the OSDUHS asks students how often, if at all, they had driven a vehicle within one hour of using cannabis during the past 12 months. We present the percentage of drivers in grades 10 to 12 who report doing so at least once.

*2009: Grades 10 to 12*

- In 2009, 16.6% of drivers in grades 10 to 12 report driving after using cannabis. This estimate represents about 48,500 drivers in grades 10 to 12.

- Male drivers are significantly more likely than female drivers to use cannabis and drive (20.8% vs 11.4%, respectively).

- The likelihood of using cannabis and driving is significantly higher among drivers in 12th-grade (21.1%) compared to the younger grades.

- Despite some variation, there are no significant regional differences.

*2001 –2009: Grades 10 to 12*

☐ As seen in Table 3.10.2, the 2009 estimate (16.9%) for using cannabis and driving is not significantly different from the estimate found in 2007 (15.5%), or the estimate from 1999 (19.9%).

## Been a Passenger with a Driver who was Using Alcohol or Drugs

(Table 3.10.3)

Students were asked how often they rode in a vehicle driven by someone who was drinking alcohol, and how often they rode with a driver who had been using drugs. Both questions refer to the past 12 months before the survey.

*2009: Grades 7 to 12*

- The 2009 survey found that 23.4% of students rode in a vehicle at least once in the past year with a driver who had been drinking, and 17.9% with a driver who had used drugs.

- No significant sex differences were found for either estimate.

- Being a passenger with a driver who had been drinking or using drugs significantly increases with grade level.

- There are no significant regional differences in the likelihood of riding with a driver who had been drinking. However, Toronto students (12.7%) are significantly less likely to report riding with a driver who had been using drugs compared to students in the other three regions.

*2001 –2009: Grades 7 to 12*

☐ The percentage of students who report riding with a driver who had been drinking did not significantly change between 2007 (25.7%) and 2009 (23.4%), but the current estimate is lower than that found in 2001 (30.9%).

☐ The percentage of students who report riding in a vehicle with a driver who been using drugs remained stable between 2009 (17.9%) and 2007 (17.6%), but is significantly lower than the estimate from 2003 (22.9%).

Figure 3.10.3
Percentage of Drivers in Grades 10 to 12 Reporting Driving After Using Cannabis at Least Once in the Past Year, by Sex, Grade and Region, 2009 OSDUHS

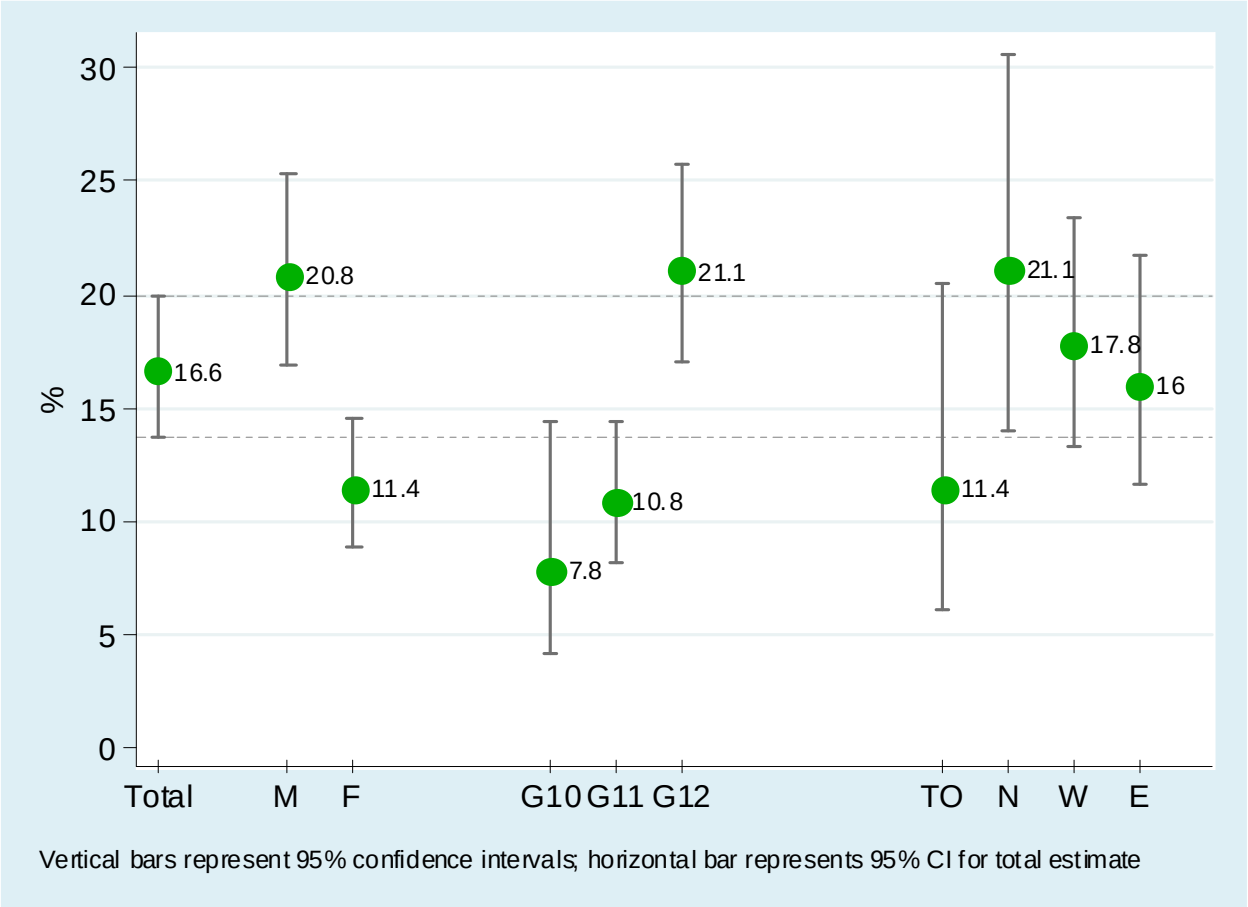


Table 3.10.2: Percentage of Students in Grades 10 to 12 with a Driver's Licence Reporting Cannabis Use and Driving at Least Once During the Past Year, 2001–2009

| | | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|
| | (N) | (400) | (1973) | (2280) | (1897) | (2219) |
| Total | | **19.9** | **20.1** | **20.0** | **15.5** | **16.6** |
| (95% CI) | | (14.9-26.0) | (17.3-23.1) | (17.6-22.5) | (13.4-17.9) | (13.8-19.9) |
| Sex | | | | | | |
| | Males | **25.3** | **25.6** | **25.2** | **17.9** | **20.8** |
| | | (17.3-35.5) | (21.4-30.2) | (22.1-28.7) | (15.0-21.2) | (16.9-25.4) |
| | Females | **12.6** | **14.1** | **13.4** | **12.7** | **11.4** |
| | | (8.5-18.4) | (11.3-17.6) | (10.8-16.4) | (9.8-16.4) | (8.9-14.6) |
| Grade | | | | | | |
| | 10 | **18.9** | **15.9** | **15.1** | **3.7** | **7.8** |
| | | (9.6-33.9) | (11.3-21.9) | (9.7-22.6) | (1.5-8.9) | (4.1-14.4) |
| | 11 | **18.9** | **18.0** | **15.4** | **12.8** | **10.8** |
| | | (12.7-27.3) | (14.4-22.3) | (12.3-19.1) | (10.0-16.3) | (8.1-14.3) |
| | 12 | **21.6** | **23.3** | **23.9** | **18.9** | **21.1** |
| | | (14.1-31.7) | (18.9-28.3) | (20.5-27.6) | (16.2-21.8) | (17.0-25.7) |
| Region | | | | | | |
| | Toronto | **13.7** | **13.8** | **16.0** | **15.1** | **11.4** |
| | | (6.1-28.0) | (10.0-19.4) | (10.8-23.1) | (11.0-20.3) | (6.1-20.4) |
| | North | **17.5** | **24.7** | **21.6** | **19.0** | **21.1** |
| | | (10.9-27.1) | (16.3-35.6) | (17.0-27.0) | (12.5-27.7) | (13.9-30.6) |
| | West | **23.9** | **21.0** | **24.1** | **14.3** | **17.8** |
| | | (17.2-32.2) | (17.0-25.7) | (20.1-28.6) | (10.9-18.5) | (13.3-23.3) |
| | East | **16.7** | **20.3** | **16.3** | **16.7** | **16.0** |
| | | (7.8-32.1) | (15.2-26.6) | (12.9-20.3) | (13.6-20.3) | (11.6-21.7) |

Notes: (1) entries in brackets are 95% confidence intervals; (2) question asked of a random half sample in 2001; (3) no significant differences 2009 vs. 2007; no significant differences 2009 vs. 1999.
Q: How often in the last 12 months have you driven within an hour of using marijuana or hashish?
Source: OSDUHS, Centre for Addiction & Mental Health

Table 3.10.3: Percentage of the Total Sample Reporting Riding in a Vehicle with a Driver who had been Drinking, and Riding in a Vehicle with a Driver who had been using Drugs (at Least Once During the Past Year), 2001–2009

| | % All Students Riding with a Driver who had been Drinking | | | | | % All Students Riding with a Driver who had been using Drugs | | | |
|---|---|---|---|---|---|---|---|---|---|
| | **2001** | **2003** | **2005** | **2007** | **2009** | **2003** | **2005** | **2007** | **2009** |
| (N) | (1837) | (3152) | (3648) | (2935) | (4261) | (3464) | (4078) | (3388) | (4851) |
| Total | **30.9** | **29.2** | **28.8** | **25.7** | **23.4** [b] | **22.9** | **21.5** | **17.6** | **17.9** [b] |
| (95% CI) | (28.5-33.5) | (27.1-31.3) | (26.9-30.8) | (23.6-27.9) | (21.6-25.4) | (20.8-25.0) | (19.3-24.0) | (16.1-19.2) | (16.4-19.5) |
| Sex | | | | | | | | | |
| Males | **31.5** | **27.6** | **26.7** | **24.7** [b] | **23.2** [b] | **21.1** | **21.2** | **16.2** | **18.9** |
| | (28.2-34.9) | (25.0-30.5) | (24.3-29.2) | (22.2-27.5) | (20.5-26.2) | (18.3-24.1) | (18.3-24.5) | (14.2-18.2) | (16.4-21.6) |
| Females | **30.4** | **30.6** | **31.2** | **26.8** | **23.6** [b] | **24.5** | **21.9** | **19.0** | **16.9** [b] |
| | (26.7-34.3) | (27.7-33.6) | (28.5-33.9) | (23.9-29.9) | (21.1-26.3) | (21.8-27.3) | (19.3-24.7) | (16.8-21.4) | (14.9-19.1) |
| Grade | | | | | | | | | |
| 7 | **17.5** | **21.2** | **17.7** | **14.0** | **10.0** | **9.4** | **6.1** | **2.8** | **1.5** [b] |
| | (12.9-23.4) | (16.6-26.8) | (14.1-22.0) | (10.8-18.0) | (6.6-14.8) | (6.1-14.1) | (3.6-10.0) | (1.6-4.9) | (0.9-2.5) |
| 8 | **23.2** | **25.2** | **19.9** | **17.3** | **14.8** | **11.1** | **9.2** | **5.6** [b] | **5.1** [b] |
| | (16.5-31.5) | (21.1-29.8) | (16.7-23.5) | (13.9-21.4) | (11.4-19.2) | (8.0-15.3) | (6.3-13.2) | (3.5-9.1) | (3.5-7.5) |
| 9 | **31.5** | **24.0** | **27.3** | **22.0** | **23.3** | **17.4** | **15.2** | **13.9** | **10.0** [b] |
| | (25.1-38.6) | (20.1-28.4) | (23.2-31.9) | (18.4-26.0) | (18.9-28.3) | (14.0-21.3) | (11.8-19.2) | (10.6-18.1) | (7.9-12.7) |
| 10 | **36.0** | **30.2** | **28.9** | **24.9** | **23.0** [b] | **23.3** | **23.6** | **17.9** | **16.7** |
| | (30.8-41.7) | (25.5-35.4) | (24.5-33.7) | (21.2-29.0) | (19.4-27.0) | (19.0-28.3) | (20.0-27.7) | (14.8-21.6) | (13.6-20.4) |
| 11 | **40.0** | **38.3** | **36.5** | **33.1** | **26.5** [b] | **33.8** | **34.7** | **25.0** | **25.9** |
| | (33.4-46.9) | (33.9-42.8) | (31.9-41.2) | (29.0-37.4) | (22.0-31.6) | (28.7-39.3) | (31.2-38.3) | (21.6-28.7) | (20.2-32.6) |
| 12 | **36.2** | **34.1** | **39.4** | **37.4** | **34.1** | **37.0** | **38.0** | **34.0** | **37.1** |
| | (28.9-44.1) | (30.1-38.2) | (34.8-44.3) | (31.8-43.4) | (28.0-40.8) | (31.4-43.0) | (33.7-42.5) | (29.3-39.1) | (23.8-41.6) |
| Region | | | | | | | | | |
| Toronto | **26.1** | **27.1** | **21.3** | **19.9** | **19.1** | **20.7** | **15.3** | **12.0** | **12.7** [b] |
| | (19.0-34.6) | (21.6-33.4) | (18.6-24.3) | (14.3-26.9) | (14.4-24.9) | (17.0-25.0) | (11.6-20.0) | (9.4-15.1) | (9.9-16.3) |
| North | **34.7** | **29.8** | **31.7** | **27.2** | **27.3** | **27.0** | **27.2** | **22.3** | **22.2** |
| | (30.9-38.8) | (26.0-33.8) | (26.7-37.2) | (22.8-32.1) | (21.7-33.6) | (21.7-33.2) | (23.6-31.3) | (18.1-27.2) | (16.8-28.8) |
| West | **32.8** | **32.5** | **30.0** | **27.9** | **23.9** | **22.7** | **23.6** | **19.0** | **18.4** |
| | (29.2-36.5) | (29.4-35.6) | (26.9-33.3) | (25.3-30.6) | (20.8-27.2) | (19.9-25.8) | (20.5-27.0) | (16.5-21.7) | (16.1-21.0) |
| East | **30.2** | **25.1** | **31.2** | **25.6** | **24.5** | **23.2** | **20.9** | **17.7** | **18.9** |
| | (26.5-34.2) | (21.6-28.9) | (27.6-35.1) | (21.4-30.4) | (22.0-27.2) | (18.9-28.0) | (16.6-26.1) | (15.3-20.4) | (16.3-21.8) |

Notes: (1) entries in brackets are 95% confidence intervals; (2) each question asked of a random half sample in each year; (3) no significant differences 2009 vs. 2007; [b] 2009 vs. 2001 (2003 for driver was using drugs) significant difference, p<.01.

Q: How often in the last 12 months did you ride in a car or other vehicle driven by someone who had been drinking alcohol?
How often in the last 12 months did you ride in a car or other vehicle driven by someone who had been using drugs (other than alcohol)?

Source: OSDUHS, Centre for Addiction & Mental Health

## Potential Drug Use Problem (CRAFFT Screener)

(Table 3.10.4; Figure 3.10.4)

Starting in 2003, the OSDUHS included the six-item "CRAFFT" screener in order to gauge drug use problems experienced by students (Knight, Shrier, Bravender, et al., 1999). The six items (presented in Table 3.10.4) pertain to problems stemming from any drug use, including prescription drugs, experienced during the past 12 months. A total score of two or more problems is used to identify adolescents who may have a drug use problem – that is, those who may be in need of treatment (α=0.78).

*2009: Grades 7 to 12*

- Among the six CRAFFT problems, riding in a vehicle with a driver who was using drugs is experienced the most (about 18%), followed by using drugs to relax or feel better (about 16%).

- Overall, 15.5% of students report at least two of the six CRAFFT symptoms, and, therefore, may have a problem with drug use. This percentage represents about 164,600 Ontario students in grades 7 to 12.

- Males (17.3%) are significantly more likely than females (13.6%) to indicate a drug use problem.

- There is significant grade variation: the likelihood of a drug use problem is lowest among 7th-graders (2.3%) and highest among 12th-graders (28.2%).

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

*2003 –2009: Grades 7 to 12*

- The percentage of students in 2009 (15.5%) indicating a drug use problem is similar to the estimate found in 2007 (14.9%), as well as those in previous years (16.4% in 2005; 17.5% in 2003).

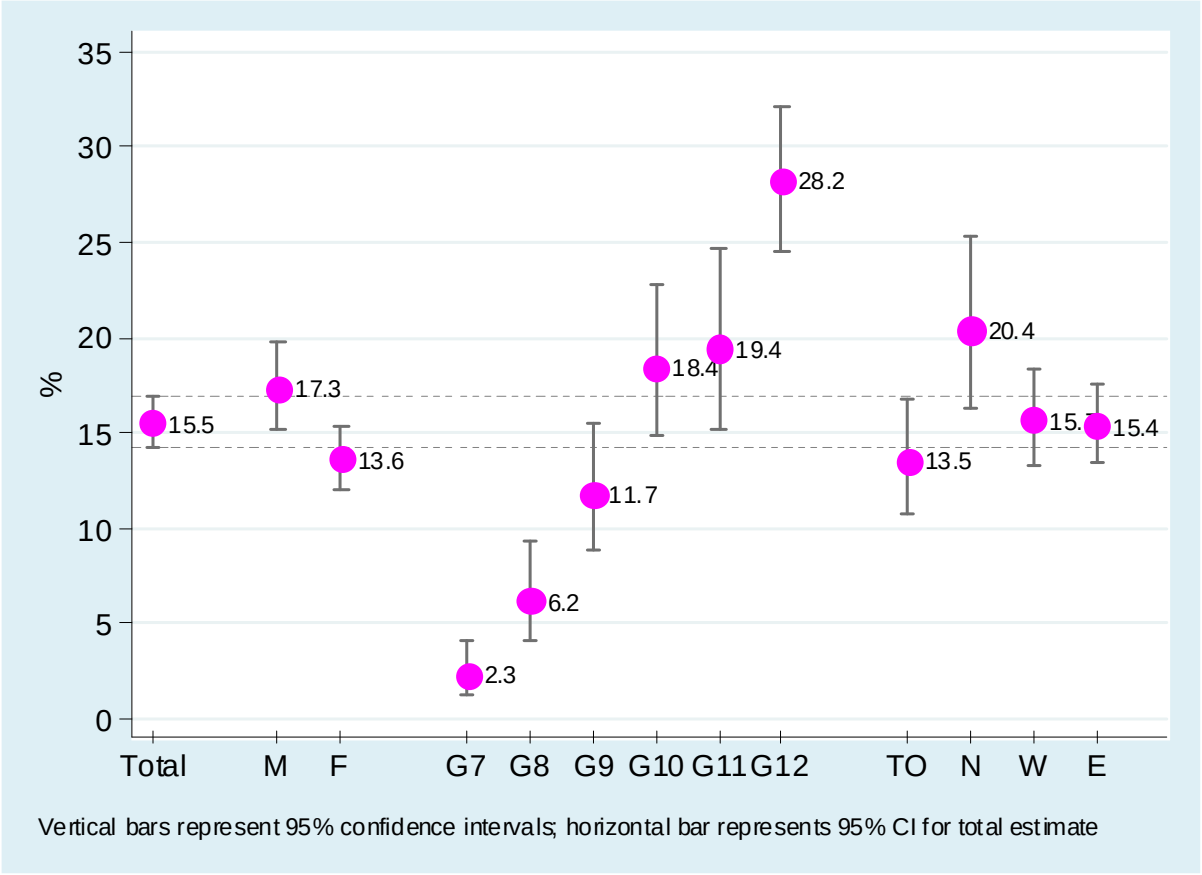
Table 3.10.4: Percentage of the Total Sample of Students Indicating a Potential Drug Use Problem ("CRAFFT") During the Past Year, 2009 OSDUHS (Grades 7 to 12)

| CRAFFT Item | % "yes" among the Total Sample (N=4,851) |
|---|---|
| "In the last 12 months…." | |
| 1. did you ride in a **c**ar or other vehicle driven by someone who had been using drugs (other than alcohol)? | 17.9 |
| 2. did you use drugs to **r**elax, feel better about yourself, or fit in? | 16.3 |
| 3. did you use drugs while you were by yourself (**a**lone)? | 9.3 |
| 4. did you **f**orget things you did while using drugs? | 9.0 |
| 5. did your **f**amily or friends tell you that you should cut down on your use of drugs? | 4.8 |
| 6. did you get into **t**rouble while using drugs? | 5.1 |
| CRAFFT 2+ Score | 15.5 |
| (95% CI) | (14.2-16.9) |

Notes: (1) those responding "yes" to 2 or more problems on the CRAFFT screener may have a drug use problem that requires treatment; (2) based on a random half sample.

Source: OSDUHS, Centre for Addiction & Mental Health

Figure 3.10.4
Percentage Indicating a Potential Drug Use Problem (CRAFFT 2+)
by Sex, Grade and Region, 2009 OSDUHS



## Alcohol and Other Drug Treatment

In addition to asking students about alcohol and drug use problems, we also surveyed students about their treatment experiences. Specifically, we asked "*Have you been in a treatment program during the last 12 months because of your alcohol or drug use?"*

- In 2009, 1.4% (range: 1.1%-1.8%) of students reported that they had received either alcohol and/or drug treatment (data not tabled). This estimate represents about 14,100 Ontario students in grades 7 to 12.

- The 2009 estimate (1.4%) for students who sought treatment is similar to the estimate from 2007 (1.5%), as well as those from previous years (0.7% in 2005; 1.4% in 2003).

## Coexisting Alcohol and Mental Health Problems

(Figures 3.10.5, 3.10.6)

In addition to substance problem indicators, the OSDUHS also contains mental health indicators. One of these is the General Health Questionnaire (GHQ-12), which is a screening instrument designed to detect current elevated psychological distress (symptoms of anxiety and depression) (Goldberg, Oldehinkel, & Ormel, 1998; McDowell & Newell, 1996). For our present purpose, we examine the percentage reporting at least 3 of the 12 GHQ problems.

Figure 3.10.5 displays the percentage of all students in grades 7 to 12 who report hazardous drinking according to the AUDIT (those scoring 8+); the percentage reporting psychological distress according to the GHQ (those scoring 3+); and the percentage reporting both problems.

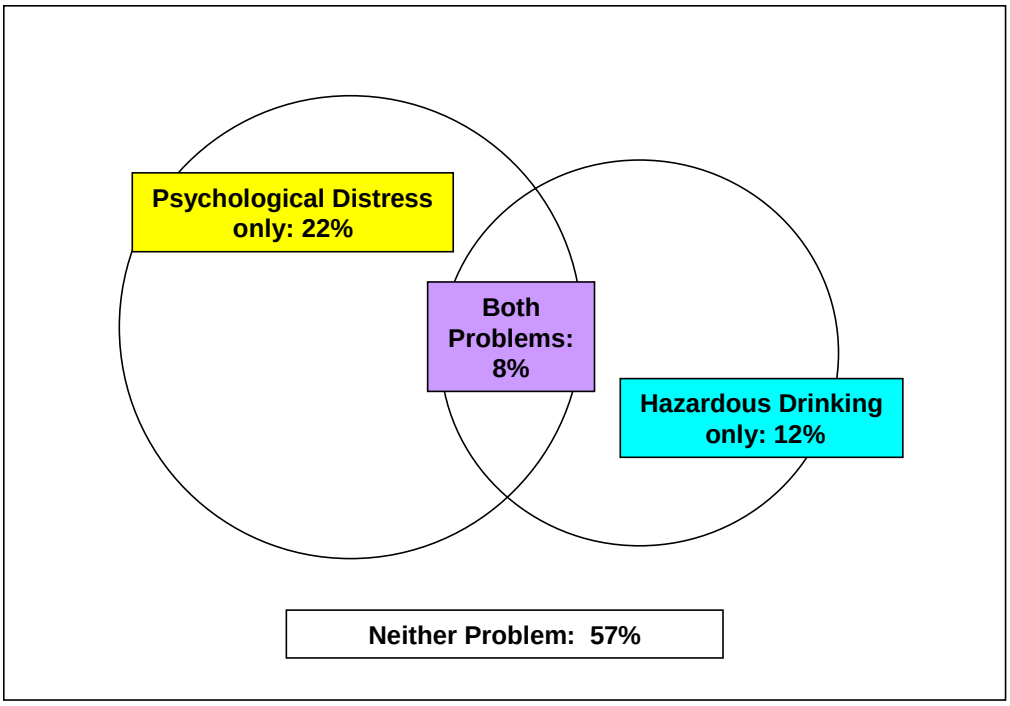
- As seen in Figure 3.10.6, 8.4% (range: 7.4%-9.6%) of all students indicate both hazardous drinking and elevated psychological distress. This estimate represents about 85,400 students in Ontario.

- Females are more likely than males to report coexisting problems (10.9% vs 6.0%, respectively).

- Coexisting problems increase with grade, up to a high of about 14%-15% among 11$^{th}$- and 12$^{th}$-graders.

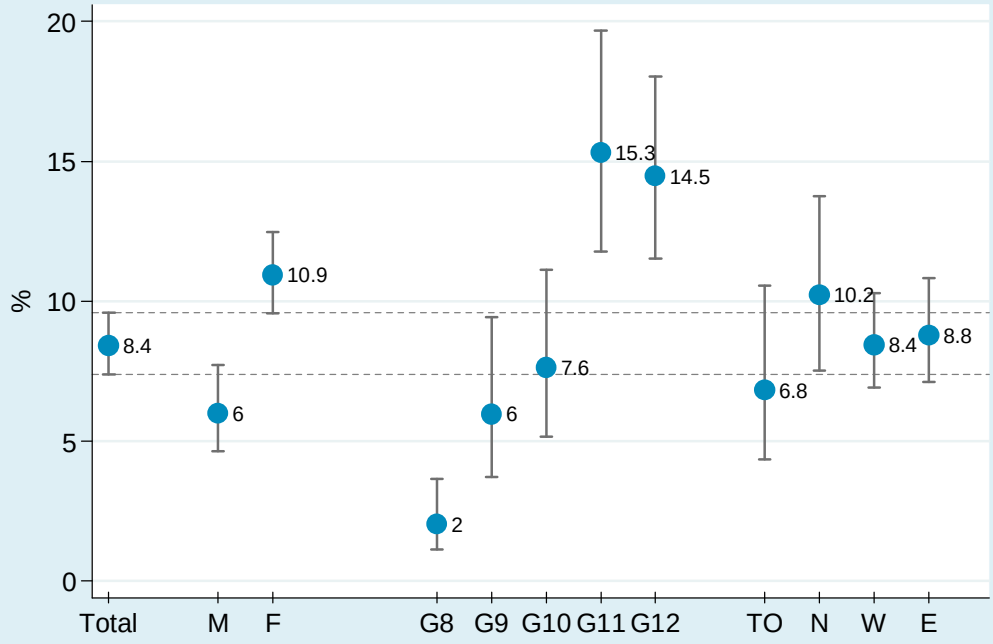
- There are no significant regional differences.

Figure 3.10.5
Coexisting Problems: Hazardous Drinking (AUDIT 8+) and Elevated Psychological Distress (GHQ 3+), 2009 OSDUHS (Grades 7 to 12)




Based on a random half sample (N=4,851); percentages do not add up to 100% due to rounding

Figure 3.10.6
Percentage Reporting Coexisting Hazardous Drinking and Elevated Psychological Distress by Sex, Grade and Region, 2009 OSDUHS




Vertical bars represent 95% confidence intervals; horizontal bar represents 95% CI for total estimate; estimate for grade 7 was suppressed

# 3.11 Attitudes and Perceptions

## Perceptions of Risk and Disapproval

(Figures 3.11.1, 3.11.2; Tables 3.11.1, 3.11.2)

Research has shown that drug-related attitudes and beliefs correlate with both increases and decreases in rates of drug use (Bachman, Wadsworth, O'Malley, Johnston, & Schulenberg, 1997; Johnston, O'Malley, Bachman, & Schulenberg, 2007). Because the OSDUHS is a cross-sectional study, we cannot necessarily attribute attitudes and beliefs as causal factors in the changing rates of drug use. We can, however, examine the extent to which beliefs and drug use vary over time.

In Table 3.11.1 and Figure 3.11.1, we display the percentage of students who believe there is a "**great risk"** that people will harm themselves if they used various drugs. In Table 3.11.2 and Figure 3.11.1, we display the percentage who "**strongly disapprove"** of people aged 18 and older using particular drugs.

*2009: Grades 7 to 12*

- Among the drug behaviours surveyed, students feel that the greatest risk of harm is associated with regular marijuana use (56.9%), followed by trying cocaine (44.4%), trying ecstasy (42.8%), trying LSD (41.0%), daily smoking (33.4%), binge drinking on weekends (28.2%), and trying marijuana (19.1%).

- Perceptions of risk significantly increase with grade for trying cocaine, LSD, and ecstasy, but *decrease with grade* for marijuana use (trying and regular use).

- The majority of students strongly disapprove of someone trying ecstasy (51.5%) and trying LSD (50.5%). Just about half strongly disapprove of trying cocaine (49.0%) and smoking marijuana on a regular basis (45.2%). Over one-quarter (28.3%) strongly disapprove of trying marijuana and 21.9% disapprove of binge drinking on weekends.

*1999–2009: Grades 7 to 12*

- The perception of great risk in trying cocaine is significantly higher in 2009 (44.4%) compared to 2007 (37.2%), as well as 1999 (33.3%). There was also an increase in 2009 (49.0%) in the percentage that strongly disapproves of trying cocaine compared to 1999 (40.1%).

- Between 1999 and 2009, there was a significant increase in the percentage of students who believe there is great risk in trying LSD (from 28.9% to 41.0%) and a parallel increase in the disapproval of trying LSD (from 38.1% to 50.5%).

- The perception of great risk in trying ecstasy is significantly higher in 2009 (42.8%) compared to 2001 (32.2%). There was also a parallel increase in the percentage that strongly disapproves of trying ecstasy (from 38.8% in 2001 up to 51.4% in 2009).

- The percentage of students who believe there is great risk in daily smoking is significantly higher in 2009 (33.4%) compared to 2003 (24.0%).

*1989–2009: Grades 7, 9, and 11 only*

- Over the long-term, risk perceptions surrounding the use of most of the substances asked about in the survey decreased somewhat in the late 1990s, and have slightly increased in recent years. However, risk perceptions about trying marijuana have not increased in recent years.

- Similarly, disapproval of using these substances decreased in the late 1990s, and has steadily increased in recent years.

Figure 3.11.1
Percentage Reporting “Great Risk” of Harm and “Strongly Disapprove” of Drug Using Behaviours, 2009 OSDUHS (Grades 7 to 12)

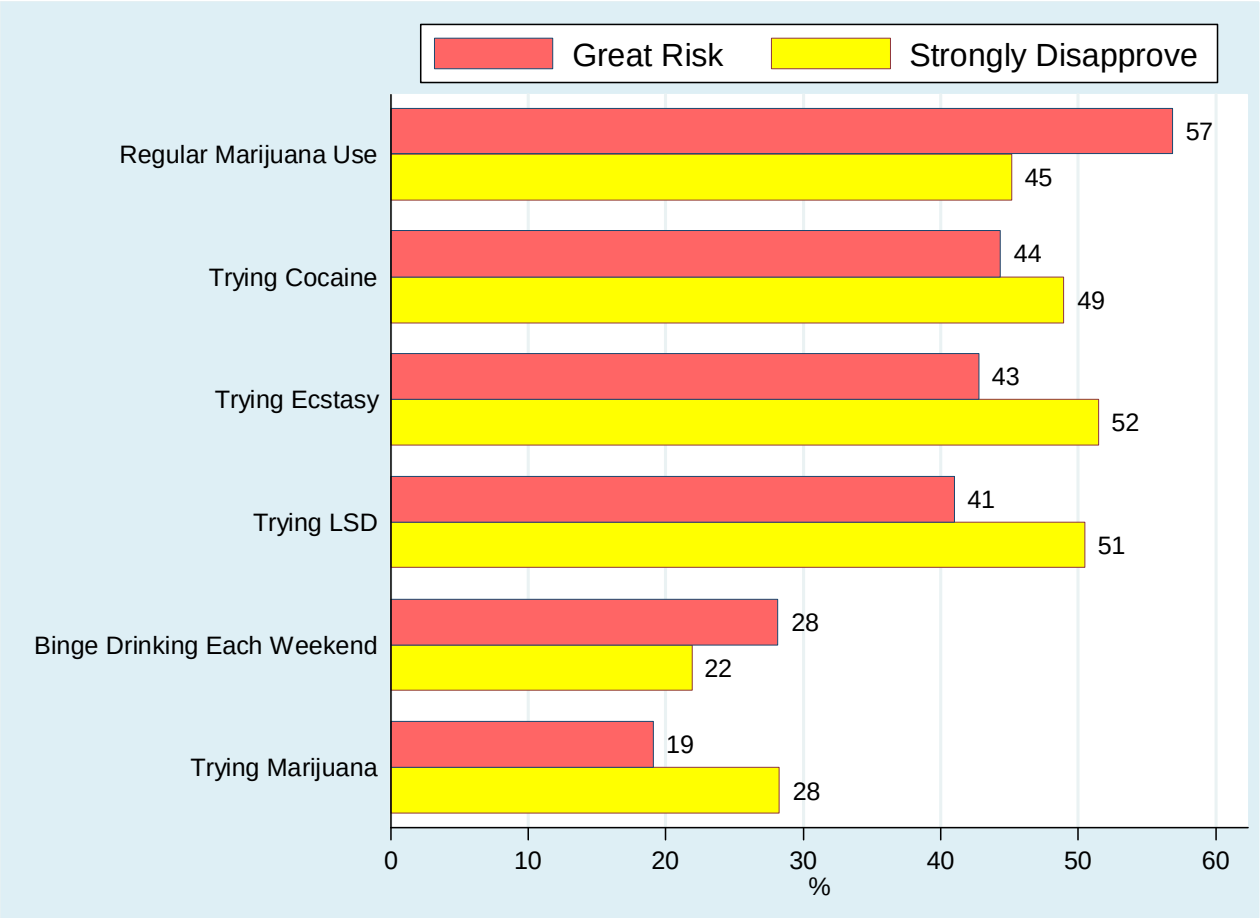


Table 3.11.1: Percentage Reporting Great Risk in Using Drugs by Grade, 1989–2009

| | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| (N[1]) | | | | | | (4447) | (1837) | (3152) | (3648) | (2935) | (4262) |
| (N[2]) | (3040) | (2961) | (2617) | (2907) | (3072) | (2421) | (953) | (1618) | (1862) | (1488) | (2069) |
| **Great Risk in Trying Marijuana Once or Twice** | | | | | | | | | | | |
| Total [1] | — | — | — | — | — | **19.2** | **19.7** | **19.2** | **20.6** | **19.4** | **19.1** |
| Total [2] | **29.1** | **32.4** | **28.5** | **21.7** | **20.1** | **19.4** | **18.8** | **19.9** | **22.8** | **21.0** | **21.9** |
| Grade 7 | 39.3 | 37.0 | 35.3 | 34.1 | 33.4 | 28.4 | 27.0 | 30.8 | 32.7 | 29.7 | 34.6 |
| Grade 8 | — | — | — | — | — | 27.7 | 30.5 | 29.4 | 24.7 | 27.0 | 27.1 |
| Grade 9 | 29.4 | 35.4 | 29.6 | 21.4 | 17.6 | 16.6 | 18.5 | 18.8 | 21.8 | 20.0 | 19.7 |
| Grade 10 | — | — | — | — | — | 13.9 | 16.6 | 13.3 | 18.9 | 14.6 | 17.4 |
| Grade 11 | 18.0 | 25.2 | 21.8 | 11.6 | 11.6 | 15.2 | 11.1 | 12.4 | 14.9 | 14.0 | 14.2 |
| Grade 12 | — | — | — | — | — | 13.8 | 16.0 | 14.6 | 12.9 | 14.2 | 9.6 |
| **Great Risk in Smoking Marijuana Regularly** | | | | | | | | | | | |
| Total [1] | — | — | — | — | — | **52.2** | **49.4** | **54.9** | **53.4** | **52.5** | **56.9** |
| Total [2] | **75.4** | **73.3** | **70.2** | **60.1** | **57.6** | **53.2** | **48.3** | **56.5** | **53.0** | **54.0** | **62.3** |
| Grade 7 | 72.3 | 72.0 | 69.9 | 67.6 | 65.9 | 63.6 | 61.1 | 69.4 | 59.2 | 61.9 | 74.0 |
| Grade 8 | — | — | — | — | — | 60.2 | 58.7 | 66.8 | 59.5 | 59.8 | 67.0 |
| Grade 9 | 78.8 | 74.0 | 73.7 | 64.1 | 59.4 | 53.1 | 47.8 | 55.4 | 53.6 | 55.7 | 64.5 |
| Grade 10 | — | — | — | — | — | 45.5 | 48.2 | 48.4 | 54.9 | 50.6 | 52.4 |
| Grade 11 | 74.6 | 73.8 | 66.9 | 50.0 | 49.2 | 44.9 | 36.8 | 47.4 | 46.8 | 45.3 | 51.5 |
| Grade 12 | — | — | — | — | — | 45.2 | 44.4 | 46.8 | 47.8 | 45.2 | 42.3 |
| **Great Risk in Trying Cocaine Once or Twice** | | | | | | | | | | | |
| Total [1] | — | — | — | — | — | **33.3** | **31.8** | **33.7** | **35.9** | **37.2** | **44.4** [ab] |
| Total [2] | **36.7** | **42.1** | **38.2** | **35.6** | **35.3** | **32.5** | **30.2** | **31.6** | **33.4** | **36.7** | **42.1** |
| Grade 7 | 35.1 | 37.8 | 30.5 | 27.1 | 27.7 | 23.8 | 21.4 | 19.0 | 25.8 | 26.9 | 34.8 |
| Grade 8 | — | — | — | — | — | 28.0 | 28.1 | 29.4 | 28.7 | 24.4 | 33.5 |
| Grade 9 | 40.7 | 41.3 | 37.1 | 34.8 | 33.0 | 27.8 | 30.0 | 32.0 | 34.8 | 33.0 | 41.1 |
| Grade 10 | — | — | — | — | — | 35.4 | 34.3 | 33.7 | 37.6 | 38.2 | 48.8 |
| Grade 11 | 33.2 | 46.8 | 45.6 | 43.6 | 43.8 | 45.1 | 38.8 | 41.2 | 38.8 | 49.4 | 48.7 |
| Grade 12 | — | — | — | — | — | 40.8 | 40.2 | 44.0 | 46.6 | 46.9 | 52.9 |
| **Great Risk in Trying LSD Once or Twice** | | | | | | | | | | | |
| Total [1] | — | — | — | — | — | **28.9** | **28.6** | **32.0** | **34.2** | **36.3** | **41.0** [ab] |
| Total [2] | | | | | **36.8** | **28.8** | **27.1** | **30.5** | **31.9** | **35.7** | **38.2** |
| Grade 7 | | | | | 39.6 | 21.9 | 19.7 | 17.8 | 22.9 | 22.8 | 30.5 |
| Grade 8 | | | | | — | 25.7 | 25.4 | 26.0 | 26.4 | 21.6 | 32.1 |
| Grade 9 | | | | | 33.4 | 30.0 | 25.8 | 34.0 | 32.2 | 35.0 | 37.5 |
| Grade 10 | | | | | — | 28.3 | 28.8 | 33.7 | 35.6 | 37.8 | 43.2 |
| Grade 11 | | | | | 38.0 | 33.0 | 35.8 | 37.0 | 39.8 | 48.2 | 44.8 |
| Grade 12 | | | | | — | 34.1 | 40.2 | 40.0 | 45.3 | 47.4 | 50.6 |
| **Great Risk in Trying Ecstasy Once or Twice** | | | | | | | | | | | |
| Total [1] | — | — | — | — | — | — | **32.2** | **39.5** | **39.5** | **40.7** | **42.8** [b] |
| Grade 7 | | | | | | | 25.5 | 23.3 | 27.6 | 27.0 | 31.1 |
| Grade 8 | | | | | | | 27.3 | 38.7 | 32.4 | 28.8 | 32.7 |
| Grade 9 | | | | | | | 31.7 | 38.7 | 39.7 | 40.4 | 40.7 |
| Grade 10 | | | | | | | 31.3 | 43.5 | 42.9 | 42.0 | 45.5 |
| Grade 11 | | | | | | | 39.4 | 43.4 | 42.8 | 51.2 | 45.8 |
| Grade 12 | | | | | | | 39.8 | 46.9 | 48.8 | 50.2 | 53.2 |

(Continued….)

| | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| (N[1]) | | | | | | (4447) | (1837) | (3152) | (3648) | (2935) | (4262) |
| (N[2]) | (3040) | (2961) | (2617) | (2907) | (3072) | (2421) | (953) | (1618) | (1862) | (1488) | (2069) |
| **Great Risk in Smoking 1 or 2 Cigarettes Daily** | | | | | | | | | | | |
| Total [1] | — | — | — | — | — | — | — | **24.0** | **27.9** | **31.2** | **33.4** [b] |
| Grade 7 | | | | | | | | 20.4 | 23.2 | 24.0 | 30.3 |
| Grade 8 | | | | | | | | 21.4 | 19.6 | 28.3 | 26.2 |
| Grade 9 | | | | | | | | 22.5 | 28.0 | 28.9 | 35.4 |
| Grade 10 | | | | | | | | 23.8 | 31.4 | 31.6 | 33.8 |
| Grade 11 | | | | | | | | 26.0 | 28.8 | 34.5 | 35.7 |
| Grade 12 | | | | | | | | 29.2 | 34.6 | 37.4 | 36.2 |
| **Great Risk in Having 5 Drinks of Alcohol Once or Twice Each Weekend** | | | | | | | | | | | |
| Total [1] | — | — | — | — | — | — | — | — | — | **27.4** | **28.2** |
| Grade 7 | | | | | | | | | | 32.2 | 31.6 |
| Grade 8 | | | | | | | | | | 26.4 | 28.0 |
| Grade 9 | | | | | | | | | | 27.3 | 33.1 |
| Grade 10 | | | | | | | | | | 27.1 | 28.3 |
| Grade 11 | | | | | | | | | | 29.8 | 27.6 |
| Grade 12 | | | | | | | | | | 23.2 | 23.1 |

Notes: (1) based on Grades 7-12 (full sample); (2) based on Grades 7, 9, and 11 only (long-term sample); (3) based on random half samples from 2001 to 2009; (4) no significant differences, 2009 vs. 2007; [b] significant difference, 2009 vs. 1999, p<.01 (vs. 2001 for ecstasy, vs. 2003 for daily smoking).
Q: How much do you think people risk harming themselves (physically or in other ways) if they…[behaviour]?
Source: OSDUHS, Centre for Addiction & Mental Health

Figure 3.11.2
Percentage Reporting Perceived "Great Risk" of Harm from Using the Drug, 1989–2009 OSDUHS (Grades 7, 9, 11 only)

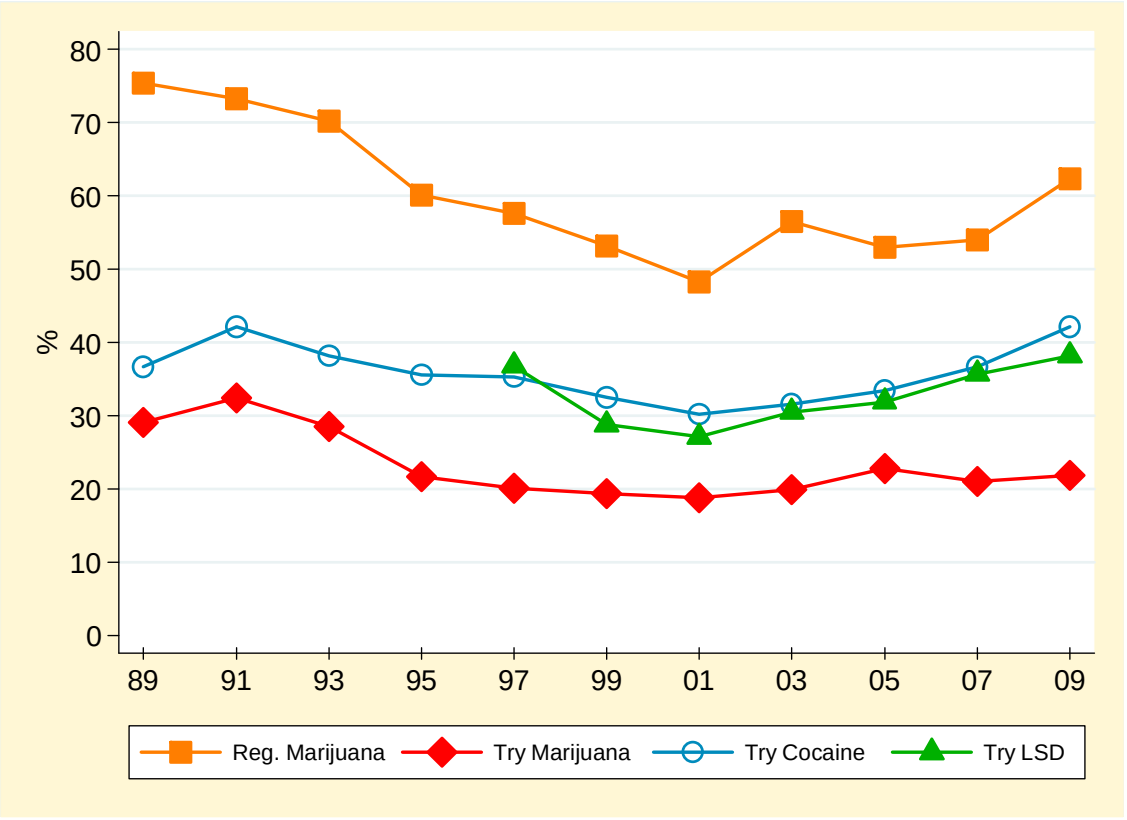


Table 3.11.2: Percentage Strongly Disapproving of Drug Use by Grade, 1989–2009

| | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| (N[1]) | | | | | | (4447) | (1837) | (3152) | (3648) | (2935) | (4261) |
| (N[2]) | (3040) | (2961) | (2617) | (2907) | (3072) | (2421) | (953) | (1618) | (1862) | (1488) | (2069) |
| **Strongly Disapprove of Trying Marijuana Once or Twice** | | | | | | | | | | | |
| Total [1] | — | — | — | — | — | **26.3** | **28.0** | **28.8** | **31.4** | **32.4** | **28.3** |
| Total [2] | **43.1** | **45.9** | **38.6** | **30.9** | **26.4** | **28.2** | **29.8** | **29.6** | **33.0** | **36.6** | **34.4** |
| Grade 7 | 59.1 | 57.9 | 48.7 | 47.6 | 44.0 | 44.3 | 48.2 | 47.3 | 49.1 | 58.1 | 57.4 |
| Grade 8 | — | — | — | — | — | 35.0 | 38.6 | 38.6 | 43.2 | 46.2 | 38.6 |
| Grade 9 | 37.9 | 48.4 | 39.0 | 30.5 | 22.3 | 25.7 | 23.7 | 26.4 | 28.8 | 30.5 | 27.9 |
| Grade 10 | — | — | — | — | — | 18.4 | 19.0 | 27.5 | 31.0 | 28.3 | 22.2 |
| Grade 11 | 32.8 | 32.5 | 30.1 | 17.7 | 15.5 | 18.2 | 19.4 | 18.9 | 22.8 | 23.8 | 23.0 |
| Grade 12 | — | — | — | — | — | 16.1 | 22.5 | 19.0 | 18.0 | 16.0 | 13.6 |
| **Strongly Disapprove of Smoking Marijuana Regularly** | | | | | | | | | | | |
| Total [1] | — | — | — | — | — | **43.4** | **39.9** | **47.1** | **46.9** | **47.6** | **45.2** |
| Total [2] | **62.5** | **62.0** | **56.8** | **49.6** | **44.1** | **44.9** | **41.8** | **47.8** | **48.0** | **52.1** | **50.7** |
| Grade 7 | 73.7 | 72.1 | 66.8 | 65.0 | 61.3 | 63.6 | 64.0 | 66.6 | 63.7 | 72.2 | 75.1 |
| Grade 8 | — | — | — | — | — | 53.5 | 53.5 | 62.3 | 57.8 | 61.4 | 60.4 |
| Grade 9 | 59.5 | 62.5 | 54.6 | 50.5 | 40.8 | 43.6 | 34.3 | 47.7 | 45.7 | 48.8 | 47.0 |
| Grade 10 | — | — | — | — | — | 35.7 | 30.6 | 42.4 | 44.4 | 43.8 | 37.0 |
| Grade 11 | 54.6 | 52.4 | 50.8 | 36.4 | 32.8 | 31.2 | 29.8 | 33.0 | 36.4 | 37.8 | 35.6 |
| Grade 12 | — | — | — | — | — | 33.2 | 30.1 | 36.8 | 37.1 | 30.5 | 30.2 |
| **Strongly Disapprove of Trying Cocaine Once or Twice** | | | | | | | | | | | |
| Total [1] | — | — | — | — | — | **40.1** | **38.7** | **44.9** | **45.3** | **51.3** | **49.0** [b] |
| Total [2] | **50.6** | **55.6** | **48.3** | **46.1** | **41.2** | **41.1** | **39.1** | **43.7** | **43.2** | **52.2** | **50.5** |
| Grade 7 | 58.6 | 59.6 | 47.7 | 45.7 | 44.9 | 44.6 | 45.3 | 48.9 | 49.4 | 63.1 | 59.4 |
| Grade 8 | — | — | — | — | — | 39.9 | 37.4 | 43.7 | 45.5 | 54.4 | 47.1 |
| Grade 9 | 48.5 | 54.5 | 46.4 | 42.6 | 37.3 | 35.5 | 34.9 | 41.5 | 38.8 | 42.6 | 43.3 |
| Grade 10 | — | — | — | — | — | 35.0 | 37.6 | 46.3 | 46.3 | 47.9 | 44.5 |
| Grade 11 | 44.9 | 53.1 | 50.6 | 49.8 | 41.7 | 44.7 | 38.4 | 41.7 | 42.0 | 52.1 | 50.5 |
| Grade 12 | — | — | — | — | — | 41.5 | 40.2 | 48.4 | 49.6 | 49.8 | 50.5 |
| **Strongly Disapprove of Trying LSD Once or Twice** | | | | | | | | | | | |
| Total [1] | — | — | — | — | — | **38.1** | **40.1** | **45.5** | **47.6** | **52.6** | **50.5** [b] |
| Total [2] | | | | | **37.9** | **39.8** | **40.5** | **44.1** | **47.1** | **53.5** | **53.3** |
| Grade 7 | | | | | 44.1 | 45.2 | 47.4 | 48.9 | 53.7 | 62.2 | 60.3 |
| Grade 8 | | | | | — | 41.1 | 39.6 | 45.5 | 46.4 | 55.3 | 47.4 |
| Grade 9 | | | | | 34.6 | 38.0 | 35.8 | 42.3 | 43.0 | 47.0 | 47.6 |
| Grade 10 | | | | | — | 28.1 | 39.0 | 47.0 | 46.1 | 48.5 | 46.9 |
| Grade 11 | | | | | 35.5 | 37.8 | 39.5 | 42.2 | 45.4 | 52.2 | 53.2 |
| Grade 12 | | | | | — | 37.1 | 40.9 | 48.3 | 51.2 | 52.2 | 49.1 |
| **Strongly Disapprove of Trying Ecstasy Once or Twice** | | | | | | | | | | | |
| Total [1] | — | — | — | — | — | — | **38.8** | **48.9** | **49.7** | **55.8** | **51.5** [b] |
| Grade 7 | | | | | | | 49.6 | 54.0 | 54.8 | 66.3 | 61.6 |
| Grade 8 | | | | | | | 40.3 | 50.6 | 51.2 | 59.2 | 50.7 |
| Grade 9 | | | | | | | 35.1 | 48.5 | 45.2 | 52.3 | 46.9 |
| Grade 10 | | | | | | | 35.6 | 51.1 | 47.7 | 51.8 | 48.0 |
| Grade 11 | | | | | | | 35.7 | 43.0 | 47.6 | 53.1 | 54.0 |
| Grade 12 | | | | | | | 38.8 | 47.4 | 51.9 | 53.9 | 50.2 |

(Continued…)

| | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ($N^1$) | | | | | | (4447) | (1837) | (3152) | (3648) | (2935) | (4261) |
| ($N^2$) | (3040) | (2961) | (2617) | (2907) | (3072) | (2421) | (953) | (1618) | (1862) | (1488) | (2069) |
| **Strongly Disapprove of Having 5 Drinks of Alcohol Once/Twice Each Weekend** | | | | | | | | | | | |
| Total [1] | — | — | — | — | — | — | — | — | — | **28.1** | **21.9** |
| Grade 7 | | | | | | | | | | 49.7 | 36.9 |
| Grade 8 | | | | | | | | | | 37.1 | 29.2 |
| Grade 9 | | | | | | | | | | 26.3 | 23.8 |
| Grade 10 | | | | | | | | | | 23.6 | 18.3 |
| Grade 11 | | | | | | | | | | 21.6 | 19.5 |
| Grade 12 | | | | | | | | | | 16.7 | 11.7 |

Notes: (1) based on Grades 7-12 (full sample); (2) based on Grades 7, 9, and 11 only (long-term sample); (3) based on random half samples from 2001 to 2009; (4) no significant differences 2009 vs. 2007; [b] 2009 vs. 1999 significant difference, p<.01 (vs. 2001 for ecstasy).
Q: Do you disapprove of people (18 or older) doing the following…[behaviour]?
Source: OSDUHS, Centre for Addiction & Mental Health

## Perceived Drug Availability

(Figures 3.11.3, 3.11.4; Table 3.11.3)

In this section, we present the percentage reporting that it is "**fairly easy"** or **"very easy"** to get alcohol, cigarettes, cannabis, cocaine, LSD, ecstasy, and OxyContin or other prescription pain relievers without visiting a doctor.

*2009: Grades 7 to 12*

- In 2009, the perception of easy availability is highest for alcohol (56.6%), followed by cigarettes (52.5%), cannabis (41.5%), ecstasy (13.3%), cocaine (12.6%), OxyContin or another prescription opioid pain reliever (11.9%), and LSD (11.2%).

- Not surprisingly, as grade level increases, students are more likely to report that these drugs are easy to obtain.

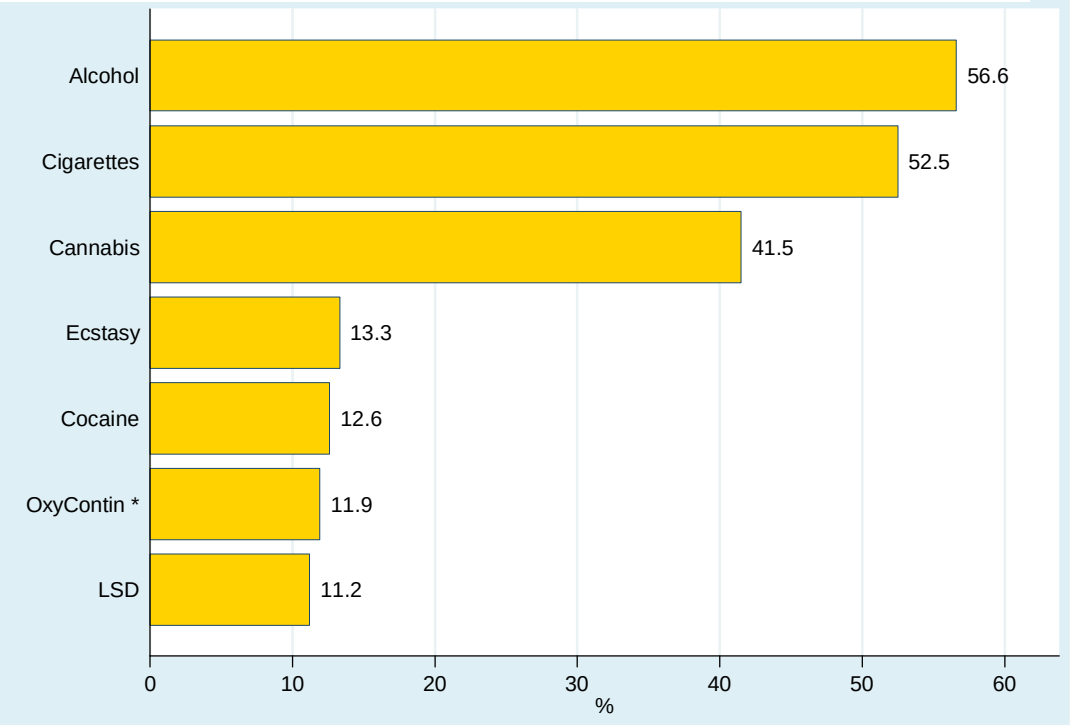
*1999 –2009: Grades 7 to 12*

- Compared to 1999 estimates, the perceived availability of alcohol, cannabis, cocaine, LSD, and ecstasy is significantly lower in 2009.

*1989 –2009: Grades 7, 9, and 11*

- The perceived availability of cannabis and cocaine increased between 1989 and 2001, and subsequently decreased. The perceived availability of alcohol was stable between 1989 and 2003, and has decreased slightly since 2005. The availability of LSD has been on a downward trend since 1995.

Figure 3.11.3
Percentage of Students Reporting it is "Fairly Easy" or "Very Easy" to Obtain the Drug, 2009 OSDUHS (Grades 7 to 12)




* OxyContin or other prescription pain reliever, without visiting a doctor

Figure 3.11.4
Percentage of Students Reporting it is “Fairly Easy” or “Very Easy” to Obtain the Drug, 1989–2009 OSDUHS (Grades 7, 9, 11 only)

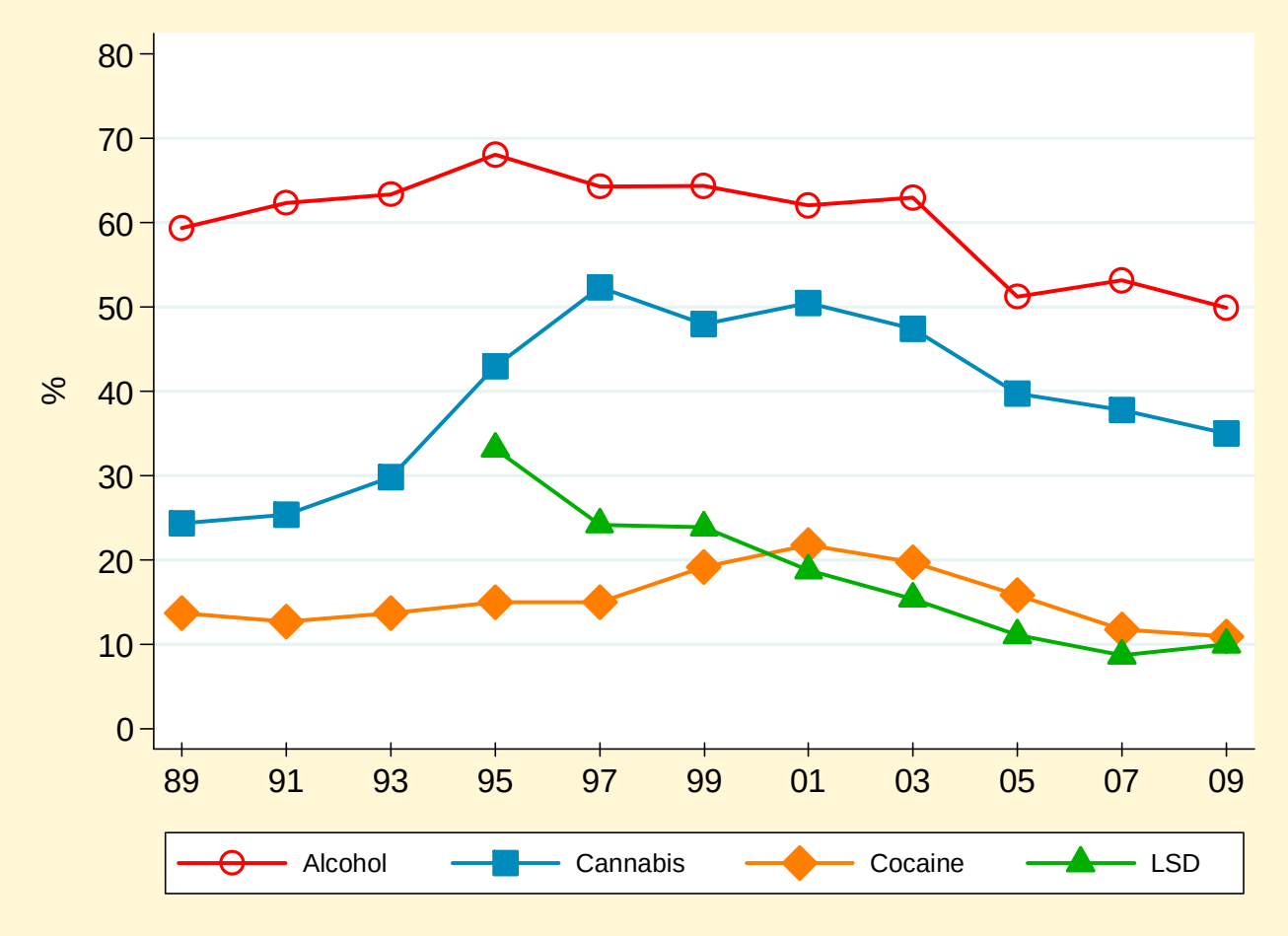


Table 3.11.3: Percentage Reporting “Fairly Easy” or “Very Easy” to Obtain Alcohol, Cannabis, Cocaine, LSD, Ecstasy, Cigarettes, and OxyContin, 1989–2009

| | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| (N[1]) | | | | | | (4447) | (1837) | (3152) | (3648) | (2935) | (4261) |
| (N[2]) | (3040) | (2961) | (2617) | (2907) | (3072) | (2421) | (953) | (1618) | (1862) | (1488) | (2069) |
| **ALCOHOL** | | | | | | | | | | | |
| Total [1] | — | — | — | — | — | **66.9** | **67.3** | **66.4** | **56.9** | **58.7** | **56.6** [b] |
| Total [2] | **59.4** | **62.3** | **63.4** | **68.1** | **64.3** | **64.4** | **62.1** | **63.0** | **51.2** | **53.2** | **49.9** |
| Grade 7 | 38.1 | 40.1 | 42.8 | 43.7 | 40.8 | 33.8 | 31.9 | 33.8 | 24.6 | 29.4 | 19.7 |
| Grade 8 | — | — | — | — | — | 47.9 | 52.3 | 43.9 | 32.8 | 35.5 | 32.8 |
| Grade 9 | 60.1 | 62.6 | 64.8 | 69.1 | 63.8 | 66.6 | 68.8 | 66.2 | 53.0 | 54.2 | 50.0 |
| Grade 10 | — | — | — | — | — | 79.2 | 80.0 | 75.1 | 66.0 | 63.8 | 62.1 |
| Grade 11 | 80.8 | 81.7 | 78.4 | 87.2 | 84.5 | 87.2 | 85.1 | 82.6 | 74.5 | 74.6 | 73.0 |
| Grade 12 | — | — | — | — | — | 87.6 | 89.6 | 86.7 | 83.8 | 84.5 | 82.0 |
| **CANNABIS** | | | | | | | | | | | |
| Total [1] | — | — | — | — | — | **51.6** | **53.4** | **51.4** | **45.8** | **43.4** | **41.5** [b] |
| Total [2] | **24.4** | **25.4** | **29.8** | **43.0** | **52.3** | **48.0** | **50.5** | **47.4** | **39.7** | **37.8** | **35.0** |
| Grade 7 | 5.1 | 4.8 | 7.1 | 12.7 | 17.3 | 12.2 | 14.9 | 14.5 | 8.9 | 10.6 | 4.2 |
| Grade 8 | — | — | — | — | — | 30.9 | 27.6 | 28.4 | 21.4 | 15.7 | 13.5 |
| Grade 9 | 26.9 | 22.3 | 28.0 | 45.1 | 51.1 | 50.3 | 59.5 | 51.6 | 43.8 | 39.0 | 35.3 |
| Grade 10 | — | — | — | — | — | 66.7 | 68.6 | 63.5 | 58.1 | 54.0 | 54.0 |
| Grade 11 | 42.0 | 47.7 | 50.2 | 66.4 | 77.3 | 75.2 | 76.6 | 70.6 | 64.2 | 62.3 | 58.5 |
| Grade 12 | — | — | — | — | — | 76.2 | 73.6 | 70.9 | 71.3 | 68.1 | 63.8 |
| **COCAINE** | | | | | | | | | | | |
| Total [1] | — | — | — | — | — | **19.6** | **21.6** | **21.1** | **17.3** | **14.4** | **12.6** [b] |
| Total [2] | **13.7** | **12.7** | **13.7** | **15.0** | **15.0** | **19.2** | **21.8** | **19.7** | **15.8** | **11.8** | **10.9** |
| Grade 7 | 5.2 | 4.5 | 5.0 | 6.3 | 6.5 | 6.5 | 6.9 | 7.1 | 4.6 | 4.8 | 1.7 |
| Grade 8 | — | — | — | — | — | 12.7 | 9.2 | 10.5 | 4.7 | 5.6 | 5.4 |
| Grade 9 | 14.4 | 12.5 | 12.9 | 15.7 | 15.1 | 19.6 | 26.3 | 21.2 | 15.8 | 10.6 | 9.9 |
| Grade 10 | — | — | — | — | — | 23.6 | 24.4 | 24.4 | 20.6 | 18.5 | 13.6 |
| Grade 11 | 21.9 | 20.6 | 21.6 | 21.5 | 22.1 | 29.5 | 31.4 | 28.8 | 26.3 | 19.8 | 18.9 |
| Grade 12 | — | — | — | — | — | 25.1 | 32.5 | 31.5 | 28.5 | 23.7 | 20.1 |
| **LSD** | | | | | | | | | | | |
| Total [1] | — | — | — | — | — | **25.2** | **20.0** | **15.6** | **12.1** | **10.4** | **11.2** [b] |
| Total [2] | | | | **33.2** | **24.2** | **23.9** | **18.8** | **15.4** | **11.1** | **8.7** | **10.0** |
| Grade 7 | | | | 8.7 | 5.0 | 3.8 | 5.2 | 3.6 | 3.3 | 2.6 | † |
| Grade 8 | | | | — | — | 13.6 | 7.1 | 6.2 | 3.2 | 4.8 | 4.4 |
| Grade 9 | | | | 29.7 | 23.1 | 23.6 | 21.3 | 13.9 | 10.6 | 8.7 | 8.4 |
| Grade 10 | | | | — | — | 33.3 | 24.9 | 19.3 | 17.4 | 13.6 | 12.4 |
| Grade 11 | | | | 56.9 | 41.6 | 40.9 | 30.6 | 25.7 | 18.9 | 14.4 | 18.2 |
| Grade 12 | | | | — | — | 35.2 | 34.3 | 20.1 | 17.6 | 15.6 | 17.2 |
| **ECSTASY** | | | | | | | | | | | |
| Total [1] | — | — | — | — | — | — | **27.1** | **19.9** | **19.3** | **15.9** | **13.3** [b] |
| Grade 7 | | | | | | | 3.9 | 4.7 | 3.7 | 3.8 | † |
| Grade 8 | | | | | | | 12.2 | 6.2 | 5.3 | 4.6 | 3.8 |
| Grade 9 | | | | | | | 28.7 | 14.4 | 16.8 | 12.8 | 9.7 |
| Grade 10 | | | | | | | 37.4 | 22.3 | 23.8 | 18.7 | 15.9 |
| Grade 11 | | | | | | | 36.8 | 33.3 | 32.2 | 22.7 | 20.8 |
| Grade 12 | | | | | | | 46.0 | 34.7 | 30.9 | 28.3 | 21.9 |

(Continued…)

| | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| (N[1]) | | | | | | (4447) | (1837) | (3152) | (3648) | (2935) | (4261) |
| (N[2]) | (3040) | (2961) | (2617) | (2907) | (3072) | (2421) | (953) | (1618) | (1862) | (1488) | (2069) |
| **CIGARETTES** | | | | | | | | | | | |
| Total [1] | — | — | — | — | — | — | — | — | **56.9** | **48.6** | **52.5** |
| Grade 7 | | | | | | | | | 18.5 | 17.7 | 12.2 |
| Grade 8 | | | | | | | | | 29.4 | 24.3 | 26.2 |
| Grade 9 | | | | | | | | | 58.1 | 46.1 | 48.2 |
| Grade 10 | | | | | | | | | 67.8 | 52.8 | 61.6 |
| Grade 11 | | | | | | | | | 76.1 | 67.0 | 72.0 |
| Grade 12 | | | | | | | | | 83.6 | 73.3 | 74.8 |
| **OXYCONTIN or OTHER PRESCRIPTION OPIOID PAIN RELIEVER** | | | | | | | | | | | |
| Total [1] | — | — | — | — | — | — | — | — | — | **10.3** | **11.9** |
| Grade 7 | | | | | | | | | | 6.3 | 4.9 |
| Grade 8 | | | | | | | | | | 9.8 | 10.8 |
| Grade 9 | | | | | | | | | | 11.1 | 12.0 |
| Grade 10 | | | | | | | | | | 11.5 | 14.2 |
| Grade 11 | | | | | | | | | | 11.4 | 14.4 |
| Grade 12 | | | | | | | | | | 11.2 | 13.0 |

Notes: (1) based on Grades 7-12 (full sample); (2) based on Grades 7, 9, and 11 only (long-term sample); (3) based on a random half sample in each year (except for alcohol); (4) † indicates estimate suppressed due to unreliability; (5) no significant differences 2009 vs. 2007; [b] 2009 vs. 1999 significant difference, p<.01 (vs. 2001 for ecstasy).

Q: How easy or difficult would it be for you to get [drug] if you wanted some?

Source: OSDUHS, Centre for Addiction & Mental Health

## Source of Cigarettes

The OSDUHS included a question about where students obtained cigarettes, if they smoked at least one whole cigarette in the past 12 months. The question used was "*Thinking about the last time you smoked a whole cigarette in the past 12 months, where did you get it from? (Please choose only one answer)*." The response options were: from a corner store, small grocery store, supermarket, gas station, or bar; over the Internet; a friend or family member; someone else; a Native Reserve; another source not listed; or don't remember. Students also had the option of responding that they did not smoke.

*2009: Grades 7 to 12*

- Among those who reported smoking at least one whole cigarette in the past 12 months, (N=721), the most common source was a friend or relative. The least likely source for cigarettes is the internet.

All sources are listed below:

- corner store/grocery store/ supermarket/gas station/bar 17%
- the Internet < 0.5%
- friend or family member 58%
- someone else 8%
- a Native reserve 3%
- other source not listed 2%
- don't remember 12%

## Source of Diverted Prescription Opioid Pain Relievers

The OSDUHS included a question about where students obtained (if at all) diverted prescription opioids. A random-half sample was asked: "*If you used pain relief pills (such as Percocet, Percodan, Tylenol #3, Demerol, OxyContin, codeine) in the last 12 months without a doctor's prescription, how did you get them?*" The response options were: got them from home; from a friend; from someone I know; from someone at a bar/club; from someone on "the street"; from another source not listed; and don't remember. Students also had the option of responding that they have never used these drugs.

*2009: Grades 7 to 12*

- Among those who used opioid pain relievers non-medically in the past year (N=670), the most common source was the student's home.

All sources are listed below:

- from home 74%
- from a friend 6%
- from someone I know 4%
- from the "street" or a bar/club < 1%
- other source not listed 6%
- don't remember 8%

# 3.12 School and Neighbourhood Factors

## Recall of Substance Education at School

(Figure 3.12.1)

In 1998, substance use education was mandated for Ontario students in grades 1 to 8 as part of the new Health and Physical Education curriculum (Ontario Ministry of Education and Training). In 1999, Ontario introduced a new curriculum for high school students stipulating that at least one Health and Physical Education credit is needed in order to graduate. Most students fulfill this requirement in 9th- or 10th-grade. Substance use education is a course component in both grades 9 and 10.

The OSDUHS asked a random half sample of students about the number of classes/lectures they received about alcohol, cannabis, and other illicit drugs during the current academic year. Typically, the majority of schools that participate in the survey do so between March and June. Specifically, the questions were: (1) "*Since September, how many classes or lectures did you have that talked about alcohol?*"; (2) "*Since September, how many classes or lectures did you have that talked about cannabis?*"; (3) "*Since September, how many classes or lectures did you have that talked about drugs other than alcohol, tobacco or cannabis?*" We focus on the percentage of students who recall receiving no class or lecture about substances. (Note that students who completed the survey in the months of November and December were excluded from this analysis.)

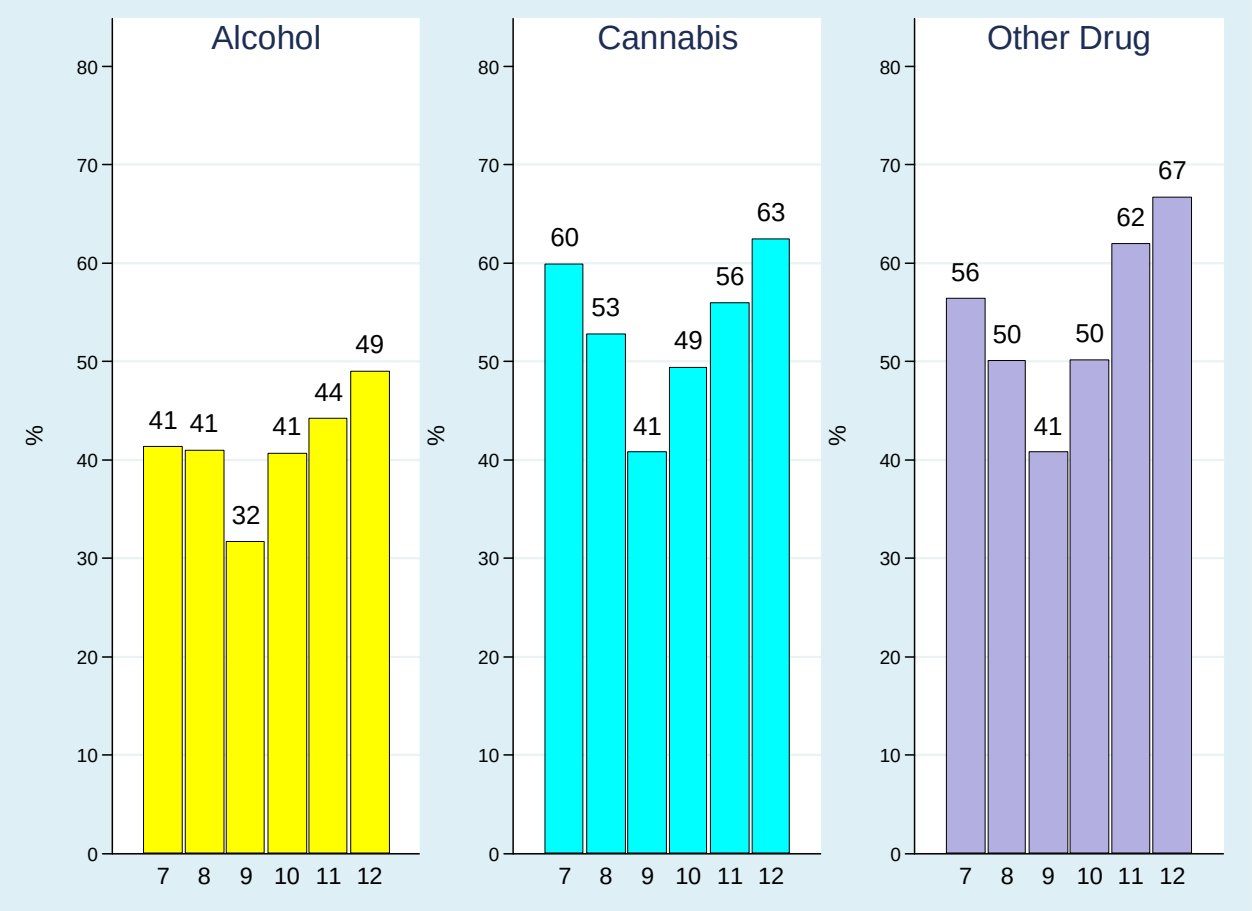
*2009: Grades 7 to 12*

- In 2009, 41.9% (range: 37.7%-46.2%) of students could not recall receiving at least one class about alcohol since the start of the academic year. This significantly varies by grade, and is lowest in grade 9 (31.7%).

- About 54.0% (range: 50.2%-57.6%) of students could not recall at least one class about cannabis since the start of the school year. This varies by grade, and is lowest in grade 9 (40.8%).

- About 55.3% (range: 51.4%-59.2%) of students could not recall at least one class about other drugs. This varies by grade, and is lowest in grade 9 (40.8%).

Figure 3.12.1
Percentage Recalling No Class/Lecture on the Substance Since September, by Grade, 2009 OSDUHS (Grades 7 to 12)



## Drug Use at School

(Tables 3.12.1, 3.12.2)

Since 1993, the OSDUHS has asked students their perceptions about drugs in their own school and neighbourhood. First, students were asked "*In your school, do you think that drug use is higher, lower, or about the same as it was a few years ago?"*

*2009: Grades 7 to 12*

- Among the total sample in 2009, 43.6% believe that drug use is currently higher in their school compared to a few years ago, 37.8% said it was the same, and 18.7% said it was lower than a few years ago.

- Students in grades 7 and 8 are least likely to report that drug use is currently higher in their school.

- Students in Toronto are least likely to report that drug use is higher now (34.8%), whereas students in the North are most likely to report that drug use is higher now (58.8%).

*Trends:*

- ☐ Among the total sample, the perception that drug use in school is higher now than a few years ago is significantly lower in 2009 (43.6%) compared to 2007 (49.4%), as well as compared to a decade ago in 1999 (54.3%).

- ☐ The perception is also currently lower compared to estimates from the mid-1990s.

Students were then asked about their perception about the magnitude of the drug problem in school, using the following question: "*In your school, is drug use a big problem, a small problem or no problem at all?"*

*2009: Grades 7 to 12*

- In 2009, 23.7% of students indicated that drug use in their school is a big problem, 48.9% said it was a small problem, and 27.4% said drug use was not a problem at their school.

- Not surprisingly, 7$^{th}$- and 8$^{th}$-graders are least likely to indicate that drug use is a "big problem" in their school.

- There are no significant differences among the regions regarding the perception that drug use in school is a "big problem."

*Trends:*

- ☐ Since 1999, there has been no significant change in the perception that drug use is a "big problem" at school.

- ☐ However, this perception is significantly higher now compared to the 1993 (14.8%) estimate.

Table 3.12.1: Percentage Reporting the Perception that Drug Use in School Has Increased Over Time, 1993–2009

| | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|---|---|
| (N[1]) | | | | (2148) | (1837) | (3152) | (3648) | (2935) | (4261) |
| (N[2]) | (1241) | (1453) | (1527) | (1168) | (953) | (1618) | (1862) | (1488) | (2069) |
| Total[1] (95% CI) | — | — | — | **54.3** (51.2-57.4) | **56.5** (53.0-60.0) | **53.4** (20.6-56.1) | **54.9** (52.3-57.4) | **49.4** (46.6-52.2) | **43.6** [ab] (41.1-46.1) |
| Total[2] | **53.4** (49.0-57.7) | **63.9** (57.0-70.3) | **56.3** (51.2-61.2) | **55.4** (51.5-59.3) | **56.6** (51.8-61.2) | **53.1** (49.5-56.6) | **54.9** (51.6-58.3) | **47.8** (44.7-50.9) | **43.7** (40.3-47.2) |
| Grade | | | | | | | | | |
| 7 | 47.0 | 45.3 | 38.9 | 41.0 | 33.8 | 29.4 | 34.1 | 26.9 | 22.4 |
| 8 | — | — | — | 43.9 | 34.2 | 35.1 | 36.7 | 32.8 | 23.0 |
| 9 | 57.8 | 71.0 | 63.9 | 60.3 | 69.0 | 61.3 | 66.7 | 59.9 | 51.8 |
| 10 | — | — | — | 59.1 | 68.6 | 66.6 | 65.2 | 62.3 | 52.0 |
| 11 | 54.2 | 71.5 | 63.2 | 61.4 | 63.1 | 63.2 | 61.5 | 53.6 | 51.8 |
| 12 | — | — | — | 57.3 | 61.7 | 55.1 | 60.2 | 54.1 | 49.2 |
| Region | | | | | | | | | |
| Toronto[1] | — | — | — | 43.6 | 49.6 | 46.8 | 45.7 | 38.6 | 34.8 |
| Toronto[2] | 52.6 | 57.6 | 50.9 | 44.6 | 50.7 | 43.2 | 48.3 | 36.9 | 37.7 |
| North[1] | — | — | — | 55.7 | 53.7 | 54.3 | 55.1 | 58.4 | 58.8 |
| North[2] | 56.4 | 61.9 | 60.6 | 58.5 | 53.9 | 54.8 | 56.6 | 58.2 | 62.2 |
| West[1] | — | — | — | 59.6 | 60.5 | 53.4 | 59.7 | 52.4 | 43.5 |
| West[2] | 53.5 | 67.0 | 57.0 | 60.4 | 61.5 | 55.3 | 60.2 | 50.2 | 44.6 |
| East[1] | — | — | — | 52.4 | 55.9 | 57.6 | 53.8 | 49.3 | 45.6 |
| East[2] | 53.4 | 63.7 | 57.2 | 54.4 | 55.3 | 55.7 | 51.2 | 48.3 | 42.4 |

Notes: (1) based on Grades 7-12 (full sample); (2) based on Grades 7, 9, and 11 only (long-term sample); (3) based on a random half sample in each year; (4) [a] 2009 vs. 2007 significant difference, p<.01; [b] 2009 vs. 1999 significant difference, p<.01.
Q: In your school, do you think that drug use is higher, lower, or about the same as it was a few years ago?
Source: OSDUHS, Centre for Addiction & Mental Health

Table 3.12.2: Percentage Reporting the Perception that Drug Use in School is a “Big Problem,” 1993–2009

| | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|---|---|
| (N[1]) | | | | (2148) | (1837) | (3152) | (3648) | (2935) | (4261) |
| (N[2]) | (1241) | (1453) | (1527) | (1168) | (953) | (1618) | (1862) | (1488) | (2069) |
| Total[1] (95% CI) | — | — | — | **23.5** (20.5-26.7) | **26.6** (23.1-30.5) | **27.8** (25.2-30.5) | **24.9** (22.4-27.6) | **25.0** (22.2-28.0) | **23.7** (21.4-26.2) |
| Total[2] | **14.8** (11.4-19.0) | **26.2** (21.5-31.5) | **25.4** (22.1-29.1) | **25.9** (22.2-30.0) | **25.5** (20.7-31.0) | **28.2** (25.0-31.6) | **24.1** (21.4-27.1) | **23.5** (20.5-26.7) | **22.6** (19.7-25.8) |
| Grade | | | | | | | | | |
| 7 | 9.0 | 13.7 | 14.5 | 17.9 | 8.1 | 14.2 | 12.4 | 10.9 | 9.8 |
| 8 | — | — | — | 14.6 | 8.0 | 14.8 | 11.3 | 13.3 | 9.6 |
| 9 | 18.0 | 31.8 | 29.1 | 29.9 | 35.0 | 32.6 | 28.9 | 27.8 | 26.6 |
| 10 | — | — | — | 21.4 | 37.0 | 35.7 | 34.4 | 30.3 | 35.5 |
| 11 | 16.5 | 31.0 | 31.2 | 27.8 | 31.2 | 34.7 | 30.3 | 30.3 | 26.4 |
| 12 | — | — | — | 26.1 | 37.4 | 28.8 | 29.8 | 32.8 | 25.8 |
| Region | | | | | | | | | |
| Toronto[1] | — | — | — | 21.8 | 21.1 | 25.6 | 23.6 | 23.4 | 22.1 |
| Toronto[2] | 16.5 | 21.5 | 24.9 | 23.7 | 21.0 | 22.8 | 23.0 | 22.9 | 19.8 |
| North[1] | — | — | — | 26.6 | 30.7 | 31.4 | 30.8 | 32.0 | 28.4 |
| North[2] | 35.5 | 10.4 | 35.4 | 24.2 | 32.3 | 32.0 | 31.7 | 32.6 | 29.3 |
| West[1] | — | — | — | 25.5 | 29.4 | 29.0 | 28.1 | 27.1 | 23.3 |
| West[2] | 11.9 | 32.7 | 26.2 | 30.1 | 27.8 | 32.2 | 27.2 | 24.7 | 24.2 |
| East[1] | — | — | — | 20.6 | 25.0 | 26.3 | 20.3 | 21.1 | 24.3 |
| East[2] | 15.4 | 23.7 | 19.3 | 21.9 | 24.6 | 24.2 | 19.3 | 19.6 | 20.7 |

Notes: (1) based on Grades 7-12 (full sample); (2) based on Grades 7, 9, and 11 only (long-term sample); (3) based on a random half sample in each year; (4) no significant changes between 1999 and 2009 among the total sample.
Q: In your school, is drug use a big problem, a small problem, or no problem at all?
Source: OSDUHS, Centre for Addiction & Mental Health

## Intoxication at School

(Figure 3.12.2)

Starting in 2005, the OSDUHS asked students about being intoxicated at school. The question used was *"In the last 12 months, how many times (if ever) have you been drunk or high at school?"* We present the percentage that report doing so at least once.

*2009: Grades 7 to 12*

- Among all students, 15.8% (range: 14.0%-17.8%) report that they were intoxicated 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.

- Males (17.3%) are significantly more likely than females (14.1%) to report being drunk or high at school.

- Students in grades 10, 11, and 12 (21%-26%) are significantly more likely to report being intoxicated at school, compared to the younger grades.

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

*2005–2009: Grades 7 to 12*

- ☐ The 2009 estimate (15.8%) is similar to the estimate found in 2007 (15.3%), and in 2005 (16.6%).

## Getting Drugs at School

(Figure 3.12.3)

Starting in 2005, the OSDUHS asked students whether they had been offered, sold, or given drugs at school. The question used was "*In the last 12 months, has anyone offered, sold, or given you an illegal drug on school property?"*

*2009: Grades 7 to 12*

- Among all students, 22.7% (range: 20.8%-24.7%) report that they had been offered, sold, or given a drug at school during the 12 months before the survey. This percentage represents about 219,000 Ontario students in grades 7 to 12.

- Males are significantly more likely than females to report having been offered, sold, or given a drug at school (26.1% vs 18.8%, respectively).

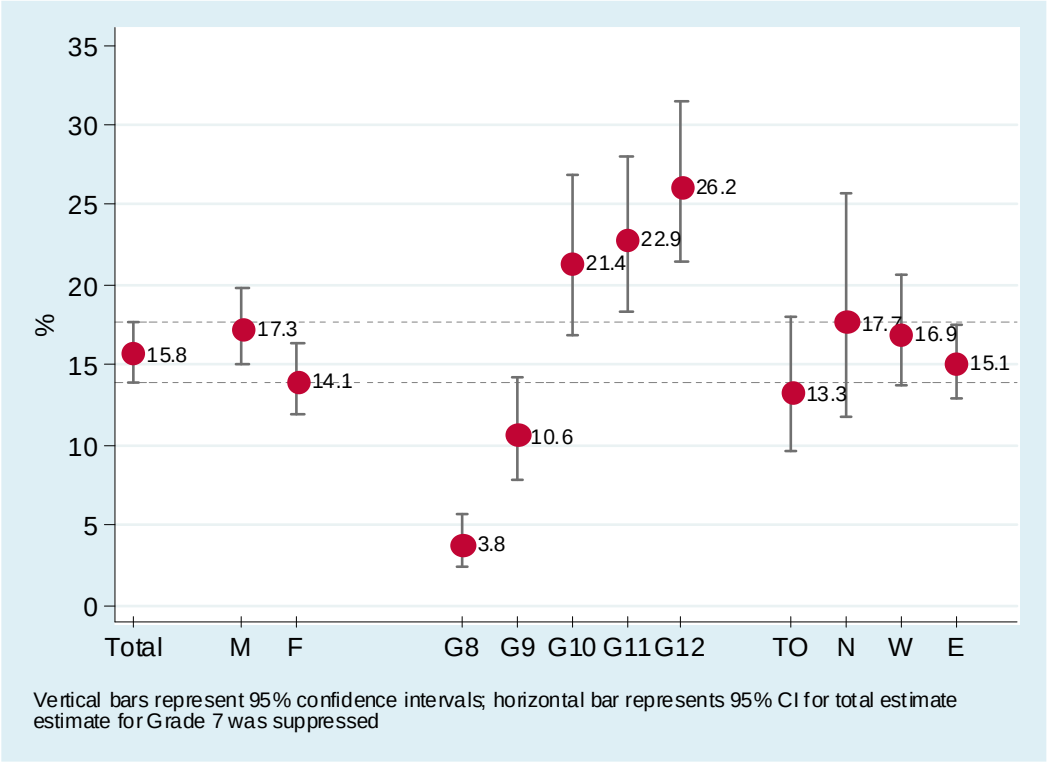
- With increasing grade, students are more likely to be offered, sold, or given a drug, peaking in grade 11 at 35.9%.

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

*2005–2009: Grades 7 to 12*

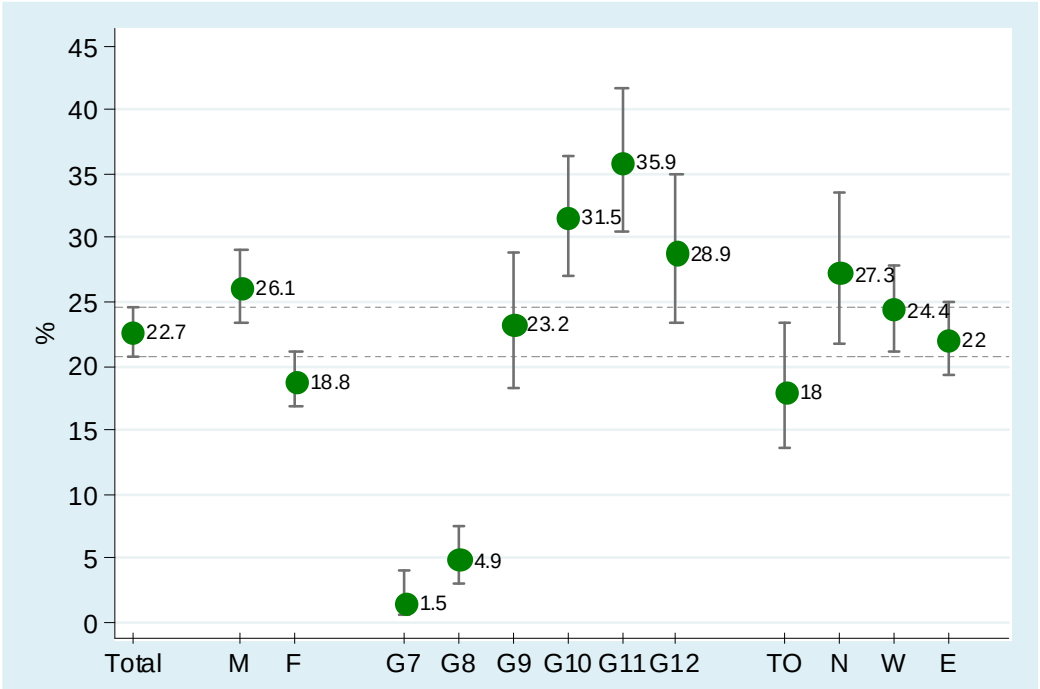
- ☐ The 2009 estimate (22.7%) is similar to the estimate found in 2007 (21.1%), and in 2005 (23.1%).

Figure 3.12.2
Percentage Reporting Being Drunk or High at School During the Past Year by Sex, Grade and Region, 2009 OSDUHS




Vertical bars represent 95% confidence intervals; horizontal bar represents 95% CI for total estimate
estimate for Grade 7 was suppressed

Figure 3.12.3
Percentage Reporting Having Been Offered, Given or Sold an Illegal Drug at School During the Past Year by Sex, Grade and Region, 2009 OSDUHS




Vertical bars represent 95% confidence intervals; horizontal bar represents 95% CI for total estimate

## Exposure to Drug Selling

(Tables 3.12.3, 3.12.4)

Students were asked whether anyone had tried to sell them drugs anywhere during the past 12 months, and whether or not they had seen drug selling in their neighbourhood.

*2009: Grades 7 to 12*

- In 2009, about one-third (32.2%) of students report that someone had tried to sell them drugs in the past year. Males and older students are more likely to report that someone tried to sell drugs to them. Northern students are most likely to report that someone tried to sell drugs to them.

- Just over one-quarter (28.3%) of students had seen someone selling drugs in their neighbourhood in the past year. Males and older students are more likely to report seeing drug selling in their neighbourhood. No significant regional differences are evident.

*1999 –2009: Grades 7 to 12*

- The percentage of students in 2009 (32.2%) reporting that someone had tried to sell them drugs is similar to the 2007 estimate (31.0%). However, there has been a significant decline since 2001 (from 38.8% in 2001 down to 32.2% in 2009).

- The percentage of students in 2009 (28.3%) that report observing drug selling in their neighbourhood is similar to the 2007 estimate (28.0%), as well as the prior estimates.

Table 3.12.3: Percentage Reporting that Someone Tried to Sell Drugs to Them During the Past Year, 1995–2009

| | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|---|
| (N[1]) | | | (2148) | (1837) | (3152) | (3648) | (2935) | (4261) |
| (N[2]) | (2907) | (1527) | (1168) | (953) | (1618) | (1862) | (1488) | (2069) |
| Total[1] (95% CI) | — | — | **35.4** (32.7-38.3) | **38.8** (35.3-42.5) | **36.7** (34.4-39.1) | **33.0** (30.8-35.2) | **31.0** (28.1-34.0) | **32.2** * (30.2-34.2) |
| Total[2] | **30.6** (28.0-33.3) | **31.0** (28.8-33.2) | **34.5** (31.2-38.0) | **37.3** (32.4-42.6) | **34.8** (31.9-37.8) | **30.5** (27.5-33.7) | **27.1** (23.9-30.6) | **28.3** (25.6-31.1) |
| Sex | | | | | | | | |
| Males[1] | — | — | 42.8 | 45.6 | 45.3 | 37.8 | 35.6 | 38.7 |
| Males[2] | 35.1 | 38.9 | 42.5 | 43.9 | 44.6 | 34.2 | 30.6 | 34.6 |
| Females[1] | — | — | 27.9 | 32.4 | 28.7 | 27.6 | 25.8 | 24.9 |
| Females[2] | 26.4 | 24.1 | 26.4 | 31.0 | 25.8 | 26.8 | 23.2 | 21.2 |
| Grade | | | | | | | | |
| 7 | 11.3 | 11.7 | 11.5 | 13.1 | 11.9 | 8.5 | 10.8 | 5.7 |
| 8 | — | — | 23.1 | 20.2 | 21.0 | 16.2 | 14.2 | 14.0 |
| 9 | 30.4 | 33.5 | 36.8 | 46.6 | 36.8 | 35.1 | 29.0 | 28.1 |
| 10 | — | — | 45.2 | 53.7 | 47.2 | 43.7 | 41.5 | 41.2 |
| 11 | 46.9 | 45.3 | 51.2 | 50.8 | 51.2 | 46.4 | 39.9 | 45.4 |
| 12 | — | — | 44.9 | 42.0 | 44.8 | 43.6 | 43.4 | 45.4 |
| Region | | | | | | | | |
| Toronto[1] | — | — | 27.8 | 29.3 | 32.6 | 24.4 | 29.1 | 27.0 |
| Toronto[2] | 27.8 | 26.7 | 29.7 | 32.0 | 30.5 | 23.6 | 21.2 | 19.4 |
| North[1] | — | — | 36.0 | 34.9 | 35.8 | 36.2 | 35.2 | 44.2 |
| North[2] | 31.4 | 35.6 | 32.4 | 31.1 | 39.2 | 33.0 | 28.9 | 38.5 |
| West[1] | — | — | 38.9 | 43.3 | 39.0 | 35.1 | 29.5 | 32.2 |
| West[2] | 32.4 | 32.5 | 37.6 | 43.5 | 37.2 | 30.7 | 27.0 | 29.9 |
| East[1] | — | — | 34.7 | 39.7 | 36.1 | 34.8 | 33.6 | 32.8 |
| East[2] | 29.5 | 30.2 | 33.6 | 34.5 | 32.7 | 34.0 | 30.6 | 29.2 |

Notes: (1) based on Grades 7-12 (full sample); (2) based on Grades 7, 9, and 11 only (long-term sample); (3) based on a random half sample in each year except 1995; (4) no significant difference among the total sample, 2009 vs. 2007; * 2009 estimate is significantly lower than the 2001 and 2003 estimates.

Q: In the last 12 months, has anyone tried to sell you any illegal drug anywhere?

Source: OSDUHS, Centre for Addiction & Mental Health

Table 3.12.4: Percentage Reporting Having Observed Drug Selling in the Neighbourhood During the Past Year, 1995–2009

| | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|---|
| (N[1]) | | | (2148) | (1837) | (3152) | (3648) | (2935) | (4261) |
| (N[2]) | (2907) | (1527) | (1168) | (953) | (1618) | (1862) | (1488) | (2069) |
| Total[1] (95% CI) | — | — | **31.4** (28.5-34.4) | **32.1** (29.0-35.3) | **32.0** (29.9-34.3) | **27.0** (25.0-29.2) | **28.0** (25.6-30.5) | **28.3** (26.1-30.7) |
| Total[2] | **24.5** (21.8-27.5) | **25.5** (22.8-28.4) | **29.3** (25.2-33.7) | **31.9** (27.3-36.8) | **31.5** (28.8-34.2) | **24.7** (22.1-27.4) | **26.7** (24.0-29.6) | **23.6** (21.0-26.5) |
| Sex | | | | | | | | |
| Males[1] | — | — | 36.2 | 37.6 | 37.7 | 29.9 | 29.4 | 30.8 |
| Males[2] | 26.7 | 30.6 | 35.2 | 36.9 | 38.5 | 27.0 | 28.2 | 26.9 |
| Females[1] | — | — | 26.5 | 26.8 | 26.7 | 23.9 | 26.4 | 25.6 |
| Females[2] | 22.6 | 21.0 | 23.2 | 27.0 | 25.0 | 22.3 | 25.0 | 20.0 |
| Grade | | | | | | | | |
| 7 | 8.7 | 12.8 | 12.2 | 14.2 | 14.3 | 7.8 | 12.5 | 10.2 |
| 8 | — | — | 22.8 | 17.8 | 22.3 | 13.4 | 13.1 | 14.0 |
| 9 | 24.4 | 26.4 | 27.5 | 36.6 | 30.8 | 28.1 | 30.0 | 26.3 |
| 10 | — | — | 43.8 | 39.9 | 36.7 | 34.0 | 35.3 | 34.8 |
| 11 | 38.0 | 35.6 | 45.8 | 44.2 | 46.2 | 36.9 | 36.2 | 31.4 |
| 12 | — | — | 38.7 | 36.7 | 37.2 | 38.2 | 35.7 | 42.6 |
| Region | | | | | | | | |
| Toronto[1] | — | — | 26.3 | 31.1 | 30.7 | 23.6 | 28.9 | 28.0 |
| Toronto[2] | 26.2 | 26.8 | 26.7 | 34.4 | 30.3 | 22.6 | 23.8 | 24.4 |
| North[1] | — | — | 33.0 | 26.0 | 27.6 | 27.8 | 29.9 | 24.1 |
| North[2] | 27.7 | 24.4 | 29.0 | 21.2 | 28.4 | 23.8 | 29.4 | 21.5 |
| West[1] | — | — | 32.5 | 33.0 | 33.7 | 27.5 | 27.4 | 28.4 |
| West[2] | 25.2 | 26.3 | 29.4 | 33.8 | 34.3 | 24.2 | 27.6 | 24.2 |
| East[1] | — | — | 32.3 | 33.0 | 31.5 | 28.4 | 27.9 | 29.2 |
| East[2] | 21.5 | 23.8 | 30.7 | 29.3 | 28.4 | 26.8 | 26.5 | 22.8 |

Notes: (1) based on Grades 7-12 (full sample); (2) based on Grades 7, 9, and 11 only (long-term sample); (3) based on a random half sample in each year except 1995; (4) no significant differences between 1999 and 2009 among the total sample.
Q: In the last 12 months, have you seen anyone selling illegal drugs in your neighbourhood?
Source: OSDUHS, Centre for Addiction & Mental Health

# 3.13 Overview of Drug Use in the Ontario LHINs

(Table 3.13.1)

This section provides the 2009 drug use estimates among high school students only (**grades 9-12**) according to Ontario's Local Health Integration Networks (LHINs). In 2006, the province designated 14 geographic areas each to function as health systems that plan, integrate and fund local health services (see http://www.lhins.on.ca).

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 11 LHIN areas presented here are:

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

Table 3.13.1: Percentage of Secondary School Students (**Grades 9 to 12**) Reporting Drug Use During the Past Year and Other Selected Indicators, by Ontario Local Health Integration Network, 2009 OSDUHS

| | **Erie St. Clair + South West** | **Waterloo Wellington** | **Hamilton Niagara Haldimand Brant** | **Central West** | **Mississauga Halton** | **Toronto Central** | **Central** | **C. East + N. Simcoe Muskoka** | **South East** | **Champlain** | **N. East + N. West** | **Ontario** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *(Student N)* | *(308)* | *(457)* | *(496)* | *(230)* | *(436)* | *(226)* | *(741)* | *(1040)* | *(256)* | *(1156)* | *(437)* | *(5783)* |
| *(School N)* | *(6)* | *(6)* | *(12)* | *(4)* | *(6)* | *(4)* | *(10)* | *(22)* | *(6)* | *(16)* | *(9)* | *(101)* |
| Cigarettes (95% CI) | **15.9** (11.7-21.2) | **19.8** (12.2-30.4) | **16.9** (11.4-24.5) | **10.4** (4.9-20.6) | **15.6** (12.1-20.0) | **15.0** (12.5-17.8) | **12.5** (9.4-16.4) | **11.9** (8.8-15.8) | **16.4** (14.5-18.5) | **16.9** (12.9-21.7) | **23.1**** (19.6-26.9) | **15.4** (13.8-17.2) |
| Daily Smoking | **7.5** (5.5-10.0) | **10.6** (5.3-19.9) | **9.3** (5.2-16.1) | † | **7.3** (4.4-11.8) | **4.2** (2.7-6.7) | **5.5** (3.2-9.4) | **4.2** (2.6-6.8) | **6.4** (4.2-9.7) | **6.6** (4.6-9.5) | **12.8**** (10.0-16.2) | **6.8** (5.7-8.1) |
| Alcohol | **82.3*** (74.3-88.2) | **72.1** (65.6-77.8) | **70.8** (65.7-75.4) | **68.6** (48.4-83.6) | **64.0** (49.5-76.3) | **72.5** (67.1-77.3) | **61.7*** (51.3-71.1) | **62.7** (53.6-70.9) | **67.8** (53.1-79.8) | **75.2** (66.2-82.5) | **79.4*** (71.8-85.4) | **69.4** (66.4-72.4) |
| Binge Drinking | **46.5*** (34.4-59.0) | **38.6** (29.4-48.7) | **35.4** (29.0-42.4) | **24.2** (15.5-35.7) | **32.2** (23.3-42.5) | **33.8** (24.8-44.1) | **27.4** (20.3-35.9) | **24.8*** (18.6-32.3) | **33.3** (27.6-39.6) | **34.8** (29.3-40.7) | **42.3**** (36.6-48.2) | **32.9** (30.3-35.6) |
| Cannabis | **38.8** (32.0-46.1) | **37.8** (31.0-45.2) | **40.6*** (36.0-45.4) | **26.7** (17.7-38.0) | **33.5** (24.7-43.6) | **37.9** (34.1-41.8) | **30.5** (23.4-38.6) | **29.8** (25.0-35.1) | **31.5** (26.3-37.1) | **30.6** (25.8-35.9) | **42.7**** (36.5-49.2) | **34.3** (32.1-36.4) |
| Glue or Solvents | † | **5.3** (2.1-12.7) | **6.7*** (4.2-10.7) | † | † | † | **3.6** (2.2-5.9) | **5.4** (2.8-9.8) | † | **2.9** (1.8-4.8) | **4.3** (2.2-8.3) | **4.5** (3.6-5.7) |
| LSD or PCP | **2.9** (1.5-5.7) | **6.5*** (3.1-13.2) | **3.8** (2.4-6.2) | † | **2.5** (1.2-5.4) | † | **2.0** (1.0-3.6) | **2.0** (1.4-3.1) | **5.6** (2.0-14.5) | **1.8** (1.3-2.4) | **3.1** (1.4-6.7) | **2.9** (2.2-3.7) |
| Hallucinogens other than LSD, PCP | **9.3*** (5.6-15.1) | **11.2*** (5.9-20.0) | **7.3** (4.5-11.6) | † | **6.1** (3.2-11.2) | † | **6.5** (4.2-9.8) | **6.1** (4.6-8.0) | **9.0** (4.8-16.4) | **6.4** (5.5-7.4) | **8.9*** (5.7-13.8) | **6.8** (5.7-8.1) |
| Jimson Weed | **5.4** (3.0-9.5) | **5.9** (3.0-11.3) | **3.6** (1.5-8.6) | † | † | † | † | † | † | **2.8** (1.0-7.7) | **5.0** (2.2-10.8) | **3.1** (2.3-4.1) |
| Salvia Divinorum | **7.5** (4.3-12.8) | **15.9**** (7.2-31.5) | † | † | **4.2** (2.1-8.0) | † | **6.3** (4.1-9.6) | **2.8*** (1.6-5.0) | † | **5.8** (3.1-10.5) | **11.9**** (8.4-16.6) | **5.9** (4.5-7.8) |
| Methamphetamine or Crystal Meth. | † | **2.9** (1.0-7.9) | † | † | **2.5** (1.0-6.5) | † | **1.9** (0.8-4.0) | **1.0*** (0.6-1.7) | † | **2.9** (1.8-4.6) | **1.9** (0.9-4.0) | **2.0** (1.4-2.7) |
| Cocaine or Crack | **4.2** (2.1-8.1) | **6.4** (2.9-13.4) | **2.7** (1.7-4.1) | † | **3.8** (2.5-5.7) | † | **3.9** (2.6-5.6) | **2.3** (1.4-3.8) | **5.9** (2.3-14.2) | **3.0** (2.1-4.4) | **6.3*** (3.9-10.0) | **3.5** (2.9-4.4) |
| Ecstasy | **4.9** (2.7-8.6) | **7.2** (3.9-13.1) | **4.7** (2.8-7.8) | † | **3.6** (1.8-6.9) | † | **3.6** (1.8-7.1) | **2.7*** (1.9-3.9) | **7.9*** (6.3-9.9) | **3.9** (2.6-5.7) | **6.4** (3.9-10.5) | **4.3** (3.5-5.2) |
| OxyContin (NM) | † | **3.5*** (2.1-5.7) | **2.7** (1.3-5.4) | † | **2.1** (1.0-4.7) | † | † | **2.0** (1.1-3.4) | † | **2.2** (1.6-3.1) | **4.6**** (3.3-6.3) | **2.2** (1.8-2.7) |
| Opioid Pain Relievers (NM) | **22.0** (14.9-31.1) | **21.0** (18.8-23.5) | **19.0** (13.7-25.7) | **19.0** (14.2-25.1) | **20.1** (17.2-23.3) | **17.9** (13.3-23.7) | **19.8** (16.4-23.7) | **20.0** (17.1-23.2) | **23.7** (20.1-27.6) | **20.6** (17.9-23.5) | **19.5** (16.9-22.4) | **20.1** (18.6-21.6) |
| Stimulants (NM) | **6.9** (5.2-9.3) | **6.8** (3.6-12.4) | **8.2** (5.1-12.8) | † | **4.6** (2.4-8.5) | **4.6** (2.5-8.3) | **3.3*** (2.1-5.2) | **5.4** (3.7-7.8) | **7.9*** (7.1-8.8) | **5.0** (3.5-7.2) | **7.9*** (5.6-11.1) | **5.7** (4.9-6.7) |
| Tranquillizers (NM) | † | **3.0** (1.2-7.4) | † | † | **2.3** (1.8-2.9) | † | † | **1.6** (0.9-2.7) | † | **2.8** (2.0-3.9) | **2.6** (1.1-5.8) | **2.0** (1.5-2.6) |
| OTC Cough/Cold Medication (NM) | † | **9.0** (4.5-17.1) | **7.3** (3.8-13.7) | **11.0** (5.4-21.0) | **4.9**** (3.6-6.6) | **14.9**** (10.5-20.7) | **6.6** (3.7-11.7) | **7.4** (5.2-10.4) | **9.2*** (8.4-10.2) | **6.1** (4.3-8.5) | **6.2** (3.4-10.9) | **7.6** (6.3-9.2) |

(Continued…)

| | Erie St. Clair + South West | Waterloo Wellington | Hamilton Niagara Haldimand Brant | Central West | Mississauga Halton | Toronto Central | Central | C. East + N. Simcoe Muskoka | South East | Champlain | N. East + N. West | Ontario |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *(Student N)* | *(308)* | *(457)* | *(496)* | *(230)* | *(436)* | *(226)* | *(741)* | *(1040)* | *(256)* | *(1156)* | *(437)* | *(5783)* |
| *(School N)* | *(6)* | *(6)* | *(12)* | *(4)* | *(6)* | *(4)* | *(10)* | *(22)* | *(6)* | *(16)* | *(9)* | *(101)* |
| Any NM Prescription Drug Use | **26.6** (21.0-33.1) | **23.6** (21.0-26.5) | **23.0** (17.3-29.9) | **21.7** (17.4-26.8) | **21.7** (19.1-24.6) | **20.2** (16.0-25.2) | **22.6** (19.3-26.4) | **22.3** (19.3-25.6) | **26.1** (22.5-30.1) | **25.7** (22.5-29.1) | **23.5** (20.4-27.0) | **23.2** (21.8-24.7) |
| Any Illicit Drug, incl NM Prescription Drug | **54.2** (45.7-62.5) | **50.5** (44.5-56.4) | **52.0** (43.6-60.3) | **43.2** (30.8-56.4) | **47.0** (41.7-52.4) | **48.8** (42.3-55.3) | **46.8** (38.9-54.8) | **46.7** (42.5-51.0) | **42.2** (35.2-49.5) | **45.0** (37.4-52.7) | **53.8** (44.9-62.5) | **48.4** (46.0-50.9) |
| Hazardous Drinking | **35.0*** (27.7-43.0) | **32.6** (22.8-44.3) | **29.7** (23.2-37.3) | **15.0** (6.3-31.5) | **23.6** (15.2-34.7) | **24.2** (18.1-31.6) | **26.3** (15.4-41.1) | **24.6** (19.7-31.2) | **29.4** (15.2-49.2) | **29.2** (23.8-35.4) | **33.3** (25.7-41.9) | **27.5** (24.9-30.2) |
| Potential Cannabis Dependence | † | † | † | † | † | † | **6.0** (2.8-12.5) | **4.9** (2.1-11.1) | † | **4.3** (2.7-6.9) | **2.7** (1.0-6.6) | **3.6** (2.7-4.7) |
| Potential Drug Use Problem | **20.5** (13.9-29.0) | **21.4** (14.4-30.6) | **22.9** (17.6-29.3) | **12.8** (7.3-21.3) | **20.3** (14.9-27.1) | **21.0** (14.6-29.4) | **21.3** (17.3-25.8) | **18.6** (15.9-21.6) | **15.8** (7.9-29.3) | **17.2** (13.4-21.9) | **28.0**** (22.2-34.6) | **20.1** (18.2-22.0) |
| Passenger/Alcohol | **30.6** (22.8-39.8) | **33.9** (25.8-43.0) | **26.2** (21.1-32.1) | **20.4*** (14.8-27.2) | **22.8** (15.7-31.8) | **35.5** (26.4-45.8) | **28.5** (23.0-34.7) | **22.7*** (18.9-27.1) | **24.8** (17.2-34.4) | **30.6** (24.6-37.4) | **30.4** (23.3-38.6) | **27.3** (25.0-29.7) |
| Passenger/Drugs | **28.7*** (24.2-33.6) | **28.0** (19.1-39.1) | **24.9** (19.5-31.2) | **20.5** (15.3-26.9) | **19.8** (13.7-27.8) | **21.9** (20.3-23.6) | **22.7** (15.3-32.2) | **22.9** (17.7-29.0) | **21.2** (11.9-34.8) | **20.9** (16.9-25.6) | **28.5** (20.9-37.5) | **23.5** (21.3-25.8) |
| Drinking-Driving (Drivers Gr. 10-12) | **11.8** (5.0-25.5) | **11.2** (6.9-17.7) | **9.2** (4.4-18.0) | **10.2** (5.3-18.8) | **12.6** (7.6-20.3) | † | **16.0** (8.7-27.8) | **10.3** (6.4-16.2) | **17.6** (11.5-25.9) | **13.2** (10.0-17.1) | **12.5** (8.9-17.2) | **11.9** (10.0-14.2) |
| Cannabis-Driving (Drivers Gr. 10-12) | **21.7** (11.9-36.4) | **22.7*** (15.6-31.9) | **17.4** (9.4-30.1) | † | **14.2** (8.6-22.6) | † | **24.2*** (16.9-33.2) | **11.9** (7.6-18.1) | **10.5** (6.8-16.0) | **13.6** (10.6-17.3) | **21.1** (13.9-30.6) | **16.6** (13.8-19.9) |

Notes: (1) due to small sample sizes, the Erie St. Clair LHIN (n=84) was merged with the South West LHIN, the North Simcoe Muskoka LHIN (n=14) was merged with the Central East LHIN, and the North West LHIN (n=130) was merged with the North East LHIN; (2) entries in brackets are 95% confidence intervals; (3) † estimate suppressed due to unreliability; (4) binge drinking is defined as consuming 5 or more drinks on one occasion at least once during the 4 weeks before the survey; (5) "Hallucinogens other than LSD, PCP" such as mescaline and psilocybin; (6) NM=non-medical use, without a doctor's prescription; (7) "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); (8) "Any Illicit Drug, incl. NM Prescription Drug" refers to use of any one of the 24 drugs asked about in the survey (excludes tobacco and alcohol); (9) "Passenger/Alcohol" refers to being a passenger in a vehicle with a driver who had been drinking alcohol; (10) "Passenger/Drugs" refers to being a passenger in a vehicle with a driver who had been using drugs; (11) *p<.05, **p<.01 significant difference, LHIN vs. Ontario.

Source: OSDUHS, Centre for Addiction & Mental Health

# 4. SUMMARY AND DISCUSSION

## The Public Health Approach Toward Drug Use

Smoking, drinking, and illicit drug use are leading causes of morbidity and mortality, both during adolescence and in adulthood. The OSDUHS performs several public health functions, namely: identifying the extent of drug use among the general student population; identifying its timing and pattern during adolescence; identifying risk and protective factors; and tracking changes in drug use over time. As well, the OSDUHS provides a knowledge-base for designing preventive programs and health promotion programs; informing public health policy; and disseminating information to the general public.

## Study Limitations and Data Interpretation

Before addressing our findings, it is important to first highlight some of the limitations of this study. First, we must recognize that these data are based on self-reports, which cannot be readily verified. However, there is evidence that conditions of anonymity (e.g., class administration of surveys) yield reasonably accurate reports of drug use (Bjarnason & Adalbjarnardottir, 2000; Brener, Billy, & Grady, 2003; Gfroerer, Wright, & Kopstein, 1997). Still, we must acknowledge that self-reported drug use likely underestimates the true rate by some unknown magnitude (Adlaf, 2005; Brener, Billy, & Grady, 2003; Hibell et al., 2003), but underreporting is not likely to vary over time. Thus, estimates of change should remain valid and unaffected by bias.

Second, another factor that can deflate drug use estimates is the bias caused by non-respondents. Research has shown that students who are absent from school report higher rates of drug use than those who attend regularly (Bovet, Viswanathan, Faeh, & Warren, 2006; Eaton, Brener, & Kann, 2008; Michaud, Delbos-Piot, & Narring, 1998). However, the rate of student absenteeism in the OSDUHS has remained fairly stable across time, and so the trends reported should remain valid.

Third, our findings cannot be generalized to adolescents who are not attending school (e.g., drop-outs, street youth, those in the workplace). Drug use in this group can be appreciably different from what is found in the mainstream student population (Smart, Adlaf, Walsh, & Zdanowicz, 1992; Smart, Adlaf, Walsh, & Zdanowicz, 1994).

Finally, the data reflect a snapshot in time; consequently, because we do not follow the same students across time, we cannot identify causes of individual change or the temporal ordering of effect. Also, we cannot determine from these data to what extent our findings are adolescent-limited – that is, whether drug use declines or ceases with the transition into young adulthood.

Despite these limitations, such monitoring studies excel at identifying the extent and change of various health behaviours that have important current and future implications for adolescent well-being. Indeed, such studies 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.

Still, the array of findings in such a large study can be numerous and complex. Indeed, 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 more emphasis on steady trends over time.

Although a majority of drugs examined had past year prevalence rates below 6%, it would be

inappropriate to dismiss these rates as unimportant. Whether a given drug poses significant problems depends not only on the percentage using, but also on the likelihood of becoming dependent and other hazards as well. Thus, it would be irresponsible to ignore the harm caused by drugs that are used by a small group. Even low rates of use represent large numbers of students. If we extrapolate our estimates to the total population of students in grades 7 through 12 in Ontario (approximately 1,023,900 students), we estimate that about 31,100 (2.9%) use cannabis daily, about 16,700 (1.6%) use OxyContin, and about 6,700 (0.7%) use heroin.

## Encouraging Findings

This report examined the past year use of alcohol, tobacco, illicit drugs, and the non-medical (NM) use of prescription drugs, and changes since 1977. There are many findings that should be viewed as encouraging. We have ordered these findings according to their public health importance. (See Table 4.1 for a trend overview.)

- **Cigarettes**: The majority of students do not smoke cigarettes. The prevalence of past year smoking decreased after the end of the 1990s, reached an all-time low in 2005 and has remained stable since then. Further, the perceived risk of harm from smoking 1 or 2 cigarettes daily is higher in 2009 compared to a few years ago.

- **Alcohol**: While the majority of students (58%) are considered to be current drinkers, the past year prevalence of alcohol use has significantly declined compared to a decade ago in 1999 (66%). The magnitude of the decline in drinking has been even greater over the long-term.

- The proportion of students that **use no substance** (just below one-third), including alcohol and cigarettes, is higher in 2009 compared to estimates from 30 years ago.

- **Drinking and driving** among licensed students has remained stable over the past decade. However, the current rate is markedly lower than rates found in the late 1970s and early 1980s.

- The percentage of all students reporting **riding in a vehicle with a driver who was drinking alcohol** significantly decreased between 2001 and 2009 (from 31% down to 23%).

- The percentage of all students reporting **riding in a vehicle with a driver who was using drugs** significantly decreased between 2003 and 2009 (from 23% down to 18%).

- Despite recent media attention given to **methamphetamine** and **crystal methamphetamine** use in various populations, there is no evidence that either drug has diffused into the student population. In fact, past year use of methamphetamine has significantly decreased since 1999.

- Use of **hallucinogenic drugs** (i.e., psilocybin and mescaline) has been declining over the past decade. Use of **LSD** also continued on the downward trend that began in 1995, and the 2009 estimate is significantly lower than those found in recent years. This decline in LSD use corresponds to increase in the perceived risk of trying LSD, as well as disapproval. The use of **PCP** has also decreased over the past decade.

- Past year use of other drugs is also lower in 2009 compared to the estimates from a decade ago: **glue, solvents, crack, heroin, ecstasy, Rohypnol,** and **stimulants**. The use of **any illicit drug including** and **excluding cannabis** (measured as two general indices) has also decreased.

- The **age of initiation** for drinking alcohol, smoking cigarettes, and using cannabis has not declined. In other words, students are not trying

these substances at younger ages compared to students in the past. Indeed, our data show that, at least over the past decade, smoking initiation and drinking initiation is occurring later in adolescence.

- The **perceived availability** of alcohol, cannabis, cocaine, LSD, and ecstasy has significantly decreased in recent years. Thus, these drugs are reportedly becoming more difficult to obtain.

- The **perceptions of risk of harm** and the disapproval of **trying cocaine**, and of **trying ecstasy** are higher in 2009 compared to recent years. Thus, students today seem to be more aware of the potential for physical harm these drugs can cause.

## Some Public Health Concerns

The following findings should be viewed as potential public health concerns. We begin with tobacco and alcohol because these legal drugs are responsible for greater harm to the physical and social well-being of youth, as well as to the population as a whole.

- **Cigarettes**: Cigarette smoking is by far the greatest public health issue impinging on a population's health, as it is the leading preventable cause of disease. Although student smoking has decreased over the decades, there is still a significant proportion (one-in-eight) that does smoke (about 119,600 students). Further, the decline in smoking seen in previous survey cycles ceased in 2009, as the rate remained stable.

- **Contraband cigarette** smoking is reported by 6% of students (about 60,000 students). Among only past year smokers, over half (53%) have smoked contraband cigarettes in the past year.

- **Alcohol**: Binge drinking still remains at an elevated level, as just over one-quarter (25%) of all students reported drinking at least 5 drinks on the same occasion once in the past month. When we look at the 12th-graders only, this proportion becomes half (49%). One-in-five students (21%) drink hazardously in that their drinking puts them at risk for current or future physical and social problems. Indeed, one-in-ten (10%) students report being injured or injuring someone as a result of their drinking in the past year.

- **Alcohol, Drugs and Vehicles**: Despite long-term declines in drinking and driving, there are still about one-in-eight (12%) licensed students who drink and drive. A higher percentage (17%) of licensed students report driving after using cannabis. Moreover, one-quarter (23%) of all students report being a passenger with a driver who had been drinking, and 18% rode with a driver who had been using drugs. Especially worrisome is that the likelihood of being a passenger with an intoxicated driver (from either alcohol or cannabis) increases significantly with grade (e.g., over one-third of 12th-graders report these behaviours). These behaviours increase the risk of unintentional injuries – the leading cause of death among youth.

- About 3% of all students **use cannabis daily**. Moreover, one half of these students also smoke cigarettes daily, thereby increasing the likelihood of respiratory illnesses. About 3% of all students may have a cannabis dependence problem (representing around 29,400 students).

- About 18% of students report using a **prescription opioid pain reliever** without a prescription at least once in the past year (representing about 180,200 Ontario students in grades 7 to 12). The non-medical use of this class of drugs, which includes Tylenol #3, codeine, Percocet, Percodan, and Demerol, ranks just after cannabis use. Three-quarters of those who used an opioid pain reliever non-medically report obtaining it from home.

- Past year use of over-the-counter (OTC) **cough/cold medication with dextromethorphan** to "get high" was reported

by 7% of students – a prevalence higher than most of the illicit drugs asked about in the survey.

- About 42% of students report past year use of **at least one illicit drug**, including a prescription drug or an OTC drug used for non-medical purposes. The proportion increases with grade, reaching 55% by grade 12. If we remove cannabis, prescription drugs, and OTC drugs from this composite index, the proportion reporting any other drug use is much lower. Thus, students today are more likely to use cannabis, prescription drugs and OTC drugs non-medically rather than other "street" drugs such as hallucinogens, cocaine, or ecstasy.

- About one in six (16%) students reports having been **drunk or high at school**, and about one in four (23%) reports being **offered, sold, or given a drug at school**.

- One-third (32%) of students report that **someone tried to sell drugs to them** at least once during the year before the survey. This proportion increases to almost half among students in grades 11 and 12, suggesting that drugs are readily available to older adolescents.

## Overlapping Alcohol and Mental Health Problems

There is an overlap between alcohol and drug use problems and mental health problems among youth. The 2009 OSDUHS shows that about 8% of all students in grades 7 to 12 (85,400 Ontario students) report both hazardous drinking *and* elevated psychological distress (symptoms of anxiety and depression).

## Important Correlates of Drug Use

The strongest correlate of drug use found in this report was **grade or age** (see Table 4.2 for an overview). Generally, drug use is more likely to occur as grade level increases, typically peaking in grade 11 or 12. The exception to this is inhalant use, which is most prevalent among 7th- and 8th-graders.

There is a prominent pattern of increasing drug use that corresponds to the transition from grade 7 to grade 8, and again from grade 8 to grade 9. This suggests that the transition from elementary school to high school may be a high-risk time for either the initiation or the increased likelihood of drug use. Another prominent pattern is a jump in prevalence rates between 10th-grade and 11th-grade.

**Sex** is also associated with certain types of drug use. As summarized in Table 4.2, males are significantly more likely to use cigarettes, alcohol, cannabis, hallucinogens (other than LSD, PCP), salvia divinorum, methamphetamine, and heroin. Females are more likely to use solvents, stimulants pills non-medically, opioid pain relievers non-medically, and tranquillizers non-medically.

There are important differences in student drug use according to **region** of the province. These are summarized in Table 4.2.

Compared to the provincial average:

- **Toronto** students are less likely to smoke cigarettes, drink alcohol, binge drink, use cannabis, and stimulant pills non-medically. They are above the provincial average for the use of glue, solvents, and over-the-counter cough/cold medication.

- **Northern** Ontario students are more likely to smoke cigarettes, drink alcohol, binge drink, use cannabis, methamphetamine, OxyContin non-medically, and stimulants pills non-medically. They are not below the provincial average on any drug measure.

- **Western** students do not differ from the province as a whole on any drug measure.

- **Eastern** students do not differ from the province as a whole on any drug measure.

## Possibilities for Prevention

Research has shown that preventing adolescents from using drugs, including alcohol and tobacco, is difficult, and, at best, effects are usually short-term. However, delaying the initiation of use, and preventing or minimizing harmful consequences from drug use may be more feasible goals (Paglia & Room, 1999; Paglia-Boak & Adlaf, 2007; Toumbourou et al., 2007).

Our survey shows that problem use of alcohol and drugs are not rare among youth. We also found that potentially harmful consequences, such as binge drinking and becoming drunk, driving while intoxicated, and being a passenger with a driver who was using alcohol or drugs, are not uncommon occurrences. Thus, there is a need for programs to focus on reducing these harmful consequences. Indeed, special efforts should be made to address the high rate of driving after cannabis use among youth.

Our findings show that, except for cannabis, a relatively smaller percentage of youth use so-called "street" or "club" drugs such as ecstasy, cocaine, or hallucinogenic drugs (i.e., "magic mushrooms") when compared to the percentage that use prescription drugs (e.g., opioid pain relievers) or over-the-counter cough/cold medications non-medically. Similar changes in the "drug landscape" over the past decade have been found in the United States (Johnston et al., 2009). One likely explanation for this shift is that young people perceive these medications to be less harmful than "street" drugs given that they are legal and also have therapeutic purposes (Friedman, 2006; Levine, 2007). Any prevention program should address what could potentially be a growing trend of use and abuse of medication to "get high" by educating youth and parents about the risks of harm associated with the non-medical use of these drugs.

Other findings in this report suggest that the prime period for prevention programs is between grade 7 and 9 (ages 12-14), as this is the most likely time for the initiation of substance use. As well, the jump between 9$^{th}$-grade to 10$^{th}$-grade is another period of increased risk for use. However, behaviours such as drinking, binge drinking, and cannabis use keep increasing with each grade level.

Prevention efforts should include a component that targets youths' beliefs and attitudes about drugs, specifically the risks of physical harms that can occur from use. Increases over time in the perceived risk of harm from using a substance are associated with concurrent and subsequent decreases in the rate of use, and vice versa (Johnston et al., 2009). Our data show that attitudes and beliefs about risk of harm and disapproval are drug-specific. Thus, any prevention effort should provide drug-specific information.

Finally, the OSDUHS data also suggest a relationship between use and availability, for certain drugs such as alcohol, cannabis, ecstasy, and LSD. That is, past year use and perceived availability have been deceasing in tandem over time. While prevention efforts cannot control access to drugs through peer groups, the availability and accessibility of cigarettes and alcohol can be controlled through stricter government policies. There is strong research evidence showing that reducing access through regulations such as increased taxes, enforcing minimum age laws, and reducing the number of sales outlets can reduce use among youth (Stockwell et al., 2005). For a comprehensive review of effective prevention programs, see Roberts et al. (2002) and Stockwell et al. (2005).

## Future OSDUHS Monitoring

Substance use by young people is an ever-changing phenomenon, requiring ongoing monitoring and evaluation. As new drugs come on to the scene, it is important to assess their use and perceptions about them. Monitoring health risk behaviours, such as substance use, over time provides valuable information about determinants, changes, and co-occurrences of the behaviours. These data enable us to evaluate the effects of policies (e.g., smoking bans on school property, zero-tolerance policies), education programs, and whether health objectives are achieved. Finally, scientific surveys such as the OSDUHS provide a useful

tool for comparisons across different youth populations.

In summary, great strides were made during the 1980s in reducing drug use among Ontario students, followed by substantial increases in the late 1990s. The past decade has shown a second dip in prevalence rates for most drugs measured in the survey. Despite this progress, we should not be complacent. History has shown that the values and lifestyles of adolescents can change quickly, and so too can the character of drug use. Not only do new drugs emerge regularly, but old ones are rediscovered. Although it is premature to know confidently what the near future holds for adolescent drug use, we can closely monitor changes to ensure that any programmatic responses are based not on sensationalized fears, but rather on sound scientific information.

Readers should note that there is a companion OSDUHS report titled *The Mental Health and Well-Being of Ontario Students*, which addresses trends in other important public health issues such as physical activity, mental health, gambling, and violence. The next release will be in the spring of 2010.

Table 4.1: Significant Changes in Past Year Drug Use by Subgroup, 2009 vs. 2007 and 2009 vs. 1999, OSDUHS (Grades 7 to 12)

| | Cigarettes | Alcohol | Binge Drinking | Cannabis | Glue | Other Solvents | LSD | PCP | Hallucinogens other than LSD, PCP | Methamphetamine | Crack | Heroin | Ecstasy | Rohypnol (NM) | OxyContin (NM) | Opioid Pain Relievers (NM) | Stimulants (NM) | Any Illicit Drug, including Cannabis | Any Illicit Drug, excluding Cannabis |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | | | | |
| Total | ▽ | ▽ | | | ▽ | ▽ | ▽ | ▽ | ▽ | ▽ | ▽ | ▽ | ▽ | ▽ | | | ▽ | ▽ | ▽ |
| | | | | | | | | | | | | | | | | | | | |
| Males | ▽ | ▽ | ▽ | | | | ▽ | ▽ | ▽ | ▽ | ▽ | ▽ | ▽ | ▽ | | | | ▽ | ▽ |
| Females | ▽ | | | | | | ▽ | ▽ | ▽ | ▽ | ▽ | | ▽ | ▽ | | | ▽ | | ▽ |
| | | | | | | | | | | | | | | | | | | | |
| Grade 7 | ▽ | ▽ | | ↓▽ | | | | | | ▽ | | | | | | | | ▽ | |
| Grade 8 | ▽ | ▽ | ▽ | ▽ | | | ▽ | ▽ | ▽ | ▽ | | | ▽ | | | ↓ | | ▽ | ▽ |
| Grade 9 | ▽ | ▽ | | | | | ▽ | ▽ | ▽ | ▽ | | | ▽ | | | | | ▽ | ▽ |
| Grade 10 | ▽ | ▽ | | | | | ▽ | ▽ | ▽ | ▽ | ▽ | | | | △ | | | | ▽ |
| Grade 11 | ▽ | | | | | | ▽ | ▽ | ▽ | ▽ | | | ▽ | | | | | ▽ | ▽ |
| Grade 12 | ▽ | | | | | | ▽ | | ▽ | ▽ | | | | | | | ▽ | | ▽ |
| | | | | | | | | | | | | | | | | | | | |
| Toronto | ▽ | | | | | | ▽ | ▽ | ▽ | ▽ | | | | | | | | | ▽ |
| North | ▽ | ▽ | | | | | ▽ | ▽ | ▽ | ▽ | | | | | | ↓ | | | ▽ |
| West | ▽ | ▽ | | | | | ▽ | ▽ | ▽ | ▽ | ▽ | ▽ | ▽ | ▽ | | | ▽ | ▽ | ▽ |
| East | ▽ | | | | ▽ | ▽ | ▽ | ▽ | ▽ | ▽ | ▽ | ▽ | | | △ | | | | ▽ |

Notes: (1) ↓ significant decrease in 2009 vs. 2007, p<.01; (2)△▽ significant increase or decrease in 2009 vs. 1999, p<.01 (vs. 2001 for ecstasy and Rohypnol, and vs. 2005 for OxyContin); (3) NM = non-medical use, without a doctor's prescription; (4) "Any Illicit Drug" indices are based on only ten drugs asked about over time; (5) no significant year differences for jimson weed, crystal methamphetamine (Ice), cocaine, GHB, ketamine, ADHD drugs (NM), tranquillizers/sedatives (NM), or OTC sleeping medication, and therefore not presented.

Source: OSDUHS, Centre for Addiction & Mental Health

Table 4.2: Significant Subgroup Differences in the 2009 OSDUHS

| | Cigarettes | Alcohol | Binge Drinking | Cannabis | Glue | Other Solvents | LSD | Hallucinogens other than LSD, PCP | Jimson Weed | Salvia Divinorum | Methamphetamine | Cocaine | Heroin | Ecstasy | Ketamine | OxyContin (NM) | Opioid Pain Relievers (NM) | Stimulants (NM) | Tranquillizers (NM) | OTC Cough/Cold Medication | Any NM Prescription Drug Use | Any Illicit Drug, incl. NM Prescription Drug |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | | | | | | | |
| **Sex Effect** | ** | * | ns | *** | ns | * | ns | *** | ns | *** | * | ns | ** | ns | ns | ns | *** | *** | * | ns | *** | ns |
| | M ↑ | M ↑ | | M ↑ | | F ↑ | | M ↑ | | M ↑ | M ↑ | | M ↑ | | | | F ↑ | F ↑ | F ↑ | | F ↑ | |
| **Grade Effect** | *** | *** | *** | *** | ns | ** | ** | *** | ** | *** | *** | *** | * | *** | ** | *** | ** | *** | ** | ns | *** | *** |
| (compared with previous grade) | 8 ↑ 7 | 8 ↑ 7 | | 8 ↑ 7 | | | | 8 ↑ 7 | | | | | | 8 ↑ 7 | | | 8 ↑ 7 | 8 ↑ 7 | 8 ↑ 7 | | 8 ↑ 7 | |
| | 9 ↑ 8 | 9 ↑ 8 | 9 ↑ 8 | 9 ↑ 8 | | | | 9 ↑ 8 | | | | | | 9 ↑ 8 | | 9 ↑ 8 | 9 ↑ 8 | | | | 9 ↑ 8 | 9 ↑ 8 |
| | 10 ↑ 9 | 10 ↑ 9 | 10 ↑ 9 | 10 ↑ 9 | | | | | | 10 ↑ 9 | | 10 ↑ 9 | | 10 ↑ 9 | | | | | 10 ↑ 9 | | | |
| | | 11 ↑ 10 | 11 ↑ 10 | 11 ↑ 10 | | | | 11 ↑ 10 | | 11 ↑ 10 | 11 ↑ 10 | | | | | | | 11 ↑ 10 | | | | |
| | | 12 ↑ 11 | 12 ↑ 11 | 12 ↑ 11 | | | | | | | | | | | | | | | | | | |
| **Region Effect** | *** | ** | *** | *** | * | * | ns | ns | ns | * | ns | ns | ns | ns | ns | ** | ns | ** | ns | * | ns | ns |
| (region compared with Ontario) | T ↓ | T ↓ | T ↓ | T ↓ | T ↑ | T ↑ | | | | | | | | | | | | T ↓ | | T ↑ | | |
| | N ↑ | N ↑ | N ↑ | N ↑ | | | | | | N ↑ | | | | | | N ↑ | | N ↑ | | | | |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | |

Notes: (1) overall tests of effect are based on a univariate chi-square statistic: *p<.05, **p<.01, ***p<.001; (2) subgroup comparisons are based on adjusted logistic regressions; (3) ns=non-significant; (4) NM=non-medical use, without a doctor's prescription; (5) grade effect for glue and solvent use compares to the next grade level; (6) use of PCP, crystal methamphetamine (Ice), crack, GHB, Rohypnol, ADHD drugs (NM), and OTC sleeping medication showed no significant differences according to sex, grade, or region and therefore are not presented.

Source: OSDUHS, Centre for Addiction & Mental Health

# 5. APPENDIX

Table A1

District School Boards in Ontario by Region

**TORONTO**

TORONTO CATHOLIC DISTRICT
TORONTO DISTRICT

**EASTERN ONTARIO**

ALGONQUIN AND LAKESHORE CATHOLIC DISTRICT
CATHOLIC DISTRICT OF EASTERN ONTARIO
CONSEIL CATHOLIQUE CENTRE-SUD
CONSEIL CATHOLIQUE DE L'EST ONTARIEN
CONSEIL DES ÉCOLES PUBLIQUES DE L'EST DE L'ONTARIO
CONSEIL DES ÉCOLES CATHOLIQUES DE LANGUE FRANÇAISE DU CENTRE-EST
DURHAM CATHOLIC DISTRICT
DURHAM DISTRICT
HASTINGS AND PRINCE EDWARD DISTRICT
KAWARTHA PINE RIDGE DISTRICT
LIMESTONE DISTRICT
OTTAWA CATHOLIC
OTTAWA-CARLETON DISTRICT
PETERBOROUGH VICTORIA NORTHUMBERLAND & CLARINGTON CATHOLIC DISTRICT
RENFREW COUNTY CATHOLIC DISTRICT
RENFREW COUNTY DISTRICT
SIMCOE COUNTY DISTRICT
SIMCOE MUSKOKA CATHOLIC DISTRICT
TRILLIUM LAKELANDS DISTRICT
UPPER CANADA DISTRICT
YORK CATHOLIC DISTRICT
YORK REGION DISTRICT

**WESTERN ONTARIO**

AVON MAITLAND DISTRICT
BLUEWATER DISTRICT
BRANT HALDIMAND NORFOLK CATHOLIC DISTRICT
BRUCE-GREY CATHOLIC DISTRICT
CONSEIL DES ECOLES CATHOLIQUES DE SUD-OUEST*
CONSEIL DE DISTRICT DU CENTRE SUD-OUEST*
DISTRICT OF NIAGARA
DUFFERIN-PEEL CATHOLIC DISTRICT
GRAND ERIE DISTRICT
GREATER ESSEX COUNTY DISTRICT
HALTON CATHOLIC DISTRICT
HALTON DISTRICT
HAMILTON-WENTWORTH CATHOLIC DISTRICT
HAMILTON-WENTWORTH DISTRICT
HURON PERTH CATHOLIC DISTRICT
LAMBTON KENT DISTRICT
LONDON DISTRICT CATHOLIC
NIAGARA CATHOLIC DISTRICT
PEEL DISTRICT
ST. CLAIR CATHOLIC DISTRICT
THAMES VALLEY DISTRICT
UPPER GRAND DISTRICT
WATERLOO CATHOLIC DISTRICT
WATERLOO REGION DISTRICT
WELLINGTON CATHOLIC DISTRICT
WINDSOR-ESSEX CATHOLIC DISTRICT

**NORTHERN ONTARIO**

ALGOMA DISTRICT
CONSEIL CATHOLIQUE FRANCO-NORD
CONSEIL CATHOLIQUE DES GRANDES RIVIÈRES
CONSEIL CATHOLIQUE DU NOUVEL ONTARIO
CONSEIL DU GRAND NORD DE L'ONTARIO
CONSEIL DU NORD-EST DE L'ONTARIO
CONSEIL CATHOLIQUE DES AURORES BORÉALES
DISTRICT ONTARIO NORTH EAST
HURON-SUPERIOR CATHOLIC DISTRICT
KEEWATIN-PATRICIA DISTRICT
KENORA CATHOLIC DISTRICT
LAKEHEAD DISTRICT
NEAR NORTH DISTRICT
NIPISSING-PARRY SOUND CATHOLIC DISTRICT
NORTH EASTERN CATHOLIC DISTRICT
NORTHWEST CATHOLIC DISTRICT
RAINBOW DISTRICT
RAINY RIVER DISTRICT
SUDBURY CATHOLIC DISTRICT
SUPERIOR-GREENSTONE DISTRICT
SUPERIOR NORTH CATHOLIC DISTRICT
THUNDER BAY CATHOLIC DISTRICT

* board with schools in another region

Table A2

## Student Participation Rate by Year of Survey

| | | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total | Selected (N) | (5,077) | (5,092) | (4,832) | (4,781) | (4,640) | (5,167) | (5,231) | (6,564) | (6,094) | (9,411) | (10,922) | (9,497) | (14,196) |
| | Participated % | 82 | 84 | 81 | 83 | 77 | 76 | 77 | 76 | 71 | 72 | 72 | 68 | 65 |
| | Absent (%) | 14 | 12 | 15 | 14 | 13 | 15 | 15 | 12 | 13 | 12 | 12 | 13 | 13 |
| | No consent (%) | 4 | 4 | 4 | 3 | 9 | 9 | 8 | 12 | 16 | 16 | 16 | 19 | 22 |
| Grade 7 | Selected (N) | (1257) | (1440) | (1340) | (1106) | (1083) | (1165) | (1054) | (1030) | (1016) | (1446) | (1273) | (1104) | (2632) |
| | Participated (%) | 84 | 86 | 84 | 86 | 83 | 80 | 81 | 76 | 75 | 68 | 76 | 66 | 63 |
| | Absent (%) | 7 | 6 | 7 | 5 | 8 | 6 | 5 | 10 | 7 | 7 | 9 | 9 | 9 |
| | No consent (%) | 9 | 7 | 9 | 9 | 9 | 13 | 14 | 14 | 18 | 25 | 14 | 25 | 27 |
| Grade 8 | Selected (N) | | | | | | | | (1061) | (1038) | (1449) | (1301) | (1085) | (2711) |
| | Participated (%) | | | | | | | | 76 | 68 | 68 | 75 | 72 | 63 |
| | Absent (%) | | | | | | | | 10 | 8 | 9 | 7 | 9 | 10 |
| | No consent (%) | | | | | | | | 14 | 24 | 23 | 18 | 19 | 12 |
| Grade 9 | Selected (N) | (1315) | (1206) | (1265) | (1029) | (1248) | (1366) | (1442) | (1201) | (1017) | (1671) | (2110) | (1820) | (2111) |
| | Participated (%) | 82 | 84 | 83 | 88 | 81 | 78 | 80 | 77 | 70 | 75 | 71 | 68 | 68 |
| | Absent (%) | 13 | 11 | 13 | 10 | 8 | 11 | 12 | 9 | 12 | 12 | 9 | 11 | 11 |
| | No consent (%) | 5 | 5 | 4 | 2 | 10 | 11 | 7 | 14 | 18 | 13 | 20 | 20 | 21 |
| Grade 10 | Selected (N) | | | | | | | | (855 | (1177) | (1654) | (2120) | (1727) | (2332) |
| | Participated (%) | | | | | | | | 76 | 70 | 73 | 68 | 65 | 67 |
| | Absent (%) | | | | | | | | 10 | 16 | 14 | 13 | 15 | 13 |
| | No consent (%) | | | | | | | | 14 | 14 | 13 | 19 | 20 | 19 |
| Grade 11 | Selected (N) | (1280) | (1341) | (1115) | (1392) | (1068) | (1270) | (1075) | (1046) | (874) | (1672) | (2128) | (1876) | (2140) |
| | Participated (%) | 80 | 84 | 79 | 81 | 68 | 74 | 75 | 73 | 68 | 72 | 73 | 69 | 65 |
| | Absent (%) | 17 | 14 | 20 | 16 | 17 | 18 | 15 | 17 | 18 | 14 | 14 | 15 | 15 |
| | No consent (%) | 3 | 2 | 1 | 2 | 15 | 7 | 10 | 10 | 14 | 14 | 13 | 16 | 20 |
| Grade 12 | Selected (N) | | | | | | | | (789) | (584) | (1519) | (1990) | (1885) | (2270) |
| | Participated (%) | | | | | | | | 76 | 68 | 72 | 69 | 66 | 65 |
| | Absent (%) | | | | | | | | 19 | 23 | 19 | 18 | 19 | 19 |
| | No consent (%) | | | | | | | | 5 | 9 | 9 | 13 | 14 | 15 |
| Toronto | Selected (N) | (1140) | (1187) | (856) | (1060) | (1117) | (1113) | (1273) | (1139) | (734) | (1617) | (1609) | (1316) | (1415) |
| | Participated (%) | 75 | 78 | 77 | 81 | 80 | 70 | 77 | 74 | 76 | 69 | 74 | 73 | 60 |
| | Absent (%) | 18 | 14 | 19 | 16 | 13 | 23 | 16 | 15 | 12 | 15 | 12 | 14 | 15 |
| | No consent (%) | 7 | 7 | 4 | 3 | 7 | 7 | 7 | 11 | 12 | 16 | 14 | 13 | 25 |
| West | Selected (N) | (1914) | (1917) | (2211) | (2054) | (2061) | (2261) | (1992) | (2321) | (2360) | (3628) | (4052) | (4030) | (4447) |
| | Participated (%) | 84 | 85 | 81 | 82 | 74 | 77 | 78 | 73 | 66 | 71 | 72 | 67 | 65 |
| | Absent (%) | 12 | 12 | 14 | 10 | 14 | 13 | 15 | 13 | 14 | 11 | 12 | 13 | 14 |
| | No consent (%) | 4 | 3 | 5 | 4 | 12 | 10 | 7 | 13 | 20 | 18 | 16 | 20 | 21 |
| East | Selected (N) | (1397) | (1404) | (1339) | (1340) | (1209) | (1407) | (1476) | (1881) | (1552) | (2298) | (3296) | (2787) | (7255) |
| | Participated (%) | 83 | 85 | 82 | 85 | 77 | 78 | 74 | 79 | 70 | 76 | 75 | 70 | 67 |
| | Absent (%) | 14 | 11 | 14 | 12 | 13 | 13 | 13 | 10 | 12 | 12 | 12 | 12 | 11 |
| | No consent (%) | 3 | 4 | 4 | 2 | 9 | 8 | 12 | 11 | 17 | 12 | 13 | 17 | 22 |
| North | Selected (N) | (626) | (584) | (426) | (327) | (253) | (386} | (490) | (1223) | (1448) | (1868) | (1965) | (1364) | (1079) |
| | Participated (%) | 84 | 86 | 87 | 86 | 81 | 76 | 79 | 77 | 76 | 70 | 64 | 60 | 61 |
| | Absent (%) | 13 | 14 | 12 | 12 | 14 | 16 | 13 | 13 | 14 | 13 | 12 | 16 | 16 |
| | No consent (%) | 3 | 0 | 0 | 2 | 5 | 8 | 9 | 10 | 10 | 17 | 24 | 24 | 23 |

Notes: Surveys from 1985 to 1997 included grades 7, 9, 11, and 13 only; surveys in 1999 and 2001 included grades 7 to 13; surveys from 2003 to 2009 included grades 7 to 12; "No consent" refers to either lack of parental consent or no returned consent form.

Source: OSDUHS, Centre for Addiction & Mental Health; tabulated by the Institute for Social Research, York University

## Table A3

## Sample Demographics by Year of Survey

| | 1977 | | 1979 | | 1981 | | 1983 | | 1985 | | 1987 | | 1989 | | 1991 | | 1993 | | 1995 | | 1997 | | 1999 | | 2001 | | 2003 | | 2005 | | 2007 | | 2009 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (N) [a] | % [b] | (N) [a] | % [b] | (N) [a] | % [b] | (N) [a] | % [b] | (N) [a] | % [b] | (N) [a] | % [b] | (N) [a] | % [b] | (N) [a] | % [b] | (N) [a] | % [b] | (N) [a] | % [b] | (N) [a] | % [b] | (N) [a] | % [b] | (N) [a] | % [b] | (N) [a] | % [b] | (N) [a] | % [b] | (N) [a] | % [b] | (N) [a] | % [b] |
| Males | (1841) | 46.9 | (1988) | 50.7 | (1530) | 52.5 | (1784) | 49.5 | (1603) | 51.2 | (1663) | 48.9 | (1509) | 49.6 | (1554) | 52.8 | (1270) | 49.4 | (1412) | 48.9 | (1438) | 47.3 | (2252) | 50.8 | (1917) | 49.8 | (3163) | 48.3 | (3720) | 51.8 | (3068) | 51.8 | (4341) | 51.8 |
| Females | (2086) | 53.1 | (1932) | 49.3 | (1461) | 47.5 | (1830) | 50.5 | (1543) | 48.8 | (1713) | 51.1 | (1531) | 50.4 | (1407) | 47.2 | (1347) | 50.6 | (1495) | 51.1 | (1634) | 52.7 | (2195) | 49.2 | (1981) | 50.2 | (3453) | 51.7 | (4006) | 48.2 | (3255) | 48.2 | (4771) | 48.2 |
| **Grade:** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | (1287) | 32.8 | (1267) | 32.3 | (1112) | 32.7 | (1539) | 38.9 | (1054) | 32.4 | (1239) | 31.9 | (1121) | 32.3 | (941) | 32.1 | (894) | 29.5 | (927) | 30.3 | (851) | 31.1 | (766) | 16.0 | (750) | 17.1 | (947) | 14.9 | (961) | 15.8 | (721) | 15.1 | (1632) | 14.1 |
| 8 | | | | | | | | | | | | | | | | | | | | | | | (798) | 16.0 | (691) | 14.6 | (976) | 14.3 | (971) | 16.1 | (768) | 15.6 | (1697) | 14.3 |
| 9 | (1578) | 40.2 | (1545) | 39.4 | (1004) | 38.7 | (1149) | 34.4 | (1078) | 35.1 | (1017) | 32.9 | (1042) | 38.1 | (897) | 33.2 | (1003) | 35.4 | (1050) | 34.7 | (1152) | 34.0 | (905) | 21.7 | (702) | 20.8 | (1254) | 18.4 | (1471) | 17.0 | (1221) | 16.5 | (1414) | 16.3 |
| 10 | | | | | | | | | | | | | | | | | | | | | | | (638) | 13.7 | (806) | 21.6 | (1181) | 18.0 | (1427) | 16.4 | (1105) | 16.6 | (1534) | 16.7 |
| 11 | (1062) | 27.0 | (1108) | 28.3 | (894) | 28.6 | (926) | 26.7 | (1014) | 32.5 | (1120) | 35.2 | (877) | 29.7 | (1123) | 34.6 | (720) | 35.1 | (930) | 35.0 | (1069) | 34.9 | (750) | 18.7 | (561) | 15.7 | (1188) | 18.3 | (1537) | 16.1 | (1273) | 16.2 | (1378) | 16.9 |
| 12 | | | | | | | | | | | | | | | | | | | | | | | (590) | 13.8 | (388) | 10.2 | (1070) | 16.1 | (1359) | 18.6 | (1235) | 20.0 | (1457) | 21.7 |
| Age (sd) | n/a | | n/a | | n/a | | 14.1 (1.8) | | 14.5 (1.8) | | 14.5 (1.8) | | 14.4 (1.7) | | 14.6 (1.9) | | 14.6 (1.7) | | 14.5 (1.7) | | 14.4 (1.7) | | 15.0 (1.8) | | 14.8 (1.7) | | 15.0 (1.8) | | 15.0 (1.8) | | 15.0 (1.9) | | | 15.0 (1.9) |
| **Region:** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Toronto | (1486) | 37.8 | (1115) | 28.4 | (494) | 21.9 | (759) | 21.2 | (574) | 22.3 | (706) | 21.4 | (453) | 18.0 | (601) | 19.4 | (642) | 20.4 | (647) | 20.2 | (715) | 19.6 | (740) | 18.0 | (533) | 19.8 | (1097) | 18.3 | (1172) | 17.9 | (943) | 17.0 | (836) | 16.7 |
| North | (509) | 13.0 | (624) | 15.9 | (356) | 8.9 | (351) | 8.7 | (401) | 11.0 | (417) | 9.7 | (256) | 9.0 | (256) | 7.8 | (156) | 8.5 | (220) | 8.4 | (291) | 8.0 | (808) | 8.5 | (1014) | 9.0 | (1285) | 7.9 | (1245) | 7.0 | (797) | 6.4 | (649) | 6.4 |
| East | (843) | 21.5 | (778) | 19.5 | (1022) | 22.6 | (1035) | 29.8 | (917) | 27.5 | (948) | 26.8 | (926) | 28.2 | (852) | 29.2 | (697) | 28.2 | (798) | 28.8 | (903) | 29.5 | (1367) | 30.7 | (926) | 28.2 | (1721) | 29.4 | (2444) | 33.4 | (1944) | 33.8 | (4766) | 34.0 |
| West | (1089) | 27.7 | (1403) | 35.8 | (1138) | 46.6 | (1469) | 40.3 | (1254) | 39.1 | (1305) | 42.2 | (1405) | 44.8 | (1252) | 43.7 | (1122) | 42.9 | (1242) | 42.7 | (1163) | 42.8 | (1532) | 42.7 | (1425) | 43.0 | (2513) | 44.4 | (2865) | 41.8 | (2639) | 42.8 | (2861) | 43.0 |
| Total | 3927 | | 3920 | | 3010 | | 3614 | | 3146 | | 3376 | | 3040 | | 2961 | | 2617 | | 2907 | | 3072 | | 4447 | | 3898 | | 6616 | | 7726 | | 6323 | | 9112 | |

Notes: [a] Based on actual sample (unweighted); [b] Based on weighted data; the 7 regions sampled in 1977 and 1979 correspond approximately to the 4 regions sampled since 1981; n/a = not available
Source: OSDUHS, Centre for Addiction & Mental Health

Table A4

Design Effects (DEFFs) for Drug Estimates by Year of Survey

| | 1981 | 1983 | 1985 | 1987 | 1989 | 1991 | 1993 | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Cigarettes | 5.64 | 4.61 | 2.28 | 1.38 | 1.56 | 1.31 | 3.13 | 1.46 | 1.23 | 3.73 | 4.65 | 2.63 | 3.42 | 2.46 | 3.44 |
| Alcohol | 2.08 | 3.34 | 1.03 | 1.83 | 3.76 | 2.95 | 2.27 | 1.72 | 3.47 | 2.94 | 3.58 | 3.46 | 5.99 | 3.62 | 5.81 |
| Binge Drinking | 0.50 | 2.10 | 3.64 | 3.45 | 4.06 | 3.98 | 1.21 | 6.19 | 2.26 | 4.33 | 3.58 | 4.07 | 6.65 | 2.95 | 4.63 |
| Been Drunk | 1.71 | 2.30 | 2.61 | 5.09 | 1.45 | 3.08 | 0.96 | 5.96 | 1.22 | 4.52 | 1.93 | 2.94 | 3.76 | 1.95 | 2.87 |
| Cannabis | 2.78 | 2.22 | 4.06 | 5.40 | 3.42 | 1.19 | 0.63 | 4.09 | 1.47 | 3.60 | 3.67 | 3.24 | 4.47 | 3.46 | 3.30 |
| Glue | 0.94 | 0.75 | 1.00 | 3.67 | 0.60 | 1.79 | 1.14 | 0.73 | 0.73 | 1.91 | 1.77 | 1.97 | 1.44 | 1.77 | 2.01 |
| Solvents | 0.85 | 1.54 | 0.85 | 3.15 | 1.14 | 1.54 | 0.92 | 0.87 | 1.48 | 1.95 | 1.88 | 2.90 | 1.81 | 1.82 | 1.94 |
| Heroin | 1.32 | 1.53 | 1.36 | 1.95 | 1.48 | 1.50 | 1.72 | 1.83 | 0.41 | 1.54 | 1.05 | 1.34 | 1.34 | 1.63 | 1.98 |
| Methamphetamine | 2.06 | 9.92 | 0.82 | 1.50 | 0.85 | 1.02 | 0.92 | 3.40 | 0.91 | 4.28 | 2.06 | 1.99 | 1.45 | 1.82 | 3.51 |
| Stimulants (NM) | 1.78 | 3.20 | 1.40 | 1.63 | 1.02 | 2.15 | 1.69 | 1.65 | 1.15 | 2.47 | 1.79 | 1.80 | 2.41 | 1.72 | 2.26 |
| Tranquillizers (NM) | 1.12 | 2.57 | 1.23 | 2.04 | 0.59 | 1.14 | 1.10 | 1.95 | 0.72 | 3.74 | 2.49 | 1.56 | 1.55 | 1.67 | 2.18 |
| Tranquillizers (M) | 0.90 | 1.15 | 0.68 | 2.19 | 0.98 | 1.25 | 0.32 | 1.28 | 0.84 | 1.71 | 1.20 | 1.11 | 1.84 | 1.28 | 2.59 |
| LSD | 2.94 | 1.81 | 2.78 | 4.20 | 3.92 | 1.24 | 2.40 | 5.04 | 0.89 | 3.42 | 2.26 | 1.85 | 2.73 | 2.33 | 2.49 |
| PCP | 1.91 | 1.39 | 0.90 | 2.68 | 1.38 | 1.69 | 1.91 | 3.79 | 2.10 | 2.12 | 2.10 | 1.17 | 2.34 | 1.05 | 4.32 |
| Other Hallucinogens | 3.80 | 2.65 | 2.00 | 4.54 | 3.52 | 0.96 | 2.03 | 5.19 | 1.57 | 4.21 | 2.48 | 3.22 | 4.40 | 2.62 | 3.50 |
| Cocaine | 1.36 | 2.27 | 2.27 | 2.51 | 1.74 | 1.52 | 1.03 | 0.68 | 0.41 | 3.13 | 1.90 | 1.61 | 2.53 | 1.50 | 2.72 |
| **Total (average)** | **2.26** | **3.10** | **2.06** | **3.37** | **2.25** | **2.02** | **1.67** | **3.27** | **1.49** | **3.54** | **2.74** | **2.63** | **3.00** | **2.10** | **3.10** |

Notes: 1981-1997 DEFFs are based on grades 7, 9, 11, and 13; 1999 and 2001 DEFFs are based on grades 7 to 13; 2003 to 2009 DEFFs are based on grades 7 to 12; NM=non-medical use; M=medical use.

Source: OSDUHS, Centre for Addiction & Mental Health

# PARENTAL CONSENT FORM

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

# The 2009 Ontario Student Drug Use and Health Survey
## *Parent and Student Information and Consent Form*

Dear Parents/Guardians and Students:

The *Centre for Addiction and Mental Health* (CAMH) conducts the longest ongoing school survey in Canada. Since 1977, students have been asked about their beliefs and use (if any) of tobacco, alcohol and other drugs (for example, cannabis, hallucinogens, cocaine, heroin and medical drugs).

A sample of about 10,000 Ontario students in grades 7 to 12 will be asked to complete a pencil-and-paper questionnaire. Your child's class has been asked to participate. Both the school and the class were randomly selected. **Students do not write their name on the questionnaire** and neither students nor classes can ever be identified. The findings will be reported in a way that ensures complete confidentiality to the fullest extent possible by law. Information on the questionnaires will never appear in any school records. Because we are interested in both the use and non-use of drugs, **there is no assumption that students who complete the survey have ever used tobacco, alcohol or other drugs.** The survey also covers topics about physical health, mental well-being, and illegal behaviours such as theft, assault and drug-selling. The survey will be completed in a single 30 to 40 minute class period. Participation is completely voluntary, students do not have to answer every question, and they have the choice to stop at any time with no penalty – if they do so, we will destroy their questionnaires. There are no foreseeable risks in completing the survey. Data will be stored in a password-protected computer at CAMH and York University (who is administering the survey) for an indefinite period. For your interest, the 2007 reports and the 2009 questionnaire are available at: www.camh.net/research/osdus.html.



The results of the survey will be used to help school and health professionals across Ontario to identify key health issues and to develop health and education programs. We believe this study is very important and we hope you will allow your child to participate by signing the form below.

I sincerely appreciate your co-operation. If you would like to receive more information about the study, please contact me at 416-535-8501 ext. 4506 or email me at edward_adlaf@camh.net. If you would like to discuss your child's rights regarding participation in this survey, please contact Dr. Padraig Darby, Chair, Research Ethics Board, CAMH at 416-535-8501 ext. 6876. This study has also been approved by York University's Human Participants Review Committee.

Thank you,

Edward M. Adlaf, Ph.D.
Study Director

.....✂

We (parent and student) have read the request for participation in the study of the ***2009 Ontario Student Drug Use and Health Survey***. We have discussed it and...

☐ I (parent) give permission for my son/daughter to participate.

☐ I (parent) do **not** give permission for my son/daughter to participate.

☐ I (student) agree to participate.

☐ I (student) do **not** agree to participate.

Signature of Parent/Guardian: _____

Signature of Student: _____

Name of Student (please print):_____

Date: _____

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# List of Selected OSDUHS Peer-Reviewed Publications


Brands, B., Paglia-Boak, A., Sproule, B. A., & Adlaf, E. M. (in press). Nonmedical use and source of opioid analgesics among Ontario students. *Canadian Family Physician*.

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