# POPULATION HEALTH STATUS INDICATORS: CANNABIS USE



### **Public Health Relevance**

Cannabis is the most popular illicit drug in Toronto, as well as in all other major cities throughout North America. Users commonly report a feeling of euphoria, as the drug's main ingredient, THC, enters the brain. Other effects of recreational use, which vary considerably among individuals, range from heightened sensory perception, increased appetite, and altered perception of time to drowsiness, extreme anxiety and paranoia.

A great deal of controversy surrounds the use of this drug. Many of the chemicals in cannabis smoke have been linked with chronic bronchitis and decreased immunity, along with cancers of the lungs, head, and neck, among others. Advocates of medicinal cannabis, however, point to the studies which indicate the potential of this drug in treating severe nausea and wasting syndrome due to chemotherapy, as well as conditions ranging from multiple sclerosis and chronic pain to glaucoma. More research is needed to address these issues.

### **Highlights**

- 1. Cannabis use is stable over time among adults.
- 2. Cannabis use is higher among students than adults and stable over time.

### **Trends Over Time**

Cannabis use is stable over time. Figure 1 below shows the percent of Toronto adults who reported that they had consumed cannabis at least once in the past year. While there was a slight increase between 1999 (10.1%) and 2015 (13.9%), the difference was not statistically significant.

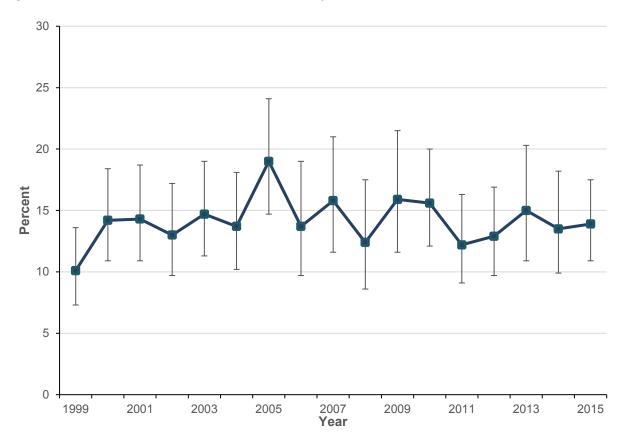
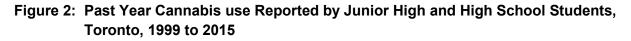
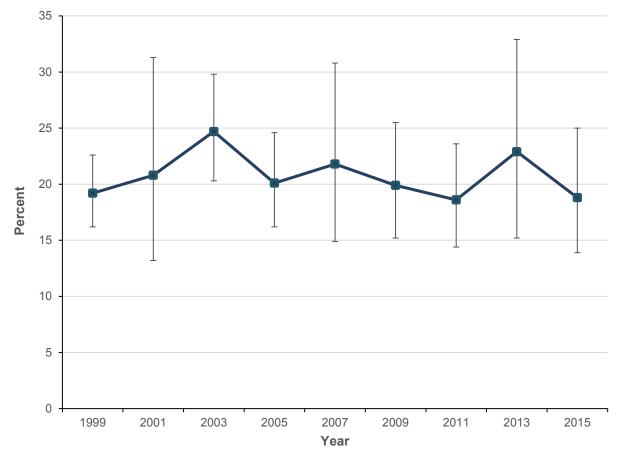


Figure 1: Past Year Cannabis Use Reported by Adults, Toronto, 1999 to 2015

Data Source: The Monitor, see Data Notes for details.

Figure 2 below shows the percent of Toronto junior high and high school students who reported that they had used cannabis at least once in the year preceding the survey. There was no significant difference found over the 16 year period, with the rates going from 19.2% reported in 1999 to 18.8% in 2015.



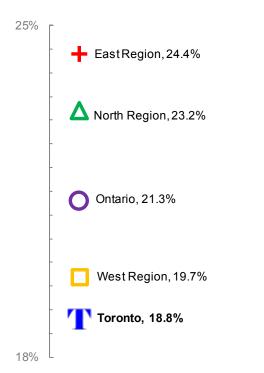


Data Source: OSDUHS, see Data Notes for details.

## **Regional Comparisons**

Figure 3 below shows the responses of junior high and high school students reporting past year cannabis use in the 2015 OSDUHS, in each of four regions of Ontario. The reported cannabis use was ranging from the low of 18.8%, for Toronto students to the high of 24.4%, reported by those in East Region. The provincial average, 21.3%, is also displayed.

### Figure 3: Past Year Cannabis Use Reported by Junior High and High School Students, Selected Regions in Ontario, 2015



Data Source: OSDUHS, see Data Notes for details.

### **Data Notes**

#### Notes

- The self-reported estimates are from surveys administered by the Centre for Addiction and Mental Health (CAMH). Self-reported data have a number of limitations. People do not always remember their behaviours, and may under-report certain behaviours or characteristics that they think are undesirable. For example, individuals may not disclose cannabis use if they are ashamed of this practice. In addition, surveys do not always provide a representative picture of the whole population. The CAMH student survey, or OSDUHS, surveys a sample of all students in attendance in Ontario's public and Catholic school systems. Thus, it excludes those who do not attend school, 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). The CAMH adult survey is a telephone based survey that includes only a sample of individuals who have landline telephones and agree to participate.
- The significance of differences was estimated using overlapping confidence intervals. Although this method is conservative (α ~< 0.01) and most appropriate when comparing mutually exclusive groups, it was chosen as an objective means of drawing conclusions on population- based data. Multiple comparisons performed in the analyses were not taken into consideration when choosing the level of significance to test.
- Where a respondent did not respond to a survey question relevant to the analysis presented, they were excluded from both the numerator and the denominator.
- Time trend analysis for the adult data is based on data from the most recent 17 data collection years. Because students are surveyed less frequently, their results are displayed from the earliest available year of complete and reliable data.

### **Definitions**

CAMH refers to the Centre for Addiction and Mental Health.

- **CAMH Monitor** refers to the annual survey of adults conducted by CAMH to monitor substance use and mental health problems among Ontario adults.
- **Cannabis** is used to denote any and all products from the hemp plant that are smoked, chewed or otherwise consumed.
- **OSDUHS** refers to the Ontario Student Drug Use and Health Survey of students in grades 7 through 12 in Ontario's public and Catholic school systems, conducted by CAMH every two years. It is used to monitor trends in student drug use, mental health, physical health, gambling, bullying, and other risk behaviours.

### **Regions of Ontario:**

North refers to the Ontario regions of Parry Sound, Nipissing and farther North.

West refers to the Ontario regions of Peel, Dufferin and farther West.

East refers to the Ontario regions of Simcoe, York and farther East.

Toronto refers to the City of Toronto.

#### Sources

- **OSDUHS:** Boak, Hamilton, H.A., Adlaf, E.M. and Mann. R.E.(2015), Drug Use among Ontario Students, 1977 to 2015: Detailed OSDUHS Findings (CAMH Research Document Series No. 41) Toronto, ON: Centre for Addiction and Mental Health. Used in:
  - Figures 2 and 3
- **The Monitor:** Ialomiteanu, A.R., et al (2016) CAMH Monitor eReport: Addiction and Mental Health Indicators Among Ontario Adults,1977 to 2015, (CAMH Research Document Series No. 45) Toronto, ON, Centre for Addiction and Mental Health. Used in:
  - Figure 1.

Population Health Status Indicator: Cannabis Use

Category: Injury and Substance Misuse

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This indicator report is part of a series that informs the ongoing assessment of Toronto's health status. For a full list of indicators, please go to: <u>www.toronto.ca/health/surveillance</u>