Substance Use and Mental Health Indicators Among Ontario Adults: Highlights from the 2015 CAMH Monitor eReport

This *eBulletin* highlights the key findings from the 2015 CAMH Monitor, an annual Ontario-wide telephone survey of substance use, mental health and well-being indicators among adults aged 18 and older. Also highlighted are trends in alcohol, tobacco, and cannabis use, and mental health indicators based on surveys conducted since 1977, where possible. The resulting compilation of these surveys represents the longest ongoing surveillance study of adult substance use in Canada.

Substance Use, Mental Health and Well-Being Indicators, Ontario Adults, 2015

Table 1 presents the major substance use and mental health estimates from the 2015 cycle of the CAMH Monitor. After controlling for other demographic characteristics, substance use and mental health indicators were associated with the following demographic factors:

Sex was significantly associated with substance use and related harms, with men showing higher prevalence than women. Specifically, men were more likely than women to:

- drink alcohol
- drink alcohol daily
- binge drink weekly
- drink hazardously or harmfully
- currently smoke tobacco cigarettes
- smoke tobacco cigarettes daily
- use cannabis in lifetime and in the past year
- experience problems from cannabis use
- use cocaine in lifetime and in the past year
- drive within an hour of drinking alcohol, and
- drive within an hour of using cannabis.

Men were also more likely than women to experience a traumatic brain injury. Regarding mental health, women were more likely than men to report moderate-to-serious psychological distress, using antianxiety and antidepressant medication in the past year.

Age of respondent was also significantly associated with substance use and well-being indicators. In most cases, use declined with age or was highest among 18 to 29 year-olds. The only two exceptions were daily drinking and poor physical health, which increased with age. Those in the 18-29 year-old age group were more likely than older respondents to:

- binge drink weekly
- drink hazardously or harmfully
- use electronic cigarettes in the past year
- use cannabis in the past year
- experience problems from cannabis use
- use cocaine in the past year
- drive within an hour of using cannabis
- report moderate-to-serious psychological distress
- report suicidal ideation in the past year, and
- report problematic use of electronic devices.

Region was significantly associated with substance use and other health risk behaviours. With the exception of physically unhealthy days – which were more frequent in Toronto – the most common regional pattern noted was significantly lower estimates among Toronto respondents compared with respondents in the other five regions. Respondents from Toronto were the least likely to:

- drink alcohol
- binge drink weekly
- smoke tobacco cigarettes daily, and
- text while driving.

Table 1
Substance Use, Mental Health and Well-Being Indicators Among Ontario Adults, 2015 *CAMH Monitor*

	Measure	Percentage Estimate	Population Estimate
Alcohol	Percentage drinking alcohol in the past year	80%	8,125,700
	Percentage drinking alcohol daily	7% of total sample 9% of drinkers	711,300
	Percentage exceeding the low-risk drinking guidelines	14% of total sample 18% of drinkers	1,447,500
	Percentage consuming five or more drinks on a single occasion weekly ("weekly binge drinking")	8% of total sample 9% of drinkers	753,200
	Percentage drinking hazardously or harmfully	15% of total sample 18% of drinkers	1,439,700
	Percentage of *drivers* who drove within an hour of drinking two or more drinks, at least once in the past year	5% of drivers	451,700
Tobacco	Percentage currently smoking tobacco cigarettes	13%	1,336,100
	Percentage smoking tobacco cigarettes daily	10%	1,012,200
	Percentage of *daily smokers* reporting high nicotine dependence	8% of daily smokers	83,400
	Percentage using electronic cigarettes in the past year	11%	1,113,000
Cannabis	Percentage using cannabis in lifetime	45%	4,576,900
	Percentage using cannabis in the past year	15%	1,467,400
	Percentage reporting a moderate or high risk of cannabis problems	8% of total sample 45% of users	753,300
	Percentage of *drivers* who drove within an hour of using cannabis, at least once in the past year	3% of drivers	266,600
Other Drug Use	Percentage using cocaine in lifetime	8%	840,300
	Percentage using cocaine in the past year	2%	161,900
	Percentage using prescription opioid pain relievers nonmedically in the past year	4%	414,600
Mental Health	Percentage reporting moderate/serious psychological distress in the past month	26%	2,598,800
	Percentage reporting serious psychological distress in the past month	3%	317,200
	Percentage reporting suicidal ideation in the past year	2%	238,600
	Percentage using prescribed antianxiety medication in the past year	10%	1,042,200
	Percentage using prescribed antidepressant medication in the past year	9%	880,200
	Percentage rating their mental health, in general, as fair or poor	7%	676,000
	Percentage reporting frequent mental distress days in the past month	10%	958,900
Physical Health	Percentage rating their physical health, in general, as fair or poor	10%	1,000,000
	Percentage reporting frequent physically unhealthy days in the past month	9%	881,000
	Percentage reporting at least one traumatic brain injury in their lifetime	15%	1,542,500
	Percentage of *drivers* reporting texting while driving, at least once in the past year	37%	3,351,200
Other	Percentage reporting problem gambling	2%	169,500
	Percentage reporting moderate-to-severe problematic use of electronic devices	7%	716,100

Notes: (1) total survey sample size was 5,013 Ontario adults; (2) percentages estimates have been rounded; (3) population estimates, based on an adult population of 10,157,960 in Ontario, have been rounded to the nearest hundred; (4) drivers are defined as those with a valid driver's licence.

Trends in Substance Use

The following substance use trends among Ontario adults are shown in Figure 1:

- The percentage of adults in Ontario who reported **drinking alcohol** in the past year remained stable between 1977 and 2015, varying slightly between 77% and 84%.

- **Weekly binge drinking** remained stable between 1977 and 1995, increased significantly in 1996 (12%), and remained at this elevated level until 2007. Since 2007, weekly binge drinking has significantly declined and has stabilized in recent years at around 8%.

- **Tobacco cigarette smoking** shows a significant declining trend, from 29% in 1991 (the first available estimate) to 13% in 2015.

- Past year **electronic cigarette use** was significantly higher in 2015 (11%) than in 2013 (7%), the first year of monitoring.

- Past year **cannabis use** remained stable between 1977 and the late 1990s, at about 8%. Use began an upward trend in the early 2000s, and is currently at an elevated level at 15%.

- Past year **cocaine use** has remained stable since monitoring first began in 1984, at about 2%.

- The **nonmedical use of prescription opioids** significantly declined between 2010 and 2015, from 8% to 4%.

Trends in Mental Health

The following trends in mental health indicators among Ontario adults are shown in Figure 2:

- The use of **antianxiety medication** among adults in Ontario has significantly increased from 5% in 1997 (the first year of monitoring) to 11% in 2014, and remained stable at 10% in 2015.

- The use of **antidepressant medication** significantly increased over time, from 4% in 1997 to 9% in 2014 and showed no change in 2015.

- Ratings of **fair or poor mental health** significantly increased over the past decade or so, from 5% in 2003 to 7% in 2013, remaining stable since then.

Figure 1
Percentage of Ontario adults ages 18+ reporting substance use in the past year, 1977–2015 *CAMH Monitor*
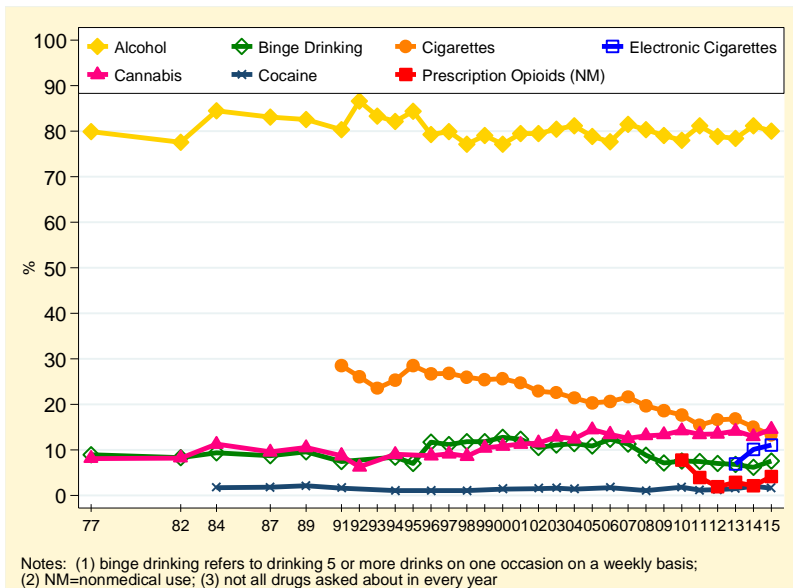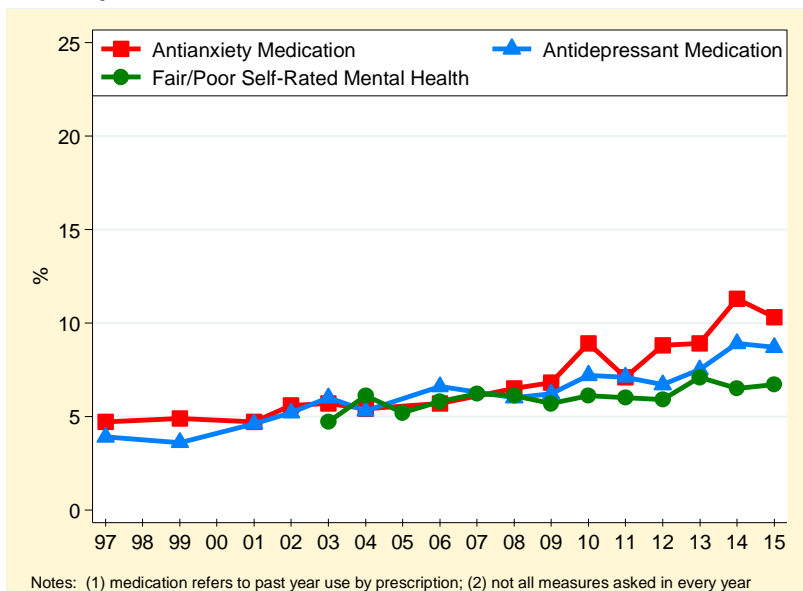

Notes: (1) binge drinking refers to drinking 5 or more drinks on one occasion on a weekly basis; (2) NM=nonmedical use; (3) not all drugs asked about in every year

Figure 2
Percentage of Ontario adults ages 18+ reporting mental health problem indicators, 1997–2015 *CAMH Monitor*

Notes: (1) medication refers to past year use by prescription; (2) not all measures asked in every year

Methods

The *CAMH Monitor* is a substance use and mental health surveillance survey of the Ontario adult population aged 18 and older. It is an anonymous, list-assisted random-digit-dialling telephone survey (landline and cell phone), administered by the Institute for Social Research at York University on CAMH's behalf. The *CAMH Monitor* is continuously conducted on quarterly probability samples from January through December. The survey uses a stratified (region) two-stage (telephone number, respondent) probability sample design. The following six regional strata are used in the design: Toronto, Central East, East, Central West, West, and North. The full sample size in 2015 was 5,013 (46% of eligible respondents). The average (mean) age of respondents was 47.6 and 48% were male. All survey estimates were weighted, and variance and statistical tests accounted for the complex survey design. The sample is representative of over ten million Ontarians aged 18 and older.

Measures & Terminology

- **Exceeding the low-risk drinking guidelines** refers to drinking beyond the amount recommended in Canada's *Low-Risk Alcohol Drinking Guidelines*. The recommendation is no more than two drinks a day or 10 standard drinks a week for women, and no more than three drinks a day or 15 standard drinks a week for men. Compliance is based on reported number of drinks daily for each of the past seven days, and derived separately by sex.
- **Binge drinking weekly** is defined as drinking five or more drinks on a single occasion at least once a week during the past 12 months.
- **Hazardous or Harmful drinking** was measured with the *Alcohol Use Disorders Identification Test* (AUDIT), a 10-item instrument designed to detect hazardous or harmful drinking at the less severe end of the spectrum. The percentage reported is based on a score of eight or more out of 40, which represents an established high-risk pattern of drinking that increases the likelihood of future medical and physical problems, or indicates harmful consequences of use already experienced. The reference period for the AUDIT is the past 12 months before the survey.
- **Current cigarette smoker** is defined as someone who: 1) has smoked over 100 cigarettes in one's lifetime, 2) is a daily or occasional smoker, and 3) has smoked in the past 30 days.
- **Nicotine dependence** was measured among daily smokers using the *Heaviness of Smoking Index* (HSI), a scale based on the time to the first cigarette each morning and number of cigarettes smoked per day. High dependence is indicated by a score five or more out of six.
- **Cannabis use problem** was measured with the *Cannabis Involvement Score* (CIS) on the ASSIST screener, which consists of six items assessing cannabis use and past-3-month cannabis-related problems. A score of four or more out of 39 was used to indicate a potential problem.
- **Nonmedical use of prescription opioid pain relievers** is defined as using a prescribed opioid such as Percocet, Percodan, Demerol, Endocet, Tylenol #3, or other products with codeine during the past 12 months without a doctor's prescription of one's own. Note that nonmedical use does not necessarily solely reflect recreational use or to use to "get high."
- **Psychological distress** (symptoms of depression and anxiety) was measured with the *Kessler-6 Psychological Distress Scale* (K6). A moderate-to-serious level of distress experienced during the past 30 days is defined as scoring five or higher out of 24. Serious psychological distress is defined as scoring 13 or higher.

- **Fair or poor mental health** is defined as responses of "fair" or "poor" to the question: "*In general, would you say your overall mental health is excellent, very good, good, fair or poor?*"
- **Frequent mental distress days** was measured with the question "*Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days in the last 30 days, was your mental health not good?*" and is defined as reporting 14 or more of such days.
- **Fair or poor physical health** is defined as responses of "fair" or "poor" to the question: "*In general, would you say your overall health is excellent, very good, good, fair or poor?*"
- **Frequent unhealthy days** was measured with the question "*Now thinking about your physical health, which includes physical illness and injury, for how many days in the last 30 days, was your physical health not good?*" and is defined as reporting 14 or more of such days.
- **Traumatic brain injury** is defined as a head injury that "*…resulted in you being unconscious (knocked out) for at least 5 minutes, or you had to stay in the hospital for at least one night because of it.*"
- **Problem gambling** was measured with the 9-item *Problem Gambling Severity Index* (PGSI) subscale of the *Canadian Problem Gambling Index* (CPGI). A moderate-to-high risk of developing a gambling problem is defined as scoring three or higher out of 27.
- **Problematic use of electronic devices** was measured with six items adapted from the *Minnesota Impulsive Disorder Interview*. Experiencing at least three of these six problem symptoms was used as an indicator for a moderate-to-severe problem.
- **Region** refers to the six regional strata used in the design: Toronto, Central East, East, Central West, West, and North
- **Statistically significant difference** refers to a difference between (or among) estimates that is statistically different at the p<.05 level, or lower, after adjusting for the sampling design. A finding of statistical significance implies that any differences are not likely due to chance alone; it is not necessarily a finding of public health importance.

Source

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Media Enquiries: please email media@camh.ca