

Highlights from the CAMH Monitor eReport: Addiction and Mental Health Indicators Among Ontario Adults, 1977-2009

This eBulletin highlights the key findings from the 2009 *CAMH Monitor*, an Ontario-wide telephone survey of substance use and mental health indicators among 2,037 adults aged 18 and older. Also highlighted are trends in alcohol, tobacco, and cannabis use, based on 24 surveys conducted during a 32-year period between 1977 and 2009. The resulting compilation of these surveys represents the longest ongoing surveillance survey of adult substance use in Canada.

Substance Use and Mental Health Indicators

Table 1 presents the major substance use and mental health estimates from the 2009 *CAMH Monitor*. After controlling for other demographic characteristics, substance and mental health indicators were associated with the following demographic factors:

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

- drink alcohol daily
- consume more alcoholic drinks weekly
- exceed the low-risk drinking guidelines
- binge drink weekly
- drink hazardously or harmfully
- use cannabis in the past year
- experience problems from their cannabis use
- use cocaine in lifetime
- drive after drinking alcohol, and
- drive after using cannabis.

Regarding mental health, women were more likely than men to report elevated psychological distress, and using prescribed anti-anxiety medication in the past year.

Age of respondent was discernibly associated with substance use and related harms. With the exception of daily drinking – which tends to increase with age – most substance use decreased with age or was highest among 18 to 29 year-olds. Specifically, after adjusting for other demographic characteristics, 18 to 29 year-olds were the most likely to:

- exceed the low-risk drinking guidelines
- binge drink weekly
- drink hazardously or harmfully
- be a current smoker
- use cannabis in the past year, and
- experience problems from their cannabis use.

Age was discernibly associated with four mental health measures, generally showing that those in their 40s and 50s were most likely to report poorer mental health, compared with the youngest and oldest respondents.

Public health region was associated with past year drinking, daily drinking, average number of drinks per week, exceeding the low-risk drinking guidelines, weekly binge drinking, drinking hazardously or harmfully, current smoking, and daily smoking.

Those from *Northern Ontario* were the most likely to be current smokers and to smoke daily; those from *Toronto* were the least likely to drink alcohol; those from the *South West* region of the province reported the highest average number of drinks consumed per week; and driving after drinking was most likely in the *South West* and in the *Central South* regions.

Public health region was not discernibly associated with any of the mental health indicators.

Table 1
Addiction and Mental Health Indicators Among Ontario Adults, 2009 CAMH Monitor

	Measure	Percentage Estimate	Population Estimate
Alcohol	Percentage drinking alcohol in the past 12 months	79.1%	7,472,600
	Percentage drinking alcohol daily	7.3% of total sample 9.3% of drinkers	689,700
	Average number of drinks consumed weekly (among <i>drinkers</i>)	4.6 drinks	
	Percentage exceeding the low-risk drinking guidelines	21.7% of total sample 27.4% of drinkers	2,046,800
	Percentage consuming 5 or more drinks on a single occasion weekly (“binge drinking weekly”)	7.1% of total sample 9.0% of drinkers	666,000
	Percentage reporting hazardous or harmful drinking (AUDIT 8+)	13.0% of total sample 16.7% of drinkers	1,212,200
	Percentage of <i>drivers</i> who drank and drove at least once in the past 12 months	6.9% of drivers	1,754,800
Tobacco	Percentage currently smoking cigarettes	18.6%	1,754,800
	Average number of cigarettes smoked daily (among <i>smokers</i>)	14.5% smoking daily 13.4 cigarettes	1,368,400
	Percentage of <i>daily smokers</i> reporting high nicotine dependence	14.8% of daily smokers	195,500
Cannabis	Percentage using cannabis in lifetime	39.7%	3,724,200
	Percentage using cannabis in the past 12 months	13.3%	1,249,500
	Percentage of <i>cannabis users</i> reporting a moderate or high risk of cannabis problems (ASSIST-CIS 4+)	6.9% of total sample 51.9% of users	648,200
	Percentage of <i>drivers</i> who drove after using cannabis at least once in the past 12 months	1.8% of drivers	155,400
Other Drug Use	Percentage using cocaine in lifetime (2008 estimate)	7.4%	697,400
	Percentage using cocaine in past 12 months (2008 estimate)	< 1.0%	74,000
	Percentage using a prescription opioid pain reliever for non-medical purposes in the past 12 months	1.7%	161,400
Mental Health	Percentage reporting elevated psychological distress in the past few weeks (GHQ12 3+)	14.7%	1,389,600
	Percentage using any prescribed anti-anxiety medication in the past 12 months	6.8%	641,600
	Percentage using any prescribed anti-depressant medication in the past 12 months	6.2%	584,600
	Percentage rating their mental health, in general, as poor	5.7%	539,700
	Percentage reporting frequent mental distress days (14+) in the past 30 days	6.4%	598,400

Notes: (1) population estimates, based on an adult population of 9,460,369, are rounded up to the nearest hundred; (2) estimates for cocaine are based on data from the 2008 CAMH Monitor cycle; drivers are defined as those with a valid driver’s licence.

Trends in Substance Use

Alcohol

- The percentage of adults reporting **drinking alcohol in the past year** remained stable between 2008 (80%) and 2009 (79%). Over the past decade, there was discernible fluctuation, but no dominant trend in past-year alcohol use, with a low of 77% in 1998 and a high of 82% in 2007.
- **Daily drinking** among past-year drinkers has changed since 1977. From a high of 13% in 1977, it decreased three-fold to 4% in 1992, and remained stable through to 2005. Recently, daily drinking increased discernibly from 6% in 2006 to 9% in 2009. This reversal was especially prominent among drinking men, whose daily drinking dropped from 20% in 1977 to 7% in 2005, and then increased to 12% in 2009.
- Between 1996 and 2009, there was a discernible increase in the **average number of drinks consumed weekly** among past-year drinkers, from 3.3 drinks in 1996 to 4.6 drinks in 2009. This increase was also found among both men and women drinkers.
- The percentage of Ontarians **exceeding the low-risk drinking guidelines** in 2009 (22%) was unchanged from 2008 (21%). There has been no change in this indicator since 2003, when it was first measured.
- **Weekly binge drinking** among adults did not change between 2008 (9%) and 2009 (7%). However, discernible declines were noted between 2006 (12%) and 2009 (7%). Both men and women showed declines in weekly binge drinking since 2006. There was also a discernible two-fold decline among 18 to 29 year olds, from 24% in 2006 to 12% in 2009.
- The percentage of adults reporting **hazardous or harmful drinking** remained stable between 2008 (15%) and 2009 (13%). Over the past decade, there was discernible fluctuation in hazardous/harmful drinking, declining from 13% in 1998 to 10% in 2005, increasing to a high of 16% in 2007, and declining again to 13% in 2009.
- The prevalence of **driving after drinking** among adult licensed drivers in 2009 (7%) did not change from 2008 (7%). Drinking and driving declined two-fold between 1996 (13%) and 2006 (6%), and has remained stable since then.

Tobacco

- The percentage of Ontario adults reporting **current cigarette smoking** remained stable between 2008 and 2009 (20% and 19%, respectively). Current smoking trended downward from 28% in 1991 to 24% in 1993, and then rebounded to 27%-28% in the mid-1990s. Since 1996, smoking has discernibly declined, from 27% in 1996 to 19% in 2009.
- **Daily smoking** also decreased over time, from 23% in 1996 down to 15% in 2009.

Cannabis

- **Past-year cannabis use** among Ontario adults remained stable between 2008 and 2009, at 13%. Cannabis use has been steadily increasing since 1977 (8%). This increase is especially evident among women (from 5% in 1977 to 10% in 2009), among 18 to 29 year-olds (from 23% to 36%), and among those aged 50 and older (from 1% to 5%).
- The percentage of Ontario adult licensed drivers reporting **driving after cannabis use** during the past year remained stable between 2008 and 2009, at 2%. This rate has not changed since 2002, when this was first measured.

Cocaine

- Rates of **past-year cocaine use** have remained stable since 1996, varying between 1% and 2%.

Trends in Mental Health

- **Elevated psychological distress** remained stable between 2008 (15%) and 2009 (13%), and has remained stable since 2000, when measurement began.
- The percentage reporting the use of **prescribed anti-anxiety medication** increased between 1999 and 2009, from 4% to 7%.
- Similarly, the percentage reporting the use of **prescribed anti-depressant medication** increased between 1999 and 2009, from 4% to 6%.

Flagging Some Public Health Issues

- Although cigarette smoking among Ontario adults has decreased considerably, current smoking (19%) still remains at an elevated level. This estimate represents just under two million adults in Ontario.

- Several indicators of heavy drinking and problematic drinking remain at elevated rates. Moreover, women and young adults have shown prominent increases over the past decade.
- Not only has past-year use of cannabis increased since 1977, but the average age of cannabis users has increased over time. This finding will likely have resource implications for the health care system.

Methods

The CAMH Monitor is an addiction and mental health surveillance survey using an anonymous random-digit-dialing telephone survey of the Ontario population aged 18 and older, administered by the Institute for Social Research, York University. The CAMH Monitor is continuously conducted on monthly samples and employs a stratified (region) two-stage (telephone number, respondent) probability sample design. The following 6 regional strata are used: Toronto, Central East, East, Central West, West, and North. The sample size in 2009 was 2,037 (57% of eligible respondents). Between 1977 and 1995, sample sizes ranged from 994 to 2,002. Since 1996, annual sample sizes have averaged about 2,200. All survey estimates were weighted, and variance and statistical tests were corrected for the complex sampling design.

Measures & Terminology

- **Daily drinking** is defined as drinking at least one alcoholic drink everyday in the past 12 months.
- **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.
- **Exceeding the low-risk drinking guidelines** refers to drinking beyond the amount recommended in Canada's "Low-Risk Drinking Guidelines." These guidelines recommend that men and women limit weekly drinking to no more than 14 and 9 standard drinks, respectively, and that daily alcohol intake should be limited to 2 drinks. Compliance is based on reported number of drinks daily for each of the past 7 days, and derived separately by gender.
- **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 here is based on a score of 8 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 his/her 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 points given for the time to the first cigarette each morning and number of cigarettes smoked per day. High dependence is based on a score 5 or more of 6.

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- **Cannabis use problems** was measured with Cannabis Involvement Score (CIS) on the ASSIST screener, which consists of 6 items assessing cannabis consumption and past-3-month cannabis-related problems. A score of 4 or more of 39 was used as a cut-off value.
- **Prescription opioid pain reliever** is defined as using a prescribed opioid such as such as Percocet, Percodan, Demerol, OxyContin, or Tylenol #3 during the past 12 months either "to get high," or that was obtained "from a prescription written for someone else," or that "bought from someone else," or that was obtained "from any other source."
- **Elevated psychological distress** was measured with the 12-item version of the *General Health Questionnaire* (GHQ), a screening instrument used to assess current mental health problems. The items assess the recent frequency of experiencing 12 symptoms (e.g., stress, depression, problem making decisions). Elevated psychological distress is defined as experiencing 3 or more of the 12 symptoms.
- **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 "During the past 30 days, for about how many days did poor physical or mental health keep you from doing your usual activities, such as self-care, work, or recreation?" and is defined as reporting 14 or more of such days.
- **Public health region** refers to the Ontario Ministry of Health's 7 planning regions: Toronto; Central South; Central West; South West; Central East; East; and North.
- **95% confidence interval (CI)** shows the probable accuracy of the estimate – that is, with repeated sampling, 95 of 100 sample CIs would contain the "true" population value. Design-based confidence intervals account for characteristics of the sample design (i.e., clustering, stratification and weighting).
- **Discernible difference** refers to a difference between estimates that is statistically different at the $p < .05$ level, or lower, after adjusting for the sampling design, and thus not likely due to chance alone.

Source

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