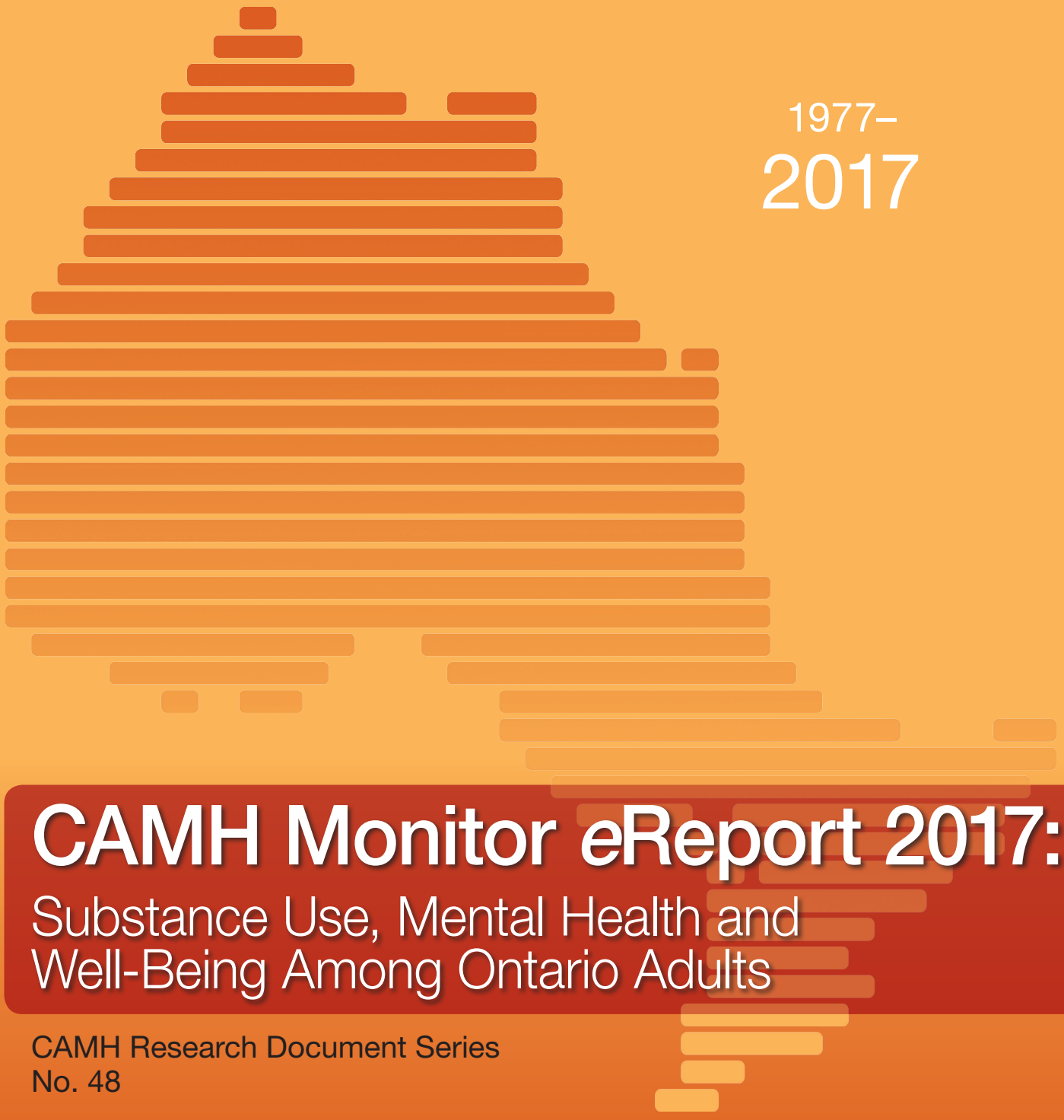

1977–
2017

CAMH Monitor *e*Report 2017:

Substance Use, Mental Health and Well-Being Among Ontario Adults

CAMH Research Document Series
No. 48

Anca R. Ialomiteanu
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The 2017 CAMH MONITOR *e*REPORT
Executive Summary

The Centre for Addiction and Mental Health's *CAMH Monitor* is the longest ongoing general population survey of adult substance use in Canada. The study, which spans **41 years**, is based on 32 cross-sectional probability surveys, conducted between 1977 and 2017. The 2017 cycle of the *CAMH Monitor* is based on telephone interviews with **2,812** adults aged 18 and older across Ontario (cooperation rate 46% of eligible respondents). This report presents the 2017 estimates of substance use and related harms, as well as mental health and well-being indicators among Ontario adults. It also describes changes in substance use and health indicators since 1996 and since 1977, where available.

Recent indicators in this report include: medical cannabis use, modes of cannabis use, use of electronic cigarettes, texting while driving, problem gambling, and problematic use of technology.

Substance Use, Mental Health and Well-Being Indicators, 2017 CAMH Monitor

Indicator	Total %	Men %	Women %		Total Population Estimate[1]
Alcohol					
Percentage drinking alcohol - past 12 months	**79.5**	82.5	76.8	*	**8,545,900**
Percentage drinking daily - total sample	**7.1**	9.3	5.2	*	**764,500**
- among drinkers	**9.0**	11.3	6.8	*	
Average number of drinks consumed weekly - among drinkers *(mean)*	**4.9**	6.2	3.6	*	**–**
Percentage exceeding low-risk drinking guidelines[2] - total sample	**16.4**	21.3	11.9	*	**1,552,000**
- among drinkers	**20.4**	24.6	15.9	*	
Percentage consuming 5 or more drinks on a single occasion weekly (weekly binge drinking) - total sample	**6.9**	10.0	3.9	*	**727,900**
- among drinkers	**8.6**	12.1	5.1	*	
Percentage reporting hazardous or harmful drinking (AUDIT 8+) - total sample	**12.5**	18.6	6.9	*	**1,275,500**
- among drinkers	**15.9**	22.8	9.0	*	
Percentage reporting symptoms of alcohol dependence (based on the AUDIT) - total sample	**6.0**	7.7	4.4	*	**636,200**
Tobacco					
Percentage currently smoking cigarettes	**15.1**	16.8	13.4		**1,614,700**
- smoking daily	**11.0**	12.1	10.0		**1,178,800**
Average number of cigarettes smoked daily - among smokers (*mean*)	**10.9**	11.8	9.9		**–**
Percentage of daily smokers reporting high nicotine dependence - among daily smokers	**10.6**	16.2	4.4	*	**124,900**
Percentage reporting electronic cigarette use - past 12 months	**8.5**	11.5	5.8	*	**915,400**

cont'd

Indicator	Total %	Men %	Women %		Total Population Estimate[1]
Cannabis					
Percentage using cannabis in lifetime	**46.8**	52.2	41.8	*	**4,993,900**
Percentage using cannabis - past 12 months	**19.4**	25.8	13.5	*	**2,068,200**
Percentage reporting moderate to high risk of cannabis problems (ASSIST-CIS 4+) - total sample - among users	 **9.5** **53.3**	 15.0 62.5	 4.9 38.3	 *	 **1,003,000**
Percentage using cannabis for medical purposes - past 12 months	**7.2**	9.8	4.8	*	**766,200**
Cocaine					
Percentage using cocaine in lifetime	**8.8**	13.7	4.6	*	**929,000**
Percentage using cocaine - past 12 months	**2.5**	3.7	1.5	*	**268,400**
Prescription Opioid Pain Relievers					
Percentage reporting any use (medical or nonmedical) of prescription opioid pain relievers - past 12 months	**21.1**	18.2	23.7	*	**2,217,600**
Percentage using prescription opioid pain relievers for nonmedical purposes - past 12 months	**2.8**	2.9	2.8		**298,900**
Driving[3]					
Percentage of drivers who drove after drinking two or more drinks in the previous hour - past 12 months	**5.2**	8.1	2.7	*	**491,100**
Percentage of drivers who drove after using cannabis in the previous hour - past 12 months	**2.6**	3.9	1.4	*	**244,300**
Percentage of drivers who reported texting while driving - past 12 months	**27.5**	32.2	23.3	*	**2,588,500**
Mental Health					
Percentage reporting moderate to serious psychological distress during the past 30 days (K6/5+)	**25.8**	24.8	26.8		**2,720,800**
Percentage reporting serious psychological distress during the past 30 days (K6/13+)	**4.0**	3.8	4.2		**422,700**
Percentage using prescribed antianxiety medication - past 12 months	**11.3**	10.6	12.0		**1,195,500**
Percentage using prescribed antidepressant medication - past 12 months	**8.8**	7.1	10.4		**931,300**
Percentage reporting fair or poor mental health in general	**10.1**	10.5	9.8		**1,082,300**
Percentage reporting frequent mental distress days (14+) during the past 30 days	**11.7**	9.9	13.3		**1,214,400**
Percentage reporting suicidal ideation - past 12 months	**4.1**	4.9	3.3		**426,900**
Physical Health					
Percentage reporting fair or poor health in general	**12.0**	12.2	11.7		**1,284,500**
Percentage reporting frequent physically unhealthy days (14+) during the past 30 days	**10.5**	10.0	10.9		**1,080,000**
Percentage reporting traumatic brain injury (TBI) - lifetime	**15.1**	20.2	10.6	*	**1,582,700**

Indicator	Total %	Men %	Women %		Total Population Estimate[1]
Gambling					
Percentage reporting any gambling - past 12 months	**69.2**	69.7	68.7		**7,249,700**
Percentage reporting casino gambling - past 12 months	**23.4**	22.7	24.0		**2,460,000**
Percentage reporting online gambling - past 12 months	**3.7**	5.1	2.4		**386,300**
Percentage reporting problem gambling (PGSI/3+) - past 12 months	**1.2**	1.5	1.0		**122,000**
Use of Electronic Devices					
Average no. of hrs./week using email, social media *(mean)*	**12.4**	11.5	13.2		**–**
Average no. of hrs./week playing video games *(mean)*	**4.0**	4.9	3.2	*	**–**
Percentage reporting moderate to severe problematic use of technology/electronic devices (3+ symptoms) - past 12 months	**8.2**	8.3	8.1		**859,100**

Notes: [1] population estimates for total sample based on an adult population of 10,766,725 are rounded to the nearest hundred; [2] estimates are based on 2016 data; [3] estimates are based on licensed drivers; * indicates a significant sex difference ($p<.05$) when controlling for other demographic factors.

2017 Subgroup Differences

- **Sex** was significantly associated with most measures analysed.

  Women displayed higher prevalence estimates than men for use of prescription opioids.

  Men displayed higher prevalence estimates than women on all other measures where differences were observed. Specifically, men were significantly more likely than women to:

  - drink alcohol in the past year
  - drink alcohol daily
  - consume more drinks weekly
  - report weekly binge drinking (5 or more drinks on a single occasion)
  - drink hazardously or harmfully
  - report symptoms of alcohol dependence
  - use e-cigarettes in the past year
  - use cannabis during lifetime
  - use cannabis in the past year
  - report cannabis use problems
  - use cannabis for medical purposes in the past year
  - use cocaine during lifetime
  - use cocaine in the past year
  - report drinking and driving
  - report cannabis use and driving
  - report texting while driving
  - report experiencing a lifetime traumatic brain injury, and
  - report playing videogames weekly.

- **Age** of respondent was also significantly associated with substance use and health indicators. In most cases, use declined with age or was highest among 18 to 29 year olds. The only exceptions were daily drinking, poor self-rated health, and reporting gambling problems, which all increased with age. After adjusting for other demographic characteristics, **18 to 29** year olds were significantly more likely than older respondents to:

  - drink hazardously or harmfully
  - report symptoms of alcohol dependence

- use e-cigarettes in the past year
- use cannabis in the past year
- report cannabis use problems
- use cannabis for medical purposes in the past year
- use cocaine in the past year
- use prescription opioids nonmedically
- report cannabis use and driving in the past year
- report moderate psychological distress
- report suicidal ideation
- report casino gambling
- report playing videogames weekly
- report using email/social media weekly, and
- report problematic use of technology/electronic devices.

- **Marital status** was also significantly associated with several measures. In all cases, substance use or health concerns were more prevalent among never married or previously married (divorced or widowed) respondents. After adjusting for other factors, **never married** respondents were more likely to:

  - drink hazardously or harmfully, and
  - use prescription opioids nonmedically.

  Previously married respondents were more likely to:

  - smoke cigarettes
  - use cocaine during lifetime
  - rate their health as fair or poor, and
  - report psychological distress.

- **Education level** was also significantly associated with substance use and health indicators. The most common pattern noted was that substance use declined with increasing education. Specifically, when adjusting for other demographic characteristics, respondents holding a **university degree** were significantly less likely to:

  - report binge drinking weekly
  - smoke cigarettes
  - use e-cigarettes
  - use cannabis in the past year
  - use any prescription opioids
  - rate their mental health as fair or poor, and
  - rate their health as fair or poor.

- **Region** was significantly associated with only three measures. Compared to the provincial average:

  - electronic cigarette use was higher in Toronto and the East
  - past year alcohol use was higher in the North, and
  - nonmedical use of prescription opioids was higher in the Central West.

- **Income** was also significantly associated with several measures. Specifically, when adjusting for other demographic characteristics, respondents with **higher incomes** were significantly more likely to:

  - drink alcohol in the past year
  - use prescription opioids nonmedically in the past year, and
  - report texting and driving.

  After adjusting for other demographic characteristics, respondents with **lower incomes** were significantly more likely to:

  - rate their mental health as fair or poor
  - report frequent mental distress days
  - rate their health as fair or poor
  - report frequent physically unhealthy days, and
  - report any gambling activities.

Past Year Changes, 2016 vs. 2017

Only five indicators showed significant changes between 2016 and 2017, and all the significant changes found were **increases**:

- **Past year cannabis use** increased significantly from 15.7% to 19.4%. This increase was prominent among women and among those aged 50 and older.
- Reports of **self-rated fair or poor physical health** increased significantly, from 9.1% to 12.0%, especially among men and lower income groups.
- Reports of **self-rated fair or poor mental health** increased significantly, from 7.0% to 10.1%. This increase was evident among men and women, and most age groups.
- Reporting **frequent mental distress days** in the past 30 days increased from 7.4% to 11.7%. This increase was prominent among women.
- Reports of **suicidal ideation** increased from 2.3% to 4.1% (an estimated 427,000 Ontario adults).

	2016		2017
Cannabis use	15.7%	↑	19.4%
Fair/poor self-rated physical health	9.1%	↑	12.0%
Fair/poor self-rated mental health	7.0%	↑	10.1%
Frequent mental distress days	7.4%	↑	11.7%
Suicidal ideation	2.3%	↑	4.1%

There were no significant declines between 2016 and 2017.

1996–2017 Trends

Alcohol

Some important changes were seen in alcohol use. We found some significant **declines** in weekly binge drinking and symptoms of alcohol dependence.

- **Weekly binge drinking** declined from 11.2% in 2007 to 6.9% in 2017 among the total sample and from 13.8% to 8.6% among drinkers. This decline was evident for all demographic subgroups examined.
- A significant **decline** was also seen in reporting **symptoms of alcohol dependence,** from 9.4% in 1998 to 6.0% in 2017. This decline was evident especially among men and 18 to 29 year olds.

There were, however, some significant **increases** in daily drinking and the average number of drinks consumed weekly.

- **Daily drinking** among drinkers increased significantly from 5.3% in 2002 to 9.0% in 2017. Significant increases were found among both male drinkers (from 7.1% in 2005 to 11.3% in 2017), and female drinkers (from a low of 2.6% in 2001 to 6.8% in 2017).
- The **average number of drinks** consumed weekly increased from 3.3 in 1996 to 4.9 in 2017. The number of drinks consumed per week among male drinkers increased from 4.8 drinks in 1996 to 6.2 drinks in 2017, and among female drinkers**,** from 1.9 drinks in 1996 to 3.6 drinks in 2017.

Tobacco

Another important change was the **decline** in **current cigarette smoking**.

- Current **cigarette smoking** declined significantly from 26.7% in 1996 to 21.6% in 2007, and continued to decline to 15.1% in 2017. There were also significant declines for all sex, age, region, marital status and education subgroups.

- **Daily smoking** declined by more than half, from 23.0% in 1996 to 11.0% in 2017.

Cannabis

A significant **increase** was evident for cannabis use.

- Past year **cannabis** use **increased** steadily from 8.7% in 1996 to 19.4% in 2017, and the 2017 estimate is the highest on record. This long-term increase was evident among both men and women**,** and for all region, marital status, and education subgroups. Significant increases were found for all age groups, but especially among 18 to 29 year olds (from 18.3% in 1996 to 39.1% in 2017), and among those aged 50 and older (from 1.4% in 1998 to 11.4% in 2017).

- Another important change related to cannabis use has been the **aging** of cannabis users. Between 1996 and 2017, among cannabis users, the percentage who are aged 50 years and older increased from 2% to 29%.

Other Drugs

- Although past year use of **cocaine** remained low, we found a significant **increase** from 1% in 1996 to 2.5% in 2017 and this increase was evident among both men and women, and all age groups.

- Past year use (medical or nonmedical) of **prescription opioid** pain relievers **declined** significantly from 26.6% in 2010 to 21.2% in 2017.

- Past year **nonmedical use** of prescription opioids **declined** from 7.7% in 2010 to 2.8% in 2017, and this decline was evident for all demographic subgroups.

Driving

- **Driving after drinking** alcohol (among drivers) **declined** significantly from 13.1% to 5.2%. The decline was seen among male drivers (from 21.2% in 1996 to 8.1% in 2017), and among young adult drivers aged 18 to 29 (from 20.1% in 1996 to 9.2% in 2017).

- **Driving after cannabis use** (among drivers) **increased** significantly from 1.3% in 2012 to 2.6% in 2017. This increase was seen among male drivers, from 1.9% in 2012 to 3.9% in 2017.

- **Texting while driving** (among drivers) **declined** significantly from 36.8% in 2015 to 27.5% in 2017, and rates were significantly lower among women and the older age groups.

Mental Health

Some significant **increases** were seen in **mental health** indicators.

- Between 2003 and 2017, there was a significant **increase** in self-rated **fair/poor mental health** (from 4.7% to 10.1%). Rates of fair/poor mental health increased significantly among both men and women, and among most demographic groups analysed.

- There was also a significant **increase** overall in reports of **frequent mental distress days** in the past 30 days, from 5.4% in 2003 to 11.7% in 2017. This increase was evident among both men and women, and among most demographic groups analysed.

- Use of **antianxiety medication** has displayed a significant linear **increase**, from 4.7% in 1997 to 11.3% in 2017. There were significant increases during this period for both men and women, and all age, region, marital status, and education subgroups.

- Use of **antidepressants** also **increased** significantly, from 3.9% in 1997 to 8.8% in 2017. There were significant increases during this period for both men and women, and all age, region, marital status, and education subgroups.

- We found a significant **increase** in the percentage of respondents reporting **suicidal ideation** in the past year, from 2.2% in 2013 to 4.1% in 2017.

Overall Health

- Overall, between 2003 and 2017, there was a significant **increase** in ratings of frequent physically **unhealthy days** in the past 30 days, from 5.9% in 2004 to 10.5% in 2017. Rates increased significantly among both men and women, and most age groups.

Gambling

- Between 2000 and 2016, all specific gambling **activities** measured (i.e., lottery, Sport Select, bingo, horse racing, casino gambling, card games, sports pools, and online gambling) have shown a significant **decline**.

- The prevalence of **any gambling declined** significantly from 80.3% in 2000 to 69.2% in 2016. Significant declines were also evident for all sex, age, region, marital status, and education subgroups.

- The prevalence of **casino gambling declined** significantly overall from 33.7% in 2000 to 23.4% in 2016. Significant declines were found for most subgroups analysed.

- The prevalence of **online gambling declined** from 6.6% in 2003 to 3.7% in 2016. Significant declines were evident for most subgroups analysed.

- However, although the prevalence of gambling declined, the overall prevalence of **problem gambling** was **stable** between 2005 (1.9%) and 2016 (1.2%).

Long-Term Trends, 1977–2017

Long-term changes in substance use are particularly noteworthy in two areas.

- The first area is the significant long-term trend reflecting **increases** in past year **cannabis** use and the **aging** of cannabis users. Past year cannabis use increased significantly, from 8.1% in 1977 to 19.4% in 2017. Current estimates show that, on average, cannabis users in 2017 were older than their counterparts in 1977 (average age of 38.2 years vs. 25.6 years, respectively). In 1977, 82% of cannabis users were aged 18-29 compared to 42% in 2017. In contrast, the proportion of past year cannabis users aged 30 to 49 years increased significantly from 15% in 1977 to 29% in 2017, and the proportion of past year cannabis users aged 50 and older increased almost ten-fold, from 3% to 29% during the same period.

- The second noteworthy area is the long-term trend reflecting changes in patterns of alcohol use. Although the percentage drinking alcohol was generally stable, varying between 77% and 87%, there were significant changes since 1977 in **daily drinking** and weekly **binge drinking**.

- Between 1977 and 2017, **daily drinking** among drinkers **decreased** steadily until 2006. From a high of 13.4% in 1977, it decreased by about two-thirds to a low of 4.1% in 1992 and remained between 5.3% and 5.9% until 2006. During the past decade, however, this trend has reversed, and daily drinking increased significantly from 5.9% in 2006 to 9.0% in 2017. This non-linear trend was especially prominent among male drinkers, whose daily drinking dropped from 19.5% in 1977 to 7.1% in 2005, and then increased to 11.3% in 2017.

- Three distinct periods are evident in weekly **binge drinking** between 1977 and 2017. Binge drinking remained **stable** between 1977 and 1995 (varying between 7.0% and 8.9%). Starting in 1996, we found a significant **increase** among the total sample (from 7.0% in 1995 to 11.7% in 1996) and among past year drinkers (from 8.2% to 14.8%). The rate of binge drinking remained at this elevated level until 2007. This was followed by a significant **decline** in weekly binge drinking, from 11.2% in 2007 to 6.9% in 2017. This decline during the past decade was evident for all sex, age, region, marital status, and education subgroups.

Overview of Trends for Selected Substance Use, Mental Health and Well-Being Indicators Among Ontario Adults, CAMH Monitor

Indicator (past year)	Period	Change
% drinking alcohol	1996–2017	Stable
% drinking daily (among drinkers)	1996–2017	Increased from 6.0% to 9.0%
mean number of drinks consumed weekly (drinkers)	1996–2017	Increased from 3.3 to 4.9
% weekly binge drinking (5+ drinks)	1996–2017	Decreased from 11.7% to 6.9%
% hazardous or harmful drinking (AUDIT 8+)	1998–2017	Stable
% reporting symptoms of alcohol dependence	1998–2017	Decreased from 9.4% to 6.0%
% currently smoking cigarettes	1996–2017	Decreased from 26.7% to 15.1%
% using cannabis	1996–2017	Increased from 8.7% to 19.4%
% using cocaine	1996–2017	Increased from 1.0% to 2.5%
% medical use of prescription opioid pain relievers	2010–2017	Decreased from 26.6% to 21.2%
% non-medical use of prescription opioid pain relievers	2010–2017	Decreased from 7.7% to 2.8%
% drinking and driving (drivers)	1996–2017	Decreased from 13.1% to 5.2%
% driving after cannabis use (drivers)	2002–2017	Increased from 1.5% to 2.6%
% texting and driving (drivers)	2015–2017	Decreased from 36.8% to 27.6%
% moderate-to-serious psychological distress	2015–2017	Stable
% fair or poor self-rated mental health	2003–2017	Increased from 4.7% to 10.1%
% frequent mental distress days (past 30 days)	2003–2017	Increased from 5.4% to 11.7%
% prescription for anxiety	1997–2017	Increased from 4.7% to 11.3%
% prescription for depression	1997–2017	Increased from 3.9% to 8.8%
% suicidal ideation	2013–2017	Increased from 2.2% to 4.1%
% fair or poor self-rated health	2003–2017	Stable
% frequent unhealthy days (past 30 days)	2003–2017	Increased from 5.9% to 10.5%
% TBI (lifetime)	2011–2017	Stable
% any gambling activity	2000–2017	Decreased from 80.3% to 69.2%
% problem gambling	2005–2017	Stable

Methodology

The Centre for Addiction and Mental Health's *CAMH Monitor* (CM) is an Ontario-wide telephone survey of adults aged 18 and older. This repeated cross-sectional telephone survey has been conducted over a period of 41 years: periodically from 1977 to 1989, annually from 1991 to 1995 and continuously since 1996. The 2017 CM is the 22nd cycle conducted since the series became continuously fielded in 1996.

The 2017 survey used a stratified (by six equally-allocated regions) two-stage (telephone number-respondents) dual-frame (list-assisted and cell-phone) RDD rolling quarterly probability sampling procedure. In total, **2,812 Ontario adults** completed the interviews (2,458 interviews were completed on a landline or cable phone and 354 interviews on a cell-phone). Excluded from the selection were adults without a phone, those who were institutionalized, and those who were unable to complete the interview in English.

The 2017 CM was administered by the Institute for Social Research at York University. The 2017 sample of 2,812 respondents is considered representative of 10,766,725 Ontarians aged 18 and older.

Questions added in the most recent cycles of the survey included medical cannabis use, modes of cannabis use, use of electronic cigarettes, texting while driving, problem gambling, and problematic use of technology or electronic devices.

Please visit the CAMH Monitor webpage for reports and FAQs:

www.camh.ca/camh-monitor

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1. INTRODUCTION

Knowledge derived from population surveillance studies, such as the *CAMH Monitor*, about the shifting pattern, character and social demography of substance use, its harms, and mental health impairments in the general population is essential to informed prevention programming, health and social policy, and any assessment of future treatment needs.

Our knowledge regarding substance use has shown that the ability of a given drug to cause harms to its users, their families, friends, and communities depends on at least three fundamental factors: (1) the prevalence of use in the population – what percentage use the substance; (2) its dependence liability – the ability of the drug to produce dependence; and (3) its hazard liability – the ability of the drug to produce lethal and other adverse consequences (Brands, Sproule, & Marshman, 1998). Thus, we should not simply equate prevalence of drug use with the prevalence of its attributable harm. The important point is that drug use prevalence in the population is only one factor in determining the harm potential of a given substance.

Similarly, population surveillance of mental health indicators is imperative for informed health policy and for treatment response. Screening instruments assessing compromised mental health can assist in identifying not only the prevalence of impaired mental and emotional functioning, but also the related determinants and risk factors (Tsuang & Tohen, 2002). These two domains – addiction and mental health impairment – have strong connections, and the ability to investigate their co-occurrence, risk profiles, and changes over time further enhance their public health utility. The *CAMH Monitor* (CM) is a substance use and mental health population survey of Ontario adults aged 18 and older. It is the longest ongoing surveillance program of adult drug use in Canada. The purpose of this report is threefold. *First*, we describe the prevalence of substance use – alcohol, tobacco, cannabis and other drugs and their attributable harms–, indicators of impaired health and mental health -self-rated poor health, psychological distress, use of antianxiety and antidepressant medication and mental health-related quality of life indicators-, as well as distracted driving and gambling indicators among Ontario adults in 2016-2017. *Second*, we examine the question, "Who is at risk?" by assessing the demographic correlates and risk factors related to these outcomes; and *third*, based on 32 repeated cross-sectional surveys conducted during a 41-year period between 1977 and 2017, we examine trends in alcohol and other drug use, health and mental health indicators.[1]

Why is it important to monitor addiction and mental health indicators? Because such phenomena are influenced by ongoing demographic shifts and market forces, as well as societal changes in values, attitudes and consequent stigmatization of such conditions, their character is rarely static. Such forces may combine to create tipping points resulting in favourable conditions for drug taking and the emergence of drug-related outbreaks and full-fledged epidemics. Thus, the need for surveillance is paramount not only to enhance knowledge of addiction and mental health in the population, but also to build strategies to reduce their drug-attributable harms (Sloboda, 2005; Stockwell, Gruenewald, Toumbourou, & Loxley, 2005) and health inequities (Schmidt, Makela, Rehm & Room, 2010).

[1] Mental health and other health measures were introduced into the *CAMH Monitor* after 2000, thus limiting the available trends to a shorter period.

Specifically, monitoring addiction and mental health indicators provides several important benefits:

- First and foremost, monitoring provides a surveillance function to identify emerging change and to monitor its development. By definition, emerging outbreaks or epidemics can only be identified with the presence of pre-existing surveillance data.
- Second, monitoring builds knowledge and increases understanding of the processes that bring about population changes in addiction and mental health indicators, of the methods to best measure them, and of associated public sentiment and stigmatization. This knowledge applies, not only to identifying changes in health indicators, but also whether the influence of risk factors are strengthening or weakening with time.
- Third, monitoring informs policy. To be effective, policies intended to reduce the harm caused by drugs and impaired mental health must be informed by the most current and trustworthy data.
- Fourth, monitoring serves as a tool for the evaluation of health programs, interventions, legislation, objectives and targets set by governmental and advisory bodies.[2] Monitoring studies inform both needs assessment as well as outcome and impact evaluation.

There are several means, including population surveys and administrative or archival aggregate data, to estimate and track addiction and mental health indicators (Sloboda, McKetin, & Kozel, 2005). Examples of administrative aggregate data include per capita alcohol consumption, the number of alcohol and drug-related arrests, convictions and seizures, and the number of illnesses or injuries as represented by hospitalizations, treatment cases, nonfatal overdoses, and fatalities.

Although aggregate data are useful in describing population level or change, or social patterning of addiction and mental health indicators because they are based on case or event counts rather than individuals, they can be somewhat remote from individual behaviour. This is because a given individual may contribute multiple events making the estimation of prevalence difficult. For example, per capita alcohol consumption, based on sales data, is a measure summed across both drinkers and non-drinkers. Although such indicators are useful on a total population basis, especially for the purpose of cross-national, national, and provincial trends, the influence of various individual-level risk factors cannot be derived.

The connection between criminal justice data and population drug use need not be a strong one. Indeed, arrest and conviction data can reflect factors other than the rate of drug use, such as the degree of enforcement and drug availability. In addition, such data often apply to atypical cases, namely individuals who are detected and apprehended for their use of drugs. It is generally found that most adult recreational drug users have little criminal justice system involvement and that legal barriers are a minor obstruction (e.g., Erickson et al., 1994). Thus, there need not be a direct and necessary relationship between drug arrests, seizures and the size of the drug-using population. Also, changes in such data must be carefully interpreted. For example, an increase in drug arrests or seizures may reflect mechanisms other than increasing drug use. It may reflect more funds or a higher priority given to enforcement; it may reflect the same number of users using greater quantities or more users consuming fixed quantities; or it may reflect increases in use among restricted and typically small populations whose behaviour readily comes to the attention of authorities. Therefore, although administrative aggregate indicators are important to help define the particular contours of the drug problem, they should not be confused with direct indicators of the prevalence, amount, and harms of use experienced by individuals in the population.

[2] e.g., Healthy People 2020: http://www.healthypeople.gov/2020/topicsobjectives2020/

The Strengths and Limitations of Surveys

The most direct means of estimating and monitoring addiction and mental health indicators in the population are based on sample surveys. Although the sample survey method has its limitations, it remains the most feasible technique to track individual-level health behaviours and outcomes in the population. The strength of the survey method is the requirement of the random selection of individuals from a known population. Thus, assuming no systematic bias in the selection process, drug users, and those with mental health difficulties drawn for the sample should represent these groups in the population.

The CM's random-digit-dial (RDD) telephone sampling procedure has several advantages, the most relevant of which are the following:[3]

- a dedicated addiction and mental health survey has greater depth of content than general health surveys with limited addiction and mental health content;
- a population with a high telephone coverage rate;
- elimination of travel costs over a wide geographical area;
- reduced cost per interview;
- better access to populations such as older adults who may be reticent about answering their door to strangers (i.e., unknown interviewers). Also, access may be restricted from personal visit interviewers in many multi-unit dwellings, such as apartments and condominiums;
- advantages of computerized interviewing systems; and
- elimination of separate data entry processing resulting in ready access to a final dataset.

The survey method also has its limitations. To begin, estimates can be biased – i.e., systematically different from the true population value – if the survey is used to project outside the target population or if the survey frame population is an inadequate representation of the target population. For example, the 2017 CM is based on a sampling frame of landline and cell phone numbers (unlisted and unpublished phone numbers are also included). Whether estimates would be measurably biased by projecting to *all* households depends on (1) the size of non-telephone household population and (2) whether the non-telephone household population differs appreciably from the telephone household population. Fortunately, Canada traditionally has one of the highest telephone coverage rates in the world. For example, based on the most recent *Residential Telephone Service Survey* (RTSS), Statistics Canada estimated that although almost one in three Canadian households in 2013 had no landline telephone, of which 21% had a cellphone only and 12% had a cable-phone, only a negligible 0.5% were phoneless (Statistics Canada, 2014). Given this high penetration rate, we would not expect appreciable coverage bias (Biemer & Lyberg, 2003).

Another limitation is that general population surveys commonly employ a target population consisting of noninstitutionalized residents and are not intended as a census of the full adult population. Thus, those residing in jails, prisons, hospitals, military establishments, and transient populations such as the homeless or marginally housed are commonly excluded by design. Many of these out-of-scope groups tend to contain an elevated proportion of drug users, heavy drinkers and those experiencing mental health difficulties (Adlaf, Smart, & Canale, 1991; Rossi, 1989; Sloboda, 2005). However, the bias caused by such non-coverage depends

[3] In 1991, a mode effect study investigated a mode switch from personal-visit to RDD surveys. During 1991, the existing area-based personal-visit survey continued as usual, but a parallel RDD survey was also administered concurrently. The objective of this study was to assess whether the two modes, and their respective packages of methods and procedures, provided similar estimates. Similar to a handful of mode studies, the results showed that holding values of sex and age fixed, mode differences were minimal for alcohol and other drug use measures (mental health measures had not yet been introduced). Consequently, in 1992, the surveillance program migrated to RDD selection.

not only upon the *difference* in drug use (or mental health impairments) between respondents and non-respondents, but also on the *size of the group* not surveyed. Thus, even if indicators of addiction and mental health are appreciably higher in the excluded group (e.g., homeless, phoneless) than those in the sampled group, if the size of the excluded group is small relative to the total population then the bias is not expected to be considerable (Groves & Couper, 1998; Heeringa, West, & Berglund, 2010; Kandel, 1991). This point also infers that even a high nonresponse rate does not necessarily translate to nonresponse bias if the difference between respondents and non-respondents is negligible.

The topic of a survey also has the potential to influence response quality in two ways: (1) topic relevance can affect the propensity to participate, and (2) topic sensitivity can influence the quality of responses (e.g., social desirability bias). Regarding the former, drug users, or those with mental health difficulties, of high social standing may be unwilling to participate in such a survey. The reliance on self-reported behaviours in surveys covering sensitive topics such as drug use or other illegal behaviours is another source of bias. However, reviews of such methods for alcohol and drug use surveys suggest that although surveys tend to underestimate true usage, they are still regarded as the best available means to estimate and monitor such individual-level behaviours for public health assessment (Harrison, Haaga, & Richards, 1993; Sloboda, 2005; Heeringa, West, & Berglund, 2010; Turner, Lessler, & Gfroefer, 1992). Moreover, although these biases may operate to understate drug use or mental health estimates at a single point in time, they should have lesser impact on estimating trends so long as the magnitude of underreporting remains constant across time (Cochran, 1977).

Repeated cross-sectional surveys – repeated surveys interviewing different respondents each time – can assess only specific types of change. Because the same individuals are not surveyed at different times, repeated cross-sectional surveys cannot evaluate development patterns or individual change (e.g., how patterns of drinking change with increasing age), nor can they fully resolve issues of causal order (e.g., whether unemployment causes drinking problems or impaired mental health or whether drinking problems or impaired mental health causes unemployment).

Nonetheless, repeated cross-sectional surveys are especially adept at *identifying* and *measuring* population change (e.g., changes in the percentage of the population affected by impairments or disabilities caused by alcohol and other drug use and mental difficulties). In comparison to re-interview (longitudinal or follow-up) studies, the advantages of repeated cross-sectional studies is that each survey accounts for population change and that estimates combine effects of changing values and changing populations, and thus provide an efficient estimate of net population change.

The next section describes the sampling procedures used in selecting respondents, features of the Computer Assisted Telephone Interview (CATI), the measures used in estimating and monitoring substance use and mental health and methods of estimation used in drawing conclusions about the population of Ontario adults. In addition to describing features of the 2017 cycle of the CM, we also describe the series of surveys conducted since 1977.

2. METHOD

2.1 Sampling Designs

The series of data described in this report are based on 32 repeated cross-sectional surveys conducted during a 41-year period between the years 1977 and 2017 and targeting a population of noninstitutionalized Ontarians aged 18 and older.[4] To capture this target population, we employed a survey population frame – the list of eligible units from which the population is drawn – of Ontario telephone numbers and their adult household members.

This surveillance program was initiated and supported by the Addiction Research Foundation (ARF) and administered from 1977 through 1998, and continued by the Centre for Addiction and Mental Health (CAMH) since 1999 (see **Table 2.1**).[5] These data – which amalgamate previous monitoring research, including the *Ontario Adult Drug Use* series (1977–1994) (Adlaf, Ivis, & Smart, 1994) and the *Ontario Alcohol and Other Drug Opinion Survey* series (1992–1995) (Ialomiteanu & Bondy, 1997) – represent the longest and most comprehensive surveillance program of adult drug use in Canada.[6]

2.1.1 Sampling Designs 1977–1995 Series

As seen in **Table 2.1**, the five modified-probability (a stratified, three-stage area sample)[7] periodic surveys conducted between 1977 and 1989 employed personal-visit interviews administered by Ian Sone and Associates (1977) and Gallup Canada (1982–1989).

In contrast, the 27 surveys conducted annually between 1991 and 2017 employed computer assisted telephone interviewing (CATI). Using a random-digit-dialling selection (RDD), these surveys employed a stratified two-stage (telephone number–household respondent) probability selection of telephone numbers and were administered at the CATI facility at York University's Institute for Social Research (ISR).[8]

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[4] The target population for all surveys includes noninstitutionalized adults aged 18 and older residing in Ontario; however, the frame population varied from geo-based (1977 through 1989) to telephone number elements (1991 onward).

[5] In 1998, the Government of Ontario amalgamated the ARF with three other substance abuse and mental health organizations into the newly formed *CAMH*, a full affiliate of the University of Toronto and a Pan American Health Organization/ World Health Organization Collaborating Centre.

[6] Each cycle of the *CAMH Monitor* procedures and interviews was approved by the CAMH Research Ethics Board and the CATI instrument and data collection procedures related to ISRs contractual involvement were also approved by the York University REB.

[7] Although such designs typically result in a sample with "representative" characteristics, these five surveys do not technically qualify for a *full probability* designation because (1) respondents within households were not randomly selected (in all households, the youngest male aged 18 and older was interviewed until the quota was filled), and (2) quota sampling was employed in rural areas.

[8] ISR, which operates a fully-supervised, centralized CATI laboratory with 75 workstations, was responsible for generating the sampling frame and drawing the sample; pretesting and deploying the CATI; developing the sampling weights; and preparing the data and dataset. The *CAMH Monitor* research team was responsible for the overall management and direction of the survey; the interview content, the post-collection data preparation (e.g., creation of derived variables and post-stratified weighting adjustments); the monitoring of cross-cycle process quality; building the multi-year dataset; and all surveillance data analysis and interpretation.

2.1.2 The *CAMH Monitor* Series 1996–2017

In 1996, general population survey research at the Addiction Research Foundation was amalgamated into the *Ontario Drug Monitor* (ODM). The major change was a transition to a continuously administered CATI similar to the US NHANES survey (Centers for Disease Control and Prevention, 2011). In 1999, this development continued, and the expanded survey questionnaire introduced modules of health and mental health indicators to better capture the wider institutional work of CAMH. To more formally recognize this wider scope, the survey was rebranded the *CAMH Monitor* (*CM*).[9]

There are four major differences between the current *CAMH Monitor* and earlier surveys:

1. Each *CAMH Monitor* cycle is based on the annual cumulation of four quarterly rolling samples (versus the typical 4 to 8 week interviewing period employed in earlier cycles). Such "rolling" or continuous data collecting systems have several advantages over periodic fieldwork including the following:
   - greater capacity to detect seasonal and secular trends;
   - greater capacity to provide timely data;[10]
   - ability to accumulate rare populations across time (Kalton, 2009; Kish, 1999);
   - multiple repeated samples lead to better statistical estimation (Kish, 1965);
   - reduction of administration costs by efficiencies in assigning interviewer workload across time;
   - more efficient detection of interview error and ability to make adjustments during fieldwork; and
   - potential for quickly fielding new material and evaluating changes in programs, policies and legislation, and for assessing potential drug-related outbreaks.

2. The *CAMH Monitor* is regionally stratified with equal allocation of respondents within each of the six regional areas (versus proportional allocation employed in earlier cycles, see **Table 2.1** for more details). This equal allocation results in disproportional-to-population stratification. As a result, the precision of estimates from areas such as Northern Ontario is improved compared with earlier surveys, although this improvement comes at a cost to larger regions, whose equally allocated sample size is reduced versus proportional allocation. As well, the potential for pooling or cumulating data across time (i.e., samples) for regional or rare subgroup analyses is greatly enhanced (see, for example, Chapter 10).

3. Beginning in 2000, the *CAMH Monitor* sampling plan introduced list-assisted sampling, thus including cell phones (as well as newly connected or listed and unpublished numbers) into the survey population frame.

4. Starting with 2017, a **dual-frame** sampling strategy was introduced. A province-wide **cell-phone sample** (10% of the total sample) was added to the sampling frame in addition to the list-assisted sampling frame.

5. The *CAMH Monitor* sample size is approaching or exceeding 3,000 per year. Between 1996 and 2017, the annual sample size varied from 2,005 to 5,013 respondents.

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[9] The *CAMH Monitor* is supported by the Ontario Ministry of Health and Long-term Care (MOHLTC) and supplemented by investigator- and organization-initiated and extramural research activities.

[10] Because changes to the CATI can be made within days, if not hours, emerging issues can be quickly administered.

Table 2.1: **ARF/CAMH – Ontario Adult Population Survey Program, 1977–2017**

Year	Mode of Interview	Survey Organization	Sample Design	Sample (N) Date	RR *deff*	Standard Error Calculation Model	Source
1977 (1)	Face-to-face	Gallup	**Area-based modified-probability design**: The sample design incorporated stratification by six community size groups, based on the most recent census figures: cities of 500,000 populations and over; those between 100,000 and 500,000; 30,000 to 100,000; 10,000 to 30,000; 1,000 to 10,000, and rural farm and rural non-farm areas. The population was arrayed in geographic order, by census enumeration areas. Enumeration areas, on the average, contain about 500 to 1,000 people. **Stage 1**: Up to 105 enumeration areas were selected randomly from this array. Within urban centres, a random block sampling procedure was used to select starting points for interviewers. **Stage 2**: The interviewer was provided with a map of the enumeration area, showing the location of the starting point and was required to follow a specified route in the selection of households. **Stage 3**: Within the household, the youngest male, 18 years and over at home at the time of the interview, was surveyed. If there is no male available, or when the male quota was filled, the youngest available female, 18 years and over, was interviewed. The selection of rural and rural non-farm interviewing locations followed the sample design established for the urban centres in terms of geographic dispersion and random selection of enumeration areas. Because of the low population density and wide dispersion of households, the random block sampling procedure was replaced by quota sampling based on sex and age. Sampling weights for the 1977 through 1989 surveys employed poststratified classes according to the sex and age distribution of the most recent census year.	N=1,059 Periodic: June 16-18	NA		(Smart & Goodstadt, 1977)
1982 (2)	Face-to-face	Gallup		N=1,040 Periodic: Feb. 22-28	NA		(Smart & Adlaf, 1982)
1984 (3)	Face-to-face	Gallup		N=1,050 Periodic: Feb. 27-March 3	NA		(Smart & Adlaf, 1984)
1987 (4)	Face-to-face	Gallup		N=1,084 Periodic: Jan. 8-23	NA		(Smart & Adlaf, 1987)
1989 (5)	Face-to-face	Gallup		N=1,101 Periodic: Feb. 11 - March 4	NA		(Adlaf & Smart, 1989)
1991 (6)	Telephone	ISR	**Full-probability landline RDD**: The survey used random-digit-dialing (RDD) techniques through computer assisted telephone interviewing (CATI) methods. The design employed *single-strata, two-stage probability RDD survey* administered during a 2-3 month period. **Stage 1**: From a sampling frame of all active area codes and exchanges in Ontario provided by the ATT Long Lines Tape, a random sample of 10-digit telephone numbers was selected with equal probability. **Stage 2:** Within selected telephone households, one respondent was selected according to the household member with the most recent birthday. A minimum of 12 callbacks were made to each nonresponding household, and all households who refused to participate were re-contacted in order to secure participation. Sampling weights were a function of the number of household members.	N=1,047 Periodic: Feb 20-March 18	RR=67% *deff*=1.14	1 SE strata; 1047 SECU; 1046 design df	(Adlaf et al., 1991)
1992 (7)	Telephone	ISR		N=1,058 Periodic: June 14- Aug 20	RR=63% *deff* =1.19	1 SE strata; 1058 SECU; 1057 design df	(Ferris, Templeton, & Wong, 1994)
1993 (8)	Telephone	ISR		N=1,034 Periodic: April 19- May 24	RR=65% *deff* =1.10	1 SE strata; 1034 SECU; 1033 design df	(Bondy, 1994)

Year	Mode of Interview	Survey Organization	Sample Design	Sample (N) Date	RR *deff*	Standard Error Calculation Model	Source
1994 (9)	Telephone	ISR		N=2,022 Periodic: March 1- May 5	RR=63% *deff* =1.16	1 SE strata; 2022 SECU; 2021 design df	(Adlaf et al., 1994; Paglia, 1995)
1995 (10)	Telephone	ISR		N=994 Periodic: March 28- May 9	RR=62% *deff* =1.16	1 SE strata; 994 SECU; 993 design df	(Anglin, 1995)
1996 (11)	Telephone	ISR	***Ontario Drug Monitor* (ODM)** **Full-probability monthly landline RDD**: The survey used RDD techniques through CATI methods. The design employed a rolling monthly *two-stage probability RDD survey* stratified by six geographical/area-code regions with sample sizes allocated equally (disproportionally). **Stage 1**: From a sampling frame of all active area codes and exchanges in Ontario provided by the ATT Long Lines Tape, within each regional stratum a random sample of telephone numbers was selected with equal probability. **Stage 2**: Within selected telephone households, one respondent was selected according to the most recent birthday of household members. A minimum of 12 call-backs were made to each non-responding household, and all households who refused to participate were re-contacted in order to secure participation. Twelve monthly samples were cumulated to provide annual estimates. Sampling weights were a function of the number of household members, regional probabilities and month.	N=2,721 **12m rolling:** April 8 - Jan 8	RR=64%	6 SE strata; 2721 SECU; 2715 design df	(Adlaf, Ivis, Bondy et al., 1997; Adlaf, Ivis, Ialomiteanu, Walsh, & Bondy, 1997)
1997 (12)	Telephone	ISR		N=2,776 12m rolling: Jan 14 - Dec 21	RR=67%	6 SE strata; 2776 SECU; 2770 design df	(Adlaf, Ivis, & Ialomiteanu, 1998; Adlaf, Ivis, Ialomiteanu et al., 1998)
1998 (13)	Telephone	ISR		N=2,509 12m rolling: Jan 21- Dec 20	RR=69%	6 SE strata; 2509 SECU; 2503 design df	(Adlaf, Paglia, & Ialomiteanu, 1999; Adlaf, Paglia, Ivis, & Ialomiteanu, 1999)
1999 (14)	Telephone	ISR	***CAMH Monitor* (*CM*)** **Full-probability monthly RDD**: The survey used RDD techniques through CATI methods. The design employed a rolling monthly *two-stage probability list-assisted RDD survey stratified by six geographical/area-code regions* with sample sizes allocated equally (disproportionally). A list of 10-digit telephone numbers in Ontario can be constructed from CD-ROM versions of telephone books and the other commercially available lists of telephone numbers. Entries from these sources, as well as telephone numbers between or on either side of listed numbers are included in the sampling frame. Since unlisted numbers, cell phone numbers and newly published numbers are interspersed among published numbers, this strategy provides a superior sample than one based on listed numbers alone.	N=2,436 12m rolling: Jan 20- Dec 21	RR=69%	6 SE strata; 2436 SECU; 2430 design df	(Adlaf & Ialomiteanu, 2001a; Adlaf, Ialomiteanu, & Paglia, 2000)
2000 (15)	Telephone	ISR		N=2,406 12m rolling: Jan 20- Dec 21	RR=61%	6 SE strata; 2406 SECU; 2400 design df	(Adlaf & Ialomiteanu, 2001b; Adlaf, Ialomiteanu, & Paglia, 2001)
2001 (16)	Telephone	ISR		N= 2,627 12m rolling: Jan 25- Dec 20	RR=61%	6 SE strata; 2627 SECU; 2621 design df	(Adlaf & Ialomiteanu, 2002a, 2002b)
2002 (17)	Telephone	ISR		N= 2,421 12m rolling: Jan 10- Dec 22	RR=58%	6 SE strata; 2421 SECU; 2415 design df	(Ialomiteanu & Adlaf, 2003)

Year	Mode of Interview	Survey Organization	Sample Design	Sample (N) Date	RR *deff*	Standard Error Calculation Model	Source
2003 (18)	Telephone	ISR	**Stage 1**: Within each of the six regional strata, each month a random sample of telephone numbers was selected with equal probability. **Stage 2**: Within selected telephone households, one respondent age 18 or older who could complete the interview in English was selected according to the "last birthday" method of household members. A minimum of 12 call-backs were placed to unanswered numbers and most households who refused to participate on the first contact were re-contacted in order to secure participation Twelve monthly samples were cumulated to provide annual estimates. Sampling weights were a function of the number of household members, regional probabilities and month. In 2000, the stage one selection was revised to a list-assisted RDD selection, with a sampling frame including landline, cell, unlisted and unpublished telephone numbers.. In 2006, the target sample was reduced to 2,000 completions. In 2009, all selected numbers received advance letter.	N= 2,411 12m rolling: Jan 10- Dec 30	RR=58%	6 SE strata; 2411 SECU; 2405 design df	(Ialomiteanu & Adlaf, 2004)
2004 (19)	Telephone	ISR		N= 2,611 12m rolling: Jan 03- Dec 30	RR=59%	6 SE strata; 2611 SECU; 2605 design df	(Ialomiteanu & Adlaf, 2005)
2005 (20)	Telephone	ISR		N= 2,445 12m rolling: Jan 10- Dec 22	RR=61%	6 SE strata; 2445 SECU; 2439 design df	(Adlaf, Ialomiteanu, & Rehm, 2008; Ialomiteanu & Adlaf, 2006)
2006 (21)	Telephone	ISR		N= 2,016 12m rolling: Jan 03- Dec 30	RR=61%	6 SE strata; 2016 SECU; 2010 design df	(Ialomiteanu & Adlaf, 2007)
2007 (22)	Telephone	ISR		N= 2,005 12m rolling: Jan 02- Dec 30	RR=53%	6 SE strata; 2005 SECU; 1999 design df	(Ialomiteanu & Adlaf, 2008; Ialomiteanu, Adlaf, Mann, & Rehm, 2009)
2008 (23)	Telephone	ISR		N= 2,024 12m rolling: Jan 05- Dec 28	RR=55%	6 SE strata; 2024 SECU; 2018 design df	(Ialomiteanu & Adlaf, 2009)
2009 (24)	Telephone	ISR		N=2,037 12m rolling: Jan 2- Dec 30	RR=57%	6 SE strata; 2037 SECU 2031 design df	(Ialomiteanu & Adlaf, 2010; Ialomiteanu, Adlaf, Mann, & Rehm, 2011)
2010 (25)	Telephone	ISR	In 2010, the target sample was increased to 3,000 completions; Sampling revised to 4 quarterly (from 12 monthly) samples..	N=3,030 12m rolling: Jan 2- Dec 28	RR=51%	6 SE strata; 3030 SECU 3024 design df	(Ialomiteanu & Adlaf, 2011)
2011 (26)	Telephone	ISR		N=3039 **4Q rolling:** Jan 4–Dec 20	RR=51%	6 SE strata; 3039 SECU 3033 design df	(Ialomiteanu & Adlaf, 2012; Ialomiteanu, Adlaf, Hamilton, & Mann, 2012)

Year	Mode of Interview	Survey Organization	Sample Design	Sample (N) Date	RR *deff*	Standard Error Calculation Model	Source
2012 (27)	Telephone	ISR	A province-wide **dual-frame** RDD sampling frame was introduced: (1) a province-wide **list-assisted** RDD sampling frame (90% of the sample) and (2) a province-wide **cell-phone** RDD sampling frame (10% of the sample).	N=3030 **4Q rolling:** Jan 3–Dec 28	RR=51%	6 SE strata; 3030 SECU 3024 design df	(Ialomiteanu & Adlaf, 2013)
2013 (28)	Telephone	ISR		N=3021 **4Q rolling:** Jan 2–Dec 20	RR=48%	6 SE strata; 3021 SECU 3015 design df	(Ialomiteanu & Adlaf, 2013; Ialomiteanu, Adlaf, Hamilton, & Mann, 2014)
2014 (29)	Telephone	ISR		N=3043 Jan 02–Dec 17	RR=45%	6 SE strata; 3043 SECU 3037 design df	(Ialomiteanu & Adlaf, 2015)
2015 (30)	Mixed Mode Telephone + Online experiment	ISR		N=5013 Jan 05–Dec 23	RR=41% CR=46%	6 SE strata; 5013 SECU 5007 design df	(Ialomiteanu, Adlaf, & Mann, 2016; Ialomiteanu, Hamilton, Adlaf, & Mann, 2016)
2016 (31)	Telephone (Dual-frame experiment in Toronto)	ISR		N=3042 Jan 04–Dec 06	CR=46% RR=38%	6 SE strata; 3042 SECU 3036 design df	(Ialomiteanu, Adlaf, & Mann, 2017; Northrup, 2017)
2017 (32)	Telephone Dual-Frame (landline+cell)	ISR		N=2812 Jan 04–Dec 18	CR=46% RR=35%	6 SE strata; 2812 SECU 2806 design df	(Ialomiteanu, Adlaf, & Mann, 2018; Northrup, 2018; Ialomiteanu, Hamilton, Adlaf, & Mann, 2018)

Notes: **ARF**, Addiction Research Foundation; **ISR**= Institute for Social Research, York University, **RR** = unweighted unit response rate; **CR** = completion rate; ***deff*** = average design effect; **SE** = standard error; **SECU**=Standard Error Calculation Unit (respondents).

The *CAMH Monitor* Sampling Plan

The 2017 *CAMH Monitor* target population – the population which we intend to make inferences about – was noninstitutionalized adults aged 18 and older residing in Ontario during the calendar year 2017 (N=10,766,725). To represent this target population, we employed a **sample** (or frame) **population** – the population that has an actual chance of being selected – based on telephone numbers (landline and cell phones) from which, corresponding adult household members residing in Ontario during 2017 and who were capable of completing the interview in English, were selected. Thus, **excluded** from selection were adult households without a phone, those adults who were institutionalized, those too ill or aged to be interviewed, and those who were unable to complete the interview in English.

Textbox 1
2017 *CAMH Monitor* Target and Sample Population

Target population
- noninstitutionalized Ontario adults aged 18 and older residing in Ontario during 2017 (N=10,766,725)

Sample (frame) population
- telephone numbers (including landline, cell/wireless or mobile phones, unlisted or newly connected or listed numbers) and their household members aged 18 and older
- residents of Ontario during 2017
- able to complete telephone interview in English

Excluded from sample frame
- phoneless households

Excluded from sample population
- institutionalized (hospitals, prisons)
- under 18 years
- language barrier

Note: Military personnel residing in civilian residences are not excluded

Since 2000, the *CAMH Monitor* has been a regionally stratified, list-assisted RDD rolling survey. To meet the challenges arising from increasing rates of noncoverage in landline-based telephone samples due to cell-phone-only households (see Sean Hu, Balluz, Battaglia, & Frankel, 2011), in 2017 the CAMH Monitor expanded the list-assisted random digit dialing survey to a dual-frame (landline and cell phone numbers) survey. Thus, a province-wide **dual-frame** RDD sampling frame was employed: (1) a province-wide **list-assisted** RDD sampling frame (90% of the sample) and (2) a province-wide **cell-phone** RDD sampling frame (10% of the sample).

(1) The landline/list-assisted RDD sampling frame

The sample design employed a **stratified** (by six regional area code aggregates) **two-stage** (PSU=telephone number; SSU=respondent) **list-assisted RDD rolling quarterly[11] probability selection** procedure, which interviewed English-speaking household residents of Ontario aged 18 or older. Similar to previous years, the four quarterly non-overlapping samples were cumulated to provide a single calendar year dataset (Alexander, 2002; Kish, 1999).

Since 2000, the sampling frame has been built using 10-digit telephone numbers in Ontario consisting of (1) an area code, (2) a central office code, exchange or prefix (the first three digits of the telephone number), and (3) a suffix or bank (the last four digits of the telephone number).

[11] In 2011, the sampling interval was revised from monthly samples to quarterly (i.e., trimonthly) samples. The reason for this change was to increase the call-back period in order to maximize the contact and response rate.

A list of telephone numbers in Ontario was generated from CD-ROM versions of telephone directories and other commercially available lists. Telephone numbers from these sources, as well as numbers on either side of selected listed numbers are included in the sampling frame. For example, if the selected directory-published number is xxx-xxx-8513 then all numbers from xxx-xxx-8510 through xxx-xxx-8519, are added to the sampling frame *even if they are cell phone numbers, unlisted or newly connected or listed numbers* (unless they are known not-in-service numbers). A computer then generates a random (i.e., EPSEM) sample of telephone numbers from this list from which each quarterly (or monthly in earlier cycles) sample is drawn. This strategy of using **a list-assisted frame** provides a superior sample. In total, in 2017, 2520 interviews were completed using the list-assisted frame (2458 landline interviews and 62 cell phone interviews).

Textbox 2
The *CAMH Monitor* Sampling Design

Stage of Selection	Primary Sampling Unit (PSU) / Secondary Sampling Unit (SSU)	Strata
1.	**Telephone number**; selected with equal probability and without replacement for each quarterly sample using list-assisted RDD rolling sampling	Six aggregated area code-based regions; equally allocated (disproportional to population allocation)
2.	**Respondent** aged 18+, selected using a "modified" last birthday method	None

List-Assisted Sample Selection

Stage 1 — Telephone number selection (PSU – primary sampling unit): Within each of the six aggregated area code regional strata, each quarter a random sample of 10-digit telephone numbers (i.e., area code – exchange – suffix) was selected with equal probability (EPSEM) and without replacement (WOR) from the list-assisted frame.

Stage 2 — Respondent selection (SSU – secondary sampling unit): Within the household of selected telephone numbers, one respondent age 18 or older who could complete the interview in English was usually selected according to the last-birthday method (Binson, Canchola, & Catania, 2000; Rizzo, Brick, & Park, 2004).[12]

Starting in 2015, the question on the selection of the respondent in a household was slightly modified to increase the probability of selecting a younger adult (aged 18 to 30) as the respondent in a household to increase sample representativeness. In the past, interviewers had asked, "*Including yourself, how many people 18 years of age or older live in your household?*" In 2017, interviewers asked, "*Including yourself, how many people between 18 and 30 years of age live in your household?*" If there was only one person who was between the ages of 18 to 30 living in a household, this person was identified as the respondent. If there were two or more younger adults in a household, one of the younger adults was randomly selected using the next birthday method. In households where there was no one 30 years of age or younger, there was no change in the probabilities of selection and the next birthday selection method was used. Since the total number of adults in a household (age 18 and over) does not change regardless of the age of the adult respondent being selected, and only the

[12] Such methods are frequently employed because there is a desire to employ unobtrusive strategies to draw a probability sample (i.e., a full listing of all household residents) without depressing response rates (Groves et al., 2009).

total number of adults in a household is used to calculate weights in a household, the calculation of weights for 2017 did not differ from previous cycles of CAMH Monitor.

A minimum of 12 call backs were placed to unanswered numbers and **refusal conversion attempts** were made with all respondents who refused to participate on the first contact.[13]

To help maximize the response rate, all selected telephone subscribers were mailed (addresses retrieved from reverse directories) a **pre-notification letter,** about one week before the phone call, describing the purpose of the survey and that they would soon be invited to participate in the survey.

To increase the precision of estimates within different areas of the province, the sample was equally allocated among six strata derived from adjacent telephone area codes, thus resulting in a **disproportional-to-population** allocation (see **Appendix A, Table A1)**.

(2) The Cell-Phone RDD Sampling Frame

As mentioned above, in 2017, a **province-wide dual-frame** sampling was employed for the CAMH Monitor Survey. The dual-frame component included adding a cell-phone sample to the landline/list-assisted sample. In total, 292 interviews were completed using the cell-phone sampling frame. Similar to the selection of the landline sample, cell phone telephone numbers were randomly selected from the six sampling regions. Because a listing of cell phone numbers does not exist, the cell-phone sampling frame was created from the list of dedicated cell phone exchanges for the six geographical areas (see **Appendix A, Table A2** for more details)

[13] These refusal conversion attempts are conducted by the most experienced interviewers. Respondents who refuse by requesting to be put on the 'do-not-call list' (even though researchers are exempt from this list) or are distressed about the request are never re-contacted.

Cell Phone Sample Selection

Stage 1 — Cell phone number selection

Similar to the selection of the landline sample, **cell phone telephone numbers** were **randomly selected** from the six sampling regions. However, unlike landline telephone numbers (where listed telephone numbers are compiled and supplemented with commercially available lists), a listing of cell phone numbers (i.e. 'phonebook') does not exist. Therefore, cell phone samples are created from the list of dedicated **cell phone exchanges** for the six geographical areas. The geographical information available for each number is limited to the area code (which determines broadly which area of the province the cell phone is used in) and the 'rate centre' (the city where that phone exchange switching station is located, and the free dialling zone associated with the cell phone number). This generally results in a larger calling zone and requires a larger sample and screening to determine if the cell phone number is in the designated area (see **Appendix A, Table A2**). Because it is not possible to obtain street (or mailing) addresses for cell phone numbers, advance letters were not mailed to households in advance of an interviewer calling. Similar to landline samples, the cell phone sample includes 'not-in-service' and 'non-residential' telephone numbers, but unlike landline numbers a non-trivial proportion of the numbers are screened out as they are not in the geographical area of interest.

Stage 2 — Respondent Selection

In landline samples, the second stage of the sample selection process is the random selection of a respondent from the selected household (using the modified birthday selection method if there is more than one adult in the household). The assumption is that the landline telephone number is associated with all eligible members of the household. For the CAMH Monitor cell phone sample, (as with most cell phone surveys, including the CDC's Behavioural Risk Factor

Surveillance System)[14], the assumption is that each cell phone is linked to a single individual and is not shared with other household members. Therefore, regardless of the number of adults living in the household, the **adult user** of the **cell phone** is selected as the **respondent** (i.e. no random respondent selection). The interviewing protocol for cell phones is as follows: (1) first, the interviewer determines whether the cell phone is used mainly for personal use; (2) the interviewer determines if the respondent is in a place where they can safely talk on the phone to answer questions, and (3) the interviewer determines that the respondent is at least 18 years old.

More details about the 2017 CAMH Monitor survey can be found in Ialomiteanu, Adlaf, & Mann, 2018 available from the CAMH Monitor website (http://www.camh.ca/camh-monitor).

2.2 Computer Assisted Telephone Interviewing (CATI)

To reduce the response load or burden while maximizing questionnaire content and flexibility, the *CAMH Monitor* employs a matrix interview design, whereby within each panel, random subsets of respondents are asked various modules of questions, while other respondents are concurrently asked modules of alternative questions.

Two split-ballot interview panels were employed in the 2017 *CAMH Monitor*. Both panels included core items – questions asked among all respondents – and panel items – questions asked among only a single panel of respondents. The CATI system randomized respondents to one of two panels, **Panel A** or **Panel B**. Both panels were administered concurrently throughout the 2017 calendar year.[15]

The major advantage of this approach is that the interview content can be maximized without increasing the response load or burden on a single respondent. In addition, the CATI system's ability to randomize respondents between different question versions and formats readily allows for methodological sub-studies on question wording, order, etc.[16] A disadvantage of matrix interviews, however, is that sample sizes for split sample analysis are reduced (unless imputation methods are used to restore the sample size). Some discussion of matrix sampling can be found in the literature (Heeringa et al., 2010; Thomas, Raghunathan, Schenker, Katzoff, & Johnson, 2006).

Questionnaire Pretesting and Interviewing

To assess usability – how well the instrument works in practice – full interviews with special attention paid to new items in the CM 2017 were field pretested with a minimum of 25 respondents. Pretest assessments also included interviewer debriefing and expert questionnaire review provided by ISR and CAMH staff.

The 2017 interview averaged **24.6 minutes** (range 10–71 min.; median 23 min.; 85% of interviews completed within 30 min). Interviews were conducted by 45 ISR interviewers, many of whom had considerable CATI experience and had completed interviews on prior CAMH surveys.[17] In addition, all respondents who refused to participate on the first contact were re-contacted by a seasoned interviewer with the purpose of converting the respondents initial refusal to participation (13% of initial refusers were converted).

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[14] https://www.cdc.gov/brfss/annual_data/2016/pdf/overview_2016.pdf

[15] Beginning in 2010, the two CATI panels (A and B) became concurrently administered in 12-month periods and were reallocated to produce samples of 1,000 and 2,000 completions, respectively. Panel A is allocated to tobacco content (and sponsored by the Ontario Tobacco Research Unit), while the larger Panel B is allocated to general prevalence and surveillance.

[16] As well, potential questions can be assessed and pretested on a subsample prior to live field interviewing.

[17] Each cycle of the *CAMH Monitor* was approved by the *CAMH* Research Ethics Board.

2.3 Data Quality: Participation, Sample Characteristics and Representativeness

Participation

A total of 11,972 telephone numbers were selected during the four quarters of 2017 (of which 2,213 were selected from a cellphone sampling frame) and 7,712 were known, or estimated, to be eligible. Of these telephone numbers, **2,812** respondents participated, representing an eligibility-adjusted total sample **cooperation rate** of **46%** and a total sample **response rate** of **35%** (quarterly response rates varied from 33% to 37%)**.**

The CM2017 unit response rates are comparable to those of other major Canadian alcohol and drug use surveys, including the 2017 CTADS (*Canadian Tobacco, Alcohol and Drugs Survey*) (Statistics Canada, 2018), which obtained an overall response rate of **36%.**

CAMH Monitor Response Rate Trends

Declines in response rates in the past two decades have been common to many large-scale surveys (Groves et al, 2009:186–188; Groves, 2011; Miller, 2017), including the *CAMH Monitor*. Unit response rates for the 27 RDD *CAMH Monitor* surveys conducted between 1991 and 2017 (see **Table 2.1**) varied from 69% to 37%. Although the year-to-year change in the response rate is small, the cumulative reduction is significant and worrisome.

CAMH Monitor's response rate declined from 45% in 2014 to 37% in 2017. Part of this decline can be attributed to the inclusion of a mixed-mode (in 2015) and a dual frame methodology (landline telephone and cell phones in 2017) to the data collection process.

Yet, despite the downtrend in response rates, recent evidence suggests that this decline need not translate into a corresponding decline in sample representativeness (Chang & Krosnick, 2009; Curtin et al., 2005; Keeter, Miller, Kohut, Groves, & Presser, 2000).

We cannot ignore the possible link between the nonresponse rate and nonresponse bias. Although the response rate is a key marker of data quality, the caveat is that we rarely know to what extent the response rate represents nonresponse bias. Rather, the magnitude of the response rate is best viewed as indicating the *potential*, not the presence of nonresponse bias (Biemer & Lyberg, 2003; Groves et al., 2004; Groves & Peytcheva, 2008).

Another interpretative challenge with response rates is the difficulty establishing an accepted threshold – some argue it is even dangerous to do so (Lohr, 1999) – because of the wide variation in their calculation, and varying definitions of components of the numerator and denominator. Moreover, defining an acceptable threshold is futile without knowledge of the difference between respondents and nonrespondents (which is rarely known) (Biemer & Lyberg, 2003:90).

Sample Representativeness

The 2017 *CM* sample represents noninstitutionalized residents aged 18 and older residing in Ontario during calendar year 2017 (a population of approximately 10,766,725 adults). To evaluate the representativeness of our sample, we compared characteristics of respondents aged 18 and older with comparable 2016 Ontario Census figures (Statistics Canada, 2018).[18]

Of the four comparisons available, two – sex and age – showed no significant differences between the 2017 CM and 2016 Census distributions, indicating that the sample with its post-adjusted weights calibrate well to the population for these characteristics.

Additional demographic comparisons were available only for marital status and region.

[18] 2017 *CM* respondent characteristics were derived using final postadjusted weights. Significant differences were determined if the Census figure fell outside the 2017 *CM* confidence interval.

There were significant differences between the 2016 Census and CM2017 figures only for marital status (data was available only for adults aged 20 and older). Compared to Ontario Census figures from 2016, the 2017 CM sample *underrepresented* those widowed, divorced or separated (15.6% vs. 12.5%).

One of the measurable indicators of response quality is item missingness – the propensity to answer every designated question. In this report, *CAMH Monitor* data are neither imputed nor adjusted for item missingness, but are removed listwise.

2.4 Measures Used in this Report

Measuring the spectrum of alcohol and other drug use requires the collection of multiple indicators. Some of the data required to estimate consumption are *prevalence*– what percentage of the population consumes a given drug, *frequency* – how often the drug is consumed, *quantity* – how much is consumed, and *concentration* – how potent is the substance. In this report, we limit our attention to a few of these factors. For alcohol consumption, we describe the prevalence, frequency, and quantity, whereas, for other drug use, we describe the prevalence and, data permitting, frequency. To assess the harms of alcohol, tobacco, other drug use and impaired mental wellbeing, we also employ validated screeners assessing hazardous or harmful patterns of alcohol (AUDIT – *Alcohol Use Disorders Identification Test*), tobacco (HIS – *Heaviness of Smoking Index*), and cannabis use (ASSIST–CIS- *Cannabis Involvement Score*) and psychological distress (*Kessler K6*) (see **Table 2.3**). Additional standardized measures include health and mental health related items – self-rated health and mental health status and physically and mentally unhealthy days – from the CDC developed *Health-Related Quality of Life* scale (HRQoL–4) and the *Problem Gambling Severity Index* (PGSI).

Although questions and modules have been added, deleted, or periodically repeated over the lifecycle of this study, to ensure valid trend comparisons, drug use and mental health questions have remained similar across each of the available on-going 22 surveys (1996-2017) (several measures are available since 1977). In addition to internal comparability across time, several surveillance items employed in the *CAMH Monitor* are drawn from standard survey practice (e.g., alcohol and other drug use question formats and wordings) as are the use of validated screeners currently being employed in other national settings.

This comparability not only enhances the potential for cross-national and cross-provincial research, but also is deemed a key dimension of data quality (Biemer & Lyberg, 2003).[19]

Regarding demographic characteristics, we have restricted our attention to the few critical social determinants of addiction and mental health risk factors (sex, age, region, marital status, education and income) (see **Tables 2.2** and **2.3**).

More details about the CAMH Monitor survey are available at http://www.camh.ca/camh-monitor.

[19] The remaining six quality dimensions identified by Eurostat include the following: relevance, accuracy, timeliness, accessibility, and clarity of information, coherence, and completeness.

Textbox 4
The 2017 CAMH Monitor Sample

- Target population: noninstitutionalized Ontario adults aged 18 or older. Telephone numbers drawn by a dual-frame (list-assisted +cell-phone) RDD stratified (6 area code regions), two-stage (telephone number; then respondent) sampling plan.

- 11,972 randomly selected telephone numbers (including landline, cell/mobile, unlisted and newly-published), of which 2,213 were selected from a cell-phone frame, and a total of 7,712 were estimated to be eligible.

- **2,812** respondents aged 18 or older completed the computer assisted telephone interviews (CATI) in English between January 02 and December 18, 2017 (2458 landline and 354 cell phone interviews; Panel A= **999**; Panel B=**1,813**).

- **46%** cooperation rate**; 35%** unit response rate

- Two concurrently administered Computer Assisted Telephone Interviews (CATI) were conducted in English *throughout* the 2017 calendar year and averaged **24.6 minutes** in length (85% of interviews completed within 30 minutes).

- Sample represents **10,766,725** Ontarians aged 18 or older; each respondent represents **3,828** Ontario adults.

- **48%** men (*n*=1150); **52%** women (n=1662)
- Mean age of **48.9** years (range 18–98 years)
- Sample equally allocated within six telephone area code regions

- Compared to the available demographic characteristics for Ontario residents from the 2016 Census, the *CM2017* respondents were *similar* for gender, age, and region, but *underrepresented* those widowed, divorced, or separated.

Table 2.2

Socio-Demographic/ Risk Factor Measures

Measure	Number of Categories and Category Type	
Sex	*2*	Men; women
Age (in years)	5	18–29; 30–39; 40–49; 50–64; 65+
	4	18–29; 30–39; 40–49; 50+
Marital Status	4	Never married; married; living with partner; previously married (i.e. widowed, divorced or separated).
	3	Never married; married (including living as married); previously married (i.e. widowed, divorced or separated).
Region	6	**Region - Design Strata** – based on adjacent regional area codes: Toronto (416, 647); Central East (705, 905, 289); Central West (519, 905, 289) ; West (519, 226); East (613, 343); North (705, 807) (Also see Appendix A, Table A1 and A2)
	14	**Local Health Integration Networks (LHIN)** – based on 14 geographical areas of Ontario: Erie St. Clair; South West; Waterloo Wellington; Hamilton Niagara Haldimand Brant; Central West; Mississauga Halton; Toronto Central; Central; Central East; South East; Champlain; North Simcoe Muskoka; North East; and North West (see appended map in Chapter 9)
Highest Education	4	Not completed high school; completed high school; some college or university (includes completed college); completed university degree (BA or higher)
Gross Annual Household Income ('000)	5	Less than $30K; $30–$49K; $50–$79K; $80K+; not stated

Table 2.3: **Definition of Addiction and Mental Health Measures**

Measure	Definition
ALCOHOL USE	
Drinking Status	Percentage classified to one of three categories: ***lifetime abstainers*** (those never drinking alcohol in their lifetime); ***former drinkers*** (those drinking alcohol in lifetime, but not in past 12 months); and ***current drinkers*** (those reporting drinking alcohol in past 12 months) (Available 1977, 1982, 1984, 1987, 1989, 1991–2017)
Past Year Drinking	Percentage reporting drinking alcohol at least once during the 12 months before the survey (Available 1977, 1982, 1984, 1987, 1989, 1991–2017).
Daily Drinking	Percentage reporting drinking at least one alcoholic drink every day during the 12 months before the survey (Available 1977, 1982, 1984, 1987, 1989, 1991–2017)
Five or More Drinks (Binge Drinking)	Percentage reporting drinking five or more alcoholic drinks on a single occasion on a weekly basis during the 12 months before the survey (Available 1977, 1982, 1984, 1987, 1989, 1991, 1994–2017)
Number of Drinks Consumed in Past Year	Estimated number of alcoholic drinks consumed in the past 12 months is the product of the frequency of drinking during the past 12 months and the number of drinks typically consumed per occasion (Available 1992–2017)
Exceeding Low-Risk Drinking Guidelines	Percentage exceeding the 2011 Canadian Low-Risk Drinking Guidelines. Based on exceeding weekly and daily sex specific limits (for men: no more than 15 standard drinks per week and 3 drinks in a single day; for women: no more than 10 standard drinks per week and 2 drinks in a single day). Also, alcohol intake on any one day should not exceed 2 standard drinks. (Available 2003–2009; 2011–2016; Panel subsample)
Hazardous or Harmful Drinking (AUDIT)	Percentage scoring 8+ on the AUDIT screener. Based on 10 items assessing alcohol intake and past 12 month alcohol-related harms and hazards. See Table 3.6.1 for items. (Available 1998–2017)
CIGARETTE USE	
Smoking Status	Percentage classified to one of five categories: ***never smokers*** (never smoked 100+ cigarettes in lifetime); ***former non-daily*** (never smoked daily and did not smoke in the past 30 days); ***former daily*** (smoked daily but did not smoke in the past 30 days); ***non-daily*** (never smoked daily but smoked occasionally in the past 30 days); ***daily smoker*** (smoked daily and smoked in the past 30 days) (Available 1996–2017)
Current Smoking	Percentage reporting 1) smoking daily or occasionally, 2) having smoked over 100 cigarettes in their lifetime, and 3) having smoked within the past 30 days (Available 1991–2017)
Daily Smoking	Percentage reporting (1) smoking at least one cigarette daily, 2) having smoked over 100 cigarettes in their lifetime, and 3) having smoked within the past 30 days (Available 1996–2017)
High Nicotine Dependence (*Heaviness of Smoking Index* -HSI)	Percentage of daily smokers who score 5 or 6 (high dependence) on the 2-item HSI. Based on (1) time to first cigarette in morning and (2) number cigarettes smoked per day. (Available 1996–2017)
CANNABIS USE	
Lifetime Cannabis Use	Percentage reporting the use of marijuana or hashish at least once in their lifetime (Available 1977, 1982, 1984, 1987, 1989, 1991–2017, excl. 1993, 1995)
Past Year Cannabis Use	Percentage reporting the use of marijuana or hashish at least once during the 12 months before the survey (Available 1977, 1982, 1984, 1987, 1989, 1991–2017; excl. 1993, 1995)

Measure	Definition
Hazardous or Harmful Cannabis Use (ASSIST–CIS)	Percentage scoring 4+ on the Cannabis Involvement Score on the ASSIST screener. Based on 6 items assessing cannabis consumption and past 3 month cannabis-related problems. See Table 5.1.5 for items. (Available 2004–2017; Panel subsample)
OTHER DRUG USE	
Lifetime Cocaine Use	Percentage reporting the use of cocaine at least once in their lifetime (Available 1984, 1987, 1989, 1991, every even year since 1994 until 2010; 2011–2017; Panel subsample)
Past Year Cocaine Use	Percentage reporting the use of cocaine at least once during the 12 months before the survey (Available 1984, 1987, 1989, 1991, every even year since 1994 until 2010; 2011–2017; Panel subsample)
Medical and Nonmedical Use of Prescription Opioid Pain Relievers	Percentage reporting medical and nonmedical use of prescription opioid pain relievers at least once during the 12 months before the survey (Available 2010–2017; Panel subsample)
DRUGS AND DRIVING	
Driving after Drinking	Percentage of drivers with a valid licence reporting driving within one hour of consuming two or more drinks of alcohol during the past 12 months (Available 1996–2017)
Driving after Cannabis Use	Percentage of drivers with a valid licence reporting driving within two hours of consuming cannabis during the past 12 months (Available 2002–2017)
OVERALL HEALTH	
Health-Related Quality of Life (HRQoL)	Percentage reporting two health related HRQoL items: self-rated ***fair/poor health*** (defined as self-ratings of *fair* or *poor* health in general); and ***frequent physically unhealthy days*** (defined as reporting 14 or more days of physically unhealthy days during the past 30 days) (Available 2003–2017; Panel subsample)
MENTAL HEALTH	
Psychological Distress (K6) (5+ cut-off)	Percentage reporting moderate or high level of distress using the Kessler K6 screener (cut-off of 5 or more out of 24). The 6 items assess nonspecific psychological distress (symptoms of anxiety and depression) over the past 30 days. (Available 2014–2017; Panel subsample)
Use of Prescribed Antianxiety Medication	Percentage reporting the use of prescribed antianxiety medication at least once during the 12 months before the survey (Available 1997, 1999–2017, excl. 2000, 2005, 2007; Panel subsample)
Use of Prescribed Antidepressant Medication	Percentage reporting the use of prescribed antidepressant medication at least once during the 12 months before the survey (Available 1997, 1999–2017, excl. 2000, 2005, 2007; Panel subsample).
Mental Health-Related Quality of Life (MHRQoL)	Percentage reporting two mental-health related HRQoL items: ***fair/poor mental health*** (defined as self-ratings of *fair* or *poor* mental health); and ***frequent mental distress days*** (defined as reporting 14 or more days of unhealthy mental health days during the past 30 days) (Available 2003–2017; Panel subsample)
	GAMBLING
Problem Gambling Severity Index (PGSI) (3+ cut-off)	Percentage reporting moderate or high risk of developing gambling problems (cut-off of 3 or more out of 27). Gambling problems were measured using the 9 items of the Canadian Problem Gambling Index (CPGI) and its Problem Gambling Severity index (PGSI) (Available 2005; 2015-2016; Panel subsample)

2.5 Data Weighting & Estimate Suppression

Data Weighting

For many good reasons, most notably the control of precision, most sample surveys do not select respondents at a probability matching their representation in the population. Consequently, such data require sample or case weights attached to each respondent to ensure that their share of the sample equals their share of the population. The weights are based on the inverse of the product of (1) the probability of selecting a telephone number within a stratum; (2) the probability of selecting one respondent within the telephone household (components 1 and 2 form the base weight); and (3) post-stratified calibration to census figures based on eight age-by-sex classes.[20] In the CM2017, on average, each respondent represents or "stands in" for 3,828 Ontario adults [21] (see Ialomiteanu, Adlaf, & Mann, 2018, for more details about data weighting).

Estimate Quality & Trustworthiness

There are two key aspects to the statistical quality of survey estimates: *precision* – measured by the lower and upper limits of the 95% confidence interval; and *stability* – measured by the ratio of the standard error to its estimate. Design-based confidence intervals indicate the probable error of a given survey estimate being correct while accommodating the inflated error induced by the complex survey data. Thus, a ±1.9%, 95% CI with the maximum limits (48.1%, 51.9%) (based on a *CAMH Monitor* sample of 3,000 with a percentage estimate of 50%) indicates that *with repeated sampling* using the same sampling plan, 95% of the sample CIs would contain the true, but unknown, population value. In essence, CIs provide a probability statement of how often we expect this interval to correctly capture the population value.

Confidence intervals, however, do not quantify total errors or accuracy. Errors as measured by confidence intervals do not include nonsampling errors such as question nonresponse, problems of respondent memory and recall, interviewer effects, underreporting of stigmatized behaviours (such as drug use and impaired mental health). The statistical precision of an estimate, as indicated by the confidence interval, is not synonymous with total accuracy, but rather, is a component of it. Indeed, accuracy (also known as mean square error) is a function of both precision and bias; heuristically, $accuracy = precision + bias^2$.

The ratio of the standard error to its estimate, the coefficient of variation, (CV) (or relative standard error), is a measure of relative variability and is especially useful when comparing the precision of different measures based on different sample sizes and is also used to identify estimates with considerable statistical inaccuracy suggesting the need for possible data suppression (Kalton, 2009).

Data Suppression

Statistically, some estimates are less trustworthy than others – namely, those based on a sparse number of respondents in the numerator or denominator, or estimates based on low percentage values. To assist readers and data users in assessing the accuracy of 2017 *CM* estimates (Kalton, 2009), we suppressed any estimate as statistically untrustworthy if the coefficient of variation exceeded 33.3 (a standard practice employed by national statistical agencies) or, regardless of the sample size, if the estimated percentage was less than 1%. Estimates replaced with a dagger ('†') indicate suppressed values; those adjacent to a dagger should be cautiously interpreted due to moderate sampling variability (i.e., 16.6≥CV≤33.3).

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[20] The eight post-strata are represented by the cross classification of the 2 sexes and 4 age groups: 18–24, 25–44, 45–64 and 65 and older.

[21] Both relative (i.e., sample size scaled) and expansion (i.e., population scaled) weights employed in the *CM2017* are rescaled versions of one other. The **relative weights** are scaled to the interviewed sample size (n=2812). The **expansion weights**, are scaled to the Ontario adult population (N=10,766,725).

Textbox 5
Complex Sample Estimation

Why do different sampling procedures affect the precision of sample estimates?

A key reason is that some sampling procedures (e.g., stratification and weighting) violate the assumption of independence, a necessary assumption for standard statistical estimation. The assumption of independence holds that the selection of one respondent must be independent of the selection of all other respondents. This assumption is typically violated in complex samples. The *CAMH Monitor*, for example, employs stratification by telephone area code. Analytically, this improves the sample because now, we can ensure that (1) there are sufficient cases in the North for estimation, and (2) when we compare regions, each has a sufficient and near equal number of respondents.

This desirable design feature, however, induces the criterion of independence to be violated because although proportional allocation typically leads to increased precision, the *CAMH Monitor* employs disproportional stratification, resulting in unequal probabilities of selection and the need for analysis or case weights, both of which combine to deflate the precision of estimates (relative to a SRS) and effectively reducing the effective sample size.

We are left with an ironic trade-off: while the stratification improves the precision and fitness for use of estimates, the consequence of stratification (i.e., sampling weights with potentially high variability) introduces the need for statistical analyses to accommodate the violations introduced by this stratification.

2.6 Complex Survey Data

Complex survey data do not conform to many estimating assumptions, including maximum likelihood, generalized linear and, most importantly, simple random sampling.[22] Complex sampling methods employ procedures that violate the independent selection of respondents. These procedures, such as disproportional stratification (culminating in unequal sampling fractions and the need for sampling weights), clustering (not employed in the *CAMH Monitor*), weighting, and multistage selection, combine to underestimate the variance (or error) when simple random sampling (SRS) formulas – the default used in standard statistical systems – are used inappropriately. The consequence of applying SRS-based assumptions when estimating variance from complex sampling designs is that we are likely to understate the error, and thereby compute a narrower confidence interval than truly exists. In turn, we also will be more likely to find an inflated number of statistically significant differences than actually exist (i.e., inflated false positive findings).

The **design effect** (*deff)*, an indicator of design efficiency, measures the net combined influence of clustering, stratification, weighting and multistage selection. The *deff* has been defined as:

"*the ratio of the variance of an estimator accounting for the sample design to the variance that would have been obtained if a SRS with same sample size had been employed"* (Kish, 1999), and as,

" *a measure of the precision gained or lost by use of the complex design instead of an SRS*" (Lohr, 1999:239).

A *deff* of 1.0 indicates equal precision between a SRS and an equivalent alternative sample, while a *deff* of 1.56, for example, indicates that the variance of a given variable of a complex sample is 56% inflated relative to an equivalent

[22] Indeed, MLE is contraindicated in the presence of complex survey data.

SRS. Stated differently, the complex survey sample results in a loss of sample information, by reducing the actual sample by 56% to an **effective sample size** (ESS) of 1,923 (i.e., 3000/1.56). Most variables in complex samples tend to have *deff*s larger than 1.0, and variances and standard errors larger than an equivalent SRS. Although the average *deff* across variables differs from one sample design to another, within the same sample, *deffs* will vary from one item to another.

Textbox 6
The Combined Effect of the Deff

Generally, the deff is a *net function* of (1) the *loss* in precision due to clustering (not used in the CM), (2) the *gain* in the precision due to stratification, and (3) the *loss* in precision due to variable sampling weights.

Given the potentially costly loss of sample information and precision, *why would complex surveys be considered a viable methodology?* The answer is simple: complex samples provide the highest precision for the lowest cost. Indeed, features of complex sampling – multistage selection, clustering and disproportional stratification (with its consequent sampling weights) optimize the variance/cost ratio of the final design (Heeringa et al., 2010). Although the *CAMH Monitor* design does not employ clustering, it does involve stratification and its related unequal sampling fractions and consequent sampling weights, and multistage selection, all of which require accommodation to resolve the possible violation of most statistical model assumptions.

In this context, one advantage of telephone surveys compared with other sampling strategies (especially those with highly clustered PSU selection), is that telephone surveys tend to produce lower *deffs*, often due to the selection of only one respondent per household (i.e., a final stage, non-clustered selection) and many RDD designs do not exceed two stages (Groves et al., 2009; Groves & Kahn, 1979).

Analyses

Our analyses have several features:

- All 2017 estimates (and estimates since 1996) are based on robust[23] methods implemented in the Stata® (version 13) suite of survey estimation procedures, which employ **pseudo-maximum likelihood estimation (PMLE)**[24] (also known as weighted MLE) in estimating point estimates (e.g., percentages, totals, means) and by default **Taylor series linearization** (TSL), a sandwich-type variance estimator, in estimating variances (e.g., standard errors, CIs) (StataCorp, 2013). In short, these methods use various strategies to accommodate the violations in data assumptions induced by the complex sample data. Design-based percentage point-estimates and their CIs were based on the *svy: tabulate* command (i.e., univariable and bivariable tabulations) and subgroup risk analyses were based on the *svy: logit* command.[25]
- Population estimates are provided for select health behaviours using Stata's *svy: total* command and expansion-scaled weights.

[23] Robust variance estimators – estimators robust to SRS violations – are also known as sandwich-type variance estimators, which include the Huber–White estimator.

[24] In pseudo–likelihood the standard errors are not derived directly from the log-likelihood of the model (Hilbe, 2009). PMLE is required to accommodate the violation of MLE assumptions generated by complex survey data.

[25] The Stata *sampling error calculation model* used for this analysis was as follows: *svyset IDNUM [pweight = FWGHTDF], strata (REGION*), where IDNUM represents respondents (the PSU codes); FWGHTDF represents the final normalized (or "sample-scaled") weight factor, whereas XWGHTDF represents the expansion "population-scaled" weights used to calculate population estimates); and REGION represents the six area code based regions (stratum codes). We also impose a standard simplifying assumption by restricting design specification to stage 1 sampling units given that stage 2 variances "roll-up" into stage 1 PSUs (Heeringa et al., 2010:67). In all, the 2017 CM has 6 sampling error strata and 2,812 sampling error computation units (respondents), resulting in 2,806 design-based degrees of freedom.

- **For variance estimation**, the 2-stage design can be approximated by the primary stage selection 2,812 telephone numbers (PSUs) from each of the six area code strata. In addition, our negligible sampling fraction allows us to ignore the finite population correction factor (fpc) in our estimation.[26]
- Complex sampling estimation employs a design-based fixed-rule calculation for the **degrees of freedom**: *df = (# PSUs) – (# strata*). In the 2017 *CM* this value for the total sample is 2,806 = (2,812) – (6).
- Estimates of sampling error (CIs) for surveys conducted between 1977 and 1995 are adjusted based on the effective sample size derived from the average design effect (see **Table 2.1**).
- One complicating feature of complex survey analysis is the **estimation among subpopulations** (e.g., drinking problems among drinkers or drinking men; distress among women; DWI among drivers). When such analyses are implemented by simply omitting observations outside the subpopulation (as is done with the use of conditional selection methods (e.g., *select if drinker*)) the software does not retain access to the original sampling error codes to properly compute degrees of freedom and variances, thereby resulting in understated variances and overstated inferences.[27] In this report, all subgroup analyses employ **unconditional subclass analysis** by specifying a *SUBPOP* procedure ensuring the correct identification of design codes of the sampling structure.[28]
- All analyses are based on those who provided responses to *all* model variables (i.e., listwise deletion).
- None of our analyses required the need to combine strata due to sparse data.

2.7 Outline of the Report

The 2017 Cross-Sectional Analyses

In reporting the 2017 *CM* findings, we present design-based percentage estimates and associated confidence intervals. As well, we examine associations between substance use and mental health with six demographic characteristics or epidemiologically-relevant risk factors described in **Table 2.2** – sex, age, marital status, region, education, and household income. Our analysis is descriptive, though we rely on statistical methods holding values of risk factors fixed among these six factors.

Our 2017 cross-sectional analyses employ design-based **multivariable logit models**. For each binary indicator or response, we employ a predictor set of maximum six risk factors. The categories *women* (SEX), *18–29* (AGE), *Ontario* (REGION), *married* (MARITAL STATUS), *not having completed high school* (EDUCATION), and *less than $30,000* (HOUSEHOLD INCOME) are set to the reference or contrast category. With the exception of REGION (which contrasted regional categories to the weighted grand provincial mean),[29] all predictor variables employed indicator coding.

[26] The fpc reflects the expected reduction in the sampling variance due to sampling without replacement and is applied when the sampling fraction n/N exceeds 5%–10%. Given the negligible sampling fraction of the 2017 CM (n/N=.03%) and the resulting fpc is ~ 1.0, we have employed the standard practice of ignoring the fpc in variance estimation (Korn & Graubard, 1999).

[27] This underestimation occurs because a conditional IF restriction removes all cases not satisfying the logical statement, *including their PSU and stratum codes*. Consequently, the correct denominator for the number of PSUs and strata for the original design, which are components of the calculation of the degrees of freedom and variances, are understated. The SUBPOP () option is especially critical for thinly sampled subpopulations.

[28] Such a procedure rather than removing respondents, assigns a weight of zero to all cases outside the subclass and retains the original weight for subclass cases thereby retaining the relevant design codes necessary for estimation (Heeringa et al., 2010; Korn & Graubard, 1999).

[29] Weighted grand mean contrasts compare a regional category to the mean of all regional means (the provincial mean).

Regarding the regional contrasts, for greater clarity of readers, we interpret this weighted grand mean contrast as one that contrasts the estimate of a specific region to the provincial estimate (i.e., the mean of all regional means).

In addition to OR testing the contribution of each category, overall tests for each factor are also assessed.[30] Sample size, percentage estimate and 95% confidence intervals and adjusted odds ratios are presented for each nonreference category (i.e., regressor). All risk factor analyses of binary indicators (e.g., drug use versus nonuse; distress versus not) employ design-based logit regression (Heeringa et al., 2010; Hilbe, 2009).

The Multi Year Trend Data

We also describe relatively **recent and long-term** changes in drug use and mental health outcomes. For **trend analyses**, we stacked (i.e., combined) all surveys for the years 1996 through 2017, culminating in a data set with **56,663** respondents dispersed among 126 strata (6 area code strata × 21 survey years).[31] Earlier surveys from1977 to1995 were not combined due to differing sample designs.[32]

In assessing trends, we assessed cross-time **change in the target population** by contrasting 2017 to all prior years through 1996, with a special emphasis on the most recent period between 2017 and 2016. Differences between years were assessed by odds ratios of a logit model.[33] Following an assessment of 2017 contrasts, we evaluated linear (straight line) and nonlinear trends for the 22-year period from 1996 through 2017. This analysis informs us about the pattern of trends in our data.

2.8 Presentation of Findings

Readers should note the following:

- Tables and figures typically provide a logit transformed, design-based 95% confidence interval, which indicates the probability of capturing the true population value within the specified interval, while accommodating features of the sample design.
- With the exception of population estimates, sample sizes displayed in all tables refer to the number of adults interviewed (i.e., the unweighted sample size).
- Some tabular estimates were deemed untrustworthy and were consequently suppressed (see Section 2.5).

[30] The contribution of each OR is assessed by the *z* test, whereas, the contribution of each multi-category factor is assessed by the overall Wald test.

[31] For trend analyses, we treat each survey as a stratum representing a distinct population. This allows us to assess changes in the population at different times (Korn & Graubard, 1999:287). Because we employed sample-scaled weights (rather than population weights) there is no need to rescale these weights in the cumulated data file. Moreover, when one is estimating time differences using cross-sectional surveys administered at different times, the original weights are appropriate to use (Korn & Graubard, 1999: 278–79; 284).

[32] See Alexander, 2002, Kish, 1999, and Korn & Graubard, 1999 for advice on combining and cumulating multiple complex survey datasets.

[33] Each logit model assessed the YEAR factor by contrasting 2017 to each prior year through 1996. The Stata command was as follows: svy: logit RESPONSE ib(last).YEAR, or.

Table Description

Below is a brief description of the tabular material.

Percentage ***Drinking Alcohol*** in the Past 12 Months, Adjusted Group Differences, Ontarians Aged 18 and older

		%	95%CI		Adjusted Odds Ratios
Total Sample		**79.6**	(77.4, 81.5)		
1) Sex					**
Men		**82.5**	(79.4, 85.3)		**1.47****
Women	(Comparison Group)	**76.8**	(73.8, 79.5)		—
2) Age		❶	❷		❸ NS
18-29	(Comparison Group)	**79.8**	(73.4, 85.1)		—
30-39		**84.6**	(78.0, 89.5)		1.17
40-49		**83.5**	(78.0, 87.8)		0.95
50-64		**81.2**	(77.3, 84.5)		0.92
65+		**70.8**	(67.5, 74.0)		0.75

❶**Percentage estimate**: Displays the estimated percentage among the total and by risk factor (e.g., sex, age group, etc.) We display estimates for six multi-category factors containing a total of 25 subgroups.

❷ **Confidence limits and interval**: Displays the confidence limits which define the confidence interval, the probable accuracy of the estimate – the *true* population value would be expected within this range in 95 of 100 sample CIs. Design-based confidence intervals account for characteristics of the sample design (i.e., stratification, weighting and multistage selection). In the table above, we see that 79.6% reported past 12 month drinking. Thus, ignoring nonsampling errors, we can be reasonably confident that while accommodating for the complex sampling plan, with repeated sampling *the true percentage of Ontario adults drinking in the population would be included within the interval 77.4% and 81.5% in 95 of 100 samples*. In addition, our CIs employ a logit transformation which, especially for estimates nearing 0 or 100, ensures that confidence limits will neither exceed 100 nor subceed 0. Consequently, CIs may become asymmetric (i.e., unequal) when the outcome nears either extremity.

❸ **Adjusted (Net) Odds Ratio**: Displays adjusted odds ratios holding values of the remaining five risk factors in the table fixed or constant. For example, *holding fixed values of the model predictors and accommodating the sampling design, the adjusted odds of past year drinking among men are 1.47 times higher (or 47% greater) than the odds for women*. Odds ratios less than 1 represent a net decrease in the odds, whereas ORs greater than 1 represent a net increase.

3. ALCOHOL

3.1. Alcohol Prevalence

The prevalence of past year drinking – the percentage consuming alcohol at least once during the 12 months before the survey – is an indicator of the relative size of the drinking population, and establishes the extent of potential exposure to alcohol-related problems.

2017……Table 3.1.1; Fig. 3.1.1–3.1.2

The estimated percentage of Ontario adults who have used alcohol in the12 months before the survey is **79.5%** (95% CI: 77.4% to 81.5%). The corresponding population estimate is 8,545,900 past year drinkers. In addition, 13.8% did not drink alcohol during the past 12 months and 6.6% were lifetime abstainers.

After adjusting for demographic characteristics, **sex**, **education** and **income** were significantly related to past year use of alcohol.

- The adjusted odds of drinking among men were 1.5 times higher than among women (82.5% vs. 76.8%; OR=1.47).
- The use of alcohol tended to increase with education. Use was lowest among those who have not completed high school (54.6%) and highest among those with university education (83.9%; OR=2.86).
- Past year drinking increased significantly with income. Relative to those with a household income of less than $30,000 (62.7%), the odds of drinking were three times higher for those with incomes of $80,000 or more (87.3%; OR=3.03).

There were no other significant differences in past year drinking.

Frequency of Drinking

Among past year drinkers, the most common frequency of drinking in 2017 was two to three times a week (18%). One-in-eight drinkers (14%) drank less than once a month and about one in 11 (9%) drank on a daily basis (*data not shown*).

Trends

1977–2017……Tables 3.1.2a-b; Fig. 3.1.3

2016–2017

Past year drinking did not change between 2016 and 2017 (79.7% vs. 79.5%). The prevalence of past year drinking was stable for all sex, age, region, marital status, and education subgroups.

1996–2017

Overall, between 1996 and 2017, past year drinking did not change significantly, varying between 77.1% and 81.5%.

Trend analyses done separately for each subgroup showed a significant non-linear decline among 18 to 29 year olds (from 89.5% in 2007 to 79.8% in 2017), and a significant increase among those aged 50 to 64 (from 76.0% in 1996 to 81.2% in 2017) and among those aged 65 years and older (from 58.8% in 1997 to 73.1% in 2016). There were also significant non-linear variations in past year drinking among married, previously married and never married respondents, and those with lower than high school and completed high-school education.

1977–2017

Long-term trend analysis between 1977 and 2017 revealed both a significant linear and non-linear trend in past year drinking with peaks in the mid-1980s, in the early 1990s, and again in 2014.

Table 3.1.1: Percentage ***Drinking Alcohol*** in the Past 12 Months and Adjusted Group Differences, Ontarians Aged 18+, 2017

	N	%	95% CI	Adjusted Odds Ratio (N= 2735)
Total	2812	**79.5**	(77.4, 81.5)	—
Sex				**
Men	1150	**82.5**	(79.4, 85.3)	**1.47****
Women *(Comparison Group)*	1662	**76.8**	(73.8, 79.5)	—
Age				NS
18-29 *(Comparison Group)*	283	**79.8**	(73.4, 85.1)	—
30-39	199	**84.6**	(78.0, 89.5)	1.17
40-49	366	**83.5**	(78.0, 87.8)	0.95
50-64	843	**81.2**	(77.3, 84.5)	0.92
65+	1110	**70.8**	(67.5, 74.0)	0.75
Region				NS
Toronto *(vs. Provincial Average)*	476	**78.5**	(73.5, 82.8)	0.82
Central East	476	**79.1**	(73.9, 83.5)	0.97
Central West	456	**79.4**	(77.1, 83.8)	0.99
West	468	**79.7**	(75.1, 83.6)	1.20
East	467	**80.9**	(75.9, 85.1)	1.03
North	469	**81.8**	(77.7, 85.3)	**1.43***
Marital Status				NS
Married/Partner *(Comparison Group)*	1730	**81.6**	(79.1, 83.8)	—
Previously Married	614	**69.7**	(64.2, 74.6)	0.85
Never Married	441	**79.2**	(73.7, 83.8)	0.93
Education				***
High school not completed *(Comparison Group)*	240	**54.6**	(45.7, 63.3)	—
Completed high school	612	**77.6**	(72.8, 81.8)	**2.50*****
Some college or university	986	**81.3**	(77.7, 84.5)	**2.78*****
University degree	933	**83.9**	(80.3, 87.0)	**2.86*****
Household Income				***
< $30,000 *(Comparison Group)*	266	**62.7**	(54.4, 70.3)	—
$30,000-$49,999	347	**72.6**	(65.7, 78.6)	1.51
$50,000-$79,999	483	**77.3**	(71.3, 82.4)	1.66
$80,000+	1079	**87.3**	(84.2, 89.9)	**3.03*****
Not stated	637	**74.7**	(70.0, 78.9)	**1.64***

Notes: (1) All analyses are sample design adjusted; *p<.05**;** **p<.01; ***p<.001; CI = 95% confidence interval; NS – not statistically significant.
(2) Asterisks in group row indicate a statistically significant group effect, based on Wald test.
(3) ORs greater than 1.0 indicate that the odds of drinking are higher in the group being compared to the comparison group; ORs less than 1.0 indicate that the odds of drinking are lower in the group being compared to the comparison group.
(4) Adjusted odds ratio holding fixed values for sex, age, region, marital status, education, and income.

Q: *During the past 12 months, have you had a drink of any alcoholic beverage?*

Source: The *CAMH Monitor*, Centre for Addiction and Mental Health

Table 3.1.2a: Percentage ***Drinking Alcohol*** in the Past 12 Months, by Demographic Characteristics, Ontarians Aged 18+, 1977–2000

	1977	1982	1984	1987	1989	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
(N=)	(1059)	(1040)	(1051)	(1084)	(1101)	(1047)	(1058)	(941)	(2022)	(994)	(2721)	(2776)	(2509)	(2436)	(2406)
Total	**79.9**	**77.6**	**84.5**	**83.1**	**82.6**	**80.3**	**86.6**	**83.3**	**82.1**	**84.4**	**79.3**	**79.9**	**77.1**	**79.1**	**77.1**
(95%CI)[a]	(73.6, 86.2)	(75.1, 80.1)	(82.3, 86.7)	(80.9, 85.3)	(80.4, 84.8)	(77.9, 82.7)	(84.5, 88.7)	(80.9, 85.7)	(80.4, 83.8)	(82.1, 86.7)	(77.5, 81.1)	(78.1, 81.6)	(75.0, 79.0)	(77.2, 80.9)	(75.1, 79.1)
Sex															
Men	**85.9**	**81.6**	**86.8**	**87.6**	**85.8**	**81.8**	**89.7**	**91.6**	**84.7**	**86.8**	**82.7**	**83.2**	**82.1**	**85.1**	**81.7**
	(82.9, 88.9)	(78.3, 84.9)	(83.9, 89.7)	(84.8, 90.4)	(82.9, 88.7)	(78.4, 85.2)	(87.0, 92.4)	(89.1, 94.1)	(82.6, 86.8)	(83.8, 89.8)	(80.6, 84.8)	(81.1, 85.3)	(79.2,84.6)	(82.4, 87.4)	(78.8, 84.3)
Women	**73.4**	**73.6**	**82.3**	**78.8**	**79.6**	**78.7**	**83.9**	**75.4**	**79.8**	**82.0**	**76.4**	**76.9**	**72.5**	**73.6**	**73.0**
	(69.6, 77.2)	(69.8, 77.4)	(79.0, 85.6)	(75.4, 82.2)	(76.2, 83.0)	(75.3, 82.1)	(80.9, 87.0)	(71.8, 79.0)	(77.2, 82.4)	(78.7, 85.3)	(74.3, 78.5)	(74.8, 79.0)	(69.6, 75.3)	(70.7, 76.3)	(70.1, 75.7)
Age															
18 - 29	**85.8**	**82.5**	**89.8**	**92.1**	**88.1**	**87.2**	**90.9**	**89.2**	**86.0**	**86.7**	**83.5**	**83.6**	**82.5**	**86.5**	**85.7**
	(81.8, 89.8)	(78.0, 87.0)	(86.2, 93.3)	(88.7, 95.5)	(84.0, 92.2)	(83.2, 91.2)	(87.5, 94.3)	(85.3, 93.1)	(82.9, 89.1)	(82.4, 91.0)	(80.3, 86.7)	(80.5, 86.7)	(77.9, 86.3)	(82.4, 89.8)	(81.5, 89.1)
30 - 39	**86.0**	**82.5**	**91.1**	**87.7**	**90.8**	**84.2**	**86.7**	**81.7**	**85.1**	**85.2**	**83.6**	**84.4**	**81.5**	**81.4**	**80.3**
	(81.4, 90.6)	(77.8, 87.2)	(87.5, 94.7)	(83.9, 91.5)	(87.5, 94.1)	(79.8, 88.6)	(82.7, 90.7)	(77.2, 86.2)	(82.1, 88.1)	(80.7, 89.7)	(80.8, 86.4)	(81.6, 87.2)	(77.5, 84.9)	(77.0, 85.0)	(75.8, 84.1)
40 - 49	**88.6**	**80.6**	**88.6**	**87.7**	**87.3**	**81.2**	**90.4**	**85.7**	**84.1**	**86.0**	**81.6**	**85.2**	**78.0**	**81.5**	**79.2**
	(84.0, 93.2)	(74.0, 87.1)	(84.1, 93.1)	(82.8, 92.6)	(82.4, 92.2)	(7.60, 86.4)	(86.4, 94.4)	(80.9, 90.5)	(80.7, 87.5)	(81.3, 90.7)	(78.4, 84.78	(82.3, 88.1)	(73.4, 81.9)	(77.1, 85.2)	(74.8, 83.0)
50 - 64	**76.2**	**76.2**	**80.0**	**80.9**	**74.2**	**73.8**	**83.1**	**81.0**	**78.2**	**86.4**	**76.0**	**77.4**	**77.2**	**78.0**	**76.5**
	(70.2, 82.2)	(70.4, 82.0)	(74.5, 85.5)	(75.6, 86.2)	(68.3, 80.1)	(66.7, 80.9	(77.1, 89.1)	(74.9, 87.1)	(73.7, 82.7)	(81.2, 91.6)	(72.2, 79.8)	(73.8, 81.0)	(72.2, 81.6)	(73.2, 82.1)	(71.7, 80.7)
65+	**53.5**	**58.5**	**64.8**	**58.2**	**66.8**	**63.8**	**73.6**	**72.0**	**67.0**	**71.6**	**66.2**	**58.8**	**65.5**	**66.6**	**61.9**
	(45.6, 61.4)	(49.8, 67.2)	(56.3, 73.3)	(50.7, 65.7)	(59.5, 74.1)	(55.6, 7.20)	(66.0, 81.2)	(64.3, 79.7)	(61.0, 73.0)	(63.6, 79.6)	(61.6, 70.8)	(54.0, 63.6)	(59.8, 70.9)	(61.2, 71.6)	(56.2, 67.3)
Region															
Toronto	—	—	—	—	—	—	—	—	—	—	**74.1**	**74.2**	**74.1**	**71.9**	**69.7**
											(69.1, 78.5)	(69.2, 78.6)	(68.9, 78.7)	(66.7, 76.6)	(64.4, 74.5)
C-East	—	—	—	—	—	—	—	—	—	—	**81.7**	**80.0**	**79.4**	**84.6**	**80.8**
											(77.6, 85.3)	(75.6, 83.8)	(74.6, 83.5)	(80.5, 87.9)	(76.4, 84.5)
C-West	—	—	—	—	—	—	—	—	—	—	**81.7**	**83.8**	**77.5**	**79.7**	**74.6**
											(77.4, 85.3)	(79.8, 87.2)	(72.6, 81.8)	(75.1, 83.6)	(69.5, 79.1)
West	—	—	—	—	—	—	—	—	—	—	**78.0**	**81.1**	**76.7**	**79.0**	**81.6**
											(73.9, 81.7)	(77.1, 84.6)	(71.8, 81.0)	(74.2, 83.1)	(77.1, 85.3)
East	—	—	—	—	—	—	—	—	—	—	**81.1**	**81.2**	**79.5**	**81.7**	**80.8**
											(77.0, 84.5)	(77.2, 84.7)	(74.9, 83.5)	(76.9, 85.6)	(76.2, 84.7)
North	—	—	—	—	—	—	—	—	—	—	**82.0**	**81.1**	**74.8**	**81.2**	**83.2**
											(78.1, 85.4)	(77.0, 84.5)	(69.9, 79.2)	(76.7, 84.9)	(79.1, 86.7)

Cont'd

	1977	1982	1984	1987	1989	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
(N=)	(1059)	(1040)	(1051)	(1084)	(1101)	(1047)	(1058)	(941)	(2022)	(994)	(2721)	(2776)	(2509)	(2436)	(2406)
Marital Status															
Married/Partner	—	—	—	—	—	**79.3**	**87.4**	**82.0**	**81.5**	**85.1**	**79.8**	**79.9**	**77.7**	**78.9**	**76.5**
Previously Married	—	—	—	—	—	**73.6**	**81.1**	**76.5**	**76.8**	**80.5**	**72.5**	**74.3**	**65.3**	**69.5**	**68.9**
Never Married	—	—	—	—	—	**85.8**	**87.5**	**89.5**	**85.8**	**84.8**	**82.5**	**82.8**	**81.4**	**85.7**	**83.4**
Education															
HS not completed	—	—	—	—	—	**64.3**	**84.0**	**78.2**	**72.1**	**79.1**	**69.4**	**68.7**	**68.4**	**66.7**	**61.1**
Completed HS	—	—	—	—	—	**81.4**	**84.4**	**81.7**	**83.1**	**83.0**	**79.8**	**77.0**	**73.0**	**78.7**	**76.6**
Some college or university	—	—	—	—	—	**87.2**	**90.2**	**81.8**	**85.9**	**84.2**	**82.4**	**86.1**	**81.7**	**83.0**	**84.6**
University degree	—	—	—	—	—	**87.4**	**88.2**	**92.4**	**85.3**	**91.4**	**84.0**	**83.4**	**83.4**	**83.9**	**79.2**

Notes: All analyses are sample design adjusted; [a] 95% confidence interval; — data not available; regional data not available;
Q: *During the past 12 months, have you had a drink of any alcoholic beverage?*
Source: The *CAMH Monitor*, Centre for Addiction and Mental Health

Table 3.1.2b: Percentage ***Drinking Alcohol*** in the Past 12 Months, by Demographic Characteristics, Ontarians Aged 18+, 2001–2017

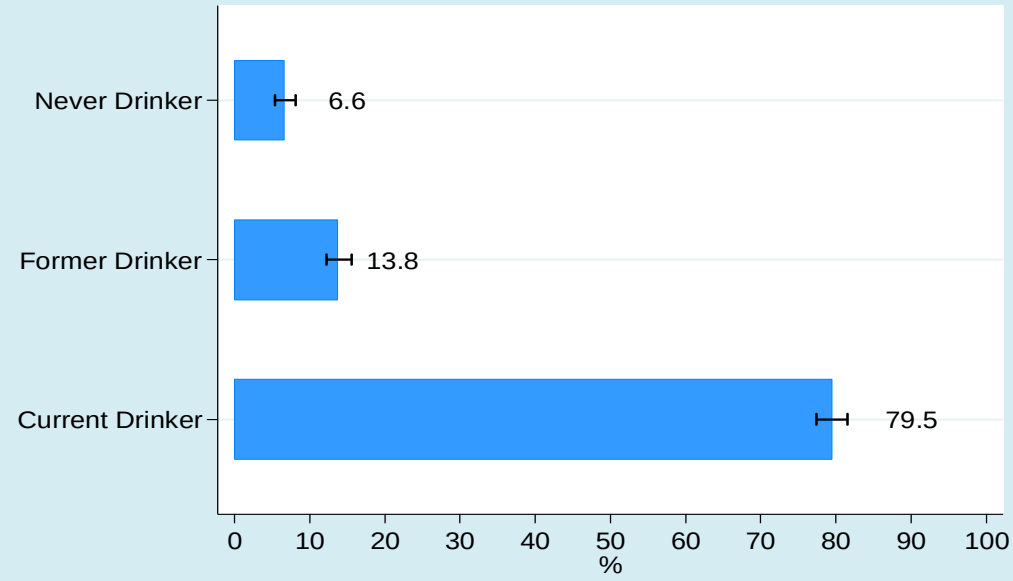
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Trend	
(N=)	(2627)	(2421)	(2411)	(2611)	(2445)	(2016)	(2005)	(2024)	(2037)	(3030)	(3039)	(3030)	(3021)	(3043)	(5013)	(3042)	(2812)		
Total	**79.5**	**79.5**	**80.4**	**81.2**	**78.9**	**77.7**	**81.5**	**80.3**	**79.1**	**78.0**	**81.2**	**78.9**	**78.4**	**81.2**	**80.0**	**79.7**	**79.5**	–	–
(95%CI)[a]	(77.6, 81.3)	(77.6, 81.3)	(78.5, 82.1)	(79.3, 83.0)	(77.0, 80.7)	(75.5,79.8)	(79.4,83.4)	(78.0, 82.3)	(76.8, 81.2)	(76.0, 79.8)	(79.4, 82.9)	(77.0, 80.6)	(76.4, 80.3)	(79.3, 83.0)	(78.5, 81.4)	(77.8, 81.6)	(77.4, 81.5)		
Sex																			
Men	**83.6**	**82.3**	**83.4**	**85.2**	**83.3**	**84.2**	**85.3**	**84.2**	**80.9**	**81.6**	**83.7**	**83.6**	**83.1**	**84.7**	**83.5**	**83.6**	**82.5**	–	–
	(80.8, 86.0)	(79.5, 84.8)	(80.8, 85.8)	(82.5, 87.5)	(80.3, 85.9)	(81.5, 86.6)	(82.4,87.9)	(80.8, 87.0)	(77.5, 83.9)	(78.8, 84.0)	(80.9, 86.1)	(80.8, 86.0)	(80.1, 85.8)	(81.8, 87.2)	(81.3, 85.6)	(80.6, 86.2)	(79.4, 85.3)		
Women	**75.7**	**76.9**	**77.5**	**77.5**	**72.4**	**73.9**	**77.8**	**76.7**	**77.4**	**74.6**	**78.9**	**74.5**	**74.1**	**78.0**	**76.7**	**76.2**	**76.8**	–	–
	(73.0, 78.3)	(74.1, 79.4)	(74.8, 80.0)	(74.8, 80.0)	(69.2,75.4)	(71.1,76.6)	(74.8,80.6)	(73.5,79.5)	(74.3, 80.3)	(71.8, 77.1)	(76.6, 81.1)	(71.9, 77.0)	(71.3, 76.6)	(75.4, 80.4)	(74.7, 78.6)	(73.5, 78.6)	(73.8, 79.5)		
Age																			
18 - 29	**84.9**	**84.6**	**87.4**	**86.9**	**82.5**	**84.5**	**89.5**	**86.5**	**83.6**	**82.4**	**85.8**	**80.7**	**80.1**	**84.4**	**79.4**	**79.6**	**79.8**	T	–
	(80.4, 88.6)	(79.9, 88.3)	(83.4,90.5)	(82.3, 90.4)	(77.4, 86.7)	(78.6,89.1)	(83.8,93.3)	(79.6, 91.4)	(76.6, 88.8)	(76.6, 87.0)	(80.1, 90.0)	(73.8, 86.1)	(72.3, 86.1)	(77.6, 89.3)	(74.5, 83.6)	(73.2, 84.8)	(73.4, 85.1)		
30 - 39	**86.5**	**81.6**	**83.0**	**85.5**	**82.6**	**78.2**	**81.9**	**84.0**	**79.0**	**78.2**	**83.1**	**80.9**	**78.4**	**82.3**	**82.2**	**83.4**	**84.6**	–	–
	(82.8, 89.5)	(77.3, 85.3)	(78.5, 86.7)	(81.1, 89.0)	(78.2, 86.3)	(72.8,82.8)	(76.4,86.3)	(78.0, 88.6)	(72.8, 84.1)	(72.9, 82.7)	(78.3, 87.0)	(75.9, 85.0)	(72.3, 83.4)	(76.5, 86.9)	(77.6, 86.0)	(77.1, 88.3)	(78.0, 89.5)		
40 - 49	**79.1**	**84.0**	**81.6**	**82.9**	**83.1**	**82.4**	**82.8**	**82.5**	**83.5**	**82.3**	**85.5**	**80.9**	**83.6**	**83.7**	**83.6**	**82.3**	**83.5**	–	–
	(74.7, 82.9)	(79.9, 87.4)	(77.7, 85.0)	(78.8, 86.4)	(79.3, 86.3)	(77.7,86.3)	(78.0,86.7)	(77.6, 86.5)	(78.8, 87.3)	(78.4, 85.7)	(81.6, 88.6)	(76.5, 84.6)	(79.6, 87.0)	(79.3, 87.3)	(80.3, 86.5)	(77.3, 86.5)	(78.0, 87.8)		
50 - 64	**78.0**	**80.1**	**78.8**	**81.5**	**77.8**	**77.2**	**82.3**	**82.1**	**81.1**	**78.3**	**80.8**	**82.4**	**79.4**	**82.9**	**81.6**	**80.7**	**81.2**	T	–
	(73.7, 81.9)	(75.9, 83.7)	(74.3, 82.6)	(77.8, 84.7)	(73.7, 81.5)	(72.8, 80.9)	(78.2,85.7)	(78.1, 85.5)	(77.0, 84.7)	(75.1, 81.3)	(77.6, 83.7)	(79.3, 85.1)	(76.3, 82.2)	(79.8, 85.7)	(79.3, 83.7)	(77.8, 83.3)	(77.3, 84.5)		
65+	**67.0**	**65.9**	**69.9**	**70.6**	**67.6**	**65.9**	**73.5**	**69.5**	**68.6**	**70.0**	**71.8**	**69.5**	**70.5**	**74.3**	**73.8**	**73.1**	**70.8**	T	–
	(61.6, 72.0)	(60.2, 71.1)	(64.7, 74.8)	(65.6, 75.2)	(62.3, 72.5)	(60.4, 71.0)	(68.5,77.9)	(64.4, 74.2)	(63.6, 73.3)	(66.0, 73.8)	(68.1, 75.2)	(65.9, 72.9)	(67.0, 73.8)	(71.1, 77.2)	(71.2, 76.2)	(70.0, 76.1)	(67.5, 74.0)		
Region																			
Toronto	**78.8**	**75.1**	**78.4**	**76.0**	**73.9**	**76.4**	**73.6**	**76.0**	**77.6**	**72.3**	**75.4**	**72.3**	**72.4**	**77.9**	**76.6**	**78.8**	**78.5**	–	–
	(74.1, 82.9)	(70.1, 79.5)	(73.7, 82.4)	(70.9, 80.5)	(68.9, 78.4)	(70.8,81.2)	(67.8,78.7)	(70.4,80.9)	(71.7, 82.7)	(67.3, 76.7)	(70.5, 79.7)	(67.3, 76.9)	(66.9, 77.2)	(73.3, 82.0)	(72.7, 80.1)	(73.9, 83.0)	(73.5, 82.8)		
C-East	**79.3**	**82.2**	**84.3**	**86.8**	**83.3**	**77.4**	**83.6**	**76.0**	**76.2**	**75.9**	**82.5**	**78.3**	**75.9**	**78.7**	**80.4**	**77.7**	**79.1**	T	–
	(74.8, 83.3)	(77.7, 85.9)	(80.0, 87.8)	(82.9, 89.9)	(79.3, 86.7)	(71.9, 82.1)	(78.7, 87.5)	(70.5, 80.8)	(70.8, 80.9)	(71.3, 79.9)	(78.4, 85.9)	(73.8, 82.2)	(71.1, 80.1)	(73.9, 82.8)	(77.1, 83.4)	(72.7, 82.1)	(73.9, 83.5)		
C-West	**80.3**	**77.4**	**81.1**	**80.4**	**76.2**	**78.7**	**81.8**	**84.4**	**81.1**	**81.7**	**83.3**	**81.8**	**83.1**	**85.8**	**80.9**	**81.5**	**79.4**	T	–
	(75.4, 84.5)	(72.4, 81.7)	(76.6, 85.0)	(75.8, 84.4)	(71.2, 80.6)	(73.6, 83.1)	(76.7, 86.0)	(78.9,88.6)	(75.9, 85.4)	(77.6, 85.1)	(79.3, 86.7)	(77.4, 85.5)	(79.1, 86.6)	(82.3, 88.7)	(77.4, 83.9)	(77.3, 85.1)	(77.1, 83.8)		
West	**77.9**	**83.6**	**80.1**	**83.3**	**79.0**	**82.3**	**84.3**	**82.7**	**78.2**	**80.6**	**83.4**	**82.1**	**78.0**	**82.5**	**81.0**	**79.4**	**79.7**	–	–
	(73.4, 81.8)	(79.2, 87.1)	(75.5, 84.1)	(79.2, 86.7)	(74.5, 82.9)	(77.8,86.0)	(79.7,88.0)	(78.1,86.5)	(73.1, 82.6)	(76.2, 84.4)	(79.7, 86.5)	(78.3, 85.3)	(73.4, 82.0)	(78.0, 86.2)	(77.7, 83.8)	(75.0, 83.1)	(75.1, 83.6)		
East	**81.4**	**83.3**	**78.2**	**82.6**	**81.6**	**76.0**	**85.6**	**86.3**	**85.6**	**80.0**	**82.4**	**83.5**	**83.7**	**83.1**	**80.1**	**82.0**	**80.9**	–	–
	(77.1, 85.1)	(79.0, 86.9)	(73.6, 82.2)	(78.4, 86.2)	(77.1, 85.4)	(70.5, 80.8)	(81.5,89.0)	(81.9,89.7)	(81.4, 89.1)	(75.8, 83.7)	(78.3, 85.8)	(79.8, 86.7)	(79.6, 87.2)	(79.0, 86.6)	(76.6, 83.2)	(77.6, 85.7)	(75.9, 85.1)		
North	**79.7**	**77.7**	**79.5**	**81.1**	**82.2**	**74.6**	**84.5**	**82.9**	**78.5**	**84.2**	**82.2**	**77.3**	**82.9**	**82.5**	**85.5**	**81.3**	**81.8**	T	–
	(76.0, 83.0)	(73.1, 81.7)	(74.9, 83.5)	(77.6, 84.2)	(78.0, 85.8)	(69.0, 79.5)	(80.1, 88.0)	(78.4, 86.6)	(73.3, 82.8)	(80.5, 87.3)	(78.4, 85.5)	(72.9, 81.2)	(78.9, 86.2)	(78.2, 86.0)	(82.7, 87.9)	(77.3, 84.8)	(77.7, 85.3)		

Cont'd

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Trend	
(N=)	(2627)	(2421)	(2411)	(2611)	(2445)	(2016)	(2005)	(2024)	(2037)	(3030)	(3039)	(3030)	(3021)	(3043)	(5013)	(3042)	(2812)		
Marital Status																			
Married/ Partner	**80.0**	**81.3**	**79.9**	**82.0**	**79.8**	**77.5**	**81.4**	**81.8**	**79.5**	**78.7**	**81.8**	**81.3**	**80.6**	**82.4**	**81.4**	**80.9**	**81.6**	**T**	**–**
Previously Married	**73.7**	**70.8**	**72.6**	**74.0**	**72.5**	**66.0**	**77.7**	**71.3**	**74.4**	**71.3**	**73.8**	**73.7**	**70.3**	**73.6**	**75.1**	**75.7**	**69.7**	**T**	**–**
Never Married	**82.4**	**80.8**	**86.0**	**84.3**	**80.6**	**85.1**	**85.0**	**81.1**	**81.7**	**79.7**	**84.3**	**74.7**	**76.4**	**82.0**	**78.6**	**78.2**	**79.2**	**T**	**–**
Education																			
HS not completed	**65.7**	**68.6**	**68.2**	**68.3**	**63.4**	**67.0**	**68.4**	**67.9**	**71.5**	**67.9**	**68.9**	**63.9**	**62.0**	**65.2**	**63.4**	**57.1**	**54.6**	**T**	**–**
Completed HS	**80.8**	**77.6**	**80.1**	**82.0**	**79.2**	**74.8**	**81.9**	**81.6**	**72.8**	**72.8**	**77.3**	**75.2**	**73.7**	**77.7**	**75.3**	**75.6**	**77.6**	**T**	**–**
Some College or University	**83.6**	**83.3**	**82.4**	**85.2**	**82.9**	**80.5**	**84.7**	**81.3**	**83.0**	**82.5**	**84.3**	**81.3**	**81.0**	**83.8**	**81.6**	**81.2**	**81.3**	**–**	**–**
University Degree	**81.4**	**83.6**	**85.8**	**83.2**	**80.7**	**81.9**	**83.2**	**82.6**	**82.0**	**80.4**	**84.2**	**83.1**	**83.5**	**84.5**	**83.6**	**84.0**	**83.9**	**–**	**–**

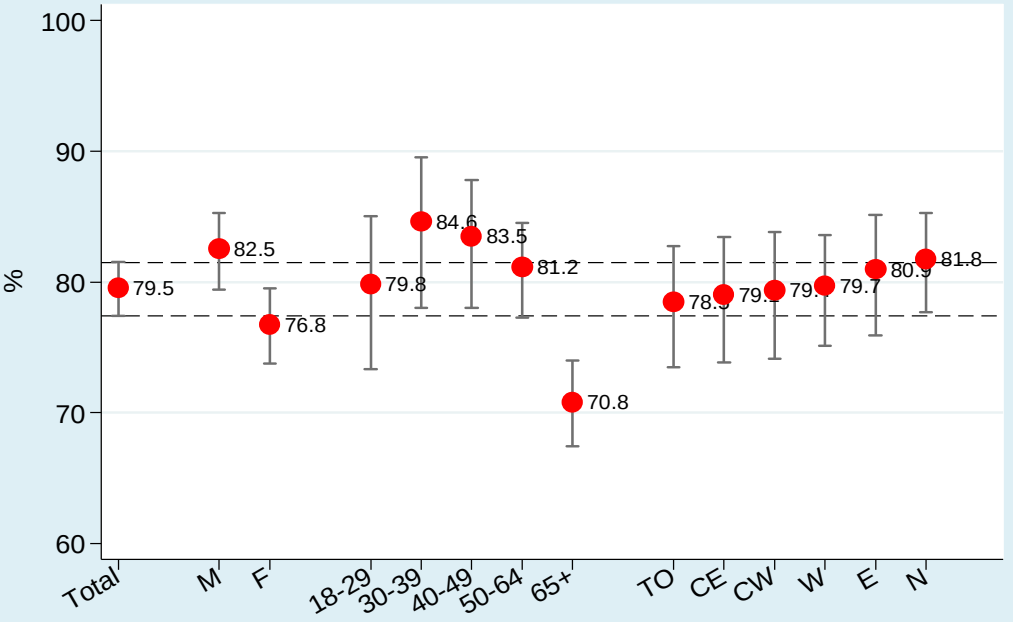
Notes: (1) All analyses are sample design adjusted; [a] 95% confidence interval; the sampling design was changed in 2017 to dual-frame sampling (landline + cell-phone).
(2) Trend Analysis: **–** change not statistically significant (p<.05); **T** significant change (p<.05) between 1996-2017; **2Y** significant change (p<.05) between last two estimates;
Q: During the past 12 months have you had a drink of any alcoholic beverage?
Source: The *CAMH Monitor*, Centre for Addiction and Mental Health

Figure 3.1.1
Drinking Status, Ontarians Aged 18+, 2017 (N=2812)



Note: horizontal 'whiskers' represent 95% confidence intervals
Source: 2017 CAMH Monitor

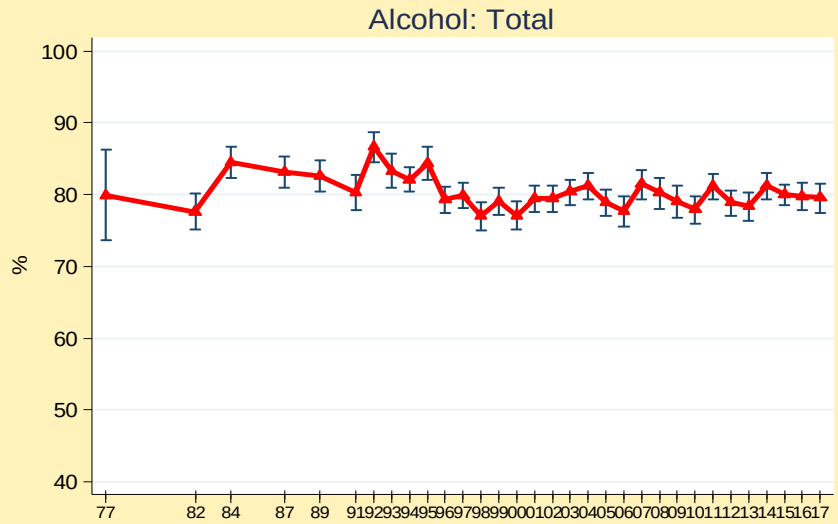
Figure 3.1.2
Past Year Alcohol Use by Sex, Age and Region, Ontarians Aged 18+, 2017 (N=2812)

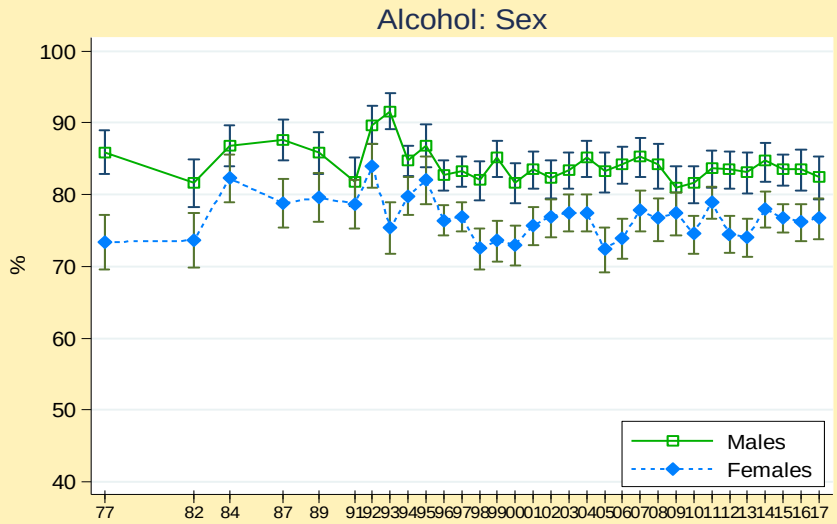


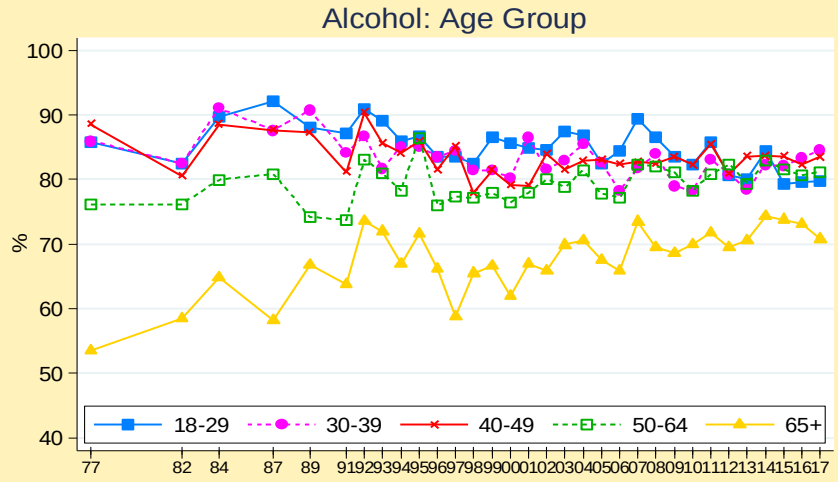
Note: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal bar represents 95% confidence interval for total estimate
(3) significant difference by sex (p<.05)
Source: 2017 CAMH Monitor

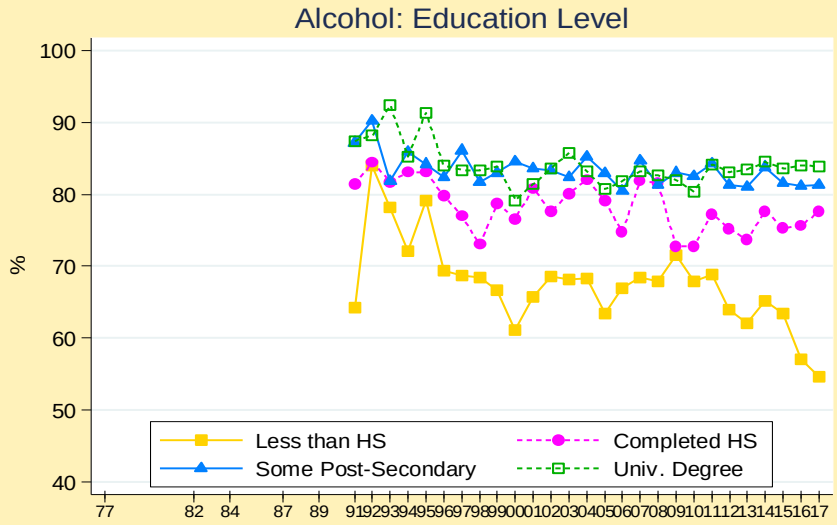
Figure 3.1.3

Past Year Alcohol Use, Ontarians Aged 18+, 1977–2017









Note: vertical 'whiskers' represent 95% confidence intervals
Source: CAMH Monitor

3.2. Daily Drinking

The percentage drinking alcohol on a daily basis is an indicator of a regular pattern of drinking. This indicator is not synonymous with a problematic drinking pattern.

2017…….Tables 3.2.1, 3.2.2; Fig. 3.2.1

An estimated **7.1%** (95% CI: 6.0% to 8.5%) of Ontario adults drank alcohol daily in the 12 months before the survey. Among past year drinkers, the prevalence was **9.0%** (95% CI: 7.6% to 10.7%). The corresponding population estimate is 764,500 daily drinkers.

Sex and **age** were significantly related to daily drinking among Ontario adults, when controlling for other characteristics.

- The adjusted odds of daily drinking were 2.1 times higher for men than women (9.3% vs. 5.2%; OR=2.08).
- Past year daily drinking increased significantly with age, from 5.4% of those aged 30 to 39 to 12.3% of those aged 65 and older. Compared to those aged 18 to 29, the adjusted odds of daily drinking were about 6.7 times higher among those aged 65 and older (OR=6.67).

Trends (among past year drinkers)

1977–2017……Tables 3.2.3a-b; Fig. 3.2.2

2016–2017
Daily drinking among past year drinkers in 2017 (9.0%) was not significantly different from 2016 (9.2%). In addition, daily drinking was stable for all subgroups.

1996–2017
Between 1996 and 2017, there was a significant **increase** in daily drinking among drinkers, from a low of 5.3% in 2002 to 9.0% in 2017.

Trend analyses done separately for each subgroup showed a significant **upward** trend for both **men** and **women** and for those aged 65 and older. There was a significant increase in daily drinking among drinking men (from a low of 7.1% in 2005 to 11.3% in 2017), drinking women (from a low of 2.6% in 2001 to 6.8% in 2017), and a non-linear upward trend among those aged 65 and older (from a low of 13.2% in 2003 to 20.8% in 2016).

There were also significant increases for all regions, for married and previously married respondents, and for all education sub-groups.

1977–2017
In the longer term, between 1977 and 2017, daily drinking among drinkers decreased until 2006. From a high of 13.4% in 1977, it decreased by about two thirds to a low of 4.1% in 1992 and varied between 5.3% and 7.4% until 2007. But this trend has reversed in the past decade, **increasing** significantly from 5.9% in 2006 to 9.0% in 2017 and this increase was evident among almost all demographic subgroups.

Table 3.2.1: Percentage ***Drinking Alcohol Daily*** in the Past 12 Months and Adjusted Group Differences, ***Ontarians*** Aged 18+, 2017

	N	%	95% CI	Adjusted Odds Ratio (N=2723)
Total	2812	**7.1**	(6.0, 8.5)	—
Sex				***
Men	1150	**9.3**	(7.5, 11.4)	**2.08*** **
Women *(Comparison Group)*	1662	**5.2**	(3.8, 7.0)	—
Age				*
18-29 *(Comparison Group)*	283	†	—	—
30-39	199	**†5.4**	(2.0, 13.7)	2.93
40-49	366	**†6.2**	(3.9, 9.7)	3.31
50-64	843	**8.6**	(6.4, 11.3)	4.31
65+	1110	**12.3**	(10.3, 14.8)	**6.67***
Region				NS
Toronto *(vs. Provincial Average)*	476	**†6.9**	(4.8, 9.8)	1.06
Central East	476	**†7.0**	(5.0, 9.7)	1.02
Central West	456	**†7.9**	(5.1, 12.0)	1.09
West	468	**†7.0**	(4.6, 10.6)	0.94
East	467	**†7.7**	(5.4, 10.8)	0.99
North	469	**†4.9**	(3.2, 7.5)	0.65
Marital Status				NS
Married/Partner *(Comparison Group)*	1730	**8.7**	(7.3, 10.5)	—
Previously Married	614	**†9.5**	(5.6, 15.5)	1.21
Never Married	441	**†2.7**	(1.3, 5.6)	0.70
Education				NS
High school not completed *(Comparison Group)*	240	**†5.9**	(4.3, 10.4)	—
Completed high school	612	**†10.1**	(7.1, 14.2)	**2.23***
Some college or university	986	**6.2**	(4.7, 8.0)	1.44
University degree	933	**6.9**	(5.0, 9.5)	1.45
Household Income				NS
< $30,000 *(Comparison Group)*	266	**†3.9**	(1.8, 8.4)	—
$30,000-$49,999	347	**†8.9**	(6.0, 13.1)	1.80
$50,000-$79,999	483	**7.1**	(5.2, 9.7)	1.71
$80,000+	1079	**7.2**	(5.4, 9.6)	1.92
Not stated	637	**†7.4**	(5.0, 10.8)	2.10

Notes: (1) All analyses are sample design adjusted; *p<.05**;** **p<.01; ***p<.001; CI = 95% confidence interval; NS – no statistically significant difference; † estimates unstable or suppressed.
(2) Asterisks in group row indicate a statistically significant group effect, based on Wald test.
(3) ORs greater than 1.0 indicate that daily alcohol use is more likely to occur in the group being compared to the comparison group; ORs less than 1.0 indicate that daily alcohol use is less likely to occur in the group being compared to the comparison group.
(4) Adjusted odds ratio holding fixed values for sex, age, region, marital status, education and income.
Q: *Response of "daily" or "almost daily" to the question: How often did you drink alcoholic beverages during the past 12 months?*
Source: The *CAMH Monitor*, Centre for Addiction and Mental Health

Table 3.2.2: Percentage ***Drinking Alcohol Daily*** in the Past 12 Months and Adjusted Group Differences, Ontarian ***Past Year Drinkers*** Aged 18+, 2017

	N	%	95% CI	Adjusted Odds Ratio (N=2135)
Total	2195	**9.0**	(7.6, 10.7)	—
Sex				**
Men	939	**11.3**	(9.2, 13.8)	**1.91****
Women *(Comparison Group)*	1256	**6.8**	(4.9, 9.2)	—
Age				*
18-29 *(Comparison Group)*	231	†	—	—
30-39	167	**†6.4**	(2.4, 15.9)	2.92
40-49	312	**†7.5**	(4.7, 11.6)	3.42
50-64	692	**10.6**	(8.0, 13.9)	**4.44***
65+	784	**17.7**	(14.8, 21.0)	**7.42****
Region				NS
Toronto *(vs. Provincial Average)*	372	**†8.8**	(6.1, 12.4)	1.11
Central East	376	**†8.9**	(6.3, 12.3)	1.02
Central West	363	**†10.0**	(6.5, 15.0)	1.07
West	363	**†8.9**	(5.9, 13.3)	0.90
East	370	**†9.5**	(6.7, 13.4)	1.01
North	351	**†6.0**	(3.9, 9.2)	0.63
Marital Status				NS
Married/Partner *(Comparison Group)*	1407	**10.8**	(9.0, 12.8)	—
Previously Married	423	**†13.8**	(8.3, 22.0)	1.38
Never Married	348	**†3.4**	(1.7, 7.0)	0.72
Education				NS
High school not completed *(Comparison Group)*	124	**†10.9**	(6.2, 18.6)	—
Completed high school	466	**†13.1**	(9.2, 18.2)	1.69
Some college or university	799	**7.6**	(5.8, 9.9)	1.02
University degree	786	**8.3**	(6.0, 11.3)	1.04
Household Income				NS
< $30,000 *(Comparison Group)*	157	**†6.3**	(2.8, 13.2)	—
$30,000-$49,999	257	**†12.4**	(8.3, 18.1)	1.66
$50,000-$79,999	382	**9.3**	(6.7, 12.6)	1.42
$80,000+	948	**8.3**	(6.2, 10.9)	1.48
Not stated	451	**†10.0**	(6.8, 14.5)	1.84

Notes: (1) All analyses are sample design adjusted; *p<.05**;** **p<.01; ***p<.001; CI = 95% confidence interval; NS – no significant difference; † estimates unstable or suppressed.
(2) Asterisks in group row indicate a statistically significant group effect, based on Wald test.
(3) ORs greater than 1.0 indicate that daily alcohol use is more likely to occur in the group being compared to the comparison group; ORs less than 1.0 indicate that daily alcohol use is less likely to occur in the group being compared to the comparison group.
(4) Adjusted odds ratio holding fixed values for sex, age, region, marital status, education and income.

Q: *Response of "daily" or "almost daily" to the question: How often did you drink alcoholic beverages during the past 12 months?*

Source: The *CAMH Monitor*, Centre for Addiction and Mental Health

Table 3.2.3a: Percentage ***Drinking Daily*** in the Past 12 Months, by Demographic Characteristics, Ontarian ***Past Year Drinkers*** Aged 18+, 1977–2000

	1977	1982	1984	1987	1989	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
(N=)	(818)	(795)	(885)	(893)	(906)	(841)	(916)	(783)	(1660)	(839)	(2141)	(2219)	(1777)	(1938)	(1887)
Total	**13.4**	**10.7**	**12.9**	**11.8**	**10.0**	**6.2**	**4.1**	**6.9**	**6.1**	**5.9**	**6.0**	**5.9**	**7.4**	**7.0**	**6.3**
(95%CI)[a]	(11.1,15.7)	(8.5,12.9)	(10.7, 15.1)	(9.7,13.9)	(8.0,12.0)	(4.6, 7.8)	(2.8, 5.4)	(5.7, 8.1)	(4.9, 7.3)	(4.3, 7.5)	(5.0,7.2)	(4.8,7.1)	(6.0,9.1)	(5.9,8.5)	(5.2,7.7)
Sex															
Men	**19.5**	**15.6**	**17.3**	**16.6**	**13.3**	**8.3**	**5.2**	**10.0**	**8.5**	**8.6**	**8.2**	**8.4**	**9.8**	**10.0**	**8.6**
	—	—	—	—	—	—	—	—	—	—	(6.4,10.3)	(6.7,10.5)	(7.6,12.6)	(2.7,5.4)	(6.8,10.8)
Women	**5.7**	**5.2**	**8.6**	**6.7**	**6.7**	**4.1**	**3.0**	**3.6**	**3.8**	**2.9**	**3.9**	**3.4**	**5.0**	**3.9**	**4.1**
	—	—	—	—	—	—	—	—	—	—	(2.9,5.3)	(2.3,4.9)	(3.5,7.0)	(8.1,12.4)	(2.8,5.9)
Age															
18 - 29	**7.8**	**† 4.1**	**† 5.0**	**6.0**	**† 3.7**	**† 3.0**	**† 1.8**	**† 2.7**	**† 2.0**	**† 1.3**	**† 1.4**	**† 1.8**	**† 3.5**	**† 2.1**	**† 1.3**
	—	—	—	—	—	—	—	—	—	—	(0.6,3.3)	(0.8,4.0)	(1.7,7.1)	(1.1,4.3)	(0.6,2.9)
30 - 39	**10.9**	**7.8**	**10.0**	**11.6**	**5.5**	**† 4.5**	**†1.8**	**6.1**	**†4.2**	**†3.6**	**†3.6**	**†3.3**	**†3.9**	**†3.4**	**†3.8**
	—	—	—	—	—	—	—	—	—	—	(2.0,6.1)	(2.0,5.5)	(2.1,7.0)	(2.0,5.7)	(2.3,6.2)
40 - 49	**18.2**	**19.1**	**15.6**	**12.9**	**11.8**	**8.8**	**†5.8**	**6.1**	**9.0**	**†5.8**	**6.5**	**6.3**	**†5.0**	**†5.1**	**†5.0**
	—	—	—	—	—	—	—	—	—	—	(4.5,9.4)	(4.0,9.7)	(3.0,8.2)	(3.0,8.3)	(3.2,7.6)
50 - 64	**22.1**	**15.7**	**22.2**	**15.7**	**17.6**	**7.9**	**7.8**	**9.7**	**8.0**	**8.2**	**9.8**	**9.6**	**12.0**	**13.7**	**10.9**
	—	—	—	—	—	—	—	—	—	—	(7.0,13.6)	(6.8,13.5)	(8.1,17.5)	(10.1,18.4)	(7.3,16.0)
65+	**13.2**	**19.9**	**21.8**	**19.6**	**23.0**	**11.8**	**8.5**	**20.0**	**15.0**	**23.6**	**16.9**	**17.1**	**19.2**	**16.4**	**16.9**
	—	—	—	—	—	—	—	—	—	—	(12.0,23.2)	(12.3,23.4)	(13.7,26.2)	(11.9,22.1)	(12.3,22.8)
Region															
Toronto	—	—	—	—	—	—	—	—	—	—	**8.5**	**8.4**	**10.6**	**8.5**	**†5.4**
											(5.7,12.4)	(5.6, 12.4)	(7.1,15.6)	(5.7,12.7)	(2.9, 9.6)
C-East	—	—	—	—	—	—	—	—	—	—	**†6.4**	**†5.1**	**†8.0**	**†8.0**	**†7.8**
											(4.3,9.6)	(3.2,7.9)	(5.0,12.7)	(5.4,11.8)	(5.3,11.4)
C-West	—	—	—	—	—	—	—	—	—	—	**†4.4**	**†6.8**	**†4.7**	**†6.3**	**†7.0**
											(2.7,7.2)	(4.5,10.0)	(2.5,8.5)	(4.0,9.7)	(4.5,10.7)
West	—	—	—	—	—	—	—	—	—	—	**†4.2**	**†4.3**	**†7.2**	**†6.2**	**†3.4**
											(2.4,7.0)	(2.4,7.5)	(4.3,11.8)	(3.9,9.6)	(1.9,6.2)
East	—	—	—	—	—	—	—	—	—	—	**†5.9**	**†4.8**	**†6.7**	**†5.7**	**†6.2**
											(3.9,8.9)	(2.9,7.7)	(4.2,10.5)	(3.5,9.1)	(3.9,9.7)
North	—	—	—	—	—	—	—	—	—	—	**†5.4**	**†3.6**	**†6.0**	**†6.6**	**†8.4**
											(3.4,8.4)	(2.1,6.1)	(3.4,10.3)	(4.2,10.2)	(5.7,12.2)

Cont'd

	1977	1982	1984	1987	1989	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
(N=)	(818)	(795)	(885)	(893)	(906)	(841)	(916)	(783)	(1660)	(839)	(2141)	(2219)	(1777)	(1938)	(1887)
Marital Status															
Married/Partner	—	—	—	—	—	**4.7**	**4.5**	**7.8**	**6.0**	**6.6**	**6.6**	**6.6**	**8.1**	**8.1**	**7.4**
Previously Married	—	—	—	—	—	**8.1**	**6.7**	**7.8**	**5.5**	**9.7**	**9.2**	**9.3**	**9.7**	**8.8**	**10.8**
Never Married	—	—	—	—	—	**†4.5**	**†1.8**	**†4.5**	**†2.2**	**†2.3**	**†3.1**	**†2.7**	**†4.4**	**† 3.2**	**† 1.8**
Education															
HS not completed	—	—	—	—	—	**6.4**	**7.2**	**9.1**	**6.3**	**6.3**	**†7.5**	**9.8**	**†5.6**	**12.2**	**9.8**
Completed HS	—	—	—	—	—	**†4.6**	**†2.7**	**5.9**	**5.1**	**6.7**	**†5.3**	**†6.0**	**8.7**	**†7.7**	**†6.6**
Some college or university	—	—	—	—	—	**†4.1**	**†2.7**	**†4.2**	**†2.3**	**6.0**	**5.1**	**†4.5**	**6.2**	**†4.5**	**†4.5**
University degree	—	—	—	—	—	**5.2**	**5.2**	**9.9**	**7.6**	**†4.4**	**6.7**	**†4.9**	**8.0**	**6.8**	**6.7**

Notes: All analyses are sample design adjusted; [a] 95% confidence interval; — data not available; regional data not available; † Estimate suppressed or unstable;
Q: *Response of "daily" or "almost daily" to the question: How often, if ever, did you drink alcoholic beverages during the past 12 months?*
Source: The *CAMH Monitor*, Centre for Addiction and Mental Health

Table 3.2.3b: Percentage ***Drinking Daily*** in the Past 12 Months, by Demographic Characteristics, Ontarian ***Past Year Drinkers*** Aged 18+, 2001-2017

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Trend	
(N=)	(2088)	(1933)	(1933)	(2101)	(1906)	(1527)	(1618)	(1599)	(1602)	(2352)	(2401)	(2355)	(2330)	(2422)	(3967)	(2368)	(2195)		
Total	**5.8**	**5.3**	**6.0**	**6.4**	**5.6**	**5.9**	**7.3**	**8.6**	**9.3**	**8.7**	**8.6**	**7.9**	**8.5**	**8.1**	**8.8**	**9.2**	**9.0**	**T**	–
(95%CI)[a]	(4.7,7.1)	(4.3,6.5)	(4.9,7.3)	(5.3,7.8)	(4.6,6.8)	(4.8,7.3)	(6.0,8.8)	(7.3, 10.2)	(7.7, 11.1)	(7.5, 10.0)	(7.4, 10.0)	(6.8, 9.2)	(7.4, 9.9)	(7.0, 9.3)	(7.9, 9.9)	(8.0, 10.7)	(7.6, 10.7)		
Sex																			
Men	**8.8**	**7.4**	**7.3**	**8.9**	**7.1**	**7.3**	**9.2**	**10.9**	**12.5**	**11.2**	**11.6**	**10.6**	**11.4**	**10.7**	**11.8**	**11.7**	**11.3**	**T**	–
	(7.0,11.1)	(5.7,9.6)	(5.6,9.5)	(7.1,11.3)	(5.6,9.1)	(5.6,9.6)	(7.1,11.7)	(8.8, 13.5)	(9.9, 15.6)	(9.3, 13.5)	(9.4, 14.0)	(8.7, 12.8)	(9.4,13.7)	(8.8,12.8)	(10.1,13.7)	(9.7,14.0)	(9.2,13.8)		
Women	**2.6**	**3.1**	**4.6**	**3.9**	**3.9**	**4.4**	**5.3**	**6.3**	**6.1**	**6.1**	**5.7**	**5.2**	**5.6**	**5.5**	**5.8**	**6.8**	**6.8**	**T**	–
	(1.7,3.9)	(2.2,4.4)	(3.4,6.2)	(2.8,5.3)	(2.7,5.5)	(3.1,6.1)	(3.9,7.1)	(4.8, 8.3)	(4.4, 8.3)	(4.8, 7.7)	(4.5, 7.2)	(4.1, 6.4)	(4.5, 7.1)	(4.4, 6.8)	(4.9, 6.9)	(5.4, 8.6)	(4.9, 9.2)		
Age																			
18 - 29	**† 1.9**	†	**†2.3**	**†2.6**	†	†	†	**†4.0**	**†7.2**	**†3.3**	**†3.1**	†	†	†	†	†	†	–	–
	(0.8,4.1)	-	(1.0,5.4)	(1.2,5.7)	-	-	-	(1.8,8.4)	(3.4, 14.5)	(1.6, 6.7)	(1.3, 7.3)	-	-	-	-	-	-		
30 - 39	**†3.9**	**†2.0**	**†3.9**	**†3.4**	**†2.4**	**†4.1**	**†3.9**	**†3.5**	**†3.9**	**†3.9**	**†4.4**	**†3.4**	**†5.5**	†	**†5.2**	**†4.9**	**†6.4**	–	–
	(2.3,6.5)	(1.0,4.2)	(2.0,7.5)	(1.8,6.4)	(1.1,5.0)	(1.9,8.4)	(1.9,7.7)	(1.8,6.8)	(1.9,7.8)	(2.1, 7.0)	(2.6, 7.6)	(1.6,7.3)	(3.1, 9.6)	-	(3.2, 8.3)	(2.3, 10.0)	(2.4, 15.9)		
40 - 49	**†4.0**	**†3.0**	**†4.1**	**†3.9**	**†5.8**	**†3.8**	**†5.9**	**†7.3**	**†5.1**	**†6.3**	**†7.1**	**†4.4**	**†6.1**	**†5.4**	**†5.2**	**†6.4**	**†7.5**	–	–
	(2.5,6.3)	(1.7,5.2)	(2.5, 6.5)	(2.2,6.9)	(3.7,8.9)	(2.2,6.5)	(3.5,9.8)	(4.6, 11.2)	(3.1, 8.1)	(4.2, 9.4)	(4.7, 10.7)	(2.8, 6.8)	(4.0, 9.3)	(3.3, 8.8)	(3.6,7.3)	(4.1, 9.9)	(4.7, 11.6)		
50 - 64	**7.2**	**9.6**	**10.6**	**10.6**	**8.0**	**9.7**	**8.4**	**11.1**	**12.1**	**11.2**	**11.1**	**9.6**	**10.7**	**9.5**	**11.3**	**11.7**	**10.6**	–	–
	(4.9,10.5)	(7.0,13.1)	(7.7,14.4)	(7.8,14.4)	(5.5,11.4)	(7.0,13.2)	(6.1,11.6)	(8.3,14.6)	(8.8, 16.2)	(8.9, 14.0)	(8.7, 14.1)	(7.5,12.2)	(8.5, 13.4)	(7.5, 12.0)	9.35, 13.5)	(9.4, 14.4)	(8.0, 13.9)		
65+	**16.2**	**16.2**	**13.2**	**15.8**	**14.3**	**14.0**	**20.2**	**21.1**	**22.2**	**22.0**	**22.8**	**20.9**	**18.1**	**21.0**	**20.1**	**20.8**	**17.7**	**T**	–
	(11.3,22.6)	(11.5,22.4)	(9.4,18.2)	(11.8,20.9)	(10.4,19.3)	(9.9,19.4)	(15.2,26.2)	(16.4,26.6)	(17.5, 27.8)	(17.9, 26.8)	(17.1, 25.1)	(17.3, 25.0)	(15.1, 21.7)	(17.8, 24.5)	(17.6, 22.9)	(17.7, 24.1)	(14.8, 21.0)		
Region																			
Toronto	**†5.8**	**†6.6**	**†6.5**	**†7.2**	**†4.9**	**†6.6**	**†8.6**	**†8.4**	**†8.0**	**†7.5**	**†9.5**	**†7.9**	**†8.0**	**10.0**	**9.5**	**8.5**	**†8.8**	–	–
	(3.5,9.5)	(4.2,10.4)	(3.9,10.6)	(4.6,10.9)	(2.9,8.2)	(3.9,10.9)	(5.5,13.3)	(5.6,12.3)	(5.0, 12.5)	(5.1, 11.0)	(6.9,12.9)	(5.6,11.0)	(5.6,11.2)	(7.2,13.6)	(7.4,12.2)	(6.2,11.4)	(6.1,12.4)		
C-East	**†3.7**	**†4.1**	**†5.8**	**†5.4**	**†5.3**	**†6.3**	**†8.3**	**†7.4**	**†11.2**	**†9.0**	**†7.6**	**†7.7**	**†7.1**	**†6.2**	**7.8**	**†9.5**	**†8.9**	**T**	–
	(2.0,6.5)	(2.4,7.0)	(3.6,9.1)	(3.3,8.6)	(3.4,8.3)	(4.0,9.8)	(5.6,12.1)	(4.7,11.4)	(7.3, 16.7)	(6.3, 12.5)	(5.1,11.0)	(5.3,11.2)	(4.8,10.5)	(4.2,9.0)	(5.8,10.4)	(6.6,13.4)	(6.3,12.3)		
C-West	**†6.6**	**†5.0**	**†4.4**	**†5.9**	**†5.4**	**†5.0**	**†6.2**	**†9.4**	**†11.3**	**9.9**	**†8.3**	**†8.1**	**†9.0**	**†6.7**	**7.6**	**8.2**	**†10.0**	**T**	–
	(4.2,10.3)	(3.1,8.1)	(2.6,7.2)	(3.6,9.6)	(3.1,9.2)	(3.0,8.3)	(3.8,9.9)	(6.4, 13.8)	(8.0, 15.8)	(7.2, 13.5)	(5.8,11.7)	(5.8, 11.2)	(6.4,12.7)	(4.8,9.4)	(5.8,9.8)	(5.9,11.3)	(6.5,15.0)		
West	**†7.1**	**†5.5**	**†5.4**	**†6.8**	**†7.4**	**†5.5**	**†7.7**	**†7.1**	**†5.3**	**8.8**	**†7.2**	**†7.7**	**9.2**	**9.5**	**9.5**	**†9.6**	**†8.9**	**T**	–
	(4.6,10.9)	(3.5,8.6)	(3.4,8.5)	(4.4,10.3)	(5.0,10.8)	(3.4,8.7)	(5.0,11.5)	(4.6,10.7)	(3.1, 8.9)	(6.4, 12.0)	(5.0,10.3)	(5.4,10.9)	(6.7,12.6)	(6.9,12.9)	(7.3,12.4)	(6.8,13.3)	(5.9,13.3)		
East	**†5.2**	**†4.6**	**†7.0**	**†7.6**	**†5.0**	**†5.9**	**†7.1**	**†10.9**	**†8.1**	**†7.4**	**11.5**	**7.4**	**9.8**	**9.3**	**10.1**	**11.7**	**†9.5**	**T**	–
	(3.2,8.3)	(2.7,7.8)	(4.5,10.7)	(5.1,11.2)	(3.1,8.0)	(3.7,9.4)	(4.6,10.7)	(7.6,15.5)	(5.6, 11.7)	(5.3, 10.4)	(8.4,15.7)	(5.4,10.2)	(7.2,13.2)	(6.7,12.7)	(7.8,12.8)	(8.4,15.9)	(6.7,13.4)		
North	**†7.2**	**†6.1**	**†8.5**	**†6.0**	**†6.6**	**†6.0**	**†3.1**	**†9.7**	**†10.1**	**9.7**	**†8.2**	**9.5**	**10.0**	**8.8**	**9.9**	**†8.4**	**†6.0**	**T**	–
	(5.1,10.3)	(3.8,9.7)	(5.7,12.5)	(4.2,8.6)	(4.3,10.1)	(3.7,9.8)	(1.7,5.8)	(6.5,14.2)	(6.7, 14.7)	(7.1,13.2)	(5.7,11.7)	(6.9,13.1)	(7.3,13.5)	(6.4,11.9)	(7.7,12.7)	(6.0,11.7)	(3.9,9.2)		

Cont'd

(N=)	2001 (2088)	2002 (1933)	2003 (1933)	2004 (2101)	2005 (1906)	2006 (1527)	2007 (1618)	2008 (1599)	2009 (1602)	2010 (2352)	2011 (2401)	2012 (2355)	2013 (2330)	2014 (2422)	2015 (3967)	2016 (2368)	2017 (2195)	Trend	
Marital Status																			
Married/ Partner	**6.6**	**6.1**	**7.2**	**6.9**	**6.8**	**5.9**	**8.2**	**9.3**	**10.3**	**9.7**	**10.1**	**8.7**	**9.7**	**9.2**	**10.6**	**11.1**	**10.8**	**T**	**–**
Previously Married	**6.4**	**7.4**	**6.6**	**8.0**	**8.4**	**10.1**	**10.2**	**10.9**	**11.8**	**13.4**	**11.4**	**12.1**	**11.7**	**12.2**	**11.2**	**12.2**	**†13.8**	**T**	**–**
Never Married	**† 3.0**	**†1.7**	**†2.4**	**†4.5**	**†**	**†3.6**	**†2.1**	**†4.5**	**†4.7**	**†3.2**	**†3.3**	**†3.4**	**†3.6**	**†2.8**	**†2.7**	**†3.0**	**†3.4**	**–**	**–**
Education																			
High School not completed	**12.0**	**†7.2**	**11.0**	**9.6**	**†8.5**	**†8.7**	**†11.5**	**15.9**	**18.8**	**†13.8**	**17.0**	**†18.5**	**†13.9**	**†14.2**	**†10.7**	**†16.4**	**†10.9**	**T**	**–**
Completed high school	**†5.7**	**†4.3**	**†5.2**	**†6.3**	**†7.1**	**†5.9**	**†7.6**	**†8.3**	**9.1**	**†7.8**	**†7.1**	**10.7**	**†8.6**	**9.9**	**11.9**	**8.7**	**†13.1**	**T**	**–**
Some college or university	**† 3.8**	**5.6**	**†4.3**	**†5.7**	**†4.6**	**†5.0**	**†5.2**	**8.1**	**7.1**	**7.2**	**†6.0**	**5.1**	**7.7**	**7.0**	**6.2**	**8.6**	**7.6**	**T**	**–**
University degree	**5.6**	**†4.5**	**6.6**	**6.1**	**†4.6**	**†5.9**	**7.7**	**7.3**	**8.9**	**9.8**	**10.4**	**7.4**	**8.1**	**7.0**	**9.6**	**9.3**	**8.3**	**T**	**–**

Notes: (1) All analyses are sample design adjusted; [a] 95% confidence interval; † Estimate suppressed or unstable; the sampling design was changed in 2017 to dual-frame sampling (landline + cell-phone).

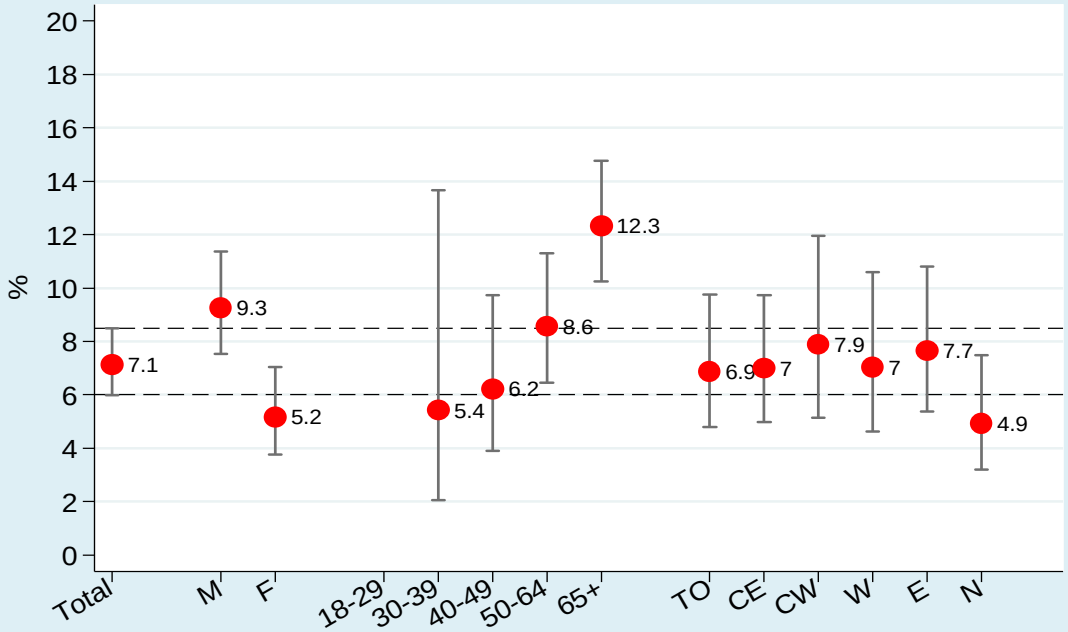
(2) Trend Analysis: **–** change not statistically significant (p<.05); **T** significant change (p<.05) between 1996-2017; **2Y** significant change (p<.05) between last two estimates.

Q: *Response of "daily" or "almost daily" to the question: How often, if ever, did you drink alcoholic beverages during the PAST TWELVE months?*

Source: The *CAMH Monitor*, Centre for Addiction and Mental Health

Figure 3.2.1

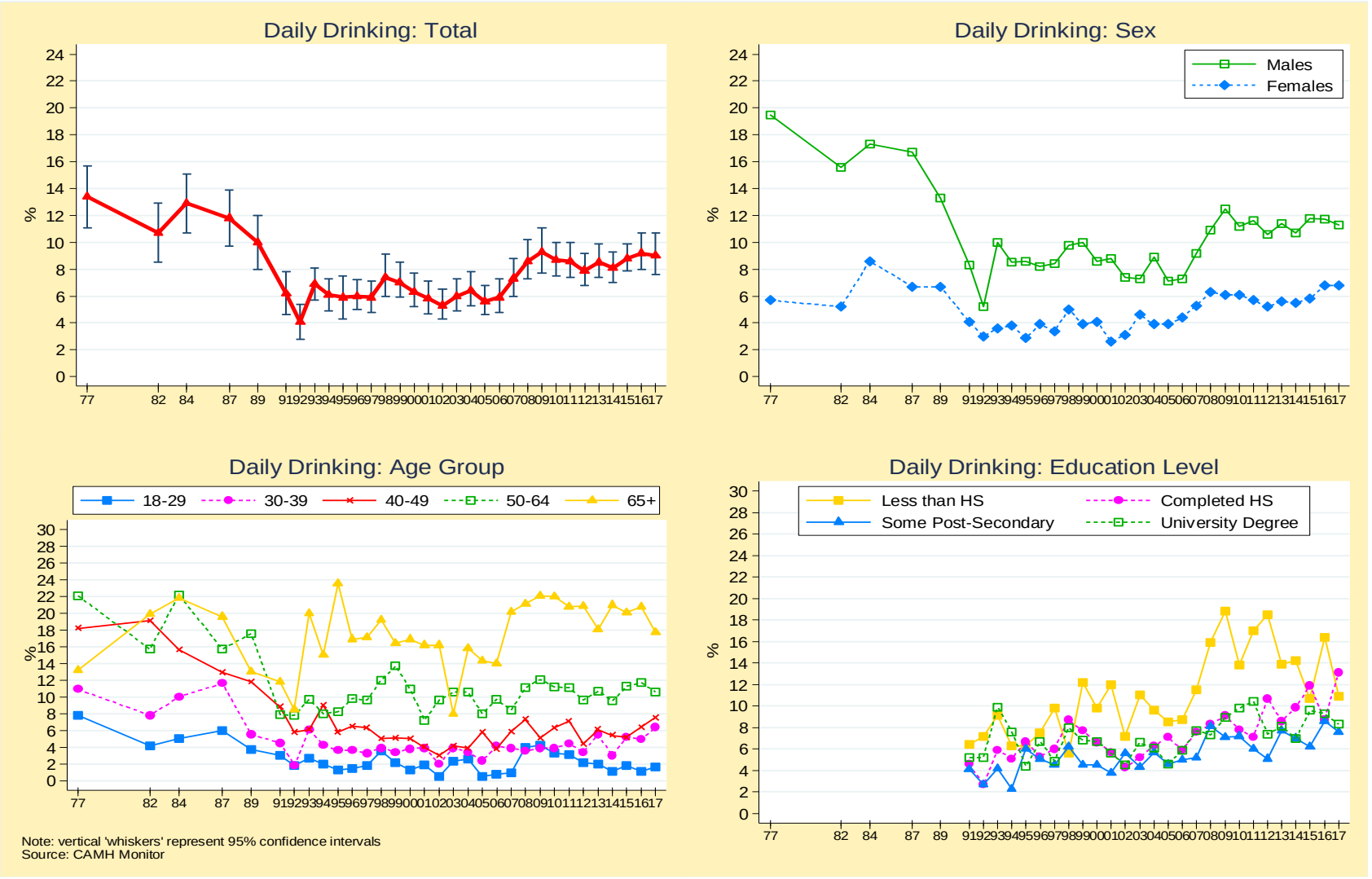
Past Year Daily Drinking by Sex, Age and Region, Ontarians Aged 18+, 2017 (N=2812)



Note: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal bar represents 95% confidence interval for total estimate
(3) significant difference by sex and age (p<.05)
Source: 2017 CAMH Monitor

Figure 3.2.3

Daily Drinking, Ontarian Past Year Drinkers Aged 18+, 1977–2017



Note: vertical 'whiskers' represent 95% confidence intervals
Source: CAMH Monitor

3.3 Estimated Number of Drinks Consumed Weekly Among Past Year Drinkers

The estimated number of drinks consumed is based on the respondent's recall of both the frequency of drinking and the amount consumed on a typical drinking occasion. In contrast to the prevalence of past year drinking, which describes the size of the drinking population, and the prevalence of daily drinking, which describes the percentage drinking regularly, the estimated number of drinks consumed is an indicator of the quantity of alcohol typically consumed.

2017……Table 3.3.1b

On average, Ontarian **past year drinkers** reported consuming **4.9** (95% CI: 4.3 to 5.5) **drinks weekly**.

Of the five demographic factors examined, there were significant univariate effects only for **sex** and **age**.

- Male drinkers consumed an average of 6.2 drinks weekly, compared to 3.6 drinks for female drinkers.
- The average number of drinks tended to increase with age. It was highest among those aged 50 to 64 (5.6 drinks) and lowest among those aged 18 to 29 (3.9 drinks).

There were no other significant differences.

Trends

1977–2017……Tables 3.3.1a-b; Fig. 3.3.1

2016–2017

The average number of drinks consumed weekly did not change significantly between 2016 and 2017 (4.5 vs. 4.9).

In addition, the number of drinks consumed was **stable** for all sex, age, region, marital status, education and income subgroups.

2007–2017

Between 2007 and 2017, there was a significant **increase** in the average number of drinks consumed weekly, from 3.7 in 2007 to 4.9 in 2017.

1996–2017

Between 1996 and 2017, there was a significant **increase** in the average number of drinks consumed weekly, from 3.3 in 1996 to 4.9 in 2017.

There were also significant **increases** in the number of drinks consumed among drinking **men** (from 4.8 in 1997 to 6.2 in 2017), among drinking **women** (from 1.9 in 1996 to 3.6 in 2017), and for all demographic factors examined (all age groups, all regions, all marital status and all education subgroups).

Table 3.3.1a: Estimated ***Average Number of Drinks per Week*** in the Past 12 Months, Ontarian ***Past Year Drinkers*** Aged 18+, 1996–2000

	1996	1997	1998	1999	2000
(N=)	(2141)	(2219)	(1582)	(1938)	(1887)
Total	**3.32**	**3.38**	**3.90**	**3.58**	**3.53**
(95%CI)[a]	(2.97,3.68)	(3.09,3.66)	(3.50,4.30)	(3.25,3.91)	(3.19,3.88)
Sex					
Men	**4.84**	**4.82**	**5.62**	**5.12**	**5.01**
	(4.16, 5.52)	(4.31,5.32)	(4.91,6.34)	(4.55,5.69)	(4.40,5.61)
Women	**1.87**	**1.97**	**2.19**	**1.94**	**2.06**
	(1.67, 2.08)	(1.74,2.19)	(1.89,2.49)	(1.68,2.21)	(1.77,2.34)
Age					
18 - 29 years	**4.16**	**3.74**	**5.14**	**3.84**	**3.29**
	(3.04, 5.28)	(3.10,4.37)	(4.04,6.24)	(3.01,4.68)	(2.72,3.86)
30 - 39 years	**2.64**	**2.98**	**3.33**	**3.55**	**2.88**
	(2.20, 3.07)	(2.50,3.46)	(2.49,4.17)	(2.80,4.31)	(2.37,3.38)
40 - 49 years	**3.11**	**2.99**	**3.18**	**3.11**	**3.67**
	(2.52, 3.70)	(2.45,3.53)	(2.61,3.74)	(2.61,3.61)	(2.82,4.54)
50 - 64 years	**3.44**	**3.42**	**3.95**	**3.87**	**4.53**
	(2.86, 4.03)	(2.82,4.02)	(3.18,4.73)	(3.18,4.56)	(3.42,5.64)
65+ years	**3.39**	**4.17**	**4.14**	**3.58**	**3.50**
	(2.73, 4.04)	(3.08,5.25)	(3.11,5.18)	(2.83,4.32)	(2.73,4.27)
Region					
Toronto	**3.59**	**3.15**	**4.20**	**3.67**	**3.07**
	(2.89, 4.29)	(2.55, 3.76)	(3.26, 5.14)	(2.91, 4.42)	(2.43, 3.70)
Central East	**3.07**	**3.51**	**3.39**	**3.57**	**3.80**
	(2.61, 3.53)	(2.91, 4.11)	(2.51, 4.27)	(2.80, 4.33)	(2.89, 4.71)
Central West	**2.89**	**3.43**	**2.86**	**3.30**	**3.25**
	(2.44, 3.34)	(2.80, 4.06)	(2.20, 3.51)	(2.65, 3.96)	(2.67, 3.84)
West	**3.67**	**2.99**	**3.97**	**3.79**	**3.49**
	(1.84, 5.50)	(2.26, 3.72)	(3.04, 4.90)	(2.96, 4.63)	(2.67, 4.31)
East	**3.39**	**4.07**	**4.33**	**3.46**	**3.53**
	(2.48,4.29)	(3.20, 4.94)	(3.40, 5.26)	(2.66, 4.26)	(2.57, 4.48)
North	**3.65**	**2.92**	**4.03**	**3.92**	**4.23**
	(2.53, 4.77)	(2.29, 3.56)	(3.09, 4.96)	(2.65, 5.19)	(2.97, 5.48)
Marital Status					
Married/Partner	**2.70**	**3.04**	**3.02**	**3.26**	**3.30**
Previously Married	**3.94**	**4.05**	**3.36**	**3.45**	**3.39**
Never Married	**4.63**	**3.75**	**5.41**	**4.57**	**4.91**
Education					
High school not completed	**3.41**	**4.13**	**4.39**	**4.86**	**3.67**
Completed high school	**3.31**	**3.57**	**4.26**	**3.82**	**3.81**
Some college or university	**3.65**	**3.19**	**3.82**	**3.27**	**3.40**
University degree	**2.93**	**2.84**	**3.32**	**3.08**	**3.36**

Notes: [a] 95% confidence interval; all analyses are sample design adjusted.
Defn: *Product of the frequency of drinking and the amount consumed on a typical drinking occasion*
Source: The *CAMH Monitor*, Centre for Addiction and Mental Health

Table 3.3.1b: Estimated ***Average Number of Drinks per Week*** in the Past 12 Months, Ontarian ***Past Year Drinkers*** Aged 18+, 2001–2017

(N=)	2001 (2088)	2002 (1933)	2003 (1933)	2004 (2101)	2005 (1906)	2006 (1527)	2007 (1618)	2008 (1599)	2009 (1602)	2010 (2352)	2011 (2401)	2012 (2355)	2013 (2330)	2014 (2422)	2015 (3967)	2016 (2368)	2017 (2195)	Trend
Total	**3.44**	**3.51**	**3.50**	**3.69**	**3.81**	**3.88**	**3.67**	**5.04**	**4.62**	**4.56**	**4.69**	**4.41**	**5.13**	**4.42**	**4.34**	**4.48**	**4.89**	**T –**
(95% CI)	(3.14,3.75)	(3.05, 3.97)	(3.18, 3.83)	(3.36, 4.02)	(3.47, 4.15)	(3.45, 4.31)	(3.33,4.02)	(4.52, 5.55)	(4.02, 5.22)	(4.18, 4.93)	(4.25, 5.14)	(4.06, 4.75)	(4.43, 5.84)	(4.03, 4.81)	(4.10, 4.58)	(4.03, 4.93)	(4.29, 5.49)	
Sex																	***	
Men	**5.00**	**4.85**	**4.84**	**4.97**	**4.97**	**5.36**	**4.96**	**7.03**	**6.48**	**6.13**	**6.67**	**6.03**	**7.41**	**5.87**	**5.85**	**6.15**	**6.23**	**T –**
	(4.44,5.53)	(4.05, 5.65)	(4.27, 5.41)	(4.41, 5.52)	(4.44, 5.49)	(4.60,6.13)	(4.37,5.54)	(6.14, 7.92)	(5.36, 7.61)	(5.48, 6.78)	(5.83, 7.50)	(5.43, 6.63)	(6.08, 8.73)	(5.16, 6.58)	(5.42, 6.28)	(5.33, 5.97)	(5.45, 7.02)	
Women	**1.85**	**2.16**	**2.14**	**2.38**	**2.54**	**2.28**	**2.36**	**3.01**	**2.79**	**2.96**	**2.76**	**2.74**	**2.78**	**2.99**	**2.84**	**2.79**	**3.55**	**T –**
	(1.64,2.06)	(1.75, 2.57)	(1.86, 2.41)	(2.06, 2.70)	(2.14, 2.95)	(1.98,2.57)	(2.04,2.68)	(2.55, 3.46)	(2.44, 3.14)	(2.64, 3.28)	(2.51, 3.01)	(2.49, 2.99)	(2.50, 3.05)	(2.67, 3.30)	(2.65, 3.03)	(2.50, 3.08)	(2.64,4.47)	
Age																	*	
18 - 29	**3.85**	**3.92**	**4.00**	**4.67**	**4.41**	**4.76**	**4.50**	**6.73**	**5.56**	**5.39**	**5.83**	**5.11**	**7.06**	**4.01**	**4.14**	**4.00**	**3.91**	**T –**
	(3.11,4.60)	(2.79, 5.06)	(3.20, 4.81)	(3.69, 5.66)	(3.63,5.21)	(3.44,6.08)	(3.54,5.46)	(5.01, 8.46)	(3.17, 7.95)	(4.15, 6.62)	(4.33, 7.34)	(3.83, 6.38)	(4.58, 9.55)	(2.86, 5.17)	(3.46, 4.82)	(2.78, 5.22)	(3.01, 4.81)	
30 - 39	**3.49**	**2.83**	**3.15**	**2.99**	**3.09**	**3.72**	**2.49**	**3.98**	**4.21**	**3.86**	**4.02**	**4.06**	**5.38**	**3.93**	**3.78**	**4.41**	**5.57**	**T –**
	(2.80,4.17)	(2.34, 3.32)	(2.49, 3.82)	(2.45, 3.54)	(2.52,3.67)	(2.69,4.75)	(1.91,3.06)	(3.12, 4.85)	(3.16, 5.26)	(3.06, 4.65)	(3.14, 4.91)	(3.25, 4.87)	(2.56, 8.19)	(2.78, 5.08)	(3.24, 4.32)	(2.52, 6.30)	(2.28, 8.86)	
40 - 49	**2.96**	**3.38**	**2.81**	**3.23**	**4.25**	**3.31**	**3.15**	**4.96**	**4.37**	**4.01**	**4.78**	**3.62**	**4.10**	**4.48**	**3.76**	**3.97**	**4.79**	**T –**
	(2.39,3.52)	(1.91, 4.85)	(2.34, 3.28)	(2.50, 3.96)	(3.26, 5.24)	(2.64,3.96)	(2.65,3.65)	(3.90, 6.02)	(3.51, 5.23)	(3.47, 4.55)	(3.87, 5.70)	(3.12, 4.12)	(3.41, 4.78)	(3.70, 5.26)	(3.26, 4.25)	(3.25, 4.69)	(3.39, 6.19)	
50 - 64	**3.43**	**3.96**	**3.92**	**3.90**	**3.45**	**3.60**	**4.15**	**4.64**	**4.49**	**4.79**	**4.53**	**4.50**	**5.23**	**4.99**	**4.90**	**5.02**	**5.63***	**T –**
	(2.88,3.99)	(3.20, 4.73)	(3.10, 4.75)	(3.32, 4.48)	(2.93,3.97)	(3.02,4.18)	(3.32,4.98)	(3.83, 5.45)	(3.65, 5.32)	(4.12, 5.46)	(3.95, 5.12)	(4.03, 4.97)	(4.27, 6.19)	(4.22, 5.75)	(4.45, 5.35)	(4.43, 5.61)	(4.75,6.52)	
65+	**3.73**	**3.76**	**3.96**	**4.01**	**4.06**	**4.06**	**4.00**	**4.89**	**4.81**	**4.77**	**4.57**	**4.95**	**4.25**	**4.47**	**4.84**	**4.79**	**4.46**	**T –**
	(2.78,4.67	(2.90, 4.63)	(3.00, 4.92)	(3.27, 4.75)	(3.33, 4.79)	(3.14,4.98)	(3.15,4.85)	(3.94, 5.85)	(3.86, 5.76)	(4.01, 5.53)	(3.54, 5.60)	(4.12, 5.77)	(3.73, 4.77)	(3.96, 4.98)	(3.36, 5.35)	(4.23, 5.34)	(3.99, 4.94)	
Region																	NS	
Toronto	**3.22**	**3.21**	**3.50**	**3.54**	**3.18**	**3.61**	**3.65**	**4.27**	**3.70**	**4.15**	**4.04**	**4.21**	**4.96**	**4.63**	**4.36**	**4.20**	**4.39**	**T –**
	(2.67, 3.76)	(2.38, 4.04)	2.70, 4.30)	(2.82, 4.28)	(2.59, 3.77)	2.68,4.54)	(2.92,4.37)	(2.99, 5.55)	(2.94,4.47)	(3.37,4.93)	(3.04, 5.03)	(3.42,5.00)	(3.58, 6.34)	(3.56, 5.71)	(3.80,4.92)	(3.27, 5.13)	(3.52, 5.26)	
C- East	**3.15**	**3.24**	**3.70**	**3.77**	**4.26**	**4.54**	**3.58**	**5.64**	**5.38**	**4.34**	**4.52**	**4.05**	**6.03**	**4.25**	**4.08**	**4.93**	**4.64**	**T –**
	(2.52, 3.79)	(2.52, 3.96)	(2.87, 4.53)	(2.87, 4.67)	(3.49, 5.03)	(3.28, 5.80)	(2.77,4.40)	(4.39, 6.90)	(3.45, 7.31)	(3.52, 5.15)	(3.59, 5.45)	(3.40, 4.69)	(3.80, 8.25)	(3.37, 5.12)	(3.59, 4.57)	(3.61, 6.24)	(3.49, 5.80)	
C-West	**3.17**	**3.77**	**2.78**	**3.47**	**3.73**	**3.11**	**3.13**	**4.99**	**5.32**	**5.19**	**4.99**	**4.19**	**4.63**	**4.38**	**4.08**	**4.56**	**5.58**	**T –**
	(2.45, 3.89)	(2.30, 5.25)	(2.27, 3.29)	(2.78, 4.17)	(2.85, 4.61)	(2.35, 3.86)	(2.42, 3.84)	(3.77, 6.21)	(4.16, 6.47)	(4.17, 6.21)	(3.75, 6.24)	(3.35, 5.02)	(3.65, 5.61)	(3.62, 5.14)	(3.51, 4.66)	(3.65, 5.46)	(3.77,7.40)	
West	**4.03**	**3.81**	**3.05**	**4.22**	**4.14**	**4.31**	**4.56**	**4.27**	**3.33**	**4.51**	**4.94**	**4.43**	**4.66**	**4.45**	**4.75**	**4.09**	**4.25**	**T –**
	(3.21, 4.84)	(2.50, 5.13)	(2.49, 3.61)	(3.38, 5.05)	(3.38, 4.89)	(3.39,5.23)	(3.57,5.54)	(3.46, 5.08)	(2.71, 3.95)	(3.65, 3.38)	(4.00, 5.88)	(3.76, 5.10)	(3.20, 6.11)	(3.71, 5.19)	(4.14, 5.35)	(3.27, 4.90)	(3.41, 5.09)	
East	**3.51**	**3.92**	**3.97**	**3.44**	**3.22**	**3.99**	**4.27**	**5.71**	**4.18**	**4.24**	**5.11**	**5.12**	**4.91**	**4.40**	**4.38**	**4.46**	**5.67**	**T –**
	(2.76, 4.25)	(2.70, 3.88)	(3.08, 4.86)	(2.82, 4.06)	(2.69, 3.75)	(3.19,4.79)	(3.33,5.20)	(4.58, 6.83)	(3.24, 5.11)	(3.58, 4.90)	(4.15, 6.08)	(4.21, 6.02)	(4.18, 5.63)	(3.48, 5.31)	(3.80, 4.97)	(3.76, 5.17)	(4.37, 6.97)	
North	**4.42**	**3.64**	**4.19**	**3.83**	**4.67**	**3.67**	**2.78**	**5.69**	**5.67**	**5.26**	**4.93**	**5.52**	**5.19**	**4.60**	**5.07**	**4.32**	**4.14**	**T –**
	(2.99, 5.85)	(2.84, 4.45)	(3.16, 5.22)	(3.09, 4.57)	(2.92, 6.40)	(2.69,4.65)	(2.14,3.43)	(4.53, 6.85)	(4.38, 6.96)	(4.01, 6.50)	(4.02, 5.84)	(4.06, 6.98)	(4.33, 6.05)	(3.73, 5.48)	(4.40, 5.74)	(3.61, 5.03)	(3.31, 4.98)	

Cont'd

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Trend
(N=)	(2088)	(1933)	(1933)	(2101)	(1906)	(1527)	(1618)	(1599)	(1602)	(2352)	(2401)	(2355)	(2330)	(2422)	(3967)	(2368)	(2195)	
Marital Status																	NS	
Married/ Partner	**3.21**	**3.09**	**3.30**	**3.28**	**3.58**	**3.29**	**3.30**	**4.41**	**4.52**	**4.22**	**4.40**	**4.23**	**4.40**	**4.36**	**4.32**	**4.49**	**5.06**	**T –**
Prev. Married	**3.09**	**2.85**	**3.94**	**3.48**	**4.36**	**4.57**	**3.69**	**5.30**	**5.39**	**5.02**	**5.48**	**3.99**	**4.43**	**4.95**	**5.19**	**4.98**	**5.95**	**T –**
Never married	**4.23**	**5.09**	**3.92**	**4.99**	**4.21**	**5.20**	**4.85**	**6.67**	**4.60**	**5.33**	**5.29**	**5.16**	**7.92***	**4.35**	**4.06**	**4.23**	**4.23**	**T –**
Education																	NS	
HS not completed	**4.62**	**6.20**	**4.14**	**4.70**	**6.06**	**4.82**	**4.92**	**8.31**	**8.80**	**5.00**	**5.86**	**5.52**	**8.09**	**5.99**	**4.77**	**5.16**	**4.97**	**T –**
Completed HS	**3.97**	**3.01**	**3.96**	**3.80**	**4.33**	**4.41**	**4.44**	**6.07**	**4.25**	**4.64**	**4.76**	**5.08**	**5.99**	**4.87**	**4.87**	**5.50**	**6.15**	**T –**
Some College or Univ.	**2.96**	**3.22**	**3.44**	**3.81**	**3.67**	**3.72**	**3.15**	**4.54**	**4.04**	**4.86**	**4.76**	**4.08**	**5.15**	**4.36**	**4.26**	**4.57**	**4.54**	**T –**
Univ Degree	**3.08**	**2.98**	**3.02**	**3.15**	**2.88**	**3.40**	**3.24**	**3.84**	**4.05**	**4.05**	**4.39**	**4.15**	**4.03**	**4.01**	**4.13**	**3.89**	**4.64**	**T –**

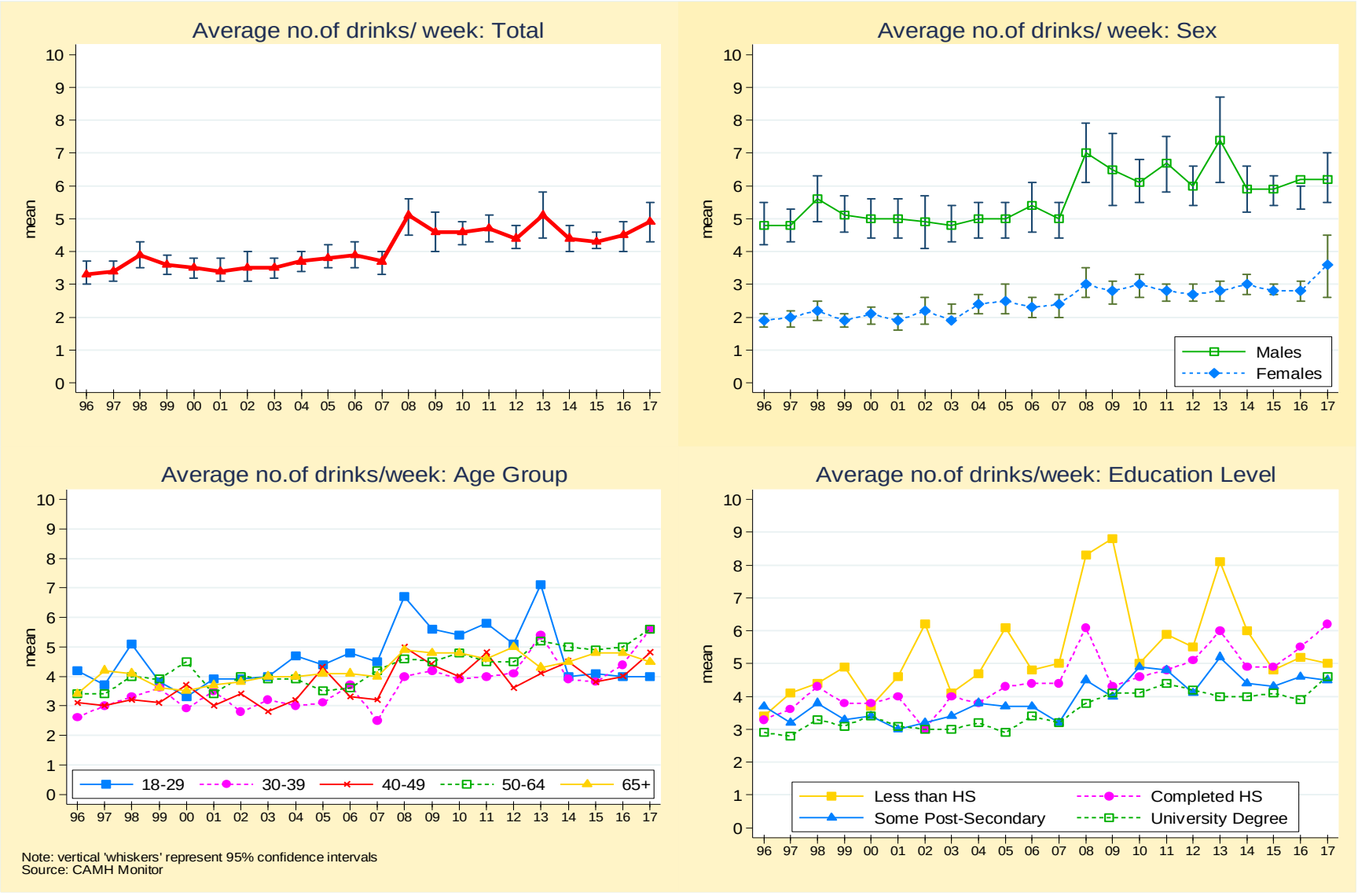
Notes: (1) All analyses are sample design adjusted; *p<.05; **p<.01; ***p<.001; based on F-tests; CI = 95% confidence interval; NS – no statistically significant difference; the sampling design was changed in 2017 to dual-frame sampling (landline + cell-phone).
(2) Trend Analysis: **–** change not statistically significant (p<.05); **T** significant change (p<.05) between 1996-2017; **2Y** significant change (p<.05) between last two estimates.

Def: *Product of the frequency of drinking and the amount consumed on a typical drinking occasion*

Source: The *CAMH Monitor*, Centre for Addiction and Mental Health

Figure 3.3.1

Average Number of Drinks Consumed Weekly, Ontarian Past Year Drinkers Aged 18+, 1996–2017



Note: vertical 'whiskers' represent 95% confidence intervals
Source: CAMH Monitor

3.4 Exceeding Low-Risk Drinking Guidelines

Canadian guidelines referring to "low-risk drinking" were initially disseminated in 1994 following an international conference on health benefits and risks (Ashley et al., 1994). In 1997, updated guidelines were released by the former Addiction Research Foundation (currently CAMH) and the Canadian Centre on Substance Abuse (Bondy et al., 1999).

Released on November 25, 2011, the revised Canada's Low-Risk Alcohol Drinking Guidelines (LRDG) were developed by the National Alcohol Strategy Advisory Committee (NASAC) to help Canadians make healthier choices about their alcohol consumption (Butt, Beirness, Gliksman, Paradis, & Stockwell, 2011).

The revised LRDG recommend 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. They also recommend that Canadians plan non-drinking days each week, to help avoid developing a habit. The LRDG suggest limits to reduce harm on single occasions, and highlight situations where alcohol should be avoided altogether, such as when taking medication, driving, or when living with mental or physical health problems. Also, caution should be taken to avoid intoxication and injury. The guidelines are intended to represent low risk of the most important forms of harm and to address usual drinking over many years.

The compliance with LRDG is derived from the respondents' self-reported consumption of standard drinks consumed during the past seven days, measured daily. Respondents were considered as exceeding the guidelines if they reported a total weekly consumption of 16 drinks or more for men and 11 or more drinks for women, OR if they exceeded three drinks (for men) or two drinks (for women) on any given day over the past week. Data for LRDG items are available only for 2016. In 2016, the LRDG items were asked of a random subsample of respondents (Panel B, n=1020).

2016…… Table 3.4.1; Fig. 3.4.1

An estimated **16.4%** (95% CI: 13.5% to 19.9%) of Ontarians exceeded the low-risk drinking guidelines during the past 12 months. Among past year drinkers, the prevalence was **20.4%** (95% CI: 16.8% to 24.6%). The corresponding population estimate is 1,552,000 Ontario adults who exceeded the guidelines.

When controlling for other demographic factors, **sex** and **education** were significantly related to exceeding the drinking guidelines during the past year.

- The adjusted odds of drinking at a level exceeding the low-risk guidelines were 2 times higher for men than women (21.3% vs. 11.9%; OR=1.99).
- The rate of drinking at a level exceeding the low-risk guidelines showed a significant association with education. Compared to those not completing high school, the odds of drinking at this level were significantly higher among those with higher education.

Age, region, marital status and income were not significantly related to exceeding the low-risk drinking guidelines, after adjusting for other demographic factors.

Trends

2003–2016 ……. Table 3.4.2; Fig 3.4.2

2014–2016

The percentage of Ontarians exceeding the low-risk drinking guidelines in 2016 (16.4%) was not significantly different from 2014 (14.2%). The percentage of Ontarians exceeding the low-risk drinking guidelines was stable among all subgroups.

2003–2016

Between 2003 and 2016, exceeding the drinking guidelines has displayed a significant linear **decline** from 21.5% in 2005 to 16.4% in 2016.

Significant non-linear declining trends were found also among women, among those aged 18 to 29, among respondents living in the Central East, in the West and in the East, among those never married, and among those with less than high school education and those with university education.

Table 3.4.1: Percentage ***Exceeding Low-Risk Drinking Guidelines*** in the Past 12 Months and Adjusted Group Differences, Ontarians Aged 18+, 2016

	N	%	95% CI	Adjusted Odds Ratio (N=1000)
Total[1]	1020	**16.4**	(13.5, 19.9)	—
Sex				**
Men	401	**21.3**	(16.3, 27.3)	**1.99**
Women *(Comparison Group)*	607	**11.9**	(9.0, 15.6)	—
Age				NS
18-29 *(Comparison Group)*	85	**†15.8**	(7.9, 29.1)	—
30-39	69	**†22.6**	(13.1, 36.0)	1.69
40-49	152	**†19.8**	(13.1, 28.8)	0.95
50-64	337	**16.6**	(12.7, 21.3)	0.72
65+	362	**†9.1**	(6.2, 13.1)	0.61
Region				NS
Toronto *(vs. Provincial Average)*	184	**†22.6**	(15.2, 32.2)	1.63
Central East	167	**†15.3**	(9.1, 24.5)	0.82
Central West	172	**†14.9**	(9.2, 23.1)	0.94
West	150	**†12.4**	(7.1, 20.6)	0.70
East	158	**†17.7**	(12.0, 25.2)	1.17
North	177	**†14.5**	(9.2, 22.1)	0.99
Marital Status				NS
Married/Partner *(Comparison Group)*	638	**16.5**	(13.0, 20.7)	—
Previously Married	220	**†13.7**	(8.7, 20.8)	1.33
Never Married	142	**†18.3**	(11.3, 28.2)	1.28
Education				*
High school not completed *(Comparison Group)*	103	**†9.6**	(3.7, 22.8)	—
Completed high school	197	**†17.6**	(12.2, 24.8)	1.92
Some college or university	366	**20.7**	(14.8, 28.3)	1.99
University degree	339	**13.2**	(9.4, 18.1)	0.92
Household Income				NS
< $30,000 *(Comparison Group)*	101	**†12.9**	(6.3, 24.6)	—
$30,000-$49,999	122	**†14.2**	(7.4, 25.7)	1.24
$50,000-$79,999	176	**†15.2**	(9.0, 24.5)	1.20
$80,000+	385	**21.1**	(16.3, 26.8)	1.69
Not stated	224	**†8.3**	(4.6, 14.7)	0.57

Notes: [1] LRDG items were asked of a random subsample in 2016 (N= 1020); all analyses are sample design adjusted.
(1) *p<.05**;** **p<.01; ***p<.001; CI = 95% confidence interval; NS – no statistically significant difference; † Estimate suppressed or unstable.
(2) Asterisks in group row indicate a statistically significant group effect, based on Wald test.
(3) ORs greater than 1.0 indicate that the odds of the outcome are higher in the group being compared to the comparison group; ORs less than 1.0 indicate that the odds of the outcome are lower in the group being compared to the comparison group.
(4) Adjusted odds ratio holding fixed values for sex, age, region, marital status, education and income.

Def'n: *Based on total weekly consumption of 16 drinks or more for males or 11 drinks or more for females, or, over the past week, a daily consumption exceeding two drinks for women or three drinks for men.*

Source: The *CAMH Monitor*, Centre for Addiction and Mental Health

Table 3.4.2: Percentage ***Exceeding Low-Risk Drinking Guidelines*** in the Past 12 Months by Demographic Characteristics, Ontarians Aged 18+, 2003-2016

	2003	2004	2005	2006	2007	2008	2009	2011	2012	2013	2014	2016	Trend	
(N=)	(2411)	(2611)	(2445)	(2016)	(2005)	(2024)	(2037)	(1040)	(2015)	(961)	(1039)	(1020)		
Total	**17.6**	**19.5**	**21.5**	**20.6**	**19.1**	**17.6**	**17.8**	**18.4**	**17.6**	**18.8**	**14.2**	**16.4**	**T**	**–**
(95%CI)[a]	(15.9, 19.5)	(17.7, 21.4)	(19.6, 23.6)	(18.5, 22.9	(17.1, 21.3)	(15.6, 19.8)	(15.8, 20.0)	(15.2, 22.1)	(15.3, 19.6)	(15.3, 22.8)	(11.6, 17.2)	(13.5, 19.9)		
Sex														
Men	**21.2**	**22.7**	**26.5**	**26.8**	**21.7**	**21.4**	**21.1**	**23.0**	**20.8**	**26.0**	**15.1**	**21.3**	**–**	**–**
	(18.5, 24.2)	(19.9, 25.9)	(23.4, 29.8)	(23.3, 30.5)	(18.6, 25.2)	(18.2, 24.9)	(18.0, 24.6)	(17.9, 29.1)	(17.5, 24.5)	(19.8, 33.3)	(11.6, 19.5)	(16.3, 27.3)		
Women	**14.2**	**16.4**	**17.0**	**14.8**	**16.7**	**14.1**	**14.7**	**13.9**	**14.2**	**12.8**	**13.3**	**11.9**	**T**	**–**
	(12.2, 16.5)	(14.2, 18.9)	(14.8, 19.5)	(12.4,17.4)	(14.3,19.4)	(11.8,16.7)	(12.3,17.6)	(10.5,18.3)	(11.9,16.9)	(9.8,16.6)	(9.8,17.8)	(9.0,15.6)		
Age														
18-29	**27.1**	**34.9**	**33.5**	**33.7**	**34.3**	**28.3**	**29.1**	**†29.0**	**25.7**	**†35.9**	**†16.2**	**†15.8**	**T**	**–**
	(22.4, 32.4)	(29.5, 40.8)	(28.1, 39.5)	(27.4, 40.7)	(27.7, 41.4)	(21.9, 35.8)	(22.3,37.0)	(19.3, 41.1)	(18.8, 34.1)	(22.2, 52.3)	(8.7, 28.3)	(7.9, 29.1)		
30-39	**20.9**	**18.9**	**24.0**	**23.1**	**17.5**	**19.0**	**16.2**	**†22.2**	**20.2**	**†22.9**	**†16.7**	**†22.6**	**–**	**–**
	(16.9, 25.5)	(15.3,23.0)	(19.8, 28.8)	(18.5, 28.5	(13.5, 22.3)	(14.3, 24.7)	(12.2, 21.2)	(14.9,31.7)	(15.3, 26.2)	(14.4, 34.4)	(8.0, 24.4)	(13.1, 36.0)		
40-49	**16.9**	**18.0**	**24.0**	**18.9**	**19.9**	**20.0**	**20.7**	**†21.7**	**17.8**	**†16.7**	**†20.3**	**†19.8**	**–**	**–**
	(13.8, 20.5)	(14.7, 21.9)	(20.2, 28.3)	(14.9,23.6)	(15.9, 24.6)	(15.9, 24.8)	(16.8,25.3)	(15.5,29.5)	(13.9, 22.4)	(11.3, 24.0)	(13.6, 29.2)	(13.1, 28.8)		
50-64	**12.2**	**16.8**	**15.9**	**17.1**	**16.3**	**14.2**	**14.5**	**†15.2**	**16.1**	**15.5**	**17.4**	**16.6**	**–**	**–**
	(9.4, 15.6)	(13.6, 20.6)	(12.9, 19.6)	(13.7, 21.1)	(13.1, 20.2)	(11.3, 17.7)	(11.3, 18.4)	(14.7,22.2)	(13.1, 19.7)	(11.4, 20.6)	(13.1, 22.7)	(12.7, 21.3)		
65+	**9.1**	**7.9**	**7.7**	**8.6**	**8.4**	**7.6**	**9.7**	**†4.0**	**8.8**	**†8.3**	**†8.2**	**†9.1**	**–**	**–**
	(6.3, 12.8)	(5.3, 11.5)	(5.2, 11.2)	(5.8, 12.6)	(5.8, 12.1)	(5.3,10.7	(7.1, 13.1)	(2.0, 7.7)	(6.5,11.9	(5.3, 12.8)	(5.6, 11.9)	(6.2, 13.1)		
Region														
Toronto	**18.1**	**15.7**	**18.5**	**15.5**	**14.3**	**12.6**	**17.1**	**†15.9**	**14.1**	**†20.1**	**†14.2**	**†22.6**	**–**	**–**
	(14.1, 22.97)	(12.1, 20.1)	(14.4, 23.4)	(11.6, 20.6)	(10.6, 19.1)	(9.1, 17.2)	(12.6, 22.7)	(9.9, 24.7)	(10.5, 18.8)	(12.4, 30.8)	(10.1, 19.1)	(15.2, 32.2)		
Central East	**18.9**	**22.9**	**25.4**	**22.2**	**19.0**	**17.8**	**18.0**	**†21.6**	**16.7**	**†20.5**	**†15.1**	**†15.3**	**T**	**–**
	(15.1, 23.4)	(18.5, 28.0)	(20.9, 30.5)	(17.2, 28.0)	(14.5, 24.4)	(13.5, 23.1)	(13.6, 23.4)	(14.5,30.8)	(12.2, 22.4)	(12.9, 31.0)	(9.6, 23.0)	(9.1, 24.5)		
Central West	**16.1**	**17.6**	**18.8**	**18.4**	**17.4**	**18.4**	**21.2**	**†14.0**	**17.3**	**†17.1**	**†16.8**	**†14.9**	**–**	**–**
	(12.4, 20.5)	(13.8, 22.3)	(14.8, 23.5)	(13.9, 24.0)	(13.0, 22.8)	(13.8, 24.0)	(16.7, 26.5)	(8.1,23.1)	(13.0, 22.8)	(10.8, 26.0)	(10.8, 25.2)	(9.2, 23.1)		
West	**17.8**	**23.9**	**25.1**	**27.2**	**22.2**	**17.1**	**13.6**	**†21.9**	**17.8**	**†13.6**	**†13.8**	**†12.4**	**T**	**–**
	(14.1,22.2)	(19.4, 28.9)	(20.8, 29.9)	(22.0, 33.1)	(17.4, 27.8)	(13.1, 22.2)	(10.0,18.2)	(14.7, 31.4)	(13.5, 23.1)	(8.5, 21.0)	(8.4, 21.8)	(7.1, 20.6)		
East	**17.1**	**20.5**	**20.4**	**25.1**	**24.2**	**23.2**	**15.3**	**†15.0**	**21.6**	**†19.2**	**†12.0**	**†17.7**	**T**	**–**
	(13.4, 21.6)	(16.6, 25.0)	(16.3, 25.2)	(20.0, 31.0)	(19.2,30.1)	(18.0, 29.3)	(11.5, 20.1)	(9.6,22.7)	(16.8, 27.2)	(12.6, 28.1)	(7.7, 18.2)	(12.0, 25.2)		
North	**17.7**	**18.9**	**21.9**	**16.6**	**23.5**	**21.0**	**23.1**	**†23.4**	**21.1**	**†21.3**	**†18.9**	**†14.5**	**–**	**–**
	(13.9, 22.2)	(15.7, 22.6)	(17.8, 26.7)	(12.5, 21.5)	(18.7, 29.1)	(16.3, 26.5)	(17.8, 29.3)	(17.1,31.1)	(16.1,27.2)	(14.5, 30.2)	(12.5, 27.7)	(9.2, 22.1)		

Cont'd

(N=)	2003 (2411)	2004 (2611)	2005 (2445)	2006 (2016)	2007 (2005)	2008 (2024)	2009 (2037)	2011 (1040)	2012 (2015)	2013 (961)	2014 (1039)	2016 (1020)	Trend	
Marital Status														
Married/Partner	**15.5**	**15.9**	**20.2**	**18.0**	**16.1**	**15.6**	**15.9**	**17.2**	**16.6**	**15.5**	**14.3**	**16.5**	**–**	**–**
Previously Married	**15.5**	**16.2**	**14.7**	**13.3**	**19.4**	**14.5**	**16.5**	**†10.6**	**11.3**	**†14.2**	**†12.7**	**†13.7**	**–**	**–**
Never Married	**24.8**	**32.4**	**29.7**	**33.3**	**29.0**	**26.0**	**25.2**	**†25.8**	**22.4**	**†31.0**	**†14.9**	**†18.3**	**T**	**–**
Education														
High school not completed	**14.3**	**13.7**	**15.8**	**18.6**	**†17.9**	**20.5**	**†21.5**	**†8.8**	**10.2**	**†12.7**	**†8.1**	**†9.6**	**T**	**–**
Completed high school	**20.6**	**20.5**	**21.5**	**20.5**	**21.2**	**18.8**	**15.7**	**†19.6**	**15.5**	**†20.4**	**†20.9**	**†17.6**	**–**	**–**
Some college or university	**19.1**	**21.4**	**27.1**	**21.6**	**21.8**	**18.8**	**20.4**	**20.7**	**19.9**	**22.0**	**15.8**	**20.7**	**–**	**–**
University degree	**15.5**	**19.7**	**17.1**	**20.8**	**14.6**	**14.6**	**15.5**	**18.3**	**18.0**	**16.2**	**†10.3**	**13.2**	**T**	**–**

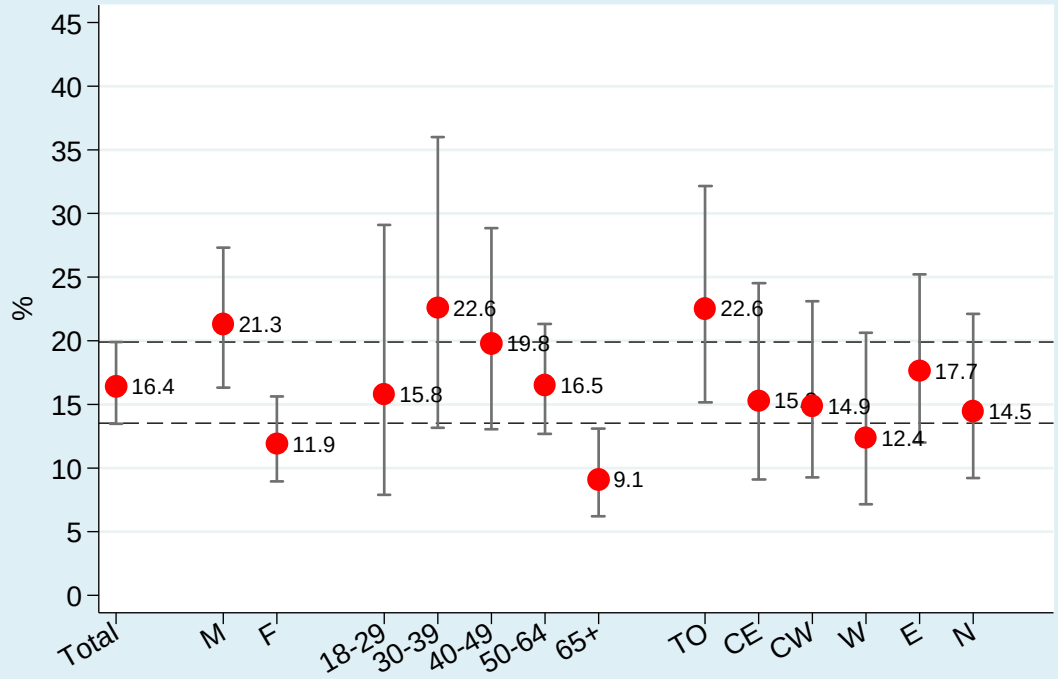
Notes: (1) All analyses are sample design adjusted; [a] 95% confidence interval; † Estimate suppressed or unstable;
(2) Trend Analysis: **–** change not statistically significant (p<.05); **T** significant change (p<.05) between 2003-2016; **2Y** significant change (p<.05) between last two estimates;

Def'n: *Based on total weekly consumption of 16 drinks or more for males or 11 or more drinks for females, or, over the past week, a daily consumption exceeding two drinks for women or three drinks for men.*

Source: The *CAMH Monitor*, Centre for Addiction and Mental Health

Figure 3.4.1

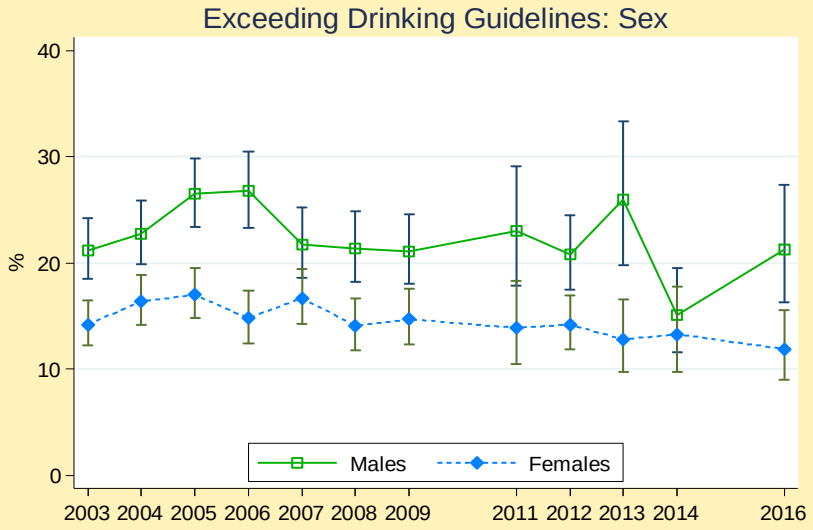
Percentage Exceeding Low-Risk Drinking Guidelines in the Past Year by Sex, Age and Region, Ontarians Aged 18+, 2016 (N=1020)

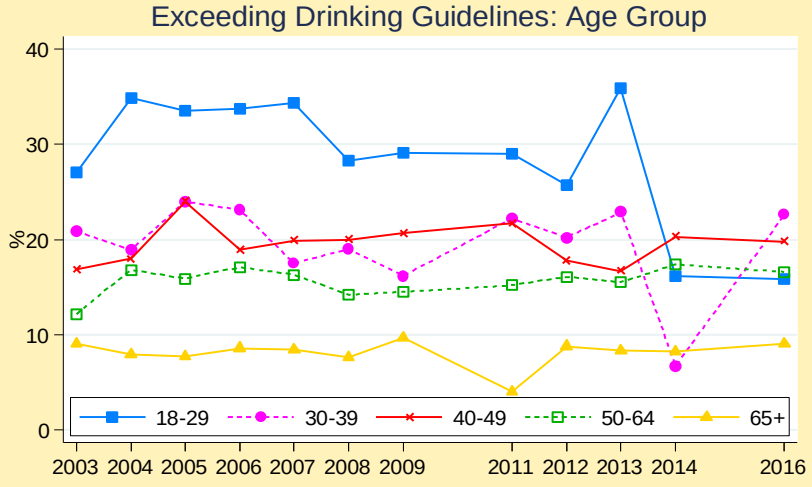


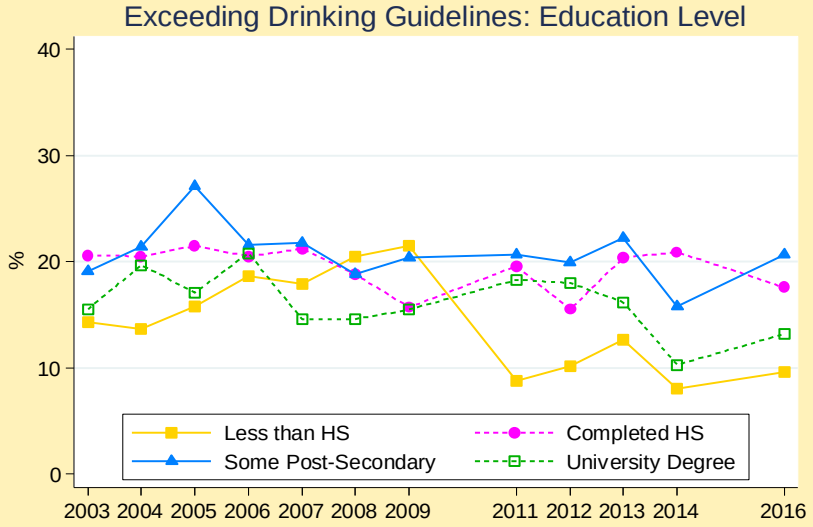
Note: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal bar represents 95% confidence interval for total estimate
(3) significant difference by sex (p<.05)
Source: 2016 CAMH Monitor

Figure 3.4.2

Percentage Exceeding Low-Risk Drinking Guidelines in the Past Year, Ontarians Aged 18+, 2003–2016







Note: Vertical 'whiskers' represent 95% confidence intervals
Source: CAMH Monitor

3.5 Weekly Binge Drinking: Five or More Drinks on a Single Occasion Weekly

The percentage reporting the consumption of five or more drinks on a single occasion on a weekly basis ("binge drinking") during the 12 months before the survey is an indicator of regular heavy intake of alcohol. Although we retain the "binge" drinking label for reader recognition, readers should note that this concept is equivalent to the terms "heavy episodic drinking," and more recently, "risky single occasion drinking".

2017……Tables 3.5.1, 3.5.2; Fig. 3.5.1

Overall, the estimated percentage of Ontarians who binge drink weekly – drink five or more drinks on a single occasion on a weekly basis in the 12 months before the survey – was **6.9%** (95% CI: 5.6% to 8.4%). Among past year drinkers, the prevalence was **8.6%** (95% CI: 7.1% to 10.5%). The corresponding population estimate is 727,900 Ontario adults who binge drink weekly.

Sex, age, and **education** were significantly related to weekly binge drinking, when controlling for other demographics:

- The adjusted odds of weekly binge drinking among men were 2.7 times higher than women (10.0% vs. 3.9%; OR=2.73).
- Weekly binge drinking declined with age. Those aged 30 to 39 reported the highest percentage of weekly binge drinking (11.0%), whereas those aged 65 and older reported the lowest percentage (2.8%; OR=0.30).
- Weekly binge drinking showed a significant association with education. The distinguishing feature was a higher rate among those who completed high school (10.9%) and a lower rate among those who completed university education (3.9%).

Past year drinkers displayed similar characteristics related to weekly binge drinking: men, those aged 30 to 39, and those who completed high school were most likely to report weekly binge drinking among their respective demographic subgroups.

Trends

1977–2017……Tables 3.5.3a - 3.5.4b; Fig. 3.5.2

2016–2017

Between 2016 and 2017, the prevalence of weekly binge drinking for the total sample did not change significantly (6.2% vs. 6.9%), and rates of weekly binge drinking were stable for all subgroups.

Past year drinkers displayed similar characteristics. The estimate of weekly binge drinking was not significantly different between 2016 (7.7%) and 2017 (8.6%), and rates of weekly binge drinking were stable for all subgroups.

2007–2017

There was a **significant** non-linear **decline** in binge drinking between 2007 and 2017. Estimates declined from 11.2% in 2007 to 6.9% in 2017 for the total sample, and from 13.8% to 8.6% among drinkers.

Significant subgroup declines were evident during this period for all sex, age, region, marital status, and education subgroups. Past year drinkers displayed similar trends.

1996–2017

Estimates of weekly binge drinking remained stable between 1996 and 2007, varying between 10.5% and 12.7% among the total sample, and between 13.1% and 16.5% among past year drinkers. A **significant** non-linear **decline** in binge drinking began in 2008 and the trend continued to decline in 2016 and 2017.

1977–2017

Since 1977, estimates of weekly binge drinking have ranged from a low of 7.0% (8.2% among drinkers) in 1995 to a high of 12.7% (16.5% among drinkers) in 2000.

Three distinct periods are evident between 1977 and 2017. Binge drinking remained stable between 1977 and 1995, and then increased significantly in 1996 among the total sample (from 7.0% to 11.7%) and among past year drinkers (from 8.2% to 14.8%) and remained at this elevated level until 2007. The increases were especially notable among men (trending upward from 10.7% in 1995 to 20.7% in 2001), and 18 to 29 year olds (trending from 10.6% in 1995 to 26.1% in 2007).

Weekly binge drinking began a **decline** again in 2008 (from 11.2% in 2007 to 6.9% in 2017) and significant subgroup declines were evident for all sex, age, region, marital status, and education subgroups.

Table 3.5.1: ***Weekly Binge Drinking*** – Percentage Drinking ***Five or More Drinks*** on a Single Occasion Weekly in the Past 12 Months and Adjusted Group Differences, ***Ontarians*** Aged 18+, 2017

	N	%	95% CI	Adjusted Odds Ratio (N=2704)
Total	2812	**6.9**	(5.6, 8.4)	—
Sex				***
Men	1150	**10.0**	(7.9, 12.4)	**2.73*** **
Women *(Comparison Group)*	1662	**†3.9**	(2.6, 5.9)	—
Age				**
18-29 *(Comparison Group)*	283	**†9.2**	(6.0, 13.7)	—
30-39	199	**†11.0**	(6.3, 18.7)	1.34
40-49	366	**†4.4**	(2.5, 7.6)	0.53
50-64	843	**7.8**	(5.8, 10.6)	0.83
65+	1110	**†2.8**	(1.9, 4.2)	**0.30***
Region				NS
Toronto *(vs. Provincial Average)*	476	**†5.1**	(3.1, 8.1)	0.73
Central East	476	**†7.7**	(5.0, 11.7)	1.09
Central West	456	**†8.4**	(5.4, 12.7)	1.29
West	468	**†5.3**	(3.2, 8.5)	0.88
East	467	**†7.7**	(5.1, 11.6)	1.20
North	469	**†5.9**	(3.8, 9.0)	0.74
Marital Status				NS
Married/Partner *(Comparison Group)*	1730	**6.1**	(4.8, 7.8)	—
Previously Married	614	**†6.2**	(2.7, 13.7)	1.40
Never Married	441	**†9.2**	(6.4, 12.9)	1.01
Education				**
High school not completed *(Comparison)*	240	**†4.6**	(1.8, 11.0)	—
Completed high school	612	**†10.9**	(7.8, 15.1)	2.06
Some college or university	986	**8.3**	(6.2, 11.0)	1.35
University degree	933	**†3.9**	(2.3, 6.5)	0.57
Household Income				NS
< $30,000 *(Comparison Group)*	266	**†7.0**	(3.7, 12.7)	—
$30,000-$49,999	347	**†5.8**	(3.1, 10.6)	0.90
$50,000-$79,999	483	**†4.8**	(3.0, 7.6)	0.65
$80,000+	1079	**8.2**	(6.1, 11.0)	1.39
Not stated	637	**†6.0**	(3.8, 9.2)	1.05

Notes: (1) All analyses are sample design adjusted; *p<.05**;** **p<.01; ***p<.001; CI = 95% confidence interval; NS – no statistically significant difference.
(2) Asterisks in group row indicate a statistically significant group effect, based on Wald test.
(3) ORs greater than 1.0 indicate that drinking is higher in the group being compared to the comparison group; ORs less than 1.0 indicate that drinking is lower in the group being compared to the comparison group.
(4) Adjusted odds ratio holding fixed values for sex, age, region, marital status, education and income.

Q: *About how often during the past 12 months would you say you had five or more drinks at the same sitting or occasion?*

Source: The *CAMH Monitor*, Centre for Addiction and Mental Health

Table 3.5.2: ***Weekly Binge Drinking*** – Percentage Drinking ***Five or More Drinks*** on a Single Occasion Weekly in the Past 12 Months and Adjusted Group Differences, Ontarian ***Past Year Drinkers*** Aged 18+, 2017

	N	%	95% CI	Adjusted Odds Ratio (N=2134)
Total	2195	**8.6**	(7.1, 10.5)	—
Sex				***
Men	939	**12.1**	(9.6, 15.0)	**2.69*** **
Women *(Comparison Group)*	1256	**†5.1**	(3.4, 7.7)	—
Age				**
18-29 *(Comparison Group)*	231	**†11.5**	(7.5, 17.1)	—
30-39	167	**†13.1**	(7.5, 21.8)	1.27
40-49	312	**†5.2**	(3.0, 9.0)	0.51
50-64	692	**9.6**	(7.1, 12.9)	0.83
65+	784	**4.0**	(2.7, 5.9)	**0.29***
Region				NS
Toronto *(vs. Provincial Average)*	372	**†6.5**	(4.0, 10.3)	0.76
Central East	376	**†9.6**	(6.2, 14.6)	1.11
Central West	363	**†10.5**	(6.8, 15.8)	1.29
West	363	**†6.6**	(4.1, 10.6)	0.87
East	370	**†9.6**	(6.3, 14.4)	1.19
North	351	**†7.2**	(4.7, 10.8)	0.65
Marital Status				NS
Married/Partner *(Comparison Group)*	1407	**7.4**	(5.8, 9.5)	—
Previously Married	423	**†9.0**	(4.0, 19.0)	1.52
Never Married	348	**†11.6**	(8.2, 16.3)	1.04
Education				**
High school not completed *(Comparison)*	124	**†8.7**	(3.5, 19.9)	—
Completed high school	466	**14.0**	(10.1, 19.2)	1.50
Some college or university	799	**10.1**	(7.6, 13.4)	0.93
University degree	786	**†4.6**	(2.7, 7.7)	0.39
Household Income				NS
< $30,000 *(Comparison Group)*	157	**†11.4**	(6.1, 20.1)	—
$30,000-$49,999	257	**†7.9**	(4.2, 14.3)	0.79
$50,000-$79,999	382	**†6.2**	(3.9, 9.8)	0.53
$80,000+	948	**9.4**	(7.0, 12.5)	1.04
Not stated	451	**†8.0**	(5.1, 12.2)	0.89

Notes: (1) All analyses are sample design adjusted;*p<.05**;** **p<.01; ***p<.001; CI = 95% confidence interval; NS – no statistically significant difference.
(2) Asterisks in group row indicate a statistically significant group effect, based on Wald test.
(3) ORs greater than 1.0 indicate that drinking is higher in the group being compared to the comparison group; ORs less than 1.0 indicate that drinking is lower in the group being compared to the comparison group.
(4) Adjusted odds ratio holding fixed values for sex, age, region, marital status, education and income.

Q: *About how often during the past 12 months would you say you had five or more drinks at the same sitting or occasion?*

Source: The *CAMH Monitor*, Centre for Addiction and Mental Health

Table 3.5.3a: ***Weekly Binge Drinking*** – Percentage Drinking ***Five or More Drinks*** on a Single Occasion Weekly in the Past 12 Months, by Demographic Characteristics, ***Ontarians*** Aged 18+, 1977–2000

	1977	1982	1984	1987	1989	1991	1994	1995	1996	1997	1998	1999	2000
(N=)	(1059)	(1040)	(1051)	(1084)	(1101)	(1047)	(2022)	(994)	(2721)	(2776)	(2232)	(2436)	(2406)
Total	**8.9**	**8.3**	**9.3**	**8.7**	**9.5**	**7.4**	**8.4**	**7.0**	**11.7**	**11.1**	**11.8**	**11.8**	**12.7**
(95%CI)[a]	(7.2, 10.6)	(6.6, 10.0)	(4.5, 11.1)	(7.0, 10.4)	(7.8, 11.2)	(5.8, 9.0)	(7.2, 9.6)	(5.4, 8.6)	(10.3, 13.3)	(9.8, 12.6)	(10.3, 13.4)	(10.4, 13.4)	(11.2, 14.3)
Sex													
Men	**14.2**	**13.3**	**15.5**	**13.9**	**16.0**	**10.4**	**13.0**	**10.7**	**18.7**	**17.8**	**20.0**	**19.8**	**18.8**
	(11.2, 17.2)	(10.4, 16.2)	(12.4, 18.6)	(11.0, 16.8)	(12.9, 19.1)	7.7, 13.1)	(11.0, 15.0)	(7.9, 13.5)	(16.3, 21.5)	(15.5, 20.4)	(17.1, 23.2)	(17.3, 22.7)	(16.3, 21.7)
Women	**3.1**	**3.3**	**3.6**	**3.8**	**3.4**	**4.5**	**4.3**	**3.2**	**5.5**	**5.1**	**4.4**	**4.4**	**7.1**
	(1.6, 4.6)	(1.8, 4.8)	(2.0, 5.2)	(2.2, 5.4)	(1.9, 4.9)	(2.8, 6.2)	(3.0, 5.6)	(1.7, 4.7)	(4.3, 7.1)	(4.0, 6.6)	(3.4, 5.8)	(3.3, 5.9)	(5.7, 8.8)
Age													
18 - 29	**13.6**	**13.7**	**12.2**	**14.2**	**15.8**	**10.0**	**12.7**	**10.6**	**21.0**	**19.7**	**18.9**	**20.2**	**21.3**
	(9.7, 17.5)	(9.6, 17.8)	(8.3, 16.1)	(9.8, 18.6)	(11.2, 20.4)	(6.4, 13.6)	(9.7, 15.7)	(6.7, 14.5)	(17.1, 25.4)	(16.3, 23.7)	(14.5, 23.8)	(16.2, 25.1)	(17.3, 25.9)
30 - 39	**4.3**	**9.0**	**11.6**	**8.7**	**6.9**	**8.3**	**9.2**	**9.2**	**11.7**	**10.7**	**11.1**	**11.0**	**13.1**
	(1.6, 7.0)	(5.5, 12.6)	(7.6, 15.6)	(5.4, 12.0)	(4.0, 9.8)	(5.0, 11.6)	(6.8, 11.6)	(5.5, 12.9)	(9.2, 14.9)	(8.3, 13.6)	(8.5, 14.5)	(8.6, 14.1)	(10.3, 16.6)
40 - 49	**13.0**	**6.5**	**9.9**	**8.5**	**8.8**	**6.4**	**6.5**	**†5.0**	**9.6**	**7.7**	**10.1**	**11.8**	**11.9**
	(8.1, 17.9)	(2.4, 10.6)	5.6, 14.2)	(4.3, 12.7)	(4.7, 12.9)	(3.1, 9.7)	(4.2, 8.8)	(2.1, 7.9)	(7.2, 12.5)	(5.6, 10.5)	(7.5, 13.6)	(8.8, 15.6)	(9.1, 15.4)
50 - 64	**6.6**	**5.8**	**6.0**	**5.6**	**7.9**	**7.3**	**4.9**	**†4.2**	**8.2**	**7.2**	**11.1**	**8.6**	**9.4**
	(3.1, 10.1)	(2.7, 8.9)	(2.7, 9.3)	(2.5, 8.7)	(4.3, 11.5)	(3.1, 11.5)	(2.5, 7.3)	(1.2, 7.2)	(5.9, 11.2)	(5.1, 10.1)	(8.0, 15.1)	(6.2, 11.8)	(6.8, 12.9)
65+	**4.0**	**†0.6**	**4.5**	**†2.1**	**†4.1**	**†1.4**	**†4.5**	**†3.0**	**†2.6**	**†5.8**	**†5.8**	**† 6.3**	**† 4.6**
	(0.9, 7.1)	(0.8, 2.0)	(0.8, 8.2)	(0.07, 4.3)	(1.0, 7.2)	(0.6, 3.4)	(1.9, 7.1)	(0.02, 6.0)	(1.4, 4.8)	(3.5, 9.5)	(3.4, 9.6)	(3.9, 9.8)	(2.5, 8.1)
Region													
Toronto	—	—	—	—	—	—	—	—	**13.0**	**11.0**	**11.4**	**10.7**	**11.9**
									(9.5, 17.4)	(8.2, 14.6)	(8.1, 15.9)	(7.8, 14.6)	(8.8, 16.1)
C-East	—	—	—	—	—	—	—	—	**10.4**	**11.2**	**†9.8**	**12.1**	**14.5**
									(7.7, 13.8)	(8.4, 14.8)	(6.9, 13.7)	(9.0, 16.1)	(11.1, 18.8)
C-West	—	—	—	—	—	—	—	—	**11.4**	**12.3**	**†9.3**	**13.3**	**12.1**
									(8.6, 15.0)	(9.4, 16.0)	(6.7, 12.9)	(10.0, 17.5)	(9.0, 16.0)
West	—	—	—	—	—	—	—	—	**13.0**	**9.1**	**14.0**	**12.5**	**11.8**
									(9.7, 17.1)	(6.5, 12.6)	(10.4, 18.5)	(9.4, 16.6)	(8.7, 15.9)
East	—	—	—	—	—	—	—	—	**10.1**	**11.8**	**14.4**	**11.7**	**12.0**
									(7.5, 13.6)	(8.8, 15.5)	(10.8, 19.0)	(8.7, 15.6)	(8.9, 15.9)
North	—	—	—	—	—	—	—	—	**12.9**	**12.7**	**13.2**	**9.1**	**14.4**
									(9.8, 16.9)	(9.7, 16.5)	(9.7, 17.7)	(6.5, 12.5)	(10.9, 18.7)

Cont'd

	1977	1982	1984	1987	1989	1991	1994	1995	1996	1997	1998	1999	2000
(N=)	(1059)	(1040)	(1051)	(1084)	(1101)	(1047)	(2022)	(994)	(2721)	(2776)	(2232)	(2436)	(2406)
Marital Status													
Married/Partner	—	—	—	—	—	**4.5**	**6.7**	**5.3**	**8.0**	**8.6**	**7.3**	**8.9**	**10.4**
Previously Married	—	—	—	—	—	**12.3**	**7.3**	**†5.5**	**9.4**	**9.6**	**10.3**	**9.0**	**10.4**
Never Married	—	—	—	—	—	**11.9**	**12.7**	**11.3**	**22.7**	**17.8**	**18.8**	**22.5**	**19.4**
Education													
HS not completed	—	—	—	—	—	**8.8**	**8.9**	**9.9**	**10.9**	**11.0**	**15.2**	**14.9**	**10.1**
Completed HS	—	—	—	—	—	**10.6**	**10.6**	**10.4**	**14.6**	**13.0**	**13.8**	**12.2**	**15.0**
Some college or university	—	—	—	—	—	**6.2**	**8.9**	**6.1**	**13.1**	**12.3**	**10.0**	**12.0**	**15.0**
University degree	—	—	—	—	—	**†3.0**	**†4.0**	**†1.8**	**8.1**	**7.4**	**9.1**	**9.0**	**8.9**

Notes: All analyses are sample design adjusted; [a] 95% confidence interval; — data not available; † Estimate suppressed or unstable;
Q: *How often during the past 12 months would you say you had five or more drinks at the same sitting or occasion?*
Source: The *CAMH Monitor*, Centre for Addiction and Mental Health

Table 3.5.3b: ***Weekly Binge Drinking*** – Percentage Drinking ***Five or More Drinks*** on a Single Occasion Weekly in the Past 12 Months, by Demographic Characteristics, ***Ontarians*** Aged 18+, 2001–2017

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Trend	
(N=)	(2627)	(2421)	(2411)	(2611)	(2445)	(2016)	(2005)	(2024)	(2037)	(3030)	(3039)	(3030)	(3021)	(3043)	(5013)	(3042)	(2812)		
Total	**12.3**	**10.5**	**11.0**	**11.4**	**10.8**	**12.3**	**11.2**	**8.8**	**7.1**	**7.5**	**7.4**	**7.0**	**6.8**	**6.1**	**7.5**	**6.2**	**6.9**	T	–
(95%CI)[a]	(10.9, 13.9)	(9.1, 11.9)	(9.6, 12.6)	(9.9,13.1)	(9.4,12.4)	(10.6,14.3)	(9.6,13.1)	(7.3,10.6)	(5.8,8.6)	(6.3, 8.8)	(6.1,8.8)	(5.8,8.4)	(5.5, 8.3)	(5.0, 7.5)	(6.5, 8.6)	(4.9, 7.6)	(5.6, 8.4)		
Sex																			
Men	**20.7**	**16.3**	**16.7**	**17.6**	**17.5**	**18.8**	**17.5**	**14.6**	**11.4**	**11.5**	**12.4**	**11.0**	**12.5**	**10.4**	**11.3**	**10.0**	**10.0**	T	–
	(18.1, 23.6)	(14.0, 18.8)	(14.2, 19.5)	(15.1, 20.5)	(15.0,20.3)	(15.0,20.3)	(14.6,20.8)	(11.9,17.9)	(9.1,14.1)	(9.6,13.9)	(10.1,15.2)	(8.9, 13.5)	(10.1, 15.4)	(8.3, 13.0)	(9.6, 13.3)	(7.8, 12.8)	(7.9, 12.4)		
Women	**4.4**	**4.9**	**5.7**	**5.6**	**4.6**	**6.2**	**5.3**	**†3.4**	**†3.1**	**†3.7**	**†2.7**	**†3.3**	**†1.5**	**†2.3**	**3.9**	**†2.7**	**†3.9**	T	–
	(3.3, 5.9)	(3.7, 6.5)	(4.4, 7.4)	(4.3, 7.4)	(3.4, 6.1)	(4.7, 8.3)	(3.9, 7.3)	(2.2, 5.1)	(1.9, 4.9)	(2.6, 5.2)	(1.9, 3.8)	(2.2, 4.8)	(0.9, 2.4)	(1.4, 3.6)	(3.0, 5.1)	(1.7, 4.0)	(2.6, 5.9)		
Age																			
18 - 29	**18.4**	**16.5**	**19.4**	**21.8**	**16.2**	**24.0**	**26.1**	**20.5**	**†11.5**	**15.4**	**16.2**	**†15.3**	**†13.0**	**†10.2**	**13.9**	**†7.8**	**†9.2**	T	–
	(14.7, 22.9)	(13.0, 20.7)	(15.3, 24.2)	(17.0, 27.3)	(12.3,21.1)	(18.4,30.7)	(20.1,33.2)	(15.0,27.4)	(7.2, 17.8)	(11.3, 20.7)	(11.6, 22.0)	(10.5, 21.0)	(8.3, 19.9)	(6.1, 16.5)	(10.5, 18.3)	(4.5, 13.2)	(6.0, 13.7)		
30 - 39	**13.8**	**9.7**	**11.6**	**11.8**	**9.9**	**12.8**	**7.9**	**9.4**	**8.0**	**†6.4**	**†6.2**	**7.6**	**†8.0**	**†4.8**	**†5.9**	**†8.8**	**†11.0**	T	–
	(10.8, 17.4)	(7.1, 13.0)	(8.5, 15.8)	(8.7, 15.8)	(7.1,13.7))	(9.3,17.2)	(5.2,11.8)	(6.1,14.4)	(5.4, 11.8)	(4.1, 9.6)	(3.9, 9.7)	(4.8, 11.9)	(5.0, 12.5)	(2.5, 9.0)	(3.9, 8.5)	(4.8, 15.5)	(6.3, 18.7)		
40 - 49	**9.1**	**11.1**	**8.4**	**10.6**	**13.0**	**11.1**	**8.6**	**7.0**	**8.8**	**†6.2**	**7.8**	**†5.4**	**†6.0**	**†7.6**	**†5.4**	**†5.4**	**†4.4**	T	–
	(6.6, 12.4)	(8.3, 14.7)	(6.2, 11.2)	(7.9, 14.2)	(10.0,16.7))	(8.0,15.2)	(6.1,11.9)	(4.7,10.1)	(6.2,12.4)	(4.3, 8.8)	(5.6, 10.9)	(3.5, 8.2)	(3.8, 8.1)	(5.3, 10.9)	(3.8, 7.6)	(3.3, 8.6)	(2.5, 7.6)		
50 - 64	**12.3**	**7.8**	**8.7**	**7.6**	**7.4**	**7.5**	**8.8**	**†5.5**	**†5.0**	**6.3**	**4.8**	**5.4**	**6.4**	**6.3**	**7.2**	**6.8**	**7.8**	T	–
	(9.4, 16.0)	(5.6, 10.8)	(6.3, 11.8)	(5.6, 10.3)	(5.4,10.1)	(5.3,10.4)	(6.5,11.8)	(3.6, 8.4)	(3.2,7.8)	(4.8, 8.2)	(3.6,6.5)	(4.0, 7.3)	(4.8, 8.6)	(4.6, 8.4)	(5.9, 8.8)	(5.2, 8.8)	(5.8, 10.6)		
65+	**† 5.5**	**6.7**	**† 6.0**	**† 5.6**	**† 6.4**	**†5.6**	**† 5.8**	**†2.5**	**†2.6**	**†3.4**	**†2.6**	**†3.0**	**†2.0**	**†2.4**	**4.4**	**†2.3**	**†2.8**	T	–
	(3.4, 8.9)	(4.3, 10.2)	(3.9, 9.1)	(3.7, 8.2)	(4.1,9.8)	(3.4, 9.0)	(3.8,8.9)	(1.4, 4.7)	(1.5, 4.5)	(2.1, 5.4)	(1.6, 4.4)	(1.8, 4.9)	(1.2, 3.2)	(1.5, 3.8)	(3.3, 5.7)	(1.5, 3.4)	(1.9, 4.2)		
Region																			
Toronto	**14.8**	**8.9**	**11.0**	**8.7**	**11.1**	**10.7**	**†7.8**	**†6.8**	**†4.7**	**†7.0**	**†5.5**	**†5.6**	**†5.3**	**†6.2**	**†5.1**	**†4.6**	**†5.1**	T	–
	(11.3, 19.2)	(6.3, 12.3)	(7.9, 15.2)	(5.9, 12.6)	(7.8,15.4)	(7.5,15.2)	(5.0,12.0)	(4.2,11.0)	(2.8, 7.8)	(4.6,10.5)	(3.2, 9.3)	(2.8, 7.8)	(2.9, 9.6)	(3.8, 10.1)	(3.7, 7.2)	(2.7, 7.8)	(3.1, 8.1)		
C- East	**11.6**	**12.0**	**12.0**	**†12.6**	**11.4**	**16.5**	**†12.5**	**†10.1**	**†7.9**	**†7.3**	**†5.8**	**†6.7**	**†6.7**	**†6.9**	**9.8**	**†6.3**	**†7.7**	T	–
	(8.8, 15.2)	(8.9, 16.2)	(8.9, 16.0)	(9.0, 17.2)	(8.3,15.5)	(12.1,22.2)	(8.7,17.6)	(6.8,14.7)	(4.9,12.4)	(5.0, 10.6)	(3.6, 9.2)	(4.3,10.2)	(4.3, 10.3)	(4.4, 10.6)	(7.4, 13.0)	(3.7, 10.7)	(5.0, 11.7)		
C- West	**10.2**	**†9.8**	**†10.0**	**12.8**	**†9.2**	**†8.7**	**†8.7**	**†9.7**	**†10.0**	**†7.8**	**†8.5**	**†5.0**	**†7.5**	**†6.4**	**7.2**	**†7.2**	**†8.4**	T	–
	(7.3, 14.0)	(7.0, 13.5)	(7.1, 14.0)	(9.4, 17.2)	(6.5, 12.7)	(5.7,13.0)	(5.6,13.2)	(6.2,14.8)	(6.8,14.6)	(5.3,11.2)	(5.7, 12.4)	(2.9, 8.4)	(4.9, 11.4)	(4.1, 9.8)	(5.2, 9.9)	(4.5, 11.5)	(5.4, 12.7)		
West	**14.5**	**12.3**	**11.0**	**14.6**	**14.1**	**17.0**	**13.1**	**†6.7**	**†5.2**	**†7.7**	**10.9**	**10.1**	**†6.6**	**†5.4**	**8.1**	**†6.2**	**†5.3**	T	–
	(11.1, 18.7)	(9.3, 16.1)	(8.0, 14.9)	(11.1, 19.1)	(10.8,18.2)	(12.7,22.4)	(9.2,18.2)	(4.2,10.7)	(3.1, 8.7)	(5.3,11.0)	(7.7, 15.2)	(3.1, 8.7)	(4.0, 10.5)	(3.6, 8.0)	(6.0, 10.9)	(3.9, 9.6)	(3.2, 8.5)		
East	**10.5**	**11.6**	**11.2**	**9.7**	**9.1**	**10.5**	**17.3**	**†8.8**	**†5.4**	**†7.0**	**8.1**	**†8.4**	**†8.2**	**†4.7**	**†6.1**	**†5.5**	**†7.7**	T	–
	(7.6, 14.3)	(8.6, 15.5)	(8.2, 15.0)	(7.0, 13.2)	(6.3,13.0)	(7.2,15.2)	(12.8,23.0)	(5.6,13.5)	(3.4, 8.6)	(4.6, 10.5)	(5.6, 11.5)	(3.4, 8.6)	(5.5, 12.1)	(2.9, 7.7)	(4.3, 8.6)	(3.4, 8.8)	(5.1, 11.6)		
North	**11.2**	**9.2**	**11.2**	**10.9**	**10.8**	**†8.3**	**†9.7**	**12.4**	**†9.3**	**†9.8**	**†7.5**	**†9.4**	**†6.9**	**†6.3**	**8.3**	**†8.9**	**†5.9**	T	–
	(8.7, 14.3)	(6.5, 12.7)	(8.2, 15.1)	(8.4, 14.0)	(7.9,14.6)	(5.5,12.4)	(6.4,14.4)	(8.6,17.5)	(6.2,13.8)	(6.8, 13.9)	(4.8, 11.5)	(6.2,13.8)	(4.4, 10.6)	(4.2, 9.3)	(6.2, 11.0)	(5.8, 13.4)	(3.9, 9.0)		

Cont'd

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Trend	
(N=)	(2627)	(2421)	(2411)	(2611)	(2445)	(2016)	(2005)	(2024)	(2037)	(3030)	(3039)	(3030)	(3021)	(3043)	(5013)	(3042)	(2812)		
Marital Status																			
Married/ Partner	**10.5**	**7.7**	**8.6**	**8.6**	**9.6**	**9.0**	**7.7**	**6.1**	**6.6**	**6.0**	**5.7**	**5.0**	**5.3**	**5.5**	**5.7**	**5.7**	**6.1**	**T**	**–**
Previously married	**9.6**	**8.7**	**9.9**	**8.7**	**8.0**	**8.3**	**12.1**	**6.9**	**†6.3**	**†4.4**	**8.9**	**†5.3**	**†3.2**	**†4.3**	**8.1**	**†7.8**	**†6.2**	**T**	**–**
Never married	**18.8**	**19.3**	**18.5**	**21.4**	**16.0**	**25.0**	**22.5**	**18.3**	**9.2**	**13.8**	**11.9**	**13.5**	**†13.2**	**†8.7**	**12.2**	**†6.6**	**†9.2**	**T**	**–**
Education																			
High school not completed	**12.7**	**14.4**	**11.7**	**14.2**	**9.4**	**9.6**	**11.9**	**12.1**	**12.7**	**†8.0**	**10.1**	**†7.0**	**†8.0**	**†9.4**	**†5.8**	**†6.4**	**†4.6**	**T**	**–**
Completed high school	**18.0**	**12.0**	**13.3**	**12.4**	**14.8**	**17.8**	**17.3**	**13.4**	**†7.7**	**9.0**	**10.6**	**†7.9**	**†9.5**	**†8.8**	**10.4**	**†8.7**	**†10.9**	**T**	**–**
Some college or university	**11.8**	**11.5**	**11.7**	**13.0**	**11.1**	**10.9**	**12.6**	**8.3**	**†7.1**	**9.4**	**7.2**	**†7.5**	**7.4**	**6.9**	**9.2**	**†6.8**	**8.3**	**T**	**–**
University degree	**7.0**	**†5.7**	**7.9**	**8.2**	**7.6**	**10.7**	**†4.3**	**†4.9**	**†5.0**	**†4.3**	**5.2**	**†5.9**	**†4.0**	**†3.4**	**4.2**	**†4.3**	**†3.9**	**T**	**–**

Notes: (1) All analyses are sample design adjusted; 95% confidence interval; † Estimate suppressed or unstable; the sampling design was changed in 2017 to dual-frame sampling (landline/cell-phone).
(2) Trend Analysis: **–** change not statistically significant (p<.05); **T** significant change (p<.05) between 1996-2017; **2Y** significant change (p<.05) between last two estimates;

Q: *How often during the past 12 months would you say you had five or more drinks at the same sitting or occasion?*

Source: The *CAMH Monitor*, Centre for Addiction and Mental Health

Table 3.5.4a: ***Weekly Binge Drinking*** – Percentage Drinking ***Five or More Drinks*** in a Single Occasion Weekly in the Past 12 Months, by Demographic Characteristics, Ontarian ***Past Year Drinkers*** Aged 18+, 1977–2000

	1977	1982	1984	1987	1989	1991	1994	1995	1996	1997	1998	1999	2000
(N=)	(818)	(792)	(891)	(889)	(908)	(841)	(1660)	(839)	(2141)	(2219)	(1777)	(1938)	(1887)
Total	**10.9**	**10.6**	**11.1**	**10.5**	**11.5**	**9.2**	**10.2**	**8.2**	**14.8**	**13.9**	**14.9**	**15.0**	**16.5**
(95%CI)[a]	(13.0, 8.8)	(12.7, 8.5)	(13.2, 9.0)	(12.5, 8.5)	(13.6, 9.4)	(11.3, 7.1)	(11.6, 8.8)	(10.1, 6.3)	(13.1, 16.7)	(12.4, 15.7)	(13.0, 16.9)	(13.2, 17.0)	(14.6, 18.5)
Sex													
Men	**16.3**	**16.1**	**18.0**	**15.9**	**18.6**	**12.7**	**15.4**	**12.4**	**22.7**	**21.4**	**23.7**	**23.4**	**23.1**
	—	—	—	—	—	—	—	—	(19.7, 25.9)	(18.7, 24.4)	(20.4, 27.2)	(20.4, 26.6)	(20.1, 26.5)
Women	**4.1**	**4.5**	**4.4**	**4.9**	**4.3**	**5.7**	**5.4**	**3.9**	**7.3**	**6.7**	**5.8**	**6.0**	**9.8**
	—	—	—	—	—	—	—	—	(5.7, 9.3)	(5.2, 8.6)	(4.4, 7.7)	(4.5, 8.0)	(7.8, 12.1)
Age													
18 - 29	**16.0**	**16.8**	**13.6**	**15.4**	**18.0**	**11.5**	**14.8**	**12.2**	**25.1**	**23.6**	**22.5**	**23.5**	**24.3**
	—	—	—	—	—	—	—	—	(20.6, 30.3)	(19.6, 28.2)	(17.9, 28.1)	(18.8, 28.9)	(20.2, 30.1)
30 - 39	**5.0**	**10.5**	**12.8**	**10.0**	**7.6**	**9.8**	**10.8**	**10.8**	**14.0**	**12.6**	**13.3**	**13.6**	**16.4**
	—	—	—	—	—	—	—	—	(11.0, 17.7)	(9.9, 16.0)	(10.2, 17.2)	(10.6, 17.2)	(12.9, 20.6)
40 - 49	**14.4**	**8.1**	**11.2**	**9.7**	**10.2**	**7.9**	**7.8**	**5.8**	**11.8**	**9.1**	**12.7**	**14.5**	**15.1**
	—	—	—	—	—	—	—	—	(8.9, 15.4)	(6.6, 12.3)	(9.4, 17.0)	(10.9, 19.1)	(11.6, 19.4)
50 - 64	**7.9**	**7.1**	**7.6**	**7.0**	**10.6**	**9.9**	**6.3**	**†4.8**	**10.8**	**9.3**	**14.0**	**11.0**	**12.4**
	—	—	—	—	—	—	—	—	(7.8, 14.7)	(6.6, 13.0)	(10.1, 19.0)	(7.9, 15.1)	(9.0, 16.8)
65+	**6.6**	**†1.1**	**7.0**	**†3.7**	**6.2**	**†2.2**	**6.8**	**†4.1**	**4.0**	**9.9**	**8.4**	**9.5**	**7.5**
	—	—	—	—	—	—	—	—	(2.2, 7.2)	(6.0, 15.9)	(5.0, 13.8)	(6.0, 14.6)	(4.2, 13.1)
Region													
Toronto	—	—	—	—	—	—	—	—	**17.5**	**13.5**	**15.0**	**15.0**	**17.2**
									(13.0, 23.2)	(10.1, 17.9))	(10.7, 20.6)	(10.9, 20.3)	(12.7, 22.9)
C-East	—	—	—	—	—	—	—	—	**12.7**	**14.0**	**†12.7**	**14.3**	**18.0**
									(9.5, 16.8)	(10.5, 18.4)	(9.0, 17.7)	(10.7, 19.0)	(13.8, 23.2)
C-West	—	—	—	—	—	—	—	—	**14.0**	**14.7**	**†12.5**	**16.8**	**16.3**
									(10.6, 18.3)	(11.2, 19.0)	(8.9, 17.3)	(12.7, 21.9)	(12.2, 21.3)
West	—	—	—	—	—	—	—	—	**16.7**	**12.3**	**17.6**	**16.0**	**14.6**
									(12.6, 21.8)	(8.8, 16.9)	(13.1, 23.1)	(12.0, 20.9)	(10.8, 19.5)
East	—	—	—	—	—	—	—	—	**12.5**	**14.5**	**17.6**	**14.4**	**14.9**
									(9.3, 16.7)	(10.9, 19.0)	(13.3, 22.9)	(10.7, 19.1)	(11.1, 19.6)
North	—	—	—	—	—	—	—	—	**15.8**	**15.7**	**17.2**	**11.4**	**17.3**
									(12.0, 20.6)	(12.0, 20.3)	(12.7, 22.8)	(8.2, 15.6)	(13.2, 22.4)

Cont'd

	1977	1982	1984	1987	1989	1991	1994	1995	1996	1997	1998	1999	2000
(N=)	(818)	(792)	(891)	(889)	(908)	(841)	(1660)	(839)	(2141)	(2219)	(1777)	(1938)	(1887)
Marital Status													
Married/Partner	—	—	—	—	—	**5.7**	**8.3**	**6.2**	**10.0**	**10.8**	**12.3**	**11.3**	**13.7**
Previously Married	—	—	—	—	—	**16.7**	**9.5**	**6.8**	**13.1**	**13.0**	**10.9**	**13.2**	**15.2**
Never Married	—	—	—	—	—	**13.9**	**14.8**	**13.4**	**27.5**	**21.5**	**23.4**	**26.5**	**23.3**
Education													
HS not completed	—	—	—	—	—	**13.7**	**12.4**	**12.5**	**15.8**	**16.1**	**21.4**	**22.8**	**16.7**
Completed HS	—	—	—	—	—	**13.1**	**12.8**	**12.5**	**18.3**	**16.9**	**17.9**	**15.7**	**19.6**
Some college or university	—	—	—	—	—	**7.1**	**10.4**	**7.2**	**15.9**	**14.3**	**11.9**	**14.5**	**17.7**
University degree	—	—	—	—	—	**†3.4**	**†4.7**	**†2.0**	**9.6**	**8.9**	**11.0**	**10.8**	**11.2**

Notes: All analyses are sample design adjusted; [a] 95% confidence interval; — data not available;
Q: *How often during the past 12 months would you say you had five or more drinks at the same sitting or occasion?*
Source: The *CAMH Monitor*, Centre for Addiction and Mental Health.

Table 3.5.4b: ***Weekly Binge Drinking*** – Percentage Drinking ***Five or More Drinks*** on a Single Occasion Weekly in the Past 12 Months, by Demographic Characteristics, Ontarian ***Past Year Drinkers*** Aged 18+, 2001–2017

(N=)	2001 (2088)	2002 (1933)	2003 (1933)	2004 (2101)	2005 (1906)	2006 (1527)	2007 (1618)	2008 (1599)	2009 (1602)	2010 (2352)	2011 (2401)	2012 (2355)	2013 (2330)	2014 (2422)	2015 (3967)	2016 (2368)	2017 (2195)	Trend
Total Drinkers	**15.5**	**13.1**	**13.7**	**14.1**	**13.8**	**15.9**	**13.8**	**11.0**	**9.0**	**9.6**	**9.1**	**8.9**	**8.7**	**7.6**	**9.3**	**7.7**	**8.6**	**T –**
(95%CI)[a]	(13.7, 17.5)	(11.5, 15.0)	(12.0, 15.7)	(12.3, 16.1)	(12.0,15.7)	(13.7,18.4)	(11.8,16.1)	(9.1,13.2)	(7.3,10.9)	(8.2, 11.3)	(7.6,10.8)	(7.4,10.6)	(7.1, 10.5)	(6.2, 9.3)	(8.1, 10.7)	(6.2, 9.6)	(7.1, 10.5)	
Sex																		
Men	**24.8**	**19.8**	**20.1**	**20.7**	**20.8**	**22.6**	**20.6**	**17.4**	**14.1**	**14.2**	**14.9**	**13.2**	**15.1**	**12.3**	**13.5**	**12.0**	**12.1**	**T –**
	(21.8, 28.1)	(17.0, 22.8)	(17.2, 23.3)	(17.8, 24.0)	(17.9, 24.1)	(17.9, 24.1)	(17.2,24.4)	(14.2,21.2)	(11.3, 17.4)	(11.8, 17.0)	(12.2, 18.1)	(10.8, 16.2)	(12.3, 18.5)	(9.8, 15.4)	(11.5, 15.8)	(9.3, 15.2)	(9.6, 15.0)	
Women	**5.8**	**6.4**	**7.4**	**7.3**	**6.2**	**8.6**	**6.8**	**†4.4**	**†4.0**	**5.0**	**†3.4**	**†4.4**	**†2.0**	**†2.9**	**5.1**	**†3.5**	**†5.1**	**T –**
	(4.4, 7.8)	(4.8, 8.5)	(5.7, 9.5)	(5.5, 9.5)	(4.7,8.3)	(6.5,11.4)	(5.0,9.3)	(2.9,6.6)	(2.5,6.3)	(3.5, 7.0)	(2.4,4.8)	(3.0,6.5)	(1.3, 3.2)	(1.8, 4.6)	(3.9, 6.6)	(2.3, 5.3)	(3.4, 7.7)	
Age																		
18 - 29	**21.7**	**19.5**	**22.2**	**25.0**	**19.7**	**28.4**	**29.2**	**23.7**	**13.7**	**18.8**	**18.9**	**†18.7**	**†16.3**	**†12.1**	**17.6**	**†9.8**	**†11.5**	**T –**
	(17.4, 26.8)	(15.4, 24.3)	(17.6, 27.5)	(19.7, 31.2)	(14.9,25.4)	(21.9,35.9)	(22.5,36.8)	(17.4,31.4)	(8.7, 21.1)	(13.8, 24.9)	(13.7,25.5)	(13.2, 25.9)	(10.4, 24.6)	(7.2, 19.4)	(13.3, 22.9)	(5.6, 16.4)	(7.5, 17.1)	
30 - 39	**16.0**	**11.8**	**14.1**	**13.8**	**12.0**	**16.4**	**9.6**	**11.2**	**10.1**	**†8.1**	**†7.5**	**†9.4**	**†10.2**	**†5.8**	**†7.2**	**†10.6**	**†13.1**	**T –**
	(12.5, 20.1)	(8.7, 15.8)	(10.3, 19.0)	(10.2, 18.4)	(8.6,16.5)	(12.2,21.9)	(6.3,14.4)	(7.3,17.0)	(6.8,14.9)	(5.3, 12.2)	(4.8,11.7)	(6.0,14.6)	(6.5, 15.8)	(3.0, 10.9)	(4.8, 10.7)	(5.8, 18.4)	(7.5, 21.8)	
40 - 49	**11.5**	**13.2**	**10.3**	**12.8**	**15.7**	**13.5**	**10.4**	**†8.5**	**10.6**	**†7.6**	**9.2**	**†6.7**	**†6.7**	**†9.1**	**†6.4**	**†6.5**	**†5.2**	**T –**
	(8.4, 15.6)	(9.9, 17.4)	(7.6, 13.7)	(9.6, 17.0)	(12.1,20.0)	(9.7, 18.4)	(7.4,14.4)	(5.8,12.3)	(7.4,14.8)	(5.3, 10.7)	(6.5,12.7)	(4.4,10.1)	(4.6, 9.7)	(6.3, 13.0)	(4.5, 9.1)	(4.0, 10.4)	(3.0, 9.0)	
50 - 64	**15.8**	**9.7**	**11.1**	**9.4**	**9.6**	**9.7**	**10.7**	**†6.7**	**†6.2**	**8.0**	**6.0**	**6.6**	**8.2**	**7.6**	**8.9**	**8.4**	**9.6**	**T –**
	(12.1, 20.4)	(7.0, 13.4)	(8.1, 14.9)	(6.9, 12.7)	(7.0,12.9)	(6.9,13.4)	(7.9,14.3)	(4.4,10.2)	(3.9,9.7)	(6.1, 10.5)	(4.4,8.0)	(4.8,8.9)	(6.1, 10.8)	(5.6, 10.2)	(7.2, 10.8)	(6.5, 10.9)	(7.1, 12.9)	
65+	**8.3**	**10.1**	**8.5**	**7.9**	**9.5**	**8.6**	**8.0**	**†3.7**	**†3.8**	**†4.9**	**†3.7**	**†4.3**	**†2.8**	**†3.3**	**5.9**	**†3.2**	**4.0**	**T –**
	(5.1, 13.2)	(6.6, 15.2)	(5.5, 12.9)	(5.3, 11.6)	(6.2, 14.4)	(5.3,13.6)	(5.1,12.1)	(2.0,6.8)	(2.2,6.6)	(3.1, 7.7)	(2.2,6.1)	(2.7,6.9)	(1.7, 4.5)	(2.1, 5.1)	(4.5, 7.8)	(2.1, 4.7)	(2.7, 5.9)	
Region																		
Toronto	**18.9**	**11.8**	**14.1**	**11.5**	**15.0**	**14.1**	**10.1**	**9.0**	**†6.1**	**†9.7**	**†7.3**	**†7.8**	**†7.4**	**†8.0**	**†6.7**	**†5.8**	**†6.5**	**T –**
	(14.4, 24.3)	(8.4, 16.3)	(10.1, 19.3)	(7.9, 16.4)	(10.7,20.7)	(10.7,20.7)	(6.9,16.2)	(5.5,14.3)	(3.6,10.0)	(6.4, 14.4)	(4.3,12.2)	(4.8,12.3)	(4.1, 13.1)	(4.9, 12.9)	(4.8, 9.3)	(3.4, 9.8)	(4.0, 10.3)	
C-East	**14.7**	**14.7**	**14.3**	**14.5**	**13.7**	**21.3**	**†15.0**	**†13.3**	**†10.4**	**†9.6**	**†7.1**	**†8.6**	**†8.8**	**†8.7**	**12.2**	**†8.1**	**†9.6**	**T –**
	(11.2, 19.1)	(10.8, 19.5)	(10.6, 18.9)	(10.5, 19.8)	(10.0, 18.6)	(15.7, 28.3)	(10.5, 20.9)	(9.1, 19.2)	(6.5,16.2)	(6.6, 13.9)	(4.4, 11.2)	(5.6, 12.9)	(5.7, 13.5)	(5.6, 13.4)	(9.2, 16.1)	(4.8, 13.6)	(6.2, 14.6)	
C-West	**12.7**	**12.7**	**†12.4**	**16.0**	**†12.0**	**†11.1**	**†10.6**	**†11.5**	**†12.4**	**†9.5**	**†10.2**	**†6.1**	**†9.1**	**†7.4**	**8.9**	**†8.9**	**†10.5**	**T –**
	(9.2, 17.4)	(9.1, 17.4)	(8.8, 17.1)	(11.8, 21.3)	(8.6, 16.6)	(7.3, 16.4)	(6.9, 16.0)	(7.4, 17.5)	(8.4, 17.9)	(6.6, 13.7)	(6.9, 14.9)	(3.5, 10.3)	(6.0, 13.6)	(4.8, 11.4)	(6.5, 12.2)	(5.5, 14.1)	(6.8, 15.8)	
West	**18.6**	**14.8**	**13.8**	**17.7**	**17.9**	**20.7**	**15.5**	**8.2**	**†6.7**	**†9.6**	**13.1**	**12.3**	**†8.5**	**†6.5**	**10.0**	**†7.8**	**†6.6**	**T –**
	(14.3, 23.9)	(11.2, 19.2)	(10.0, 18.6)	(13.5, 22.9)	(13.8, 22.9)	(15.6,27.0)	(11.0,21.5)	(5.1,12.8)	(4.0,11.1)	(6.7, 13.6)	(9.3,18.1)	(8.9,16.9)	(5.2, 13.4)	(4.3, 9.7)	(7.5, 13.4)	(4.9, 12.1)	(4.1, 10.6)	
East	**12.9**	**13.9**	**14.3**	**11.7**	**11.2**	**13.9**	**20.2**	**10.3**	**†6.3**	**†8.8**	**9.8**	**†10.2**	**†9.8**	**†5.7**	**†7.6**	**†6.7**	**†9.6**	**T –**
	(9.4, 17.5)	(10.3, 18.5)	(10.6, 19.0)	(8.5, 16.0)	(7.7, 15.9)	(9.5,19.8)	(15.0,26.6)	(6.6,15.7)	(3.9,10.0)	(5.8, 13.1)	(6.8,13.9)	(6.6,15.4)	(6.6,14.4)	(3.5, 9.2)	(5.4, 10.7)	(4.1,10.7)	(6.3, 14.4)	
North	**14.1**	**11.8**	**14.1**	**13.4**	**13.3**	**11.3**	**11.4**	**15.0**	**12.1**	**†11.8**	**†9.2**	**†12.3**	**†8.4**	**†7.7**	**9.7**	**†10.9**	**†7.2**	**T –**
	(10.9, 17.9)	(8.4, 16.2)	(10.4, 18.9)	(10.4, 17.2)	(9.8,17.9)	(7.5,16.5)	(7.6,16.9)	(10.4,21.0)	(8.1,17.8)	(8.2, 16.5)	(5.9,14.0)	(8.1,18.3)	(5.4, 12.9)	(5.1, 11.4)	(7.2, 12.9)	(7.1, 16.3)	(4.7, 10.8)	

Cont'd

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Trend	
(N=)	(2088)	(1933)	(1933)	(2101)	(1906)	(1527)	(1618)	(1599)	(1602)	(2352)	(2401)	(2355)	(2330)	(2422)	(3967)	(2368)	(2195)		
Marital Status																			
Married/ Partner	**13.1**	**9.4**	**10.8**	**10.6**	**12.0**	**11.7**	**9.5**	**7.5**	**8.3**	**7.7**	**7.0**	**6.2**	**6.6**	**6.7**	**7.0**	**7.0**	**7.4**	**T**	**–**
Previously married	**13.2**	**12.2**	**13.6**	**11.8**	**11.2**	**12.6**	**15.6**	**9.8**	**†8.5**	**†6.2**	**12.2**	**†7.2**	**†4.5**	**†5.9**	**10.8**	**†10.3**	**†9.0**	**T**	**–**
Never married	**22.9**	**23.9**	**21.6**	**25.4**	**19.9**	**29.4**	**26.5**	**22.6**	**11.3**	**17.4**	**14.2**	**18.2**	**17.4**	**†10.6**	**15.5**	**8.5**	**†11.6**	**T**	**–**
Education																			
High school not completed	**19.6**	**20.9**	**17.3**	**21.0**	**15.1**	**14.4**	**17.5**	**17.9**	**17.8**	**†9.7**	**14.8**	**†11.0**	**†13.0**	**†14.8**	**†9.3**	**†11.3**	**†8.7**	**T**	**–**
Completed high school	**22.3**	**15.4**	**16.7**	**15.1**	**18.7**	**23.8**	**21.1**	**16.4**	**†10.6**	**†10.1**	**13.8**	**†10.6**	**†12.9**	**†11.4**	**13.9**	**†11.6**	**14.0**	**T**	**–**
Some college or university	**14.2**	**13.7**	**14.2**	**15.3**	**13.4**	**13.5**	**14.9**	**10.2**	**†8.6**	**†8.8**	**8.5**	**9.2**	**9.2**	**8.2**	**11.3**	**†8.4**	**10.1**	**T**	**–**
University degree	**8.7**	**6.8**	**9.2**	**9.8**	**9.5**	**13.1**	**†5.2**	**†6.0**	**†6.0**	**†9.6**	**6.2**	**†7.1**	**†4.7**	**†4.0**	**5.1**	**†5.1**	**†4.6**	**T**	**–**

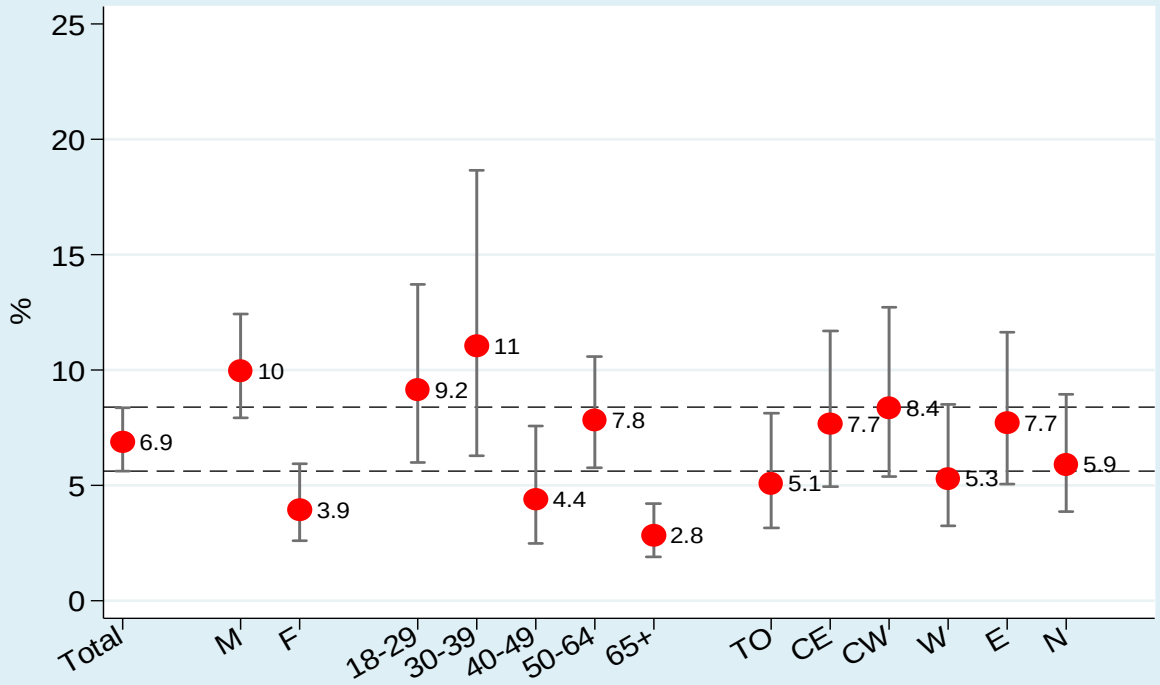
Notes: (1) All analyses are sample design adjusted; 95% confidence interval; † Estimate suppressed or unstable; the sampling design was changed in 2017 to dual-frame sampling (landline/cell-phone).
(2) Trend Analysis: **–** change not statistically significant (p<.05); **T** significant change (p<.05) between 1996-2017; **2Y** significant change (p<.05) between last two estimates;

Q: *How often during the past 12 months would you say you had five or more drinks at the same sitting or occasion?*

Source: The *CAMH Monitor*, Centre for Addiction and Mental Health

Figure 3.5.1

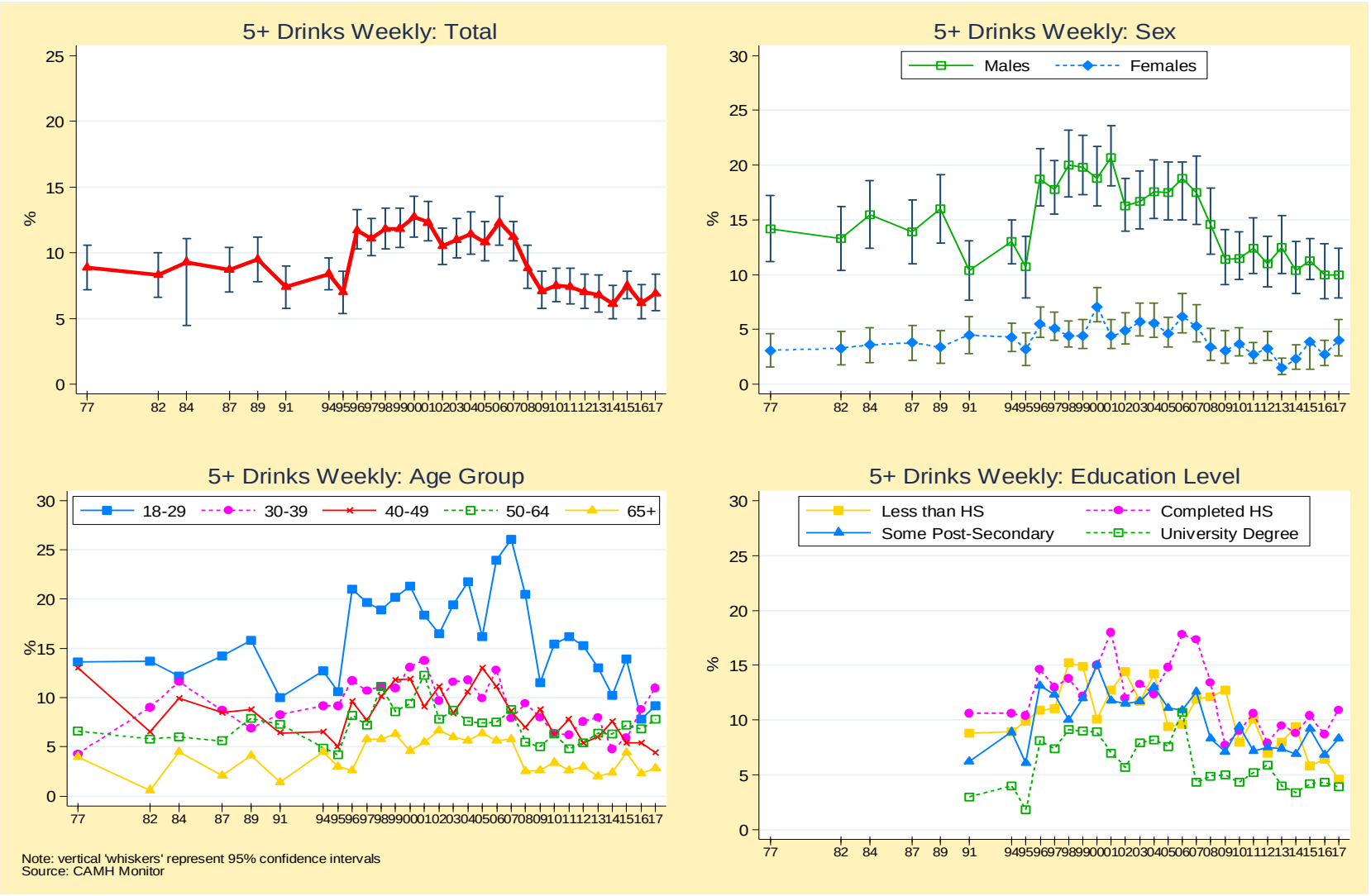
Percentage Drinking Five or More Drinks on a Single Occasion Weekly in the Past Year by Sex, Age and Region, Ontarians Aged 18+, 2017 (N=2812)



Note: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal bar represents 95% confidence interval for total estimate
(3) significant difference by sex and age (p<.05)
Source: 2017 CAMH Monitor

Figure 3.5.2

Percentage Drinking Five or More Drinks on a Single Occasion Weekly in the Past Year, Ontarians Aged 18+, 1977–2017



Note: vertical 'whiskers' represent 95% confidence intervals
Source: CAMH Monitor

3.6 Hazardous or Harmful Drinking (AUDIT)

The consequences of problematic drinking vary in their nature and quality. Alcohol problems are multidimensional; they can be indicated by excessive consumption, problematic consequences, and dependence.

The *Alcohol Use Disorders Identification Te*st (AUDIT), whose development was sponsored by the World Health Organization, was designed to detect problem drinkers at the less severe end of the spectrum of alcohol problems. The AUDIT identifies **hazardous** alcohol use – an established pattern of drinking that *increases the likelihood of future* physical and mental health problems (e.g., liver disease) – as well as **harmful** consequences of that use – a pattern of drinking that is *already causing damage* to health (e.g., alcohol-related injuries, depression) and indications of dependence (Babor et al., 2001; Saunders et al., 1993). The AUDIT is a 10-item screener (including lack of control over one's own drinking, failure to meet expectations, drinking in the morning, feelings of guilt, black-outs, injuries resulting from drinking, and having someone express concern about drinking) with a protocol for scoring responses to these items (see **Table 3.6.1**).

Conventionally, a score of **8 or more** out of 40 on the AUDIT scale is used to identify drinkers that **drink at hazardous or harmful levels** or are at risk of becoming dependent. A score of 8 or more should not be viewed as "alcoholism," but as a pattern of drinking that is causing current problems or likely to cause future problems.

2017…….Tables 3.6.1–3.6.3; Fig. 3.6.1

An estimated, **12.5%** (95% CI: 10.9% to 14.4%) of Ontario adults drank hazardously or harmfully during the past 12 months before the survey. Among past year drinkers, the prevalence was **15.9%** (95% CI: 13.9% to 18.1%). The corresponding population estimate is 1,275,500 hazardous/harmful drinkers.

Sex, age, marital status, and **education** were all significantly related to hazardous/ harmful drinking, when controlling for other characteristics.

- The adjusted odds of hazardous/harmful drinking among men were 3 times higher than among women (18.6% vs. 6.9%; OR=3.06).
- Hazardous/harmful drinking declined significantly with age, dropping from 18.4% among 18 to 29 year olds to 5.5% among those aged 65 and older, and the adjusted odds of hazardous/harmful drinking were significantly lower among those aged 65 and older (OR=0.40) compared to the youngest group.
- Compared to married respondents, the adjusted odds of hazardous/harmful drinking were significantly lower among those previously married (OR=0.53) and higher among those never married.
- Hazardous/harmful drinking was significantly associated with education. The rate was lowest among those who have not completed high school (8.9%) and highest among those who have only completed high school (16.6%).

Similarly, among **past year drinkers**, sex, age, marital status, education, and income were all significantly related to hazardous/harmful drinking. Men, those aged 18 to 29, those never married, those with only a high school education, and those with the lowest income displayed the highest rates of hazardous/harmful drinking.

Trends

1998–2017 ……Tables 3.6.4-3.6.5; Fig 3.6.2

2016–2017

The percentage of Ontarians reporting hazardous/harmful drinking did not change significantly in 2017 (12.5%) compared to 2016 (11.6%), and rates were stable for almost all subgroups. We found only one significant increase in reporting hazardous/harmful drinking among those aged 50 to 64 (from 10.5% in 2016 to 15.1% in 2017).

Past year drinkers displayed similar characteristics. Overall, hazardous/harmful drinking among Ontario drinkers was not significantly different between 2016 (14.7%) and 2017 (15.9%), and rates were stable for all subgroups.

1998–2017

Between 1998 and 2017 hazardous/harmful drinking remained generally **stable** among Ontario adults, hovering between 10% and 16%.

We found a significant **decline** among **18 to 29 year olds** from 31.8% in 2010 to 18.4% in 2017. Significant subgroup declines were found during this period for the West and North regions and for never married respondents.

Past year drinkers displayed similar patterns. Hazardous/harmful drinking among drinkers did not vary significantly between 1998 and 2017. Significant non-linear subgroup **decreases** were found among drinkers aged 18 to 29, among respondents from the West and among those never married.

Table 3.6.1: Percentage Reporting ***Hazardous and Harmful Drinking (AUDIT) Indicators***, ***Ontarians*** and Ontarian ***Past Year Drinkers***, Aged 18+, 2017

AUDIT Item	% "yes" Total Sample (n=2812)	% "yes" Past Year Drinkers (n=2195)
Alcohol Intake		
1. Consumed alcohol during the past 12 months	79.7	--
2. Number of drinks usually have on typical day when drink (% reporting 2+ drinks)	46.2	58.1
3. Consumed 5 or more drinks on one occasion during the past 12 months	38.7	48.6
Dependence Indicators (past 12 months)		
4. Were not able to stop drinking once you had started	3.2	4.0
5. Failed to do what was normally expected from you because of your drinking	4.1	5.1
6. Needed a first alcoholic drink in the morning to get yourself going after a heavy drinking session	1.1	1.4
Adverse Consequences		
7. Had a feeling of guilt or remorse after drinking, during the past 12 months	9.7	12.2
8. Been unable to remember what happened the night before because you had been drinking, during the past 12 months	6.9	8.7
9. You or someone else been injured as a result of your drinking		
Yes, but not in the past 12 months:	5.8	7.2
Yes, in the past 12 months:	1.3	1.6
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:	3.5	4.3
Yes, in the past 12 months:	2.2	2.7
AUDIT 8+ Score (95% CI)	**12.5%** (10.9-14.4)	**15.9%** (13.9-18.1)

Notes: All analyses are sample design adjusted; † Estimate less than 1%;
Def: The AUDIT screener measures hazardous and harmful drinking, as indicated by a score of 8 or more out of 40.
Source: The *CAMH Monitor*, Centre for Addiction and Mental Health

Table 3.6.2: Percentage Reporting ***Hazardous or Harmful Drinking (AUDIT 8+)*** in the Past 12 Months and Adjusted Group Differences, ***Ontarians*** Aged 18+, 2017

	N	%	95% CI	Adjusted Odds Ratio (N=2615)
Total	2812	**12.5**	(10.9, 14.4)	—
Sex				*******
Men	1150	**18.6**	(15.8, 21.8)	**3.06*****
Women *(Comparison Group)*	1662	**6.9**	(5.3, 8.8)	—
Age				**
18-29 *(Comparison Group)*	283	**18.4**	(13.8, 24.2)	—
30-39	199	**†12.9**	(8.5, 19.2)	0.82
40-49	366	**†9.3**	(6.4, 13.3)	0.68
50-64	843	**15.1**	(12.1, 18.7)	1.05
65+	1110	**5.5**	(4.1, 7.4)	**0.40***
Region				NS
Toronto *(vs. Provincial Average)*	476	**13.4**	(9.7, 18.1)	1.00
Central East	476	**12.0**	(8.6, 16.6)	0.97
Central West	456	**12.6**	(9.3, 16.8)	1.04
West	468	**†9.1**	(6.3, 12.9)	0.78
East	467	**14.9**	(11.1, 19.8)	1.32
North	469	**†11.7**	(8.3, 16.4)	0.80
Marital Status				*
Married/Partner *(Comparison Group)*	1730	**11.6**	(9.7, 13.8)	—
Previously Married	614	**†5.7**	(3.8, 8.5)	**0.53***
Never Married	441	**18.2**	(14.2, 23.0)	1.19
Education				**
High school not completed *(Comparison Group)*	240	**†8.9**	(4.3, 17.7)	—
Completed high school	612	**16.6**	(12.7, 21.6)	1.79
Some college or university	986	**14.6**	(11.8, 18.0)	1.43
University degree	933	**9.2**	(7.1, 11.8)	0.77
Household Income				NS
< $30,000 *(Comparison Group)*	266	**†15.4**	(10.2, 22.5)	—
$30,000-$49,999	347	**†10.2**	(6.3, 16.0)	0.57
$50,000-$79,999	483	**†8.1**	(5.4, 12.0)	**0.40***
$80,000+	1079	**14.6**	(12.0, 17.7)	0.81
Not stated	637	**11.6**	(8.4, 15.8)	0.68

Notes: (1) All analyses are sample design adjusted;*p<.05**;** **p<.01; ***p<.001; CI = 95% confidence interval;
NS – no statistically significant difference.
(2) Asterisks in group row indicate a statistically significant group effect, based on Wald test.
(3) ORs greater than 1.0 indicate that drinking is higher in the group being compared to the comparison group; ORs less than 1.0 indicate that drinking is lower in the group being compared to the comparison group.
(4) Adjusted odds ratio holding fixed values for sex, age, region, marital status, education and income.

Defn: *The AUDIT screener measures hazardous and harmful drinking, as indicated by a score of 8 or more out of 40.*

Source: The *CAMH Monitor*, Centre for Addiction and Mental Health

Table 3.6.3: Percentage Reporting ***Hazardous or Harmful Drinking (AUDIT 8+)*** in the Past 12 Months and Adjusted Group Differences, Ontarian ***Past Year Drinkers*** Aged 18+, 2017

	N	%	95% CI	Adjusted Odds Ratio (N=2045)
Total	2195	**15.9**	(13.9, 18.1)	—
Sex				*******
Men	939	**22.8**	(19.4, 26.5)	**3.02*****
Women *(Comparison Group)*	1256	**9.0**	(7.0, 11.5)	—
Age				******
18-29 *(Comparison Group)*	231	**23.4**	(17.6, 30.4)	—
30-39	167	**†15.5**	(10.2, 22.8)	0.76
40-49	312	**†11.1**	(7.7, 15.8)	0.63
50-64	692	**18.7**	(15.1, 23.1)	1.04
65+	784	**7.9**	(5.9, 10.5)	**0.38***
Region				NS
Toronto *(vs. Provincial Average)*	372	**17.2**	(12.6, 23.0)	1.05
Central East	376	**15.3**	(11.0, 20.9)	0.98
Central West	363	**16.0**	(11.9, 21.2)	1.05
West	363	**†11.5**	(8.0, 16.3)	0.77
East	370	**18.7**	(14.0, 24.5)	1.32
North	351	**†14.4**	(10.2, 20.0)	0.66
Marital Status				*****
Married/Partner *(Comparison Group)*	1407	**14.2**	(11.9, 16.8)	—
Previously Married	423	**†8.5**	(5.7, 12.5)	**0.54***
Never Married	348	**23.3**	(18.3, 29.3)	1.22
Education				******
High school not completed *(Comparison Group)*	124	**†17.0**	(8.3, 31.4)	—
Completed high school	466	**21.6**	(16.6, 27.7)	1.18
Some college or university	799	**18.1**	(14.6, 22.1)	0.90
University degree	786	**11.0**	(8.5, 14.1)	0.46
Household Income				*****
< $30,000 *(Comparison Group)*	157	**†25.3**	(17.0, 35.8)	—
$30,000-$49,999	257	**†14.1**	(8.8, 21.9)	**0.44***
$50,000-$79,999	382	**†10.5**	(7.0, 15.4)	**0.28****
$80,000+	948	**16.8**	(13.8, 20.2)	**0.52***
Not stated	451	**15.7**	(11.4, 21.3)	**0.49***

Notes: (1) All analyses are sample design adjusted;*p<.05**;** **p<.01; ***p<.001; CI = 95% confidence interval;
NS – no statistically significant difference.
(2) Asterisks in group row indicate a statistically significant group effect, based on Wald test.
(3) ORs greater than 1.0 indicate that drinking is higher in the group being compared to the comparison group; ORs less than 1.0 indicate that drinking is lower in the group being compared to the comparison group.
(4) Adjusted odds ratio holding fixed values for sex, age, region, marital status, education and income.

Def: *The AUDIT screener measures hazardous and harmful drinking, as indicated by a score of 8 or more out of 40.*

Source: The *CAMH Monitor*, Centre for Addiction and Mental Health

Table 3.6.4: Percentage ***Reporting Hazardous or Harmful Drinking (AUDIT 8+)*** in the Past 12 Months, by Demographic Characteristics, ***Ontarians***, Aged 18+, 1998–2017

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Trend	
(N=)	(2509)	(2436)	(2406)	(2627)	(2421)	(2411)	(2611)	(2445)	(2016)	(2005)	(2024)	(2037)	(3030)	(3039)	(3030)	(3021)	(3043)	(5013)	(3042)	(2812)		
Total	**13.3**	**13.2**	**13.3**	**12.9**	**13.0**	**13.2**	**13.9**	**10.4**	**13.8**	**15.6**	**14.7**	**13.0**	**14.8**	**14.4**	**12.9**	**13.7**	**12.0**	**14.6**	**11.6**	**12.5**	–	–
(95%CI)[a]	(11.7, 15.0)	(11.7, 14.9)	(11.8, 15.0)	(11.4, 14.4)	(11.5, 14.6)	(11.6, 14.9)	(12.3, 15.7)	(9.0, 12.0)	(11.9, 15.8)	(13.6, 17.7)	(12.7,16.9)	(11.2, 15.1)	(13.2, 16.5)	(12.7,16.2)	(11.3, 14.6)	(12.0, 15.7)	(10.4, 13.8)	(13.2, 16.1)	(10.0, 13.5)	(10.9, 14.4)		
Sex																						
Men	**22.9**	**21.7**	**20.0**	**19.7**	**19.9**	**19.4**	**20.6**	**15.5**	**21.6**	**23.2**	**22.2**	**19.0**	**21.3**	**21.5**	**19.5**	**22.1**	**17.8**	**21.5**	**18.5**	**18.6**	–	–
	(20.1, 26.0)	(18.9, 24.8)	(17.4, 23.0)	(17.2, 22.4)	(17.3, 22.7)	(16.7, 22.4)	(17.8, 23.7)	(13.0, 18.3)	(18.4, 25.2)	(19.9, 26.8)	(18.8, 25.9)	(16.0, 22.4)	(18.6, 24.2)	(18.6, 24.7)	(16.8, 22.5)	(18.9, 25.7)	(15.0, 20.9)	(19.1, 24.1)	(15.5, 22.0)	(15.8, 21.8)		
Women	**4.8**	**5.6**	**7.4**	**6.6**	**6.6**	**7.5**	**7.8**	**5.6**	**6.5**	**8.4**	**7.8**	**7.5**	**8.7**	**7.9**	**7.5**	**6.1**	**6.8**	**8.4**	**5.4**	**6.9**	T	–
	(3.7, 6.2)	(4.3, 7.2)	(6.0, 9.0)	(5.3, 8.4)	(5.1, 8.5)	(5.9, 9.4)	(6.1, 9.8)	(4.3, 7.3)	(4.9, 8.5)	(6.6, 10.8)	(5.8,10.5)	(5.6,9.9)	(7.1, 10.7)	(6.3,9.8)	(5.5,8.8)	(4.7, 8.0)	(5.3, 8.7)	(7.0, 9.9)	(4.1, 7.2)	(5.3, 8.8)		
Age																						
18-29	**26.9**	**25.7**	**25.5**	**24.9**	**22.4**	**27.2**	**31.2**	**25.5**	**28.2**	**39.1**	**31.4**	**27.5**	**31.8**	**29.6**	**23.4**	**30.5**	**21.9**	**29.3**	**18.6**	**18.4**	T	–
	(22.4, 31.9)	(21.2, 30.9)	(21.2, 30.4)	(20.7, 29.7)	(18.2, 27.2)	(22.4, 32.5)	(25.9, 37.1)	(20.6, 31.2)	(22.2, 35.0)	(32.2, 46.4)	(24.4,39.4)	(20.9,35.3)	(26.2, 38.1)	(23.7,36.3)	(17.8, 30.1)	(23.3, 38.7)	(15.8, 29.5)	(24.4, 34.8)	(13.2, 25.4)	(13.8, 24.2)		
30-39	**11.4**	**13.1**	**11.9**	**14.8**	**15.5**	**16.0**	**15.6**	**7.1**	**14.5**	**11.7**	**16.0**	**14.7**	**14.9**	**14.7**	**17.0**	**17.2**	**†11.9**	**15.2**	**†14.0**	**†12.9**	–	–
	(8.8, 14.6)	(10.2, 16.6)	(9.4, 15.1)	(11.7, 18.6)	(12.2, 19.6)	(12.3, 20.5)	(12.1, 20.0)	(5.0, 9.9)	(10.8, 19.3)	(8.3,16.2)	(11.5,21.7)	(10.8,19.6)	(11.3,19.2)	(11.1,19.2)	(12.9, 22.1)	(12.8, 22.9)	(8.3, 16.8)	(11.6, 19.6)	(8.8, 20.5)	(8.5, 19.2)		
40-49	**11.6**	**11.0**	**10.9**	**9.5**	**11.2**	**10.1**	**10.4**	**9.3**	**11.7**	**10.1**	**13.5**	**11.8**	**12.5**	**16.2**	**13.0**	**10.5**	**14.2**	**11.8**	**10.6**	**†9.3**	–	–
	(8.8, 15.1)	(8.2, 14.6)	(8.2, 14.2)	(7.2, 12.5)	(8.4, 14.6)	(7.6, 13.2)	(7.8, 13.7)	(6.8, 12.6)	(8.5, 15.8)	(7.3, 14.0)	(9.9,18.0)	(8.9,15.7)	(9.8, 15.9)	(12.8, 20.2)	(10.1, 16.7)	(7.8, 13.9)	(10.9, 18.3)	(9.2, 14.9)	(7.6, 14.5)	(6.4, 13.3)		
50-64	**9.3**	**9.0**	**9.8**	**10.9**	**8.7**	**7.4**	**7.5**	**6.1**	**8.3**	**13.5**	**10.3**	**8.0**	**10.5**	**8.8**	**9.2**	**10.2**	**10.3**	**11.6**	**10.5**	**15.1**	T	2Y
	(6.6, 12.9)	(6.2, 12.7)	(7.1, 13.4)	(8.2, 14.4)	(6.2, 12.0)	(5.2, 10.5)	(5.3, 10.4)	(4.2, 8.8)	(6.0, 11.5)	(10.5, 17.2)	(7.7,13.6)	(5.6,11.4)	(8.6, 12.9)	(6.7, 11.5)	(7.3, 11.6)	(8.1, 12.6)	(8.3, 12.7)	(9.8, 13.6)	(8.5, 13.0)	(12.1, 18.7)		
65+	**†4.7**	**†4.7**	**†5.2**	**†2.4**	**†5.7**	**†3.2**	**†5.4**	**†3.1**	**†4.6**	**†4.5**	**†3.4**	**†5.0**	**†4.5**	**†4.3**	**†5.4**	**4.4**	**†4.1**	**6.8**	**5.7**	**5.5**	–	–
	(2.7, 8.1)	(2.9, 7.6)	(3.0, 9.1)	(1.2, 4.7)	(3.3, 9.5)	(1.8, 5.9)	(3.3, 8.6)	(1.7, 5.7)	(2.7, 7.8)	(2.7, 7.5)	(2.1, 5.7)	(3.2, 7.7)	(3.1, 6.6)	(2.9, 6.37)	(3.8, 7.6)	(3.1, 6.2)	(2.9, 5.7)	(5.4, 8.5)	(4.4, 7.5)	(4.1, 7.4)		
Region																						
Toronto	**13.3**	**12.7**	**12.6**	**13.0**	**11.7**	**12.9**	**13.4**	**†7.3**	**11.2**	**13.4**	**12.2**	**12.4**	**12.9**	**10.8**	**11.9**	**13.3**	**†8.9**	**15.2**	**†9.4**	**13.4**	–	–
	(9.9, 17.7)	(9.3, 17.2)	(9.3, 16.7)	(9.8, 17.0)	(8.5, 15.7)	(9.5, 17.5)	(9.9, 17.9)	(4.8, 10.8)	(7.6, 16.1)	(9.6, 18.4)	(8.1,18.1)	(8.6,17.7)	(9.6,17.0)	(7.7,15.0)	(8.8,15.9)	(9.5, 18.4)	(6.3, 12.6)	(12.1, 18.9)	(6.5, 13.4)	(9.7, 18.1)		
C-East	**13.5**	**12.0**	**14.8**	**14.7**	**12.8**	**17.0**	**15.0**	**12.7**	**16.7**	**†14.2**	**15.5**	**†13.5**	**12.8**	**13.6**	**11.6**	**14.4**	**12.6**	**16.4**	**†12.9**	**12.0**	–	–
	(10.0, 18.0)	(8.8, 16.1)	(11.4, 19.1)	(11.3, 18.9)	(9.5, 17.1)	(13.2, 21.6)	(11.0, 11.9)	(9.2, 17.2)	(12.2, 22.4)	(10.2, 19.5)	(11.4, 20.8)	(9.5, 18.9)	(9.6, 16.9)	(10.0, 18.2)	(8.5, 15.7)	(10.6, 19.3)	(9.1, 17.2)	(13.4, 20.2)	(9.1, 17.9)	(8.6, 16.6)		
C- West	**10.1**	**14.3**	**12.8**	**†8.9**	**14.9**	**11.7**	**13.9**	**†8.3**	**†9.6**	**†14.7**	**†14.7**	**15.7**	**14.6**	**14.1**	**†10.4**	**14.5**	**†11.7**	**12.5**	**†11.1**	**12.6**	–	–
	(7.4, 13.7)	(10.8, 18.7)	(9.6, 16.8)	(6.4, 12.3)	(11.4, 19.3)	(8.5, 15.8)	(10.4, 18.4)	(5.6, 12.2)	(6.5, 13.9)	(10.6, 20.2)	(10.5, 20.3)	(11.6, 20.8)	(11.2, 19.0)	(10.4, 18.8)	(7.4, 14.5)	(10.6, 19.5)	(8.3, 16.3)	(9.8, 15.9)	(7.4, 16.3)	(9.3, 16.8)		
West	**15.4**	**14.5**	**12.2**	**15.9**	**12.0**	**12.9**	**15.8**	**13.2**	**19.2**	**17.8**	**11.9**	**9.1**	**16.6**	**20.6**	**15.3**	**10.7**	**14.6**	**12.4**	**†10.4**	**†9.1**	T	–
	(11.6, 20.0)	(11.1, 18.7)	(9.0, 16.4)	(12.3, 20.3)	(9.0, 15.8)	(9.7, 16.9)	(12.2, 20.3)	(9.8, 17.5)	(14.7, 24.5)	(13.4, 23.3)	(8.1,17.1)	(6.1, 13.2)	(12.8,21.1)	(16.2, 25.7)	(11.8, 19.6)	(7.4, 15.1)	(11.0, 19.0)	(9.7, 15.7)	(11.0, 19.0)	(6.3, 12.9)		
East	**13.9**	**12.5**	**12.1**	**13.2**	**13.6**	**11.8**	**11.1**	**10.4**	**14.9**	**22.0**	**18.7**	**12.1**	**16.8**	**14.6**	**17.2**	**14.3**	**12.6**	**13.9**	**13.1**	**14.9**	–	–
	(10.4, 18.2)	(9.2, 16.8)	(8.9, 16.2)	(10.0,17.3)	(10.2, 17.9)	(8.5, 16.1)	(8.2, 15.0)	(7.3, 14.6)	(10.6, 20.4)	(16.9, 28.0)	(13.8,24.7)	(8.7,16.6)	(13.0,21.5)	(11.2,18.9)	(13.2, 22.2)	(10.7, 18.9)	(9.3, 16.8)	(11.0, 17.5)	(9.5, 17.9)	(11.1, 19.8)		
North	**16.4**	**13.6**	**17.1**	**13.1**	**12.2**	**12.0**	**14.2**	**12.7**	**11.3**	**11.3**	**18.2**	**13.3**	**21.1**	**16.6**	**14.9**	**15.3**	**14.5**	**17.0**	**14.9**	**†11.7**	T	–
	(12.6, 21.0)	(10.3, 17.8)	(13.3, 21.6)	(10.3, 16.5)	(9.0, 16.2)	(8.8, 16.1)	(11.3, 17.8)	(9.4, 17.0)	(7.9, 15.8)	(7.8,16.1)	(13.8,23.8)	(9.6,18.2)	(16.8,26.2)	(12.6,21.7)	(10.9, 20.1)	(11.4, 20.2)	(10.9, 18.9)	(13.8, 20.7)	(10.9, 20.0)	(8.3, 16.4)		

Cont'd

(N=)	1998 (2509)	1999 (2436)	2000 (2406)	2001 (2627)	2002 (2421)	2003 (2411)	2004 (2611)	2005 (2445)	2006 (2016)	2007 (2005)	2008 (2024)	2009 (2037)	2010 (3030)	2011 (3039)	2012 (3030)	2013 (3021)	2014 (3043)	2015 (5013)	2016 (3042)	2017 (2812)	Trend	
Marital Status																						
Married/ Partner	**9.9**	**9.7**	**10.4**	**9.8**	**10.4**	**10.0**	**9.7**	**7.2**	**9.8**	**10.6**	**10.8**	**10.8**	**11.8**	**11.0**	**10.7**	**10.2**	**10.1**	**10.9**	**10.0**	**11.6**	**–**	**–**
Previously Married	**8.7**	**9.7**	**11.5**	**8.7**	**10.9**	**11.8**	**8.4**	**7.3**	**†9.8**	**13.2**	**10.1**	**8.0**	**9.2**	**12.5**	**†10.0**	**7.3**	**9.3**	**13.5**	**†9.9**	**†5.7**	**–**	**–**
Never Married	**25.3**	**26.3**	**21.8**	**24.0**	**21.3**	**23.5**	**29.9**	**21.8**	**28.3**	**33.7**	**29.7**	**23.7**	**26.7**	**25.8**	**20.5**	**28.2**	**19.0**	**26.0**	**16.6**	**18.2**	**T**	**–**
Education																						
High school not completed	**15.8**	**13.7**	**10.3**	**9.4**	**14.8**	**12.3**	**17.6**	**10.0**	**†12.7**	**†13.1**	**17.8**	**16.4**	**†15.7**	**14.2**	**†13.0**	**13.9**	**†14.4**	**†8.8**	**†11.3**	**†8.9**	**–**	**–**
Completed high school	**12.9**	**15.0**	**15.5**	**17.9**	**14.7**	**15.3**	**16.4**	**†14.7**	**16.9**	**22.0**	**18.2**	**11.9**	**16.1**	**14.8**	**13.0**	**15.5**	**14.3**	**17.5**	**14.3**	**16.6**	**–**	**–**
Some college or university	**14.9**	**13.0**	**15.0**	**13.1**	**13.6**	**14.4**	**15.0**	**11.7**	**13.4**	**17.1**	**14.7**	**15.4**	**17.0**	**16.4**	**14.2**	**15.9**	**13.8**	**17.1**	**12.8**	**14.6**	**–**	**–**
University degree	**10.0**	**11.4**	**10.8**	**9.6**	**9.4**	**10.7**	**9.9**	**†5.2**	**12.2**	**†9.4**	**11.1**	**10.3**	**11.4**	**12.3**	**11.2**	**10.4**	**8.7**	**11.5**	**9.4**	**9.2**	**–**	**–**

Notes: (1) All analyses are sample design adjusted; [a]95% confidence interval; † Estimate suppressed or unstable; † Estimate suppressed or unstable; the sampling design was changed in 2017 to dual-frame sampling (landline + cell-phone).

(2) Trend Analysis: **–** change not statistically significant (p<.05); **T** significant change (p<.05) between 1998-2017; **2Y** significant change (p<.05) between last two estimates.

Def: *The AUDIT screener measures hazardous and harmful drinking, as indicated by a score of 8 or more out of 40.*

Source: The *CAMH Monitor*, Centre for Addiction and Mental Health

Table 3.6.5: Percentage ***Reporting Hazardous or Harmful Drinking (AUDIT 8+)*** in the Past 12 Months, by Demographic Characteristics, Ontarian ***Past Year Drinkers***, Aged 18+, 1998–2017

(N=)	1998 (1777)	1999 (1938)	2000 (1887)	2001 (2088)	2002 (1933)	2003 (1933)	2004 (2101)	2005 (1906)	2006 (1527)	2007 (1618)	2008 (1599)	2009 (1602)	2010 (2352)	2011 (2401)	2012 (2355)	2013 (2330)	2014 (2422)	2015 (3967)	2016 (2368)	2017 (2195)	Trend	
Total Drinkers	**17.4**	**16.9**	**16.7**	**16.7**	**16.5**	**16.5**	**17.3**	**13.3**	**17.9**	**19.3**	**18.4**	**16.7**	**19.1**	**17.8**	**16.5**	**17.7**	**14.9**	**18.4**	**14.7**	**15.9**	–	–
(95%CI)[a]	(15.4, 19.6)	(15.0, 19.1)	(14.9,18.8)	(14.9,18.6)	(14.6, 18.6)	(14.6, 18.6)	(15.3, 19.5)	(11.6, 15.4)	(15.5, 20.5)	(16.9,21.8)	(16.0, 21.1)	(14.3,19.1)	(17.1, 21.2)	(15.8,20.1)	(14.6,18.6)	(15.5, 20.2)	(13.0, 17.1)	(16.7, 20.3)	(12.7, 17.0)	(13.9, 18.1)		
Sex																						
Men	**28.0**	**25.9**	**23.9**	**24.7**	**24.4**	**23.5**	**24.4**	**18.6**	**26.2**	**27.4**	**26.5**	**23.7**	**26.2**	**25.8**	**23.6**	**26.9**	**21.3**	**25.9**	**22.4**	**22.8**	–	–
	(24.5, 31.8)	(22.6, 29.4)	(20.8, 27 .3)	(21.7, 27.9)	(21.4, 27.8)	(20.4, 27.0)	(21.2, 28.0)	(15.7, 21.9)	(22.4,30.4)	(23.6,31.5)	(22.6,30.8)	(20.0,27.8)	(23.0,29.7)	(22.4,29.6)	(20.4, 27.0)	(23.1, 31.0)	(18.0, 24.9)	(23.1, 29.0)	(18.9, 26.4)	(19.4, 26.5)		
Women	**6.8**	**7.7**	**9.5**	**8.3**	**8.6**	**9.7**	**10.1**	**7.8**	**9.0**	**10.9**	**10.3**	**9.7**	**11.8**	**10.0**	**9.4**	**8.3**	**8.8**	**11.0**	**7.2**	**9.0**	T	–
	(5.2, 8.8)	(5.9, 9.9)	(7.7,11.7)	(6.6,10.5)	(6.7, 11.1)	(7.6, 12.2)	(8.0, 12.8)	(6.0, 10.1)	(6.0, 10.1)	(8.6,13.9)	(7.7,13.6)	(7.3,12.8)	(9.7, 14.3)	(8.0,12.5)	(7.4,11.8)	(6.4, 10.8)	(6.8, 11.2)	(9.3, 13.0)	(5.4, 9.4)	(7.0, 11.5)		
Age																						
18–29	**32.1**	**29.9**	**29.6**	**30.3**	**26.6**	**31.4**	**36.2**	**31.2**	**33.5**	**43.9**	**36.4**	**33.0**	**38.8**	**34.7**	**29.4**	**38.2**	**26.2**	**37.3**	**23.5**	**23.4**	T	–
	(26.7, 38.0)	(24.7, 35.7)	(24.8,35.0)	(25.3,35.7)	(21.8, 32.2)	(26.0, 37.3)	(30.1, 42.7)	(25.3, 37.7)	(26.6,41.1)	(36.5,51.6)	(28.5,45.1)	(25.3,41.7)	(32.2, 45.8)	(27.9,42.1)	(22.5, 37.3)	(29.7, 47.5)	(19.2, 34.9)	(31.3, 43.6)	(16.9, 31.7)	(17.6, 30.4)		
30–39	**13.8**	**16.2**	**14.4**	**15.9**	**19.2**	**19.4**	**18.4**	**8.6**	**18.7**	**14.3**	**19.1**	**18.6**	**19.1**	**17.7**	**21.1**	**22.2**	**14.7**	**18.7**	**†16.4**	**†15.5**	–	–
	(10.5, 17.9)	(12.7, 20.4)	(11.3,18.2)	(12.6,20.0)	(15.2, 23.9)	(15.0, 24.7)	(14.3, 23.5)	(6.1, 12.1)	(13.9,24.6)	(10.2,19.7)	(13.8,25.7)	(13.8,24.6)	(14.6, 24.4	(13.4,22.9)	(16.1, 27.2)	(16.6, 29.0)	(10.3, 20.5)	(14.4, 23.9)	(10.7, 24.4)	(10.2, 22.8)		
40– 49	**14.6**	**13.7**	**12.7**	**13.1**	**13.4**	**12.5**	**12.6**	**11.3**	**14.2**	**12.3**	**16.5**	**14.3**	**15.3**	**19.0**	**16.2**	**12.6**	**17.1**	**14.1**	**12.9**	**†11.1**	–	–
	(11.0, 19.1)	(10.3, 18.1)	(9.7,16.6)	(10.1,16.8)	(10.1, 17.5)	(9.4, 16.2)	(9.5, 16.6)	(8.3, 15.3)	(10.4,19.2)	(8.9,16.9)	(12.3,21.9)	(10.7,18.8)	(12.0,19.3)	(15.2,23.6)	(12.6, 20.6)	(9.5, 16.6)	(13.2, 21.8)	(11.1, 17.8)	(9.3, 17.6)	(7.7, 15.8)		
50– 64	**12.7**	**11.6**	**12.5**	**13.5**	**10.9**	**9.5**	**9.3**	**7.9**	**10.9**	**16.6**	**12.6**	**9.9**	**13.5**	**11.0**	**11.3**	**12.9**	**12.5**	**14.3**	**13.2**	**18.7**	T	–
	(9.0, 17.6)	(8.1, 16.3)	(9.0,17.0)	(10.2,17.7)	(7.8, 15.0)	(6.6, 13.4)	(6.6, 12.8)	(5.5, 11.3)	(7.8,14.9)	(12.9,21.0)	(9.4, 16.6)	(6.9,14.0)	(11.0,16.5)	(8.4,14.2)	(10.0, 14.1)	(10.4, 16.0)	(10.1, 15.4)	(12.2, 16.7)	(10.7, 16.2)	(15.1, 23.1)		
65+	**8.0**	**7.5**	**8.1**	**†5.2**	**8.9**	**†4.7**	**7.8**	**†4.8**	**7.2**	**†6.2**	**†5.0**	**7.4**	**†6.5**	**6.1**	**7.9**	**6.3**	**†5.6**	**9.3**	**8.0**	**7.9**	–	–
	(4.6, 13.6)	(4.6, 11.9)	(4.6,13.8)	(3.1,8.6)	(5.3, 14.7)	(2.5, 8.4)	(4.8, 12.4)	(2.6, 8.7)	(4.2,12.1)	(3.7, 10.3)	(3.0,8.2)	(4.7, 11.3)	(4.4, 9.5)	(4.1, 8.9)	(5.6, 11.1)	(4.5, 8.9)	(4.0, 7.7)	(7.4, 11.6)	(6.1, 10.4)	(5.9, 10.5)		
Region																						
Toronto	**18.5**	**18.2**	**17.0**	**18.6**	**15.9**	**16.7**	**17.8**	**10.1**	**14.9**	**18.4**	**16.2**	**16.2**	**18.0**	**14.5**	**16.5**	**18.6**	**†11.5**	**20.1**	**†12.0**	**17.2**	–	–
	(13.7, 24.4)	(13.4, 24.3)	(12.6,22.5)	(14.3,23.8)	(11.7, 21.3)	(12.3, 22.3)	(13.3, 23.6)	(6.7, 14.8)	(10.2,21.2)	(13.3,25.0)	(10.9,23.6)	(11.2, 22.7)	(13.6, 23.5)	(10.4,19.9)	(12.3, 21.9)	(13.4, 25.3)	(8.1, 16.1)	(16.1, 24.8)	(8.4, 17.0)	(12.6, 23.0)		
C- East	**16.2**	**14.4**	**18.5**	**18.7**	**15.7**	**20.3**	**17.4**	**15.4**	**21.7**	**17.2**	**20.5**	**†17.9**	**17.0**	**16.6**	**15.0**	**19.2**	**16.2**	**20.6**	**16.7**	**15.3**	–	–
	(11.9, 21.7)	(10.6, 19.2)	(14.3, 23.6)	(14.4, 23.8)	(11.7, 20.8)	(15.8, 25.7)	(12.9, 23.0)	(11.3, 20.7)	(16.1, 28.7)	(12.4, 23.4)	(15.2, 27.2)	(12.7, 24.6)	(12.8, 22.2)	(12.3,22.0)	(11.1, 20.1)	(14.3, 25.4)	(11.8, 21.8)	(16.7, 25.1)	(12.0, 22.9)	(11.0, 20.9)		
C-West	**13.3**	**18.0**	**17.2**	**†11.2**	**19.5**	**14.6**	**17.5**	**†11.1**	**†12.2**	**18.1**	**†17.6**	**19.4**	**18.0**	**17.0**	**†12.9**	**17.6**	**†13.8**	**15.6**	**†13.8**	**16.0**	–	–
	(9.6, 18.2)	(13.7, 23.4)	(13.0, 22.4)	(8.0,15.4)	(15.0, 24.9)	(10.7, 19.6)	(13.2, 22.9)	(7.5, 16.1)	(8.3,17.7)	(13.1, 24.6)	(12.6,24.0)	(14.5, 25.5)	(13.8, 23.1)	(12.6, 22.6)	(9.2, 17.7)	(13.0, 23.4)	(9.8, 19.0)	(12.2, 19.6)	(9.3, 20.1)	(11.9, 21.2)		
West	**20.5**	**18.7**	**15.5**	**20.3**	**14.5**	**16.1**	**19.2**	**16.9**	**23.5**	**21.2**	**14.4**	**11.7**	**20.7**	**24.8**	**18.8**	**13.9**	**17.8**	**15.4**	**†13.2**	**†11.5**	T	–
	(15.5, 26.5)	(14.4, 23.9)	(11.6,20.4)	(15.8,25.6)	(10.9, 18.9)	(12.2, 21.0)	(14.9, 24.5)	(12.6, 22.2)	(18.1,29.8)	(16.0,27.5)	(9.9,20.6)	(7.9,16.9)	(16.2, 26.2)	(19.7,30.7)	(14.5, 23.9)	(9.7, 19.4)	(13.6, 23.0)	(12.1, 19.4)	(9.4, 18.3)	(8.0, 16.3)		
East	**17.9**	**15.5**	**15.3**	**15.8**	**16.4**	**15.2**	**13.6**	**12.9**	**19.8**	**25.8**	**21.8**	**14.2**	**21.1**	**17.8**	**20.8**	**17.1**	**15.2**	**17.5**	**16.2**	**18.7**	–	–
	(13.5, 23.3)	(11.4, 20.6)	(11.4,20.2)	(12.0,20.5)	(12.4, 21.4)	(11.1, 20.5)	(10.0, 18.3)	(9.1, 17.9)	(14.2,26.7)	(20.0,32.6)	(16.2,28.6)	(10.2,19.3)	(16.4, 26.8)	(13.6,22.9)	(16.0,26.6)	(12.9, 22.5)	(11.3, 20.2)	(13.9, 21.9)	(11.7, 21.9)	(14.0, 24.5)		
North	**22.4**	**17.0**	**21.0**	**17.8**	**15.8**	**15.2**	**17.7**	**15.7**	**15.4**	**13.4**	**22.2**	**17.3**	**25.4**	**20.6**	**19.6**	**18.7**	**17.7**	**19.9**	**18.5**	**†14.4**	–	–
	(17.2, 28.7)	(12.9, 22.0)	(16.5,26.3)	(14.3,18.6)	(11.7, 20.9)	(11.2, 20.2)	(15.3, 19.5)	(11.6, 20.9)	(11.0, 20.5)	(9.2,19.0)	(16.8,28.7)	(12.5,23.5)	(20.3, 31.2)	(15.6,26.7)	(14.4,26.0)	(14.0, 24.6)	(13.4, 23.0)	(16.3, 24.2)	(13.6, 24.5)	(10.2, 20.0)		

Cont'd

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Trend	
(N=)	(1777)	(1938)	(1887)	(2088)	(1933)	(1933)	(2101)	(1906)	(1527)	(1618)	(1599)	(1602)	(2352)	(2401)	(2355)	(2330)	(2422)	(3967)	(2368)	(2195)		
Marital Status																						
Married/ Partner	**12.7**	**12.5**	**12.5**	**12.2**	**12.9**	**12.6**	**11.9**	**9.1**	**12.8**	**13.1**	**13.3**	**13.6**	**15.1**	**13.6**	**13.3**	**12.7**	**12.3**	**13.5**	**12.5**	**14.2**	**–**	**–**
Previously Married	**12.7**	**14.4**	**17.5**	**11.9**	**15.6**	**16.5**	**11.6**	**10.5**	**15.3**	**17.2**	**14.4**	**10.9**	**13.1**	**17.1**	**13.9**	**10.5**	**12.8**	**18.2**	**†13.3**	**†8.5**	**–**	**–**
Never Married	**31.8**	**31.0**	**26.6**	**31.0**	**26.7**	**27.5**	**35.8**	**27.4**	**33.4**	**40.0**	**36.8**	**29.1**	**33.7**	**30.7**	**27.8**	**37.2**	**23.4**	**33.5**	**21.5**	**23.3**	**T**	**–**
Education																						
High school not completed	**24.4**	**21.6**	**17.6**	**16.0**	**22.3**	**18.2**	**27.0**	**16.8**	**19.8**	**19.8**	**26.6**	**23.4**	**23.6**	**21.2**	**20.9**	**23.3**	**†23.3**	**†14.3**	**†21.7**	**†17.0**	**–**	**–**
Completed high school	**18.4**	**19.4**	**20.3**	**23.0**	**19.1**	**19.3**	**20.1**	**18.8**	**22.9**	**27.1**	**22.5**	**16.5**	**22.4**	**19.5**	**17.5**	**21.4**	**18.6**	**23.4**	**19.1**	**21.6**	**–**	**–**
Some college or university	**17.3**	**15.8**	**17.4**	**16.3**	**16.5**	**17.6**	**17.8**	**14.2**	**16.7**	**20.4**	**18.3**	**18.7**	**20.7**	**19.6**	**17.7**	**19.7**	**16.6**	**21.1**	**16.0**	**18.1**	**–**	**–**
University degree	**12.2**	**13.7**	**11.8**	**10.9**	**11.3**	**12.5**	**12.0**	**6.5**	**15.0**	**11.4**	**13.5**	**12.6**	**14.2**	**14.6**	**13.6**	**12.5**	**10.3**	**13.9**	**11.3**	**11.0**	**–**	**–**

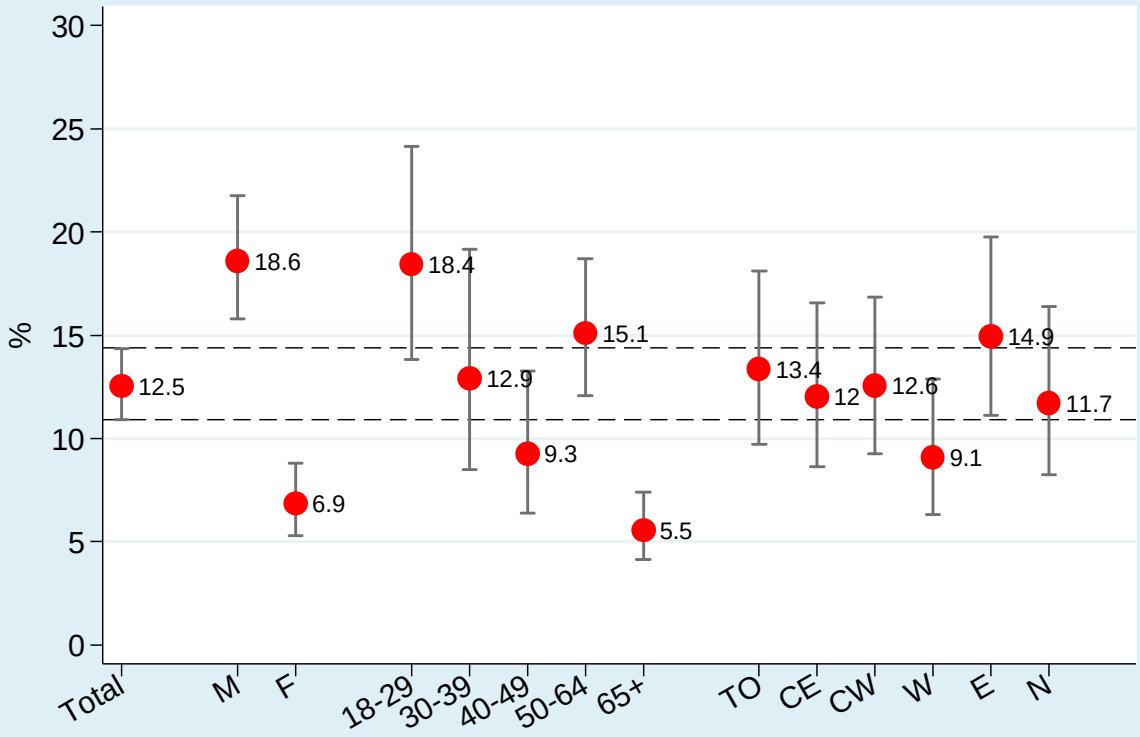
Notes: (1) All analyses are sample design adjusted; [a]95% confidence interval; † Estimate suppressed or unstable; the sampling design was changed in 2017 to dual-frame sampling (landline + cell-phone).
(2) Trend Analysis: **–** change not statistically significant (p<.05); **T** significant change (p<.05) between 1998-2017; **2Y** significant change (p<.05) between last two estimates.

Def: *The AUDIT screener measures hazardous and harmful drinking, as indicated by a score of 8 or more out of 40.*

Source: The *CAMH Monitor*, Centre for Addiction and Mental Health

Figure 3.6.1

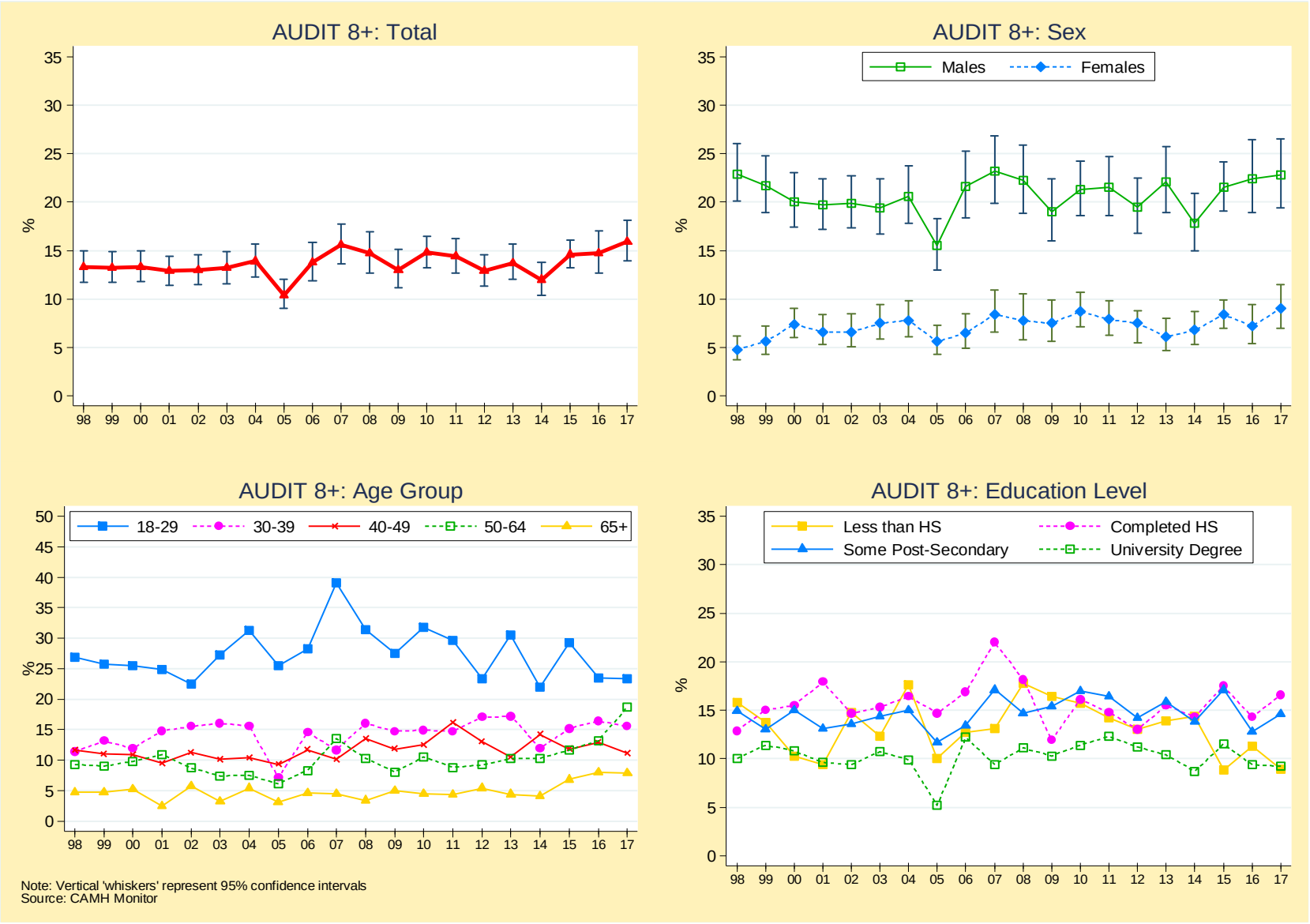
Percentage Drinking Hazardously or Harmfully (AUDIT 8+) in the Past Year by Sex, Age and Region, Ontarians Aged 18+, 2017 (N=2812)



Note: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal bar represents 95% confidence interval for total estimate
(3) significant difference by sex and age (p<.05)
Source: 2017 CAMH Monitor

Figure 3.6.2

Percentage Drinking Hazardously or Harmfully (AUDIT 8+) in the Past Year, Ontarians Aged 18+, 1998–2017



Note: Vertical 'whiskers' represent 95% confidence intervals
Source: CAMH Monitor

3.6.1 Symptoms of Alcohol Dependence (AUDIT)

While the previous section examined the prevalence of hazardous/harmful drinking, this section describes AUDIT symptoms of **alcohol dependence** experienced in the past year among Ontario adults.

Of the 10 AUDIT items, three (Q4–Q6 in Table 3.6.1) are indicators of alcohol dependence. In this section, we present the proportion of Ontario adults reporting **one or more of the three dependence indicators** included in the AUDIT: (1) *not able to stop drinking once you had started*; (2) *failed to do what was normally expected from you because of drinking*; or (3) *needed a first alcoholic drink in the morning to get yourself going after a heavy drinking session*.

2017……..Table 3.6.6, Fig 3.6.3

An estimated **6.0%** (95%CI: 4.9% to 7.4%) of Ontario adults experienced at least one dependence symptom during the past year. The corresponding population estimate is 636,200 Ontario adults.

Sex and **age** were significantly related to reporting at least one dependence symptom, when controlling for our set of risk factors.

- The odds of experiencing a dependence symptom were 1.7 times greater among men than women (7.7% vs. 4.4%; OR=1.74).
- The prevalence of experiencing at least one dependence symptom declined significantly with age. Symptoms were highest among 18 to 29 year olds (10.9%) and lowest among those aged 65 and older (1.6%). The adjusted odds of reporting at least one dependence symptom was significantly lower among those 65 and older (OR=0.10) when compared to 18 to 29 year olds.

Trends

1998–2017…….Table 3.6.7, Fig 3.6.4

2016–2017

The proportion of Ontario adults reporting at least one of the dependence indicators in 2017 (6.0%) remained unchanged from 2016 (6.4%). In addition, rates were stable between 2016 and 2017 for all subgroups.

1998–2017

Between 1998 and 2017, there was a significant non-linear **decline** in reporting at least one of the dependence indicators among Ontario adults. The percentage experiencing at least one dependence symptom **declined** significantly from 9.4% in 1998 to 6.0% in 2017.

Significant non-linear **declines** were found during this period for men, those aged 18 to 29, respondents from the Central East and Central West, those never married, and those with only a high school education.

Table 3.6.6: Percentage ***Reporting One or More Alcohol Dependence Symptoms*** *(based on AUDIT)* in the Past 12 Months and Adjusted Group Differences, ***Ontarians***, Aged 18+, 2017

	N	%	95% CI	Adjusted Odds Ratio (N=2698)
Total	2812	**6.0**	(4.9, 7.4)	—
Sex				*
Men	1150	**7.7**	(5.9, 10.0)	**1.74***
Women *(Comparison Group)*	1662	**4.4**	(3.2, 6.0)	—
Age				***
18-29 *(Comparison Group)*	283	**†10.9**	(7.5, 15.5)	—
30-39	199	**†6.3**	(3.2, 12.0)	0.46
40-49	366	**†6.0**	(3.7, 9.5)	0.48
50-64	843	**†5.6**	(4.0, 7.8)	0.38
65+	1110	**†1.6**	(0.9, 2.6)	**0.10*** **
Region				NS
Toronto *(vs. Provincial Average)*	476	**†8.4**	(5.5, 12.4)	1.48
Central East	476	**†6.3**	(4.0, 10.0)	1.06
Central West	456	**†3.7**	(2.2, 6.2)	0.66
West	468	**†3.9**	(2.2, 6.7)	0.68
East	467	**†7.5**	(4.6, 12.0)	1.46
North	469	**†6.6**	(4.2, 10.1)	1.02
Marital Status				NS
Married/Partner *(Comparison Group)*	1730	**5.1**	(3.9, 6.6)	—
Previously Married	614	**†4.1**	(1.7, 9.5)	0.95
Never Married	441	**†9.1**	(6.4, 12.7)	0.66
Education				NS
High school not completed *(Comparison Group)*	240	**†5.7**	(2.1, 14.7)	—
Completed high school	612	**†7.6**	(5.1, 11.2)	1.22
Some college or university	986	**†6.9**	(5.0, 9.6)	0.92
University degree	933	**†4.3**	(3.0, 6.2)	0.54
Household Income				NS
< $30,000 *(Comparison Group)*	266	**†9.8**	(5.5, 16.9)	—
$30,000-$49,000	347	**†4.9**	(2.4, 9.6)	0.53
$50,000-$79,000	483	**†4.7**	(2.6, 8.4)	0.46
$80,000+	1079	**6.3**	(4.7, 8.4)	0.57
Not stated	637	**†5.5**	(3.4, 8.8)	0.54

Notes: (1) All analyses are sample design adjusted;*p<.05**;** **p<.01; ***p<.001; CI = 95% confidence interval;
NS – no statistically significant difference.
(2) Asterisks in group row indicate a statistically significant group effect, based on Wald test.
(3) ORs greater than 1.0 indicate that drinking is higher in the group being compared to the comparison group; ORs less than 1.0 indicate that drinking is lower in the group being compared to the comparison group.
(4) Adjusted odds ratio holding fixed values for sex, age, region, marital status, education and income.

Def: *Percent reporting 1 or more (out of 3) AUDIT dependence indicators.*

Source: The CAMH Monitor, Centre for Addiction and Mental Health

Table 3.6.7: Percentage ***Reporting One or More Alcohol Dependence Symptoms*** in the Past 12 Months, by Demographic Characteristics, ***Ontarians***, Aged 18+, 1998–2017

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Trend	
(N=)	(2509)	(2436)	(2406)	(2627)	(2421)	(2411)	(2611)	(2445)	(2016)	(2005)	(2024)	(2037)	(3030)	(3039)	(3030)	(3021)	(3043)	(5013)	(3042)	(2812)		
Total Drinkers	**9.4**	**8.5**	**7.7**	**8.1**	**6.7**	**5.9**	**6.3**	**6.8**	**6.8**	**7.1**	**7.5**	**6.4**	**7.9**	**8.1**	**5.9**	**6.6**	**7.3**	**7.2**	**6.4**	**6.0**	**T**	**–**
	(8.1,10.9)	(7.3, 9.8)	(6.5,9.0)	(6.9,9.4)	(5.6,7.9)	(4.9,7.1)	(5.2,7.6)	(5.7,8.2	(5.4,8.4)	(5.8,8.7)	(6.0,9.3)	(5.2,7.9)	(6.7, 9.3)	(6.8, 9.6)	(4.9,7.2)	(5.4, 8.0)	(6.1, 8.9)	(6.2, 8.3)	(5.2, 7.8)	(4.9, 7.4)		
Sex																						
Men	**13.7**	**12.2**	**10.3**	**11.9**	**10.0**	**7.2**	**8.6**	**9.6**	**9.8**	**8.6**	**10.6**	**8.3**	**9.6**	**10.2**	**7.9**	**9.1**	**9.8**	**8.5**	**8.4**	**7.7**	**T**	**–**
	(11.5,16.3)	(10.2,14.7)	(8.4,12.5)	(9.9,14.3)	(8.2,12.2)	(5.7,9.2)	(6.8,10.9)	(7.6,11.9)	(7.5,12.7)	(6.5,11.3)	(8.2,13.6)	(6.4,10.7)	(7.7,11.9)	(8.0,12.8)	(6.3, 10.0)	(7.0, 11.7)	(7.6, 12.5)	(6.9, 10.4)	(6.4, 10.9)	(5.9, 10.0)		
Women	**5.6**	**5.1**	**5.3**	**4.5**	**† 3.6**	**4.7**	**4.1**	**4.3**	**† 4.0**	**5.7**	**† 4.7**	**† 4.6**	**6.4**	**6.2**	**†4.1**	**4.3**	**5.1**	**6.0**	**4.6**	**4.4**	**–**	**–**
	(4.3,7.2)	(3.9,6.6)	(4.1,6.8)	(3.3,6.1)	(2.5,5.1)	(3.5,6.2)	(2.9,5.6)	(3.2,5.8)	(2.8,5.7)	(4.2,7.6)	(3.1,7.0)	(3.1,6.8)	(5.0,8.1)	(4.7,8.0)	(2.9, 5.7)	(3.2, 5.7)	(3.8, 6.8)	(4.8, 7.4)	(3.4, 6.2)	(3.2, 6.0)		
Age																						
18-29	**18.6**	**14.0**	**17.1**	**17.1**	**12.3**	**14.0**	**11.8**	**16.1**	**15.1**	**17.3**	**17.8**	**13.3**	**19.9**	**19.0**	**†12.3**	**†13.4**	**†15.5**	**13.3**	**†10.9**	**†10.9**	**T**	**–**
	(14.7,23.1)	(10.7,18.1)	(13.6,21.3)	(13.4,21.5)	(9.2,16.3)	(10.7,18.2)	(8.5,16.2)	(12.3,20.9)	(10.6,21.0)	(12.3,23.9)	(12.2,25.1)	(8.8,19.7)	(15.2,25.5)	(14.1,25.0)	(8.3,17.8)	(8.7, 20.1)	(10.4,22.6)	(10.0,17.5)	(6.9, 16.7)	(7.5,15.5)		
30-39	**10.4**	**11.1**	**6.0**	**8.1**	**8.7**	**†6.2**	**8.4**	**†5.7**	**7.7**	**†5.3**	**7.4**	**8.7**	**8.2**	**7.3**	**†7.1**	**†7.8**	**†7.1**	**†7.3**	**†10.4**	**†6.3**	**–**	**–**
	(7.9,13.6)	(8.5,14.3)	(4.2,8.4)	(5.9,11.2)	(6.4,11.8)	(4.2,9.1)	(5.8,12.1)	(3.8,8.5)	(4.9,11.7)	(3.2,8.6)	(4.4,12.0)	(5.8,13.0)	(5.7,11.6)	(4.6,11.2)	(4.6,10.9)	(5.0, 11.9)	(4.5, 11.2)	(5.0, 10.8)	(6.9, 15.3)	(3.2, 12.0)		
40-49	**†7.5**	**†7.8**	**†5.5**	**†7.7**	**†4.7**	**†3.9**	**†5.9**	**†6.3**	**†6.9**	**†6.2**	**†6.5**	**†6.4**	**†4.8**	**9.6**	**†4.9**	**†5.6**	**9.3**	**8.8**	**†5.1**	**†6.0**	**–**	**–**
	(5.4,10.4)	(5.5,10.9)	(3.7,8.2)	(5.4,10.9)	(3.0,7.2)	(2.5,6.0)	(3.9,8.7)	(4.2,9.3)	(4.5,10.4)	(4.1,9.2)	(4.3,9.9)	(4.3,9.5)	(3.3,6.8)	(7.0,13.0)	(3.2, 7.4)	(3.8, 8.1)	(6.7, 12.7)	(6.5, 11.8)	(3.0, 8.4)	(3.7, 9.5)		
50-64	**†6.6**	**†5.7**	**†5.3**	**†4.5**	**†3.2**	**†3.2**	**†2.8**	**†2.9**	**†2.4**	**†5.2**	**†4.1**	**†3.6**	**5.3**	**†3.5**	**†4.3**	**5.7**	**4.7**	**4.6**	**4.9**	**†5.6**	**–**	**–**
	(4.2,10.0)	(3.5,9.1)	(3.4,8.2)	(2.7,7.4)	(1.8,5.7)	(1.9,5.2)	(1.7,4.8)	(1.6,5.0)	(1.4,4.4)	(3.5,7.8)	(2.6,6.5)	(2.3,5.6)	(3.9,7.1)	(2.4,5.2)	(3.0, 6.0)	(4.2, 7.6)	(3.4, 6.4)	(3.5, 5.9)	(3.6, 6.6)	(4.0, 7.8)		
65+	**†**	**†**	**†2.3**	**†**	**†3.5**	**†**	**†**	**†2.3**	**†**	**†**	**†2.7**	**†**	**†2.3**	**†2.3**	**†2.6**	**†1.8**	**†2.0**	**†3.4**	**†2.3**	**†1.6**	**–**	**–**
	—	—	(1.1,4.8)	—	(1.7,7.3)	—	—	(1.3,4.3)	—	—	(1.4,5.0)	—	(1.3,3.9)	(1.3,4.0)	(1.5, 4.4)	(1.1, 3.0)	(1.1, 3.4)	(2.4, 4.7)	(1.5, 3.4)	(0.9, 2.6)		
Region																						
Toronto	**10.6**	**†8.3**	**†7.8**	**10.8**	**†6.8**	**†5.4**	**†5.9**	**†5.8**	**†6.2**	**†5.9**	**†8.4**	**†6.5**	**†9.8**	**†8.3**	**†4.7**	**†6.9**	**†6.4**	**†8.9**	**†5.7**	**†8.4**	**–**	**–**
	(7.7, 14.4)	(5.7,11.9)	(5.5,11.0)	(7.8,14.7)	(4.6,10.1)	(3.5,8.3)	(3.7,9.3)	(3.6,9.1)	(3.7,10.3)	(3.6,9.4)	(5.0,13.7)	(4.0,10.7)	(6.9,13.7)	(5.6,12.2)	(2.9, 7.4)	(4.3, 10.6)	(4.2, 9.5)	(6.6, 11.9)	(3.5, 9.2)	(5.5, 12.4)		
C-East	**11.0**	**†8.7**	**†8.8**	**†7.4**	**†6.0**	**†5.6**	**†4.9**	**†7.2**	**†7.8**	**†6.6**	**†7.9**	**†6.3**	**†4.3**	**†8.0**	**†4.7**	**†6.6**	**†8.2**	**8.3**	**†6.9**	**†6.3**	**T**	**–**
	(7.9, 15.0)	(6.2, 12.1)	(6.2, 12.5)	(5.1, 10.7)	(3.9, 9.4)	(3.6, 8.5)	(2.8, 8.5)	(4.9, 10.6)	(4.8, 12.3)	(3.9, 11.2)	(5.0, 12.3)	(3.7, 10.5)	(2.6, 7.1)	(5.3,11.9)	(2.6, 8.3)	(4.2, 10.4)	(5.3, 12.4)	(6.1, 11.2)	(4.3, 10.7)	(4.0, 10.0)		
C-West	**†8.4**	**†9.0**	**†7.0**	**†8.2**	**†7.8**	**†6.1**	**†7.1**	**†7.0**	**†6.2**	**†6.6**	**†9.4**	**†7.0**	**†7.5**	**†8.9**	**†6.0**	**†6.9**	**†7.5**	**†6.0**	**†4.9**	**†3.7**	**T**	**–**
	(5.7, 12.1)	(6.4, 12.6)	(4.6, 10.4)	(5.5, 11.9)	(5.3, 11.3)	(3.9, 9.4)	(4.6, 10.7)	(4.5, 10.6)	(3.6, 10.5)	(3.9, 11.1)	(6.0, 14.5)	(4.5, 10.9)	(5.0, 11.0)	(6.0, 13.0)	(3.9, 9.2)	(4.6, 10.3)	(4.9, 11.5)	(4.3, 8.4)	(2.8, 8.6)	(2.2, 6.2)		
West	**†8.7**	**†9.4**	**†5.7**	**†7.3**	**†6.2**	**†5.5**	**†7.4**	**†7.3**	**†7.9**	**†8.7**	**†5.0**	**†6.0**	**†8.1**	**†7.7**	**†8.2**	**†6.5**	**†7.6**	**†4.6**	**†7.1**	**†3.9**	**–**	**–**
	(6.0,12.6)	(6.6,13.2)	(3.7,8.7)	(5.1,10.5)	(4.1,9.2)	(3.5,8.7)	(5.0,10.7)	(4.8,10.8)	(5.1,12.1)	(5.7,12.9)	(3.0,8.4)	(3.5,9.9)	(5.6,11.8)	(5.0,11.7)	(5.5, 11.9)	(4.0, 10.3)	(5.1, 11.3)	(3.1, 6.9)	(4.5, 10.9)	(2.2, 6.7)		
East	**†7.3**	**†6.9**	**†6.7**	**†6.1**	**†6.3**	**†7.3**	**†6.1**	**†6.4**	**†5.6**	**†9.2**	**†4.9**	**†6.2**	**†9.8**	**†7.7**	**†7.2**	**†5.4**	**†6.6**	**†6.8**	**†8.2**	**†7.5**	**–**	**–**
	(5.1,10.4)	(4.7,10.2)	(4.4,10.0)	(4.1,9.0)	(4.0,9.7)	(4.9,10.8)	(4.0,9.4)	(4.1,9.9)	(3.2,9.6)	(5.9,14.0)	(2.6,9.1)	(3.9,9.7)	(6.8,14.0)	(5.3,11.1)	(4.9, 10.6)	(3.4, 8.6)	(4.2, 10.2)	(4.8, 9.4)	(5.3, 12.5)	(4.6, 12.0)		
North	**†9.5**	**†7.9**	**†10.7**	**†6.1**	**†6.2**	**†6.1**	**†6.6**	**†8.2**	**†6.9**	**†6.3**	**†8.3**	**†5.0**	**†12.6**	**†6.4**	**†7.3**	**†6.9**	**†7.2**	**†6.2**	**†6.1**	**†6.6**	**–**	**–**
	(6.8,13.1)	(5.6,11.2)	(7.8,14.5)	(4.3,8.6)	(4.0,9.4)	(3.9,9.5)	(4.7,9.2)	(5.5,12.0)	(4.3,10.8)	(3.8,10.2)	(5.4,12.5)	(2.9,8.6)	(9.0,17.3)	(4.1,9.7)	(4.3, 12.2)	(4.4, 10.5)	(4.5, 11.2)	(4.3, 8.9)	(3.8, 9.5)	(4.2, 10.1)		

Cont'd

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Trend	
(N=)	(2509)	(2436)	(2406)	(2627)	(2421)	(2411)	(2611)	(2445)	(2016)	(2005)	(2024)	(2037)	(3030)	(3039)	(3030)	(3021)	(3043)	(5013)	(3042)	(2812)		
Marital Status																						
Married/ Partner	**6.9**	**7.2**	**5.2**	**5.7**	**5.0**	**4.1**	**4.9**	**4.8**	**4.3**	**5.3**	**4.9**	**5.2**	**5.1**	**5.4**	**4.4**	**5.2**	**5.6**	**5.7**	**5.2**	**5.1**	**–**	**–**
Previously Married	**†5.5**	**†4.8**	**†6.8**	**†4.0**	**†4.6**	**†5.0**	**†5.3**	**†4.4**	**†4.6**	**†5.0**	**†8.2**	**†6.2**	**†5.1**	**†8.1**	**†5.1**	**†4.2**	**†5.3**	**†6.5**	**†6.3**	**†4.1**	**–**	**–**
Never Married	**18.7**	**14.7**	**14.8**	**16.9**	**12.5**	**11.7**	**11.2**	**14.2**	**15.7**	**†14.6**	**†15.2**	**†10.7**	**18.2**	**16.7**	**†10.8**	**†12.3**	**†13.1**	**12.1**	**†9.5**	**†9.1**	**T**	**–**
Education																						
High school not completed	**†9.5**	**†7.1**	**†7.5**	**†4.5**	**†7.8**	**†5.3**	**†5.8**	**†8.4**	**†5.9**	**†6.8**	**†8.7**	**†7.8**	**†8.2**	**†11.2**	**†5.9**	**†8.5**	**†9.2**	**†4.9**	**†9.3**	**†5.7**	**–**	**–**
Completed High school	**9.9**	**9.4**	**9.2**	**11.6**	**†6.3**	**†7.4**	**†6.3**	**†7.9**	**†7.2**	**†9.0**	**†10.2**	**†7.4**	**†5.8**	**†6.9**	**†7.0**	**†5.4**	**†8.9**	**†6.6**	**†5.9**	**†7.6**	**T**	**–**
Some College or University	**11.6**	**9.2**	**7.9**	**8.4**	**7.2**	**6.3**	**6.9**	**8.1**	**†7.6**	**8.7**	**†7.0**	**†6.9**	**9.6**	**8.4**	**6.2**	**7.7**	**8.1**	**8.7**	**†6.0**	**†6.9**	**–**	**–**
University Degree	**†6.0**	**†7.6**	**†5.7**	**†5.8**	**†5.8**	**†4.8**	**†5.9**	**†3.5**	**†6.0**	**†3.6**	**†5.7**	**†4.9**	**7.6**	**8.0**	**†5.1**	**†5.7**	**†5.5**	**6.4**	**†6.6**	**†4.3**	**–**	**–**

Notes: (1) All analyses are sample design adjusted; [a] 95% confidence interval; † Estimate suppressed or unstable; † Estimate suppressed or unstable; the sampling design was changed in 2017 to dual-frame sampling (landline + cell-phone).

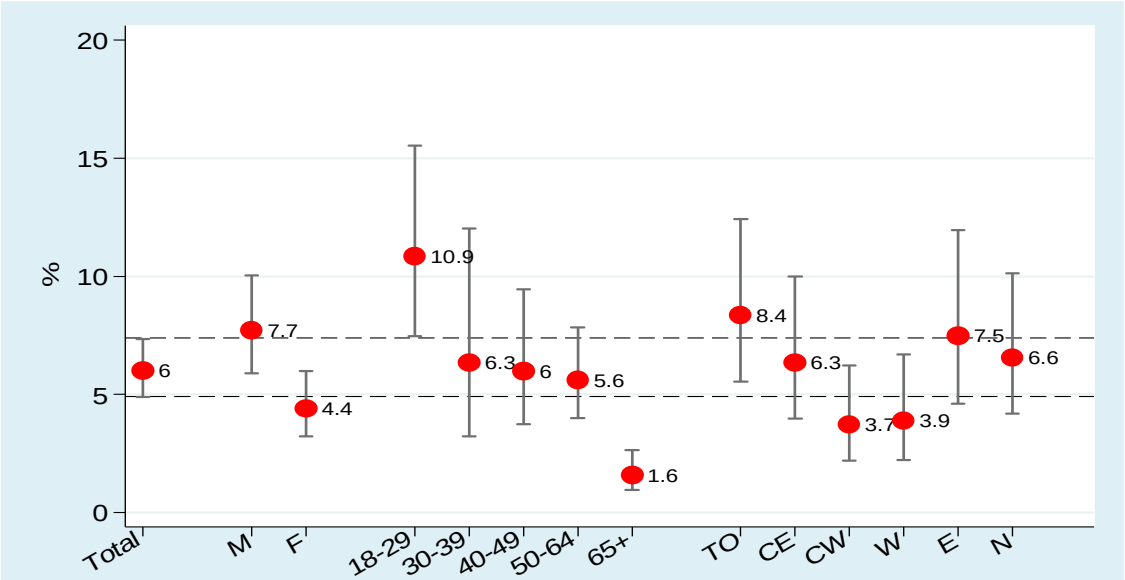
(2) Trend Analysis: **–** change not statistically significant (p<.05); **T** significant change (p<.05) between 1998-2017; **2Y** significant change (p<.05) between last two estimates.

Def'n: *Percent reporting 1 or more (out of 3) AUDIT dependence indicators.*

Source: The CAMH Monitor, Centre for Addiction and Mental Health

Figure 3.6.3

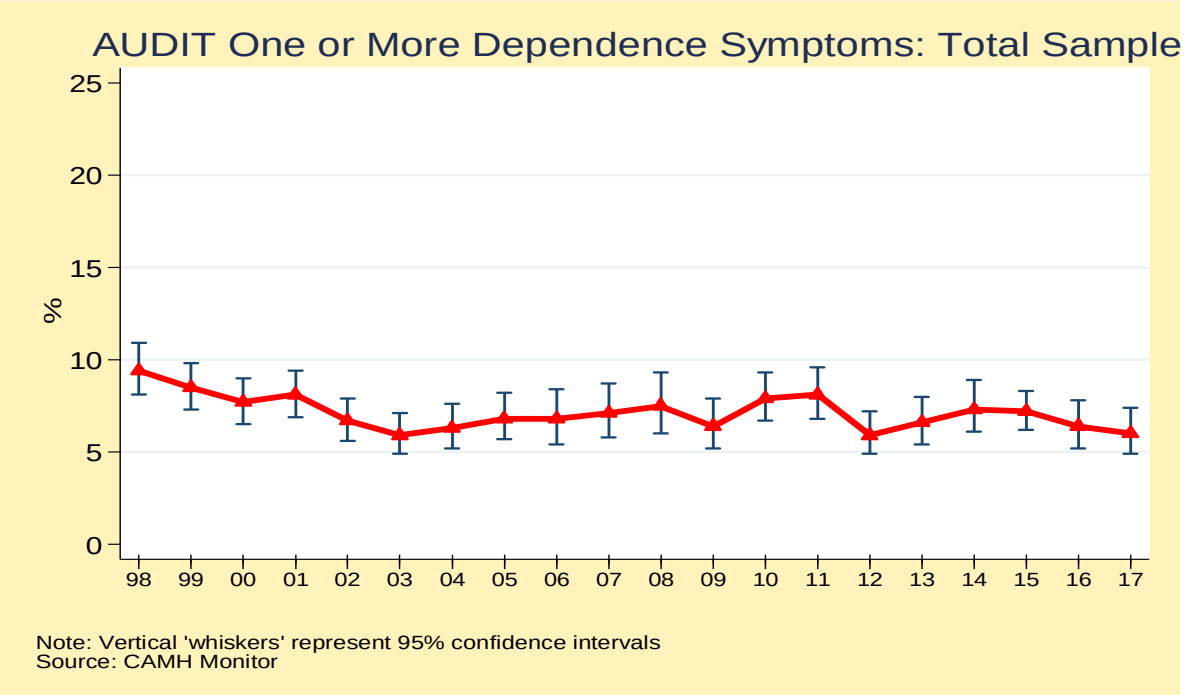
Percentage Reporting One or More Alcohol Dependence Symptoms (based on AUDIT) in the Past Year by Sex, Age and Region, Ontarians Aged 18+, 2017 (N=2812)



Note: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal bar represents 95% confidence interval for total estimate
(3) significant difference by sex and age (p<.01)
Source: 2017 CAMH Monitor

Figure 3.6.4

Percent Reporting One or More Alcohol Dependence Symptoms (based on AUDIT) in the Past Year, Ontarians Aged 18+, 1998–2017



Note: Vertical 'whiskers' represent 95% confidence intervals
Source: CAMH Monitor

4. TOBACCO
AND ELECTRONIC CIGARETTE USE

4.1.1 Cigarette Smoking

2017 …….. Table 4.1.1; Fig. 4.1.1–4.1.3

Overall, the estimated percentage of *current* smokers – respondents who (1) smoked 100 or more cigarettes in their lifetime, *and* (2) smoked occasionally or daily during the past year, *and* (3) smoked during the past 30 days – was **15.1%** (95% CI: 13.2% to 17.1%).[34] The corresponding Ontario population estimate is 1,614,700 current adult smokers.

More than half (57.3%) of Ontarians were classified as *never smokers* (never smoked more than 100 cigarettes in their lifetime). Over one-quarter of the population (27.7%) are estimated to be former smokers comprising *former daily* (24.6%) and *former nondaily* (3.1%) smokers. Finally, 11.0% of the population are estimated to be *daily smokers,* while 4.1% are estimated to be *nondaily smokers* (Fig 4.1.1).

Age, marital status, and **education** were significantly related to current smoking, when adjusting for other demographic factors.

- Current smoking was significantly related to age. Compared to those aged 18 to 29 (17.0%), the adjusted odds of current smoking were significantly lower among those aged 65 and older (6.4%; OR=0.22).
- Relative to married respondents (11.8%), the adjusted odds of current smoking were 2.7 times higher among those previously married (24.0%).
- Smoking decreased significantly with increasing education. It was highest among those not completing high school (27.3%), and lowest among those with a university degree (7.0%). Relative to those not completing high school, smoking was significantly lower among respondents with completed high-school (OR=0.51), among those with some postsecondary education (OR=0.43), and among those with a university degree (OR=0.15).

Average Number of Cigarettes Smoked Daily

- On average, current smokers smoked 10.9 **cigarettes per day** (Fig. 4.1.3). This number varied significantly by sex and age. Men smoked more cigarettes daily compared to women (11.8 vs. 9.9). The number of cigarettes smoked daily was highest among those aged 65 and older (16.7) and lowest among those aged 30 to 39 (7.2).

4.1.2 Daily Smoking

2017 …….. Table 4.1.2; Fig. 4.1.1, 4.1.3

An estimated, **11.0%** (95% CI: 9.5% to 12.8%) of Ontario adults smoked cigarettes daily. The corresponding population estimate is 1,178,800 daily smokers.

Daily smoking displayed similar characteristics as current smoking: those aged 65 and older, those married, and those with higher education reported significantly lower rates of daily smoking within their respective demographic risk factors.

[34] Standard to Health Canada guidelines.

4.1.3 Nicotine Dependence (HSI) ..... Fig. 4.1.4

2017

Since 1996, the *CAMH Monitor* has assessed nicotine dependence among daily smokers[35] using the *Heaviness of Smoking Index* (HSI).

The 2-item HSI, derived from the Fagerström scale (Fagerström, 1978), is based on scores assigned to the *time to the first cigarette each morning* and *number of cigarettes smoked per day* (Heatherton et al., 1989). Scores of 0-2, 3-4 and 5-6 indicate classifications of low, moderate and high dependence on nicotine.

An estimated **10.6%** (95% CI: 6.9% to 16.1%) of daily smokers (*n*=274) met the HSI cut-off for **high nicotine dependence**. The corresponding population estimate is 124,900 Ontarian daily smokers. An additional 38.2% and 51.1% of daily smokers were classified as experiencing moderate or low nicotine dependence, respectively.

Trends

1991–2017.....Tables 4.1.3a–4.1.4b; Fig. 4.1.5

2016–2017

Prevalence of current cigarette **smoking** in 2017 (15.1%) was not significantly different from 2016 (13.5%). In addition, rates of smoking were stable for all subgroups.

Daily smoking displayed similar patterns to current smoking. Prevalence of daily smoking in 2017 (11.0%) was not significantly different from 2016 (9.9%). In addition, rates of smoking were stable for all demographic subgroups.

2007–2017

Since 2007, the prevalence of current smoking moved downward from 21.6% in 2007 to 15.1% in 2017, and daily smoking declined from 17.0% in 2007 to 11.0% in 2017. However, the declines seen over the past decade seem to have levelled off.

1991–2017

Since 1991, the prevalence of current **smoking** moved downward from 28.5% in 1991 to 23.5% in 1993, and then rebounded back to 28.5% in 1995. Since 1996, current smoking has steadily **declined** (from 26.7% in 1996 to 15.1% in 2017), most noticeably since 2007.

There were significant declines during this period for both men and women, and most age, region, and marital status subgroups.

Since 1996, **daily smoking** also **declined** significantly from 23.0% to 11.0% in 2017. Significant subgroup declines were also evident for sex, age, region, marital status, and education subgroups.

[35] The HSI is more meaningful among daily smokers than current smokers because a sizeable proportion of the latter are occasional smokers or smokers attempting to quit.

Table 4.1.1: Percentage Reporting ***Current Cigarette Smoking*** and Adjusted Group Differences, Ontarians Aged 18+, 2017

	N	%	95% CI	Adjusted Odds Ratio (N=2725)
Total	2812	**15.1**	(13.2, 17.1)	—
Sex				NS
Men	1150	**16.8**	(14.1, 20.0)	1.34
Women *(Comparison Group)*	1662	**13.4**	(11.1, 16.1)	—
Age				***
18-29 *(Comparison Group)*	283	**17.0**	(12.2, 23.3)	—
30-39	199	**†21.8**	(15.2, 30.2)	1.65
40-49	366	**†9.8**	(6.7, 14.0)	0.77
50-64	843	**20.2**	(17.0, 23.9)	1.35
65+	1110	**6.4**	(5.1, 8.1)	**0.22*** **
Region				NS
Toronto *(vs. Provincial Average)*	476	**13.5**	(9.9, 18.2)	0.95
Central East	476	**15.7**	(11.3, 21.4)	0.99
Central West	456	**15.7**	(11.8, 20.6)	1.07
West	468	**12.4**	(9.2, 16.6)	0.76
East	467	**16.9**	(12.8, 22.1)	1.24
North	469	**16.7**	(12.7, 21.6)	0.96
Marital Status				***
Married/Partner *(Comparison Group)*	1730	**11.8**	(9.9, 13.9)	—
Previously Married	614	**24.0**	(18.4, 30.6)	**2.72*** **
Never Married	441	**18.3**	(14.1, 23.6)	1.25
Education				***
High school not completed *(Comparison Group)*	240	**27.3**	(19.6, 36.7)	—
Completed high school	612	**19.3**	(15.2, 24.2)	**0.51***
Some college or university	986	**18.5**	(15.3, 22.2)	**0.43****
University degree	933	**†7.0**	(4.8, 10.2)	**0.15*** **
Household Income				NS
< $30,000 *(Comparison Group)*	266	**22.9**	(16.4, 31.1)	—
$30,000-$49,999	347	**19.4**	(14.4, 25.7)	1.15
$50,000-$79,999	483	**13.4**	(9.8, 18.0)	0.69
$80,000+	1079	**12.5**	(10.0, 15.6)	0.79
Not stated	637	**16.6**	(12.5, 21.8)	0.97

Notes: (1) All analyses are sample design adjusted ; *p<.05**;** **p<.01; ***p<.001; CI = 95% confidence interval; NS – no statistically significant difference.
(2) Asterisks in group row indicate a statistically significant group effect, based on Wald test.
(3) ORs greater than 1.0 indicate that the odds of smoking are higher in the group being compared to the comparison group; ORs less than 1.0 indicate that the odds of smoking are lower in the group being compared to the comparison group.
(4) Adjusted odds ratio holding fixed values for sex, age, region, marital status, education, and income.

Defn: *Current smokers are those who (1) reported smoking 100 or more cigarettes in their lifetime, (2) smoked cigarettes daily or occasionally during the past year; and (3) smoked during the past 30 days.*

Source: The *CAMH Monitor*, Centre for Addiction and Mental Health

Table 4.1.2: Percentage Reporting ***Daily Cigarette Smoking*** and Adjusted Group Differences, Ontarians Aged 18+, 2017

	N	%	95% CI	Adjusted Odds Ratio (N=2725)
Total	2812	**11.0**	(9.5, 12.8)	—
Sex				NS
Men	1150	**12.1**	(9.8, 14.9)	1.29
Women *(Comparison Group)*	1662	**10.0**	(8.1, 12.3)	—
Age				***
18-29 *(Comparison Group)*	283	**†11.4**	(7.4, 17.0)	—
30-39	199	**†12.4**	(7.6, 19.3)	1.22
40-49	366	**†7.9**	(5.1, 12.0)	0.98
50-64	843	**16.0**	(13.1, 19.4)	1.54
65+	1110	**5.5**	(4.2, 7.1)	**0.25****
Region				NS
Toronto *(vs. Provincial Average)*	476	**†9.5**	(6.6, 13.6)	0.97
Central East	476	**†11.6**	(7.7, 17.1)	1.00
Central West	456	**11.1**	(8.0, 15.2)	1.02
West	468	**11.2**	(8.1, 15.2)	0.90
East	467	**†11.6**	(8.1, 16.3)	1.15
North	469	**12.4**	(8.9, 16.9)	0.93
Marital Status				**
Married/Partner *(Comparison Group)*	1730	**8.8**	(7.2, 10.8)	—
Previously Married	614	**18.5**	(14.0, 24.0)	**2.32*****
Never Married	441	**†12.3**	(8.7, 17.0)	1.11
Education				***
High school not completed *(Comparison Group)*	240	**†25.9**	(18.3, 35.3)	—
Completed high school	612	**15.7**	(12.0, 20.3)	**0.44****
Some college or university	986	**13.5**	(10.8, 16.9)	**0.34*****
University degree	933	**†3.0**	(1.7, 5.0)	**0.07*****
Household Income				NS
< $30,000 *(Comparison Group)*	266	**†18.3**	(12.3, 26.3)	—
$30,000-$49,999	347	**†15.9**	(11.3, 22.0)	1.08
$50,000-$79,999	483	**†10.7**	(7.6, 14.9)	0.71
$80,000+	1079	**7.9**	(6.0, 10.4)	0.67
Not stated	637	**†12.6**	(9.0, 17.5)	0.89

Notes: (1) All analyses are sample design adjusted; *p<.05**;** **p<.01; ***p<.001; CI = 95% confidence interval; NS – no statistically significant difference.
(2) Asterisks in group row indicate a statistically significant group effect, based on Wald test.
(3) ORs greater than 1.0 indicate that the odds of smoking are higher in the group being compared to the comparison group; ORs less than 1.0 indicate that the odds of smoking are lower in the group being compared to the comparison group.
(4) Adjusted odds ratio holding fixed values for sex, age, region, marital status, education and income.

Defn: *Daily smokers are those who (1) reported using 100 or more cigarettes in their lifetime, (2) smoked cigarettes occasionally or daily during the past year; and (3) smoked cigarettes daily at the time of the survey.*

Source: The *CAMH Monitor*, Centre for Addiction and Mental Health.

Table 4.1.3a: Percentage Reporting ***Current Cigarette Smoking***, by Demographic Characteristic, Ontarians Aged 18+, 1991–2000

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
(N=)	(1047)	(1058)	(941)	(2022)	(994)	(2721)	(2776)	(2509)	(2436)	(2406)
Total	**28.5**	**26.1**	**23.5**	**25.3**	**28.5**	**26.7**	**26.8**	**25.9**	**25.4**	**25.6**
(95%CI)[a]	(25.8,31.2)	(23.5,28.7)	(20.8,26.2)	(23.4,27.2)	(25.7,31.3)	(25.0,28.4)	(25.2,28.4)	(24.0,27.9)	(23.5,27.4)	(23.7,27.6)
Sex										
Men	**28.5**	**29.5**	**28.2**	**26.4**	**30.4**	**27.8**	**29.3**	**28.2**	**28.2**	**31.1**
	(24.5,32.5)	(25.5,33.5)	(24.2,32.2)	(23.8,29.0)	(26.3,34.5)	(25.3,30.3)	(26.8,31.8)	(25.2,31.4)	(25.2,31.3)	(28.0,34.4)
Women	**28.6**	**23.2**	**19.7**	**24.3**	**26.7**	**25.7**	**24.5**	**23.8**	**22.9**	**20.6**
	(24.8,32.4)	(19.7,26.7)	(16.4,23.0)	(21.5,27.1)	(22.9,30.5)	(23.5,27.9)	(22.3,26.7)	(21.4,26.3)	(20.4,25.5)	(18.3,23.1)
Age										
18 - 29 years	**29.4**	**31.4**	**26.0**	**34.2**	**33.7**	**29.1**	**34.2**	**31.6**	**31.8**	**32.7**
	(23.9,34.9)	(25.9,36.9)	(20.5,31.5)	(29.9,38.5)	(27.7,39.7)	(25.2,33.0)	(30.3,38.1)	(26.9,36.7)	(27.1,36.8)	(28.0,37.8)
30 - 39 years	**31.4**	**30.4**	**29.5**	**28.2**	**31.9**	**31.8**	**31.2**	**32.4**	**31.8**	**28.3**
	(25.8,37.0)	(25.0,35.8)	(24.1,34.9)	(24.4,32.0)	(26.0,37.8)	(28.3,35.3)	(27.6,34.8)	(28.4,36.7)	(27.6,36.3)	(24.3,32.6)
40 - 49 years	**28.7**	**25.8**	**24.9**	**21.6**	**30.3**	**29.0**	**28.1**	**27.1**	**26.7**	**29.6**
	(22.6,34.8)	(19.8,31.8)	(19.0,30.8)	(17.7,25.5)	(24.1,36.5)	(25.2,32.8)	(24.4,31.8)	(23.2,31.4)	(22.7,31.1)	(25.4,34.2)
50 - 64 years	**31.3**	**18.2**	**17.6**	**19.1**	**25.6**	**23.2**	**21.2**	**20.2**	**20.2**	**20.6**
	(23.9,38.7)	(12.1,24.3)	(11.7,23.5)	(14.8,23.4)	(19.0,32.2)	(19.4,27.0)	(17.6,24.8)	(16.3,24.8)	(16.4,24.7)	(16.9,24.9)
65+ years	**18.8**	**12.7**	**10.0**	**12.4**	**10.8**	**14.1**	**9.3**	**15.2**	**13.3**	**13.6**
	(12.2,25.4)	(6.9,18.5)	(4.9,15.1)	(8.2,16.6)	(5.3,16.3)	(10.7,17.5)	(6.5,12.1)	(11.5,19.8)	(9.8,17.7)	(10.0,18.1)
Region										
Toronto	–	–	–	–	–	**24.1**	**27.2**	**23.6**	**21.0**	**21.5**
						(19.8,29.0)	(22.8,32.1)	(19.3,28.5)	(16.9,25.8)	(17.4,26.3)
Central East	–	–	–	–	–	**25.7**	**28.2**	**26.4**	**24.8**	**28.6**
						(21.7,30.1)	(23.9,32.8)	(22.0,31.3)	(20.6,29.6)	(24.1,33.6)
Central West	–	–	–	–	–	**28.2**	**24.3**	**24.4**	**25.0**	**21.5**
						(23.9,33.0)	(20.3,28.7)	(20.2,29.1)	(20.6,29.9)	(17.5,26.1)
West	–	–	–	–	–	**26.1**	**29.4**	**27.3**	**31.6**	**28.1**
						(19.8,29.0)	(25.2,34.0)	(22.9,32.1)	(26.9,36.7)	(23.5,33.2)
East	–	–	–	–	–	**27.5**	**21.7**	**27.7**	**26.4**	**28.1**
						(23.4,32.0)	(17.9,26.0)	(23.3,32.7)	(22.1,31.2)	(23.6,33.2)
North	–	–	–	–	–	**31.5**	**32.9**	**29.5**	**28.8**	**32.2**
						(27.1,36.3)	(28.3,37.8)	(25.1,34.4)	(24.3,33.8)	(27.5,37.3)
Marital Status										
Married/Partner	**26.8**	**25.0**	**21.0**	**22.7**	**26.4**	**24.3**	**21.8**	**23.6**	**23.4**	**22.7**
Previously Married	**39.4**	**31.8**	**30.4**	**30.7**	**34.9**	**32.9**	**35.4**	**29.4**	**25.6**	**26.2**
Never Married	**28.2**	**27.0**	**27.2**	**29.5**	**31.0**	**29.9**	**34.6**	**30.9**	**32.0**	**32.4**
Education										
High school not completed	**40.5**	**37.5**	**35.5**	**33.8**	**26.4**	**35.0**	**35.0**	**32.6**	**28.7**	**26.2**
Completed high school	**29.8**	**27.8**	**25.4**	**29.8**	**35.8**	**27.0**	**26.6**	**24.5**	**25.7**	**23.9**
Some college or university	**26.0**	**23.9**	**22.9**	**23.3**	**30.0**	**22.9**	**24.0**	**20.9**	**22.5**	**21.8**
University degree	**16.9**	**14.9**	**10.1**	**14.2**	**19.4**	**9.9**	**10.2**	**12.4**	**7.6**	**11.3**

Notes: [a] 95% confidence interval; — data not available; all analyses are sample design adjusted.

Defn: *Current smokers are those that report (1) consuming 100 or more cigarettes in their lifetime, (2) smoked cigarettes occasionally or daily during the past year; and (3) smoked during the past 30 days.*

Source: The *CAMH Monitor*, Centre for Addiction and Mental Health

Table 4.1.3b: Percentage Reporting ***Current Cigarette Smoking***, by Demographic Characteristic, Ontarians Aged 18+, 2001–2017

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Trend
(N=)	(2627)	(2421)	(2411)	(2611)	(2445)	(2016)	(2005)	(2024)	(2037)	(3030)	(3039)	(3030)	(3021)	(3043)	(5013)	(3042)	(2812)	
Total	**24.7**	**22.8**	**22.5**	**21.4**	**20.3**	**20.6**	**21.6**	**19.7**	**18.6**	**17.6**	**15.4**	**16.6**	**16.8**	**15.0**	**13.2**	**13.5**	**15.1**	**T –**
(95%CI)[a]	(22.8,26.7)	(20.1,24.8)	(20.7,24.5)	(19.6, 23.4)	(18.5, 22.2)	(18.5,22.8)	(19.5,23.9)	(17.6,21.9)	(16.6,20.8)	(15.9, 19.3)	(13.8, 17.0)	(15.0,18.4)	(15.0,18.6)	(13.3,16.9)	(12.0,14.5)	(12.0,15.2)	(13.2,17.1)	
Sex																		
Men	**28.0**	**25.6**	**25.2**	**24.8**	**21.7**	**23.7**	**23.7**	**23.7**	**21.2**	**20.7**	**17.9**	**20.1**	**19.3**	**17.9**	**15.6**	**16.2**	**16.8**	**T –**
	(25.2,31.1)	(22.8,28.6)	(22.4,28.3)	(21.9, 27.9)	(19.0, 24.7)	(20.4,27.3)	(20.4,27.3)	(20.4,27.3)	(18.1,24.7)	(18.1,23.6)	(15.4, 20.7)	(17.4, 23.0)	(16.5, 22.4)	(15.1, 21.0)	(13.5, 17.9)	(13.7, 19.2)	(14.1, 20.0)	
Women	**21.5**	**20.2**	**20.0**	**18.3**	**19.1**	**17.6**	**19.6**	**15.9**	**16.2**	**14.6**	**13.0**	**13.5**	**14.4**	**12.3**	**11.0**	**10.9**	**13.4**	**T –**
	(19.1,24.1)	(17.8,22.8)	(17.7,22.6)	(16.1, 20.7)	(16.8, 21.5)	(15.2,20.3)	(17.1,22.4)	(13.5,18.6)	(13.7,19.0)	(12.7,16.7)	(11.3, 14.9)	(11.7, 15.5)	(12.4, 16.7)	(10.4, 14.4)	(9.6, 12.6)	(9.4, 12.7)	(11.1, 16.1)	
Age																		
18 - 29	**32.0**	**28.4**	**31.0**	**24.9**	**27.8**	**27.0**	**31.2**	**24.3**	**24.7**	**18.1**	**16.9**	**17.7**	**19.0**	**19.5**	**16.4**	**13.1**	**17.0**	**T –**
	(27.2,37.1)	(23.8,33.5)	(26.3,36.2)	(20.1, 30.4)	(22.7, 33.5)	(21.4,33.5)	(24.9,38.4)	(18.3,31.6)	(18.6,32.1)	(13.7, 23.5)	(12.6, 22.3)	(12.9, 23.8)	(13.5, 26.1)	(13.7, 26.9)	(12.5, 21.2)	(8.9, 18.8)	(12.2, 23.3)	
30 - 39	**30.4**	**29.4**	**23.9**	**25.6**	**23.6**	**22.6**	**21.8**	**19.8**	**21.9**	**20.3**	**15.9**	**21.4**	**21.6**	**15.3**	**15.0**	**15.2**	**†21.8**	**T –**
	(26.2,35.0)	(25.1,34.1)	(19.6,28.7)	(21.3, 30.3)	(19.6, 28.2)	(18.0,27.9)	(17.2, 27.2)	(14.9,25.7)	(17.0, 27.7)	(16.1, 25.4)	(12.3, 20.4)	(17.1, 26.4)	(16.6, 27.6)	(11.0, 20.8)	(11.6, 19.2)	(10.7, 21.1)	(15.2, 30.2)	
40 - 49	**25.6**	**25.2**	**23.9**	**23.4**	**22.4**	**21.7**	**26.3**	**23.6**	**17.1**	**19.8**	**19.2**	**17.5**	**19.5**	**16.0**	**12.3**	**13.9**	**†9.8**	**T –**
	(21.8,29.8)	(21.6,29.9)	(20.3,27.8)	(19.5, 27.9)	(18.8, 26.6)	(17.4,26.6)	(21.6,31.5)	(19.2,28.6)	(13.4,21.5)	(16.4,23.6)	(15.8, 23.2)	(14.2, 21.3)	(15.9, 23.7)	(12.5, 20.2)	(9.9, 15.2)	(10.7, 17.9)	(6.7, 14.0)	
50 - 64	**23.1**	**21.1**	**20.7**	**22.6**	**18.6**	**21.2**	**19.4**	**20.7**	**20.2**	**18.8**	**14.7**	**18.1**	**17.3**	**16.4**	**14.9**	**16.3**	**20.2**	**T –**
	(19.1,27.6)	(17.5,25.2)	(16.9,25.1)	(19.1,26.5)	(15.3, 22.4)	(17.4,25.6)	(16.0,23.3)	(16.9,25.0)	(16.5,24.4)	(16.1,22.0)	(12.2, 17.5)	(15.4, 21.2)	(14.7, 20.2)	(13.8, 19.3)	(13.1, 17.1)	(13.9, 19.0)	(17.0, 23.9)	
65+	**10.1**	**6.6**	**11.2**	**8.2**	**8.0**	**9.1**	**8.9**	**10.3**	**9.2**	**10.1**	**9.0**	**8.3**	**7.4**	**7.6**	**6.8**	**7.6**	**6.4**	**T –**
	(7.3,13.8)	(4.4, 9.7)	(8.1,15.4)	(6.0, 11.3)	(5.7, 11.2)	(6.4,12.9)	(6.4,12.3)	(7.6,13.8)	(6.6,12.5)	(7.8, 13.1)	(6.8, 11.8)	(6.4, 10.5)	(5.7, 9.5)	(6.0, 9.6)	(5.5, 8.3)	(6.0, 9.4)	(5.1, 8.1)	
Region																		
Toronto	**24.9**	**17.2**	**22.3**	**19.7**	**15.4**	**13.5**	**20.7**	**16.8**	**17.9**	**17.4**	**11.7**	**16.8**	**14.5**	**14.2**	**10.2**	**11.8**	**13.5**	**T –**
	(20.5,29.9)	(13.5,21.8)	(18.0,27.2)	(15.7, 24.4)	(11.9, 19.7)	(9.8,18.2)	(15.9, 26.5)	(12.6,22.1)	(13.5,23.3)	(13.9,21.7)	(8.6, 15.7)	(13.3,20.9)	(11.0, 19.0)	(10.5, 19.0)	(7.8, 13.3)	(8.6, 15.9)	(9.9, 18.2)	
Central East	**23.3**	**21.3**	**21.4**	**18.8**	**22.0**	**21.2**	**20.1**	**19.0**	**19.6**	**15.7**	**13.1**	**14.0**	**18.9**	**15.6**	**15.5**	**11.9**	**15.7**	**T –**
	(19.2,27.9)	(17.3,25.9)	(17.4,26.0)	(15.0, 23.3)	(17.9, 26.7)	(16.5, 26.8)	(15.6, 25.4)	(14.6, 24.5)	(15.3,24.9)	(12.2, 20.0)	(10.2, 16.7)	(10.7, 18.0)	(15.0, 23.7)	(11.9, 20.2)	(12.5, 18.9)	(9.0, 15.6)	(11.3, 21.4)	
Central West	**23.6**	**27.4**	**20.4**	**24.2**	**23.9**	**23.2**	**20.1**	**20.1**	**22.4**	**18.8**	**18.4**	**15.5**	**16.5**	**15.6**	**12.2**	**13.2**	**15.7**	**T –**
	(19.5,28.4)	(22.9,32.5)	(16.4,25.0)	(19.9, 29.1)	(19.6, 28.9)	(18.3,29.0)	(15.5,25.7)	(15.6,25.5)	(17.6,27.9)	(15.1,23.1)	(14.7, 22.8)	(12.0, 19.8)	(12.9, 20.9)	(11.9, 20.1)	(9.8, 15.2)	(9.6, 17.8)	(11.8, 20.6)	
West	**23.3**	**24.6**	**24.0**	**20.7**	**20.4**	**24.6**	**24.0**	**19.7**	**14.9**	**17.5**	**17.1**	**18.6**	**16.9**	**12.4**	**12.4**	**14.4**	**12.4**	**T –**
	(19.2,28.0)	(20.4,29.3)	(19.8,28.7)	(16.8, 25.2)	(16.5, 24.9)	(20.0,29.8)	(19.3, 29.4)	(15.2,25.1)	(10.9,20.0)	(14.1, 21.6)	(13.4, 21.5)	(15.1, 22.8)	(13.3, 21.2)	(9.5, 16.0)	(9.8, 15.5)	(11.1, 18.4)	(9.2, 16.6)	
East	**25.3**	**20.8**	**21.4**	**22.1**	**15.8**	**22.3**	**22.5**	**21.3**	**13.3**	**18.8**	**15.4**	**17.5**	**14.2**	**13.2**	**14.3**	**14.2**	**16.9**	**T –**
	(21.2,30.0)	(16.8,25.3)	(17.4,26.1)	(18.2, 26.6)	(12.3, 20.0)	(17.7,27.8)	(17.7,28.1)	(16.5,27.1)	(9.8,17.8)	(15.1, 23.1)	(12.1, 19.4)	(14.1,21.7)	(11.0,18.2)	(10.1,17.0)	(11.4,17.7)	(10.7,18.6)	(12.8,22.1)	
North	**29.9**	**29.6**	**31.0**	**24.5**	**27.6**	**20.9**	**26.7**	**26.4**	**24.6**	**18.9**	**23.3**	**24.1**	**20.2**	**21.2**	**16.2**	**22.1**	**16.7**	**T –**
	(26.0,34.1)	(25.3,34.5)	(26.3,36.2)	(21.0, 28.4)	(18.5, 22.2)	(16.5, 26.2)	(21.9,32.2)	(21.5,32.0)	(19.8,30.2)	(15.2, 23.3)	(19.2, 27.9)	(19.8,29.1)	(16.4, 24.6)	(17.3, 25.7)	(13.4, 19.4)	(17.9, 27.1)	(12.7, 21.6)	

Cont'd

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Trend
(N=)	(2627)	(2421)	(2411)	(2611)	(2445)	(2016)	(2005)	(2024)	(2037)	(3030)	(3039)	(3030)	(3021)	(3043)	(5013)	(3042)	(2812)	
Marital Status																		
Married/Partner	**22.0**	**20.7**	**20.0**	**18.7**	**18.9**	**18.3**	**18.1**	**17.2**	**17.3**	**15.6**	**14.8**	**13.6**	**14.2**	**12.1**	**10.7**	**11.8**	**11.8**	**T** –
Previously Married	**27.8**	**25.4**	**23.1**	**26.5**	**21.8**	**24.2**	**26.6**	**27.3**	**23.7**	**24.3**	**20.7**	**22.1**	**22.4**	**21.4**	**18.5**	**22.4**	**24.0**	**T** –
Never Married	**30.7**	**26.8**	**30.0**	**26.6**	**24.0**	**26.1**	**30.1**	**22.4**	**20.3**	**20.1**	**14.3**	**22.8**	**21.9**	**20.3**	**18.2**	**14.1**	**18.3**	**T** –
Education																		
HS not completed	**28.8**	**27.0**	**29.3**	**28.7**	**28.5**	**27.6**	**35.1**	**30.0**	**31.0**	**23.3**	**27.0**	**26.3**	**29.1**	**29.6**	**20.7**	**24.8**	**27.3**	**T** –
Completed HS	**29.0**	**30.4**	**31.4**	**25.8**	**24.4**	**32.0**	**26.8**	**27.6**	**24.3**	**22.7**	**19.5**	**19.5**	**24.2**	**20.8**	**19.0**	**19.8**	**19.3**	**T** –
Some College or University	**27.2**	**22.4**	**22.1**	**23.2**	**22.6**	**20.0**	**25.4**	**20.1**	**19.0**	**21.0**	**17.4**	**18.7**	**18.4**	**15.4**	**16.3**	**14.5**	**18.5**	**T** –
University Degree	**15.3**	**14.4**	**12.9**	**13.7**	**11.2**	**9.5**	**7.6**	**10.4**	**10.8**	**8.9**	**7.7**	**9.2**	**7.2**	**8.2**	**5.8**	**7.8**	**†7.0**	**T** –

Notes: (1) [a] 95% confidence interval; all analyses are sample design adjusted; the sampling design was changed in 2017 to dual-frame sampling (landline + cell-phone).
(2) Trend Analysis: **–** change not statistically significant (p<.05); **T** statistically significant change (p<.05) between 1996-2017; **2Y** statistically significant change (p<.05) between last two estimates.
Defn: *Current smokers are those that report (1) consuming 100 or more cigarettes in their lifetime, (2) smoked cigarettes occasionally or daily during the past year; and (3) smoked during the past 30 days.*
Source: The *CAMH Monitor*, Centre for Addiction and Mental Health

Table 4.1.4a: Percentage Reporting ***Daily Cigarette Smoking***, by Demographic Characteristic, Ontarians Aged 18+, 1996–2000

	1996	1997	1998	1999	2000
(N=)	(2721)	(2776)	(2509)	(2436)	(2406)
Total	**23.0**	**23.1**	**22.0**	**20.7**	**20.3**
(95%CI)[a]	(21.3, 24.9)	(21.4, 25.0)	(20.2, 23.9)	(19.0, 22.6)	(18.5, 22.1)
Sex					
Men	**23.6**	**26.1**	**24.4**	**23.5**	**24.9**
	(21.1, 26.4)	(23.4, 29.0)	(21.5, 27.5)	(20.8, 26.4)	(22.1, 28.0)
Women	**22.5**	**20.4**	**19.8**	**18.2**	**16.1**
	(20.2,25.0)	(18.2, 22.8)	(17.6, 22.2)	(16.1, 20.6)	(14.1, 18.4)
Age					
18 - 29 years	**23.0**	**28.3**	**26.5**	**24.2**	**25.7**
	(19.2,27.3)	(24.2, 32.8)	(22.0, 31.4)	(20.0, 28.9)	(21.4, 30.6)
30 - 39 years	**27.8**	**26.1**	**26.7**	**24.4**	**20.6**
	(24.2,31.5)	(22.7, 30.0)	(22.9, 30.8)	(20.8, 28.3)	(17.2, 24.5)
40 - 49 years	**26.3**	**25.6**	**23.7**	**24.0**	**23.6**
	(22.4,30.6)	(21.7, 29.8)	(20.0, 27.9)	(20.2, 28.3)	(19.7, 27.9)
50 - 64 years	**20.6**	**19.4**	**18.3**	**17.9**	**17.9**
	(17.0,24.8)	(16.0, 23.3)	(14.6, 22.7)	(14.2, 22.2)	(14.4, 21.9)
65+ years	**13.4**	**8.5**	**12.8**	**11.5**	**11.8**
	(9.8,18.1)	(5.8, 12.3)	(9.5, 17.2)	(8.4, 15.6)	(8.4, 16.2)
Region					
Toronto	**19.3**	**22.1**	**19.5**	**15.3**	**16.4**
	(15.5,23.8)	(18.0, 26.8)	(15.5, 24.3)	(12.0, 19.4)	(12.8, 20.9)
Central East	**21.9**	**24.0**	**22.9**	**22.6**	**24.3**
	(18.2, 26.2)	(20.0, 28.4)	(18.7, 27.6)	(18.5, 27.2)	(20.1, 29.1)
Central West	**24.9**	**21.1**	**22.7**	**19.2**	**15.8**
	(20.8, 29.6)	(17.4, 25.4)	(18.7, 27.3)	(15.4, 23.7)	(12.4, 20.0)
West	**23.8**	**25.6**	**21.5**	**26.8**	**23.5**
	(19.9,28.3)	(21.6, 30.0)	(17.5, 26.0)	(22.4, 31.7)	(19.2, 28.4)
East	**24.3**	**20.0**	**21.6**	**21.3**	**22.7**
	(20.5, 28.6)	(16.3, 24.2)	(17.7, 26.2)	(17.3, 25.8)	(18.5, 27.6)
North	**28.1**	**30.0**	**26.3**	**25.2**	**23.9**
	(23.8, 32.1)	(25.6, 34.8)	(22.0, 31.0)	(20.9, 30.0)	(19.7, 28.7)
Marital Status					
Married/Partner	**21.9**	**19.0**	**19.9**	**19.8**	**18.1**
Previously Married	**29.4**	**30.8**	**27.2**	**22.2**	**22.2**
Never Married	**22.7**	**29.2**	**25.4**	**23.1**	**24.8**
Education					
High school not completed	**35.0**	**35.0**	**32.6**	**28.7**	**26.2**
Completed high school	**27.0**	**26.6**	**24.5**	**25.7**	**23.9**
Some college or university	**22.9**	**24.0**	**20.9**	**22.5**	**21.8**
University degree	**9.9**	**10.2**	**12.4**	**7.6**	**11.3**

Notes: [a] 95% confidence interval; all analyses are sample design adjusted.

Defn: *Current smokers are those that report (1) consuming 100 or more cigarettes in their lifetime, and (2) smoked cigarettes occasionally or daily during the past year; and (3) smoked during the past 30 days.*

Source: The *CAMH Monitor*, Centre for Addiction and Mental Health

Table 4.1.4b: Percentage Reporting ***Daily Cigarette Smoking***, by Demographic Characteristic, Ontarians Aged 18+, 2001–2017

(N=)	2001 (2627)	2002 (2421)	2003 (2411)	2004 (2611)	2005 (2445)	2006 (2016)	2007 (2005)	2008 (2024)	2009 (2037)	2010 (3030)	2011 (3039)	2012 (3030)	2013 (3021)	2014 (3043)	2015 (5013)	2016 (3042)	2017 (2812)	Trend
Total	**19.0**	**18.0**	**17.8**	**16.5**	**16.1**	**15.6**	**17.0**	**15.6**	**14.5**	**14.2**	**11.5**	**12.7**	**13.2**	**11.4**	**10.0**	**9.9**	**11.0**	**T –**
(95%CI)[a]	(17.4, 20.8)	(16.4, 19.8)	(16.2, 19.6)	(14.9, 18.3)	(14.5, 17.8)	(13.8,17.6)	(15.1,19.5)	(13.7,17.6)	(12.7,16.5)	(12.8,15.9)	(10.2, 12.9)	(11.3, 14.2)	(11.6, 14.9)	(9.9, 13.1)	(8.9, 11.2)	(8.6, 11.3)	(9.5, 12.8)	
Sex																		
Men	**21.7**	**20.3**	**19.9**	**18.9**	**17.0**	**16.6**	**18.1**	**19.6**	**17.0**	**16.6**	**12.3**	**14.8**	**15.3**	**13.6**	**11.6**	**11.4**	**12.1**	**T –**
	(19.1, 24.6)	(17.8, 23.1)	(17.3, 22.7)	(16.3, 21.8)	(14.6, 19.8)	(13.8,19.6)	(15.2,21.5)	(16.6,23.1)	(14.2,20.2)	(14.2,19.3)	(10.2, 14.7)	(12.6, 17.4)	(12.8, 18.2)	(11.2, 16.5)	(9.8, 13.6)	(9.2, 13.9)	(9.8, 14.9)	
Women	**16.5**	**15.8**	**15.9**	**14.3**	**15.2**	**14.8**	**15.9**	**11.7**	**12.2**	**12.1**	**10.8**	**10.8**	**11.2**	**9.3**	**8.5**	**8.6**	**10.0**	**T –**
	(14.5, 18.8)	(13.8, 18.2)	(13.8, 18.2)	(12.3, 16.5)	(13.1, 17.4)	(12.6,17.3)	(13.6, 18.5)	(9.7,14.1)	(10.1,14.7)	(10.3,14.0)	(9.2, 12.5)	(9.2, 12.5)	(9.5, 13.2)	(7.8, 11.2)	(7.4, 9.9)	(7.2, 10.1)	(8.1, 12.3)	
Age																		
18-29	**22.5**	**20.3**	**22.9**	**16.1**	**20.2**	**19.2**	**23.3**	**16.0**	**16.8**	**13.8**	**11.0**	**10.1**	**13.7**	**12.7**	**10.9**	**8.3**	**†11.4**	**T –**
	(18.4, 27.1)	(16.4, 24.8)	(18.7, 27.6)	(12.2, 20.9)	(15.8, 25.4)	(14.5,24.9)	(17.5, 30.2)	(11.1, 22.5)	(11.8, 23.5)	(9.9, 18.8)	(7.6, 15.7)	(6.7, 15.2)	(9.1, 20.2)	(8.0, 19.5)	(7.8, 15.0)	(5.1, 13.3)	(7.4, 17.0)	
30-39	**22.7**	**24.1**	**18.8**	**20.4**	**17.8**	**15.6**	**17.0**	**14.8**	**16.9**	**15.2**	**11.8**	**13.8**	**15.7**	**10.3**	**10.7**	**9.0**	**†12.4**	**T –**
	(19.0, 26.9)	(20.1, 28.6)	(15.1, 23.2)	(16.6, 24.9)	(14.3, 22.0)	(11.8,20.5)	(13.0.22.0)	(10.7,20.3)	(10.7,20.3)	(11.4, 19.9)	(8.8, 15.7)	(10.4, 18.0)	(11.3, 21.4)	(6.9, 15.2)	(7.9, 14.4)	(5.7, 14.0)	(7.6, 19.3)	
40-49	**21.3**	**20.3**	**20.6**	**19.4**	**18.2**	**19.0**	**20.9**	**20.3**	**12.7**	**16.8**	**14.2**	**15.3**	**14.4**	**12.7**	**9.7**	**11.6**	**†7.9**	**T –**
	(17.8, 25.3)	(16.8, 24.3)	(17.3, 24.4)	(15.8, 23.7)	(14.9, 22.0)	(15.0,23.8)	(16.7,25.9)	(16.2,25.1)	(9.5,16.7)	(13.6, 20.4)	(11.3, 17.7)	(12.2, 19.0)	(11.3, 18.0)	(9.6, 16.7)	(7.6, 12.4)	(8.7, 15.3)	(5.1, 12.0)	
50-64	**19.7**	**18.0**	**16.3**	**18.1**	**17.1**	**16.6**	**15.2**	**18.5**	**18.3**	**15.7**	**11.6**	**15.7**	**15.4**	**14.2**	**12.2**	**12.8**	**16.0**	**T –**
	(15.9, 24.0)	(14.6, 22.0)	(13.0, 20.2)	(15.0, 21.8)	(14.0, 20.9)	(13.2, 20.6)	(12.2,18.9)	(14.9,22.7	(14.8,22.4	(13.1, 18.6)	(9.4, 14.2)	(13.2, 18.7)	(12.9, 18.2)	(11.8, 17.0)	(10.5, 14.1)	(10.8, 15.3)	(13.1, 19.4)	
65+	**6.9**	**5.4**	**9.4**	**6.6**	**6.5**	**6.8**	**8.3**	**8.2**	**7.0**	**9.3**	**7.9**	**7.1**	**6.2**	**6.0**	**5.5**	**5.8**	**5.5**	**T –**
	(4.7, 10.1)	(3.5, 8.2)	(6.5, 13.5)	(4.6, 9.3)	(4.5, 9.3)	(4.6, 9.9)	(5.9,11.6)	(5.9,11.4)	(4.8,10.1)	(7.1, 12.2)	(5.8, 10.7)	(5.4, 9.3)	(4.7, 8.1)	(4.5, 7.9)	(4.3, 6.9)	(4.5, 7.5)	(4.2, 7.1)	
Region																		
Toronto	**19.1**	**11.9**	**17.4**	**15.7**	**10.1**	**9.7**	**17.2**	**13.4**	**15.5**	**14.3**	**6.8**	**12.1**	**11.7**	**9.1**	**6.9**	**7.8**	**†9.5**	**T –**
	(15.2, 23.6)	(8.8, 15.9)	(13.7, 21.8)	(12.1, 20.2)	(7.4, 13.6)	(6.6, 14.1)	(12.7, 22.8)	(9.7,18.4)	(11.4,20.6)	(11.1, 18.4)	(4.6, 10.0)	(9.2, 15.8)	(8.5, 15.9)	(6.3, 12.9)	(5.1, 9.4)	(5.4, 11.2)	(6.6, 13.6)	
Central East	**17.8**	**17.2**	**16.3**	**13.8**	**17.5**	**16.9**	**14.5**	**14.8**	**14.3**	**12.5**	**10.1**	**10.4**	**14.4**	**12.3**	**11.3**	**8.8**	**†11.6**	**T –**
	(14.2, 22.1)	(13.6, 21.6)	(12.8, 20.6)	(10.6, 17.7)	(13.8, 22.0)	(12.6, 22.2)	(10.7,19.3)	(13.5,27.5)	(10.6,18.9)	(9.3,16.6)	(7.5, 13.4)	(7.8, 13.8)	(10.9, 18.7)	(9.0, 16.7)	(8.9, 14.4)	(6.4, 12.1)	(7.7, 17.1)	
Central West	**18.1**	**21.4**	**16.4**	**18.5**	**19.1**	**16.6**	**15.2**	**15.2**	**17.5**	**15.3**	**15.2**	**12.2**	**13.2**	**12.1**	**10.8**	**9.1**	**11.1**	**T –**
	(14.4, 22.4)	(17.3, 26.1)	(12.8, 20.8)	(14.7, 23.1)	(15.1, 23.7)	(12.6, 21.5)	(11.2,20.2)	(11.3,20.1)	(13.3,22.7)	(12.1, 19.3)	(11.8, 19.2)	(9.1, 16.0)	(10.0, 17.2)	(8.9, 16.3)	(8.4, 13.6)	(6.1, 13.2)	(8.0, 15.2)	
West	**18.1**	**21.4**	**19.6**	**16.1**	**18.0**	**19.8**	**20.6**	**15.8**	**12.9**	**14.8**	**12.2**	**15.2**	**13.3**	**10.6**	**8.9**	**13.0**	**11.2**	**T –**
	(14.4, 22.5)	(17.5, 25.9)	(15.7, 24.1)	(12.6, 20.3)	(14.3, 22.5)	(15.7, 24.6)	(16.2,25.9)	(11.8,20.8)	(9.1,17.9)	(11.7, 18.7)	(9.3, 15.8)	(12.0, 19.2)	(10.2, 17.2)	(8.1, 13.8)	(6.9, 11.5)	(9.8, 17.0)	(8.1, 15.2)	
East	**19.0**	**17.2**	**16.0**	**16.1**	**12.0**	**15.6**	**16.3**	**16.6**	**9.3**	**13.9**	**12.1**	**13.8**	**11.1**	**10.1**	**10.5**	**9.8**	**†11.6**	**T –**
	(15.4, 23.3)	(13.5, 21.6)	(12.6, 20.2)	(12.8, 20.1)	(9.0, 15.9)	(11.8,20.2)	(12.3,21.3)	(12.4,22.0)	(6.4,13.3)	(10.8, 17.8)	(9.2,15.7)	(10.8, 17.5)	(8.3, 14.7)	(7.5, 13.5)	(8.1, 13.6)	(7.1, 13.5)	(8.1, 16.3)	
North	**25.9**	**23.0**	**26.5**	**21.0**	**24.3**	**18.4**	**23.1**	**23.6**	**18.1**	**16.6**	**18.7**	**17.7**	**16.2**	**16.7**	**13.7**	**16.6**	**12.4**	**T –**
	(22.3, 29.9)	(18.9, 27.7)	(22.1, 31.4)	(17.7, 24.6)	(20.0, 29.3)	(14.2, 23.6)	(18.5,28.3)	(18.9,29.1)	(14.0,23.0)	(13.0, 20.8)	(15.0, 23.1)	(14.0, 22.1)	(12.8, 20.4)	(13.2, 20.8)	(11.1, 16.7)	(13.1, 20.8)	(8.9, 16.9)	

Cont'd

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Trend
(N=)	(2627)	(2421)	(2411)	(2611)	(2445)	(2016)	(2005)	(2024)	(2037)	(3030)	(3039)	(3030)	(3021)	(3043)	(5013)	(3042)	(2812)	
Marital Status																		
Married/ Partner	**16.9**	**16.0**	**16.2**	**14.8**	**15.1**	**14.2**	**14.3**	**14.1**	**13.8**	**12.4**	**10.5**	**11.5**	**11.3**	**9.3**	**8.2**	**8.8**	**8.8**	**T –**
Previously Married	**22.4**	**21.9**	**20.2**	**22.1**	**17.8**	**18.2**	**23.4**	**21.9**	**18.2**	**20.9**	**19.2**	**17.6**	**17.9**	**19.3**	**15.7**	**15.9**	**18.5**	**T –**
Never Married	**22.5**	**20.9**	**21.6**	**18.5**	**18.3**	**19.3**	**21.9**	**16.3**	**14.9**	**16.5**	**10.7**	**13.9**	**16.6**	**14.0**	**12.6**	**10.2**	**†12.3**	**T –**
Education																		
HS not completed	**23.8**	**23.7**	**26.2**	**24.4**	**26.5**	**24.3**	**30.9**	**26.7**	**28.3**	**21.7**	**23.1**	**21.3**	**27.0**	**26.4**	**17.8**	**20.6**	**†25.9**	**T –**
Completed HS	**23.0**	**23.7**	**26.1**	**21.9**	**22.0**	**25.3**	**21.1**	**21.4**	**20.5**	**20.4**	**15.5**	**14.1**	**20.6**	**17.0**	**15.7**	**16.6**	**15.7**	**T**
Some College or Univ	**20.5**	**17.8**	**17.7**	**15.8**	**16.5**	**14.7**	**19.8**	**16.5**	**14.4**	**16.7**	**13.3**	**15.0**	**13.2**	**11.3**	**12.1**	**9.7**	**13.5**	**T –**
University Degree	**10.7**	**9.9**	**7.2**	**10.4**	**6.7**	**5.8**	**4.8**	**7.0**	**4.8**	**5.5**	**4.4**	**6.3**	**4.6**	**5.1**	**3.6**	**5.1**	**†3.0**	**T –**

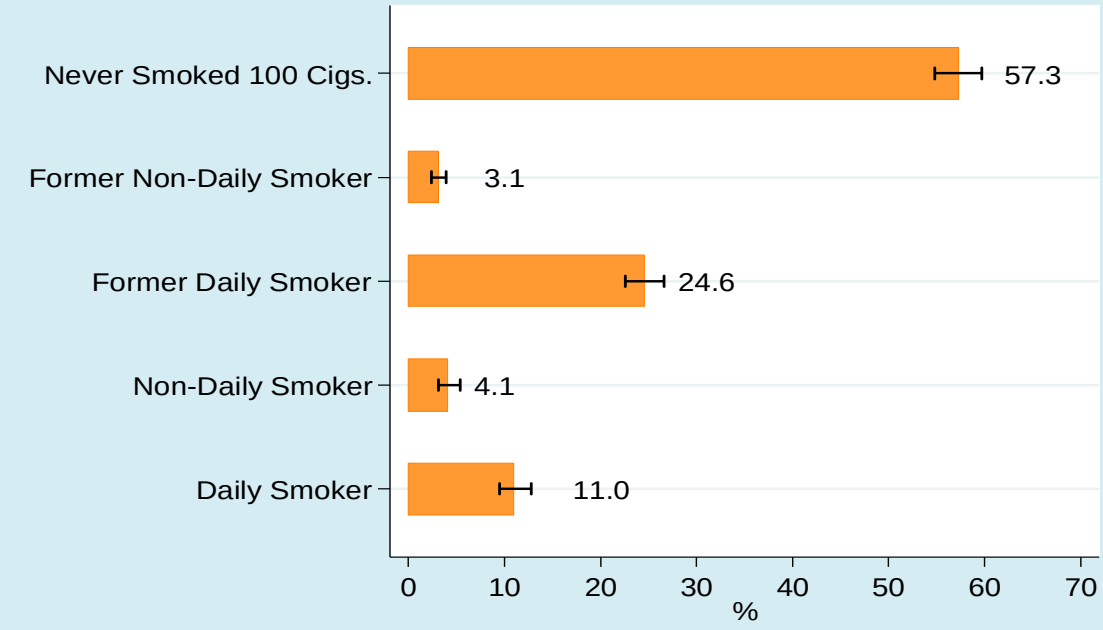
Notes: (1) [a] 95% confidence interval; all analyses are sample design adjusted; the sampling design was changed in 2017 to dual-frame sampling (landline + cell-phone).
(2) Trend Analysis: **–** change not statistically significant (p<.05); **T** statistically significant change (p<.05) between 1996-2017; **2Y** statistically significant change (p<.05) between last two estimates.

Defn: *Daily smokers are those who (1) reported using 100 or more cigarettes in their lifetime, (2) smoked cigarettes occasionally or daily during the past year; and (3) smoked cigarettes daily at the time of the survey.*

Source: The *CAMH Monitor*, Centre for Addiction and Mental Health

Figure 4.1.1

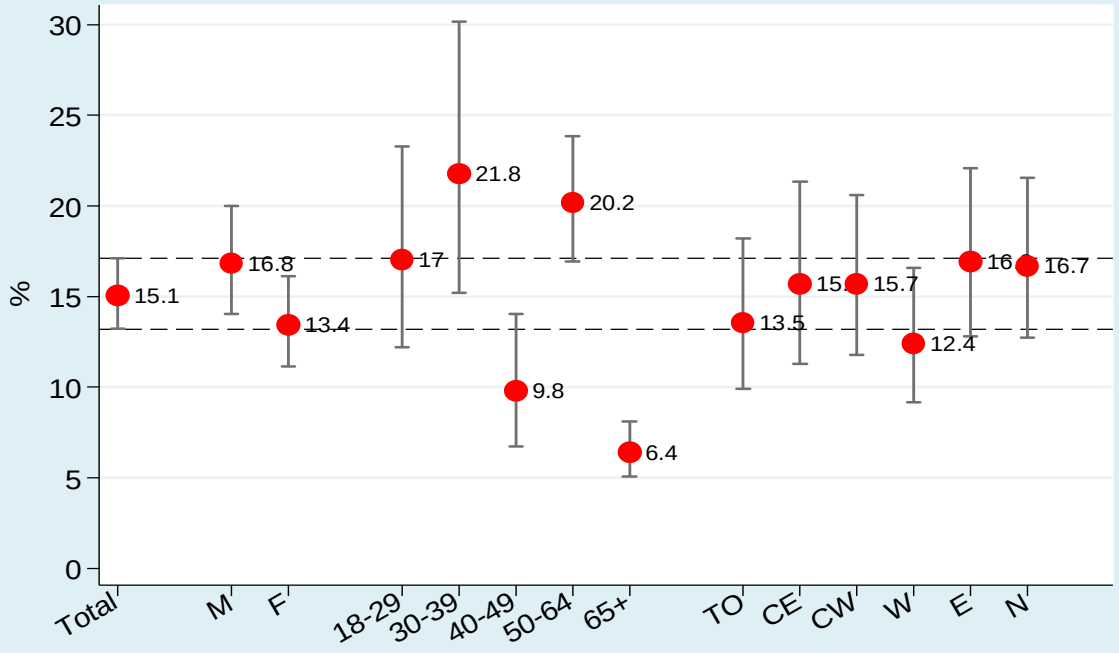
Cigarette Smoking Status, Ontarians Aged 18+, 2017 (N=2812)



Note: horizontal 'whiskers' represent 95% confidence intervals
Source: 2017 CAMH Monitor

Figure 4.1.2

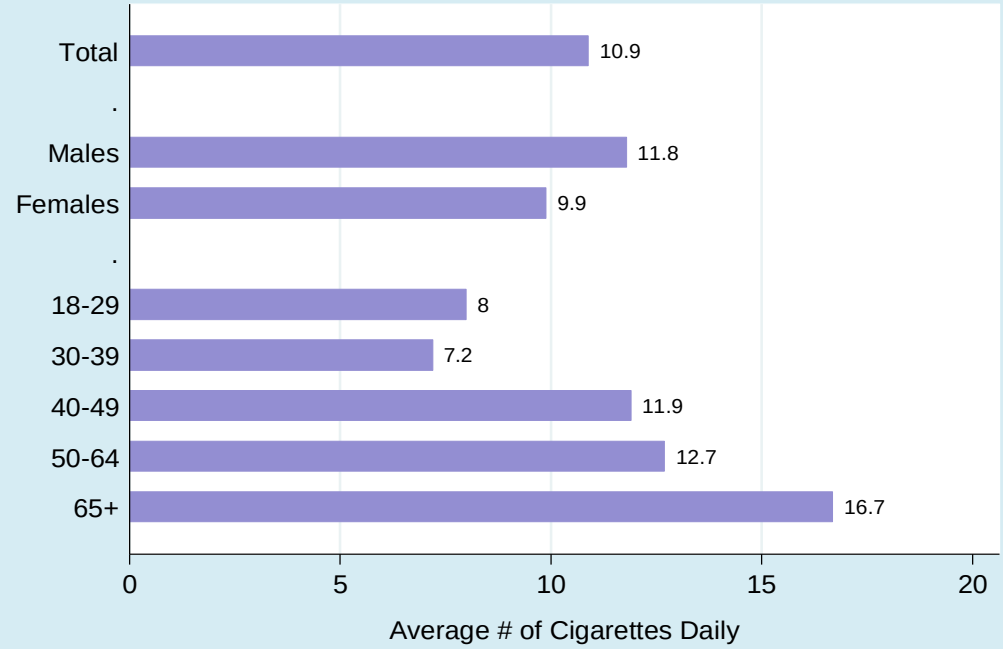
Current Cigarette Use by Sex, Age and Region, Ontarians Aged 18+, 2017 (N=2812)



Note: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal bar represents 95% confidence interval for total estimate
(3) significant difference by age (p<.05)
Source: 2017 CAMH Monitor

Figure 4.1.3

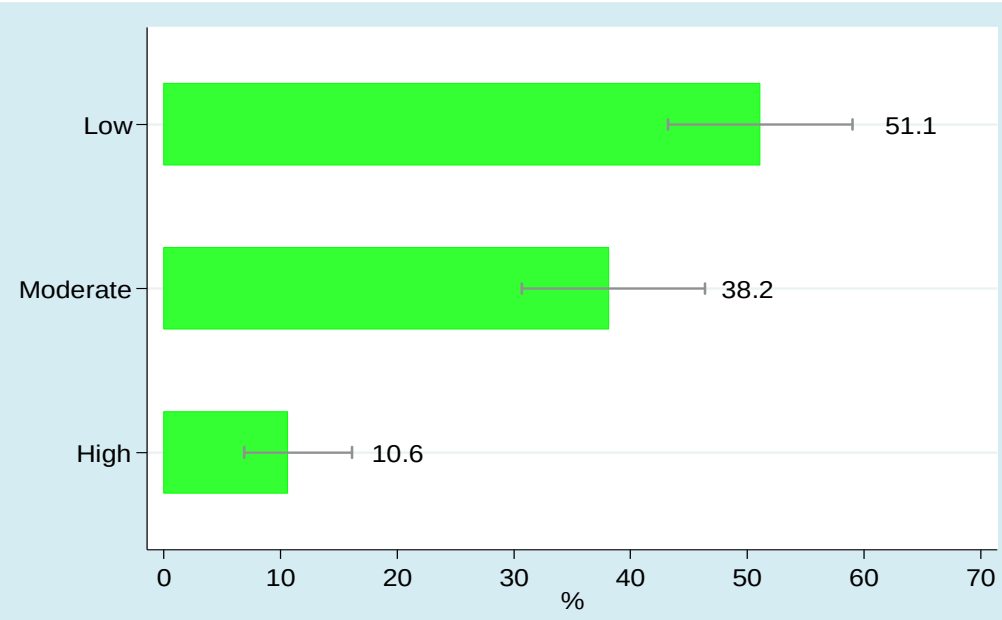
Average Number of Cigarettes Smoked Daily, Current Smokers Aged 18+, 2017 (*n*=364)



Source: 2017 CAMH Monitor

Figure 4.1.4

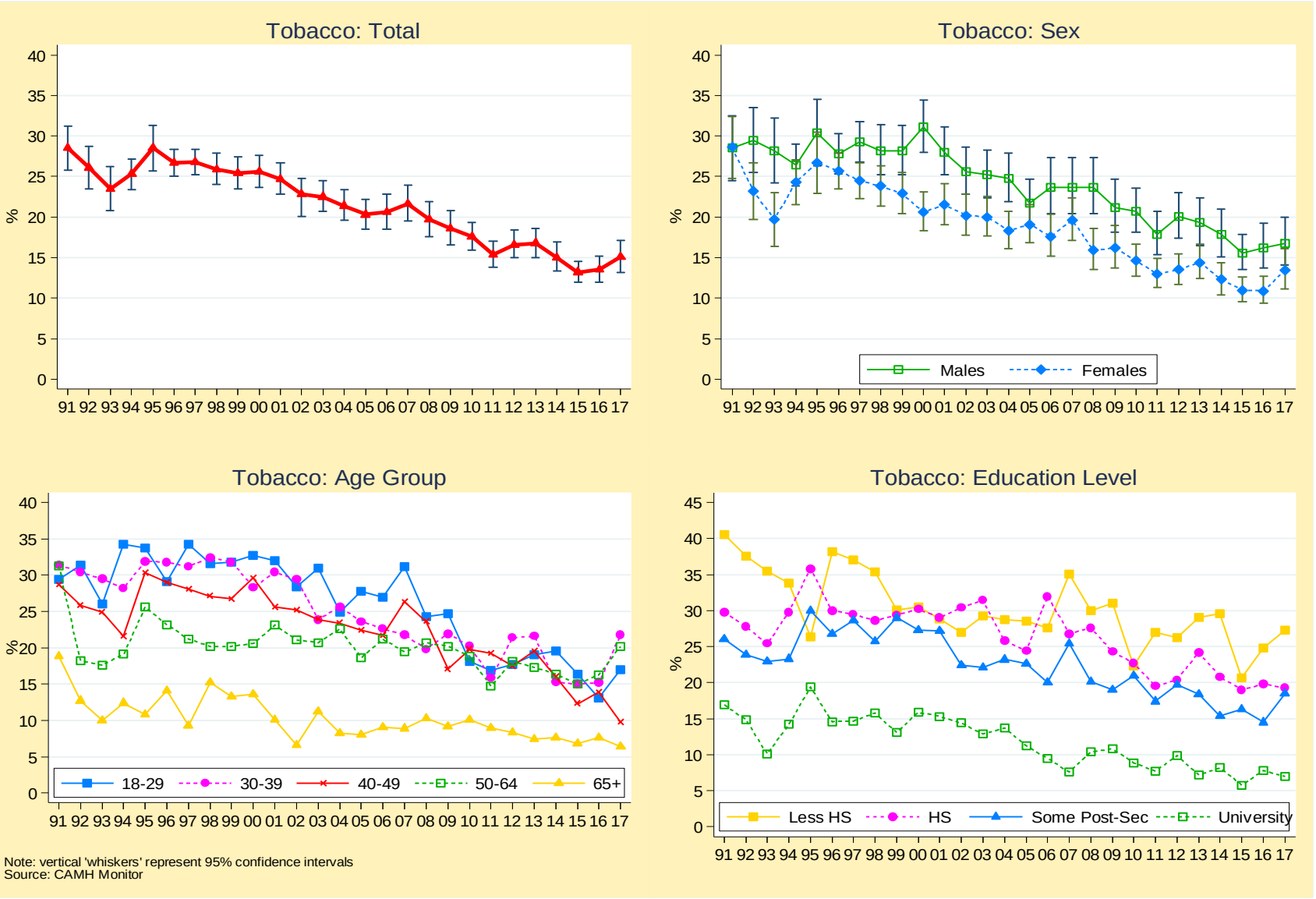
Nicotine Dependence (HSI), Daily Smokers Aged 18+, 2017 (*n*=274)



Note: horizontal 'whiskers' represent 95% confidence intervals
Source: 2017 CAMH Monitor

Figure 4.1.5

Current Cigarette Use Among Ontarians Aged 18+, 1991–2017



Note: vertical 'whiskers' represent 95% confidence intervals
Source: CAMH Monitor

4.2. Electronic Cigarette Use

An electronic cigarette (e-cigarette) is a battery-powered cigarette-shaped canister used to simulate the sensation of smoking. Other names for an e-cigarette include "vape pen," "hookah pen," and "e-hookah." A liquid-filled cartridge is heated and releases vapour. The vapour, which resembles smoke, is inhaled. Some e-cigarettes contain nicotine, and most are flavoured.

In Canada, e-cigarettes with and without nicotine can be legally sold and the government has authority over the product and promotion. Sales to minors are banned (18 year olds nationally, 19 year olds in Ontario). However, Health Canada warns that e-cigarettes with or without nicotine may pose significant health risks.

Questions about the use of electronic cigarettes were included in the CAMH Monitor for the first time in 2013. In 2017, respondents were asked the following:

"*E-cigarettes, also known as "vape pipes," "hookah pens," and "e-hookahs" are electronic devices that create an inhaled mist, simulating the act of smoking. Have you ever taken at least one puff from an e-cigarette?"*

Two follow-up questions asked respondents whether they used an e-cigarette in the past year and if the e-cigarette they smoked the last time contained nicotine:

1) *"Was it in the past 12 months that you had at least one puff of an e-cigarette?"*

2) *"The last time you used an e-cigarette, did it contain nicotine?"*

2017 ……..Tables 4.2.1; 4.2.2; Fig. 4.2.1–4.2.2

Overall, the estimated percentage of electronic cigarette use in the past 12 months was **8.5%** (95% CI: 7.1% to 10.1%). The corresponding population estimate is 915,400 current users.

Sex, age, region and **education** were significantly related to electronic cigarette use, when adjusting for other demographic factors.

- The adjusted odds of electronic cigarette use were 2 times higher among men than women (11.4% vs. 5.8%, respectively; OR=2.12).
- Compared to those aged 18 to 29 (20.3%), the adjusted odds of electronic cigarette use were significantly lower among those aged 30 to 39 (9.6%; OR=0.23), among those aged 40 to 49 (5.6%; OR=0.16), and among those aged 50 and older (4.4%; OR=0.10).
- Electronic cigarette use was highest among respondents from Toronto and the East region (11.8% and 11.1%, respectively).
- Electronic cigarette use was significantly lower among those holding a university degree (4.4%).

The majority (**52.7%**) of past 12 months users report using e-cigarettes with **nicotine**, **33.9%** report using e-cigarettes **without nicotine**, and 13.4% were not sure what they used (Fig. 4.2.2).

Trends

2013–2017…… Table 4.2.2

The prevalence of **electronic cigarette** use in 2017 (8.5%) was not significantly different from 2016 (9.6%).

Electronic cigarette use did not change significantly between 2013 (10.5%) and 2017 (8.5%) among the total sample.

However, during the same period, **electronic cigarette** use **decreased** significantly among women, among those aged 40 to 49, and among those aged 50 and older, and among respondents from the West and Central West regions.

Table 4.2.1: Percentage Reporting ***Electronic Cigarette Use*** in the Past 12 Months and Adjusted Group Differences, Ontarians Aged 18+, 2017

	N	%	95% CI	Adjusted Odds Ratio (N=2741)
Total[1]	2812	**8.5**	(7.1, 10.1)	—
Sex				***
Men	1150	**11.4**	(9.1, 14.3)	**2.12*** **
Women *(Comparison Group)*	1662	**5.8**	(4.3, 7.6)	—
Age				
(Comparison Group is previous age group)				****
18-29	283	**20.3**	(15.4, 26.3)	—
30-39	199	**†9.6**	(5.7, 15.8)	**0.23*** **
40-49	366	**†5.6**	(3.5, 9.0)	**0.16*** **
50+	1953	**4.4**	(3.4, 5.8)	**0.10*** **
Public Health Region				*
Toronto *(vs. Provincial Average)*	476	**†11.8**	(8.4, 16.4)	**1.47***
Central East	476	**†8.9**	(5.9, 13.2)	0.97
Central West	456	**†5.6**	(3.4, 9.1)	0.70
West	468	**†5.1**	(3.0, 8.3)	0.67
East	467	**†11.1**	(7.6, 16.0)	**1.63***
North	469	**†8.4**	(5.5, 12.6)	0.91
Marital Status				NS
Married/Partner *(Comparison Group)*	1730	**5.6**	(4.4, 7.1)	—
Previously Married	614	**†7.2**	(4.2, 12.1)	1.52
Never Married	441	**15.5**	(11.7, 20.3)	0.56
Education				****
High school not completed *(Comparison Group)*	240	**†8.0**	(4.1, 15.0)	—
Completed high school	612	**†10.0**	(7.0, 13.9)	1.26
Some college or university	986	**11.8**	(9.1, 15.1)	1.28
University degree	933	**†4.4**	(2.9, 6.5)	**0.39***
Household Income				NS
< $30,000 *(Comparison Group)*	266	**†13.6**	(8.4, 21.4)	—
$30,000-$49,999	347	**†7.3**	(4.0, 13.0)	0.57
$50,000-$79,999	483	**†8.5**	(5.3, 13.2)	0.67
$80,000+	1079	**9.3**	(7.2, 11.9)	0.87
Not stated	637	**†5.8**	(3.6, 9.2)	**0.38***

Notes: (1) All analyses are sample design adjusted; *p<.05**;** **p<.01; ***p<.001; CI = 95% confidence interval; NS – no statistically significant difference; † Estimate unstable or suppressed; [1] Asked only of a random subsample.
(2) Asterisks in group row indicate a statistically significant group effect, based on Wald test.
(3) ORs greater than 1.0 indicate that the odds of smoking are higher in the group being compared to the comparison group; ORs less than 1.0 indicate that the odds of smoking are lower in the group being compared to the comparison group.
(4) Adjusted odds ratio holding fixed values for sex, age, region, marital status, education, and income.
Q: *Have you ever taken at least one puff from an e-cigarette? Was this in the past 12 months?*
Source: The *CAMH Monitor*, Centre for Addiction and Mental Health.

Table 4.2.2: Percentage Reporting ***Electronic Cigarette Use*** in the Past 12 Months, by Demographic Characteristics, Ontarians Aged 18+, 2013-2017

(N=)	2013 (1890)	2014 (3043)	2015 (2011)	2016 (2028)	2017 (2812)	Trend	
Total	**10.5**	**10.1**	**10.9**	**9.6**	**8.5**	–	–
(95%CI)[a]	(8.7, 12.6)	(8.5, 11.8)	(9.0, 13.2)	(7.8, 11.8)	(7.1, 10.1)		
Sex							
Men	**10.6**	**11.6**	**12.9**	**13.5**	**11.4**	–	–
	(8.0, 13.8)	(9.1, 14.6)	(9.8, 16.8)	(10.3, 17.6)	(9.1, 14.3)		
Women	**10.3**	**8.7**	**9.2**	**5.9**	**5.8**	**T**	–
	(8.0, 13.1)	(7.0, 10.7)	(7.1, 11.8)	(4.4, 8.0)	(4.3, 7.6)		
Age							
18-29	**†17.5**	**†21.0**	**27.1**	**†17.6**	**20.3**	–	–
	(11.6, 25.6)	(14.9, 28.6)	(20.1, 35.6)	(11.7, 25.5)	(15.4, 26.3)		
30-39	**†10.7**	**†12.2**	**†11.5**	**†14.6**	**†9.6**	–	–
	(6.8, 16.5)	(8.6, 17.0)	(7.1, 17.9)	(8.2, 24.4)	(5.7, 15.8)		
40-49	**†10.2**	**11.5**	**†6.6**	**†9.3**	**†5.6**	**T**	–
	(7.0, 14.5)	(8.4, 15.5)	(4.2, 10.2)	(6.2, 13.6)	(3.5, 9.0)		
50+	**7.2**	**4.9**	**†5.3**	**5.1**	**4.4**	**T**	–
	(5.5, 9.4)	(3.8, 6.2)	(4.0, 7.1)	(3.9, 6.8)	(3.4, 5.8)		
Region							
Toronto	**†6.9**	**†9.1**	**†8.8**	**†6.2**	**†11.8**	–	–
	(3.8, 12.4)	(6.0, 13.8)	(5.3, 14.1)	(3.5, 10.8)	(8.4, 16.4)		
Central East	**†10.6**	**†12.3**	**†12.0**	**†11.4**	**†8.9**	–	–
	(7.0, 15.9)	(8.8, 16.9)	(7.9, 17.7)	(7.1, 17.8)	(5.9, 13.2)		
Central West	**†13.5**	**10.8**	**†12.5**	**†9.6**	**†5.6**	**T**	–
	(9.3, 19.2)	(7.8, 14.8)	(8.2, 18.5)	(5.8, 15.4)	(3.4, 9.1)		
West	**†12.3**	**†7.3**	**†8.6**	**†7.6**	**†5.1**	**T**	–
	(8.3, 17.8)	(4.8, 10.9)	(5.3, 13.7)	(4.2, 13.6)	(3.0, 8.3)		
East	**†9.3**	**†9.2**	**†11.4**	**†12.7**	**†11.1**	–	–
	(6.3, 13.5)	(6.6, 12.7)	(7.3, 17.5)	(8.6, 18.4)	(7.6, 16.0)		
North	**†8.2**	**†8.3**	**†13.7**	**†10.9**	**†8.4**	–	–
	(5.2, 12.9)	(5.6, 12.0)	(9.6, 19.2)	(7.1, 16.2)	(5.5, 12.6)		
Marital Status							
Married/ Partner	**8.0**	**7.2**	**6.7**	**7.2**	**5.6**	–	–
Previously Married	**†11.2**	**†8.8**	**†8.3**	**†8.0**	**†7.2**	–	–
Never Married	**†16.9**	**18.9**	**24.8**	**†16.3**	**15.5**	–	–
Education							
Less than high school	**†16.2**	**†12.8**	**†6.4**	**†9.2**	**†8.0**	–	–
Completed high school	**†14.5**	**14.9**	**†12.3**	**†14.1**	**†10.0**	–	–
Some college or university	**11.7**	**10.0**	**17.8**	**11.4**	**11.8**	–	–
University degree	**†5.3**	**†6.9**	**†4.0**	**†5.3**	**†4.4**	–	–

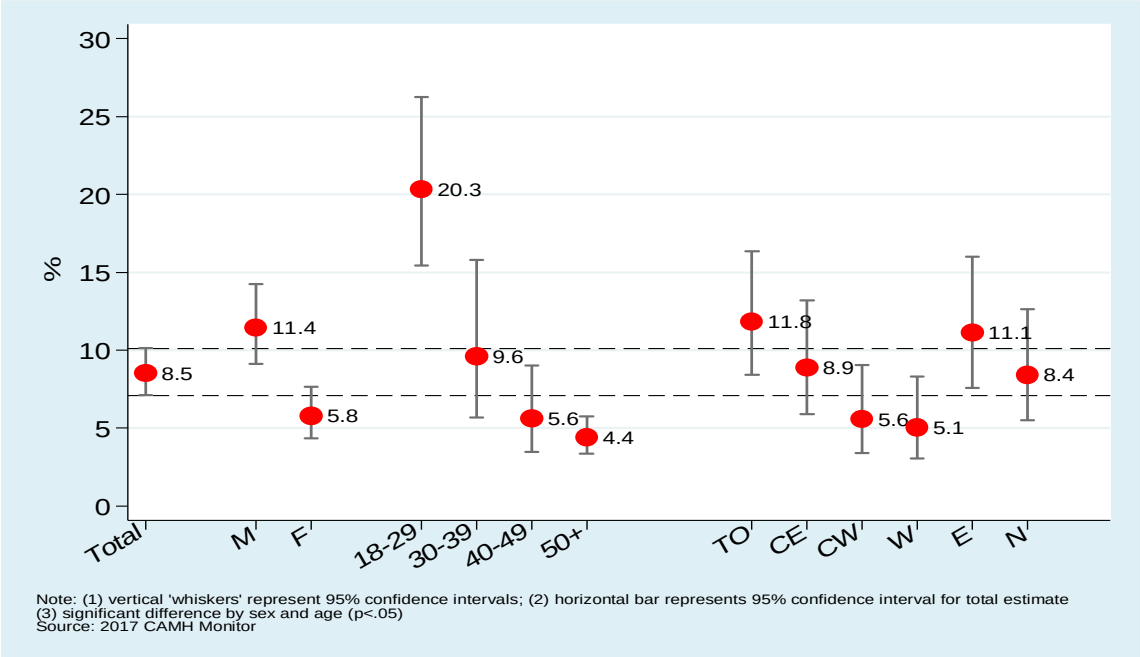
Notes: (1) All analyses are sample design adjusted; [a]95% confidence interval; † estimate suppressed or unstable; sampling design was changed in 2017 to dual-frame sampling (landline + cell-phone).
(2) Trend Analysis: **–** change not statistically significant at p<.05; **T** significant change (p<.05) between 2013-2017; **2Y** significant change (p<.05) between last two estimates.

Q: Have you ever taken at least one puff from an e-cigarette? Was this in the past 12 months?

Source: The *CAMH Monitor*, Centre for Addiction and Mental Health

Figure 4.2.1

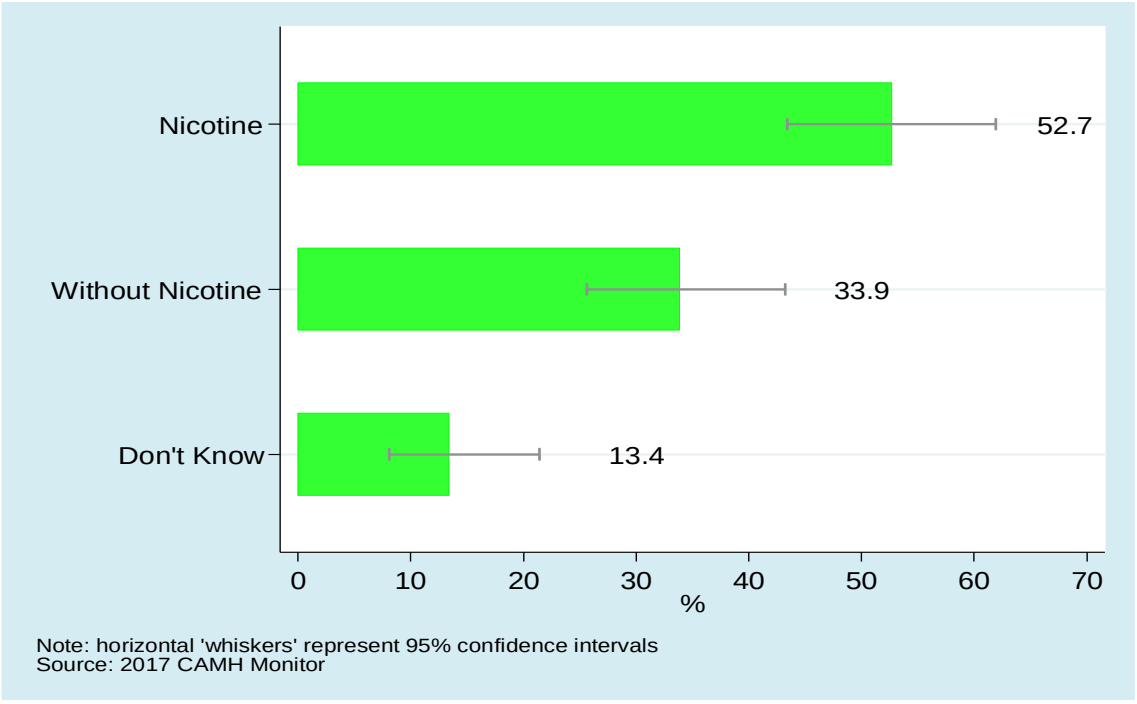
Past Year Electronic Cigarette Use by Sex, Age and Region, Ontarians Aged 18+, 2017 (N=2812)



Note: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal bar represents 95% confidence interval for total estimate
(3) significant difference by sex and age (p<.05)
Source: 2017 CAMH Monitor

Figure 4.2.2

Type of Electronic Cigarette Used, Past Year Users Aged 18+, 2017 (*n*=178)



Note: horizontal 'whiskers' represent 95% confidence intervals
Source: 2017 CAMH Monitor

5. CANNABIS and OTHER DRUGS

5.1 Cannabis Use

2017……..Tables 5.1.1 - 5.1.3; Fig. 5.1.1 - 5.1.2

Overall, an estimated **46.8%** (95% CI: 44.3 to 49.3) of Ontario adults used cannabis at least once in their lifetime, while **19.4%** (95% CI: 17.3% to 21.7%) used it in the 12 months before the survey. Population estimates for lifetime and past year use are 4,993,900 and 2,068,200 Ontario adults, respectively.

Frequency of cannabis use

Overall, **11.5%** of Ontario adults used cannabis once a month or more frequently. Among past year cannabis users, 41% used less than once a month and 59% used once a month or more frequently.

Sex, age, and **household income** were all significantly related to past year use of cannabis. While holding values of risk factors constant, adjusted group differences showed the following:

- The adjusted odds of use were significantly higher among men than women (25.8% vs. 13.5%; OR=2.14).
- Past year cannabis use showed a significant decline with age, dropping from 39.1% among 18 to 29 year olds to 11.4% among those aged 50 years and older. Compared to 18 to 29 year olds, the adjusted odds of past year cannabis use were significantly lower among 40 to 49 years olds (OR=0.34), and among those 50 and older (OR=0.23).
- Household income showed a significant association with past year cannabis use. The distinguishing feature was a higher rate among those with the lowest and highest incomes.

There were no significant differences according to region, marital status or education, after adjusting for other demographics.

Trends

1977–2017…… Table 5.1.4-5.1.5 Fig. 5.1.3 – 5.1.4

2016–2017

Prevalence of past year cannabis use was significantly **higher** in 2017 (19.4%) compared to 2016 (15.7%). This **increase** was especially evident among women (13.6% vs. 9.8%), among those aged 50 years and older (11.4% vs. 8.9%), among Toronto and East residents, and among those with university degrees.

2007–2017

Since 2007, the prevalence of past year cannabis use **increased** significantly from 12.5% in 2007 to 19.4% in 2017. The increasing trend has been most visible among men.

1996–2017

Since 1996, past year cannabis use among the total sample has **increased** significantly (more than doubled), from 8.7% to 19.4% in 2017, and the trend has been increasing steadily since 2008.

Increases were strongest among the youngest respondents and weakened with increasing age. Between 1996 and 2017, cannabis use increased among 18 to 29 year olds from 18.3% to 39.1%, but we also found a significant increase among those aged 50 and older, from 1.4% in 1998 to 11.4% in 2017, and the 2017 estimate is the **highest** on record for this age group.

Significant **increases** also occurred among men and women, and all region, marital status and education subgroups.

1977–2017

Since 1977, past year use of cannabis has increased appreciably. The current estimate of 19.4% is significantly higher than the 8.1% found in 1977, and the overall 2017 estimate is the **highest** on record. There were also significant increases over the longer term among **men** (from 9.1% in 1992 to 25.8% in 2017), **women** (from 4.5% in 1977 to 13.5% in 2017) and among **all age groups**.

Another important change is the aging of cannabis users (Fig 5.1.2). In 1977, 82% of past year cannabis users were aged 18 to 29 versus 42% in 2017. In contrast, the proportion of cannabis users aged 30 to 49 increased from 15% to 29%, and the proportion aged 50 and older increased almost 10-fold from 3% to 29% during the same period.

Table 5.1.1: Percentage Reporting ***Cannabis Use*** in their *Lifetime* and *Past 12 Months*, Ontarians Aged 18+, 2017

Total sample (N=2812)	Lower Limit %	Estimate %	Upper Limit %
Lifetime Use	44.3	**46.8**	49.3
Past 12 Months Use	17.3	**19.4**	21.7

Note: All estimates are sample design adjusted.
Source: The *CAMH Monitor*, Centre for Addiction and Mental Health

Table 5.1.2: Frequency of ***Cannabis Use*** among *Lifetime* and *Past Year Users,* Ontarians Aged 18+, 2017

Frequency of Cannabis Use	Lifetime Users (N=1166)	Past year Users (N=389)
	% (95% CI)	% (95% CI)
Used in lifetime, but not past 12 months	**58.4** (54.6, 62.2)	—
Used less than once a month during the past 12 months	**17.1** (14.2, 20.3)	**41.0** (34.9, 47.4)
Used once a month or more often during the past 12 months	**24.6** (21.3, 28.2)	**59.0** (52.6, 65.1)

Note: All estimates are sample design adjusted.
Source: The *CAMH Monitor*, Centre for Addiction and Mental Health

Table 5.1.3: Percentage ***Using Cannabis*** in the Past 12 Months and Adjusted Group Differences, Ontarians Aged 18+, 2017

	N	%	95% CI	Adjusted Odds Ratio (N=2714)
Total	2812	**19.4**	(17.3, 21.7)	—
Sex				*******
Men	1150	**25.8**	(22.4, 29.5)	**2.14*****
Women *(Comparison Group)*	1662	**13.5**	(11.3, 16.2)	—
Age				*******
18-29 *(Comparison Group)*	283	**39.1**	(32.5, 46.1)	—
30-39	199	**24.8**	(18.0, 33.3)	0.58
40-49	366	**15.2**	(11.4, 20.1)	**0.34*****
50+	1953	**11.4**	(9.6, 13.6)	**0.23*****
Region				NS
Toronto *(vs. Provincial Average)*	476	**24.8**	(20.0, 30.3)	1.26
Central East	476	**19.3**	(14.8, 24.8)	0.97
Central West	456	**16.4**	(12.1, 21.8)	0.81
West	468	**16.1**	(12.2, 21.0)	1.01
East	467	**20.5**	(15.9, 26.0)	1.18
North	469	**17.2**	(13.0, 22.4)	0.81
Marital Status				NS
Married/Partner *(Comparison Group)*	1730	**13.9**	(11.9, 16.2)	—
Previously Married	614	**†16.3**	(11.1, 23.3)	1.64
Never Married	441	**34.2**	(28.7, 40.1)	1.43
Education				NS
High school not completed *(Comparison Group)*	240	**†22.6**	(14.4, 33.7)	—
Completed high school	612	**18.8**	(14.9, 23.5)	0.66
Some college or university	986	**20.8**	(17.5, 24.6)	0.67
University degree	933	**18.2**	(14.7, 22.3)	**0.53***
Household Income				*******
< $30,000 *(Comparison Group)*	266	**28.7**	(21.1, 37.9)	—
$30,000-$49,999	347	**16.7**	(11.5, 23.6)	0.65
$50,000-$79,999	483	**14.5**	(10.6, 19.5)	**0.49***
$80,000+	1079	**24.0**	(20.6, 27.8)	1.05
Not stated	637	**11.7**	(8.4, 16.0)	**0.36****

Notes: (1) All analyses are sample design adjusted; * p<.05**;** **p<.01; ***p<.001; CI = 95% confidence interval; NS – no statistically significant difference; † Estimate unstable.
(2) Asterisks in group row indicate a statistically significant group effect, based on Wald test.
(3) ORs greater than 1.0 indicate that the odds of cannabis use are higher in the group being compared to the comparison group; ORs less than 1.0 indicate that the odds of cannabis use are lower in the group being compared to the comparison group.
(4) Adjusted odds ratio holding fixed values of sex, age, region, marital status, education, and income.
Q: *How many times, if any, have you used cannabis, marijuana or hash during the past 12 months*?
Source: The *CAMH Monitor*, Centre for Addiction and Mental Health

Table 5.1.4: Percentage ***Using Cannabis*** in the Past 12 Months by Demographic Characteristic, Ontarians Aged 18+, 1977– 2000

	1977	1982	1984	1987	1989	1991	1992	1994	1996	1997	1998	1999	2000
(N=)	(1059)	(1026)	(1043)	(1075)	(1098)	(1047)	(1058)	(2022)	(2721)	(2776)	(2509)	(2436)	(2406)
Total	**8.1**	**8.2**	**11.2**	**9.5**	**10.5**	**8.7**	**6.2**	**9.0**	**8.7**	**9.1**	**8.6**	**10.4**	**10.8**
(95% CI) [a]	(6.5,9.7)	(5.9,10.5)	(9.3,13.1)	(7.7,11.3)	(8.7,12.3)	7.0,10.4)	(4.7,7.7)	(7.8,10.2)	(7.6,9.8)	(7.8,10.3)	(7.3,10.0)	(9.1,11.9)	(9.4,12.4)
Sex													
Men	**11.2**	**12.3**	**15.6**	**12.3**	**13.0**	**11.5**	**9.1**	**11.4**	**12.6**	**11.4**	**12.1**	**13.2**	**14.3**
	(8.5,13.9)	(9.5,15.1)	(12.5,18.7)	(9.5,15.1)	(10.2,15.8)	(8.7,14.3)	(6.6,11.6)	(9.5,13.3)	(10.7,14.5)	(9.3,13.5)	(9.9,14.7)	(11.1,15.8)	(12.0,16.9)
Women	**4.5**	**4.1**	**7.1**	**6.8**	**8.2**	**6.0**	**3.6**	**7.0**	**5.3**	**7.0**	**5.4**	**7.8**	**7.7**
	(2.7,6.3)	(2.4,5.8)	(4.9,9.3)	(4.7,8.9)	(5.9,10.5)	(4.0,8.0)	(2.1,5.1)	(5.4,8.6)	(4.2,6.4)	(5.4,8.5)	(4.2,6.9)	(6.3,9.7)	(6.2,9.6)
Age													
18 - 29	**22.6**	**22.7**	**28.5**	**19.0**	**24.6**	**19.9**	**13.3**	**19.6**	**18.3**	**21.4**	**25.2**	**27.1**	**28.2**
	(17.8,27.4)	(17.7,27.7)	(23.1,33.9)	(14.9,24.2)	(19.2,30.0)	(15.1,24.7)	(9.3,17.3)	(16.0,23.2)	(15.0,21.6)	(17.4,25.3)	(20.8,30.1)	(22.6,32.0)	(23.7,33.2)
30 - 39	**3.9**	**4.2**	**9.5**	**11.6**	**11.8**	**9.1**	**6.6**	**10.2**	**11.3**	**9.8**	**8.2**	**10.3**	**12.3**
	(1.3,6.5)	(1.7,6.7)	(5.8,13.2)	(7.9,15.3)	(8.1,15.5)	(5.6,12.6)	(3.7,9.5)	(7.6,12.8)	(8.9,13.7)	(7.3,12.3)	(6.1,11.1)	(7.9,13.4)	(9.4,15.9)
40 - 49	**†2.3**	**†**	**†2.2**	**5.4**	**†3.9**	**†3.0**	**†2.4**	**4.3**	**6.1**	**4.3**	**4.6**	**6.8**	**6.4**
	(0.1,4.5)	—	(0.1,4.3)	(2.0,8.8)	(1.1,6.7)	(0.7,5.3)	(0.3,4.5)	(2.4,6.2)	(4.1,8.1)	(2.6,6.1)	(3.1,6.7)	(4.8,9.5)	(4.5,9.1)
50 +	**†1.2**	**†1.3**	**†1.8**	**†**	**†1.4**	**†**	**†1.3**	**†**	**†**	**†1.7**	**†1.4**	**4.1**	**†2.9**
	(0.3,2.7)	(0.2,2.8)	(0.2,3.6)	—	(0.1,3.0)	—	(0.5,3.1)	—	—	(0.6,2.8)	(0.3,2.5)	(2.3,5.9)	(1.4,4.4)
Region													
Toronto	—	—	—	—	—	—	—	—	**10.2**	**10.9**	**13.0**	**10.1**	**14.2**
									(7.5,13.8)	(8.1,14.7)	(9.7,17.3)	(7.3,13.6)	(10.9,18.4)
Central East	—	—	—	—	—	—	—	—	**†7.9**	**†8.0**	**†7.5**	**11.6**	**†5.7**
									(5.7,10.9)	(5.6,11.5)	(5.0, 11.1)	(8.5,15.7)	(3.6, 9.0)
Central West	—	—	—	—	—	—	—	—	**9.7**	**†8.5**	**†9.1**	**10.6**	**†6.8**
									(7.0,13.3)	(6.0,11.7)	(6.5,12.6)	(7.6,14.5)	(4.5,10.3)
West	—	—	—	—	—	—	—	—	**7.6**	**8.0**	**4.6**	**10.6**	**11.0**
									(5.2,10.8)	(5.6,11.3)	(2.8,7.4)	(7.7,14.4)	(7.8,15.2)
East	—	—	—	—	—	—	—	—	**8.0**	**11.0**	**7.4**	**9.7**	**9.0**
									(5.6,11.3)	(8.1,14.7)	(5.0,11.0)	(7.0,13.3)	(6.2,12.7)
North	—	—	—	—	—	—	—	—	**6.6**	**5.5**	**7.2**	**9.0**	**8.5**
									(4.4,9.7)	(3.7,8.2)	(4.8,10.7)	(6.3,12.9)	(5.9,12.3)
Marital Status													
Married	—	—	—	—	—	**4.0**	**3.5**	**4.1**	**4.9**	**5.1**	**4.3**	**6.4**	**6.2**
Previously Married	—	—	—	—	—	**6.5**	**6.3**	**8.6**	**6.7**	**6.0**	**3.9**	**6.2**	**†6.0**
Never Married	—	—	—	—	—	**20.2**	**13.7**	**20.9**	**19.5**	**20.1**	**22.9**	**25.3**	**26.4**
Education													
High school not completed	—	—	—	—	—	**6.3**	**6.3**	**8.5**	**6.1**	**9.8**	**6.8**	**7.7**	**10.4**
Completed high school	—	—	—	—	—	**9.8**	**5.2**	**9.6**	**9.5**	**10.4**	**10.7**	**10.6**	**9.5**
Some college or university	—	—	—	—	—	**10.7**	**6.7**	**10.3**	**11.3**	**9.0**	**10.2**	**13.5**	**15.7**
University degree	—	—	—	—	—	**7.6**	**7.2**	**7.0**	**7.0**	**7.4**	**5.6**	**8.5**	**7.0**

Notes: All estimates and analyses are sample design adjusted; [a] 95% confidence interval; — data not available; † Estimate unstable or suppressed.
Q: How many times, if any, have you used cannabis, marijuana or hash during the past 12 months?
Source: The *CAMH Monitor*, Centre for Addiction and Mental Health

Table 5.1.5: Percentage ***Using Cannabis*** in the Past 12 Months by Demographic Characteristic, Ontarians Aged 18+, 2001–2017

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Trend	
(N=)	(2627)	(2421)	(2411)	(2611)	(2445)	(2016)	(2005)	(2024)	(2037)	(3030)	(3039)	(3030)	(3021)	(3043)	(5013)	(3042)	(2812)		
Total	**11.2**	**11.5**	**12.8**	**12.4**	**14.4**	**13.4**	**12.5**	**13.1**	**13.3**	**14.2**	**13.4**	**13.5**	**14.1**	**12.9**	**14.5**	**15.7**	**19.4**	**T**	**2Y**
(95% CI) [a]	(9.9,12.8)	(10.1,13.1)	(11.4,14.5)	(10.8, 14.1)	(12.7, 16.2)	(11.5, 15.6)	(10.8,14.5)	(11.2, 15.3)	(11.5,15.4)	(12.6, 16.0)	(11.8,15.2)	(11.8,15.3)	(12.2, 16.1)	(11.2, 14.8)	(13.1, 16.1)	(13.8, 17.9)	(17.3, 21.7)		
Sex																			
Men	**15.4**	**15.3**	**16.0**	**16.0**	**18.8**	**18.6**	**15.2**	**18.2**	**17.4**	**19.9**	**16.3**	**16.8**	**17.6**	**15.8**	**19.2**	**22.2**	**25.8**	**T**	**–**
	(13.2,18.0)	(12.9,17.9)	(13.6,18.7)	(13.5, 18.9)	(16.0, 21.9)	(15.4,22.3)	(12.5,18.2)	(15.0,21.9)	(14.4,20.7)	(17.2, 22.9)	(13.7,19.3)	(14.2,19.8)	(14.7, 20.9)	(13.0, 19.0)	(16.8, 21.9)	(18.8, 25.9)	(22.4, 29.5)		
Women	**7.3**	**8.0**	**9.9**	**9.0**	**10.3**	**8.5**	**10.1**	**8.4**	**9.5**	**8.8**	**10.8**	**10.5**	**10.8**	**10.2**	**10.2**	**9.8**	**13.5**	**T**	**2Y**
	(5.7,9.2)	(6.4,10.0)	(8.2,11.9)	(7.3, 11.1)	(8.4, 12.5)	(6.6,10.8)	(8.0, 12.6)	(6.3,11.0)	(7.3,12.2)	(7.2,10.7)	(8.8, 13.0)	(8.5, 12.8)	(8.9, 13.3)	(8.2, 12.6)	(8.7, 12.0)	(8.0, 12.0)	(11.3, 16.2)		
Age																			
18 - 29	**26.8**	**26.6**	**33.6**	**34.3**	**38.2**	**38.2**	**33.6**	**34.6**	**35.8**	**33.8**	**33.5**	**34.3**	**40.4**	**28.3**	**37.9**	**32.4**	**39.1**	**T**	**–**
	(22.5,31.7)	(22.1,31.7)	(28.7,38.9)	(28.9, 40.2)	(32.4, 44.2)	(31.6,45.4)	(27.3,40.5)	(27.4,42.7)	(28.6,43.7)	(28.0,40.0)	(27.4,40.2)	(27.6, 41.8)	(32.8, 48.6)	(21.6, 36.1)	(32.6, 43.5)	(25.7, 39.8)	(32.5, 46.1)		
30 - 39	**15.8**	**14.7**	**12.0**	**14.7**	**16.9**	**14.1**	**12.5**	**15.2**	**12.9**	**18.9**	**16.1**	**15.4**	**17.3**	**19.6**	**15.0**	**20.4**	**24.8**	**T**	**–**
	(12.5,19.8)	(11.5,18.7)	(9.1,15.7)	(11.3, 19.0)	(13.1, 21.6)	(10.4,18.9)	(9.0,17.2)	(11.0,20.6)	(9.2,17.7)	(14.6, 24.0)	(12.5,20.5)	(11.8, 19.9)	(13.0, 22.8)	(14.6, 25.9)	(11.6, 19.2)	(14.7, 27.5)	(18.0, 33.3)		
40 - 49	**7.2**	**7.6**	**9.5**	**7.3**	**10.8**	**8.4**	**9.9**	**9.9**	**11.7**	**10.1**	**9.2**	**10.8**	**8.4**	**10.4**	**8.8**	**12.4**	**15.2**	**T**	**–**
	(5.3,9.7)	(5.4,10.5)	(7.3,12.3)	(5.2, 10.2)	(8.2, 14.1)	(5.8,12.1)	(7.0,13.8)	(7.0,13.9)	(8.5,15.8)	(7.7,13.0)	(6.8,12.3)	(8.2,14.1)	(6.1,11.4)	(7.5,14.1)	(6.6,11.6)	(9.3,16.4)	(11.4,20.1)		
50 +	**†3.3**	**†3.3**	**†3.1**	**†3.0**	**†2.6**	**†2.6**	**†4.6**	**†4.0**	**†4.7**	**5.4**	**5.2**	**6.4**	**5.9**	**6.3**	**7.2**	**8.9**	**11.4**	**T**	**2Y**
	(1.8,4.8)	(2.2, 5.0)	(2.0, 4.8)	(2.4, 4.4)	(1.7, 3.9)	(1.7, 3.8)	(3.3,6.4)	(2.7, 5.8)	(3.4, 6.3)	(4.3, 6.8)	(4.1, 6.6)	(5.1, 7.9)	(4.7, 7.5)	(5.1, 7.8)	(6.1, 8.3)	(7.5, 10.6)	(9.6, 13.6)		
Region																			
Toronto	**14.3**	**13.0**	**14.7**	**13.7**	**19.0**	**13.7**	**15.8**	**12.4**	**15.9**	**15.6**	**12.2**	**12.9**	**15.0**	**13.5**	**13.9**	**16.8**	**24.8**	**T**	**2Y**
	(10.9,18.7)	(9.7,17.2)	(11.3,19.0)	(10.2, 18.1)	(14.7, 24.1)	(9.7,19.0)	(11.6,21.0)	(8.6,17.5)	(11.6,21.5)	(12.1, 20.0)	(9.1, 16.3)	(9.7, 16.9)	(10.9, 20.3)	(9.9, 18.2)	(10.9, 17.5)	(12.9, 21.6)	(20.0, 30.3)		
C-East	**11.7**	**12.4**	**12.0**	**13.6**	**16.9**	**†14.9**	**†8.6**	**16.9**	**†12.3**	**14.7**	**12.6**	**12.4**	**15.5**	**13.6**	**18.1**	**16.0**	**19.3**	**T**	**–**
	(8.8, 15.5)	(9.2,16.4)	(9.0,15.7)	(9.9, 18.4)	(13.0, 21.6)	(10.6, 20.5)	(5.7,12.9)	(2.2, 23.0)	(8.6,17.3)	(11.1, 19.1)	(9.2,17.0)	(9.0, 17.0)	(11.6, 20.3)	(9.9, 18.3)	(14.8, 22.1)	(11.7, 21.4)	(14.8, 24.8)		
C-West	**9.5**	**12.1**	**11.9**	**11.7**	**11.9**	**†12.7**	**†9.4**	**†10.5**	**12.5**	**12.6**	**15.2**	**15.2**	**17.2**	**16.0**	**13.1**	**17.9**	**16.4**	**T**	**–**
	(6.9,13.0)	(8.8,16.2)	(8.7,16.1)	(8.5, 15.8)	(8.7, 16.2)	(8.6,18.4)	(6.3,14.0)	(7.1,15.4)	(9.0,17.1)	(9.3, 16.9)	(11.5, 20.0)	(11.4, 20.0)	(13.0, 22.4)	(12.0, 21.1)	(10.2, 16.6)	(13.3, 23.8)	(12.1, 21.8)		
West	**9.6**	**10.0**	**11.6**	**11.1**	**11.6**	**15.9**	**14.0**	**13.0**	**13.8**	**12.1**	**15.4**	**16.0**	**†10.3**	**†8.7**	**10.6**	**12.1**	**16.1**	**T**	**–**
	(7.0,13.2)	(7.2,13.7)	(8.5,15.6)	(8.1, 15.0)	(8.5, 15.6)	(11.7,21.3)	(10.1,19.0)	(8.8,18.8)	(9.4,19.7)	(8.8, 16.3)	(11.4, 20.3)	(12.3, 20.5)	(7.1, 14.8)	(6.1, 12.4)	(8.0, 13.8)	(8.6, 16.7)	(12.2, 21.0)		
East	**10.9**	**8.2**	**14.4**	**11.9**	**11.4**	**10.1**	**16.8**	**12.0**	**11.4**	**13.9**	**12.9**	**†12.4**	**†10.6**	**†9.1**	**13.9**	**13.1**	**20.5**	**T**	**2Y**
	(8.0,14.8)	(5.6,11.8)	(11.0,18.6)	(8.8, 15.9)	(8.2, 15.6)	(6.6,15.2)	(12.3,22.6)	(8.1,17.3)	(7.6,16.6)	(10.5, 18.3)	(9.6, 17.2)	(8.8, 17.0)	(7.5, 14.8)	(6.3, 13.0)	(10.9, 17.5)	(9.6, 17.5)	(15.9, 26.0)		
North	**8.8**	**11.8**	**11.5**	**11.1**	**10.9**	**11.5**	**13.0**	**†11.9**	**†14.4**	**16.6**	**12.7**	**†11.7**	**†9.4**	**13.4**	**15.5**	**17.7**	**17.2**	**T**	**–**
	(6.6,11.7)	(8.8,15.7)	(8.5,11.3)	(8.6, 14.3)	(7.8, 15.1)	(8.2,16.1)	(9.3,18.0)	(8.2,16.9)	(10.0,20.3)	(12.7, 21.4)	(9.2,17.2)	(8.3,16.3)	(6.6,13.2)	(9.9,17.9)	(12.5,19.1)	(13.3,23.2)	(13.0,22.4)		

Cont'd

(N=)	2001 (2627)	2002 (2421)	2003 (2411)	2004 (2611)	2005 (2445)	2006 (2016)	2007 (2005)	2008 (2024)	2009 (2037)	2010 (3030)	2011 (3039)	2012 (3030)	2013 (3021)	2014 (3043)	2015 (5013)	2016 (3042)	2017 (2812)	Trend	
Marital Status																			
Married/ Partner	**6.7**	**7.4**	**7.6**	**6.4**	**7.2**	**7.4**	**7.8**	**7.4**	**9.3**	**9.6**	**8.3**	**8.2**	**8.4**	**8.3**	**8.9**	**11.3**	**13.9**	**T**	–
Previously Married	**9.0**	**9.2**	**10.5**	**9.9**	**10.0**	**9.4**	**8.4**	**9.4**	**7.8**	**10.7**	**11.2**	**10.3**	**9.1**	**11.4**	**9.5**	**13.2**	**†16.3**	**T**	**–**
Never Married	**25.4**	**24.3**	**29.2**	**31.9**	**31.6**	**34.4**	**31.8**	**34.4**	**30.1**	**30.5**	**30.2**	**31.3**	**34.5**	**27.2**	**33.0**	**29.1**	**34.2**	**T**	**–**
Education																			
HS not completed	**†7.8**	**11.0**	**9.9**	**7.0**	**10.3**	**13.1**	**†7.7**	**13.1**	**13.2**	**†12.6**	**†11.8**	**†16.0**	**†11.1**	**†10.3**	**†7.9**	**†12.9**	**†22.6**	**T**	–
Completed HS	**13.1**	**13.2**	**15.8**	**12.7**	**15.0**	**15.2**	**17.1**	**15.2**	**15.0**	**16.5**	**14.7**	**12.6**	**18.5**	**12.9**	**18.5**	**17.2**	**18.8**	**T**	**–**
Some college or university	**12.3**	**13.3**	**15.4**	**15.7**	**17.0**	**14.2**	**15.9**	**14.2**	**14.8**	**16.1**	**15.1**	**15.1**	**15.3**	**14.7**	**18.2**	**19.5**	**20.8**	**T**	**–**
University degree	**10.2**	**8.8**	**9.2**	**11.2**	**12.4**	**11.7**	**†7.4**	**11.7**	**11.0**	**11.1**	**11.4**	**12.0**	**11.0**	**12.0**	**9.7**	**12.2**	**18.2**	**T**	**2Y**

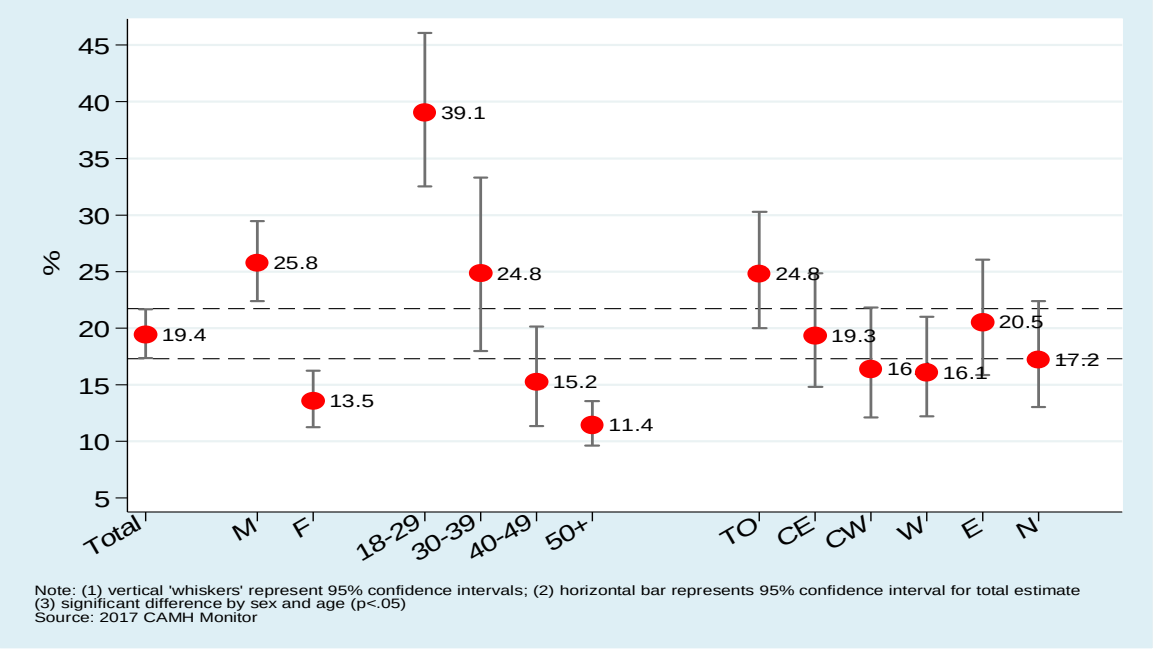
Notes: (1) All estimates are sample design adjusted; [a] 95% confidence interval; **†** Estimate unstable or suppressed; the sampling design was changed in 2017 to dual-frame sampling (landline + cell-phone).
(2) Trend Analysis: **–** change not statistically significant (p<.05); **T** statistically significant change (p<.05) between 1996-2017; **2Y** statistically significant change (p<.05) between last two estimates;

Q: *How many times, if any, have you used cannabis, marijuana or hash during the past 12 months?*

Source: The *CAMH Monitor*, Centre for Addiction and Mental Health

Figure 5.1.1

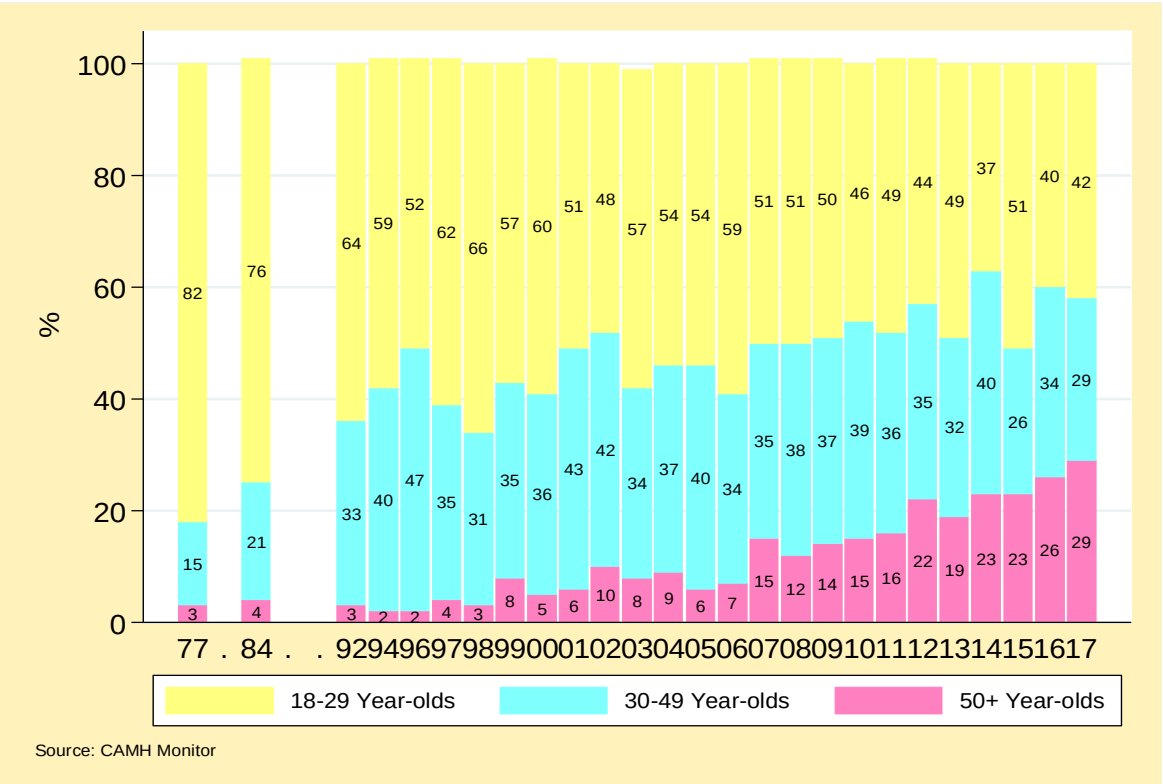
Past Year Cannabis Use by Sex, Age and Region, Ontarians Aged 18+, 2017 (N=2812)



Note: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal bar represents 95% confidence interval for total estimate
(3) significant difference by sex and age (p<.05)
Source: 2017 CAMH Monitor

Figure 5.1.2

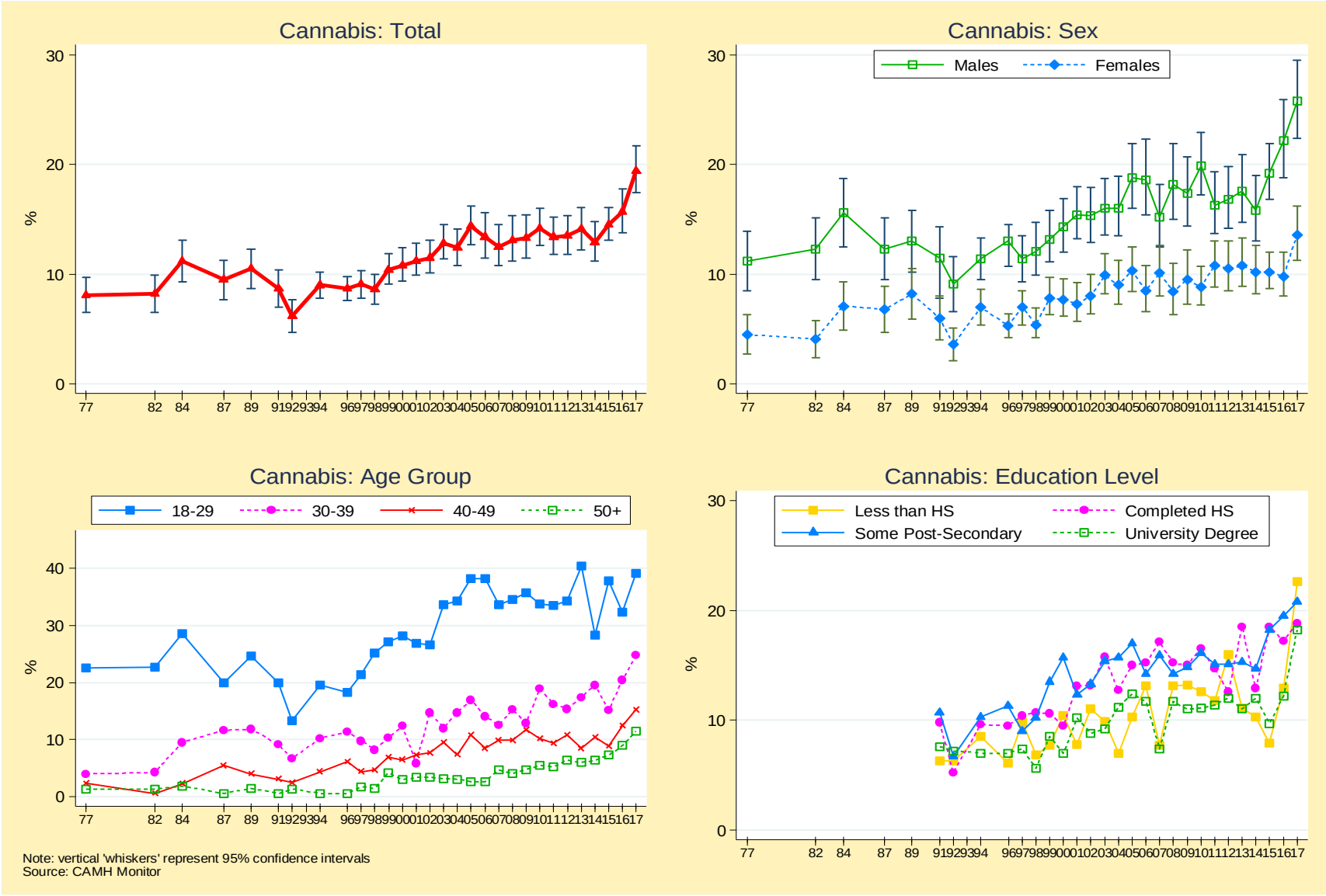
Age Distribution of Past Year Cannabis Users, Ontarians Aged 18+, 1977–2017



Source: CAMH Monitor

Figure 5.1.3

Past Year Cannabis Use, Ontarians Aged 18+, 1977–2017



Note: vertical 'whiskers' represent 95% confidence intervals
Source: CAMH Monitor

5.1.1. Cannabis Use Problems (ASSIST–CIS)

To provide estimates of cannabis use problems, we used the *Cannabis Involvement Score* (CIS) from the World Health Organization's *Alcohol, Smoking and Substance Involvement Screening Test* (ASSIST V3.0). The WHO developed the ASSIST as a screening instrument designed to assess the risk of experiencing health and other problems (e.g. social, financial, legal, relationship) from their current pattern of use (WHO ASSIST Working Group, 2002).

The ASSIST–CIS was first introduced in the CM in 2004 and is asked only of past three month cannabis users. It consists of a 6-item screener (addressing frequency of use, strong desire to use, legal or financial problems from use, lack of control over one's own use, failure to meet expectations, and having someone express concern about using) and a protocol for scoring responses (see Table 5.1.6).

The ASSIST–CIS, which ranges in value from 0 to 39, captures aspects of harmful/hazardous use, abuse and dependence and provides three categories to assess the risk of experiencing health and other problems: 1) *low risk* (scores of 0–3) indicating a pattern of use associated with a low risk of experiencing problems; 2) *moderate risk* (scores of 4–26) indicating a pattern of use associated with a moderate risk of experiencing problems; and 3) *high risk* (scores of 27 or more) indicating a pattern of use that is associated with a high risk of experiencing problems and is likely to lead to dependency.

We use a score of 4 or more on the ASSIST–CIS screener as a cut-off to estimate the percentage of respondents who present a moderate to high risk of experiencing cannabis use problems. In 2017, ASSIST-CIS items were asked only of a random subsample of respondents (N=1,813).

2017 ……Tables 5.1.7 - 5.1.8; Fig. 5.1.4

Overall, an estimated **9.5%** (95% CI: 7.7% to 11.7%) of Ontario adults and **53.3%** (95% CI: 45.0% to 61.3%) of past year cannabis users met the criteria for **moderate to high risk** of cannabis use problems. The population estimate is 1,003,000 adults.

Among the **total sample**, adjusted group differences show the following:

- The odds of experiencing cannabis problems were more than three times higher among men than women (15.0% vs. 4.9%; OR=3.31).
- The odds of experiencing cannabis problems were 3 times higher among those aged 18 to 29 than among those aged 30 and older (19.5% vs. 6.9%; OR=3.10).

Among **past year users** there were significant differences only by sex.

Trends

2004–2017……Tables 5.1.9 - 5.1.10; Fig. 5.1.5

2016–2017

Overall, the prevalence of cannabis use problems was not significantly different between 2016 and 2017 (9.1% vs. 9.5%), and rates were stable for both men and women and both age groups.

Among **past year users** we found similar patterns. The estimate of past year cannabis problems among past year cannabis users was not significantly different between 2016 and 2017 (59.6% vs. 53.3%) and rates were stable for all subgroups.

2004–2017

Overall, there was a statistically significant **increase** in the percentage reporting cannabis use problems from 5.8% in 2004 to 9.5% in 2017. These increases were especially evident among men and among those aged 30 and older.

Among past year cannabis users, estimates of cannabis use problems between 2004 and 2017 were generally stable, despite fluctuations between 38.5% and 59.6%.

Table 5.1.6: Percentage Reporting ***Cannabis Involvement Score Indicators (ASSIST-CIS)***, Ontarians *Overall* and Ontarian *Past Year Cannabis Users*, Aged 18+, 2017

ASSIST ITEMS	Response Weight and Response Category	Total[1] (N=1813)	Past year Cannabis Users[2] (N=239)
ASSIST Q1. How often have you used cannabis, marijuana or hash during the past 3 months?	0. Never	85.9	22.7
	2. Once or twice	†3.1	†16.8
Abuse indicator	3. Monthly	†3.0	†16.7
	4. Weekly	†4.1	†22.7
	6. Daily or almost daily	†3.9	†21.2
	Mean (SE)	.55 (.05)	3.01 (.18)
ASSIST Q2. During the past 3 months, how often have you had a strong desire or urge to use cannabis, marijuana or hash?	0. Never	94.0	67.2
	3. Once or twice	†1.6	†8.5
	4. Monthly	†1.0	†5.4
Dependence indicator	5. Weekly	†1.0	†5.6
	6. Daily or almost daily	†2.4	†13.4
	Mean (SE)	.28 (.04)	1.55 (.21)
ASSIST Q3. During the past 3 months, how often has your use of cannabis, marijuana or hash led to health, social, legal or financial problems?	0. Never	98.7	92.8
	4. Once or twice	†	†3.1
	5. Monthly	†	†1.7
Abuse and harmful use indicator	6. Weekly	†	†
	7. Daily or almost daily	†	†2.5
	Mean (SE)	.07 (.03)	.37 (.14)
ASSIST Q4. During the past 3 months, how often have you failed to do what was normally expected of you because of your use of cannabis, marijuana or hash?	0. Never	98.6	92.4
	5. Once or twice	†	†5.1
	6. Monthly	†	†1.1
Abuse indicator	7. Weekly	†	†
	8. Daily or almost daily	†	†1.4
	Mean (SE)	.08 (.03)	.43 (.16)
ASSIST Q5. Has a friend, relative, a doctor or anyone else ever expressed concern about your use of cannabis, marijuana or hash?	0. Never	97.9	88.8
	3. Yes, not past 3 months	†1.4	†7.8
	6. Yes, past 3 months	†	†3.5
Abuse and dependence indicator	Mean (SE)	.08 (.02)	.44 (.11)
ASSIST Q6. Have you ever tried and failed to control, cut down or stop using cannabis, marijuana or hash?	0. Never	97.0	83.9
	3. Yes, not past 3 months	†1.9	†10.6
Dependence indicator	6. Yes, past 3 months	†1.0	†5.5
	Mean (SE)	.12 (.03)	.65 (.16)

Notes: [1]ASSIST-CIS items were asked only of a random subsample of respondents (N=1,813); [2]Analysis based on unconditional subclass of past year cannabis users (N=239); all analyses are sample design adjusted; † Estimate unstable or suppressed.

Def'n: The ASSIST–CIS (WHO) screener measures risk of experiencing cannabis use problems.

Source: *CAMH Monitor*, Centre for Addiction and Mental Health

Table 5.1.7: Percentage Reporting Moderate or High ***Risk of Cannabis Use Problems (ASSIST–CIS/4+)*** in the Past Three Months and Adjusted Group Differences, Ontarians Aged 18+, 2017

		N	%	95% CI	Adjusted Odds Ratio (N=1799)
Total[1]		1813	**9.5**	(7.7, 11.7)	—
Sex					***
Men		718	**15.0**	(11.6, 19.1)	**3.31*** **
Women	*(Comparison Group)*	1095	**†4.9**	(3.4, 6.9)	—
Age					***
18-29		184	**†19.5**	(13.6, 27.1)	**3.10*** **
30+	*(Comparison Group)*	1620	**6.9**	(5.3, 8.9)	—

Notes: (1) All analyses are sample design adjusted; *p<.05**;** **p<.01; ***p<.001; CI = 95% confidence interval; NS – no significant difference; † Estimate suppressed or unstable; [1]ASSIST-CIS items were asked only of a random subsample of respondents.
(2) Asterisks in group row indicate a statistically significant group effect, based on Wald test.
(3) ORs greater than 1.0 indicate that the odds of cannabis use problems are higher in the group being compared to the comparison group; ORs less than 1.0 indicate that the odds of cannabis problems are lower in the group being compared to the comparison group;
(4) Adjusted odds ratio holding fixed values for sex, and age.
Def'n: The ASSIST–CIS (WHO) screener measures risk of experiencing cannabis use problems as indicated by a score of 4 or more.
Source: The *CAMH Monitor*, Centre for Addiction and Mental Health

Table 5.1.8: Percentage Reporting Moderate or High ***Risk of Cannabis Use Problems (ASSIST–CIS/4+)*** in the Past Three Months and Adjusted Group Differences, Ontario ***Cannabis Users***[1], Aged 18+, 2017

		N	%	95% CI	Adjusted Odds Ratio (N=233)
Total [1]		239	**53.3**	(45.0, 61.3)	—
Sex					**
Men		126	**62.5**	(50.9, 72.8)	**2.70** **
Women	*(Comparison Group)*	113	**38.3**	(28.0, 49.7)	—
Age					NS
18-29		71	**50.3**	(36.6, 64.0)	0.71
30+	*(Comparison Group)*	165	**56.5**	(47.1, 65.4)	—

Notes: (1) All analyses are sample design adjusted; *p<.05**;** **p<.01; ***p<.001; CI = 95% confidence interval; NS – no statistically significant difference; † Estimate suppressed or unstable; [1]Analysis based on unconditional subclass of past year cannabis users (N=239).
(2) Asterisks in group row indicate a statistically significant group effect, based on Wald test.
(3) ORs greater than 1.0 indicate that the odds of cannabis use problems are higher in the group being compared to the comparison group; ORs less than 1.0 indicate that the odds of cannabis problems are lower in the group being compared to the comparison group;
(4) Adjusted odds ratio holding fixed values for sex and age.
Def'n: The ASSIST (WHO) screener measures risk of experiencing cannabis use problems as indicated by a score of 4.
Source: The *CAMH Monitor*, Centre for Addiction and Mental Health

Table 5.1.9: Percentage Reporting Moderate or High ***Risk of Cannabis Use Problems (ASSIST–CIS 4+)*** in the Past Three Months, by Demographic Characteristics, Ontarians Aged 18+, 2004–2017

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Trend	
(N=)	(2611)	(1255)	(2016)	(2005)	(2024)	(2037)	(2024)	(1999)	(2015)	(2060)	(2004)	(1005)	(1020)	(1813		
Total	**5.8**	**6.3**	**6.0**	**5.2**	**5.6**	**6.9**	**7.1**	**5.6**	**4.7**	**7.5**	**6.5**	**7.5**	**9.1**	**9.5**	**T**	**–**
(95% CI) [a]	(4.7, 7.1)	(4.8, 8.2)	(4.6, 7.7)	(4.1, 6.5)	(4.3, 7.3)	(5.5, 8.6)	(5.6, 8.9)	(4.3, 7.2)	(3.5, 6.4)	(5.9, 9.5)	(4.9, 8.5)	(5.3,10.5)	(6.7, 12.2)	(7.7, 11.7)		
Sex																
Men	**8.6**	**8.2**	**10.1**	**6.3**	**8.3**	**9.4**	**11.8**	**7.7**	**†6.6**	**9.6**	**†8.2**	**†11.4**	**†14.7**	**15.0**	**T**	**–**
	(6.8, 11.0)	(5.7, 11.7)	(7.5,13.4)	(4.7, 8.5)	(6.2,11.0)	(7.1, 12.3)	(9.1, 15.1)	(5.5, 10.6)	(4.6, 9.3)	(7.1, 12.9)	(5.7, 11.7)	(7.5, 17.0)	(10.3, 20.5)	(11.6, 19.1)		
Women	**†3.1**	**†4.6**	**†2.1**	**†4.0**	**†3.2**	**4.5**	**†2.4**	**†3.7**	**†3.1**	**†5.4**	**†4.8**	**†3.8**	**†3.8**	**†4.9**	**–**	**–**
	(2.2, 4.4)	(3.1, 6.9)	(1.2, 3.5)	(2.7,5.9)	(1.8,5.5)	(3.1, 6.6)	(1.5, 3.8)	(2.4, 5.7)	(1.8, 5.3)	(3.7, 7.9)	(3.2, 7.2)	(2.1, 6.7)	(2.3, 6.1)	(3.4, 6.9)		
Age																
18-29	**18.4**	**16.5**	**19.2**	**14.9**	**16.3**	**22.2**	**17.6**	**15.8**	**†13.2**	**†22.9**	**†17.6**	**†18.2**	**†17.7**	**†19.5**	**–**	**–**
	(14.3, 23.3)	(11.2, 23.6)	(13.9,26.0)	(10.6, 20.5)	(10.9, 23.5)	(16.3, 29.4)	(12.3, 24.5)	(10.6, 22.9)	(10.6, 22.9)	(16.0, 31.8)	(11.3, 26.4)	(10.5, 29.6)	(9.4, 31.0)	(13.6, 27.1)		
30 +	**2.8**	**3.9**	**2.6**	**3.0**	**3.2**	**3.5**	**4.4**	**3.1**	**3.0**	**4.3**	**†4.2**	**†4.6**	**†7.6**	**6.9**	**T**	**–**
	(2.0, 3.9)	(2.7, 5.7)	(1.7,3.8)	(2.2,4.1)	(2.3,4.4)	(2.6, 4.7)	(3.3, 5.9)	(2.3, 4.3)	(2.3, 4.3)	(3.3, 5.7)	(3.0, 5.9)	(3.0, 6.9)	(5.4, 10.7)	(5.3, 8.9)		

Notes: (1) [a] 95% confidence interval; † Estimate suppressed or unstable; all analyses are sample design adjusted.
(2) Trend Analysis: **–** change not statistically significant (p<.05); **T** significant change (p<.05) between 2004-2017;
2Y significant change (p<.05) between the last two estimates.
Def'n: *The WHO ASSIST screener measures the risk of experiencing cannabis use problems as indicated by a score of 4 or more.*
Source: The *CAMH Monitor*, Centre for Addiction and Mental Health

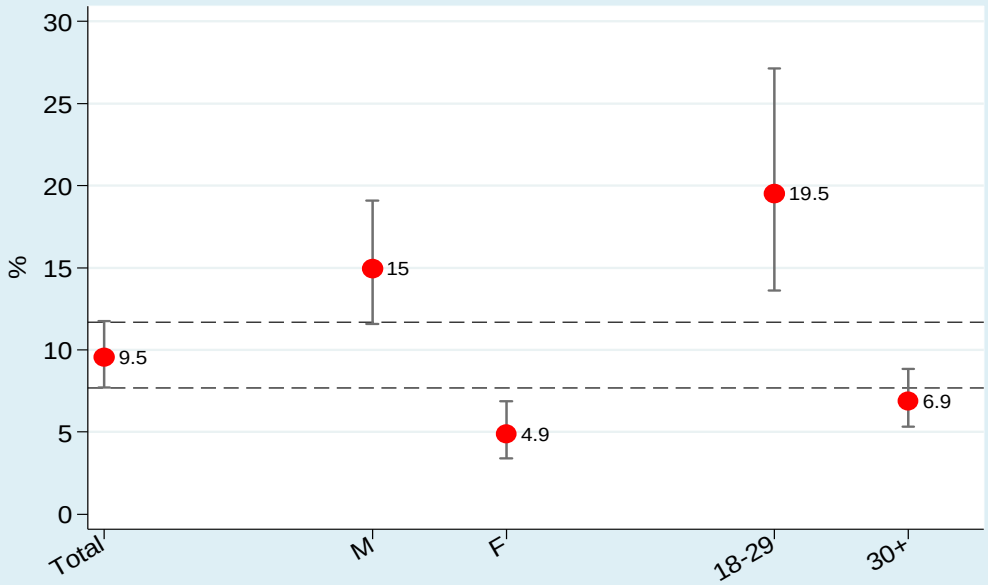
Table 5.1.10: Percentage Reporting Moderate or High ***Risk of Cannabis Use Problems (ASSIST–CIS 4+)*** in the Past Three Months, by Demographic Characteristics, Ontario ***Cannabis Users***[1] Aged 18+, 2004–2017

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Trend	
(N=)	(279)	(145)	(209)	(222)	(209)	(211)	(249)	(196)	(192)	(181)	(193)	(122)	(111)	(239)		
Total [1]	**47.2**	**47.1**	**44.9**	**41.4**	**43.4**	**51.9**	**43.6**	**41.7**	**38.5**	**55.4**	**46.3**	**45.1**	**59.6**	**53.3**	**–**	**–**
(95% CI) [a]	(40.1,54.3)	(37.7, 60.7)	(36.6,53.4)	(33.9,49.2)	(35.0,52.3)	(43.8, 59.8)	(36.2, 51.3)	(33.5, 50.4)	(29.9, 47.9)	(46.3, 64.1)	(37.4, 55.5)	(34.2, 56.5)	(47.5, 70.7)	(45.0, 61.3)		
Sex																
Men	**54.4**	**47.5**	**54.8**	**40.0**	**38.3**	**54.2**	**52.3**	**49.6**	**43.3**	**62.4**	**49.5**	**51.6**	**65.7**	**62.5**	**–**	**–**
	(45.1,63.4)	(35.0,60.4)	(44.2,64.9)	(28.8, 52.3)	(24.2,54.6)	(44.2, 63.9)	(42.8, 61.7)	(38.2, 61.1)	(32.2, 55.1)	(50.7, 72.9)	(37.2, 61.9)	(37.2, 65.8)	(49.8, 78.8)	(50.9, 72.8)		
Women	**35.0**	**46.6**	**†24.4**	**42.3**	**46.0**	**47.9**	**†24.0**	**32.1**	**†31.6**	**46.3**	**41.9**	**†33.1**	**†44.5**	**38.3**	**–**	**–**
	(25.5,45.9)	(32.9,60.7)	(15.0,37.2)	(32.7,52.6)	(35.7,56.7)	(34.7, 61.3)	(15.2, 35.6)	(21.5, 44.9)	(19.3, 47.3)	(33.3, 59.9)	(29.8, 55.2)	(19.5, 50.3)	(28.9, 61.3)	(28.0, 49.7)		
Age																
18-29	**54.0**	**46.1**	**50.6**	**44.3**	**47.4**	**62.0**	**47.3**	**46.2**	**†43.0**	**59.0**	**58.7**	**†55.9**	**†57.9**	**50.3**	**–**	**–**
	(43.6,64.1)	(32.5,60.2)	(38.8,62.2)	(32.9,56.3)	(34.0,61.3)	(48.8, 73.7)	(35.2, 59.8)	(32.5, 60.5)	(27.7, 59.8)	(43.8, 72.6)	(41.2, 74.3)	(37.2, 73.1)	(32.7, 79.5)	(36.6, 64.0)		
30 +	**39.0**	**48.3**	**36.7**	**39.0**	**39.4**	**41.6**	**39.7**	**36.1**	**34.9**	**51.8**	**39.0**	**†37.1**	**60.3**	**56.5**	**T**	**–**
	(30.0,49.1)	(35.9,61.0)	(26.6,48.2)	(29.7,49.1)	(29.7,49.9)	(32.4, 51.5)	(31.0, 49.2)	(27.2, 46.1)	(26.3, 44.6)	(41.7, 61.7)	(29.5, 49.4)	(25.5, 50.3)	(47.0, 72.3)	(47.1, 65.4)		

Notes: [1]Analysis based on unconditional subclass of past year cannabis users.
(1) [a] 95% confidence interval; † Estimate suppressed or unstable; all analyses are sample design adjusted.
(2) Trend Analysis: **–** change not statistically significant (p<.05); **T** significant change (p<.05) between 2004-2017;
2Y significant change (p<.05) between the last two estimates.
Def'n: *The WHO ASSIST screener measures the risk of experiencing cannabis use problems as indicated by a score of 4 or more.*
Source: The *CAMH Monitor*, Centre for Addiction and Mental Health

Figure 5.1.4

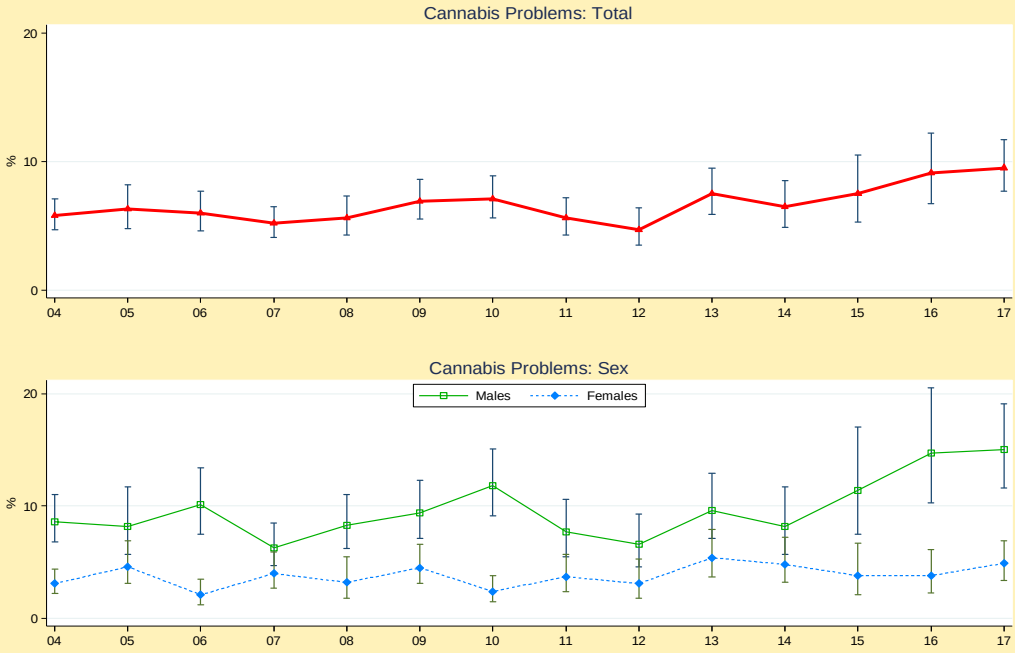
Percentage Reporting Cannabis Use Problems in the Past Three Months by Sex and Age, Ontarians Aged 18+, 2017 (N=1813)



Note: (1) Vertical 'whiskers' represent 95% confidence intervals; (2) horizontal bar represents 95% confidence interval for total estimate
(3) significant difference by sex and age (p<.05)
Source: 2017 CAMH Monitor

Figure 5.1.5

Percentage Reporting Cannabis Use Problems in the Past Three Months, Ontarians Aged 18+, 2004–2017



Note: vertical 'whiskers' represent 95% confidence intervals
Source: CAMH Monitor

5.1.2. Cannabis Use for Medical Purposes

To provide estimates of cannabis use for medical purposes, the survey asked respondents about their use of cannabis to treat any medical problem. The question asked was: "In the past 12 months, have you ever used cannabis to treat pain, nausea, glaucoma, multiple sclerosis, or any other medical condition?" Response options were *yes* or *no*.

2017 ……Tables 5.1.11 - 5.1.12

Overall, an estimated **7.2%** (95% CI: 5.8% to 8.9%) of Ontario adults, and **37.2%** (95% CI: 31.1% to 43.6%) of past year cannabis users, reported using cannabis for medical purposes. The population estimate is 766,200 Ontario adults.

Among the **total sample**, adjusted group differences show the following:

- The odds of using cannabis for medical purposes were about two times higher among men than women (9.8% vs. 4.8%; OR=2.06).

- Compared to those aged 18 to 29, the odds of using cannabis for medical purposes were significantly lower among those aged 40 to 49 and 50 and older (OR=0.33 and OR=0.37, respectively).

Among **past year users** there were no significant differences by sex or age.

Table 5.1.11: Percentage Reporting ***Cannabis Use for Medical Purposes*** in the Past Three Months and Adjusted Group Differences, Ontarians Aged 18+, 2017

	N	%	95% CI	Adjusted Odds Ratio (N=2768)
Total	2812	**7.2**	(5.8, 8.9)	—
Sex				**
Men	1150	**9.8**	(7.5, 12.6)	**2.06****
Women *(Comparison Group)*	1662	**†4.8**	(3.4, 6.8)	—
Age				***
18-29 *(Comparison Group)*	283	**†12.8**	(8.7, 18.5)	—
30-39	199	**†10.7**	(5.9, 18.7)	0.84
40-49	366	**†4.3**	(2.3, 7.9)	**0.33****
50+	1953	**†5.0**	(3.9, 6.6)	**0.37*****

Notes: (1) All analyses are sample design adjusted; *p<.05**;** **p<.01; ***p<.001; CI = 95% confidence interval; NS – no significant difference; † Estimate suppressed or unstable;
(2) Asterisks in group row indicate a statistically significant group effect, based on Wald test.
(3) ORs greater than 1.0 indicate that the odds of cannabis use are higher in the group being compared to the comparison group; ORs less than 1.0 indicate that the odds of cannabis use are lower in the group being compared to the comparison group;
(4) Adjusted odds ratio holding fixed values for sex, and age.

Q: *In the past 12 months, have you used cannabis to treat pain, nausea, glaucoma, MS, or any other medical condition?*

Source: The *CAMH Monitor*, Centre for Addiction and Mental Health

Table 5.1.12: Percentage Reporting ***Cannabis Use for Medical Purposes*** in the Past Three Months and Adjusted Group Differences, Ontario ***Cannabis Users***, Aged 18+, 2017

	N	%	95% CI	Adjusted Odds Ratio (N=386)
Total	389	**37.2**	(31.1, 43.6)	—
Sex				NS
Men	222	**37.9**	(37.2, 65.8)	1.08
Women *(Comparison Group)*	167	**35.8**	(19.5, 50.3)	—
Age				NS
18-29 *(Comparison Group)*	111	**32.9**	(23.2, 44.2)	—
30-39	48	**†43.2**	(26.1, 62.1)	1.57
40-49	54	**†28.5**	(16.3, 45.1)	0.82
50+	175	**44.4**	(35.5, 53.7)	1.63

Notes: (1) All analyses are sample design adjusted; *p<.05**;** **p<.01; ***p<.001; CI = 95% confidence interval; NS – no statistically significant difference; † Estimate suppressed or unstable;
(2) Asterisks in group row indicate a statistically significant group effect, based on Wald test.
(3) ORs greater than 1.0 indicate that the odds of cannabis use are higher in the group being compared to the comparison group; ORs less than 1.0 indicate that the odds of cannabis use are lower in the group being compared to the comparison group;
(4) Adjusted odds ratio holding fixed values for sex and age.

Q: *In the past 12 months, have you used cannabis to treat pain, nausea, glaucoma, MS, or any other medical condition?*

Source: The *CAMH Monitor*, Centre for Addiction and Mental Health

5.1.3. Modes of Use and Perceived Risk of Cannabis Use

Modes of cannabis use (among users)

2017…….. Fig. 5.1.6

Starting in 2017, the survey asked past year cannabis users about the ways they used cannabis in the past 12 months. Each of the seven questions begins with the wording: "*In the past 12 months did you ....*" followed by :

(1) …smoke cannabis in a joint?
(2) …used it in a vaporizer or e-cigarette?
(3) …smoke cannabis in a pipe, bong or waterpipe?
(4) …used it in a food product or edibles (such as a brownie, cookie, candy)
(5) …had a drink that contained cannabis (such as a tea)
(6) …used cannabis as a tincture
(7) …used cannabis on skin (such as lotion, patches)

Among past year cannabis users, the most common modes of using cannabis were smoking it in a joint (77.5%), followed by smoking it in a pipe, bong or waterpipe (52.3%), using it in a food product (48%), and using it in a vaporizer or e-cigarette (35.6%).
The least common modes of use were using cannabis in a drink (7.8%), as a tincture (5.8%), and as a lotion or a patch (4.6%).

Perceived risk of cannabis use

Research has shown that drug-related attitudes and beliefs strongly correlate with drug using behaviour (Okaneku, Vearrier, McKeever, LaSala, & Greenberg, 2015).

2017 ……Table 5.1.13

In Table 5.1.13 we present the percentage of Ontario adults who believe there is “no risk,” “slight risk,” “moderate risk,” or “great risk” that people will harm themselves physically and in other ways if they used cannabis in various ways.

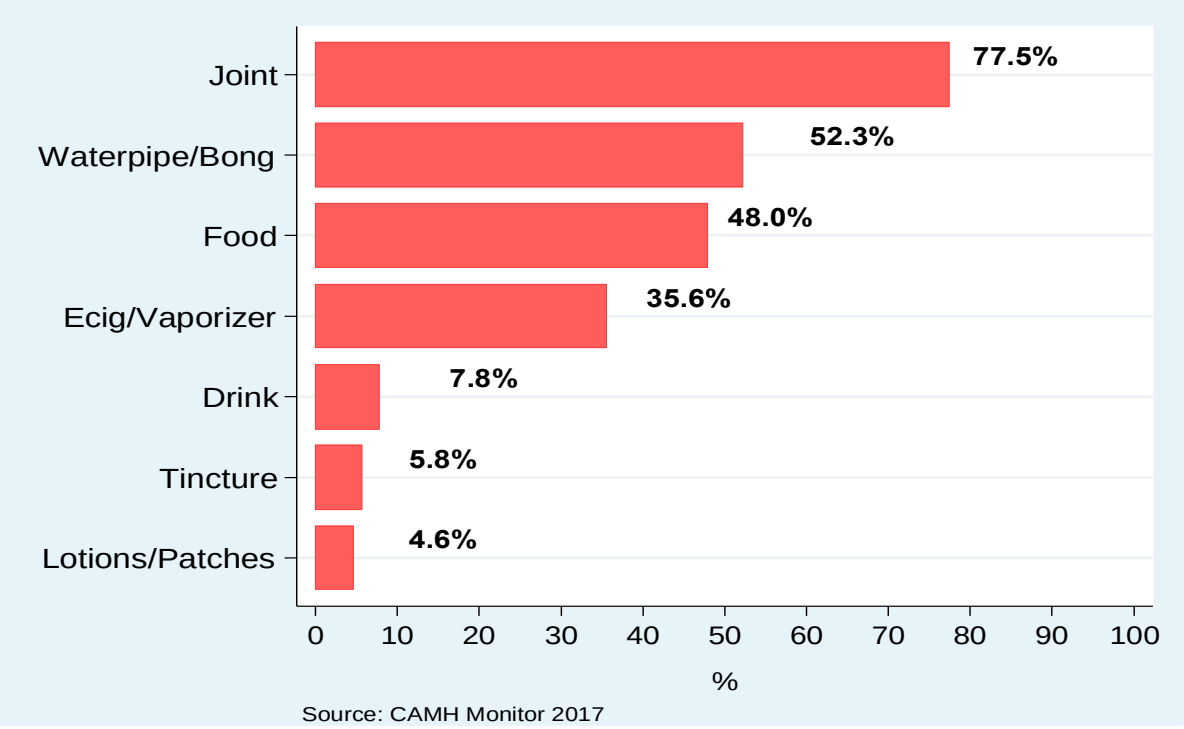
Respondents believed that the greatest risk of harm is associated with daily cannabis smoking (38.4%), followed by daily use of cannabis by way of vaporization (33.3%) and daily cannabis use in food or beverages (30.6%).
The least risk of harm was associated with smoking cannabis once or twice a week (19.2%).

Table 5.1.13: Perceived Risk of ***Cannabis Use*** Ontarians Aged 18+, 2017

How much do people risk harming themselves physically and in other ways when they …	Total sample (N=1813)			
	No risk	Slight risk	Moderate risk	Great risk
… smoke cannabis once or twice a week	**22.1**	**35.5**	**23.2**	**19.2**
… smoke cannabis daily or almost daily	**9.7**	**20.9**	**31.1**	**38.4**
… use cannabis daily or almost daily in foods, baked goods or beverages	**12.8**	**23.2**	**33.4**	**30.6**
… use cannabis daily or almost daily by way of vaporization	**11.6**	**22.5**	**32.6**	**33.3**

Note: All estimates are sample design adjusted.
Source: The *CAMH Monitor*, Centre for Addiction and Mental Health

Figure 5.1.6
Modes of Cannabis Use in the Past Year, Ontario Cannabis Users Aged 18+, 2017 (N=389)



5.2 Cocaine Use

2017 ……. Tables 5.2.1, 5.2.2, Fig. 5.2.1

Overall, an estimated **8.8%** (95% CI: 7.2% to 10.8%) of Ontario adults used cocaine in their lifetime, and **2.5%** (95% CI: 1.6% to 4.0%) used it in the 12 months before the survey. The respective population estimates for lifetime and past year use are 929,000 and 268,400 Ontario adults. In 2017, cocaine use items were asked of a random subsample of respondents (N=1,813).

Lifetime Use

Only **sex** was significantly related to **lifetime use** of cocaine. Holding values of risk factors constant, adjusted group differences showed the following:

- The adjusted odds of lifetime cocaine use were 3.3 times higher among men than women (13.7% vs. 4.6%; OR=3.28).

There were no other dominant associations after adjusting for other factors.

Past year use

Only **age** was significantly related to **past year use** of cocaine.

- Past year use of cocaine was reported almost exclusively by the younger respondents aged 18 to 29 (6.3%; OR=3.99), with other age groups reporting low estimates (1.6%).

Trends

1996–2017……Tables 5.2.3, 5.2.4, Fig. 5.2.2

2016–2017

Lifetime use of cocaine was stable between the two most recent surveys (10.1% in 2016 vs. 8.8% in 2017), and rates were also stable for past year cocaine use (2.2% in 2016 vs. 2.5% in 2017).

1996–2017

Lifetime cocaine use **increased significantly** between 1998 and 2017, from 4.6% to 8.8%. This increase was also evident among both men and women and among the age groups analysed.

Although **past year cocaine use** remained low (under 2.5%) during the same period, there was a significant **increase** from 1.0% in 1998 to 2.5% in 2017. We found a **significant increase** in past year cocaine use among both men and women and among all age groups analysed.

Table 5.2.1: Percentage ***Using Cocaine*** in ***Lifetime*** and Adjusted Group Differences, Ontarians Aged 18+, 2017

	N	%	95% CI	Adjusted Odds Ratio (N=1763)
Total	1813	**8.8**	(7.2, 10.8)	—
Sex				***
Men	718	**13.7**	(10.6, 17.4)	**3.28*** **
Women *(Comparison Group)*	1095	**†4.6**	(3.2, 6.6)	—
Age				NS
18-29 *(Comparison Group)*	184	**†9.2**	(5.4, 15.4)	—
30-39	123	**†13.2**	(7.3, 22.7)	1.69
40-49	234	**†8.2**	(5.2, 12.9)	1.34
50+	1263	**7.9**	(6.1, 10.2)	1.05
Region				NS
Toronto *(vs. Provincial Average)*	314	**†8.7**	(5.6, 13.3)	0.97
Central East	304	**†11.3**	(7.0, 17.7)	1.49
Central West	284	**†4.7**	(2.4, 8.9)	**0.55***
West	302	**†7.8**	(4.7, 12.8)	0.99
East	304	**†12.1**	(7.5, 18.9)	1.47
North	305	**†11.9**	(7.7, 18.1)	1.36
Marital Status				NS
Married/Partner *(Comparison Group)*	1100	**7.9**	(6.0, 10.2)	—
Previously Married	399	**†11.5**	(6.7, 19.1)	1.73
Never Married	292	**†10.2**	(6.7, 15.1)	1.32
Education				NS
High school not completed *(Comparison Group)*	165	**†14.2**	(7.3, 25.9)	—
Completed high school	400	**†7.8**	(5.0, 11.8)	0.52
Some college or university	641	**9.5**	(6.8, 13.1)	0.64
University degree	581	**†7.8**	(5.2, 11.5)	0.57
Household Income				NS
< $30,000 *(Comparison Group)*	175	**†13.1**	(6.3, 25.4)	—
$30,000-$49,999	232	**†8.6**	(4.9, 14.5)	0.69
$50,000-$79,999	303	**†7.5**	(4.3, 12.8)	0.62
$80,000+	690	**9.6**	(7.3, 12.6)	0.89
Not stated	413	**†6.8**	(3.8, 11.8)	0.68

Notes: (1) All estimates and analyses are sample design adjusted; *p<.05**;** **p<.01; ***p<.001; CI = 95% confidence interval; NS – no statistically significant difference; † Estimate suppressed or unstable; asked only of a random subsample of respondents.
(2) Asterisks in group row indicate a statistically significant group effect, based on Wald test.
(3) ORs greater than 1.0 indicate that the odds of cocaine use are higher in the group being compared to the comparison group; ORs less than 1.0 indicate that the odds of cocaine use are lower in the group being compared to the comparison group;
(4) Adjusted odds ratio holding fixed values for sex, age, region, marital status, education and income.
Q: *Have you ever in your lifetime used cocaine*?
Source: The *CAMH Monitor*, Centre for Addiction and Mental Health

Table 5.2.2: Percentage ***Using Cocaine*** in the ***Past 12 Months*** and Adjusted Group Differences, Ontarians Aged 18+, 2017

	N	%	95% CI	Adjusted Odds Ratio (N=1801)
Total	1813	**†2.5**	(1.6, 4.0)	—
Sex				NS
Men	718	**†3.7**	(2.2, 6.4)	2.32
Women *(Comparison Group)*	1095	**†1.5**	(0.7, 3.2)	—
Age				****
18-29	184	**†6.3**	(3.1, 12.1)	**3.99****
30+ *(Comparison Group)*	1620	**†1.6**	(0.9, 2.7)	—

Notes: (1) All estimates and analyses are sample design adjusted; *p<.05**;** **p<.01; ***p<.001; CI = 95% confidence interval; NS – no statistically significant difference; † Estimate suppressed or unstable; asked only of a random subsample of respondents.
(2) Asterisks in group row indicate a statistically significant group effect, based on Wald test.
(3) ORs greater than 1.0 indicate that the odds of cocaine use are higher in the group being compared to the comparison group; ORs less than 1.0 indicate that the odds of cocaine use are lower in the group being compared to the comparison group;
(4) Adjusted odds ratio holding fixed values for sex and age.
Q: *How many times, if any, have you used cocaine in the past 12 months*?
Source: The *CAMH Monitor*, Centre for Addiction and Mental Health

Table 5.2.3: Percentage ***Using Cocaine*** in ***Lifetime***, by Demographic Characteristics, Ontarians Aged 18+, 1984–2017

	1984	1987	1989	1991	1994	1996	1998	2000	2002	2003	2004	2006	2008	2010	2011	2012	2013	2014	2015	2016	2017	Trend	
(N=)	(1050)	(1081)	(1101)	(1047)	(2022)	(2721)	(2509)	(2406)	(2421)	(2411)	(2611)	(2016)	(2024)	(2024)	(1999)	(2015)	(3021)	(2004)	(4007)	(2034)	(1813)		
Total Lifetime	**3.3**	**6.1**	**5.6**	**6.2**	**5.7**	**4.9**	**4.6**	**6.4**	**6.6**	**6.6**	**6.0**	**7.1**	**7.4**	**9.6**	**7.0**	**7.9**	**7.7**	**9.8**	**8.3**	**10.1**	**8.8**	**T**	**–**
(95% CI) [a]	(2.2, 4.4)	(4.7, 7.5)	(4.2, 7.0)	(4.7, 7.7)	(4.7, 6.7)	(4.1, 5.7)	(3.8, 5.7)	(5.4, 7.6)	(5.5, 7.8)	(5.5, 7.7)	(4.9, 7.3)	(5.8, 8.7)	(6.1, 9.0)	(8.1, 11.4)	(5.6, 8.7)	(6.8, 9.3)	(6.5, 9.1)	(8.1, 11.1)	(7.2, 9.6)	(8.4, 12.1)	(7.2,10.8)		
Sex																							
Men	—	—	—	—	—	**†6.9**	**†6.9**	**†8.3**	**†8.6**	**†8.8**	**†9.8**	**†10.1**	**†9.8**	**†12.5**	**†10.2**	**†11.3**	**†10.8**	**13.3**	**11.5**	**15.4**	**13.7**	**T**	**–**
						(5.5, 8.5)	(5.3, 8.9)	(6.6, 10.3)	(6.9, 10.8)	(6.9, 10.8)	(6.9, 10.8)	(7.8, 12.9)	(7.5,12.6)	(10.1,15.4)	(7.7, 13.3)	(9.2, 13.7)	(8.6, 13.3)	(10.3, 17.1)	(9.6, 13.8)	(12.3, 19.1)	(10.6, 17.4))		
Women	—	—	—	—	—	**†3.1**	**†2.6**	**†4.8**	**†4.7**	**†4.5**	**†2.5**	**†4.4**	**†5.1**	**†6.7**	**†4.7**	**†4.8**	**†4.9**	**6.5**	**5.4**	**5.3**	**†4.6**	**T**	**–**
						(2.2, 4.4)	(1.9, 3.5)	(3.7, 6.2)	(3.5, 6.2)	(3.4, 5.8)	(1.8, 3.5)	(3.2, 6.0)	(3.9, 6.8)	(5.1, 8.8)	(3.4, 6.5)	(3.7, 6.2)	(3.8, 6.4)	(4.9, 8.7)	(4.3, 6.7)	(4.1, 6.8)	(3.2, 6.6)		
Age																							
18-29	—	—	—	—	—	**†4.0**	**†6.6**	**†8.0**	**†8.0**	**†6.1**	**†10.4**	**†10.7**	**†10.1**	**†11.2**	**†10.4**	**†10.6**	**†9.8**	**†15.0**	**†12.2**	**†9.4**	**†9.2**	**T**	**–**
						(2.5, 6.2)	(4.4, 9.8)	(5.6, 11.3)	(5.4, 11.7)	(3.9, 9.3)	(7.2, 14.9)	(6.9, 16.2)	(6.1, 16.2)	(7.4, 16.4)	(6.0, 17.5)	(6.9, 15.9)	(6.0, 15.8)	(8.9, 24.1)	(8.7, 16.9)	(5.0, 16.9)	(5.4, 15.4)		
30+	—	—	—	—	—	**†5.3**	**†4.2**	**†6.1**	**†6.4**	**†6.8**	**†5.0**	**†6.3**	**†7.0**	**†9.5**	**†6.7**	**†7.5**	**†7.4**	**9.0**	**7.4**	**10.2**	**8.8**	**T**	**–**
						(4.3, 6.4)	(3.3, 5.4)	(5.0, 7.3)	(5.2, 7.8)	(5.7, 8.1)	(3.9, 6.8)	(5.1, 7.9)	(5.7,8.5)	(7.9,11.3)	(5.4,8.3)	(6.4,8.8)	(6.2,8.7)	(7.4,10.9)	(6.4,8.6)	(8.5,12.2)	(7.0,10.9)		

Notes: (1) [a] 95% confidence interval; †Estimate suppressed or unstable; all estimates are sample design adjusted; the sampling design was changed in 2017 to dual-frame sampling (landline + cell-phone).
(2) Trend Analysis: **–** change not statistically significant at p<.05; **T** significant change (p<.05) between 1996 and 2017; — data not available.
Q: *Have you ever in your lifetime used cocaine?*
Source: The *CAMH Monitor*, Centre for Addiction and Mental Health

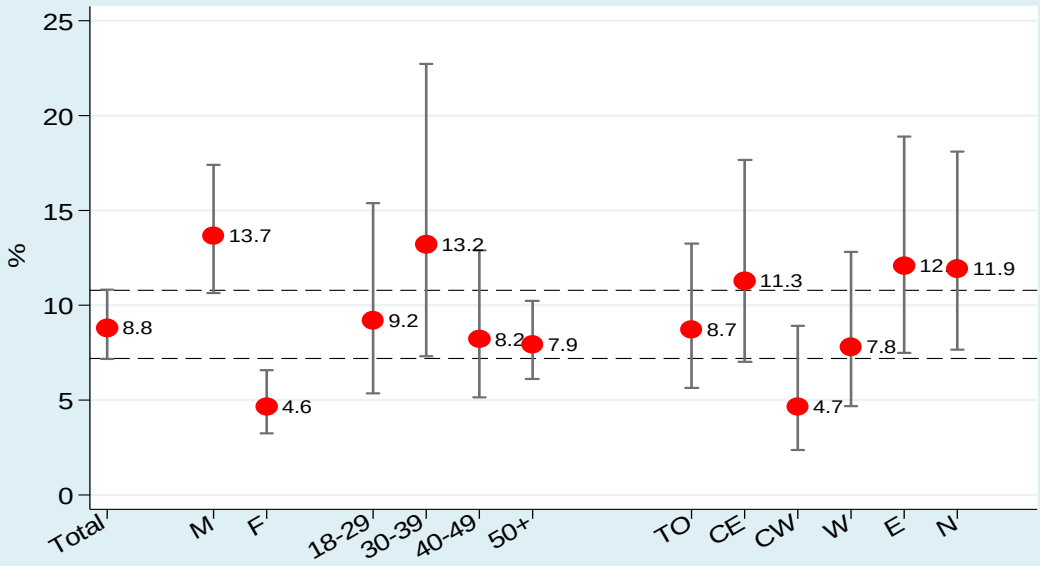
Table 5.2.4: Percentage ***Using Cocaine*** in the ***Past 12 Months***, by Demographic Characteristics, Ontarians Aged 18+, 1984–2017

	1984	1987	1989	1991	1994	1996	1998	2000	2002	2003	2004	2006	2008	2010	2011	2012	2013	2014	2015	2016	2017	Trend	
(N=)	(1050)	(1081)	(1101)	(1047)	(2022)	(2721)	(2509)	(2406)	(2421)	(2411)	(2611)	(2016)	(2024)	(2024)	(1999)	(2015)	(3021)	(2004)	(4007)	(2034)	(1813)		
Total Past Year	**†1.7**	**†1.8**	**†2.1**	**†1.6**	**†1.0**	**†0.8**	**†1.0**	**†1.4**	**†1.5**	**†1.6**	**†1.4**	**†1.7**	**†1.0**	**†1.8**	**†1.1**	**†1.2**	**†1.5**	**†2.0**	**†1.6**	**†2.2**	**†2.5**	**T**	**–**
(95% CI) [a]	(0.9, 2.5)	(1.0, 2.6)	(1.3, 2.9)	(0.8, 2.4)	(0.3, 1.3)	(0.3, 1.1)	(0.4, 1.4)	(0.9, 2.2)	(1.0, 2.3)	(1.1, 2.3)	(0.8, 2.0)	(1.0, 2.8)	(0.4, 1.4)	(1.1, 2.8)	(0.6, 2.3)	(0.7, 1.9)	(1.0, 2.4)	(1.2, 3.5)	(1.1, 2.4)	(1.4, 3.6)	(1.6, 4.0)		
Sex																							
Men	—	—	—	—	—	**†1.1**	**†1.6**	**†2.1**	**†2.3**	**†1.9**	**†2.6**	**†3.0**	**†**	**†2.6**	**†2.0**	**†1.6**	**†2.2**	**†3.5**	**†2.5**	**†4.3**	**†3.7**	**T**	**–**
						(0.5, 1.7)	(0.9, 2.8)	(1.3, 3.5)	(1.3, 3.6)	(1.1, 3.2)	(1.1, 3.2)	(1.7, 5.1)	—	(1.6, 4.4)	(0.9, 4.4)	(0.9, 3.0)	(1.2, 3.8)	(1.9, 6.4)	(1.6, 3.9)	(2.5, 7.1)	(2.2, 6.4)		
Women	—	—	—	—	—	**†**	**†**	**†**	**†**	**†1.2**	**†**	**†**	**†**	**†**	**†**	**†**	**†**	**†1.0**	**†**	**†0.8**	**†**	**T**	**–**
						—	—	—	—	(0.7, 2.1)	—	—	—	—	—	—	—	(0.5, 1.8)	-	(0.3, 1.7)	-	(0.7, 3.2)		
Age																							
18-29	—	—	—	—	—	**†1.1**	**†2.9**	**†5.1**	**†4.3**	**†4.3**	**†4.9**	**†4.9**	**†1.5**	**†3.5**	**†3.5**	**†4.9**	**†5.0**	**†7.3**	**†5.9**	**†7.3**	**†6.3**	**T**	**–**
						(0.2, 2.0)	(1.5, 5.5)	(3.1, 8.1)	(2.4, 7.8)	(2.5, 7.3)	(2.9, 8.1)	(2.5, 9.5)	(0.5, 4.6)	(1.6, 7.6)	(1.2, 9.3)	(2.6, 8.8)	(2.5, 9.7)	(3.4, 15.1)	(3.6, 9.6)	(3.4, 15.1)	(3.1, 12.1)		
30+	—	—	—	—	—	**†**	**†**	**†**	**†0.8**	**†0.8**	**†**	**†**	**†**	**†1.4**	**†**	**†**	**†0.9**	**†1.0**	**†0.6**	**†1.0**	**†1.6**	**T**	**–**
						—	—	—	(0.4, 1.4)	(0.5, 1.3)	—	—	—	(0.8, 2.4)	—	—	(0.5, 1.4)	(0.5, 1.9)	(0.3, 1.0)	(0.5, 1.9)	(0.9, 2.7)		

Notes: (1) [a] 95% confidence interval; †Estimate suppressed or unstable; all estimates are sample design adjusted; the sampling design was changed in 2017 to dual-frame sampling (landline + cell-phone).
(2) Trend Analysis: **–** change not statistically significant at p<.05; **T** significant change (p<.05) between 1996 and 2017; — data not available.
Q: *How many times, if any, have you used cocaine during the past 12 months?*
Source: The *CAMH Monitor*, Centre for Addiction and Mental Health

Figure 5.2.1

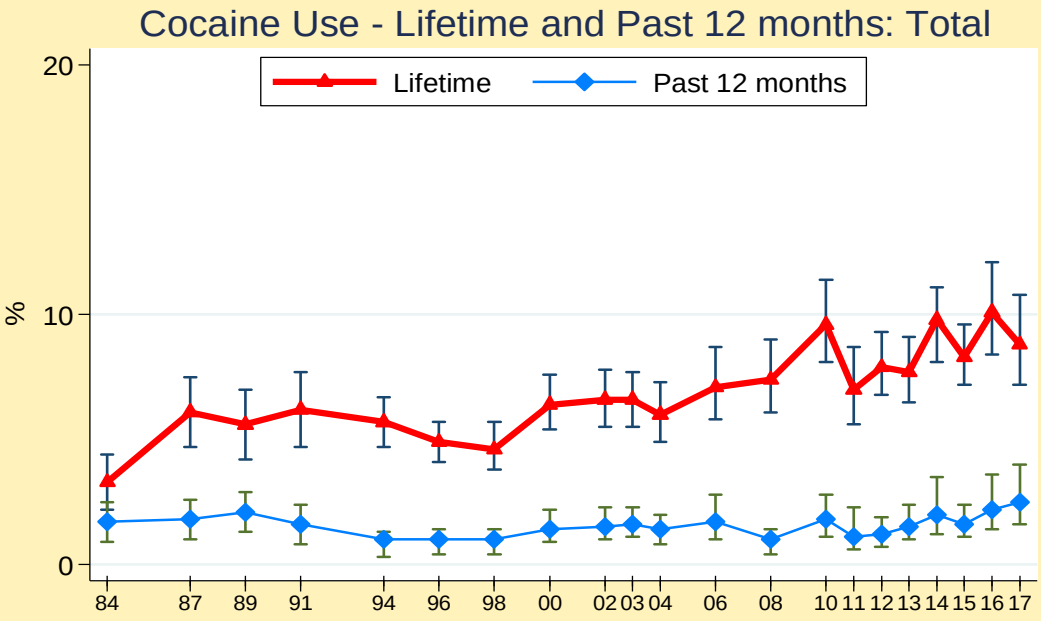
Lifetime Cocaine Use by Sex, Age and Region, Ontarians Aged 18+, 2017 (N=1813)



Note: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal bar represents 95% confidence interval for total estimate
(3) significant difference by sex (p<.05)
Source: 2017 CAMH Monitor

Figure 5.2.2

Cocaine Use, Ontarians Aged 18+, 1984–2017



Note: vertical 'whiskers' represent 95% confidence intervals
Source: CAMH Monitor

5.3 Use of Prescription Opioid Pain Relievers

In response to significant increases in the use of opioid pain relievers (Fischer, 2008), a module about the use of the general class of prescription opioid pain relievers was added in 2010. Specifically, we asked respondents about their use of prescription opioid pain relievers, such as Percocet™, Demerol™, Tylenol™ #3 or other pain relievers with codeine that are usually obtained by a prescription from a doctor. Opioids suppress pain and may cause a relaxed or euphoric feeling. They also can be dangerous when not used as prescribed or are not used under a doctor's supervision. If taken with depressants (e.g., alcohol) or in large quantities they can impede breathing and lead to respiratory failure.

Any past year use (i.e., medical or nonmedical) of prescription opioid pain relievers was assessed by the item: "*In the past 12 months how often, if at all, have you used any pain relievers (such as Percocet, Demerol, Tylenol #3 or other products)?*" Responses were recoded as *any past year use* (coded 1) versus *no use* (coded 0).

Any past year nonmedical use of prescription opioid pain relievers was assessed by the item: "*During the past 12 months, how often did you use pain relievers without a prescription or without a doctor telling you to take them?"* Responses were recoded as *any nonmedical past year use* (coded 1) versus *no use* (coded 0). The opioid pain reliever module was asked only of a random subsample of respondents (N=1,813).

2017 ……Table 5.3.1; Fig. 5.3.1; 5.3.2

Overall, an estimated **21.1%** (95% CI: 18.8% to 23.7%) of Ontario adults reported **any use** of prescription pain relievers in the past year, and **2.8%** (95% CI: 1.9% to 4.3%) reported **any nonmedical use.** The population estimates for any past year use and any past year nonmedical use are 2,217,600 and 298,900 Ontario adults.

Sex and **education** were significantly related to **any past year** use of prescription pain relievers.

- Any past year use of pain relievers was significantly lower among men than among women (18.2% vs. 23.7%; OR=0.72).
- Any past year use of pain relievers was significantly lower among those with higher education. Relative to those not completing high school, the adjusted odds of any past year use of pain relievers were significantly lower among those with a university degree (16.0% vs. 23.7%; OR=0.64).

There were no other significant differences in any past year use after adjusting for other demographic characteristics.

Age, region, marital status, education and **household income** were all significantly related to any past year **nonmedical use** of pain relievers after controlling for other factors.

- Past year nonmedical use of pain relievers declined with age, dropping from 7.3% among 18 to 29 year olds to 1.8% among those 65 and older (OR=0.04).

- Past year nonmedical use of pain relievers was lower among married respondents (2.3%) than among those never married (4.0%).

- Relative to the provincial average, the adjusted odds of past year nonmedical use of pain relievers were significantly higher among respondents living in the Central West region (5.1% vs. 2.8%; OR=2.84).

- Relative to those not completing high school, the adjusted odds of any past year nonmedical use of pain relievers were significantly lower among those with a university degree (1.6% vs. 5.3%; OR=0.21).

- Any past year nonmedical use of pain relievers increased with income and it was significantly higher among those with the highest incomes.

Trends

2010–2017 ……Tables 5.3.2; 5.3.3 ; Fig. 5.3.3

2016–2017

Past year **use of any prescription opioid** in 2017 (21.1%) was not significantly different from 2016 (22.9%) and rates were stable between these two years for all subgroups.

2010–2017

Past year **use of any prescription opioid** declined significantly from 26.6% in 2010 to 21.1% in 2017.

We found significant **declines** during this period for those aged 40 to 49 and for those aged 50 years or older, for Toronto, the Central East and the North regions, and for those who were married, and respondents with completed high school and university degrees.

Rates of past year **nonmedical use** of prescription opioid pain relievers were **stable** between 2016 and 2017, but displayed significant declines since 2010. The proportion of Ontario adults who reported past year **nonmedical use** of prescription opioid pain relievers **declined significantly** from 7.7% in 2010 to 2.8% in 2017 and displayed similar declining trends among all demographic subgroups.

Table 5.3.1: Percentage Reporting ***Any Use*** and ***Any Nonmedical Use*** of ***Prescription Opioid (PO) Pain Relievers*** in the Past 12 Months and Adjusted Group Differences Ontarians, Aged 18+, 2017

		Any use of PO			Any nonmedical use of PO		
	N	%	95% CI	Adjusted Odds Ratio (N=1749)	%	95% CI	Adjusted Odds Ratio (N=1760)
Total	1813	**21.1**	(18.8, 23.7)	—	**†2.8**	(1.9, 4.3)	—
Sex				*			NS
Men	718	**18.2**	(15.1, 21.9)	**0.72***	**†2.9**	(1.7, 4.9)	1.11
Women *(Comparison Group)*	1095	**23.7**	(20.4, 27.2)	—	**†2.8**	(1.5, 5.2)	—
Age				NS			**
18-29 *(Comparison Group)*	184	**†20.0**	(13.9, 27.9)	—	**†7.3**	(3.7, 14.0)	—
30-39	123	**†14.6**	(9.3, 22.3)	0.66	†	—	—
40-49	234	**18.5**	(13.5, 24.7)	0.80	**†1.3**	(0.5, 3.2)	**0.04****
50+	1263	**24.1**	(21.3, 27.2)	1.16	**†1.8**	(1.2, 2.9)	**0.04****
Region				NS			**
Toronto *(vs. Provincial Average)*	314	**18.8**	(14.0, 24.6)	0.96	**†3.3**	(1.4, 7.6)	1.55
Central East	304	**24.2**	(18.5, 31.1)	1.17	**†2.6**	(0.9, 7.1)	0.78
Central West	284	**19.9**	(15.0, 26.0)	0.90	**†5.1**	(2.6, 9.7)	**2.84****
West	302	**24.7**	(19.5, 30.8)	1.17	†	—	—
East	304	**20.4**	(15.5, 26.4)	0.97	**†1.1**	(0.4, 3.0)	0.59
North	305	**20.5**	(15.4, 26.7)	0.89	†	—	—
Marital Status				NS			*
Married/Partner *(Comparison Group)*	1100	**20.7**	(18.0, 23.7)	—	**†2.3**	(1.3, 3.8)	—
Previously Married	399	**29.1**	(23.4, 35.5)	1.34	**†3.3**	(1.1, 9.3)	2.01
Never Married	292	**18.8**	(13.8, 25.1)	0.93	**†4.0**	(1.8, 8.7)	**0.12***
Education				**			*
HS not completed *(Comparison Group)*	165	**†23.7**	(16.5, 32.9)	—	**†5.3**	(1.7, 15.1)	—
Completed high school	400	**19.8**	(15.1, 25.6)	0.82	**†5.1**	(2.3, 10.9)	0.95
Some college or university	641	**26.6**	(22.4, 31.4)	1.19	**†2.3**	(1.2, 4.4)	0.33
University degree	581	**16.0**	(12.8, 19.8)	0.64	**†1.6**	(0.7, 4.0)	**0.21***
Household Income				NS			*
< $30,000 *(Comparison Group)*	175	**†23.2**	(16.2, 31.9)	—	†	—	—
$30,000-$49,999	232	**23.9**	(17.9, 31.2)	1.03	**†1.6**	(0.7, 3.8)	3.97
$50,000-$79,999	303	**19.0**	(14.2, 25.0)	0.87	**†2.8**	(1.4, 5.5)	**7.08***
$80,000+	690	**21.2**	(17.6, 25.3)	1.12	**†2.6**	(1.3, 5.2)	**7.65***
Not stated	413	**20.6**	(15.6, 26.7)	0.89	**†4.5**	(2.1, 9.6)	**12.25****

Notes: Opioid pain reliever items were asked of a random sub-sample; all estimates and analyses are sample design adjusted.
(1) *p<.05**;** **p<.01; ***p<.001; CI = 95% confidence interval; NS – no statistically significant difference; † Estimate unstable.
(2) Asterisks in group row indicate a statistically significant group effect, based on Wald test.
(3) ORs greater than 1.0 indicate that the odds of opioid use are higher in the group being compared to the comparison group; ORs less than 1.0 indicate that the odds of opioid use are lower in the group being compared to the comparison group.
(4) Adjusted odds ratio holding fixed values for sex, age, region, marital status, education and income.

Def'n: *"Any use of pain relievers" defined as reporting any medical or nonmedical use in the past 12 months; "Any nonmedical use of pain relievers" defined as reporting use "without a prescription or without a doctor telling you to take them" in the past 12 months.*

Source: The *CAMH Monitor*, Centre for Addiction and Mental Health.

Table 5.3.2: Percentage Reporting ***Any Use of Prescription Opioid Pain Relievers*** in the Past 12 Months, by Demographic Characteristics, Ontarians Aged 18+, 2010–2017

(N=)	2010 (2024)	2011 (1999)	2012 (2015)	2013 (2060)	2014 (2004)	2015 (4007)	2016 (2034)	2017 (1813)	Trend	
Total Sample	**26.6**	**23.9**	**21.1**	**22.2**	**22.2**	**22.6**	**22.9**	**21.1**	**T**	**–**
(95%CI)[a]	(23.3, 29.1)	(21.7, 26.3)	(18.9, 23.4)	(20.0, 24.6)	(19.9, 24.7)	(21.0, 24.3)	(20.5, 25.4)	(18.8, 23.7)		
Sex										
Men	**25.3**	**24.1**	**19.3**	**21.5**	**21.5**	**21.1**	**22.6**	**18.2**	**T**	**–**
	(21.9, 29.0)	(20.6, 28.0)	(16.2, 22.9)	(18.3, 25.0)	(18.1, 25.5)	(18.7, 23.7)	(19.1, 26.6)	(15.1, 21.9)		
Women	**27.9**	**23.8**	**22.7**	**22.9**	**22.9**	**24.1**	**23.0**	**23.7**	**–**	**–**
	(24.9, 31.2)	(21.0, 26.8)	(19.9, 25.9)	(20.0, 26.2)	(20.0, 26.1)	(22.0, 26.3)	(20.1, 26.3)	(20.4, 27.2)		
Age										
18-29	**22.4**	**26.0**	**†21.8**	**†19.3**	**†20.1**	**20.3**	**†20.5**	**†20.0**	**–**	**–**
	(16.5, 29.7)	(19.4, 33.8)	(15.3, 30.2)	(13.0, 27.7)	(13.5, 28.7)	(13.5, 28.7)	(13.6, 29.7)	(13.9, 27.9)		
30-39	**21.4**	**22.3**	**16.7**	**23.0**	**24.4**	**20.3**	**23.4**	**†14.6**	**–**	**–**
	(16.3, 26.6)	(17.0, 28.6)	(12.1, 22.5)	(17.3, 29.9)	(18.1, 32.0)	(16.0, 25.4)	(17.0, 31.1)	(9.3, 22.3)		
40-49	**27.1**	**22.9**	**20.4**	**21.6**	**20.7**	**18.3**	**20.6**	**18.5**	**T**	**–**
	(22.3, 32.6)	(18.4, 28.2)	(15.9, 25.7)	(17.2, 26.7)	(16.1, 26.2)	(15.1, 22.2)	(15.6, 26.7)	(13.5, 24.7)		
50+	**30.4**	**24.8**	**23.4**	**23.5**	**23.7**	**26.0**	**24.4**	**24.1**	**T**	**–**
	(27.3, 33.6)	(22.0, 27.8)	(20.8, 26.3)	(20.9, 26.4)	(20.9, 26.6)	(24.0, 28.0)	(21.9, 27.2)	(21.3, 27.2)		
Region										
Toronto	**24.2**	**22.3**	**23.9**	**25.4**	**16.0**	**22.0**	**16.7**	**18.8**	**T**	**–**
	(19.1, 30.1)	(17.3, 28.1)	(18.4, 30.3)	(20.0, 31.6)	(11.9, 21.2)	(18.4, 26.1)	(12.4, 22.1)	(14.0, 24.6)		
Central East	**29.5**	**22.8**	**18.2**	**16.9**	**23.8**	**20.8**	**27.2**	**24.2**	**T**	**–**
	(24.3, 35.3)	(18.1, 28.4)	(14.0, 23.4)	(12.9, 21.8)	(18.7, 29.9)	(17.5, 24.6)	(21.5, 33.7)	(18.5, 31.1)		
Central West	**23.5**	**26.1**	**25.4**	**24.3**	**23.4**	**23.9**	**25.2**	**19.9**	**–**	**–**
	(18.7, 29.0)	(21.0, 32.0)	(20.5, 30.9)	(19.3, 30.1)	(18.3, 29.5)	(20.2, 28.0)	(19.8, 31.5)	(15.0, 26.0)		
West	**27.9**	**22.6**	**15.5**	**24.9**	**26.3**	**25.3**	**21.4**	**24.7**	**–**	**–**
	(22.8, 33.7)	(18.1, 27.9)	(11.7, 20.1)	(19.9, 30.7)	(21.2, 32.1)	(21.7, 29.3)	(16.7, 26.9)	(19.5, 30.8)		
East	**27.3**	**24.1**	**20.6**	**20.8**	**19.8**	**22.7**	**22.8**	**20.4**	**–**	**–**
	(22.2, 33.1)	(19.2, 29.7)	(16.2, 25.8)	(16.4, 26.0)	(15.1, 25.5)	(19.1, 26.8)	(17.9, 28.6)	(15.5, 26.4)		
North	**28.2**	**29.0**	**23.0**	**25.9**	**28.8**	**23.4**	**23.1**	**20.5**	**T**	**–**
	(22.9, 34.9)	(23.4, 35.4)	(18.1, 28.7)	(20.6, 32.0)	(23.3, 35.0)	(19.5, 27.7)	(18.0, 29.1)	(15.4, 26.7)		
Marital Status										
Married/Partner	**26.2**	**23.3**	**20.3**	**22.4**	**22.6**	**22.2**	**21.9**	**20.7**	**T**	**–**
Previously Married	**31.2**	**29.2**	**24.3**	**26.6**	**26.9**	**28.9**	**33.8**	**29.1**	**–**	**–**
Never Married	**25.5**	**23.4**	**22.2**	**19.4**	**20.3**	**21.2**	**20.1**	**18.8**	**–**	**–**
Education										
High school not completed	**29.5**	**28.9**	**27.0**	**31.0**	**31.3**	**31.5**	**40.0**	**†23.7**	**–**	**–**
Completed high school	**29.9**	**26.2**	**23.5**	**17.8**	**25.1**	**22.1**	**22.3**	**19.8**	**T**	**–**
Some college or university	**27.6**	**24.3**	**19.5**	**23.9**	**23.8**	**25.2**	**25.9**	**26.6**	**–**	**–**
University degree	**22.9**	**20.8**	**19.5**	**20.6**	**17.1**	**19.2**	**18.4**	**16.0**	**T**	**–**

Notes: (1) All analyses are sample design adjusted; [a] 95% confidence interval; † Estimate unstable; the sampling design was changed in 2017 to dual-frame sampling (landline + cell-phone).
(2) Trend Analysis: **–** change not statistically significant at p<.05; **T** significant change (p<.05) between 2010–2017; **2Y** significant change (p<.05) between last two estimates;

Def'n: *"Any use of pain relievers" defined as reporting any medical or nonmedical use in the past 12 months.*

Source: The CAMH Monitor, Centre for Addiction and Mental Health.

Table 5.3.3: Percentage Reporting ***Any Nonmedical Use of Prescription Opioid Pain Relievers*** in the Past 12 Months, by Demographic Characteristics, Ontarians Aged 18+, 2010-2017

	2010	2011	2012	2013	2014	2015	2016	2017	Trend	
(N=)	(2024)	(1999)	(2015)	(2060)	(2004)	(4007)	(2034)	(1813)		
Total Sample	**7.7**	**3.9**	**†1.9**	**†2.8**	**†2.1**	**4.1**	**3.5**	**†2.8**	**T**	**–**
(95%CI)[a]	(6.4, 9.3)	(2.9, 5.3)	(1.2, 2.9)	(1.9, 4.1)	(1.3, 3.4)	(3.4, 5.0)	(2.6, 4.9)	(1.9, 4.3)		
Sex										
Men	**8.1**	**†5.5**	**†2.1**	**†3.6**	**†3.2**	**3.8**	**†3.8**	**†2.9**	**T**	**–**
	(6.2, 10.6)	(3.6, 8.1)	(1.1, 4.1)	(2.1, 5.9)	(1.7, 5.9)	(2.8, 5.2)	(2.5, 5.8)	(1.7, 4.9)		
Women	**7.4**	**†2.6**	**†1.7**	**†2.0**	**†1.1**	**4.4**	**†3.3**	**†2.8**	**T**	**–**
	(5.7, 9.5)	(1.8, 3.8)	(1.0, 2.8)	(1.2, 3.6)	(0.6, 2.0)	(3.4, 5.6)	(2.0, 5.4)	(1.5, 5.2)		
Age										
18-29	**†7.0**	**†7.0**	**†**	**†7.4**	**†4.4**	**†5.1**	**†4.6**	**†7.3**	**–**	**–**
	(4.1, 11.6)	(3.6,13.2)	–	(3.8, 14.1)	(1.5, 12.2)	(2.9, 8.6)	(1.7, 12.1)	(3.7, 14.0)		
30-39	**†6.6**	**†**	**†**	**†3.6**	**†3.1**	**†5.2**	**†6.1**	**†**	**–**	**–**
	(3.8, 11.2)	–	–	(1.6, 7.9)	(1.2, 7.8)	(3.1, 8.5)	(3.3, 10.9)	–		
40-49	**†8.9**	**†5.7**	**†**	**†2.3**	**†1.1**	**†3.5**	**†2.4**	**†1.3**	**T**	**–**
	(5.9, 13.4)	(3.5,9.1)	–	(1.1, 4.7)	(0.5, 2.9)	(2.1, 5.6)	(1.2, 4.9)	(0.5, 3.2)		
50+	**7.9**	**†2.1**	**†1.5**	**†1.1**	**†1.5**	**3.5**	**†2.8**	**†1.8**	**T**	**–**
	(6.2, 10.0)	(1.4, 3.1)	(0.8, 2.6)	(0.6, 1.9)	(0.9, 2.4)	(2.8, 4.4)	(1.9, 4.0)	(1.2, 2.9)		
Region										
Toronto	**†8.4**	**†4.3**	**†**	**†2.6**	**†**	**†3.7**	**†2.4**	**†3.3**	**T**	**–**
	(5.4, 12.9)	(2.4, 7.5)	–	(1.0, 6.4)	–	(2.2, 6.0)	(0.9, 5.8)	(1.4, 7.6)		
Central East	**†9.6**	**†4.2**	**†**	**†4.0**	**†**	**†3.7**	**†3.3**	**†2.6**	**T**	**–**
	(6.6, 13.8)	(2.0, 8.4)	–	(1.9, 8.0)	–	(2.3, 5.9)	(1.4, 7.3)	(0.9, 7.1)		
Central West	**†5.7**	**†4.1**	**†4.3**	**†3.1**	**†3.1**	**†4.3**	**†4.6**	**†5.1**	**–**	**–**
	(3.5, 9.1)	(2.1,8.2)	(2.3, 8.0)	(1.5, 6.4)	(1.3, 7.1)	(2.7, 6.8)	(2.2, 9.2)	(2.6, 9.7)		
West	**†8.6**	**†3.4**	**†**	**†2.7**	**†**	**†4.0**	**†4.4**	**†**	**T**	**–**
	(5.7, 12.8)	(1.8,6.3)	–	(1.3, 5.8)	–	(2.5, 6.3)	(2.3, 8.1)	–		
East	**†5.5**	**†2.7**	**†**	**†**	**†2.2**	**†4.6**	**†2.6**	**†1.1**	**–**	**–**
	(3.4, 8.9)	(1.3, 5.3)	–	–	(1.0,4.7)	(2.9, 7.4)	(1.3,5.0)	(0.4, 3.0)		
North	**†6.8**	**†5.1**	**†**	**†**	**†**	**†5.7**	**†5.3**	**†**	**–**	**–**
	(4.1, 10.9)	(3.0, 8.4)	–	–	–	(3.8, 8.4)	(2.6, 10.3)	–		
Marital Status										
Married/Partner	**6.9**	**†3.2**	**†1.5**	**†2.1**	**†1.2**	**3.3**	**†3.2**	**†2.3**	**T**	**–**
Previously Married	**†9.8**	**†**	**†**	**†1.3**	**†2.4**	**†4.0**	**†4.1**	**†3.3**	**T**	**–**
Never Married	**†9.0**	**†6.3**	**†**	**†6.0**	**†4.7**	**†6.5**	**†4.1**	**†4.0**	**–**	**–**
Education										
High school not completed	**†6.9**	**†**	**†**	**†8.2**	**†**	**†5.8**	**†12.2**	**†5.3**	**–**	**–**
Completed high school	**†10.5**	**†4.2**	**†**	**†3.7**	**†3.5**	**†5.4**	**†1.2**	**†3.1**	**T**	**–**
Some college or university	**†6.1**	**†4.8**	**†1.4**	**†1.9**	**†2.1**	**†4.9**	**†5.2**	**†2.3**	**T**	**–**
University degree	**†7.9**	**†3.1**	**†**	**†**	**†**	**†2.4**	**†2.1**	**†1.6**	**T**	**–**

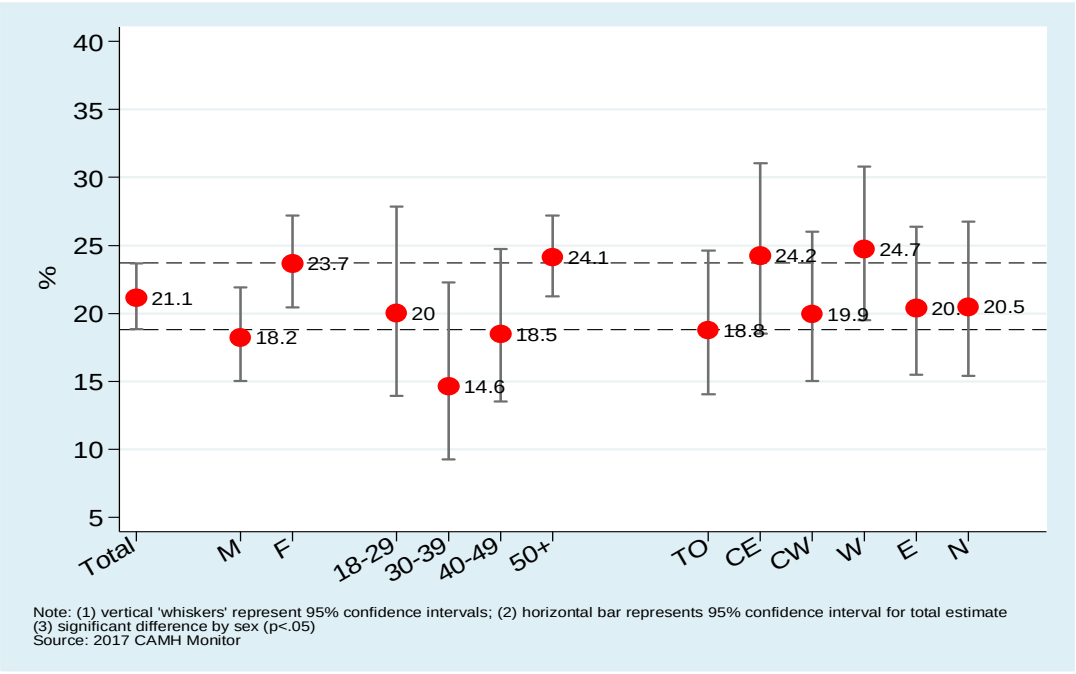
Notes: (1) All analyses are sample design adjusted; [a] 95% confidence interval; † Estimate unstable; the sampling design was changed in 2017 to dual-frame sampling (landline + cell-phone).
(2) Trend Analysis: **–** change not statistically significant at p<.05; **T** significant change (p<.05) between 2010–2017; **2Y** significant change (p<.05) between last two estimates;

Def'n: *"Any nonmedical use of pain relievers" defined as reporting use "without a prescription or without a doctor telling you to take them" in the past 12 months.*

Source: The CAMH Monitor, Centre for Addiction and Mental Health.

Figure 5.3.1

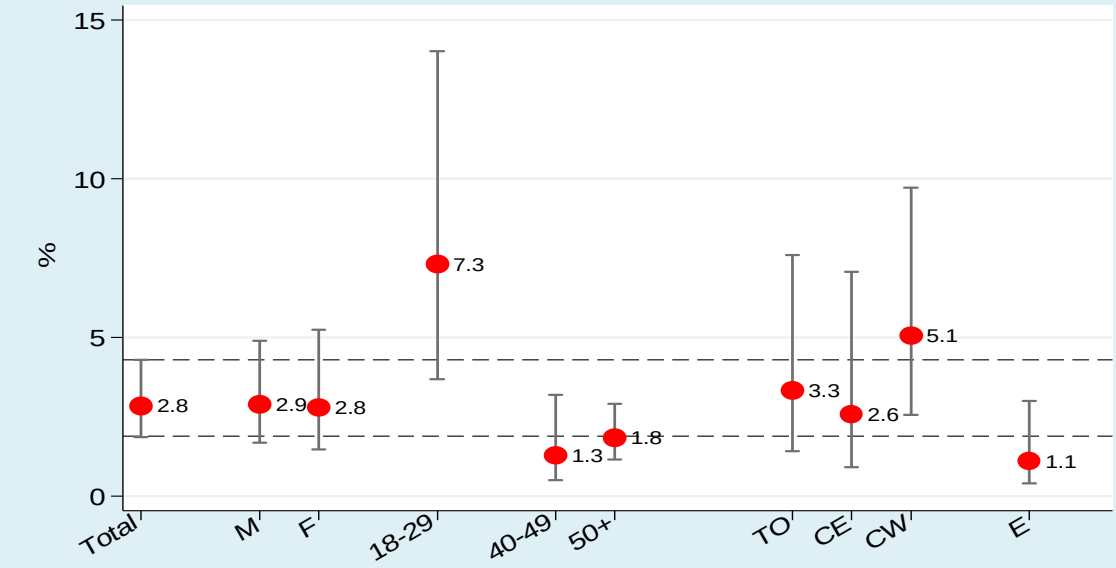
Past Year Use of Any Prescription Opioid Pain Relievers by Sex, Age and Region, Ontarians Aged 18+, 2017 (N=1813)



Note: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal bar represents 95% confidence interval for total estimate
(3) significant difference by sex (p<.05)
Source: 2017 CAMH Monitor

Figure 5.3.2

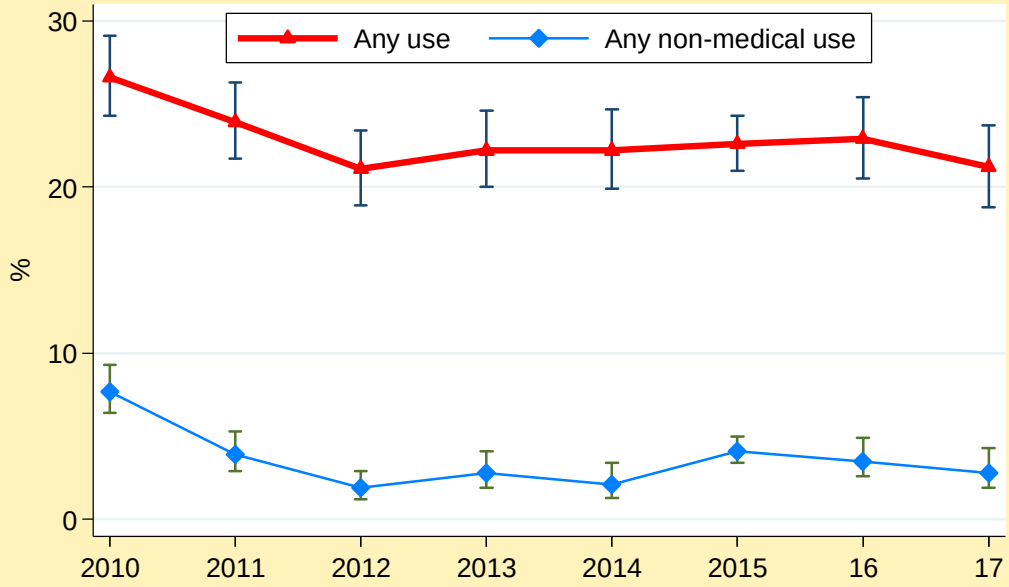
Past Year Nonmedical Use of Prescription Opioid Pain Relievers by Sex, Age and Region, Ontarians Aged 18+, 2017 (N=1813)



Note: (1) Vertical 'whiskers' represent 95% confidence intervals; (2) horizontal bar represents 95% confidence interval for total estimate
(3) significant difference by age (p<.05); (4)estimates for certain age groups and regions were suppressed
Source: 2017 CAMH Monitor

Figure 5.3.3

Past Year Use of Prescription Opioid Pain Relievers, Ontarians Aged 18+, 2010–2017



Note: vertical 'whiskers' represent 95% confidence intervals
Source: CAMH Monitor

6. IMPAIRED AND DISTRACTED DRIVING

6.1 Driving after Drinking

2017……Table 6.1.1, Fig. 6.1.1

Overall, an estimated **5.2%** (95% CI: 3.8% to 7.1%) of Ontario adults with a valid driver's licence reported driving after drinking alcohol – **driving after consuming two or more alcoholic drinks in the previous hour** – at least once during the past 12 months. This prevalence corresponds to a population estimate of 491,100 Ontario licensed drivers. Driving items were asked only of a random subsample of respondents who reported they drove in 2017 (N=1,642).

After adjusting for demographic risk factors, only **sex** and **age** were significantly related to driving after drinking.

- The adjusted odds of driving after drinking were 3 times higher among male drivers than female drivers (8.1% vs. 2.7%; OR=3.1).
- Driving after drinking was significantly related to age. Compared to those aged 18 to 29, the adjusted odds of driving after drinking were significantly lower among those aged 65 and older (OR=0.59).

There were no other dominant effects after adjusting for other demographic factors.

Trends

1996–2017……Table 6.1.2a-6.1.2b, Fig. 6.1.2

2016–2017

The prevalence of driving after drinking in 2017 (5.2%) was not significantly different from 2016 (6.0%). In addition, rates were stable for most demographic subgroups.

2007–2017

Since 2007, there were no statistically significant changes in driving after drinking, with rates fluctuating between 7.1% and 4.7%.

1996–2017

Since 1996, driving after drinking has displayed a significant **linear decline** from 13.1% to 5.2% in 2017.

There were significant declines since 1996 for all demographic subgroups. Significant declines were evident for both men and women and all age categories. There were significant declines especially among **male drivers**, from 21.2% in 1996 to 8.1% in 2017 and among young adult drivers aged **18** to **29**, from 20.1% in 1996 to 9.2% in 2017. Significant **declining** linear trends between 1996 and 2017 were found for **all regions**, among all three marital status categories and among all four education subgroups.

Table 6.1.1: Percentage ***Driving within One Hour after Consuming 2 or More Drinks*** in the Past 12 Months and Adjusted Group Differences, Ontario Licensed Drivers, Aged 18+, 2017

	N	%	95% CI	Adjusted Odds Ratio (N=1605)
Total Drivers[1]	1642	**5.2**	(3.8, 7.1)	—
Sex				**
Men	667	†**8.1**	(5.5, 11.7)	**3.09****
Women *(Comparison Group)*	975	†**2.7**	(1.5, 4.8)	—
Age				*
18-29 *(Comparison Group)*	157	†**9.2**	(4.7, 17.4)	—
30-39	114	†**11.1**	(6.0, 19.5)	2.98
40-49	227	†**4.7**	(2.4, 9.0)	1.61
50-64	492	†**3.2**	(1.7, 5.9)	0.97
65+	646	†**1.5**	(0.8, 2.9)	0.59
Region				NS
Toronto *(vs. Provincial Average)*	268	†**5.1**	(2.5, 10.1)	0.81
Central East	283	†**8.5**	(4.3, 16.2)	1.76
Central West	256	†**5.0**	(2.7, 9.3)	1.15
West	279	†**2.7**	(1.1, 6.3)	0.70
East	280	†**4.6**	(2.1, 10.0)	0.91
North	276	†**2.9**	(1.3, 6.1)	0.61
Marital Status				NS
Married/Partner *(Comparison Group)*	1049	†**3.6**	(2.4, 5.3)	—
Previously Married	334	†	—	1.67
Never Married	244	†**10.6**	(6.3, 17.3)	3.46
Education				NS
High school not completed *(Comparison Group)*	125	†	—	—
Completed high school	354	†**5.0**	(2.4, 10.2)	1.69
Some college or university	589	†**5.7**	(3.5, 9.2)	1.99
University degree	557	†**5.5**	(3.2, 9.3)	2.31
Household Income				NS
< $30,000 *(Comparison Group)*	130	†	—	—
$30,000-$49,999	202	†**2.6**	(0.8, 7.6)	1.73
$50,000-$79,999	289	†**3.5**	(1.6, 7.3)	2.10
$80,000+	671	†**6.3**	(4.3, 9.4)	3.69
Not stated	350	†**5.9**	(2.6, 12.7)	3.59

Notes: [1]Driving items were asked only of a random subsample of respondents;
(1) All analyses are sample design adjusted; *p<.05**;** **p<.01; ***p<.001; CI = 95% confidence interval; NS – no statistically significant difference; † Estimate suppressed or unstable.
(2) Asterisks in group row indicate a statistically significant group effect, based on Wald test.
(3) ORs greater than 1.0 indicate that the odds of driving after drinking are higher in the group being compared to the comparison group; ORs less than 1.0 indicate that the odds of driving after drinking are lower in the group being compared to the comparison group.
(4) Adjusted odds ratio holding fixed values for sex, age, region, marital status, education and income.
Q: *During the past 12 months, have you driven a motor vehicle after having two or more drinks in the previous hour?*
Source: The CAMH Monitor, Centre for Addiction and Mental Health

Table 6.1.2a: Percentage ***Driving within One Hour after Consuming Two or More Drinks*** in the Past 12 Months, by Demographic Characteristics, Ontario Licensed Drivers, Aged 18+, 1996–2000

	1996	1997	1998	1999	2000
(N=)	(2360)	(2432)	(2183)	(2101)	(2066)
Total	**13.1**	**10.6**	**10.1**	**10.5**	**8.6**
(95%CI)[a]	(11.6,14.7)	(9.3,12.1)	(8.8,11.7)	(9.1,12.1)	(7.3,10.1)
Sex					
Men	**21.2**	**18.6**	**16.0**	**16.5**	**13.6**
	(18.5,24.1)	(16.1,21.3)	(13.7,18.7)	(14.1,19.2)	(11.3,16.2)
Women	**4.9**	**†2.9**	**4.1**	**4.1**	**3.4**
	(3.8,6.4)	(2.1,4.1)	(3.0,5.6)	(3.0,5.5)	(2.4,4.9)
Age					
18 - 29 years	**20.1**	**13.0**	**14.0**	**13.9**	**11.2**
	(16.7,24.7)	(10.0,16.8)	(10.4,18.4)	(10.4,18.4)	(8.2,15.1)
30 - 39 years	**15.4**	**11.4**	**10.3**	**12.6**	**10.2**
	(12.4,19.0)	(8.8,16.5)	(7.5,13.3)	(10.0,15.8)	(7.5,13.8)
40 - 49 years	**11.8**	**10.1**	**11.3**	**10.3**	**8.3**
	(9.1,15.1)	(7.3,13.8)	(8.6,14.9)	(7.5,13.9)	(6.0,11.4)
50 - 64 years	**7.0**	**9.4**	**8.1**	**8.0**	**† 5.9**
	(4.7,10.2)	(6.9,12.6)	(5.8,11.4)	(5.5,11.6)	(3.7,9.3)
65+ years	**5.8**	**7.8**	**6.4**	**6.8**	**† 6.0**
	(3.3,9.9)	(5.2,10.4)	(4.0,10.2)	(4.1,11.0)	(3.3,10.7)
Region					
Toronto	**13.8**	**†7.8**	**†9.9**	**†8.5**	**†9.0**
	(10.3,18.9)	(5.0,12.0)	(6.9,14.1)	(5.7,12.7)	(5.9,13.4)
Central East	**16.2**	**9.9**	**11.2**	**†10.7**	**† 6.3**
	(12.7,20.5)	(7.3,13.3)	(8.1,15.3)	(7.6,14.8)	(4.3,9.2)
Central West	**11.2**	**11.5**	**†8.3**	**†9.4**	**†8.6**
	(8.4,14.8)	(8.6,15.3)	(5.7,11.8)	(6.6,13.1)	(6.0,12.1)
West	**13.1**	**11.4**	**10.4**	**12.4**	**†9.3**
	(9.9,17.1)	(8.5,15.1)	(7.5,14.2)	(9.3,16.3)	(6.2,13.7)
East	**†9.5**	**12.2**	**10.0**	**11.7**	**†7.6**
	(6.8,13.2)	(9.2,16.1)	(7.1,13.8)	(8.5,15.8)	(5.0,11.5)
North	**13.9**	**11.5**	**12.8**	**12.8**	**13.2**
	(10.4,18.3)	(8.5,15.3)	(9.4,17.0)	(9.3,17.3)	(9.7,10.1)
Marital Status					
Married/Partner	**10.5**	**9.0**	**9.1**	**9.7**	**7.4**
Previously Married	**13.1**	**14.8**	**12.4**	**9.4**	**10.5**
Never Married	**20.7**	**13.4**	**12.5**	**14.1**	**11.3**
Education					
High school not completed	**10.6**	**12.7**	**11.3**	**5.9**	**† 6.2**
Completed high school	**14.0**	**9.9**	**9.1**	**11.5**	**11.3**
Some college or university	**15.9**	**12.5**	**13.0**	**12.4**	**9.5**
University degree	**10.8**	**8.1**	**6.9**	**9.6**	**† 5.9**

Notes: [a] 95% confidence interval; all analyses are sample design adjusted.

Q: *During the past 12 months, have you driven a motor vehicle after having two or more drinks in the previous hour?* (Asked among drivers currently holding a valid licence)

Source: The CAMH Monitor, Centre for Addiction and Mental Health

Table 6.1.2b: Percentage ***Driving within One Hour after Consuming Two or More Drinks*** in the Past 12 Months, by Demographic Characteristics, Ontario Licensed Drivers, Aged 18+, 2001–2017

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Trend	
(N=)	(2308)	(2132)	(2124)	(2283)	(2126)	(1730)	(1745)	(1809)	(1833)	(2711)	(1812)	(1830)	(1856)	(1816)	(924)	(1019)	(1642)		
Total Drivers[1]	**10.9**	**8.1**	**8.5**	**7.7**	**6.2**	**5.9**	**6.1**	**7.1**	**6.9**	**5.0**	**5.8**	**4.7**	**5.1**	**4.9**	**4.9**	**†6.0**	**5.2**	**T**	**–**
(95% CI)[a]	(9.5,12.5)	(6.9,9.5)	(7.2,9.9)	(6.4, 9.2)	(5.1, 7.5)	(4.7, 7.4)	(4.9, 7.5)	(5.8, 8.8)	(5.5, 8.5)	(4.1, 6.1)	(4.6, 7.4)	(3.7, 6.0)	(3.9, 6.6)	(3.8, 6.4)	(3.3, 7.2)	(3.9, 9.1)	(3.8, 7.1)		
Sex																			
Men	**17.9**	**12.5**	**13.7**	**12.6**	**10.1**	**9.4**	**9.6**	**11.4**	**11.6**	**7.3**	**10.6**	**7.9**	**8.2**	**8.4**	**9.2**	**†10.9**	**†8.1**	**T**	**–**
	(15.4,20.7)	(10.4,14.9)	(11.4,16.3)	(10.3, 15.2)	(8.2, 12.5)	(7.3,12.0)	(7.5, 12.2)	(9.0, 14.4)	(9.2,14.5)	(5.8, 9.0)	(8.2,13.7)	(6.0, 10.3)	(6.2, 10.8)	(6.3, 11.2)	(6.0, 13.7)	(6.8, 17.1)	(5.5, 11.7)		
Women	**3.5**	**3.5**	**3.0**	**†2.6**	**†2.1**	**†2.3**	**†2.5**	**†3.0**	**†2.3**	**†2.8**	**†1.4**	**†1.6**	**†2.0**	**†1.5**	**†**	**†1.4**	**†2.7**	**T**	**–**
	(2.5,4.9)	(2.5,4.8)	(2.0,4.3)	(1.8, 3.8)	(1.4, 3.2)	(1.3,3.9)	(1.6, 3.9)	(1.9,4.7)	(1.4, 3.8)	(1.9, 4.2)	(0.9, 2.3)	(0.9, 3.1)	(1.1, 3.6)	(0.8, 2.7)	–	(0.6, 3.1)	(1.5, 4.8)		
Age																			
18-29	**12.5**	**11.9**	**12.4**	**14.6**	**†7.7**	**10.2**	**10.3**	**12.4**	**12.8**	**†5.7**	**†5.6**	**†6.7**	**†8.9**	**†3.2**	**†6.7**	**†**	**†9.2**	**T**	**–**
	(9.3, 16.6)	(8.8,15.9)	(9.0,16.9)	(10.5, 19.9)	(5.0, 11.8)	(6.3,15.9	(6.6, 15.8)	(7.8,19.2	(8.5,19.0)	(3.4, 9.4)	(2.6,11.4)	(3.7, 11.7)	(4.7, 16.4)	(1.1, 8.9)	(2.5, 16.5)	–	(4.7, 17.4)		
30-39	**13.2**	**8.5**	**11.1**	**†7.1**	**†8.0**	**†3.4**	**†4.6**	**†6.0**	**9.0**	**†7.0**	**†5.0**	**†5.1**	**†5.1**	**†8.3**	**†**	**†13.3**	**†11.1**	**T**	**–**
	(10.1,17.0)	(6.0,11.9)	(8.1,15.0)	(4.6, 10.7)	(5.4, 11.8)	(1.8, 6.3)	(2.6, 7.9)	(3.5, 10.0)	(5.6,14.3)	(4.6, 10.4)	(2.7, 9.3)	(2.7, 9.3)	(2.5, 9.9)	(4.6, 14.4)	–	(5.5, 28.8)	(6.0, 19.5)		
40-49	**11.9**	**†6.3**	**8.7**	**†6.4**	**†8.0**	**†6.7**	**†5.8**	**†6.9**	**†7.3**	**†5.2**	**†7.8**	**†2.9**	**†4.0**	**†7.1**	**†5.8**	**†5.2**	**†4.7**	**T**	**–**
	(9.0,15.5)	(4.3,9.2)	(6.3,11.9)	(4.4, 9.2)	(5.8, 11.0)	(4.4,10.1)	(3.7, 9.1)	(4.5,10.6)	(4.9,10.8)	(3.4, 7.8)	(4.8,12.5)	(1.6, 5.5)	(2.3, 6.9)	(4.5, 11.0)	(2.2, 14.5)	(2.0, 13.0)	(2.4, 9.0)		
50-64	**9.9**	**9.6**	**†5.8**	**†5.6**	**†2.6**	**†5.8**	**†6.1**	**†5.6**	**†3.9**	**†3.9**	**†6.9**	**†5.5**	**†4.7**	**†3.6**	**†5.1**	**†3.9**	**†3.2**	**T**	**–**
	(7.1, 13.5)	(7.0,13.2)	(3.8,8.7)	(3.9, 8.2)	(1.5, 4.6)	(3.8,8.9)	(4.1, 9.0)	(3.8,8.4)	(2.5,6.1)	(2.8, 5.6)	(4.8, 9.8)	(3.7, 8.1)	(3.1, 6.9)	(2.3, 5.7)	(2.8, 8.9)	(2.1, 7.3)	(1.7, 5.9)		
65+	**† 5.0**	**†3.7**	**†3.4**	**†5.3**	**†4.3**	**†3.2**	**†4.4**	**†5.3**	**†2.5**	**†3.7**	**†3.7**	**†3.5**	**†4.1**	**†3.4**	**†4.8**	**†2.8**	**†1.5**	**T**	**–**
	(2.7, 9.4)	(1.9,7.1)	(1.8,6.6)	(3.1, 8.8)	(2.4, 7.6)	(1.5,6.6)	(2.3, 8.3)	(3.2, 8.7)	(1.2,4.8)	(2.4, 5.6)	(2.2, 6.1)	(1.9, 6.1)	(2.6, 6.4)	(2.0, 5.7)	(2.6, 8.6)	(1.3, 5.8)	(0.8, 2.9)		
Region																			
Toronto	**†10.4**	**†5.0**	**†9.1**	**†7.3**	**†2.5**	**†4.5**	**†3.5**	**†5.4**	**†5.1**	**†4.6**	**†5.1**	**†2.9**	**†4.1**	**†3.8**	**†2.5**	**†6.0**	**†5.1**	**T**	**–**
	(7.2,14.8)	(2.9,8.5)	(6.2,13.2)	(4.5, 11.7)	(1.3, 4.8)	(2.3,8.8)	(1.7,6.9)	(3.1, 9.2)	(2.8, 9.1)	(2.9, 7.5)	(3.1, 8.3)	(1.4, 6.1)	(2.0, 8.4)	(1.8, 7.8)	(1.0, 6.3)	(2.3, 14.9)	(2.5, 10.1)		
Central East	**10.5**	**†8.5**	**†9.4**	**†7.7**	**†7.9**	**†4.6**	**†7.4**	**†7.2**	**†5.9**	**†3.0**	**†5.6**	**†3.9**	**†5.1**	**†4.5**	**†5.7**	**†9.0**	**†8.5**	**T**	**–**
	(7.6,14.2)	(5.7,12.5)	(6.6,13.2)	(5.1, 11.5)	(5.2, 11.8)	(2.5,8.5)	(4.7,11.4)	(4.4, 11.8)	(3.4,9.8)	(1.7, 5.3)	(3.2,9.6)	(2.0, 7.2)	(2.9, 8.7)	(2.4, 8.1)	(2.6, 12.1)	(3.9, 19.3)	(4.3, 16.2)		
Central West	**†9.5**	**†6.8**	**†7.7**	**†6.3**	**†6.7**	**†5.8**	**†2.8**	**†7.8**	**†7.5**	**†6.5**	**†7.5**	**†4.5**	**†4.5**	**†7.8**	**†4.9**	**†4.6**	**†5.0**	**T**	**–**
	(6.5,13.7)	(4.5,10.2)	(5.1,11.6)	(3.9, 10.0)	(4.5, 9.9)	(3.3,10.2)	(1.3,5.9)	(4.8,12.3)	(4.8,11.7)	(4.3, 9.8)	(4.5,12.3)	(2.5, 7.9)	(2.4, 8.3)	(4.9, 12.3)	(1.6, 13.8)	(1.8, 11.3)	(2.7, 9.3)		
West	**15.6**	**13.2**	**†8.5**	**13.1**	**†9.2**	**†7.2**	**†10.8**	**†5.2**	**†5.2**	**†6.6**	**†5.9**	**†6.6**	**†**	**†4.9**	**†5.7**	**†**	**†2.7**	**T**	**–**
	(12.0,20.0)	(10.0,17.3)	(5.9,12.2)	(9.7, 17.3)	(6.5, 12.9)	(4.4,11.5)	(7.3,15.6)	(3.1,8.5)	(3.1,8.5)	(4.4, 9.9)	(3.4,10.1)	(4.0, 10.8)	–	(2.7, 8.8)	(2.7, 11.5)	–	(1.1, 6.3)		
East	**10.5**	**†7.5**	**†7.0**	**†5.4**	**†4.4**	**†7.9**	**†8.7**	**†9.2**	**†10.8**	**†5.4**	**†5.1**	**†6.3**	**†7.4**	**†4.2**	**†6.0**	**†**	**†4.6**	**T**	**–**
	(7.7,14.3)	(5.0,11.0)	(4.6,10.5)	(3.4, 8.3)	(2.4, 8.0)	(5.1,12.0)	(5.5,13.6)	(5.9,14.2)	(7.0,16.4)	(3.4, 8.3)	(2.8,9.0)	(3.8, 10.4)	(4.4, 12.1)	(2.3, 7.7)	(2.1, 15.9)	–	(2.1, 10.0)		
North	**9.9**	**†8.1**	**†9.0**	**†6.8**	**†6.3**	**†7.3**	**†5.0**	**†10.7**	**†9.3**	**†5.6**	**†5.0**	**†7.0**	**†7.7**	**†3.6**	**†6.0**	**†4.5**	**†2.9**	**T**	**–**
	(7.3,13.4)	(5.4,12.1)	(6.2,12.9)	(4.8, 9.5)	(3.9,10.0)	(4.6,11.5)	(2.7,9.2)	(6.9,16.3)	(5.6,14.9)	(3.5, 8.6)	(2.5,9.6)	(4.1, 11.9)	(4.8, 12.3)	(1.8, 6.7)	(3.0, 11.5)	(1.9, 10.2)	(1.3, 6.1)		

Cont'd

(N=)	2001 (2308)	2002 (2132)	2003 (2124)	2004 (2283)	2005 (2126)	2006 (1730)	2007 (1745)	2008 (1809)	2009 (1833)	2010 (2711)	2011 (1812)	2012 (1830)	2013 (1856)	2014 (1816)	2015 (924)	2016 (1019)	2017 (1642)	Trend	
Marital Status																			
Married/ Partner	**9.8**	**7.5**	**7.6**	**6.5**	**5.6**	**5.5**	**5.4**	**6.4**	**5.8**	**5.1**	**5.5**	**4.7**	**4.0**	**5.4**	**5.3**	**†5.9**	**†3.6**	**T**	**–**
Previously Married	**9.0**	**6.2**	**†5.4**	**†4.5**	**†5.7**	**†6.1**	**†4.1**	**†7.0**	**†3.8**	**†4.4**	**†6.4**	**†5.4**	**†7.4**	**†5.2**	**†3.7**	**†3.7**	**†**	**T**	**–**
Never Married	**15.6**	**11.1**	**12.9**	**13.6**	**†8.5**	**†7.2**	**†9.7**	**†10.3**	**13.0**	**5.3**	**†6.8**	**†4.6**	**†8.0**	**†2.7**	**†4.5**	**†7.7**	**†10.6**	**T**	**–**
Education																			
HS not completed	**11.4**	**9.3**	**†7.8**	**†6.1**	**†6.1**	**†4.5**	**†5.8**	**10.7**	**†4.3**	**†5.2**	**†3.9**	**†**	**†5.1**	**†4.1**	**†**	**†**	**†**	**T**	**–**
Completed HS	**12.6**	**7.5**	**10.0**	**6.9**	**†6.0**	**†6.1**	**†8.6**	**†5.3**	**8.3**	**†3.5**	**†5.0**	**†6.3**	**†4.8**	**†8.0**	**†2.5**	**†6.6**	**†5.0**	**T**	**–**
Some college or university	**11.0**	**8.9**	**7.6**	**8.1**	**7.0**	**6.8**	**7.6**	**7.1**	**8.7**	**5.7**	**†7.5**	**†3.9**	**†6.2**	**†4.2**	**†6.2**	**†9.6**	**†5.7**	**T**	**–**
University degree	**8.7**	**7.0**	**8.9**	**8.4**	**†5.4**	**†5.1**	**†2.8**	**†7.7**	**†5.0**	**†5.4**	**†4.8**	**†5.3**	**†3.9**	**†4.3**	**†4.1**	**†3.2**	**†5.5**	**T**	**–**

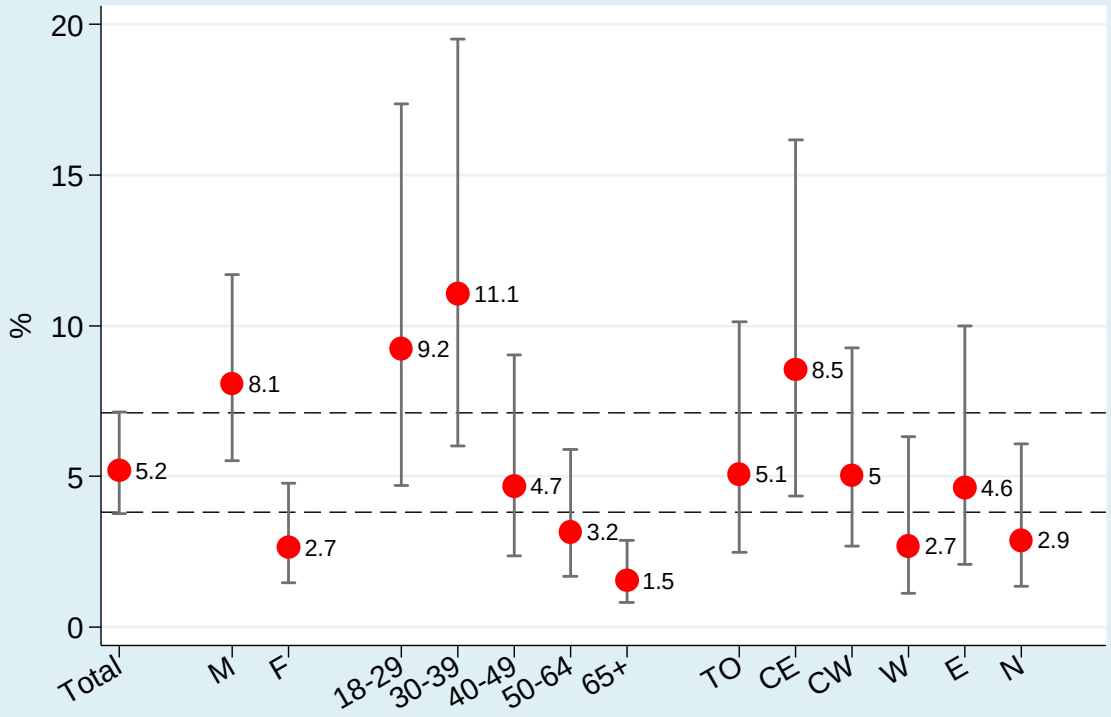
Notes: [1]Driving items were asked only of a random subsample of respondents (Panel B only); the sampling design was changed in 2017 to dual-frame sampling (landline + cell-phone).
(1) [a] 95% confidence interval; † Estimate suppressed or unstable; all estimates and analyses are sample design adjusted.
(2) Trend Analysis: **–** change not statistically significant (p<.05); **T** statistically significant change (p<.05) between 1996-2017; **2Y** statistically significant change (p<.05) between last two estimates.

Q: *During the past 12 months, have you driven a motor vehicle after having two or more drinks in the previous hour?* (Asked among drivers currently holding a valid licence)

Source: The CAMH Monitor, Centre for Addiction and Mental Health

Figure 6.1.1

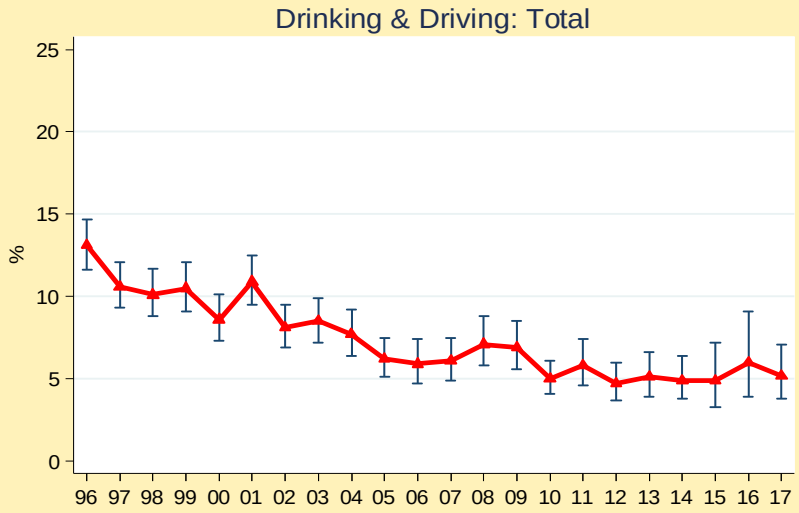
Past Year Driving after Drinking by Sex, Age and Region, Ontario Licensed Drivers Aged 18+, 2017 (N=1642)

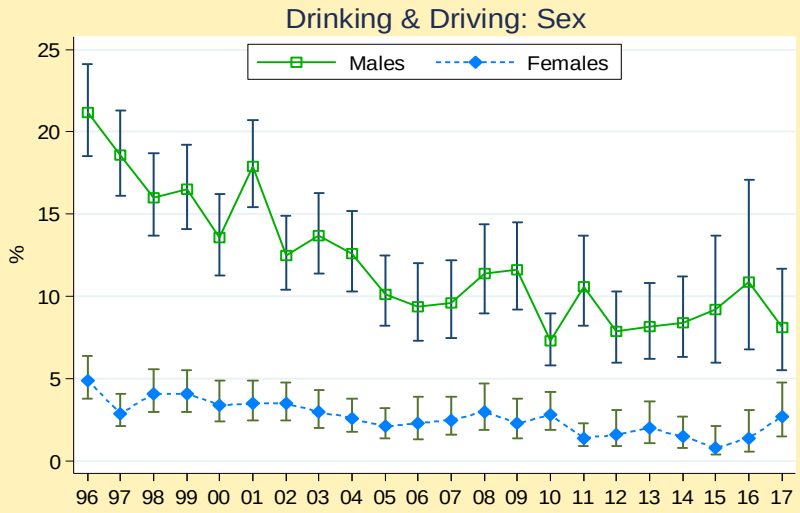


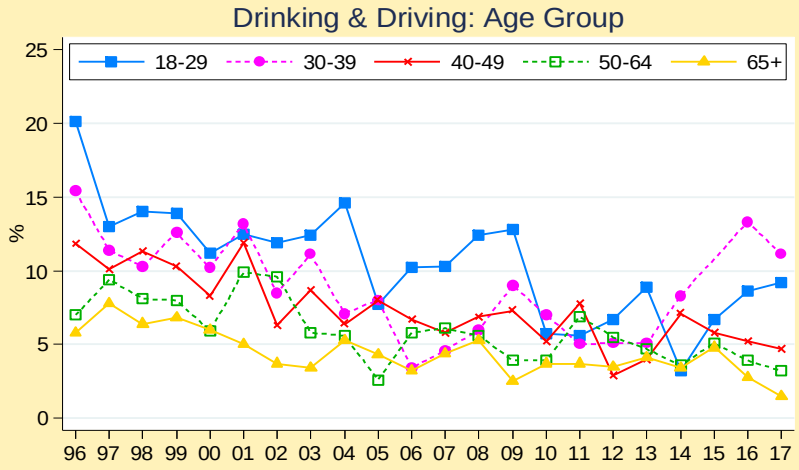
Note: (1) Vertical bars represent 95% confidence intervals; (2) horizontal bar represents 95% confidence interval for total estimate
(3) significant difference by sex and age (p<.05)
Source: 2017 CAMH Monitor

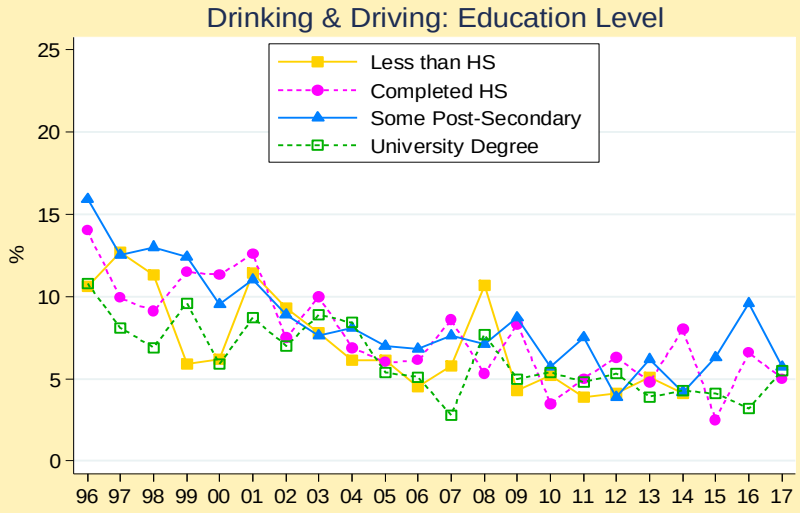
Figure 6.1.2

Past Year Driving after Drinking, Ontario Licensed Drivers Aged 18+, 1996–2017









Note: vertical 'whiskers' represent 95% confidence intervals
Source: CAMH Monitor

6.2 Driving after Cannabis Use

2017……Table 6.2.1, Fig. 6.2.1

Overall, an estimated **2.6%** (95% CI: 1.7% to 4.0%) of Ontario adults with a valid driver's licence reported **driving within one hour of consuming cannabis** at least one time during the past 12 months. This prevalence corresponds to a population estimate of 244,300 licensed drivers.

Assessing the effects of sex and age showed the following:

- The adjusted odds of driving after cannabis use were almost 3 times higher among men (3.9%) than women (1.4%; OR=2.57).
- Driving after cannabis use was reported almost exclusively among young drivers aged 18 to 29 (6.4%), with other age groups reporting very low estimates (estimates that were statistically unstable were suppressed).

Trends

2002–2017……Table 6.2.2, Fig. 6.2.2

2016–2017

The percentage of Ontario adult drivers reporting driving within one hour of consuming cannabis at least one time during the past 12 months in 2017 (2.6%) was not significantly different from 2016 (2.9%). In addition, rates were stable for all demographic subgroups.

2002–2017

Over the study period, driving after cannabis use has displayed a significant linear **increase**[36] from 1.5% in 2010 to 2.6% in 2017.

Significant linear **increases** were evident especially among men. Driving after consuming cannabis increased significantly among men, from 1.9% in 2012 to 3.9% in 2017. No other subgroup changes were evident.

[36] All these trend results must be interpreted with caution because moderate sample sizes (with sizeable sampling errors) and low prevalence estimates result in unreliable measures of change.

Table 6.2.1: Percentage ***Driving within One Hour after Consuming Cannabis*** in the Past 12 Months and Adjusted Group Differences, Ontario Licensed Drivers, Aged 18+, 2017

	N	%	95% CI	Adjusted Odds Ratio (N=1636)
Total Drivers[1]	1642	**†2.6**	(1.7, 4.0)	**—**
Sex				*****
Men	667	**†3.9**	(2.3, 6.6)	**2.57***
Women *(Comparison Group)*	975	**†1.4**	(0.7, 2.9)	**—**
Age				**
18-29 *(Comparison Group)*	157	**†6.4**	(3.1, 12.6)	**—**
30+	1485	**†1.7**	(1.0, 2.8)	**0.27***

Notes: [1]Driving items were asked only of a random subsample of respondents (Panel B only).
(1) All analyses are sample design adjusted; *p<.05**;** **p<.01; ***p<.001; CI = 95% confidence interval; NS – no statistically significant difference; † Estimate suppressed or unstable.
(2) Asterisks in group row indicate a statistically significant group effect, based on Wald test.
(3) ORs greater than 1.0 indicate that the odds of driving after cannabis use are higher in the group being compared to the comparison group; ORs less than 1.0 indicate that the odds of driving after cannabis use are lower in the group being compared to the comparison group.
(4) Adjusted odds ratio holding fixed values for sex and age.

Q: *During the past 12 months, have you driven a motor vehicle within an hour of using cannabis, marijuana or hash?*
(Asked among drivers currently holding a valid licence)

Source: The CAMH Monitor, Centre for Addiction and Mental Health

Table 6.2.2: Percentage ***Driving within One Hour after Consuming Cannabis*** in the Past 12 Months, by Demographic Characteristics, Ontario Licensed Drivers[1], Aged 18+, 2002–2017

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Trend	
(N=)	(2132)	(2124)	(2283)	(2126)	(1730)	(1745)	(1809)	(1833)	(2711)	(1812)	(1830)	(1856)	(1816)	(924)	(1019)	(1642)		
Total Drivers	**2.9**	**3.0**	**2.5**	**2.9**	**2.9**	**1.8**	**2.2**	**†1.8**	**†1.5**	**†2.4**	**†1.3**	**†2.3**	**†1.6**	**†2.9**	**†2.9**	**†2.6**	**T**	**–**
(95% CI) [a]	(2.1, 4.1)	(2.2, 4.0)	(1.7, 3.6)	(2.1, 4.1)	(1.9, 4.3)	(1.2, 2.7)	(1.4, 3.6)	(1.2, 2.8)	(1.0, 2.2)	(1.5,3.7)	(0.7, 2.2)	(1.5, 3.5)	(0.9, 2.7)	(1.6, 5.2)	(1.4, 5.6)	(1.7, 4.0)		
Sex																		
Men	**4.8**	**4.6**	**4.1**	**4.5**	**4.8**	**†2.2**	**†2.9**	**†3.3**	**†2.8**	**†2.9**	**†1.9**	**†3.4**	**†2.8**	**†5.6**	**†5.3**	**†3.9**	**T**	**–**
	(3.4, 6.7)	(3.2, 6.4)	(2.8, 6.1)	(3.0, 6.6)	(3.1, 7.6)	(1.3,3.8)	(1.7,4.8)	(2.1,5.1)	(1.9,4.0)	(1.6, 5.2)	(1.0,3.6)	(2.1,5.5)	(1.6, 4.9)	(3.0, 10.2)	(2.5, 11.0)	(2.3, 6.6)		
Women	**†1.0**	**1.3**	**†1.0**	**†1.3**	**†1.0**	**†1.3**	**†1.6**	**†**	**†**	**†1.9**	**†**	**†1.2**	**†**	**†**	**†**	**†1.4**	**–**	**–**
	(0.5, 2.3)	(0.7, 2.4)	(0.4, 1.8)	(0.7, 2.4)	(0.5, 2.2)	(0.7, 2.6)	(0.6, 4.2)	—	—	(1.0, 3.6)	—	(0.5, 2.8)	—	—	—	(0.7, 2.9)		
Age																		
18 - 29	**†7.3**	**9.0**	**†8.6**	**†8.0**	**†11.9**	**†6.3**	**†7.0**	**†2.8**	**†3.2**	**†8.6**	**†4.3**	**†8.3**	**†4.8**	**†7.5**	**†4.4**	**†6.3**	**–**	**–**
	(4.6,11.3)	(6.0,13.2)	(5.3, 13.5)	(5.0, 12.5)	(7.4, 18.4)	(3.5, 11.0)	(3.4, 13.8)	(1.3, 6.1)	(1.7, 5.9)	(4.7,15.2)	(2.1, 8.7)	(4.3, 15.4)	(2.1, 10.6)	(2.9, 17.9)	(0.6, 15.1)	(3.1, 12.6)		
30 - 39	**†4.2**	**†2.1**	**†1.0**	**†3.1**	**†1.5**	**†**	**†2.1**	**†3.4**	**†2.3**	**†**	**†**	**†**	**†**	**†**	**†9.0**	**†**	**–**	**–**
	(2.3, 7.6)	(1.0,4.2)	(0.3, 2.4)	(1.5, 6.6)	(0.5, 5.8)	—	(0.7, 6.1)	(1.5, 7.2)	(1.1, 4.8)	—	—	—	—	—	(3.1, 23.8)	—		
40 - 49	**†**	**†2.4**	**†1.8**	**†2.4**	**†**	**†**	**†1.8**	**†1.7**	**†**	**†**	**†**	**†**	**†**	**†**	**†**	**†**	**–**	**–**
	—	(1.4, 4.2)	(0.8, 4.0)	(1.2, 4.6)	—	—	(0.9, 3.7)	(0.7, 4.4)	—	—	—	—	—	—	—	—		
50+	**†**	**†**	**†**	**†**	**†**	**†**	**†**	**†**	**†**	**†1.1**	**†**	**†1.1**	**†**	**†1.1**	**†0.6**	**†1.4**	**–**	**–**
	—	—	—	—	—	—	—	—	—	(0.6, 2.2)	—	(0.6, 2.3)	—	(0.4, 2.7)	(0.3, 1.5)	(0.6, 2.8)		

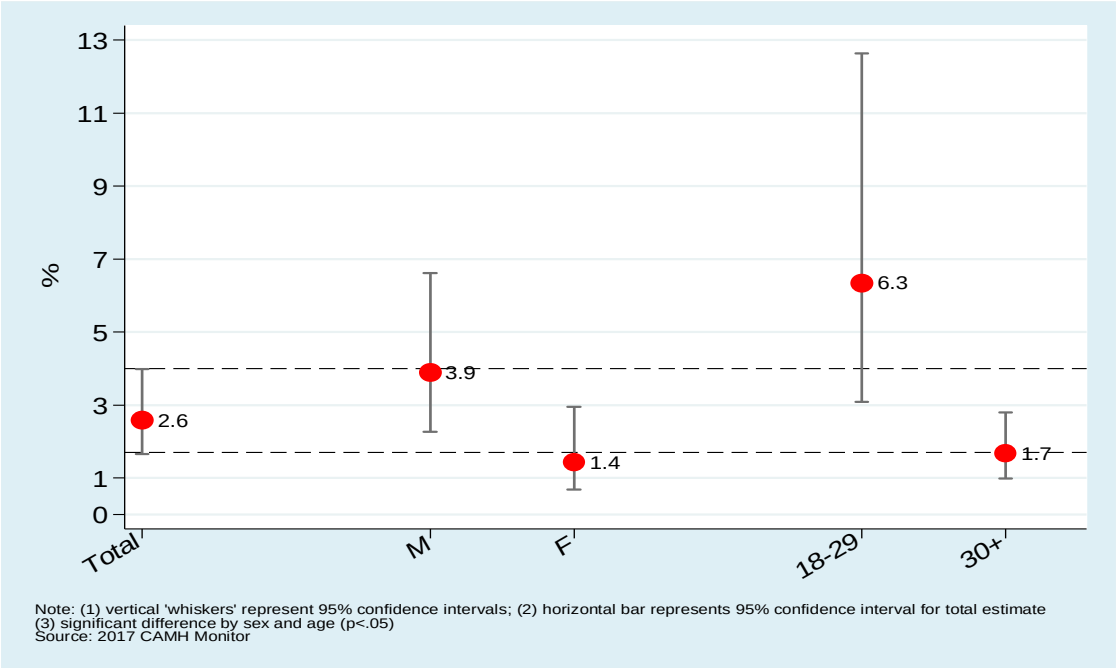
Notes: [1]Driving items were asked only of a random subsample of respondents (Panel B only); the sampling design was changed in 2017 to dual-frame sampling (landline + cell-phone).
(1) All analyses are sample design adjusted; [a] 95% confidence interval; † Estimate suppressed or unstable;
(2) Trend Analysis: **–** change not statistically significant (p<.05); **T** statistically significant change (p<.05) between 1996-2017; **2Y** statistically significant change (p<.05) between last two estimates;

Q: *During the past 12 months, have you driven a motor vehicle within one hour of using cannabis, marijuana or hash?* (Asked among drivers currently holding a valid licence)

Source: CAMH Monitor, Centre for Addiction and Mental Health

Figure 6.2.1

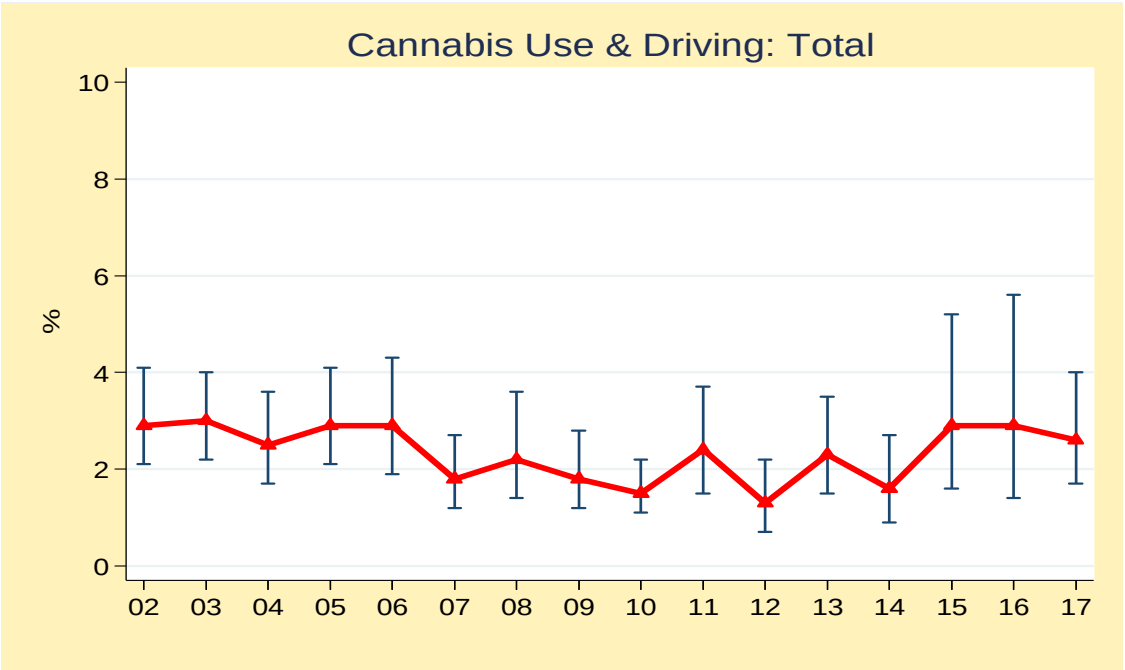
Past Year Driving after Cannabis Use by Sex and Age, Ontario Licensed Drivers Aged 18+, 2017 (N=1642)



Note: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal bar represents 95% confidence interval for total estimate
(3) significant difference by sex and age (p<.05)
Source: 2017 CAMH Monitor

Figure 6.2.2

Past Year Driving after Cannabis Use, Ontario Licensed Drivers Aged 18+, 2002–2017



6.3 Texting While Driving

2017……Tables 6.3.1; 6.3.3; Fig. 6.3.1 - 6.3.2

The survey asked about **texting while driving** starting in 2015. The question was "*During the past 12 months, how many times, if at all, did you send or read a text message or an email while you were driving a vehicle*?"
In Table 6.3.1 we present the percentage of licensed drivers who reported texting while driving a vehicle at least once in the past year.

Overall, an estimated **27.5%** (95% CI: 24.5% to 30.7%) of Ontario adults with a valid driver's licence reported texting while driving at least once during the past 12 months. This prevalence corresponds to a population estimate of 2,588,500 licensed drivers. Notably, **3.5%** (95% CI: 2.2% to 5.5%) of licensed drivers reported texting while driving 30 times or more in the past 30 days.

After adjusting for demographic risk factors, **sex, age** and **income** were significantly related to texting while driving in the past year.

- The prevalence of texting while driving was significantly higher among men (32.2%; OR=1.66) than among women (23.3%).

- Texting while driving showed a significant decline with age, dropping from 47.9% among 30 to 39 year olds to 17.9% among those 50 to 64 year olds and to 4.4% among those 65 years and older. Compared to the youngest age group (18 to 29 years old), the adjusted odds of texting while driving were significantly lower among those 50 to 64 year olds (OR=0.21) and among those aged 65 and older (OR=0.07).

- The rate of texting while driving showed a significant association with income. Compared to those with the lowest incomes, the adjusted odds of texting while driving were significantly higher among drivers with the highest incomes (OR=4.02).

There were no other dominant effects, after adjusting for other demographic factors.

Trends

2015–2017……Table 6.3.2, Fig. 6.3.3
The percentage of Ontario adult drivers reporting texting while driving at least once during the past 12 months in 2017 (27.5%) was similar to the 2016 estimate (26.3%). We found only one significant decline among respondents aged 50 to 64, from 26.5% to 17.9%.

However, the percentage of adult drivers reporting texting while driving was significantly **lower** in 2017 compared to 2015 (36.8%). In addition, rates were lower among **women**, among respondents aged 30 to 39, those aged 50 to 64 and 65 and older, among respondents living in Central East, West and North, among those married and previously married and among those with lower education.

Table 6.3.1: Percentage Reporting ***Texting while Driving*** in the Past 12 Months and Adjusted Group Differences, Ontario Licensed Drivers, Aged 18+, 2017

	N	%	95% CI	Adjusted Odds Ratio (N=1601)
Total Drivers[1]	1642	**27.5**	(24.5, 30.7)	—
Sex				**
Men	667	**32.2**	(27.5, 37.4)	**1.66****
Women *(Comparison Group)*	975	**23.3**	(19.7, 27.3)	—
Age				***
18-29 *(Comparison Group)*	157	**42.7**	(33.5, 52.6)	—
30-39	114	**47.9**	(37.7, 58.3)	1.05
40-49	227	**40.2**	(32.9, 47.9)	0.62
50-64	492	**17.9**	(14.1, 22.4)	**0.21*****
65+	646	**†4.4**	(3.0, 6.4)	**0.07*****
Region				NS
Toronto *(vs. Provincial Average)*	268	**33.2**	(26.4, 40.9)	1.05
Central East	283	**29.8**	(23.2, 37.5)	1.04
Central West	256	**26.0**	(19.2, 34.2)	1.05
West	279	**21.7**	(16.2, 28.4)	0.94
East	280	**27.4**	(21.2, 34.6)	0.94
North	276	**20.0**	(14.4, 27.0)	0.84
Marital Status				NS
Married/Partner *(Comparison Group)*	1049	**26.3**	(23.0, 29.8)	—
Previously Married	334	**†12.2**	(7.4, 19.3)	0.90
Never Married	244	**37.3**	(29.6, 45.8)	0.83
Education				NS
High school not completed *(Comparison Group)*	125	**†6.9**	(3.2, 14.2)	—
Completed high school	354	**19.7**	(14.3, 26.4)	2.06
Some college or university	589	**27.3**	(22.5, 32.8)	2.73
University degree	557	**35.3**	(30.0, 41.0)	**3.44***
Household Income				***
< $30,000 *(Comparison Group)*	130	**†10.1**	(5.0, 19.2)	—
$30,000-$49,999	202	**†13.2**	(7.9, 21.3)	1.89
$50,000-$79,999	289	**†20.6**	(14.3, 28.7)	2.00
$80,000+	671	**39.1**	(34.3, 44.2)	**4.02****
Not stated	350	**18.5**	(13.4, 25.0)	1.50

Notes: [1]Driving items were asked only of a random subsample of respondents (Panel B only); Percentage reporting texting while driving at least once in the past 12 months.
(1) All analyses are sample design adjusted; *p<.05**;** **p<.01; ***p<.001; CI = 95% confidence interval; NS – no statistically significant difference; † Estimate suppressed or unstable.
(2) Asterisks in group row indicate a statistically significant group effect, based on Wald test.
(3) ORs greater than 1.0 indicate that the odds of texting and driving are higher in the group being compared to the comparison group; ORs less than 1.0 indicate that the odds of texting and driving are lower in the group being compared to the comparison group.
(4) Adjusted odds ratio holding fixed values for sex, age, region, marital status, education and income.
Q: *During the past 12 months, how many times, if at all, did you send or read a text message or an email while you were driving?*
Source: The CAMH Monitor, Centre for Addiction and Mental Health

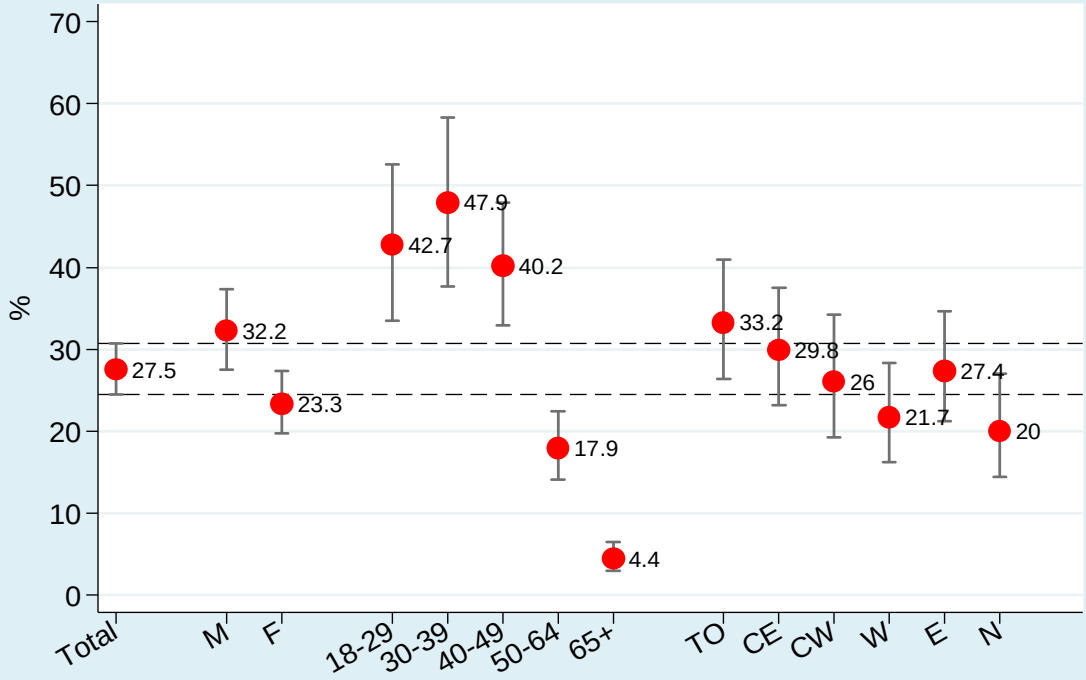
Table 6.3.2: Percentage Reporting ***Texting while Driving*** in the Past 12 Months by Demographic Characteristics, Ontario Licensed Drivers, Aged 18+, 2015–2017

(N=)	2015 (924)	2016 (1019)	2017 (1642)	Trend	
Total Drivers[1]	**36.8**	**26.3**	**27.5**	**T**	**–**
(95% CI)[a]	(32.6, 41.2)	(22.6, 30.4)	(24.5, 30.7)		
Sex					
Men	**37.9**	**30.3**	**32.2**	**–**	**–**
	(31.2, 45.0)	(24.4, 37.0)	(27.5, 37.4)		
Women	**35.8**	**22.6**	**23.3**	**T**	**–**
	(30.7, 41.2)	(18.2, 27.6)	(19.7, 27.3)		
Age					
18-29	**50.9**	**†42.4**	**42.7**	**–**	**–**
	(37.6, 64.2)	(27.2, 59.2)	(33.5, 52.6)		
30-39	**61.7**	**†32.1**	**47.9**	**T**	**–**
	(48.8, 73.1)	(21.3, 45.3)	(37.7, 58.3)		
40-49	**50.0**	**38.1**	**40.2**	**–**	**–**
	(40.2, 59.8)	(29.1, 48.1)	(32.9, 47.9)		
50-64	**25.7**	**26.5**	**17.9**	**T**	**2Y**
	(20.4,31.8)	(21.3, 32.4)	(14.1, 22.4)		
65+	**6.4**	**†2.3**	**†4.4**	**T**	**–**
	(3.6, 11.0)	(0.9, 3.8)	(3.0, 6.4)		
Region					
Toronto	**28.6**	**41.0**	**33.2**	**–**	**–**
	(20.3, 38.7)	(30.7, 52.2)	(26.4, 40.9)		
Central East	**47.8**	**†25.1**	**29.8**	**T**	**–**
	(38.5, 57.3)	(17.5,34.7)	(23.2,37.5)		
Central West	**34.6**	**†23.2**	**26.0**	**–**	**–**
	(25.5, 45.0)	(15.8, 32.7)	(19.2, 34.2)		
West	**32.9**	**†25.7**	**21.7**	**T**	**–**
	(24.4, 42.6)	(18.0, 35.3)	(16.2, 28.4)		
East	**37.0**	**†22.2**	**27.4**	**–**	**–**
	(27.8, 47.3)	(14.7, 32.1)	(21.2, 34.6)		
North	**31.4**	**†15.1**	**20.0**	**T**	**–**
	(23.2, 40.8)	(9.6, 23.1)	(14.4, 27.0)		
Marital Status					
Married/Partner	**35.2**	**26.9**	**26.3**	**T**	**–**
Previously Married	**23.3**	**†15.6**	**†12.2**	**T**	**–**
Never Married	**48.2**	**†31.3**	**37.3**	**–**	**–**
Education					
Less Than High School	**†23.9**	**†16.7**	**†6.9**	**T**	**–**
Completed High School	**27.2**	**†19.1**	**19.7**	**–**	**–**
Some College or University	**40.7**	**27.2**	**27.3**	**T**	**–**
University Degree	**40.7**	**30.4**	**35.3**	**–**	**–**

Notes: [1] Asked only of a random subsample; † Estimate suppressed or unstable; the sampling design was changed in 2017 to dual-frame sampling (landline + cell-phone).
(1) [a] 95% confidence interval; all analyses are sample design adjusted;
(2) Trend Analysis: **–** change not statistically significant at p<.05; **T** significant change (p<.05) between 2015-2017;
Q: *During the past 12 months, how many times, if at all, did you send or read a text message or an email while you were driving?*
Source: The CAMH Monitor, Centre for Addiction and Mental Health

Figure 6.3.1

Percentage Reporting Texting while Driving in the Past Year by Sex, Age and Region, Ontario Licensed Drivers Aged 18+, 2017 (N=1642)



Note: (1) Vertical bars represent 95% confidence intervals; (2) horizontal bar represents 95% confidence interval for total estimate
(3) significant difference by sex and age(p<.05)
Source: 2017 CAMH Monitor

Table 6.3.3:

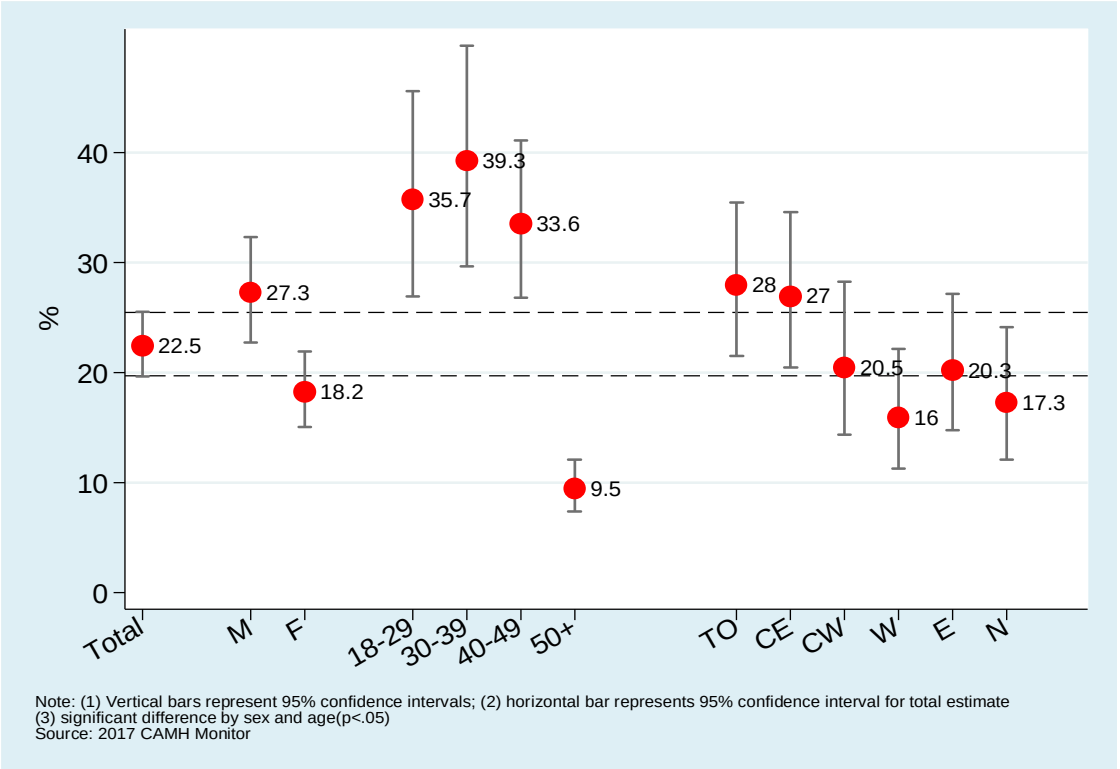
Percentage Reporting ***Texting while Driving*** in the Past Year and Past 30 Days, Ontario Licensed Drivers Aged 18+, 2017

Total drivers (N=1642)	Lower Limit %	Estimate %	Upper Limit %
At least once in the past year	24.5	**27.5**	30.7
At least once in the past 30 days	19.7	**22.5**	25.5
Less than 30 times in the past 30 days	16.4	**19.0**	21.8
30 times or more in the past 30 days	2.2	**3.5**	5.5

Note: All estimates are sample design adjusted.
Source: The *CAMH Monitor*, Centre for Addiction and Mental Health

Figure 6.3.2

Percentage Reporting Texting while Driving (at least once) in the Past 30 Days by Sex, Age and Region, Ontario Licensed Drivers Aged 18+, 2017 (N=1642)



Note: (1) Vertical bars represent 95% confidence intervals; (2) horizontal bar represents 95% confidence interval for total estimate
(3) significant difference by sex and age(p<.05)
Source: 2017 CAMH Monitor

7. MENTAL HEALTH

7.1 Psychological Distress

Starting in 2015, the *Kessler 6-Item Psychological Distress Scale (K6),* a screening instrument designed to detect nonspecific psychological distress (symptoms of anxiety and depression) was included in the survey. Because the *K6* is a screening instrument, it should not be used for clinical diagnoses (Kessler et al., 2002, Kessler et al., 2003). In 2017 these items were asked of a random subsample of respondents (N=1,813).

Each of the six questions begins with the wording: "*In the past 30 days how often did you....*" The following symptoms comprise the K6 screener:

- *feel nervous*
- *feel hopeless*
- *feel restless or fidgety*
- *feel so depressed that nothing could cheer you up*
- *feel that everything was an effort*
- *feel worthless*

Response categories are on a 5-point frequency scale ranging from (1) "*None of the time*" to (5) "*All of the time.*" Responses to each of the six items were rescaled to a 0–4 scale for summation. A summated score ranging from 0 to 24 was computed for respondents who answered all six items. Higher scores indicate higher levels of psychological distress.

For our purposes, we used two cut-off scores: (1) a score of **5 or higher** (of 24) to estimate the percentage experiencing a *moderate-to-serious* level of psychological distress (henceforth, called moderate psychological distress) (Prochaska et al., 2012); and (2) a cut-off score of **13 or higher** (of 24) to estimate the percentage experiencing *serious* psychological distress (Kessler et al., 2003).

Psychological Distress Symptoms

2017 ..... Fig. 7.1.1–7.1.2

The three most common symptoms experienced by respondents "*most of the time"* or "*all of the time"* during the past 30 days were: feeling restless or fidgety (8.7%), feeling that everything was an effort (6.9%), and feeling nervous (5.2%). The less commonly reported symptoms were feeling hopeless (3.2%), thinking of oneself as worthless (2.5%) and felt so depressed nothing could cheer them up (2.5%). There were no significant differences between men and women.

7.1.1 Moderate Psychological Distress

2017 .....Table 7.1.1; Fig. 7.1.3

An estimated **25.8%** (95% CI: 23.0% to 28.7%) of Ontario adults met the criteria for **moderate psychological distress** (a score of 5 or higher) during the past 30 days. The corresponding population estimate is 2,720,800 Ontario adults.

Only **age** was significantly related to moderate psychological distress. While holding values of risk factors constant, adjusted group differences showed the following:

- Moderate psychological distress declined with age, dropping from 43.8% among 18 to 29 year olds to 13.3% among those 65 and older. The adjusted odds of moderate psychological distress were lower among those aged 50 to 64 (OR=0.47) and among those 65 and older (OR=0.21), compared to those aged 18 to 29.

There were no other significant differences when holding values of demographics constant.

Trends
2015–2017……Table 7.1.3

The percentage of respondents indicating moderate psychological distress in 2017 (25.8%) was not significantly different from 2016 (22.3%) or 2015 (25.7%) and rates were stable for most subgroups.

There were only two significant increases in reporting moderate psychological distress between 2016 and 2017. These increases were observed among respondents from Central East (from 23.0% in 2016 to 33.7% in 2017) and respondents from the West region (from 16.7% in 2016 to 27.7% in 2017).

7.1.2 Serious Psychological Distress

2017 ……Table 7.1.2; Fig. 7.1.4

An estimated **4.0%** (95% CI: 2.8% to 5.6%) of Ontario adults met the criteria for **serious psychological distress** (a score of 13 or higher) during the past 30 days. The corresponding population estimate is 422,700 Ontario adults.

Age and **marital status** were significantly related to serious psychological distress when holding values of the set of risk factors fixed.

- Serious psychological distress declined with age, dropping from 8.4% among 18 to 29 year olds to 1.7% among those 65 and older (OR=0.03).

- Relative to married respondents, the adjusted odds of serious psychological distress were significantly higher among those previously married (10.3% vs. 1.9%; OR=7.63).

There were no other significant differences when holding values of other demographics constant.

Trends
2015–2017……Table 7.1.4

The percentage of respondents indicating serious psychological distress in 2017 (4.0%) was not significantly different from 2016 (2.9%) or 2015 (3.1%) and rates were stable for most subgroups.

There was only one significant increase in reporting serious psychological distress between 2016 and 2017. Among women, the proportion reporting serious psychological distress increased from 2.1% in 2016 to 4.2% in 2017.

Table 7.1.1: Percentage Reporting ***Moderate to Serious Psychological Distress (K6/5+)*** in the Past 30 Days and Adjusted Group Differences, Ontarians Aged 18+, 2017

	N	%	95% CI	Adjusted Odds Ratio (N=1765)
Total [1]	1813	**25.8**	(23.0, 28.7)	—
Sex				NS
Men	718	**24.8**	(20.7, 29.4)	0.84
Women *(Comparison Group)*	1095	**26.6**	(23.1, 30.5)	—
Age				*******
18-29 *(Comparison Group)*	184	**43.8**	(35.5, 52.6)	—
30-39	123	**†25.8**	(17.7, 36.1)	0.57
40-49	234	**26.4**	(20.1, 33.9)	0.67
50-64	529	**21.6**	(17.5, 26.2)	**0.47****
65+	734	**13.3**	(10.8, 16.4)	**0.21*****
Region				NS
Toronto *(vs. Provincial Average)*	314	**26.9**	(20.9, 33.9)	1.09
Central East	304	**33.7**	(26.9, 41.2)	1.35
Central West	284	**18.2**	(13.1, 24.7)	**0.65***
West	302	**27.7**	(21.3, 35.2)	1.24
East	304	**26.3**	(20.0, 33.8)	1.13
North	305	**23.4**	(17.7, 30.3)	0.86
Marital Status				NS
Married/Partner *(Comparison Group)*	1100	**19.2**	(16.5, 22.3)	—
Previously Married	399	**27.3**	(21.1, 34.6)	**1.66***
Never Married	292	**40.0**	(33.0, 47.5)	1.42
Education				NS
High school not completed *(Comp. Group)*	165	**†26.1**	(16.9, 37.9)	—
Completed high school	400	**28.2**	(22.1, 35.1)	0.85
Some college or university	641	**29.7**	(25.1, 34.7)	0.83
University degree	581	**20.5**	(16.4, 25.4)	0.60
Household Income				NS
< $30,000 *(Comparison Group)*	175	**36.2**	(26.2, 47.6)	—
$30,000-$49,999	232	**26.8**	(19.7, 35.3)	0.72
$50,000-$79,999	303	**23.6**	(17.2, 31.6)	0.60
$80,000+	690	**23.0**	(19.1, 27.3)	0.58
Not stated	413	**28.2**	(22.3, 35.0)	0.72

Notes: (1) All analyses are sample design adjusted; *p<.05**;** **p<.01; ***p<.001; CI = 95% confidence interval; NS – not statistically significant; † Estimate unstable or supressed; [1] Asked only of a random subsample.
(2) Asterisks in group row indicate a statistically significant group effect, based on Wald test.
(3) ORs greater than 1.0 indicate that the odds of distress are higher relative to the comparison group; ORs less than 1.0 indicate that the odds of distress are lower relative to the comparison group.
(4) Adjusted odds ratio holding fixed values for sex, age, region, marital status, education and income.
Def'n: Moderate Psychological Distress is defined as reporting a score of 5 or more (out of 24) on the K6 scale.
Source: The *CAMH Monitor*, Centre for Addiction and Mental Health

Table 7.1.2: Percentage Reporting ***Serious Psychological Distress (K6/13+)*** in the Past 30 Days and Adjusted Group Differences, Ontarians Aged 18+, 2017

	N	%	95% CI	Adjusted Odds Ratio (N=1765)
Total [1]	1813	**†4.0**	(2.8, 5.6)	—
Sex				NS
Men	718	**†3.8**	(2.2, 6.5)	0.94
Women *(Comparison Group)*	1095	**†4.2**	(2.6, 6.5)	—
Age				****
18-29 *(Comparison Group)*	184	**†8.4**	(4.7, 14.6)	—
30-39	123	**†5.5**	(2.1, 13.3)	0.40
40-49	234	**†2.1**	(0.9, 7.9)	**0.14***
50-64	529	**†3.2**	(1.9, 5.3)	**0.13****
65+	734	**†1.7**	(0.9, 3.1)	**0.03*****
Region				NS
Toronto *(vs. Provincial Average)*	314	**†4.0**	(1.9, 8.3)	1.11
Central East	304	**†2.9**	(1.2, 6.7)	0.52
Central West	284	**†4.1**	(1.8, 9.1)	1.23
West	302	**†6.0**	(3.3, 10.8)	1.73
East	304	**†4.2**	(1.6, 10.7)	1.08
North	305	**†2.9**	(1.3, 6.3)	0.68
Marital Status				****
Married/Partner *(Comparison Group)*	1100	**†1.9**	(1.2, 2.9)	—
Previously Married	399	**†10.3**	(5.4, 19.0)	**7.63****
Never Married	292	**†6.1**	(3.4, 10.9)	0.62
Education				NS
High school not completed *(Comp. Group)*	165	**†2.4**	(0.8, 6.9)	—
Completed high school	400	**†5.2**	(2.4, 11.1)	2.80
Some college or university	641	**†5.2**	(3.2, 8.2)	2.29
University degree	581	**†2.2**	(1.0, 4.7)	1.24
Household Income				NS
< $30,000 *(Comparison Group)*	175	**†8.7**	(3.7, 18.9)	—
$30,000-$49,999	232	**†5.5**	(2.5, 12.0)	1.07
$50,000-$79,999	303	**†4.3**	(1.8, 9.7)	0.66
$80,000+	690	**†2.5**	(1.4, 4.5)	0.50
Not stated	413	**†4.3**	(1.9, 9.3)	0.77

Notes: (1) All analyses are sample design adjusted; *p<.05**;** **p<.01; ***p<.001; CI = 95% confidence interval; NS – not statistically significant; † Estimate unstable or supressed; [1] Asked only of a random subsample..
(2) Asterisks in group row indicate a statistically significant group effect, based on Wald test.
(3) ORs greater than 1.0 indicate that the odds of distress are higher relative to the comparison group; ORs less than 1.0 indicate that the odds of distress are lower relative to the comparison group.
(4) Adjusted odds ratio holding fixed values for sex, age, region, marital status, education and income.

Deff: *Serious Psychological Distress is defined as reporting a score of 13 or more (out of 24) on the K6 scale.*

Source: The *CAMH Monitor*, Centre for Addiction and Mental Health

Table 7.1.3: Percentage Reporting ***Moderate to Serious Psychological Distress (K6/5+)*** in the Past 30 Days by Demographic Characteristics, Ontarians Aged 18+, 2015–2017

(N=)	2015 (4007)	2016 (2034)	2017 (1813)	Trend	
Total Sample[1]	**25.7**	**22.3**	**25.8**	–	–
(95% CI)[a]	(23.9, 27.5)	(19.8, 25.0)	(23.0, 28.7)		
Sex					
Men	**22.4**	**20.9**	**24.8**	–	–
	(19.7, 25.4)	(17.1, 25.4)	(20.7, 29.4)		
Women	**28.7**	**23.6**	**26.6**	–	–
	(26.3, 31.1)	(20.5, 26.9)	(23.1, 30.5)		
Age					
18-29	**42.7**	**39.0**	**43.8**	–	–
	(36.7, 49.0)	(30.1, 48.8)	(35.5, 52.6)		
30-39	**27.9**	**26.9**	**†25.8**	–	–
	(23.0, 33.4)	(19.8, 35.4)	(17.7, 36.1)		
40-49	**19.1**	**19.3**	**26.4**	–	–
	(15.9, 22.8)	(14.9, 24.7)	(20.1, 33.9)		
50-64	**23.2**	**16.4**	**21.6**	–	–
	(20.6, 25.9)	(13.6, 19.7)	(17.5, 26.2)		
65+	**16.5**	**15.7**	**13.3**	–	–
	(14.2, 19.0)	(12.5, 19.5)	(10.8, 16.4)		
Region					
Toronto	**27.5**	**21.8**	**26.9**	–	–
	(23.4, 32.0)	(16.3, 28.5)	(20.9, 33.9)		
Central East	**27.3**	**23.0**	**33.7**	–	**2Y**
	(23.3, 31.8)	(17.6, 29.3)	(26.9, 41.2)		
Central West	**25.1**	**28.2**	**19.2**	–	–
	(21.1, 29.6)	(21.8, 35.6)	(13.1, 24.7)		
West	**20.4**	**16.7**	**27.7**	**T**	**2Y**
	(16.9, 24.4)	(12.6, 21.9)	(21.3, 35.2)		
East	**26.1**	**22.3**	**26.3**	–	–
	(22.0, 30.6)	(17.4, 28.1)	(20.0, 33.8)		
North	**23.6**	**17.2**	**23.4**	–	–
	(19.7, 27.9)	(13.0, 22.5)	(17.7, 30.3)		
Marital Status					
Married/Partner	**19.9**	**16.8**	**19.2**	–	–
Previously Married	**28.0**	**24.0**	**27.3**	–	–
Never Married	**41.1**	**37.9**	**40.0**	–	–
Education					
Less Than High School	**31.4**	**31.8**	**†26.1**	–	–
Completed High School	**28.9**	**24.5**	**28.2**	–	–
Some College or University	**29.1**	**25.0**	**29.7**	–	–
University Degree	**19.7**	**17.8**	**20.5**	–	–

Notes: [1] Asked only of a random subsample; † Estimate suppressed or unstable;
(1) The sampling design was changed in 2017 to dual-frame sampling (landline + cell-phone).
(2) [a] 95% confidence interval; all analyses are sample design adjusted; *p<.05**;** **p<.01; ***p<.001;
(3) Trend Analysis: **–** change not statistically significant at p<.05; **T** significant change (p<.05) between 2015-2017; **2Y** significant change (p<.05) between last two estimates.

Def'n: *Moderate Psychological Distress is defined as reporting a score of 5 or more (out of 24) on the K6 scale.*

Source: The *CAMH Monitor*, Centre for Addiction and Mental Health

Table 7.1.4: Percentage Reporting ***Serious Psychological Distress (K6/13+)*** in the Past 30 Days by Demographic Characteristics, Ontarians Aged 18+, 2015–2017

(N=)	2015 (4007)	2016 (2034)	2017 (1813)	Trend	
Total Sample[1]	**3.1**	**†2.9**	**†4.0**	–	–
(95% CI)[a]	(2.4, 4.1)	(1.9, 4.3)	(2.8, 5.6)		
Sex					
Men	**†2.8**	**†3.7**	**†3.8**	–	–
	(1.8, 4.4)	(2.1, 6.6)	(2.2, 6.5)		
Women	**3.4**	**†2.1**	**†4.2**	–	**2Y**
	(2.5, 4.7)	(1.2, 3.5)	(2.6, 6.5)		
Age					
18-29	**†6.8**	**†6.6**	**†8.4**	–	–
	(4.1, 11.2)	(2.9, 14.2)	(4.7, 14.6)		
30-39	**†2.6**	**†3.5**	**†5.5**	–	–
	(1.2, 5.5)	(1.3, 8.8)	(2.1, 13.3)		
40-49	**†2.3**	**†1.5**	**†2.1**	–	–
	(1.3, 3.9)	(0.6, 3.8)	(0.9, 7.9)		
50-64	**†2.6**	**†2.1**	**†3.2**	–	–
	(1.9, 3.7)	(1.1, 3.8)	(1.9, 5.3)		
65+	**†1.4**	**†1.7**	**†1.7**	–	–
	(0.9, 2.3)	(1.0, 2.9)	(0.9, 3.1)		
Region					
Toronto	**†4.4**	**†4.8**	**†4.0**	–	–
	(2.6, 7.4)	(2.0, 10.7)	(1.9, 8.3)		
Central East	**†3.2**	**†0.8**	**†2.9**	–	–
	(1.8, 5.8)	(0.2, 3.1)	(1.2, 6.7)		
Central West	**†3.2**	**†3.0**	**†4.1**	–	–
	(1.8, 5.6)	(1.2, 7.4)	(1.8, 9.1)		
West	**†1.8**	**†3.7**	**†6.0**	**T**	–
	(1.1, 3.0)	(1.7, 8.1)	(3.3, 10.8)		
East	**†2.8**	**†2.1**	**†4.2**	–	–
	(1.5, 5.0)	(0.9, 5.1)	(1.6, 10.7)		
North	**†1.6**	**†3.9**	**†2.9**	–	–
	(0.8, 2.9)	(2.1, 7.1)	(1.3, 6.3)		
Marital Status					
Married/Partner	**†1.5**	**†1.3**	**†1.9**	–	–
Previously Married	**†4.9**	**†6.1**	**†10.3**	**T**	–
Never Married	**†7.0**	**†5.8**	**†6.1**	–	–
Education					
Less Than High School	**†4.4**	**†8.2**	**†2.4**	–	–
Completed High School	**†4.3**	**†4.0**	**†5.2**	–	–
Some College or University	**†4.2**	**†3.9**	**†5.2**	–	–
University Degree	**†1.2**	**†**	**†2.2**	–	–

Notes: [1] Asked only of a random subsample; † Estimate suppressed or unstable;
(1) The sampling design was changed in 2017 to dual-frame sampling (landline + cell-phone).
(2) [a] 95% confidence interval; all analyses are sample design adjusted; *p<.05**;** **p<.01; ***p<.001;
(3) Trend Analysis: **–** change not statistically significant at p<.05; **T** significant change (p<.05) between 2015-2017; **2Y** significant change (p<.05) between last two estimates.

Def'n: Serious Psychological Distress is defined as reporting a score of 13 or more (out of 24) on the K6 scale.

Source: The *CAMH Monitor*, Centre for Addiction and Mental Health

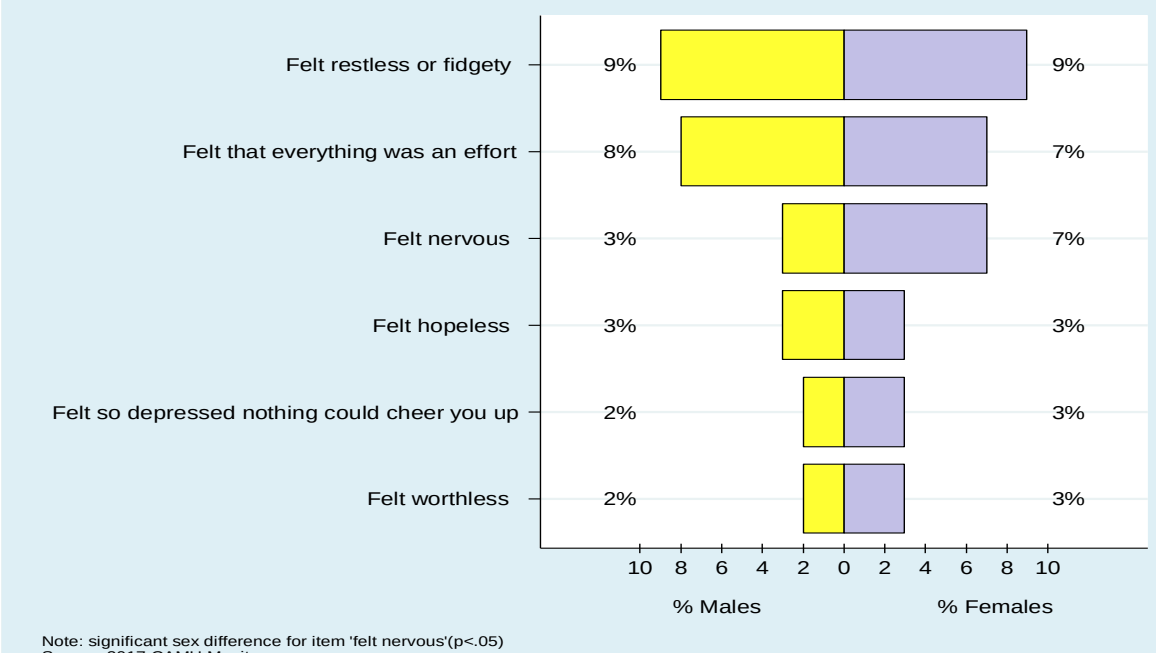
Figure 7.1.1

Percentage Reporting Symptoms of Psychological Distress (K6) "Most of the Time" or "All of the Time" in the Past Month, Ontarians Aged 18+, 2017 (N=1813)

Note: horizontal bar represents 95% confidence interval for total estimate
Source: 2017 CAMH Monitor

Figure 7.1.2

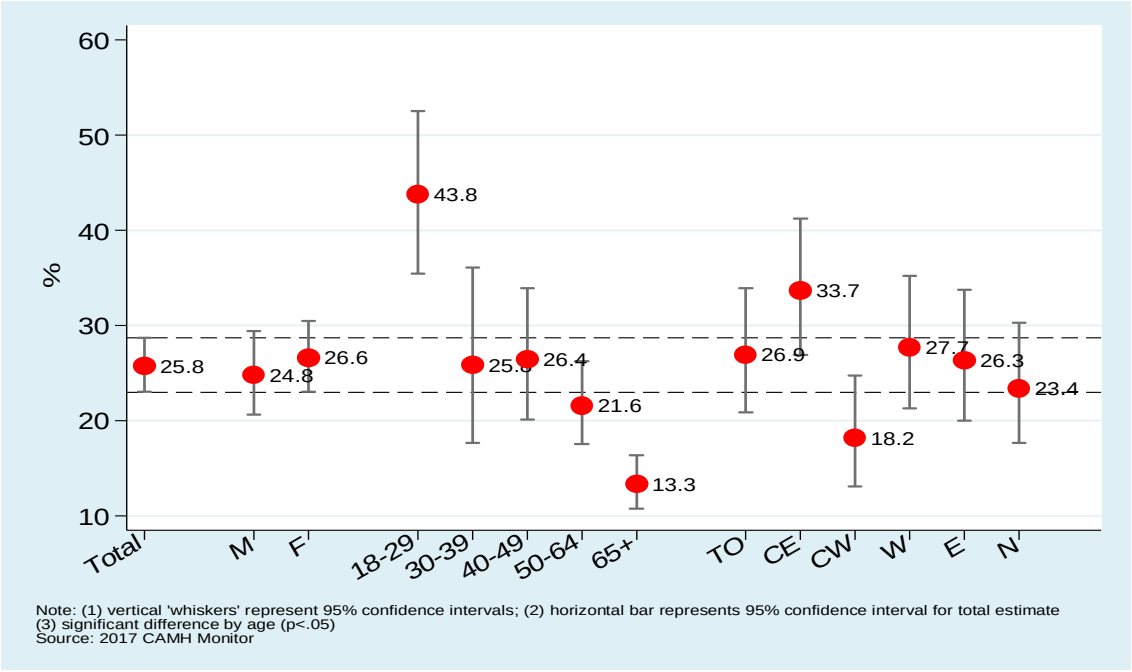
Percentage Reporting Symptoms of Psychological Distress (K6) "Most of the Time" or "All of the Time" in the Past Month by Sex, Ontarians Aged 18+, 2017 (N=1813)



Note: significant sex difference for item 'felt nervous'(p<.05)
Source: 2017 CAMH Monitor

Figure 7.1.3

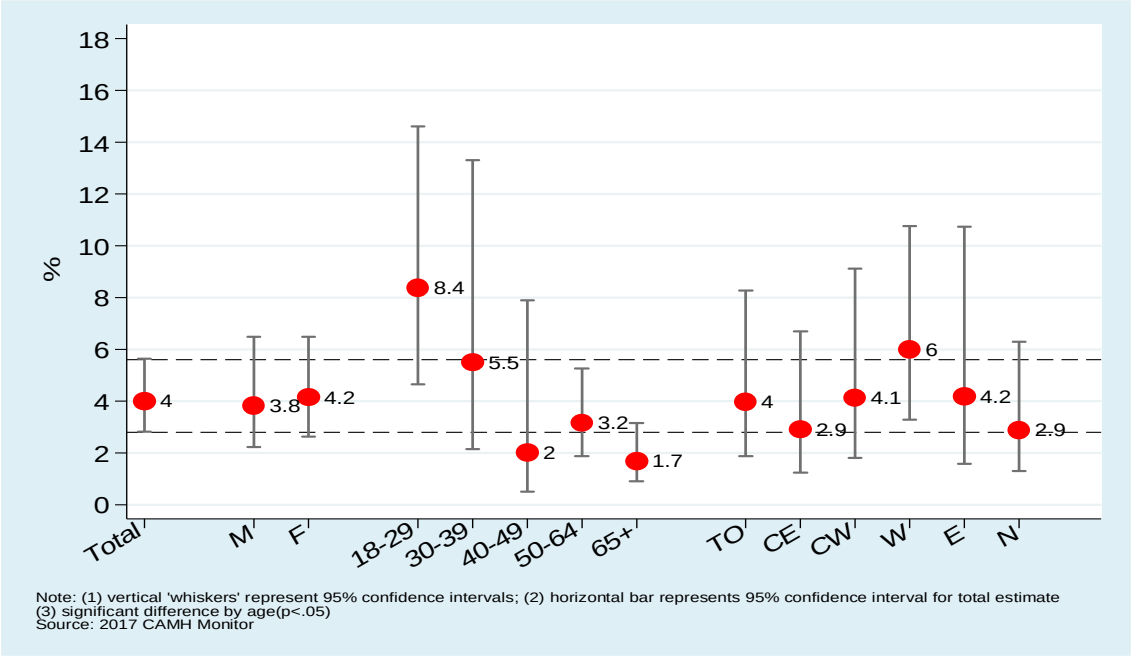
Percentage Reporting Moderate-to-Serious Psychological Distress (K6/5+) in the Past Month by Sex, Age and Region, Ontarians Aged 18+, 2017 (N=1813)



Note: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal bar represents 95% confidence interval for total estimate
(3) significant difference by age (p<.05)
Source: 2017 CAMH Monitor

Figure 7.1.4

Percentage Reporting Serious Psychological Distress (K6/13+) in the Past Month by Sex, Age and Region, Ontarians Aged 18+, 2017 (N=1813)



Note: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal bar represents 95% confidence interval for total estimate
(3) significant difference by age(p<.05)
Source: 2017 CAMH Monitor

7.2 Prescription Medication for Anxiety and Depression

Anxiety and depression are some of the most prevalent mental health conditions experienced by adults. For monitoring purposes, we assess the percentage reporting having used prescription medication to treat anxiety (anxiolytics) and depression (antidepressants) during the 12 months before the survey.

The following questions were asked:
1) *In the past 12 months, have you taken any prescription medication to treat anxiety or panic attacks?*
2) *In the past 12 months, have you taken any prescription medication to treat depression?*

Estimates for past year use of antianxiety and antidepressant medications are available beginning 1997. In 2017 these items were asked of a random subsample of respondents (N=1,813).

7.2.1 Antianxiety Medication

2017 ……Table 7.2.1; Fig. 7.2.1

Overall, an estimated **11.3%** (95% CI: 9.5% to 13.6%) of Ontario adults used a prescribed medication to treat anxiety – anxiolytics – during the 12 months before the survey. The corresponding population estimate is 1,195,500 Ontario adults.

There were no significant differences in using prescribed medication to treat anxiety by demographic characteristics when holding values of the set of risk factors constant.

Trends

1997–2017……Table 7.2.3; Fig. 7.2.3

2016–2017
Use of antianxiety medication in 2017 (11.3%) was not significantly different from 2016 (9.5%) and rates were stable between these two years for all subgroups.

1997–2017
Since 1997, use of anxiolytics among the total sample has displayed a significant **linear increase**, from 4.7% to 11.3% in 2017.

There were significant **increases** during this period for both men and women, and all age, region, marital status, and education subgroups.

7.2.2. Antidepressant Medication

2017 ……Table 7.2.2; Fig. 7.2.2

An estimated **8.8%** (95% CI: 7.2% to 10.8%) of Ontario adults used a prescribed medication for depression – antidepressants – during the 12 months before the survey. The corresponding population estimate is 931,300 Ontario adults.

There were no significant differences in using prescribed medication to treat anxiety by demographic characteristics when holding values of the set of risk factors constant.

Trends

1997–2017 …… Table 7.2.4; Fig. 7.2.4

2016–2017
The prevalence of past year use of antidepressants in 2017 (8.8%) was statistically unchanged from 2016 (7.7%). In addition, rates of use were stable between these two years for all demographic subgroups.

1997–2017
Since 1997, use of antidepressants among the total population has significantly **increased**, from 3.9% in 1997 to 8.8% in 2017.

There were significant **increases** during this period for both men and women, and all age, region, marital status, and education subgroups.

Table 7.2.1 Percentage Reporting ***Using Prescription Medication to Treat Anxiety or Panic Attacks*** in the Past 12 Months and Adjusted Group Differences, Ontarians Aged 18+, 2017

	N	%	95% CI	Adjusted Odds Ratio (N=1760)
Total [1]	1813	**11.3**	(9.5, 13.6)	—
Sex				NS
Men	718	**10.6**	(7.8, 14.3)	0.89
Women *(Comparison Group)*	1095	**12.0**	(9.6, 14.8)	—
Age				NS
18-29 *(Comparison Group)*	184	**†12.7**	(8.0, 19.6)	—
30-39	123	**†11.2**	(5.7, 21.0)	0.89
40-49	234	**†12.8**	(8.4, 19.0)	1.14
50-64	529	**11.4**	(8.4, 15.2)	0.91
65+	734	**9.2**	(7.1, 11.7)	0.60
Region				NS
Toronto *(vs. Provincial Average)*	314	**†8.6**	(5.1, 14.1)	0.79
Central East	304	**†13.5**	(8.9, 20.0)	1.22
Central West	284	**†10.8**	(6.9, 16.4)	0.95
West	302	**15.5**	(11.1, 21.3)	1.41
East	304	**†10.2**	(6.8, 15.0)	0.91
North	305	**†11.9**	(8.1, 17.0)	1.03
Marital Status				NS
Married/Partner *(Comparison Group)*	1100	**10.4**	(8.4, 13.0)	—
Previously Married	399	**†14.6**	(10.2, 20.5)	1.27
Never Married	292	**†12.5**	(8.2, 18.5)	1.07
Education				NS
High school not completed *(Comparison Group)*	165	**†14.7**	(7.7, 24.3)	—
Completed high school	400	**†10.4**	(6.8, 15.6)	0.68
Some college or university	641	**14.3**	(11.0, 18.3)	1.00
University degree	581	**†8.3**	(5.6, 12.0)	0.61
Household Income				NS
< $30,000 *(Comparison Group)*	175	**†17.6**	(10.7, 27.4)	—
$30,000-$49,999	232	**†13.3**	(8.5, 20.3)	0.77
$50,000-$79,999	303	**†15.6**	(10.1, 23.2)	0.91
$80,000+	690	**9.3**	(7.1, 12.2)	0.52
Not stated	413	**†9.3**	(5.7, 14.8)	0.51

Notes: (1) All analyses are sample design adjusted; *p<.05**;** **p<.01; ***p<.001; CI = 95% confidence interval; NS – not statistically significant; † Estimate suppressed or unstable; [1] Asked only of a random subsample.
(2) Asterisks in group row indicate a statistically significant group effect, based on Wald test.
(3) ORs greater than 1.0 indicate that the odds of anxiolytics use are higher relative to the comparison group; ORs less than 1.0 indicate that the odds of anxiolytics use are lower relative to the comparison group.
(4) Adjusted odds ratio holding fixed values for sex, age, region, marital status, education, and income.
Q: *In the past 12 months, have you taken any prescription medication to reduce anxiety or panic attacks?*
Source: The *CAMH Monitor*, Centre for Addiction and Mental Health.

Table 7.2.2 Percentage Reporting ***Using Prescription Medication to Treat Depression*** in the Past 12 Months and Adjusted Group Differences, Ontarians Aged 18+, 2017

	N	%	95% CI	Adjusted Odds Ratio (N=1756)
Total [1]	1813	**8.8**	(7.2, 10.8)	—
Sex				NS
Men	718	**†7.1**	(4.9, 10.0)	0.71
Women *(Comparison Group)*	1095	**10.4**	(8.1, 13.3)	—
Age				NS
18-29 *(Comparison Group)*	184	**†11.5**	(7.0, 18.4)	—
30-39	123	**†5.2**	(2.4, 10.9)	0.46
40-49	234	**†10.5**	(6.4, 16.8)	1.15
50-64	529	**9.2**	(6.6, 12.6)	0.87
65+	734	**6.6**	(5.0, 8.8)	0.50
Region				NS
Toronto *(vs. Provincial Average)*	314	**†6.1**	(3.4, 10.6)	0.71
Central East	304	**†11.2**	(6.9, 17.6)	1.24
Central West	284	**†8.2**	(4.9, 13.5)	0.94
West	302	**†11.4**	(7.6, 16.6)	1.32
East	304	**†8.8**	(6.0, 12.9)	1.09
North	305	**†9.5**	(6.1, 14.5)	1.11
Marital Status				NS
Married/Partner *(Comparison Group)*	1100	**7.6**	(5.8, 9.8)	—
Previously Married	399	**†12.1**	(8.0, 17.8)	1.47
Never Married	292	**†10.6**	(6.8, 16.3)	1.19
Education				NS
High school not completed *(Comparison Group)*	165	**†8.5**	(4.7, 14.9)	—
Completed high school	400	**†9.2**	(5.7, 14.6)	1.03
Some college or university	641	**10.1**	(7.4, 13.7)	1.12
University degree	581	**†7.3**	(4.9,10.9)	0.93
Household Income				NS
< $30,000 *(Comparison Group)*	175	**†13.1**	(8.0, 20.5)	—
$30,000-$49,999	232	**†8.7**	(5.1, 14.5)	0.60
$50,000-$79,999	303	**†9.8**	(5.8, 16.0)	0.68
$80,000+	690	**7.0**	(5.0, 9.6)	0.48
Not stated	413	**†10.2**	(6.3, 16.1)	0.74

Notes: (1) All analyses are sample design adjusted; *p<.05**;** **p<.01; ***p<.001; CI = 95% confidence interval; NS – not statistically significant; † Estimate suppressed or unstable; [1] Asked only of a random subsample..
(2) Asterisks in group row indicate a statistically significant group effect, based on Wald test.
(3) ORs greater than 1.0 indicate that the odds of antidepressant use are higher relative to the comparison group; ORs less than 1.0 indicate that the odds of antidepressant use are lower relative to the comparison group.
(4) Adjusted odds ratio holding fixed values for sex, age, region, marital status, education, and income.
Q: *In the past 12 months, have you taken any prescription medication to treat depression?*
Source: The *CAMH Monitor*, Centre for Addiction and Mental Health.

Table 7.2.3: Percentage Reporting ***Using Prescription Medication to Treat Anxiety or Panic Attacks*** in the Past 12 Months, by Demographic Characteristics, Ontarians Aged 18+, 1997–2017

	1997	1999	2001	2002	2003	2004	2006	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Trend	
(N=)	(2568)	(2436)	(2627)	(2421)	(2411)	(2611)	(2016)	(2024)	(2037)	(2024)	(1999)	(2015)	(2060)	(2004)	(4007)	(2034)	(1813)		
Total	**4.7**	**4.5**	**4.7**	**5.6**	**5.7**	**5.4**	**5.7**	**6.5**	**6.8**	**8.9**	**7.1**	**8.8**	**8.9**	**11.3**	**10.3**	**9.5**	**11.3**	**T**	**–**
(95% CI)[a]	(3.8, 5.6)	(3.7,5.4)	(3.9,5.7)	(4.7,6.8)	(4.8,6.8)	(4.5, 6.5)	(4.7,6.8)	(5.4,7.8)	(5.7, 8.2)	(7.5, 10.3)	(5.8, 8.5)	(7.5, 10.4)	(7.4, 10.7)	(9.5, 13.4)	(9.2, 11.6)	(8.0, 11.1)	(9.5, 13.6)		
Sex																			
Men	**3.7**	**2.8**	**3.4**	**3.1**	**4.1**	**3.3**	**3.4**	**5.2**	**5.0**	**6.1**	**†5.4**	**†6.6**	**†7.1**	**9.2**	**7.7**	**7.0**	**10.6**	**T**	**–**
	(2.7,4.7)	(2.0,4.1)	(2.2,4.3)	(2.1,4.6)	(3.1,5.5)	(2.3,4.8)	(2.4,4.7)	(3.7,7.3)	(3.7,6.9)	(4.5, 8.0)	(3.7,7.9)	(4.9, 9.0)	(5.1, 9.8)	(6.7, 12.6)	(6.2, 9.6)	(5.1, 9.5)	(7.8, 14.3)		
Women	**5.6**	**6.0**	**6.3**	**8.0**	**7.2**	**7.3**	**7.9**	**7.7**	**8.5**	**11.5**	**8.6**	**10.8**	**10.7**	**13.3**	**12.7**	**11.8**	**12.0**	**T**	**–**
	(4.4, 6.8)	(4.8, 7.5)	(5.0, 7.8)	(6.5, 9.9)	(5.8, 8.8)	(5.9, 9.1)	(6.3, 9.8)	(6.1,9.5)	(6.8,10.6)	(9.5, 13.9)	(7.0,10.5)	(8.9, 13.1)	(8.7, 13.1)	(10.9, 16.1)	(11.2, 14.5)	(9.8, 14.1)	(9.6, 14.8)		
Age																			
18-29	**†1.7**	**†2.3**	**†2.5**	**†3.4**	**†3.7**	**†5.3**	**†2.9**	**†4.1**	**†5.0**	**†5.4**	**†5.8**	**†8.7**	**†10.8**	**†13.9**	**†10.7**	**†7.9**	**†12.7**	**T**	**–**
	(0.6, 2.8)	(1.3, 3.9)	(1.4, 4.5)	(1.9, 5.8)	(2.1, 6.2)	(3.2, 8.8)	(1.5, 5.5)	(1.9,8.7)	(2.6,9.6)	(3.0, 9.7)	(2.9,11.2)	(4.8, 15.0)	(6.1, 18.5)	(8.4, 22.3)	(7.5, 15.1)	(4.3, 13.9)	(8.0, 19.6)		
30-39	**†4.8**	**†4.0**	**†5.1**	**†5.4**	**†6.1**	**†5.1**	**†3.4**	**†5.2**	**†4.2**	**†10.8**	**†7.1**	**†8.5**	**†8.9**	**†14.0**	**†10.0**	**†9.7**	**†11.2**	**T**	**–**
	(3.2, 6.4)	(2.6, 6.1)	(3.5, 7.4)	(3.5, 8.4)	(4.0, 9.0)	(3.3, 7.8)	(2.0, 5.8)	(3.1,8.9)	(2.4,7.1)	(7.3, 15.8)	(4.5,10.8)	(5.6, 12.8)	(5.5, 14.2)	(9.0, 21.1)	(7.0, 13.9)	(5.7, 16.0)	(5.7, 21.0)		
40-49	**7.8**	**7.4**	**†6.3**	**7.2**	**8.5**	**†4.7**	**†7.1**	**8.7**	**9.2**	**†6.9**	**†8.7**	**†8.3**	**†6.9**	**†9.2**	**8.3**	**†8.8**	**†12.8**	**–**	**–**
	(5.6, 10.0)	(5.2, 10.4)	(4.5, 8.7)	(5.1, 10.0)	(6.4, 11.1)	(2.9, 7.3)	(4.8, 10.2)	(6.2,12.1)	(6.5,12.9)	(4.7, 10.1)	(6.0,12.5)	(5.9, 11.6)	(4.6, 10.4)	(6.1, 13.5)	(6.4, 10.7)	(6.2, 12.4)	(8.4, 19.0)		
50-64	**†5.2**	**†4.2**	**†5.9**	**†4.3**	**†6.5**	**8.5**	**8.4**	**9.2**	**9.3**	**12.8**	**7.7**	**10.7**	**9.5**	**11.5**	**11.3**	**10.5**	**11.4**	**T**	**–**
	(3.3, 7.1)	(2.7, 6.4)	(4.0, 8.7)	(2.8, 6.6)	(4.7, 9.0)	(6.4, 11.2)	(6.3, 11.2)	(6.8,12.3)	(6.9,12.4)	(10.1, 16.0)	(5.7,10.5)	(8.4, 13.5)	(7.3, 12.3)	(8.8, 14.8)	(9.5, 13.3)	(8.2, 13.3)	(8.4, 15.2)		
65+	**†4.9**	**†5.2**	**†4.1**	**8.2**	**†3.4**	**†3.3**	**†7.2**	**†5.4**	**†6.0**	**†8.2**	**†6.3**	**†7.0**	**8.9**	**8.6**	**11.0**	**10.1**	**9.2**	**T**	**–**
	(2.8, 7.0)	(3.4, 8.0)	(2.5, 6.8)	(5.6, 12.0)	(1.9, 5.9)	(2.0, 5.2)	(4.7, 11.0)	(3.5,8.1)	(4.1,8.9)	(5.8, 11.5)	(4.3,9.2)	(4.8, 10.0)	(6.7, 11.9)	(6.3, 11.6)	(9.1, 13.1)	(8.0, 12.8)	(7.1, 11.7)		
Region																			
Toronto	**†3.7**	**†2.2**	†3.1	**†6.9**	**†4.4**	**†6.4**	**†4.4**	**†6.1**	**†5.0**	**†8.1**	**†6.2**	**†7.9**	**†9.9**	**†13.0**	**9.1**	**†6.3**	**†8.6**	**T**	**–**
	(2.2, 6.0)	(1.2, 4.1)	(1.7, 5.4)	(4.6, 10.3)	(2.8, 6.9)	(4.2, 9.6)	(2.7, 7.1)	(4.0,9.1)	(3.1,7.8)	(5.4, 12.1)	(4.0,9.6)	(5.0, 12.1)	(6.5, 14.6)	(9.1, 18.3)	(7.1, 11.7)	(3.8, 10.0)	(5.1, 14.1)		
C- East	**†6.1**	**†6.2**	**†3.8**	**†9.3**	**†6.4**	**†3.5**	**†4.8**	**†6.0**	**†6.5**	**†6.7**	**†5.8**	**†6.8**	**†8.6**	**†12.0**	**10.1**	**†9.8**	**†13.5**	**T**	**–**
	(4.1, 8.9)	(4.2, 9.1)	(2.3, 6.2)	(6.0, 14.3)	(4.3, 9.6)	(2.1, 6.0)	(3.0, 7.8)	(3.7,9.5)	(4.1, 10.2)	(4.5, 9.8)	(3.4,9.8)	(4.3, 10.6)	(5.5, 13.2)	(8.0, 17.7)	(7.7, 13.1)	(6.6, 14.2)	(8.9, 20.0)		
C- West	**†4.7**	**†3.9**	†3.4	**†6.6**	**†5.1**	**†3.1**	**†5.1**	**†5.7**	**†7.9**	**†11.6**	**†6.7**	**†9.1**	**†7.9**	**†9.2**	**12.0**	**†8.9**	**†10.8**	**T**	–
	(3.0, 7.5)	(2.4, 6.4)	(2.0, 5.6)	(4.1, 10.5)	(3.1, 8.2)	(1.7, 5.4)	(3.2, 8.2)	(3.5, 9.0)	(5.3,11.6)	(8.1, 16.2)	(4.3,10.2)	(6.3,13.0)	(5.2, 11.7)	(6.2, 13.3)	(9.3, 15.3)	(6.1, 13.0)	(6.9, 16.4)		
West	**†3.6**	**†6.9**	**†5.3**	**†5.1**	**7.5**	**†5.3**	**9.1**	**†5.8**	**†7.2**	**†8.8**	**†6.4**	**12.4**	**†9.3**	**†9.6**	**9.8**	**†9.7**	**15.5**	**T**	**–**
	(2.2, 6.0)	(4.7, 10.0)	(3.5, 8.1)	(3.3, 7.9)	(5.2, 10.7)	(3.6, 7.9)	(6.3, 12.9)	(3.6,9.1)	(4.8,10.7)	(6.0, 12.8)	(4.2,9.6)	(9.0, 16.7)	(6.3, 13.7)	(6.5, 14.0)	(7.6, 12.7)	(6.5, 14.1)	(11.1, 21.3)		
East	**†5.2**	**†3.7**	**†6.6**	**†6.8**	**8.7**	**9.9**	**†5.6**	**10.2**	**†7.6**	**†9.7**	**10.5**	**†9.9**	**†9.7**	**†11.1**	**10.9**	**14.2**	**†10.2**	**T**	**–**
	(3.4, 8.0)	(2.2, 6.1)	(4.6, 9.5)	(4.5, 10.0)	(6.0, 12.3)	(7.2, 13.6)	(3.7, 8.4)	(7.0,14.7)	(4.9,11.6)	(6.7, 13.8)	(7.1,15.4)	(6.8, 14.2)	(7.0, 13.4)	(7.3, 16.5)	(8.2, 14.4)	(10.6, 18.6)	(6.8, 15.0)		
North	**†4.8**	**†5.6**	**†5.5**	**†4.8**	**†6.7**	**†5.9**	**†7.5**	**†6.0**	**†8.5**	**†9.3**	**†9.9**	**†9.8**	**†8.7**	**†12.7**	**10.4**	**†10.1**	**†11.9**	**T**	–
	(3.1, 7.4)	(3.7, 8.5)	(3.8, 7.8)	(3.0, 7.6)	(4.5, 9.5)	(4.1, 8.5)	(5.0, 11.0)	(3.7,10.1)	(6.2,13.4)	(6.3, 13.6)	(6.6,14.6)	(6.6, 14.3)	(5.9, 12.7)	(8.9, 17.7)	(8.1, 13.4)	(7.0, 14.4)	(8.1, 17.0)		

Cont'd

	1997	1999	2001	2002	2003	2004	2006	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Trend	
(N=)	(2568)	(2436)	(2627)	(2421)	(2411)	(2611)	(2016)	(2024)	(2037)	(2024)	(1999)	(2015)	(2060)	(2004)	(4007)	(2034)	(1813)		
Marital Status																			
Married/ Partner	**4.4**	**4.5**	**4.4**	**5.0**	**5.4**	**4.0**	**5.5**	**5.6**	**6.0**	**8.3**	**5.8**	**7.1**	**8.1**	**10.0**	**8.7**	**8.2**	**10.4**	**T**	**–**
Previously Married	**10.4**	**6.9**	**8.3**	**10.2**	**7.5**	**9.3**	**11.2**	**13.4**	**15.2**	**14.1**	**†13.9**	**15.9**	**12.2**	**†13.2**	**16.0**	**17.3**	**†14.6**	**T**	**–**
Never Married	**†2.7**	**†2.6**	**†3.6**	**†4.3**	**†5.6**	**7.1**	**†3.5**	**†5.2**	**†5.5**	**†7.7**	**†7.5**	**†9.5**	**†10.3**	**†14.1**	**12.5**	**†9.4**	**†12.5**	**T**	**–**
Education																			
High school not completed	**†5.8**	**7.8**	**†3.4**	**†6.1**	**†7.0**	**†5.3**	**†8.1**	**†8.8**	**†8.6**	**†12.6**	**†10.5**	**†11.1**	**†12.2**	**†17.5**	**14.6**	**†13.5**	**†14.7**	**T**	**–**
Completed high school	**†5.5**	**†5.4**	**†5.5**	**†5.8**	**†6.6**	**†7.7**	**†6.3**	**†3.8**	**†7.7**	**†10.6**	**†5.6**	**†6.5**	**†9.2**	**†10.0**	**10.9**	**†8.9**	**†10.4**	**T**	**–**
Some college or university	**†4.0**	**†3.6**	**†4.6**	**†7.2**	**†5.5**	**†5.3**	**†4.8**	**8.6**	**6.8**	**7.6**	**8.9**	**9.5**	**8.8**	**13.5**	**11.3**	**10.5**	**14.3**	**T**	**–**
University degree	**†4.0**	**†2.1**	**†5.0**	**†3.4**	**†4.8**	**†3.9**	**†5.2**	**†5.4**	**†5.8**	**7.7**	**†5.8**	**8.5**	**†7.7**	**†8.6**	**8.3**	**8.6**	**†8.3**	**T**	**–**

Notes: (1) † Estimate suppressed or unstable; [a] 95% confidence interval; all estimates are sample design adjusted; the sampling design was changed in 2017 to dual-frame sampling (landline + cell-phone).
(2) Trend Analysis: **–** change not statistically significant at p<.05 between 1997-2017; **T** significant change (p<.05) between 1997-2017; **2Y** significant change (p<.05) between last two estimates.

Q: *In the past 12 months have you taken any prescription medication to reduce anxiety or panic attacks?*

Source: *CAMH Monitor*, Centre for Addiction and Mental Health

Table 7.2.4: Percentage Reporting ***Using Prescription Medication to Treat Depression*** in the Past 12 Months, by Demographic Characteristics, Ontarians Aged 18+, 1997–2017

	1997	1999	2001	2002	2003	2004	2006	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Trend	
(N\=)	(2568)	(2436)	(2627)	(2421)	(2411)	(2611)	(2016)	(2024)	(2037)	(2024)	(1999)	(2015)	(2060)	(2004)	(4007)	(2034)	(1813)		
Total	**3.9**	**3.6**	**4.6**	**5.2**	**6.0**	**5.3**	**6.6**	**6.0**	**6.2**	**7.2**	**7.1**	**6.7**	**7.5**	**8.9**	**8.7**	**7.7**	**8.8**	**T**	**–**
(95% CI)[a]	(3.1, 4.7)	(2.9, 4.4)	(3.8, 5.5)	(4.4, 6.3)	(5.0, 7.1)	(4.4, 6.5)	(5.5, 7.8)	(5.0, 7.3)	(5.1,7.5)	(6.0, 8.5)	(5.9,8.5)	(5.6,7.9)	(6.1,9.1)	(7.4, 10.6)	(7.7, 9.9)	(6.4, 9.3)	(7.2, 10.8)		
Sex																			
Men	**†2.8**	**†1.9**	**†2.8**	**†2.7**	**4.1**	**3.5**	**†3.6**	**†4.1**	**5.5**	**4.8**	**5.0**	**†4.0**	**†5.2**	**†6.3**	**6.1**	**†5.7**	**†7.1**	**T**	**–**
	(1.9, 3.7)	(1.2, 2.9)	(2.0, 4.0)	(1.9, 3.9)	(3.0, 5.6)	(2.4, 5.2)	(2.6, 5.0)	(2.8, 6.0)	(3.9,7.5)	(3.5,6.5)	(3.4,7.3)	(2.8, 5.6)	(3.4, 7.7)	(4.5, 8.9)	(4.8, 7.9)	(4.0, 8.2)	(4.9, 10.0)		
Women	**4.9**	**5.2**	**6.2**	**7.6**	**7.7**	**7.1**	**9.3**	**7.8**	**6.9**	**9.5**	**9.0**	**9.1**	**9.7**	**11.3**	**11.1**	**9.6**	**10.4**	**T**	**–**
	(3.8, 6.0)	(4.1, 6.5)	(5.0, 7.8)	(6.2, 9.3)	(6.3, 9.4)	(5.7, 8.7)	(7.6, 11.4)	(6.3, 9.7)	(5.5,8.6)	(7.7, 11.7)	(5.9,8.5)	(7.6,11.0)	(7.8,12.0)	(9.2,13.8)	(9.7, 12.8)	(7.7,11.8)	(8.1, 13.3)		
Age																			
18-29	**†2.0**	**†2.5**	**†1.9**	**†3.3**	**†3.7**	**†3.5**	**†5.2**	**†4.4**	**†3.5**	**†4.2**	**†7.2**	**†2.4**	**†8.0**	**†10.6**	**†8.5**	**†8.2**	**†11.5**	**T**	**–**
	(0.8, 3.2)	(1.4, 4.3)	(1.0, 3.5)	(2.0, 5.5)	(2.2, 6.1)	(1.9, 6.5)	(3.1, 8.6)	(2.1,9.1)	(1.6,7.8)	(2.2, 7.9)	(3.9,12.8)	(1.0,5.6)	(4.1,14.9)	(6.0,18.3)	(5.6, 12.8)	(4.5,14.5)	(7.0, 18.4)		
30-39	**†3.6**	**†4.1**	**†4.9**	**†4.6**	**6.3**	**6.3**	**†4.6**	**†4.2**	**†2.9**	**†5.2**	**†7.7**	**†7.1**	**†9.5**	**†6.8**	**†9.9**	**†8.2**	**†5.2**	**T**	**–**
	(2.2, 5.0)	(2.8, 6.1)	(3.3, 7.1)	(2.9, 7.2)	(4.2, 9.3)	(4.3, 9.1)	(2.9, 7.3)	(2.4,7.3)	(1.5,5.6)	(2.8, 9.3)	(5.1,11.6)	(4.6,10.8)	(5.7,15.4)	(4.2,10.8)	(6.9, 13.9)	(4.7,14.1)	(2.4, 10.9)		
40-49	**6.9**	**†4.6**	**6.9**	**8.2**	**7.2**	**†4.7**	**9.4**	**9.2**	**†7.0**	**†6.1**	**†8.2**	**†7.8**	**†6.6**	**†10.3**	**6.9**	**†7.8**	**†10.5**	**–**	**–**
	(4.8, 9.0)	(3.1, 6.9)	(5.0, 9.4)	(6.0, 11.1)	(5.3, 9.7)	(3.2, 7.0)	(6.7, 12.9)	(6.7,12.6)	(4.7,12.5)	(3.9, 9.4)	(5.8,11.4)	(5.3,11.3)	(4.3,10.1)	(7.2,14.7)	(5.1, 9.2)	(5.1,11.7)	(6.4, 16.8)		
50-64	**†4.1**	**†3.5**	**†4.5**	**†4.8**	**9.2**	**7.1**	**8.7**	**8.5**	**9.5**	**11.7**	**8.1**	**10.1**	**7.7**	**9.3**	**10.3**	**8.6**	**9.2**	**T**	**–**
	(2.4, 5.8)	(2.0, 5.8)	(3.0, 6.8)	(3.3, 6.9)	(6.8, 12.5)	(5.1, 9.7)	(6.5, 11.6)	(6.3,11.3)	(7.1,12.5)	(9.2, 14.9)	(6.1,10.5)	(7.9,12.8)	(5.8,10.1)	(7.1,12.0)	(8.6, 12.2)	(6.6,11.1)	(6.6, 12.6)		
65+	**†4.1**	**†3.1**	**†4.7**	**†5.7**	**†2.9**	**†4.2**	**†4.6**	**†4.6**	**†7.1**	**†7.9**	**†4.7**	**†6.0**	**†6.3**	**8.0**	**7.7**	**5.6**	**6.6**	**T**	**–**
	(2.2, 6.0)	(1.8, 5.1)	(2.8, 7.8)	(3.7, 8.8)	(1.6, 5.2)	(2.6, 6.9)	(2.8, 7.5)	(2.1,5.6)	(4.9,10.2)	(5.6, 11.1)	(3.0,7.2)	(4.1,8.9`)	(4.4,8.8)	(5.8,10.8)	(6.1, 9.6)	(4.1,7.7)	(5.0, 8.8)		
Region																			
Toronto	**†4.3**	**†**	**†3.6**	**†6.6**	**†6.3**	**†5.8**	**†4.5**	**†4.6**	**†4.1**	**†7.0**	**†5.6**	**†6.9**	**†9.7**	**†8.5**	**9.7**	**†4.2**	**†6.1**	**T**	**–**
	(2.6, 7.0)	—	(2.1, 6.0)	(4.5, 9.6)	(4.2, 9.1)	(3.7, 9.0)	(2.8, 7.2)	(3.0,7.1)	(2.6,6.6)	(4.4, 10.9)	(3.6,8.6)	(4.5, 10.4)	(6.1, 14.9)	(5.6, 12.7)	(7.4, 12.6)	(2.3, 7.6)	(3.4, 10.6)		
C- East	**†4.4**	**†4.6**	**†3.6**	**†7.4**	**†7.7**	**†4.9**	**†5.8**	**†6.4**	**†7.0**	**†4.6**	**†4.0**	**†3.2**	**†6.0**	**†7.0**	**7.8**	**†7.5**	**†11.2**	**T**	**–**
	(2.9, 6.8)	(3.0, 7.1)	(2.1, 6.1)	(4.7, 11.3)	(5.3, 11.1)	(3.2, 7.5)	(3.7, 8.9)	(4.0,10.0)	(4.5,10.7)	(3.0, 7.0)	(2.0,7.6)	(1.8, 5.4)	(3.5, 10.0)	(4.2, 11.3)	(5.6, 10.7)	(4.7, 11.9)	(6.9, 17.6)		
C- West	**†3.5**	**†2.8**	**†2.8**	**†6.6**	**†5.0**	**†3.6**	**†6.8**	**†6.1**	**†6.1**	**†8.0**	**†9.0**	**†7.5**	**†7.7**	**†10.0**	**10.4**	**†9.8**	**†8.2**	**T**	**–**
	(2.1, 5.7)	(1.6, 4.7)	(1.6, 4.9)	(4.1, 10.5)	(3.1, 7.9)	(2.1, 6.4)	(4.5, 10.4)	(3.9,9.2)	(4.0,9.2)	(5.3, 11.9)	(6.2,12.8)	(5.2, 10.7)	(5.1, 11.5)	(7.1, 14.1)	(7.8, 13.6)	(6.6, 14.3)	(4.9, 13.5)		
West	**†3.9**	**†3.7**	**†4.1**	**†4.2**	**†5.0**	**†4.8**	**†8.4**	**†6.2**	**†7.5**	**†9.2**	**†6.9**	**†8.4**	**†5.9**	**†8.8**	**†5.2**	**†7.7**	**†11.4**	**T**	**–**
	(2.4, 6.2)	(2.2, 6.1)	(2.6, 6.5)	(2.6, 6.7)	(3.1, 7.9)	(3.1, 7.4)	(5.8, 12.0)	(3.8,9.9)	(5.1,11.0)	(6.4, 13.2)	(4.6,10.3)	(5.9,11.8)	(3.5,9.6)	(6.1,12.5)	(3.7, 7.2)	(4.7,12.2)	(7.6, 16.6)		
East	**†3.1**	**†4.6**	**8.0**	**†6.6**	**8.3**	**†8.7**	**†7.9**	**†8.3**	**†6.7**	**†8.8**	**†11.0**	**†8.6**	**†8.6**	**†11.1**	**10.0**	**†10.3**	**†8.8**	**T**	**–**
	(1.7, 5.6)	(2.9, 7.2)	(5.7, 11.2)	(4.5, 9.4)	(5.7, 11.8)	(6.1, 12.2)	(5.4, 11.5)	(5.7, 11.9)	(4.6,9.7)	(6.0, 12.7)	(7.7,15.7)	(5.9,12.4)	(6.0,12.1)	(7.2,16.7)	(7.6, 13.1)	(7.3,14.4)	(6.0, 12.9)		
North	**†4.1**	**†6.3**	**†6.0**	**†5.7**	**7.0**	**†5.2**	**†8.5**	**†4.2**	**†6.9**	**†5.5**	**†10.0**	**†10.4**	**†8.0**	**†11.1**	**9.0**	**†8.6**	**†9.5**	**T**	**–**
	(2.5, 6.6)	(4.2, 9.2)	(4.2, 8.5)	(3.7, 8.8)	(4.8, 10.1)	(3.7, 7.4)	(5.7, 12.3)	(2.4, 7.4	(4.4,10.6)	(3.4, 8.8)	(6.4,15.4)	(7.3,14.6)	(5.3,11.9)	(7.6,15.9)	(6.8, 11.7)	(5.8,12.7)	(6.1, 14.5)		

Cont'd

	1997	1999	2001	2002	2003	2004	2006	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Trend	
(N\=)	(2568)	(2436)	(2627)	(2421)	(2411)	(2611)	(2016)	(2024)	(2037)	(2024)	(1999)	(2015)	(2060)	(2004)	(4007)	(2034)	(1813)		
Marital Status																			
Married/Partner	**3.2**	**3.2**	**4.3**	**4.4**	**5.3**	**4.5**	**6.4**	**4.9**	**5.3**	**6.2**	**6.0**	**6.5**	**6.6**	**7.6**	**7.1**	**7.0**	**7.6**	**T**	**–**
Previously Married	**8.7**	**†6.1**	**8.9**	**10.7**	**11.2**	**7.7**	**11.1**	**12.9**	**16.5**	**14.6**	**12.7**	**13.7**	**11.3**	**14.1**	**14.5**	**11.7**	**†12.1**	**T**	**–**
Never Married	**†3.3**	**†3.0**	**†3.0**	**†4.2**	**†5.3**	**6.2**	**†4.8**	**†5.6**	**†4.0**	**†6.2**	**†8.2**	**†3.5**	**†8.5**	**†10.2**	**10.7**	**†7.9**	**†10.6**	**T**	**–**
Education																			
High school not completed	**†4.2**	**†5.5**	**†3.7**	**†4.2**	**†5.4**	**†5.8**	**†7.7**	**†6.9**	**†13.8**	**†12.1**	**†7.6**	**†7.6**	**†9.5**	**†17.8**	**†8.6**	**†14.5**	**†8.5**	**T**	**–**
Completed high school	**†4.9**	**†3.0**	**†4.9**	**†5.7**	**6.9**	**7.9**	**†6.3**	**†5.3**	**†5.6**	**†6.6**	**†7.0**	**†7.1**	**†7.7**	**†8.4**	**9.8**	**†10.2**	**†9.2**	**T**	**–**
Some college or university	**†3.1**	**†3.6**	**†5.8**	**†5.4**	**6.2**	**†5.4**	**7.2**	**7.0**	**6.5**	**7.7**	**9.2**	**†6.1**	**7.1**	**10.8**	**10.3**	**†8.6**	**10.1**	**T**	**–**
University degree	**†3.8**	**†2.7**	**†3.5**	**†5.5**	**†5.3**	**†3.2**	**†5.8**	**†5.2**	**†3.8**	**†5.1**	**†4.6**	**†6.6**	**†7.0**	**†5.3**	**6.6**	**†4.9**	**†7.3**	**T**	**–**

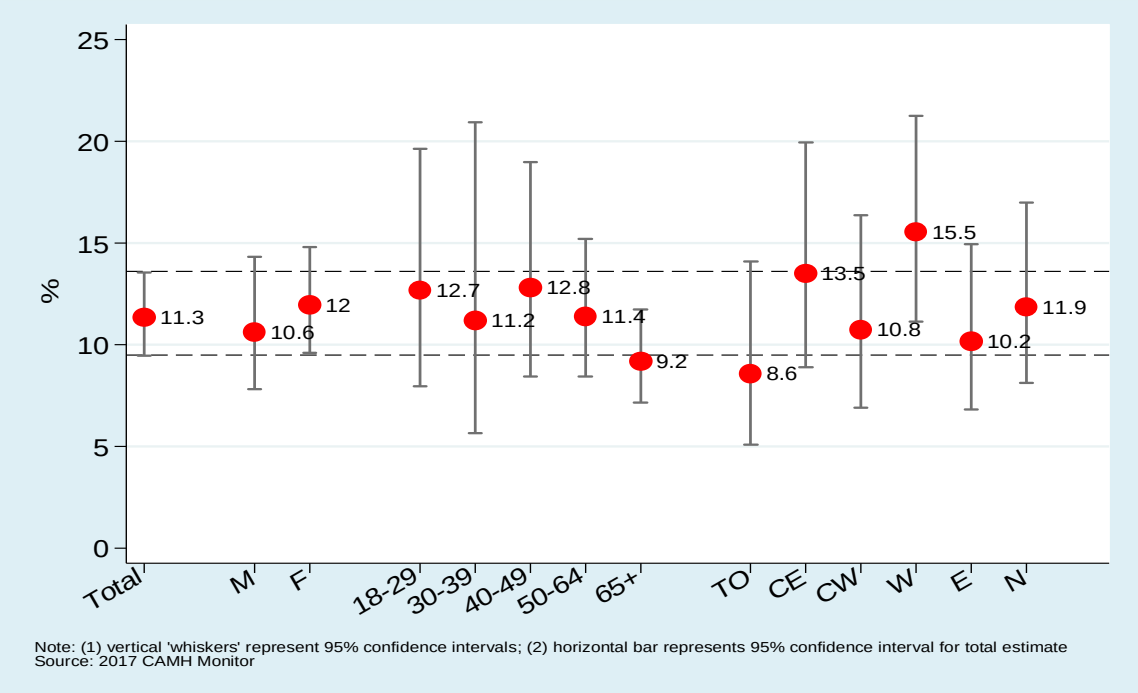
Notes: (1) † Estimate suppressed or unstable; [a] 95% confidence interval; all estimates are sample design adjusted; the sampling design was changed in 2017 to dual-frame sampling (landline + cell-phone).
(2) Trend Analysis: **–** change not statistically significant at p<.05 between 1997-2015; **T** significant change (p<.05) between 1997-2017; **2Y** significant change (p<.05) between last two estimates.

Q: *In the past 12 months, have you taken any prescription medication to treat depression?*

Source: *CAMH Monitor*, Centre for Addiction and Mental Health

Figure 7.2.1

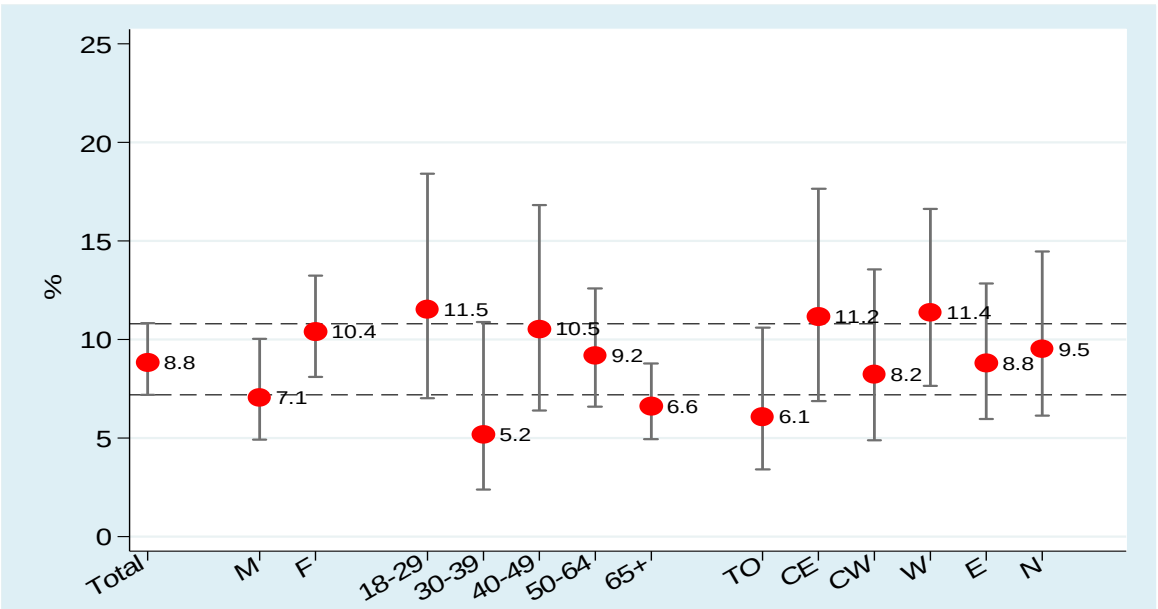
Past Year Use of Prescription Medication to Treat Anxiety/ Panic Attacks by Sex, Age and Region, Ontarians Aged 18+, 2017 (N=1813)



Note: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal bar represents 95% confidence interval for total estimate
Source: 2017 CAMH Monitor

Figure 7.2.2

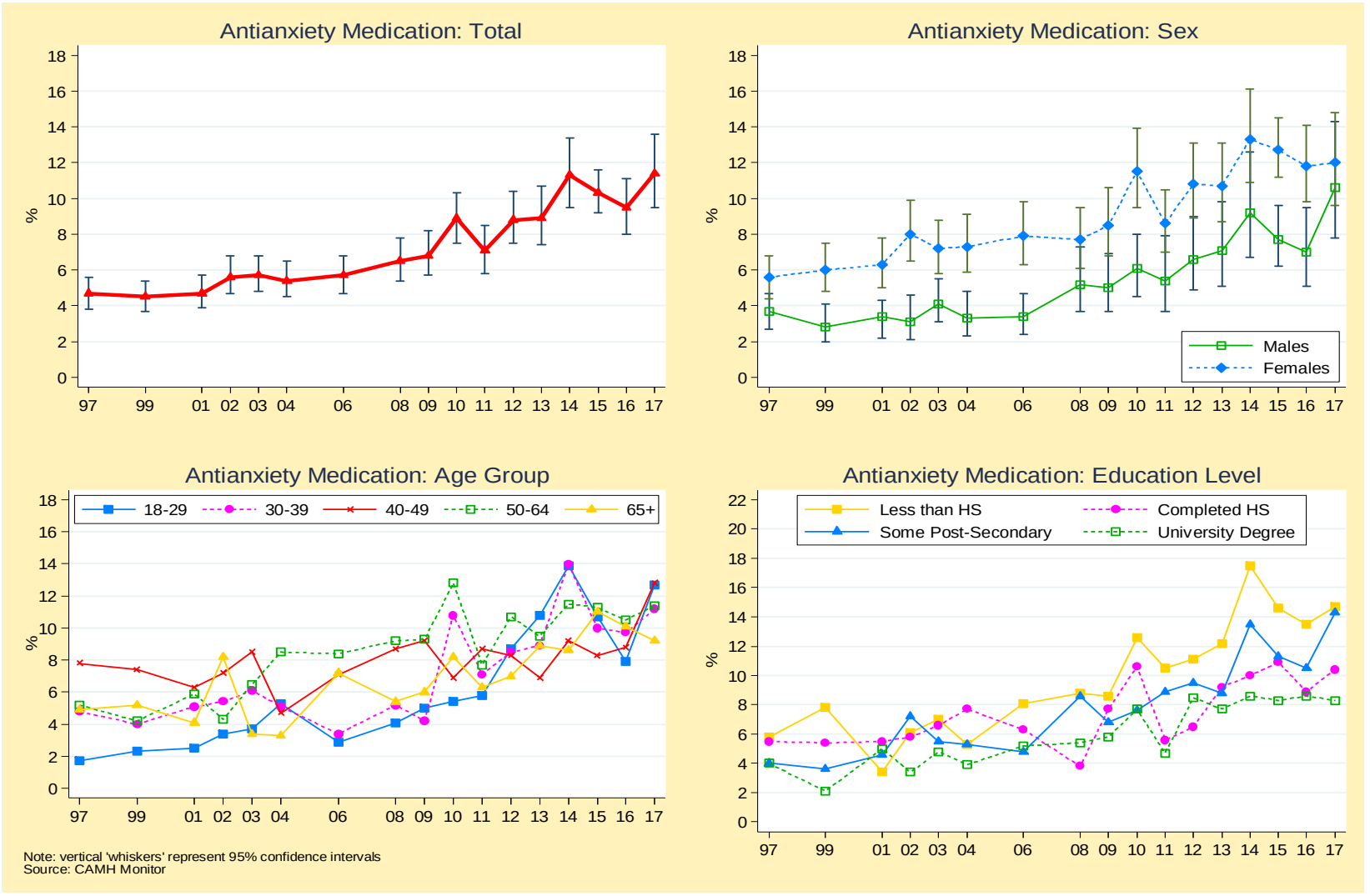
Past Year Use of Prescription Medication to Treat Depression by Sex, Age and Region, Ontarians Aged 18+, 2017 (N=1813)



Note: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal bar represents 95% confidence interval for total estimate
Source: 2017 CAMH Monitor

Figure 7.2.3

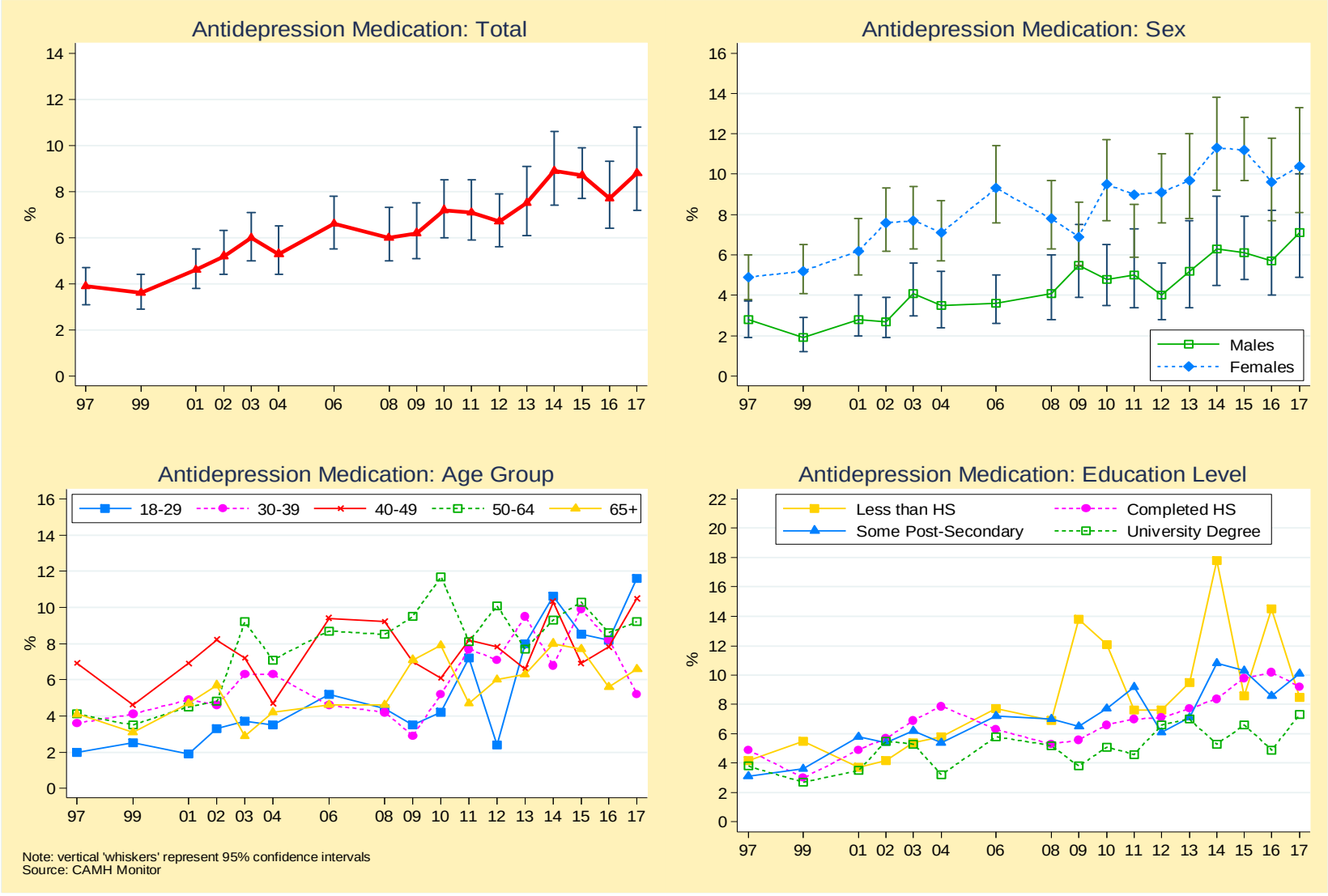
Past Year Use of Prescription Medication to Treat Anxiety or Panic Attacks, Ontarians Aged 18+, 1997–2017



Note: vertical 'whiskers' represent 95% confidence intervals
Source: CAMH Monitor

Figure 7.2.4

Past Year Use of Prescription Medication to Treat Depression, Ontarians Aged 18+, 1997–2017



Note: vertical 'whiskers' represent 95% confidence intervals
Source: CAMH Monitor

7.3 Mental Health-Related Quality Of Life

Health-Related Quality of Life (HRQoL) items, introduced in 2003, are based on the core module (HRQoL-4) developed by the Centers for Disease Control and Prevention (CDC). Investigators at CDC developed a brief instrument to identify key health-related quality of life measures for adult populations (Moriarty, Zack, & Kobau, 2003; Ôunpuu, Krueger, Vermeulen, & Chambers, 2000). The four-item HRQoL measures self-rated health and mental health, recent physical and mental health, and recent activity limitation. HRQoL captures the key concepts of health identified by the World Health Organization as "a state of complete physical, mental, and social well-being – not merely the absence of disease or infirmity."

The following items were asked in the CM:

1) *In general, would you say your overall mental health is excellent, very good, good, fair, or poor?*

2) *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?*

In this report, we present two measures of mental health-related quality of life: 1) the percent reporting *fair or poor mental health*, defined as the percentage rating their mental health as fair or poor, and 2) the percent reporting *frequent mental distress days*, defined as the percentage reporting 14 or more mentally unhealthy days during the past 30 days.

7.3.1 Self- Rated Fair/Poor Mental Health

2017 ……Table 7.3.1; Fig 7.3.1

An estimated **10.1%** (95% CI: 8.6% to11.8%) of Ontario adults rated their mental health as fair or poor. The corresponding population estimate is 1,082,300 Ontario adults.

Age, education, and **income** were significantly related to reporting fair or poor mental health, when holding fixed our set of risk factors.

- Self-rated fair/poor mental health decreased significantly with age. Compared to those aged 18 to 29 (12.9%), fair/poor mental health was significantly lower among those aged 65 and older (5.8%; OR=0.43).

- Relative to those who did not graduate high school (17.0%), fair/poor mental health was significantly lower among respondents who completed high school (8.3%; OR=0.42) and among those with a university degree (7.7%; OR=0.40).

- Household income was significantly associated with reporting fair or poor mental health. The distinguishing feature was a higher rate among those with the lowest income and a lower rate among those with higher incomes. Ratings of fair/poor mental health decreased significantly from 21.3% among those with incomes of less than $30,000 to 8.7% among those with incomes of $80,000 and higher.

There were no other significant risk factor effects, after adjusting for other factors.

Trends

2003–2017 ……Table 7.3.3; Fig. 7.3.3

2016–2017

Prevalence of fair or poor self-rated mental health was significantly **higher** in 2017 (10.1%) compared to 2016 (7.0%). In addition, rates of fair or poor mental health were higher in 2017 among both men and women, among respondents aged 30 to 39, those aged 40 to 49 and those aged 50 to 64, those living in the West, those married and those with the highest education.

2003–2017

Between 2003 and 2017, there was a significant **increase** in ratings of fair/poor mental health, from 4.7% in 2003 to 10.1% in 2017.

Between 2003 and 2017, rates of fair/poor mental health **increased** significantly among both men and women, among most age groups, most regions, those married, those never married, and among all education subgroups.

7.3.2 Frequent Mental Distress Days

2017 ……Table 7.3.2; Fig. 7.3.2

Overall, an estimated **11.7%** (95% CI: 9.6% to 14.2%) of Ontario adults experienced **frequent mental distress days** (14+ days) in the past 30 days. The corresponding population estimate is 1,214,400 Ontario adults.

Only **age** and **income** were significantly related to reporting frequent mental distress days, after adjusting for our set of risk factors.

- The rates of experiencing frequent mental distress days declined significantly with age, dropping from 18.8% of 18 to 29 year olds to 6.0% of those 65 and older (OR=0.17).
- Household income was significantly associated with reporting frequent mental distress days. The distinguishing feature was a higher rate among those with the lowest income and a lower rate among those with higher incomes. The rates of experiencing frequent mental distress days declined significantly from 22.3% among those with incomes of less than $30,000 to 9.7% among those with incomes of $80,000 and higher (OR=0.44).

There were no other significant effects, when adjusting for our set of risk factors.

Trends

2003–2017……Table 7.3.4; Fig. 7.3.4

2016–2017

Overall, there was a significant **increase** in the percent reporting frequent mental distress days in the past 30 days in 2017 (11.7%) compared to 2016 (7.4%). Significant increases during this period were found for women (from 7.5% to 13.3%), for those aged 40-49 (from 6.0% to 14.7%), for married respondents (from 5.6% to 8.9%) and for those with lower education (from 9.3% to 14.0%).

2003–2017

Between 2003 and 2017, there was a significant linear **increase** in reporting frequent mental distress days from 5.4% in 2003 to 11.7% in 2017. The increase was evident among men and women, most age groups, most regions, and among all marital status and education subgroups.

Table 7.3.1 Percentage Reporting ***Fair or Poor Mental Health*** and Adjusted Group Differences, Ontarians Aged 18+, 2017

	N	%	95% CI	Adjusted Odds Ratio (N=2729)
Total	2812	**10.1**	(8.6, 11.8)	—
Sex				NS
Men	1150	**10.5**	(8.2, 13.2)	1.01
Women *(Comparison Group)*	1662	**9.8**	(7.9, 12.1)	—
Age				**
18-29 *(Comparison Group)*	283	**†12.9**	(9.2, 17.9)	—
30-39	199	**†13.8**	(8.2, 22.3)	1.48
40-49	366	**†9.7**	(6.4, 14.5)	1.17
50-64	843	**9.8**	(7.5, 12.6)	0.98
65+	1110	**5.8**	(4.5, 7.6)	**0.43***
Region				NS
Toronto *(vs. Provincial Average)*	476	**†10.3**	(7.2, 14.4)	1.04
Central East	476	**†10.0**	(6.9, 14.3)	0.97
Central West	456	**†8.4**	(5.4, 12.8)	0.83
West	468	**12.6**	(9.1, 17.3)	1.35
East	467	**†10.8**	(7.2, 15.8)	1.11
North	469	**†10.7**	(7.6, 15.0)	0.97
Marital Status				NS
Married/Partner *(Comparison Group)*	1730	**7.7**	(6.3, 9.4)	—
Previously Married	614	**†14.6**	(9.6, 21.5)	1.88
Never Married	441	**13.9**	(10.3, 18.5)	1.69
Education				*
High school not completed *(Comparison Group)*	240	**†17.0**	(10.0, 27.4)	—
Completed high school	612	**†8.3**	(5.9, 11.7)	**0.42***
Some college or university	986	**12.2**	(9.6, 15.3)	0.61
University degree	933	**†7.7**	(5.4, 10.7)	**0.40***
Household Income				*
< $30,000 *(Comparison Group)*	266	**†21.3**	(14.5, 30.2)	—
$30,000-$49,999	347	**†12.8**	(8.6, 18.5)	0.68
$50,000-$79,999	483	**†10.1**	(6.5, 15.3)	**0.50***
$80,000+	1079	**8.7**	(6.6, 11.3)	**0.45***
Not stated	637	**†7.9**	(5.4, 11.3)	**0.38****

Notes: (1) All analyses are sample design adjusted; *p<.05**;** **p<.01; ***p<.001; CI = 95% confidence interval; NS – not statistically significant; † Estimate suppressed or unstable.
(2) Asterisks in group row indicate a statistically significant group effect, based on Wald test.
(3) ORs greater than 1.0 indicate that the odds of poor mental health are higher relative to the comparison group; ORs less than 1.0 indicate that the odds of poor mental health are lower relative to the comparison group.
(4) Adjusted odds ratio holding fixed values for sex, age, region, marital status, education, and income.
Q: *In general, would you say your overall mental health is excellent, very good, good, fair, or poor?*
Def'n: *Poor Mental Health – reporting fair or poor mental health in general.*
Source: The *CAMH Monitor*, Centre for Addiction and Mental Health.

Table 7.3.2 Percentage Reporting ***Frequent Mental Distress Days*** (14+) in the Past 30 Days and Adjusted Group Differences, Ontarians Aged 18+, 2017

	N	%	95% CI	Adjusted Odds Ratio (N=1724)
Total [1]	1813	**11.7**	(9.6, 14.2)	—
Sex				NS
Men	718	**†9.9**	(7.1, 13.7)	0.67
Women *(Comparison Group)*	1095	**13.3**	(10.5, 16.7)	—
Age				***
18-29 *(Comparison Group)*	184	**†18.8**	(12.7, 27.1)	—
30-39	123	**†10.3**	(5.2, 19.6)	**0.44***
40-49	234	**†14.7**	(9.6, 21.8)	0.78
50-64	529	**9.2**	(6.7, 12.7)	**0.37***
65+	734	**6.0**	(4.4, 8.3)	**0.17*****
Region				NS
Toronto *(vs. Provincial Average)*	314	**†11.4**	(7.7, 16.6)	1.00
Central East	304	**†11.3**	(7.3, 17.0)	0.83
Central West	284	**†10.1**	(5.8, 17.1)	0.87
West	302	**†14.4**	(9.2, 21.9)	1.34
East	304	**†13.8**	(8.8, 21.0)	1.33
North	305	**†10.8**	(6.6, 17.1)	1.91
Marital Status				NS
Married/Partner *(Comparison Group)*	1100	**8.9**	(6.9, 11.4)	—
Previously Married	399	**†17.7**	(11.6, 26.1)	2.30
Never Married	292	**†15.9**	(10.9, 22.6)	1.02
Education				NS
High school not completed *(Comparison Group)*	165	**†14.0**	(7.4, 24.9)	—
Completed high school	400	**†10.2**	(6.4, 15.7)	0.61
Some college or university	641	**15.1**	(11.5, 19.7)	0.90
University degree	581	**†8.3**	(5.4, 12.6)	0.50
Household Income				NS
< $30,000 *(Comparison Group)*	175	**†22.3**	(13.9, 33.8)	—
$30,000-$49,999	232	**†12.3**	(7.5, 19.6)	0.57
$50,000-$79,999	303	**†12.5**	(7.7, 19.6)	0.56
$80,000+	690	**†9.7**	(6.8, 13.7)	**0.44***
Not stated	413	**†11.1**	(7.4, 16.3)	**0.48***

Notes: (1) All analyses are sample design adjusted; *p<.05; **p<.01; ***p<.001; CI = 95% confidence interval; NS – no statistically significant difference; † Estimate suppressed or unstable; [1] Asked only of a random subsample.
(2) Asterisks in group row indicate a statistically significant group effect, based on Wald test.
(3) ORs greater than 1.0 indicate that the odds of distress are higher relative to the comparison group; ORs less than 1.0 indicate that the odds of distress are lower relative to the comparison group.
(4) Adjusted odds ratio holding fixed values for sex, age, region, marital status, education, and income.

Q: *Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?*

Def'n: *Frequent Mental Distress Days – reporting 14 or more mental distress days during the past 30 days.*

Source: The *CAMH Monitor*, Centre for Addiction and Mental Health.

Table 7.3.3: Percentage Reporting ***Fair or Poor Mental Health***, by Demographic Characteristics, Ontarians Aged 18+, 2003–2017

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Trend	
(N=)	(2411)	(2611)	(2445)	(2016)	(2005)	(2024)	(2037)	(2024)	(1999)	(3030)	(3021)	(3043)	(5013)	(3042)	(2812)		
Total	**4.7**	**6.1**	**5.2**	**5.8**	**6.2**	**6.1**	**5.7**	**6.1**	**6.0**	**5.9**	**7.1**	**6.5**	**6.7**	**7.0**	**10.1**	**T**	**2Y**
(95% CI)[a]	(3.9, 5.8)	(5.1, 7.4)	(4.3, 6.3)	(4.7, 7.1)	(5.2, 7.5)	(4.8, 7.6)	(4.7, 7.0)	(5.0, 7.5)	(4.9, 7.3)	(5.0, 7.0)	(5.8, 8.6)	(5.4, 7.8)	(5.8, 7.6)	(5.9, 8.3)	(8.6, 11.8)		
Sex																	
Men	**5.0**	**6.4**	**4.3**	**5.6**	**5.1**	**6.1**	**6.1**	**5.4**	**5.3**	**6.0**	**8.3**	**5.8**	**5.9**	**7.1**	**10.5**	**T**	**2Y**
	(3.7, 6.7)	(4.8, 8.5)	(3.1, 6.0)	(4.4,7.8)	(3.7, 6.9)	(4.4, 8.3)	(4.6, 8.2)	(4.0, 7.4)	(3.8, 7.4)	(4.6, 7.9)	(6.2, 11.0)	(4.2, 7.9)	(4.7, 7.4)	(5.3, 9.3)	(8.2, 13.2)		
Women	**4.5**	**5.8**	**6.1**	**5.9**	**7.3**	**6.1**	**5.4**	**6.9**	**6.6**	**5.8**	**5.9**	**7.1**	**7.3**	**6.9**	**9.8**	**T**	**2Y**
	(3.4, 5.9)	(4.6, 7.4)	(4.8, 7.7)	(4.1, 7.6)	(5.7, 9.3)	(4.4, 8.3)	(4.1, 7.0)	(5.2, 9.0)	(5.2, 8.4)	(4.8, 7.2)	(4.7, 7.5)	(5.6, 8.9)	(6.2, 8.6)	(5.5, 8.6)	(7.9, 12.1)		
Age																	
18-29	**6.2**	**5.1**	**5.4**	**4.7**	**†7.1**	**†6.4**	**†2.9**	**†5.3**	**†6.1**	**†6.5**	**†12.1**	**†11.1**	**†8.5**	**†11.6**	**†12.9**	**T**	**–**
	(3.9, 9.6)	(3.0, 8.4)	(3.4, 8.5)	(2.5, 8.8)	(4.5, 11.2)	(3.0, 13.1)	(1.5, 5.7)	(2.7, 10.2)	(3.2,11.3)	(3.7,11.2)	(7.3,19.3)	(7.1,17.1)	(6.0, 11.9)	(7.8,17.0)	(9.2, 17.9)		
30-39	**†4.8**	**8.0**	**6.1**	**5.9**	**†3.9**	**†5.9**	**†7.8**	**†4.2**	**†5.6**	**†5.2**	**†7.8**	**†5.6**	**†6.7**	**†5.1**	**†13.8**	**–**	**2Y**
	(3.0, 7.5)	(5.6, 11.3)	(3.9, 9.4)	(3.6, 9.5)	(2.3, 6.4)	(3.4, 10.1)	(4.9, 12.1)	(2.3, 7.5)	(3.5,8.9)	(3.3,8.0)	(4.9,12.0)	(3.5,8.9)	(4.6, 9.9)	(2.7,9.4)	(8.2, 22.3)		
40-49	**†4.3**	**5.3**	**5.6**	**7.3**	**8.0**	**†6.1**	**†6.5**	**†8.0**	**†6.7**	**†4.3**	**†5.0**	**†7.8**	**†4.8**	**†5.5**	**†9.7**	**T**	**2Y**
	(2.8, 6.5)	(3.5, 11.3)	(3.8, 8.0)	(4.9, 10.6)	(5.5, 11.5)	(4.0, 9.2)	(4.2, 9.8)	(5.4, 11.7)	(4.5,9.9)	(2.9, 6.3)	(3.3, 7.3)	(5.3, 11.5)	(3.3, 6.9)	(3.7, 8.1)	(6.4, 14.5)		
50-64	**†4.3**	**6.4**	**5.2**	**5.4**	**†6.5**	**7.9**	**†7.2**	**7.4**	**6.6**	**8.0**	**5.9**	**4.3**	**7.3**	**6.5**	**9.8**	**T**	**2Y**
	(2.9, 6.3)	(4.6, 9.0)	(3.5, 7.6)	(3.6, 8.2)	(4.5,9.3)	(5.7, 10.9)	(5.2, 9.9)	(5.4, 10.2)	(4.7,9.0)	(6.3, 10.1)	(4.5, 7.7)	(3.2, 5.9)	(6.0, 8.9)	(5.0, 8.5)	(7.5, 12.6)		
65+	**†3.5**	**†4.2**	**†3.3**	**†5.7**	**†5.7**	**†4.0**	**†4.3**	**†5.2**	**†5.8**	**†5.1**	**6.2**	**4.5**	**5.7**	**6.2**	**5.8**	**–**	**–**
	(2.1, 5.8)	(2.6, 6.8)	(2.0, 5.5)	(3.7,8.8)	(3.5, 9.2)	(2.4, 6.5)	(2.7, 6.6)	(3.4, 7.9)	(4.0,8.5)	(3.7, 7.0)	(4.4, 8.5)	(3.3, 6.2)	(4.6, 7.1)	(4.7, 7.9)	(4.5, 7.6)		
Region																	
Toronto	**†4.6**	**†7.1**	**†4.9**	**†5.4**	**†6.5**	**†9.2**	**†6.7**	**†6.9**	**†5.9**	**†7.2**	**†8.6**	**†6.0**	**6.4**	**†6.2**	**†10.3**	**–**	**–**
	(2.8, 7.3)	(4.7, 10.6)	(3.0, 7.8)	(3.2, 8.9)	(4.2,10.0)	(6.1, 13.7)	(4.4, 10.2)	(4.2, 11.3)	(3.6,9.4)	(5.2,10.1)	(5.5,13.3)	(3.6,9.8)	(4.8, 8.6)	(4.2,9.3)	(7.2, 14.4)		
Central East	**†5.1**	**†5.2**	**†5.5**	**†6.7**	**†8.0**	**†6.6**	**†5.7**	**†5.4**	**†3.7**	**†5.5**	**†7.4**	**†5.5**	**†6.2**	**†6.3**	**†10.0**	**–**	**–**
	(3.2, 7.9)	(3.3, 8.1)	(3.5, 8.5)	(4.2,10.6)	(5.4,11.8)	(3.9, 11.2)	(3.5,9.0)	(3.5, 8.4)	(2.2,6.2)	(3.5, 8.5)	(4.8, 11.3)	(3.5, 8.6)	(4.5, 8.6)	(4.1, 9.6)	(6.9, 14.3)		
Central West	**†3.7**	**†6.3**	**†3.1**	**†5.1**	**†4.1**	**†2.6**	**†5.7**	**†5.8**	**†8.4**	**†4.2**	**†6.8**	**†7.0**	**8.0**	**†7.7**	**†8.4**	**T**	**–**
	(2.0, 6.7)	(4.1, 9.6)	(1.8, 5.4)	(3.0, 8.3)	(2.4,7.1)	(1.4, 4.7)	(3.7, 8.7)	(3.5, 9.2)	(5.5,12.6)	(2.7, 6.3)	(4.6, 9.9)	(4.8, 10.3)	(6.0, 10.6)	(5.1, 11.4)	(5.4, 12.8)		
West	**†4.2**	**†5.2**	**†6.4**	**†5.2**	**†5.9**	**†5.3**	**†5.4**	**†6.0**	**†6.8**	**†6.6**	**†4.2**	**†6.5**	**†5.8**	**†6.7**	**12.6**	**T**	**2Y**
	(2.6, 6.8)	(3.4, 7.9)	(4.4, 9.4)	(3.3, 8.1)	(3.7,9.2)	(3.5,8.2)	(3.5,8.3)	(3.6,9.8)	(4.5,10.1)	(4.6, 9.5)	(2.7, 6.4)	(4.3, 9.6)	(4.1, 7.9)	(4.3, 10.4)	(9.1, 17.3)		
East	**†5.4**	**†6.7**	**†6.9**	**†4.2**	**†5.2**	**†5.5**	**†5.8**	**†7.5**	**†5.0**	**†6.3**	**†7.9**	**†8.2**	**7.0**	**†8.9**	**†10.8**	**T**	**–**
	(3.4, 8.5)	(4.2, 10.7)	(4.5, 10.4)	(2.5,7.1)	(3.2,8.3)	(3.2,9.1)	(3.7,9.0)	(4.9, 11.3)	(3.1,7.8)	(4.4, 8.9)	(5.5, 11.3)	(5.5, 12.1)	(5.1, 9.4)	(6.1, 12.9)	(7.2, 15.8)		
North	**†6.9**	**†6.3**	**†6.7**	**†9.3**	**†7.5**	**†5.1**	**†3.8**	**†4.1**	**†8.3**	**†6.4**	**†6.5**	**†6.8**	**6.6**	**†7.0**	**†10.7**	**T**	**–**
	(4.8, 9.7)	(4.2, 9.3)	(4.5, 9.9)	(6.4,13.5)	(4.9,11.3)	(3.0, 8.4)	(2.1, 6.7)	(2.5, 6.5)	(5.4,12.6)	(4.3, 9.4)	(4.5, 9.2)	(4.5, 10.0)	(5.1, 8.6)	(4.9, 9.8)	(7.6, 15.0)		

Cont'd

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Trend	
(N=)	(2411)	(2611)	(2445)	(2016)	(2005)	(2024)	(2037)	(2024)	(1999)	(3030)	(3021)	(3043)	(5013)	(3042)	(2812)		
Marital Status																	
Married/Partner	**†3.6**	**4.6**	**4.0**	**5.4**	**5.2**	**4.3**	**5.2**	**5.1**	**5.0**	**4.1**	**5.2**	**4.5**	**5.3**	**4.8**	**7.7**	**T**	**2Y**
Previously Married	**7.8**	**11.9**	**8.6**	**10.3**	**9.2**	**11.8**	**†8.5**	**†10.9**	**†8.9**	**9.4**	**9.4**	**†9.5**	**11.2**	**10.6**	**†14.6**	**–**	**–**
Never Married	**†6.4**	**†7.2**	**†6.7**	**†4.4**	**†7.1**	**†8.3**	**†6.3**	**†6.7**	**†8.0**	**†9.5**	**†12.0**	**†11.0**	**8.7**	**†11.5**	**13.9**	**T**	**–**
Education																	
High school not completed	**7.9**	**8.9**	**8.5**	**11.8**	**12.8**	**†9.7**	**11.2**	**†10.9**	**†7.2**	**†12.1**	**†15.1**	**†11.2**	**†9.6**	**†11.3**	**†17.0**	**T**	**–**
Completed high school	**6.4**	**9.2**	**6.1**	**†4.1**	**†7.6**	**†6.2**	**†6.6**	**†7.3**	**†5.9**	**†7.2**	**†7.5**	**†8.6**	**7.6**	**9.8**	**†8.3**	**T**	**–**
Some college or university	**†4.0**	**5.5**	**†3.8**	**5.6**	**†4.7**	**6.1**	**†4.7**	**5.6**	**8.6**	**5.6**	**6.9**	**6.3**	**8.2**	**8.5**	**12.2**	**T**	**–**
University degree	**†2.9**	**†3.4**	**5.0**	**†4.8**	**†4.0**	**†5.0**	**†4.6**	**†4.6**	**†3.0**	**†3.6**	**†4.7**	**†4.5**	**4.2**	**†3.6**	**†7.7**	**T**	**2Y**

Notes: (1) † Estimate suppressed or unstable; [a] 95% confidence interval; all estimates are sample design adjusted; the sampling design was changed in 2017 to dual-frame sampling (landline + cell-phone).
(2) Trend Analysis: **–** change not statistically significant at p<.05; T significant change (p<.05) between 2003-2017; **2Y** significant change (p<.05) between last two estimates.
Q: *In general, would you say your overall mental health is excellent, very good, good, fair, or poor?*
Def'n: *Poor Mental Health – reporting fair or poor mental health in general.*
Source: The *CAMH Monitor*, Centre for Addiction and Mental Health.

Table 7.3.4: Percentage Reporting ***Frequent Mental Distress Days*** (14+) in the Past 30 Days, by Demographic Characteristics, Ontarians Aged 18+, 2003–2017

(N=)	2003 (2411)	2004 (2611)	2005 (2445)	2006 (2016)	2007 (2005)	2008 (2024)	2009 (2037)	2010 (2024)	2011 (1999)	2012 (2015)	2013 (2060)	2014 (2004)	2015 (1005)	2016 (1020)	2017 (1813	Trend	
Total	**5.4**	**6.6**	**5.4**	**5.8**	**6.6**	**6.0**	**6.4**	**7.9**	**7.1**	**6.4**	**7.3**	**6.0**	**9.7**	**7.4**	**11.7**	**T**	**2Y**
(95% CI)[a]	(4.5, 6.5)	(5.5, 7.9)	(4.5, 6.6)	(4.7, 7.1)	(5.5,7.9)	(4.7, 7.6)	(4.8, 8.3)	(6.6, 9.5)	(5.7,8.7)	(5.2, 7.9)	(5.8,9.0)	(4.8,7.5)	(7.5, 12.5)	(5.5,9.9)	(9.6, 14.2)		
Sex																	
Men	**4.2**	**5.7**	**4.4**	**†4.9**	**†4.7**	**†5.6**	**†4.7**	**5.8**	**†5.8**	**†5.8**	**†7.1**	**†4.0**	**†7.9**	**†7.4**	**†9.9**	**T**	**–**
	(3.0, 5.8)	(4.3, 7.6)	(3.2, 6.2)	(3.4,6.9)	(3.3,6.5)	(3.9, 7.9)	(3.1, 7.2)	(4.2, 8.0)	(3.9,8.7)	(4.0, 8.3)	(5.0,10.1)	(2.5,6.4)	(4.9, 12.6)	(4.5,11.8)	(7.1, 13.7)		
Women	**6.5**	**7.4**	**6.3**	**6.7**	**8.4**	**6.4**	**8.1**	**10.1**	**8.2**	**7.0**	**7.4**	**7.9**	**11.4**	**†7.5**	**13.3**	**T**	**2Y**
	(5.2, 8.2)	(6.0, 9.2)	(5.0, 8.0)	(5.2,8.6)	(6.7,10.5)	(4.5, 8.9)	(5.7,11.4)	(8.1, 12.5)	(6.5, 10.3	(5.4, 8.9)	(5.7, 9.6)	(6.2, 10.0)	8.5, 15.2)	(5.3, 10.4)	(10.5, 16.7)		
Age																	
18-29	**7.0**	**8.2**	**†5.7**	**†5.4**	**†7.9**	**10.2**	**†5.0**	**†9.0**	**†11.6**	**†6.8**	**†9.9**	**†5.4**	**†12.8**	**†8.3**	**†18.8**	**T**	**–**
	(4.6, 10.4)	(5.5, 12.1)	(3.6, 9.0)	(3.1,9.0)	(5.1,12.1)	(5.8, 17.4)	(2.1, 11.5)	(5.6, 14.2)	(7.1, 18.5)	(3.3, 13.2)	(5.4, 17.6)	(2.5, 11.0)	(6.7.23.1)	(3.2, 20.1)	(12.7.27.1)		
30-39	**†3.4**	**6.3**	**7.6**	**†7.6**	**†8.5**	**†5.9**	**†7.2**	**†7.5**	**†6.9**	**†8.5**	**†9.9**	**†8.3**	**†12.7**	**†10.1**	**†10.3**	**T**	**–**
	(2.1, 5.4)	(4.2, 9.3)	(5.1, 11.1)	(4.9,11.6)	(5.6, 12.5)	(3.7, 9.5)	(4.1, 12.3)	(4.7, 11.8)	(4.3, 10.9)	(5.5, 12.9)	(5.8, 16.2)	(4.8, 14.0)	(6.7, 22.7)	(4.8, 20.1)	(5.2, 19.6)		
40-49	**6.8**	**7.8**	**†4.8**	**†7.1**	**†7.2**	**8.1**	**†6.5**	**†7.5**	**†6.7**	**†7.5**	**†6.7**	**†8.1**	**†11.1**	**†6.0**	**†14.7**	**T**	**2Y**
	(4.8, 9.4)	(5.5, 11.0)	(3.2, 7.1)	(4.8,10.4)	(4.8,10.5)	(5.5,11.9)	(3.7, 11.4)	(5.0, 11.1)	(4.6,9.9)	(5.0, 11.1)	(4.4,10.3)	(5.3,12.3)	(6.7, 17.8)	(2.8,12.7)	(9.6, 21.8)		
50-64	**6.9**	**6.6**	**†5.1**	**†5.4**	**†6.2**	**†4.3**	**†8.3**	**†9.7**	**†5.6**	**†6.8**	**7.0**	**†5.0**	**†7.3**	**†7.1**	**9.2**	**–**	**–**
	(4.9, 9.8)	(4.8, 9.1)	(3.4, 7.7)	(3.6, 8.2)	(4.3,9.0)	(2.8, 6.4)	(5.2, 13.0)	(7.2, 13.0)	(3.9,8.0)	(5.0, 9.2)	(5.1,9.4)	(3.5,7.1)	(4.8, 11.1)	(4.6,10.8)	(6.7, 12.7)		
65+	**†1.9**	**†3.8**	**†3.6**	**†3.2**	**†3.1**	**†1.9**	**†3.5**	**†5.5**	**†4.6**	**†2.5**	**†3.8**	**†4.2**	**†6.4**	**†6.6**	**6.0**	**T**	**–**
	(1.0,3.8)	(2.2, 6.4)	(2.2, 5.8)	(1.7,6.2)	(1.9,5.2)	(1.0, 3.8)	(1.7, 7.1)	(3.6, 8.4)	(2.9,7.2)	(1.5, 4.2)	(2.4,5.8)	(2.8,6.3)	(3.9, 10.3)	(4.2,10.2)	(4.4, 8.3)		
Region																	
Toronto	**†4.7**	**†7.3**	**†4.8**	**†3.8**	**†5.1**	**†6.6**	**†6.9**	**†8.4**	**†7.7**	**†6.4**	**†9.2**	**†5.7**	**†6.8**	**†5.8**	**†11.4**	**T**	**–**
	(3.0, 7.5)	(5.0, 10.7)	(3.0, 7.5)	(2.0, 7.3)	(3.0, 8.5)	(3.8, 11.3)	(3.8, 12.0)	(5.4, 12.8)	(5.0,11.7)	(3.9, 10.5)	(5.7,14.6)	(3.3,9.6)	(3.7, 12.3)	(2.4,13.4)	(7.7, 16.6)		
Central East	**†5.5**	**†5.4**	**†6.5**	**†7.0**	**†8.7**	**†8.4**	**†5.5**	**†7.1**	**†6.0**	**†8.0**	**†7.7**	**†4.9**	**†9.2**	**†6.9**	**†11.3**	**–**	**–**
	(3.6, 8.1)	(3.5, 8.2)	(4.2, 10.0)	(4.5, 10.7)	(6.0,12.6)	(5.3, 13.1)	(3.0, 9.9)	(4.7, 10.5)	(3.3, 10.6)	(5.3, 12.1)	(4.7, 12.4)	(2.9, 8.1)	(4.8, 16.7)	(3.7, 12.4)	(7.3, 17.0)		
Central West	**†6.2**	**†6.4**	**†5.6**	**†6.3**	**†5.4**	**†4.0**	**†8.5**	**†10.3**	**†8.7**	**†4.8**	**†6.5**	**†8.0**	**†12.7**	**†9.0**	**†10.1**	**T**	**–**
	(4.0, 9.5)	(4.1, 9.9)	(3.7, 8.3)	(4.0, 9.9)	(3.3,8.6)	(2.1, 7.8)	(4.8, 14.7)	(7.0,15.0)	(5.7,13.0)	(2.7, 8.3)	(4.1,10.3)	(5.0,12.4)	(7.4, 20.8)	(4.2,18.1)	(5.8, 17.1)		
West	**†6.0**	**†8.6**	**†5.1**	**†6.0**	**†4.3**	**†5.4**	**†4.5**	**†5.8**	**†6.8**	**†6.3**	**†6.2**	**†7.0**	**†4.8**	**†6.7**	**†14.4**	**–**	**–**
	(4.0, 9.1)	(6.2, 12.0)	(3.2, 8.0)	(3.8, 9.5)	(2.7,7.0)	(3.3, 8.5)	(2.2, 8.7)	(3.6, 9.3)	(4.3, 10.7)	(3.9, 10.0)	(4.0, 9.5)	(4.4, 11.0)	(2.0, 10.8)	(3.1, 14.0)	(9.2, 21.9)		
East	**†4.5**	**†6.0**	**†5.1**	**†5.4**	**†8.3**	**†3.3**	**†7.4**	**†8.5**	**†6.4**	**†6.0**	**†7.3**	**†6.0**	**†13.3**	**†8.3**	**†13.8**	**T**	**–**
	(2.8, 7.2)	(4.0, 9.0)	(3.1, 8.2)	(3.2, 9.0)	(5.5,12.4)	(1.7, 6.1)	(3.8, 14.1)	(5.7, 12.6)	(4.0, 10.3)	(4.0, 9.0)	(4.5, 11.5)	(3.3, 10.8)	(7.5, 22.3)	(4.7, 14.4)	(8.8, 21.0)		
North	**†5.4**	**†5.1**	**†4.6**	**†6.3**	**†8.4**	**†6.4**	**†4.4**	**†4.9**	**†6.7**	**†5.3**	**†4.7**	**†4.6**	**†15.0**	**†9.3**	**†10.8**	**T**	**–**
	(3.5, 8.3)	(3.6, 7.2)	(2.9, 7.2)	(3.9, 9.9)	(5.6,12.4)	(3.7, 10.6)	(1.8, 9.9)	(2.7, 8.8)	(3.9, 11.2)	(3.3, 8.4)	(2.8, 7.8)	(2.6, 8.1)	(9.1, 23.7)	(5.1, 16.3)	(6.6, 17.1)		

Cont'd

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Trend	
(N=)	(2411)	(2611)	(2445)	(2016)	(2005)	(2024)	(2037)	(2024)	(1999)	(2015)	(2060)	(2004)	(1005)	(1020)	(1813		
Marital Status																	
Married/Partner	**4.4**	**5.0**	**4.0**	**5.5**	**5.8**	**4.4**	**6.1**	**6.9**	**5.0**	**5.3**	**5.4**	**5.4**	**7.7**	**†5.6**	**8.9**	**T**	**2Y**
Previously Married	**†7.4**	**10.6**	**9.2**	**†8.5**	**†8.8**	**†6.8**	**†7.7**	**†14.1**	**†12.1**	**10.0**	**†12.7**	**†5.5**	**†13.2**	**†16.6**	**†17.7**	**T**	**–**
Never Married	**†7.1**	**8.9**	**†7.3**	**†5.4**	**†7.8**	**10.6**	**†6.5**	**†8.1**	**†11.3**	**†7.5**	**†10.8**	**†8.3**	**†14.0**	**†8.4**	**†15.9**	**T**	**–**
Education																	
High school not completed	**†5.7**	**7.3**	**†5.5**	**†7.9**	**†9.5**	**†7.2**	**†4.4**	**†11.3**	**†9.5**	**†13.1**	**†14.5**	**†10.8**	**†13.6**	**†9.3**	**†14.0**	**T**	**2Y**
mpleted high school	**7.6**	**9.2**	**7.2**	**†6.3**	**8.9**	**†4.8**	**†7.4**	**†8.5**	**†5.2**	**†5.1**	**†9.7**	**†9.2**	**†12.9**	**†9.2**	**†10.2**	**T**	**–**
Some college or university	**5.7**	**7.4**	**5.0**	**†4.9**	**6.6**	**†7.3**	**6.1**	**8.6**	**10.8**	**7.6**	**†5.4**	**†6.4**	**†10.7**	**†8.0**	**15.1**	**T**	**–**
University degree	**†3.2**	**†3.5**	**†4.2**	**†5.5**	**†3.4**	**†5.2**	**6.6**	**†4.8**	**†3.7**	**†3.7**	**†5.7**	**†3.0**	**†5.9**	**†5.5**	**†8.3**	**T**	**–**

Notes: (1) † Estimate suppressed or unstable; [a] 95% confidence interval; all estimates are sample design adjusted; the sampling design was changed in 2017 to dual-frame sampling (landline + cell-phone).
(2) Trend Analysis: **–** change not statistically significant at p<.05; **T** significant change (p<.05) between 2003-2017; **2Y** significant change (p<.05) between last two estimates.

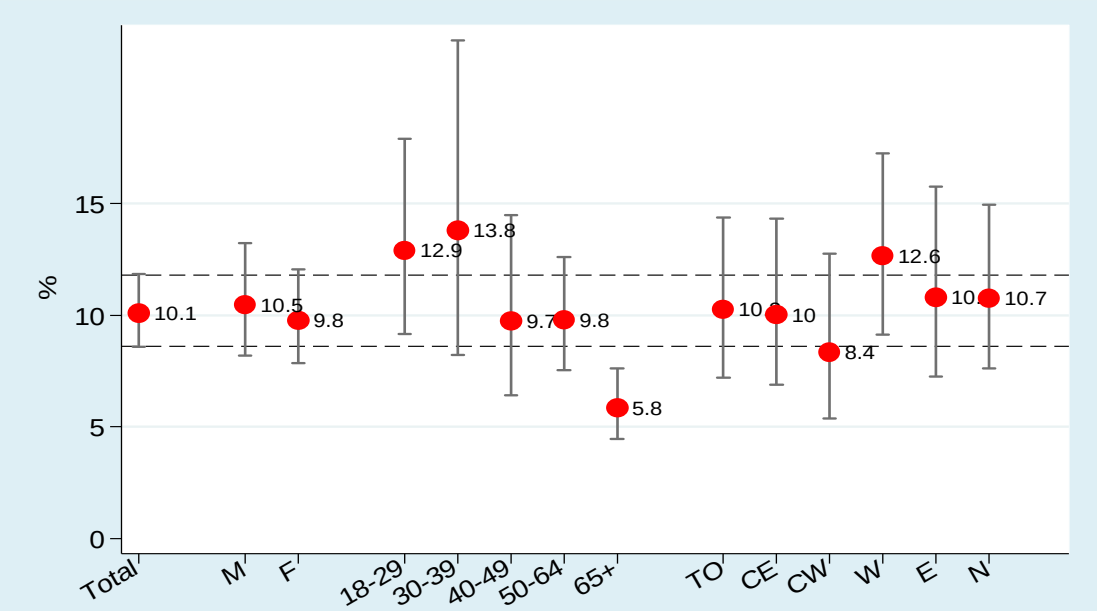
Q: *Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?*

Def'n: *Frequent Mental Distress Days – reporting 14 or more mental distress days during the past 30 days*

Source: The *CAMH Monitor*, Centre for Addiction and Mental Health.

Figure 7.3.1

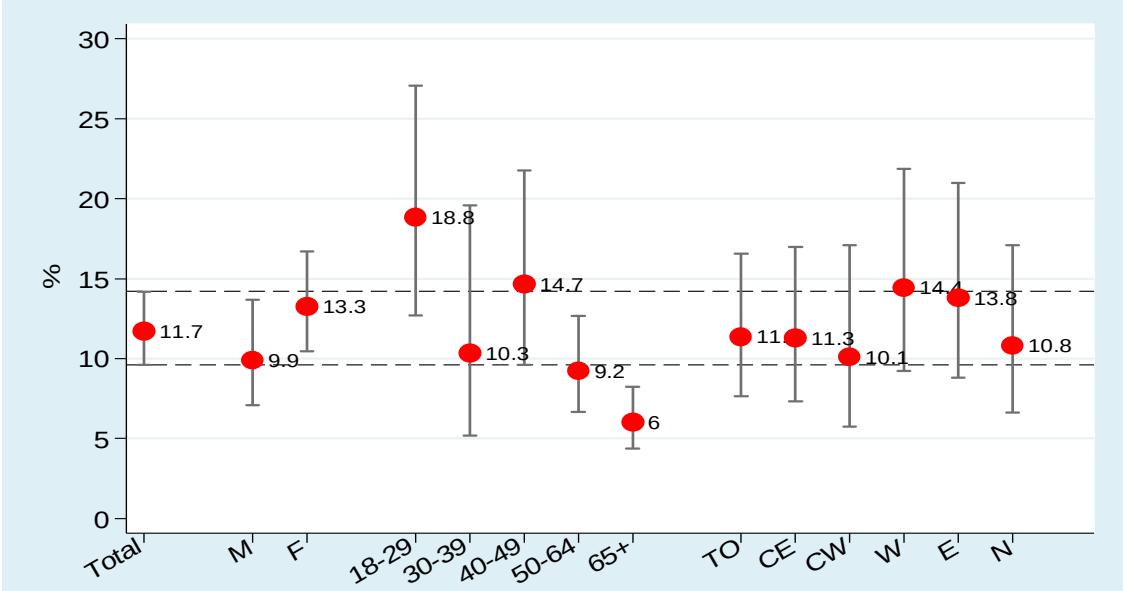
Percentage Reporting Fair or Poor Mental Health by Sex, Age and Region, Ontarians Aged 18+, 2017 (N=2812)



Note: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal bar represents 95% confidence interval for total estimate
(3) significant difference by age (p<.05)
Source: 2017 CAMH Monitor

Figure 7.3.2

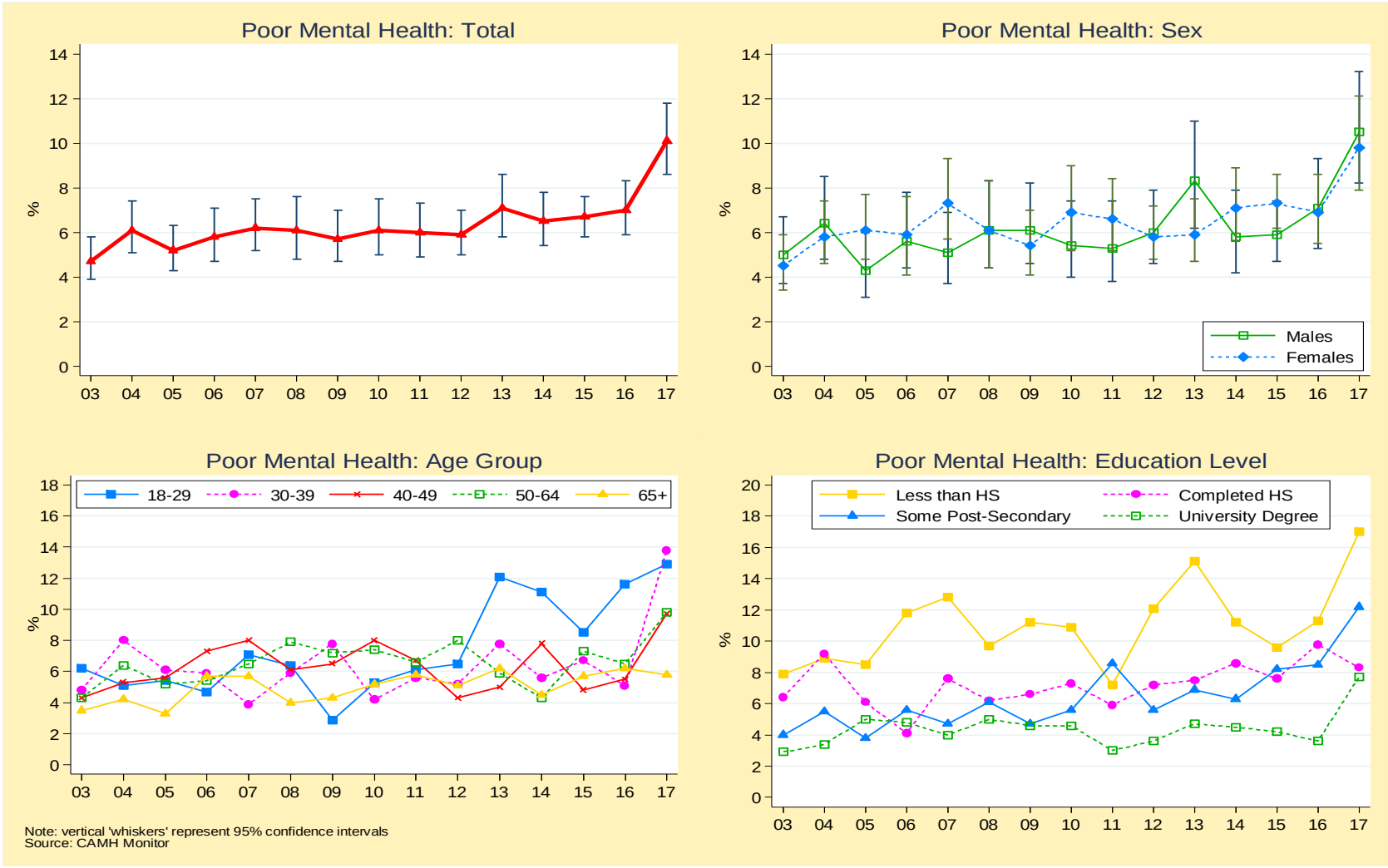
Percentage Reporting Frequent Mental Distress Days (14+) in the Past 30 Days by Sex, Age and Region, Ontarians Aged 18+, 2017 (N=1813)



Note: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal bar represents 95% confidence interval for total estimate
(3) significant difference by age (p<.05)
Source: 2017 CAMH Monitor

Figure 7.3.3

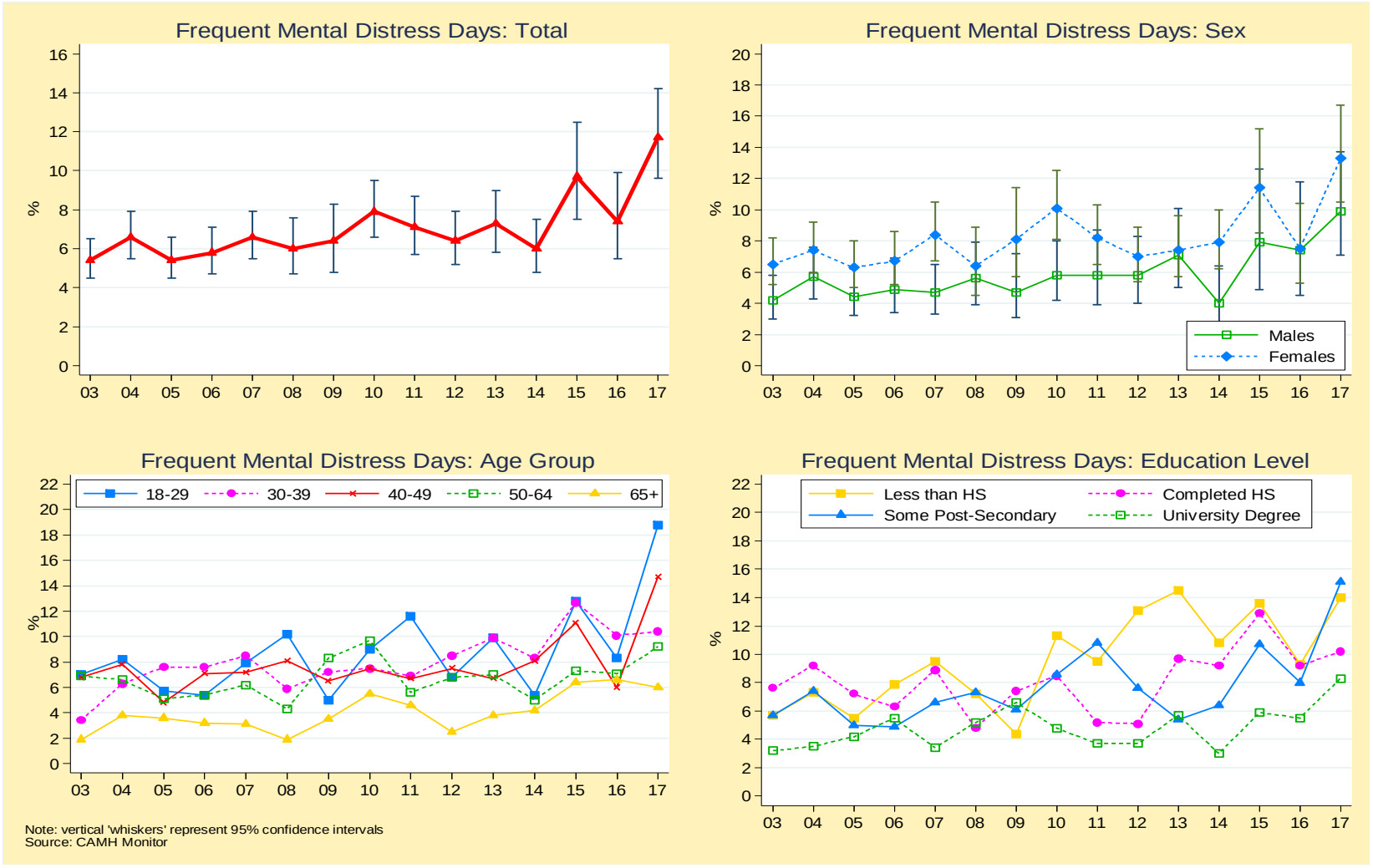
Percentage Reporting Fair or Poor Mental Health, Ontarians Aged 18+, 2003–2017



Note: vertical 'whiskers' represent 95% confidence intervals
Source: CAMH Monitor

Figure 7.3.4

Percentage Reporting Frequent Mental Distress Days (14+) in the Past 30 Days, Ontarians Aged 18+, 2003–2017



Note: vertical 'whiskers' represent 95% confidence intervals
Source: CAMH Monitor

7.4 Suicidal Ideation and Suicide Attempt

The *CM* included a question about suicidal ideation and attempts starting in 2013. In 2017, a random subsample of respondents (N = 1,813) were asked: (1)*"In the past 12 months, did you ever seriously consider attempting suicide?"* and (2) *"In the past 12 months, did you actually attempt suicide?"* Response options to both questions were *yes* or *no*.

2017 ……Table 7.4.1; Fig. 7.4.1

Overall, an estimated **4.1%** (95% CI: 2.8% to 5.9%) of Ontario adults reported that they seriously **contemplated suicide** during the 12 months before the survey. The corresponding population estimate is 426,900 adults. Less than **0.5%** of Ontario adults reported **attempting suicide** in the past year. Estimates for suicide attempts were suppressed due to unreliability.

- Suicidal ideation did not significantly differ by sex, after controlling for age.
- Compared to those aged 55 and older (2.3%), the adjusted odds of reporting suicidal ideation were almost 4 times higher among those aged 18 to 34 (8.2%; OR=3.69).
- Estimates by region, marital status education, and income were supressed due to unreliability.

Trends

2013–2017 ……Table 7.4.2

Overall, the percentage of respondents reporting suicidal ideation was significantly **higher** in 2017 (4.1%) compared to 2016 (2.3%). The current estimate is also significantly higher than in 2013 (2.2%). There were no significant changes by demographic characteristics.

Table 7.4.1 Percentage Reporting ***Suicidal Ideation*** in the Past 12 Months and Adjusted Group Differences, Ontarians Aged 18+, 2017

	N	%	95% CI	Adjusted Odds Ratio (N=1794)
Total [1]	1813	**†4.1**	(2.8, 5.9)	—
Sex				NS
Men	718	**†4.9**	(2.9, 8.3)	1.33
Women *(Comparison Group)*	1095	**†3.3**	(2.0, 5.5)	—
Age *(Comparison Group)*				**
18-34	244	**†8.2**	(4.6, 14.0)	**3.69****
35-54	461	**†2.9**	(1.6, 5.2)	1.28
55 +	1099	**†2.3**	(1.2, 4.3)	—

Notes: (1) All analyses are sample design adjusted; *p<.05**;** **p<.01; ***p<.001; CI = 95% confidence interval; NS – not statistically significant; † Estimate unstable; [1] Asked only of a random subsample.
(2) Asterisks in group row indicate a statistically significant group effect, based on Wald test.
(3) ORs greater than 1.0 indicate that the odds of reporting suicidal ideation are higher relative to the comparison group; ORs less than 1.0 indicate that the odds are lower relative to the comparison group.
(4) Adjusted odds ratio holding fixed values for sex, age, region, marital status, education, and income.
Q: *In the past 12 months, did you ever seriously consider attempting suicide?*
Source: The *CAMH Monitor*, Centre for Addiction and Mental Health.

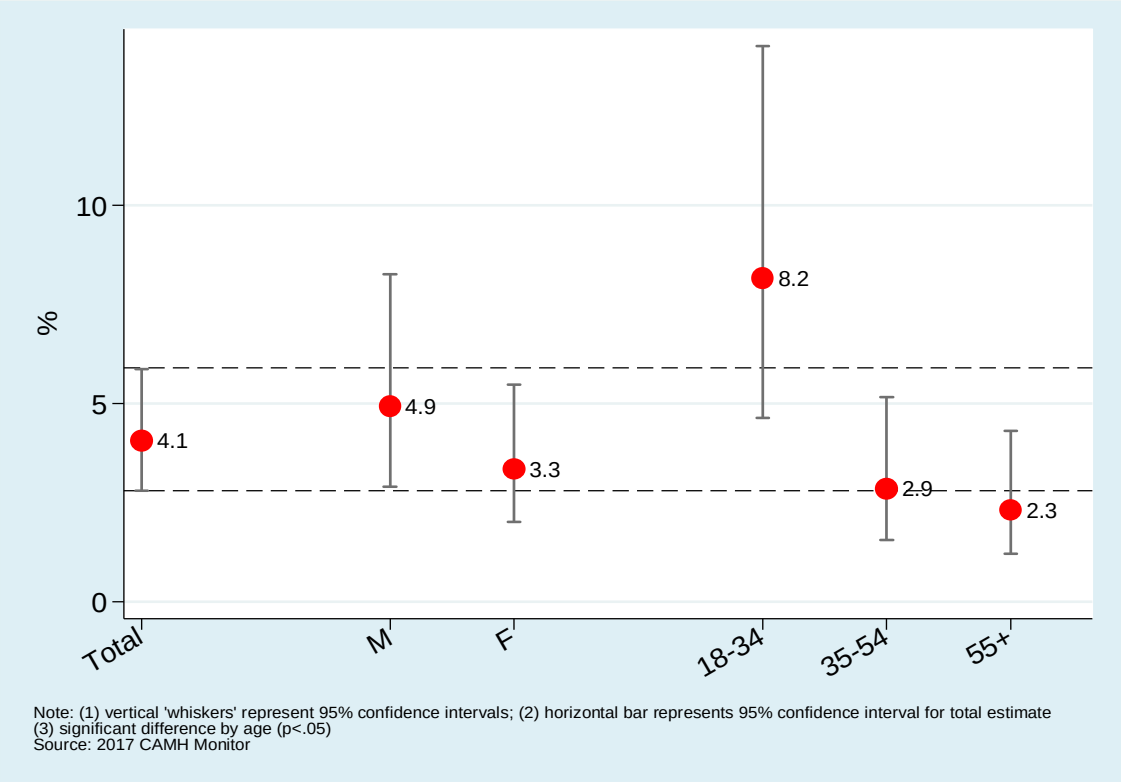
Table 7.4.2 Percentage Reporting ***Suicidal Ideation*** in the Past 12 Months, by Demographic Characteristics, Ontarians Aged 18+, 2013–2017

(N=)	2013 (2060)	2014 (2004)	2015 (4007)	2016 (2034)	2017 (1813)	Trend T	Trend 2Y
Total (95% CI) [a]	**†2.2** (1.4, 3.3)	**†2.5** (1.6, 3.8)	**2.4** (1.7, 3.2)	**†2.3** (1.5, 3.5)	**†4.1** (2.8, 5.9)		
Sex							
Men	**†2.8** (1.6, 5.0)	**†2.6** (1.3, 5.1)	**†2.5** (1.6, 4.1)	**†2.7** (1.4, 5.0)	**†4.9** (2.9, 8.3)	–	–
Women	**†1.6** (1.0, 2.7)	**†2.3** (1.4, 3.9)	**†2.2** (1.5, 3.1)	**†2.0** (1.2, 3.3)	**†3.3** (2.0, 5.5)	–	–
Age *(Comparison Group)*							
18-34	**†4.8** (2.3, 9.8)	**†3.9** (1.6, 9.1)	**†4.9** (3.0, 8.0)	**†4.6** (2.1, 9.9)	**†8.2** (4.6, 14.0)	–	–
35-54	**†1.0** (0.6, 2.0)	**†2.5** (1.3, 4.5)	**†1.3** (0.8, 2.3)	**†1.5** (0.9, 2.6)	**†2.9** (1.6, 5.2)	–	–
55+	**†1.9** (1.1, 3.1)	**†1.6** (0.8, 3.0)	**†1.5** (1.1, 2.1)	**†1.7** (1.1, 2.8)	**†2.3** (1.2, 4.3)	–	–

Notes: (1) [a] 95% confidence interval; † Estimate unstable; all estimates are sample design adjusted; the sampling design was changed in 2017 to dual-frame sampling (landline + cell-phone).
(2) Trend Analysis: – change not statistically significant (p<.05) between 2013-2017;
Q: *In the past 12 months, did you ever seriously consider attempting suicide?*
Source: The *CAMH Monitor*, Centre for Addiction and Mental Health.

Figure 7.4.1

Percentage Reporting Suicidal Ideation in the Past Year by Sex and Age, Ontarians Aged 18+, 2017 (N=1813)



Note: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal bar represents 95% confidence interval for total estimate
(3) significant difference by age (p<.05)
Source: 2017 CAMH Monitor

8. PHYSICAL AND OVERALL HEALTH

8.1 Self-Rated Health

One of the more frequently used indicators of a person's current health status is perceived or self-rated health. Despite its simplicity, this global assessment of health status has been shown to be a reliable measure and a valid predictor of physical health and emotional well-being (McDowell, 2006), as well as future morbidity and mortality (Idler & Benyamini, 1997).

Since 2003, the following items have been asked in the CM:

(1) In general, would you say your overall health is excellent, very good, good, fair, or poor?

(2) 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?

In this report, we present two measures of self-rated health: 1) the percent reporting *fair or poor health*, defined as the percentage rating their overall health as fair or poor in general, and 2) the percent reporting *frequent physically unhealthy days*, defined as the percentage reporting **14 or more** physically unhealthy days during the past 30 days.

8.1.1 Self-Rated Fair/Poor Health

2017……Table 8.1.1; Fig. 8.1.1

An estimated **12.0%** (95% CI: 10.5% to 13.7%) of Ontario adults rated their overall health as fair or poor. The corresponding population estimate is 1,284,500 Ontario adults.

Age, education, and **income** were significantly related to reporting fair or poor overall health.

- Reports of fair or poor overall health increased with age, from 7.7% of 18 to 29 year olds to 18.3% of those 65 and older (OR=1.83).
- Relative to those who did not graduate high school, the adjusted odds of fair/poor health ratings were significantly lower among respondents with higher education (OR=0.32).
- Household income was significantly associated with fair or poor overall health. The distinguishing feature was a higher rate among those with the lowest income and a significantly lower rate among those with higher incomes. Relative to those with incomes of less than $30,000, the adjusted odds of fair/poor health ratings were significantly lower among respondents with incomes of $50,000 to $79,999 and among those with incomes of $80,000 and higher (OR=0.36 and OR=0.31, respectively).

Trends

2003–2017 ……Table 8.1.3; Fig. 8.1.3

2016–2017

The prevalence of fair or poor self-rated overall health was significantly **higher** in 2017 (12.0%) compared to 2016 (9.1%). In addition, rates of fair or poor overall health increased among men, among those aged 40 to 49, those living in Central East, those previously married and those with the lowest incomes.

2003–2017

Overall, the 2017 estimate of fair or poor self-rated overall health was similar to the 2003 estimate and there was no evidence of dominant differential trends between subgroups.

8.1.2 Frequent Physically Unhealthy Days

2017 ……Table 8.1.2; Fig. 8.1.2

Overall, an estimated **10.5%** (95% CI: 8.6% to 12.6%) of Ontario adults experienced frequent physically unhealthy days (14+ days) in the past 30 days. The corresponding population estimate is 1,080,000 Ontario adults.

Only **income** was significantly related to experiencing frequent unhealthy days, after adjusting for our set of risk factors.

- Experiencing frequent unhealthy days was significantly related to household income. The distinguishing feature was a higher rate among those with the lowest income and a lower rate among those with higher incomes. Reports of frequent unhealthy days declined from 24.5% among those with incomes of less than $30,000 to 7.9% among those with incomes of $80,000 and higher (OR=0.29).

There were no other significant effects, when adjusting for other factors.

Trends

2003–2017…… Table 8.1.4; Fig. 8.1.4

2016–2017

Overall, the percentage reporting frequent unhealthy days in the past 30 days in 2017 (10.5%) was not significantly different from 2016 (8.8%) and rates of frequent unhealthy days were stable for all demographic subgroups.

2003–2017

Overall, between 2003 and 2017, there was a significant **increase** in reports of frequent unhealthy days in the past 30 days, from 5.9% in 2004 to 10.5% in 2017.

Between 2003 and 2017, reports of frequent unhealthy days **increased** significantly among men and women, among almost all age groups, among most regions, among those married and those never married and among those with higher education.

Table 8.1.1 Percentage Reporting ***Fair or Poor Health*** and Adjusted Group Differences, Ontarians Aged 18+, 2017

	N	%	95% CI	Adjusted Odds Ratio (N=2735)
Total	2812	**12.0**	(10.5, 13.7)	—
Sex				NS
Men	1150	**12.2**	(10.0, 14.9)	1.17
Women *(Comparison Group)*	1662	**11.7**	(9.8, 14.0)	—
Age				*
18-29 *(Comparison Group)*	283	**†7.7**	(4.8, 12.1)	—
30-39	199	**†10.6**	(5.8, 18.8)	1.62
40-49	366	**†9.9**	(6.6, 14.7)	1.74
50-64	843	**12.1**	(9.8, 15.0)	1.63
65+	1110	**18.3**	(15.6, 21.3)	**1.83***
Public Health Region				NS
Toronto *(vs. Provincial Average)*	476	**10.2**	(7.3, 13.9)	0.98
Central East	476	**13.0**	(9.7, 17.2)	1.12
Central West	456	**†11.5**	(8.2, 15.9)	0.94
West	468	**12.7**	(9.6, 16.5)	0.96
East	467	**†11.9**	(8.5, 16.5)	1.01
North	469	**15.4**	(12.0, 19.6)	1.07
Marital Status				NS
Married/Partner *(Comparison Group)*	1730	**10.8**	(9.2, 12.7)	—
Previously Married	614	**24.5**	(19.0, 30.9)	**1.78***
Never Married	441	**†9.2**	(6.5, 13.0)	1.00
Education				**
High school not completed *(Comparison Group)*	240	**31.8**	(23.3, 41.6)	—
Completed high school	612	**13.0**	(10.2, 16.4)	**0.44****
Some college or university	986	**12.1**	(9.7, 15.0)	**0.45****
University degree	933	**7.6**	(5.6, 10.5)	**0.32*****
Household Income				**
< $30,000 *(Comparison Group)*	266	**28.0**	(20.8, 36.5)	—
$30,000-$49,999	347	**19.0**	(14.4, 24.6)	0.62
$50,000-$79,999	483	**9.9**	(6.9, 14.1)	**0.36****
$80,000+	1079	**7.3**	(5.4, 9.8)	**0.31*****
Not stated	637	**14.0**	(10.9, 17.7)	**0.55***

Notes: (1) All analyses are sample design adjusted; *p<.05**;** **p<.01; ***p<.001; CI = 95% confidence interval; NS – not statistically significant; † Estimate suppressed or unstable.
(2) Asterisks in group row indicate a statistically significant group effect, based on Wald test.
(3) ORs greater than 1.0 indicate that the odds of reporting poor physical health are higher relative to the comparison group; ORs less than1.0 indicate that the odds are lower relative to the comparison group.
(4) Adjusted odds ratio holding fixed values for sex, age, region, marital status, education and income.
Q: *In general, would you say your overall health is excellent, very good, good, fair, or poor?*
Def'n: Fair or Poor Health – reporting fair or poor health in general.
Source: The *CAMH Monitor*, Centre for Addiction and Mental Health.

Table 8.1.2 Percentage Reporting ***Frequent Physically Unhealthy Days*** (14+) in the Past 30 Days and Adjusted Group Differences, Ontarians Aged 18+, 2017

	N	%	95% CI	Adjusted Odds Ratio (N=1718)
Total [1]	1813	**10.5**	(8.6, 12.6)	—
Sex				NS
Men	718	**10.0**	(7.2, 13.6)	0.95
Women *(Comparison Group)*	1095	**10.9**	(8.7, 13.6)	—
Age				NS
18-29 *(Comparison Group)*	184	**†8.8**	(4.7, 16.0)	—
30-39	123	**†7.9**	(3.7, 16.1)	0.78
40-49	234	**†9.6**	(5.6, 16.0)	1.27
50-64	529	**†12.2**	(9.1, 16.2)	1.36
65+	734	**11.7**	(9.2, 14.7)	1.04
Public Health Region				NS
Toronto *(vs. Provincial Average)*	314	**†6.7**	(4.1, 10.7)	0.67
Central East	304	**†10.2**	(6.8, 15.0)	1.02
Central West	284	**†10.0**	(6.0, 16.1)	0.94
West	302	**†15.9**	(10.6, 23.2)	1.66
East	304	**†13.3**	(8.8, 19.6)	1.48
North	305	**†9.8**	(6.9, 13.9)	0.81
Marital Status				NS
Married/Partner *(Comparison Group)*	1100	**10.0**	(7.9, 12.5)	—
Previously Married	399	**†16.8**	(11.9, 23.1)	1.11
Never Married	292	**†9.3**	(5.6, 15.0)	0.91
Education				NS
High school not completed *(Comparison Group)*	165	**†14.6**	(7.9, 25.2)	—
Completed high school	400	**†10.5**	(7.0, 15.6)	0.92
Some college or university	641	**13.3**	(10.2, 17.2)	1.25
University degree	581	**†6.3**	(3.9, 10.1)	0.63
Household Income				****
< $30,000 *(Comparison Group)*	175	**†24.5**	(15.8, 35.9)	—
$30,000-$49,999	232	**†15.3**	(10.4, 22.0)	0.53
$50,000-$79,999	303	**†8.1**	(4.5, 14.2)	**0.25****
$80,000+	690	**†7.9**	(5.5, 11.3)	**0.29****
Not stated	413	**†9.8**	(6.7, 14.2)	**0.36****

Notes: (1) All analyses are sample design adjusted; *p<.05**;** **p<.01; ***p<.001; CI = 95% confidence interval; NS – no statistically significant difference; † Estimate suppressed or unstable; [1] Asked only of a random subsample.
(2) Asterisks in group row indicate a statistically significant group effect, based on Wald test.
(3) ORs greater than 1.0 indicate that the odds of reporting unhealthy days are higher relative to the comparison group; ORs less than 1.0 indicate that the odds are lower relative to the comparison group.
(4) Adjusted odds ratio holding fixed values for sex, age, region, marital status, education and income.

Q: *Now thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?*

Def'n: Frequent Unhealthy Days – reporting 14 or more physically unhealthy days during the past 30 days

Source: The *CAMH Monitor*, Centre for Addiction and Mental Health.

Table 8.1.3: Percentage Reporting ***Fair or Poor Health***, by Demographic Characteristic, Ontarians Aged 18+, 2003–2017

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Trend	
(N=)	(2411)	(2611)	(2445)	(2016)	(2005)	(2024)	(2037)	(2024)	(1999)	(3030)	(3021)	(3043)	(5013)	(3042)	(2812)		
Total	**10.2**	**11.1**	**11.4**	**9.7**	**11.9**	**10.4**	**10.5**	**11.2**	**11.9**	**10.8**	**9.4**	**9.9**	**9.9**	**9.1**	**12.0**	–	**2Y**
(95% CI)[a]	(9.0, 11.7)	(9.7, 12.6)	(10.1, 13.0)	(8.4, 11.3)	(10.4, 13.7)	(8.9, 12.1)	(9.1, 12.1)	(9.8, 12.8)	(10.4, 13.6)	(9.6, 12.2)	(8.3, 10.7)	(8.7, 11.3)	(8.9, 10.9)	(8.0, 10.4)	(10.5, 13.7)		
Sex																	
Men	**9.2**	**11.4**	**10.2**	**9.6**	**11.3**	**10.0**	**11.5**	**10.4**	**13.1**	**11.3**	**9.4**	**9.9**	**9.9**	**8.6**	**12.2**	–	**2Y**
	(7.5, 11.3)	(9.4, 13.7)	(8.2, 12.6)	(7.6, 12.0)	(9.1, 13.9)	(7.9, 12.6)	(9.3, 14.1)	(8.4, 12.8)	(10.7, 16.0)	(9.4, 13.5)	(7.6, 11.4)	(8.0, 12.3)	(8.4, 11.6)	(6.9, 10.6)	(10.0, 14.9)		
Women	**11.2**	**10.8**	**12.6**	**9.9**	**12.6**	**10.8**	**9.6**	**12.0**	**10.9**	**10.4**	**9.5**	**9.9**	**9.8**	**9.6**	**11.7**	–	–
	(9.4, 13.3)	(9.1, 12.8)	(10.8, 14.7)	(8.2, 11.9)	(10.5, 14.9)	(8.9, 13.0)	(7.9, 11.7)	(10.0, 14.3)	(9.1, 12.9)	(8.9, 12.2)	(8.0, 11.2)	(8.5, 11.7)	(8.7, 11.2)	(8.2, 11.3)	(9.8, 14.0)		
Age																	
18-29	**†7.1**	**†8.3**	**†8.8**	**†3.4**	**†11.5**	**†6.2**	**†7.8**	**†5.2**	**†8.3**	**†5.9**	**†4.5**	**†6.6**	**†5.9**	**†5.1**	**†7.7**	–	–
	(4.7,10.6)	(5.7,12.1)	(5.9,12.9)	(1.8,7.9)	(7.8, 16.7)	(3.1, 11.9)	(4.4, 13.4)	(2.9, 9.3)	(4.8, 14.0)	(3.3, 10.4)	(2.1, 9.2)	(3.4, 12.1)	(3.7, 9.2)	(2.7, 9.4)	(4.8, 12.1)		
30-39	**†4.7**	**†4.8**	**†6.8**	**†7.5**	**†8.3**	**†5.5**	**†8.5**	**†5.9**	**†6.8**	**†8.8**	**†7.4**	**†7.8**	**†5.3**	**†4.5**	**†10.6**	–	–
	(3.0, 7.4)	(3.2, 7.2)	(4.6, 9.9)	(4.8, 11.4)	(5.5, 12.3)	(3.3, 9.2)	(5.6, 12.7)	(3.4, 10.1)	(4.1, 11.0)	(6.0, 12.9)	(4.8, 11.2)	(5.0, 12.0)	(3.4, 8.2)	(2.2, 9.1)	(5.8, 18.8)		
40-49	**8.7**	**9.6**	**8.3**	**†9.9**	**†9.5**	**†10.9**	**†7.0**	**†8.7**	**†8.0**	**7.7**	**8.4**	**†8.9**	**†6.3**	**†5.1**	**†9.9**	–	**2Y**
	(6.5, 11.6)	(7.2, 12.8)	(6.1, 11.2)	(7.1, 13.6)	(6.8, 13.2)	(7.8, 15.0)	(4.8, 10.2)	(6.1, 12.1)	(5.4, 11.8)	(5.6, 10.6)	(6.2, 11.3)	(6.2, 12.6)	(4.5, 8.7)	(3.3, 7.9)	(6.6, 14.7)		
50-64	**14.0**	**11.6**	**14.3**	**11.8**	**14.1**	**14.0**	**12.5**	**14.5**	**14.6**	**12.4**	**10.5**	**10.4**	**13.1**	**11.1**	**12.1**	–	–
	(11.0, 17.5)	(9.1, 14.7)	(11.3, 17.9)	(9.1, 15.1)	(11.1, 17.7)	(11.0, 17.8)	(9.8, 15.9)	(11.5, 18.1)	(11.8, 18.1)	(10.3, 14.9)	(8.4, 13.0)	(8.5, 12.6)	(11.2, 15.1)	(9.1, 13.4)	(9.8, 15.0)		
65+	**17.8**	**22.4**	**21.9**	**16.7**	**16.3**	**17.4**	**18.4**	**21.4**	**22.3**	**18.2**	**15.4**	**15.1**	**16.5**	**17.9**	**18.3**	–	–
	(14.0, 22.5)	(18.3, 27.0)	(17.6, 26.9)	(13.0, 21.2)	(12.7, 20.7)	(14.0, 21.5)	(14.8, 22.7)	(17.5, 25.8)	(18.6, 26.4)	(15.4, 21.4)	(13.0, 18.2)	(12.8, 18.0)	(14.5, 18.8)	(15.5, 20.6)	(15.6, 21.3)		
Region																	
Toronto	**10.0**	**†10.3**	**11.0**	**†10.5**	**†11.0**	**12.5**	**12.9**	**†9.0**	**11.2**	**11.5**	**†9.1**	**†8.0**	**8.1**	**6.9**	**10.2**	–	–
	(7.2, 13.7)	(7.3, 14.3)	(8.1, 14.8)	(7.5, 14.6)	(7.6, 15.7)	(9.2, 16.8)	(9.5, 17.3)	(6.2, 13.0)	(8.1, 15.2)	(8.8, 14.9)	(6.6, 12.6)	(5.7, 11.2)	(6.2, 10.6)	(4.9, 9.7)	(7.3, 13.9)		
Central East	**†9.3**	**10.5**	**13.6**	**†9.2**	**14.6**	**†10.2**	**†10.8**	**11.3**	**†10.6**	**10.9**	**9.0**	**10.2**	**10.6**	**8.3**	**13.0**	–	**2Y**
	(6.6, 12.9)	(7.9, 13.9)	(10.3, 17.7)	(6.4, 13.1)	(11.1, 19.0)	(7.0, 14.7)	(7.7, 15.1)	(8.3, 15.2)	(7.4, 14.9)	(8.2, 14.4)	(6.6, 12.2)	(7.4, 13.9)	(8.4, 13.3)	(6.0, 11.4)	(9.7, 17.2)		
Central West	**10.4**	**11.0**	**10.2**	**†9.1**	**†7.8**	**†8.0**	**†8.9**	**12.0**	**13.1**	**7.6**	**8.7**	**8.5**	**10.0**	**11.1**	**†11.5**	–	–
	(7.5, 14.1)	(8.2, 14.7)	(7.3, 14.0)	(6.3, 13.0)	(5.2, 11.6)	(5.5, 11.6)	(6.4, 12.3)	(8.6, 16.4)	(9.8, 17.2)	(5.6, 10.2)	(6.4, 11.8)	(6.1, 11.7)	(7.9, 12.5)	(8.3, 14.7)	(8.2, 15.9)		
West	**9.1**	**10.3**	**11.7**	**10.1**	**†10.7**	**†10.6**	**†6.6**	**13.6**	**†11.1**	**11.8**	**9.2**	**10.3**	**9.8**	**9.7**	**12.7**	–	–
	(6.6, 12.4)	(7.6, 13.7)	(8.9, 15.2)	(7.3, 13.9)	(7.6, 15.0)	(7.5, 14.9)	(4.3, 10.0)	(10.1, 18.0)	(7.9, 15.3)	(9.1, 15.2)	(6.9, 12.0)	(7.8, 13.5)	(7.8, 12.1)	(7.3, 12.7)	(9.6, 16.5)		
East	**10.5**	**11.9**	**9.3**	**†6.6**	**15.1**	**†8.7**	**†8.6**	**10.3**	**12.8**	**11.0**	**10.0**	**12.4**	**10.3**	**9.5**	**†11.9**	–	–
	(7.7, 14.0)	(9.0, 15.6)	(6.7, 12.8)	(4.4, 9.7)	(11.5, 19.6)	(6.1, 12.2)	(6.2, 11.9)	(7.4, 14.0)	(9.4, 17.2)	(8.4, 14.2)	(7.5, 13.3)	(9.8, 15.6)	(8.3, 12.7)	(7.0, 12.9)	(8.5, 16.5)		
North	**14.4**	**14.8**	**13.2**	**15.8**	**13.9**	**13.2**	**17.2**	**13.5**	**15.4**	**15.9**	**13.3**	**13.9**	**11.9**	**11.8**	**15.4**	–	–
	(11.1, 18.5)	(12.0, 18.1)	(10.2, 16.9)	(12.1, 20.4)	(10.4, 18.4)	(9.8, 17.6)	(13.8, 23.2)	(10.3, 18.2)	(11.9, 20.8)	(12.3, 20.0)	(10.8, 17.4)	(10.9, 17.7)	(9.8, 14.4)	(9.0, 15.2)	(12.0, 19.6)		

Cont'd

(N=)	2003 (2411)	2004 (2611)	2005 (2445)	2006 (2016)	2007 (2005)	2008 (2024)	2009 (2037)	2010 (2024)	2011 (1999)	2012 (3030)	2013 (3021)	2014 (3043)	2015 (5013)	2016 (3042)	2017 (2812)	Trend	
Marital Status																	
Married/Partner	**9.1**	**9.5**	**10.0**	**9.2**	**10.4**	**8.9**	**8.9**	**10.8**	**11.6**	**10.1**	**8.7**	**8.9**	**9.4**	**8.8**	**10.8**	**–**	**–**
Previously Married	**21.7**	**20.5**	**19.6**	**17.4**	**18.3**	**22.8**	**21.5**	**22.3**	**20.9**	**17.3**	**17.7**	**18.6**	**17.1**	**17.3**	**24.5**	**–**	**2Y**
Never Married	**†7.2**	**10.6**	**10.4**	**†6.7**	**†12.1**	**†7.9**	**†9.7**	**†6.6**	**†8.2**	**9.7**	**†7.4**	**†8.8**	**8.1**	**6.3**	**†9.2**	**–**	**–**
Education																	
High school not completed	**24.3**	**24.4**	**24.6**	**23.6**	**26.0**	**19.6**	**22.8**	**27.8**	**25.5**	**24.3**	**19.9**	**22.4**	**27.4**	**20.3**	**31.8**	**–**	**2Y**
Completed high school	**12.9**	**13.4**	**13.4**	**10.5**	**12.3**	**13.9**	**14.7**	**13.2**	**12.6**	**12.9**	**11.9**	**11.7**	**11.8**	**11.6**	**13.0**	–	–
Some college or university	**7.0**	**8.9**	**9.4**	**6.0**	**11.8**	**10.1**	**8.1**	**9.6**	**12.1**	**9.8**	**8.3**	**11.6**	**10.3**	**10.5**	**12.1**	**–**	**–**
University degree	**†4.9**	**5.4**	**†6.9**	**†7.5**	**†5.9**	**†5.5**	**6.4**	**†7.2**	**7.7**	**6.5**	**6.0**	**4.5**	**5.8**	**4.8**	**7.6**	**–**	**–**

Notes: (1) † Estimate suppressed or unstable; [a] 95% confidence interval; all analyses are sample design adjusted; the sampling design was changed in 2017 to dual-frame sampling (landline + cell-phone).
(2) Trend Analysis: **–** change not statistically significant at p<.05; **T** significant change (p<.05) between 2003-2017; **2Y** significant change (p<.05) between last two estimates.
(3) Fair or Poor Health – reporting fair or poor health in general.

Q: *In general, would you say your overall health is excellent, very good, good, fair, or poor?*

Source: The *CAMH Monitor*, Centre for Addiction and Mental Health.

Table 8.1.4: Percentage Reporting ***Frequent Physically Unhealthy Days*** (14+) in the Past 30 Days, by Demographic Characteristics, Ontarians Aged 18+, 2003–2017

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Trend	
(N=)	(2411)	(2611)	(2445)	(2016)	(2005)	(2024)	(2037)	(2024)	(1999)	(2015)	(2060)	(2004)	(1005)	(1020)	(1813)		
Total[1]	**6.7**	**5.9**	**6.5**	**6.9**	**7.4**	**6.6**	**8.3**	**7.1**	**7.2**	**7.4**	**6.7**	**7.2**	**8.9**	**8.8**	**10.5**	T	–
(95% CI)[a]	(5.7, 7.9)	(5.0, 7.0)	(5.5, 7.8)	(5.7, 8.3)	(6.2, 8.7)	(5.6, 7.9)	(6.6, 10.4)	(5.9, 8.5)	(6.0, 8.6)	(6.3, 8.7)	(5.6, 8.0)	(6.0, 8.7)	(6.9, 11.4)	(6.9, 11.1)	(8.6, 12.6)		
Sex																	
Men	**4.9**	**5.0**	**5.5**	**†6.0**	**6.5**	**5.9**	**†6.9**	**5.7**	**6.9**	**5.9**	**6.5**	**†6.1**	**6.6**	**†9.0**	**10.0**	T	–
	(3.7, 6.5)	(3.9, 6.5)	(4.1, 7.4)	(4.3, 8.3)	(4.9,8.5)	(4.5, 7.9)	(4.8, 9.9)	(4.2, 7.6)	(5.1, 9.3)	(4.4, 7.8)	(4.9, 8.6)	(4.4, 8.5)	(4.3, 10.0)	(6.1, 13.2)	(7.2, 13.6)		
Women	**8.4**	**6.8**	**7.5**	**7.7**	**8.3**	**7.3**	**9.8**	**8.6**	**7.5**	**8.7**	**7.0**	**8.2**	**11.1**	**8.5**	**10.9**	T	–
	(6.9, 10.2)	(5.5, 8.4)	(6.1, 9.2)	(6.1, 9.7)	(6.7,10.2)	(5.8, 9.0)	(7.3, 13.1)	(6.8, 10.8)	(6.0, 9.3)	(7.2, 10.6)	(5.6, 8.7)	(6.6, 10.3)	(8.2, 14.8)	(6.4, 11.1)	(8.7, 13.6)		
Age																	
18-29	**†2.8**	**2.9**	**†5.3**	**†4.7**	**†4.6**	**†3.8**	**†**	**†6.3**	**†**	**†**	**†**	**†**	**†6.1**	**†8.1**	**†8.8**	T	–
	(1.4, 5.4)	(1.5, 5.3)	(3.1, 8.8)	(2.2, 9.6)	(2.4, 8.4)	(1.8, 7.9)	-	(3.5, 11.3)	-	-	-	-	(2.5, 14.5)	(2.8,21.3)	(4.7, 16.0)		
30-39	**†3.4**	**†4.1**	**†3.7**	**†7.2**	**†3.9**	**†2.9**	**†6.1**	**†3.4**	**†4.3**	**†5.5**	**†8.2**	**†6.5**	**†8.6**	**†5.4**	**†7.9**	T	–
	(2.1, 5.6)	(2.5, 6.7)	(2.2, 6.2)	(4.6,11.0)	(2.3, 6.5)	(1.4, 5.9)	(3.1, 11.8)	(1.8, 6.8)	(2.3, 7.9)	(3.3, 9.2)	(5.1, 12.9)	(3.6, 11.3)	(3.8, 18.5)	(2.1, 13.4)	(3.7, 16.1)		
40-49	**9.5**	**†5.5**	**†4.9**	**†5.8**	**†7.4**	**†5.8**	**†5.1**	**†3.9**	**†4.9**	**†6.3**	**†5.7**	**†7.7**	**†9.4**	**†4.5**	**†9.6**	T	–
	(7.1, 12.5)	(3.8, 8.0)	(3.4, 7.0)	(3.9, 8.6)	(5.1, 10.6)	(3.9, 8.8)	(3.0, 8.6)	(2.2, 6.9)	(3.1,7.7)	(4.2, 9.4)	(3.6, 9.0)	(4.9, 12.0)	(5.0, 17.0)	(2.0, 9.7)	(5.6, 16.0)		
50-64	**9.7**	**7.4**	**7.8**	**7.9**	**9.9**	**9.3**	**10.2**	**9.9**	**10.2**	**9.4**	**7.2**	**7.9**	**†9.4**	**11.0**	**†12.2**	–	–
	(7.3, 12.8)	(5.5, 9.7)	(5.7, 10.6)	(5.7, 10.7)	(7.4, 13.0)	(7.1, 12.2)	(7.0, 14.7)	(7.5, 12.9)	(7.8, 13.3)	(7.2, 12.2)	(5.3, 9.8)	(6.0, 10.5)	(6.5, 13.6)	(8.1, 14.8)	(9.1, 16.2)		
65+	**†7.7**	**10.9**	**13.5**	**†9.8**	**11.2**	**12.6**	**18.3**	**11.6**	**12.1**	**13.1**	**11.3**	**9.0**	**†10.7**	**12.9**	**11.7**	T	–
	(5.3, 11.1)	(8.0, 14.7)	(10.0, 17.9)	(6.9, 13.7)	(8.1, 15.3)	(9.6, 16.3)	(13.0, 25.1)	(8.8, 15.2)	(9.3, 15.6)	(10.2, 16.6)	(8.7, 14.4)	(6.9, 11.8)	(7.6, 15.0)	(9.5, 17.3)	(9.2, 14.7)		
Region																	
Toronto	**†3.6**	**†4.0**	**†6.4**	**†5.8**	**†5.0**	**†4.8**	**†6.3**	**†6.8**	**†6.7**	**†8.1**	**†7.4**	**†4.4**	**†11.5**	**†5.6**	**†6.7**	T	–
	(2.2, 5.7)	(2.4, 6.5)	(4.1, 9.9)	(3.5, 9.3)	(2.9, 8.3)	(3.1, 7.4)	(3.6, 11.0)	(4.3, 10.6)	(4.5, 9.9)	(5.5, 11.7)	(4.7, 11.6)	(2.7, 7.2)	(6.8, 18.9)	(2.7, 11.1)	(4.1, 10.7)		
Central East	**†7.9**	**†6.5**	**†7.7**	**†7.6**	**†7.7**	**†8.9**	**†8.1**	**†5.7**	**†5.8**	**†6.7**	**†5.1**	**†6.9**	**†4.9**	**†4.5**	**†10.2**	T	–
	(5.4, 11.3)	(4.5, 9.3)	(5.3, 11.2)	(5.0, 11.6)	(5.4, 11.1)	(6.2, 12.5)	(4.6, 13.8)	(3.6, 8.9)	(3.5, 9.6)	(4.6, 9.7)	(3.2, 7.9)	(4.4, 10.8)	(2.5, 9.3)	(2.2, 8.9)	(6.8, 15.0)		
Central West	**†8.4**	**†5.2**	**†4.5**	**†6.3**	**†7.4**	**†3.8**	**†7.8**	**†9.2**	**†7.9**	**†5.5**	**†6.5**	**†8.1**	**†10.8**	**†13.3**	**†10.0**	T	–
	(6.0, 11.7)	(3.3, 8.0)	(2.9, 6.9)	(3.7, 10.4)	(4.9, 11.1)	(2.3, 6.5)	(4.5, 13.1)	(6.2, 13.3)	(5.4, 11.6)	(3.6, 8.4)	(4.5, 9.4)	(5.4, 11.8)	(6.0. 18.6)	(8.0, 21.2)	(6.0. 16.1)		
West	**†5.6**	**†5.8**	**†6.0**	**†7.5**	**†8.3**	**†8.2**	**†8.2**	**†5.9**	**†8.8**	**†7.5**	**†9.7**	**†7.7**	**†6.3**	**†12.9**	**†15.9**	T	–
	(3.8, 8.2)	(4.0, 8.5)	(4.1, 8.6)	(5.1, 10.9)	(5.6, 12.2)	(5.6, 11.8)	(5.0, 13.4)	(3.9, 9.0)	(5.9, 12.9)	(5.2, 10.7)	(6.7, 13.8)	(5.0, 11.7)	(3.5, 11.2)	(7.2, 22.1)	(10.6, 23.2)		
East	**†8.6**	**†8.6**	**†6.6**	**†4.4**	**†8.5**	**†6.2**	**†10.2**	**†8.0**	**†8.0**	**†9.2**	**†6.3**	**†8.4**	**†12.5**	**†8.9**	**†13.3**	T	–
	(6.1, 11.9)	(6.1, 12.1)	(4.4, 9.7)	(2.6, 7.5)	(5.8, 12.4)	(4.1, 9.2)	(5.7, 17.6)	(5.2, 12.1)	(5.4, 11.7)	(6.3, 13.2)	(4.1, 9.5)	(5.3, 13.0)	(7.5, 20.0)	(5.5, 14.1)	(8.8, 19.6)		
North	**†7.4**	**8.7**	**10.2**	**†12.5**	**†9.5**	**†8.6**	**†13.7**	**†8.6**	**†7.4**	**†9.2**	**†7.4**	**†11.6**	**†8.0**	**†12.9**	**†9.8**	–	–
	(5.0, 10.6)	(6.5, 11.5)	(7.5, 13.6)	(9.0, 17.1)	(6.8,13.3)	(5.9, 12.5)	(9.2, 20.6)	(5.7, 13.0)	(5.1, 10.7)	(6.5, 13.0)	(5.2, 10.5)	(7.8, 17.0)	(5.1, 12.3)	(8.6, 18.9)	(6.9, 13.9)		

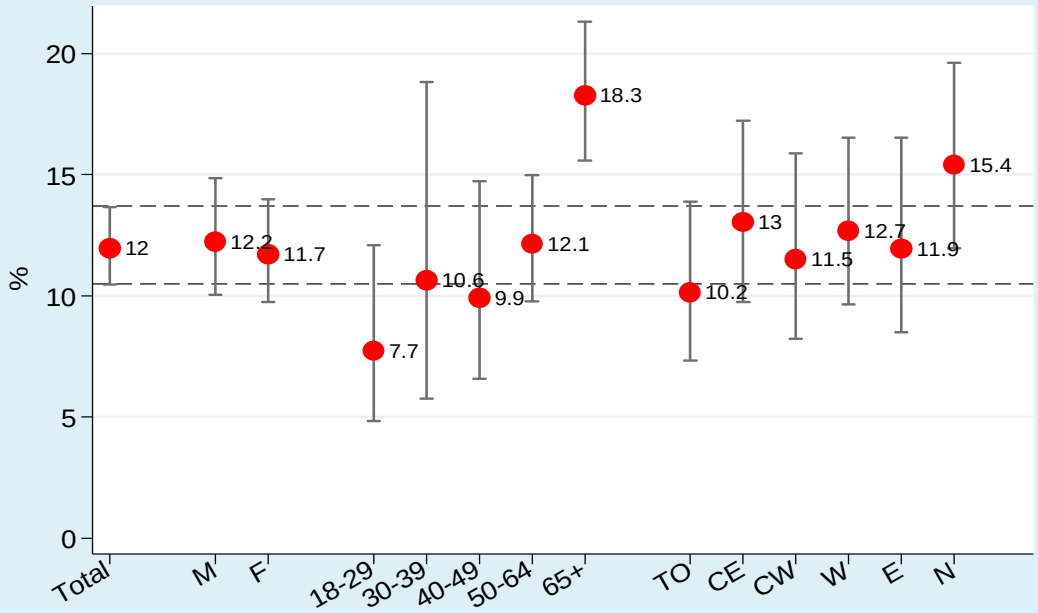
Cont'd

(N=)	2003 (2411)	2004 (2611)	2005 (2445)	2006 (2016)	2007 (2005)	2008 (2024)	2009 (2037)	2010 (2024)	2011 (1999)	2012 (2015)	2013 (2060)	2014 (2004)	2015 (1005)	2016 (1020)	2017 (1813)	Trend	
Marital Status																	
Married/Partner	**6.5**	**5.5**	**5.5**	**6.9**	**6.4**	**5.9**	**7.1**	**5.8**	**6.6**	**7.2**	**6.4**	**7.0**	**8.9**	**7.9**	**10.0**	**T**	–
Previously Married	**13.8**	**12.1**	**13.2**	**10.9**	**14.5**	**12.6**	**†17.8**	**16.1**	**†15.4**	**14.5**	**11.4**	**10.3**	**†11.2**	**†14.0**	**†16.8**	**–**	**–**
Never Married	**†3.5**	**†4.0**	**†5.8**	**†4.9**	**†5.8**	**†5.6**	**†7.7**	**†6.5**	**†4.6**	**†4.7**	**†5.1**	**†5.5**	**†8.0**	**†8.7**	**†9.3**	**T**	–
Education																	
High school not completed	**14.9**	**11.1**	**†13.6**	**†12.3**	**†11.6**	**†10.2**	**†9.5**	**†12.6**	**†16.4**	**†12.7**	**†13.3**	**†11.6**	**†15.9**	**†21.3**	**†14.6**	–	–
Completed high school	**8.4**	**6.4**	**†6.1**	**†9.7**	**†8.3**	**†6.6**	**†10.2**	**†7.5**	**†8.3**	**†8.3**	**†6.9**	**†8.3**	**†7.7**	**†9.7**	**†10.5**	–	–
Some college or university	**5.6**	**6.2**	**5.6**	**†5.4**	**7.5**	**8.1**	**†8.7**	**7.6**	**6.7**	**7.1**	**6.3**	**8.6**	**†12.3**	**†10.2**	**13.3**	**T**	**–**
University degree	**†3.0**	**†3.1**	**†5.1**	**†4.1**	**†5.2**	**†4.1**	**†6.1**	**†4.8**	**†4.3**	**†5.6**	**†5.0**	**†3.6**	**†5.0**	**†4.8**	**†6.3**	**T**	–

Notes: [1]Estimates based on a random subsample starting 2010; the sampling design was changed in 2017 to dual-frame sampling (landline + cell-phone).
(1) † Estimate suppressed or unstable; [a] 95% confidence interval; all analyses are sample design adjusted;
(2) Trend Analysis: **–** change not statistically significant at p<.05; **T** significant change (p<.05) between 2003-2017; 2Y significant change (p<.05) between last two estimates.
(3) Frequent Unhealthy Days – reporting 14 or more physically unhealthy days during the past 30 days
Q: *Now thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?*
Source: The *CAMH Monitor*, Centre for Addiction and Mental Health.

Figure 8.1.1

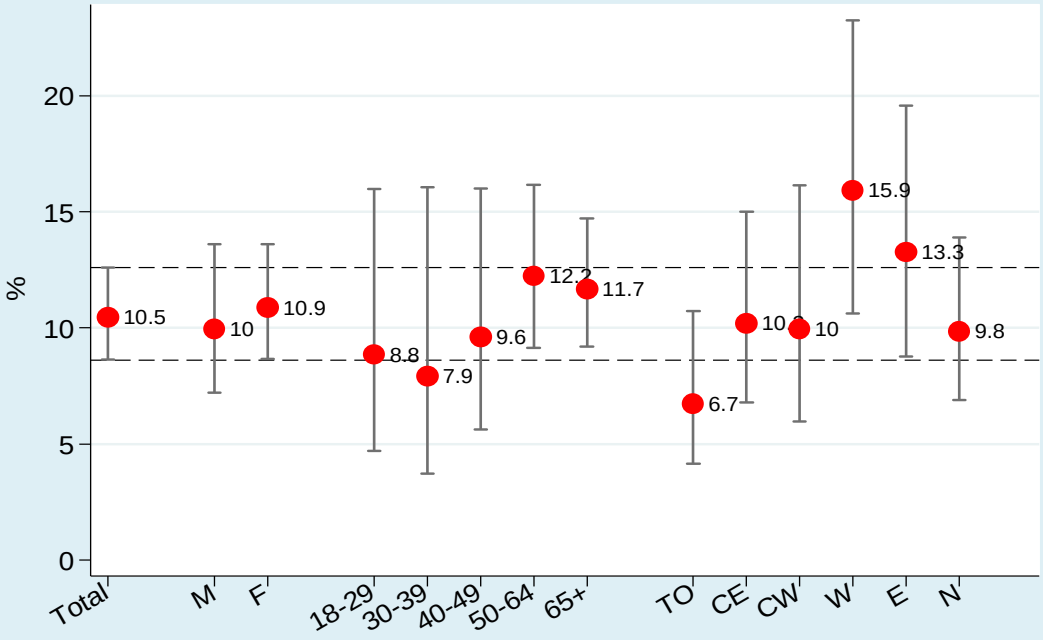
Percentage Reporting Fair or Poor Health by Sex, Age and Region, Ontarians Aged 18+, 2017 (N=2812)



Note: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal bar represents 95% confidence interval for total estimate
(3) significant difference by age (p<.05)
Source: 2017 CAMH Monitor

Figure 8.1.2

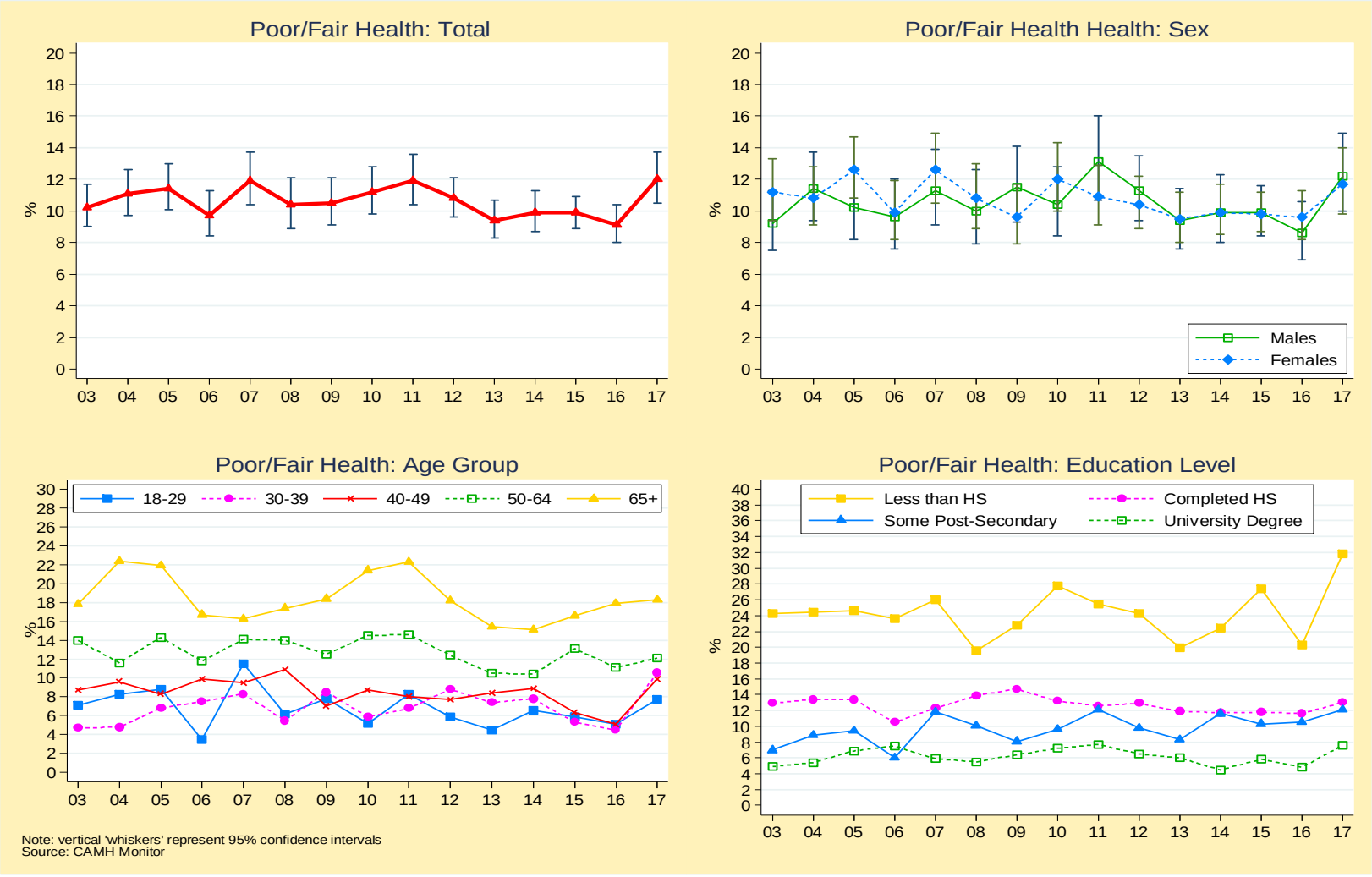
Percentage Reporting Frequent Physically Unhealthy Days (14+) in the Past 30 Days by Sex, Age and Region, Ontarians Aged 18+, 2017 (N=1813)



Note: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal bar represents 95% confidence interval for total estimate
Source: 2017 CAMH Monitor

Figure 8.1.3

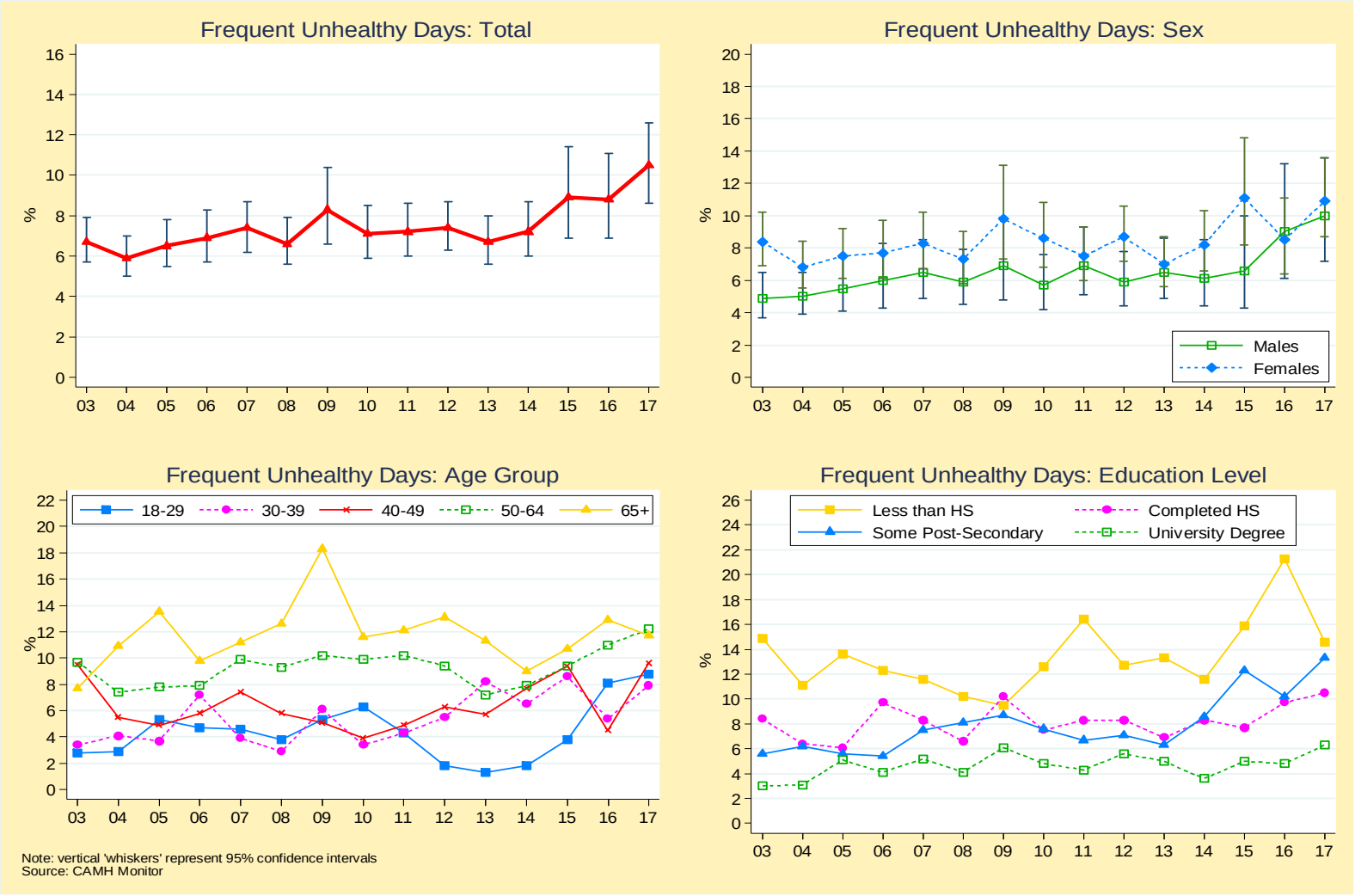
Percentage Reporting Fair or Poor Health, Ontarians Aged 18+, 2003–2017



Note: vertical 'whiskers' represent 95% confidence intervals
Source: CAMH Monitor

Figure 8.1.4

Percentage Reporting Frequent Physically Unhealthy Days (14+) in the Past 30 Days, Ontarians Aged 18+, 2003–2017



Note: vertical 'whiskers' represent 95% confidence intervals
Source: CAMH Monitor

8.2 Traumatic Brain Injury (TBI) in Lifetime

Starting in 2011, the CAMH Monitor included two items asking respondents about their history of head injuries sustained during their lifetime.

Traumatic brain injury (TBI) is defined as a change in brain function that is caused by a hit or blow to the head by an external force. Traumatic brain injuries can affect the individual's health-related quality of life (Dijkers, 2004; Ilie et al., 2015), finances, ability to work and relationships, and represent a major cause of serious long term health problems world-wide.

Traumatic brain injuries sustained in one's lifetime were assessed by a single question worded as follows: *We are interested in any head injuries 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.* Respondents were then asked: *How many times, if ever in your life, have you had this type of head injury?* Responses were recoded to create a binary lifetime TBI measure (yes=1; no=0).

2017 ……Table 8.2.1; Fig. 8.2.1

Overall, an estimated **15.1%** (95% CI: 12.8% to 17.7%) of Ontario adults reported that they had sustained a TBI in their lifetime. The corresponding population estimate is 1,582,700 adults. Only **0.7%** of Ontario adults reported that they had sustained a TBI in the past year.

- The prevalence of lifetime TBI was significantly higher among men (20.2%; OR=2.20) than among women (10.6%).

Trends

2011–2017 ……Table 8.2.2

2016–2017

The prevalence of TBI sustained in one's lifetime in 2017 (15.1%) did not change significantly from 2016 (14.2%). In addition, ratings of lifetime TBI were stable for sex and all age subgroups analysed.

2011–2017

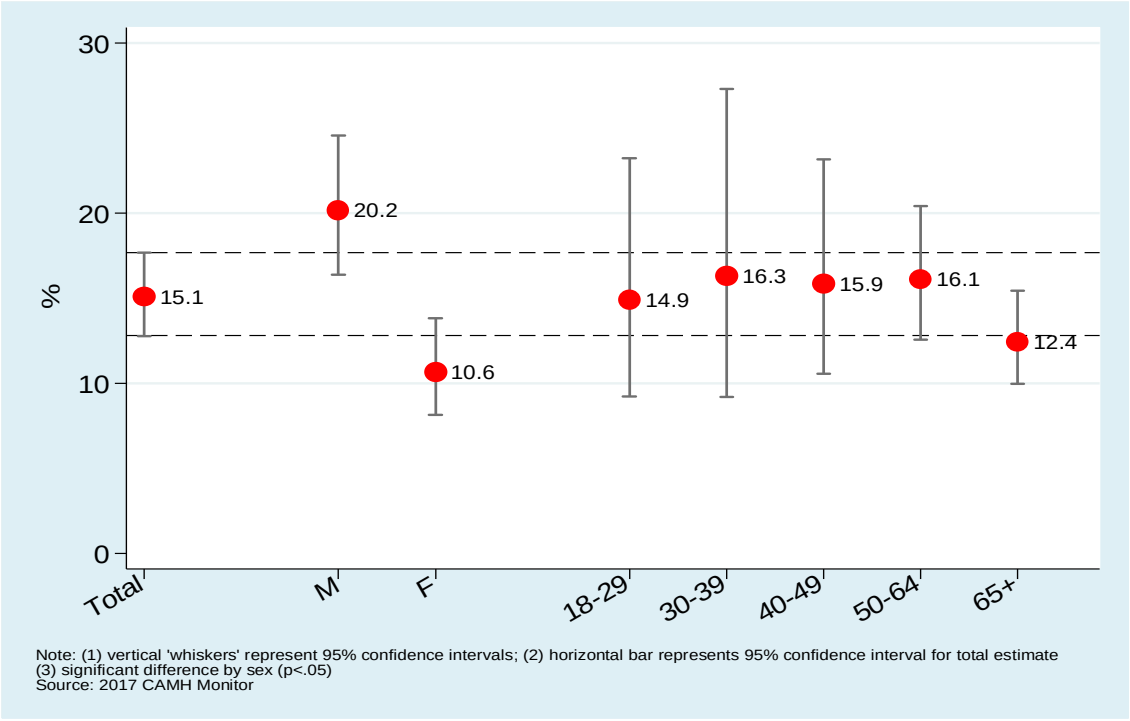
There were no significant changes in reporting lifetime TBI between 2011 and 2017.

Table 8.2.1 Percentage Reporting ***Lifetime Traumatic Brain Injury (TBI)*** and Adjusted Group Differences, Ontarians Aged 18+, 2017

	N	%	95% CI	Adjusted Odds Ratio (N=1784)
Total [1]	1813	**15.1**	(12.8, 17.7)	—
				***
Sex				
Men	718	**20.2**	(16.4, 24.6)	**2.20*** **
Women *(Comparison Group)*	1095	**10.6**	(8.1, 13.8)	—
Age				NS
18-29 (*Comparison Group)*	184	**†14.9**	(9.2, 23.3)	—
30-39	123	**†16.3**	(9.2, 27.3)	1.12
40-49	234	**†15.9**	(10.6, 23.2)	1.21
50-64	529	**16.1**	(12.6, 20.4)	1.16
65+	734	**12.4**	(9.9, 15.4)	0.86

Notes: (1) All analyses are sample design adjusted; *p<.05**;** **p<.01; ***p<.001; CI = 95% confidence interval; NS – not statistically significant; † Estimate suppressed or unstable; [1] Asked only of a random subsample.
(2) Asterisks in group row indicate a statistically significant group effect, based on Wald test.
(3) ORs greater than 1.0 indicate that the odds of reporting lifetime TBI are higher relative to the comparison group; ORs less than 1.0 indicate that the odds are lower relative to the comparison group.
(4) Adjusted odds ratio holding fixed values for sex, age, region, marital status, education and income.
Q: *How many times, if ever in your life, have you had this type of head injury?*
Source: The *CAMH Monitor*, Centre for Addiction and Mental Health.

Figure 8.2.1
Lifetime Traumatic Brain Injury (TBI) by Sex and Age, Ontarians Aged 18+, 2017 (N=1813)



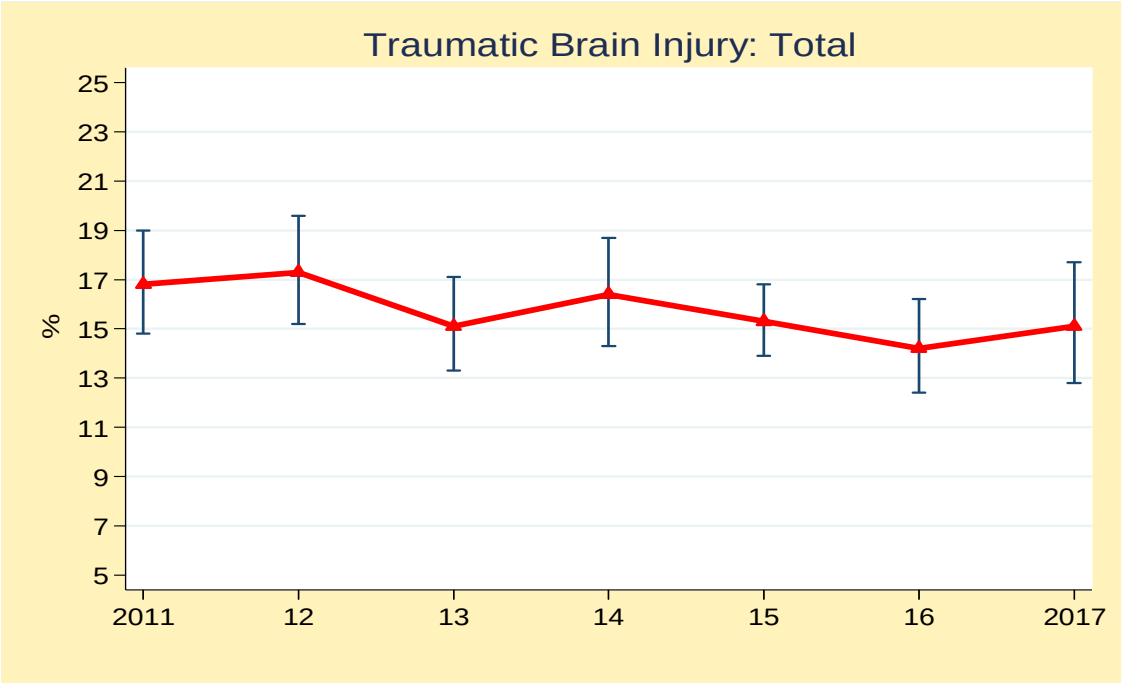
Note: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal bar represents 95% confidence interval for total estimate
(3) significant difference by sex (p<.05)
Source: 2017 CAMH Monitor

Table 8.2.2 Percentage Reporting Lifetime ***Traumatic Brain Injury***, by Demographic Characteristics, Ontarians Aged 18+, 2011–2017

	2011	2012	2013	2014	2015	2016	2017	Trend	
(N=)	(1999)	(2015)	(2060)	(2004)	(4007)	(2034)	(1813)		
Total	**16.8**	**17.3**	**15.1**	**16.4**	**15.3**	**14.2**	**15.1**	–	–
(95% CI) [a]	(14.8, 19.0)	(15.2, 19.6)	(13.3, 17.1)	(14.3, 18.7)	(13.9,16.8)	(12.4, 16.2)	(12.8,17.7)		
Sex									
Men	**22.5**	**21.8**	**20.3**	**21.7**	**19.6**	**20.1**	**20.2**	–	–
	(19.0, 26.4)	(18.5, 25.6)	(17.4, 23.7)	(18.1, 25.7)	(17.3, 22.2)	(16.8, 23.7)	(16.4, 24.6)		
Women	**11.7**	**13.1**	**10.0**	**11.4**	**11.2**	**8.9**	**10.6**	–	–
	(9.6, 14.1)	(10.6, 16.2)	(8.1, 12.2)	(9.4, 13.8)	(9.7, 13.0)	(7.2, 10.9)	(8.1, 13.8)		
Age *(Comparison Group)*									
18-29	**†20.8**	**†22.2**	**†8.7**	**†18.1**	**15.2**	**†10.1**	**†14.9**	–	–
	(14.6, 28.6)	(15.2, 31.2)	(4.8, 15.4)	(11.4, 27.6)	(11.2, 20.2)	(5.7, 17.1)	(9.2, 23.3)		
30-39	**†15.5**	**17.1**	**†12.3**	**†9.8**	**†11.9**	**†10.9**	**†16.3**	–	–
	(11.0, 21.5)	(12.6, 22.9)	(8.3, 17.7)	(6.4, 14.9)	(8.4, 16.5)	(6.9, 16.8)	(9.2, 27.3)		
40-49	**17.1**	**16.7**	**19.1**	**19.9**	**13.2**	**17.9**	**†15.9**	–	–
	(13.1, 22.0)	(12.7, 21.6)	(14.8, 24.2)	(15.2, 25.6)	(10.4, 16.7)	(13.3, 23.6)	(10.6, 23.2)		
50-64	**16.8**	**18.2**	**18.7**	**17.5**	**19.3**	**17.0**	**16.1**	–	–
	(13.6, 20.7)	(14.9, 22.0)	(15.5, 22.4)	(14.2, 21.2)	(16.9, 22.0)	(14.0, 20.5)	(12.6, 20.4)		
65+	**15.2**	**12.1**	**14.2**	**15.8**	**14.3**	**13.4**	**12.4**	–	–
	(12.0, 18.9)	(9.3, 15.6)	(11.4, 17.6)	(12.8, 19.5)	(12.3, 16.7)	(10.8, 16.6)	(9.9, 15.4)		

Notes: (1) [a] 95% confidence interval; † Estimate suppressed or unstable; all analyses are sample design adjusted.
(2) Trend Analysis: – change not statistically significant (p<.05) between 2011- 2017; the sampling design was changed in 2017 to dual-frame sampling (landline + cell-phone).
Q: *How many times, if ever in your life, have you had this type of head injury?*
Source: The *CAMH Monitor*, Centre for Addiction and Mental Health.

Figure 8.2.2
Lifetime Traumatic Brain Injury (TBI), Ontarians Aged 18+, 2011-2017



9. GAMBLING, GAMING, AND TECHNOLOGY USE

9.1 Gambling Participation

Gambling participation was introduced in the CAMH Monitor for the first time in 2000 and included in the survey until 2005. In 2015 and 2016, an updated module including gambling participation, problem gambling, and technology use was added to the survey. These items were asked of a random subsample of respondents (N=3,007 in 2015 and N=1,014 in 2016). The gambling items were not included in the 2017 cycle of the survey.

Gambling participation was measured using several gambling activity frequency items. Respondents were asked questions about their involvement in nine types of gambling activities: lottery, Sport Select or Pro-Line, horse racing, bingo, casino gambling (slot machines and/or table games), cards playing, sports pool, and internet gambling.

Each of the nine items begins with the wording: "*In the past 12 months how often did you bet or spend money....*"

- *buying lottery tickets (6-49, Super 7, instant lottery, etc.)*
- *buying Sport Select or Pro- Line tickets*
- *playing bingo*
- *on horse racing*
- *on slot machines in any type of casino*
- *on table games in any type of casino*
- *on card games*
- *in a sports pool*
- *over the internet*

Response categories ranged from (1) "*Once a day*" to (7) "*Never.*"

9.1.1 Gambling Activities

2016 ..... Fig. 9.1.1

The most common form of gambling was purchasing lottery tickets, reported by 62.5% of the sample. Buying Sport Select or Pro-Line tickets was reported by 8.7% of the sample, and 7.1% reported playing bingo in the past year. Betting on horse racing was reported by 4.3% of the sample, 21.5% reported betting on slots in casinos/racinos, and 8.7% reported betting on table games in casinos in the past year. Betting on card games was reported by 8.7% of the sample, and 10.4% reported betting in sports pools. Betting money over the internet was reported by 3.7% of the sample.

Trends

2000–2016 .....Fig 9.1.2

The past year prevalence estimates for lottery, Sport Select, bingo, horse racing, and online gambling were **significantly lower** in 2016 compared to 2003. All gambling activities show a significant downward trend between 2000 and 2016.

9.1.2 Any Gambling

2016 .....Table 9.1.1; Fig. 9.1.1; Fig 9.1.3

An estimated **69.2%** (95% CI: 65.2% to 72.8%) of Ontario adults reported participating in at least one gambling activity in the past 12 months. The corresponding population estimate is 7,249,700 Ontario adults. When participation in lotteries was excluded, the proportion participating was **33.9%** (95% CI: 30.0% to 38.0%). The corresponding population estimate is 3,560,000 Ontario adults.

Only **income** was significantly related to reporting at least one gambling activity in the past 12 months, when holding risk factors constant.

- Household income was significantly associated with reporting any gambling activity in the past 12 months. The distinguishing feature was a lower rate among those with middle incomes and a higher rate among those with the lowest and the highest incomes.

Trends

2000–2016 ……Table 9.1.4; Fig. 9.1.6

Overall, the prevalence of gambling **declined** significantly from 80.3% in 2000 to 69.2% in 2016. Significant subgroup declines were also evident for sex, age, region, marital status and education.

9.1.3 Casino Gambling

2016 ……Table 9.1.2; Fig. 9.1.4

Overall, an estimated **23.4%** (95% CI: 19.9% to 27.3%) of Ontario adults reported betting on slots or on table games in a casino in the past 12 months. The corresponding population estimate is 2,460,000 Ontario adults.

Only **age** was significantly related to gambling in a casino, after adjusting for our set of risk factors.

- Casino gambling was higher among those aged 18 to 29 and those aged 30 to 39.

There were no other significant differences, when adjusting for other factors.

Trends

2000–2016……Table 9.1.5; Fig. 9.1.2

Overall, the prevalence of casino gambling **declined** significantly from 33.7% in 2000 to 23.4% in 2016.

Significant subgroup declines were also evident for most subgroups analysed.

9.1.4 Online Gambling

2016 ……Table 9.1.3; Fig. 9.1.5

Overall, an estimated **3.7%** (95% CI: 2.2% to 6.0%) of Ontario adults reported betting money over the internet (online) in the past 12 months. The corresponding population estimate is 386,300 Ontario adults. There were no significant subgroup differences.

Trends

2000–2016…… Table 9.1.6; Fig. 9.1.2

There was a significant **decline** in online gambling, from 6.6% in 2003 to 3.7% in 2016.

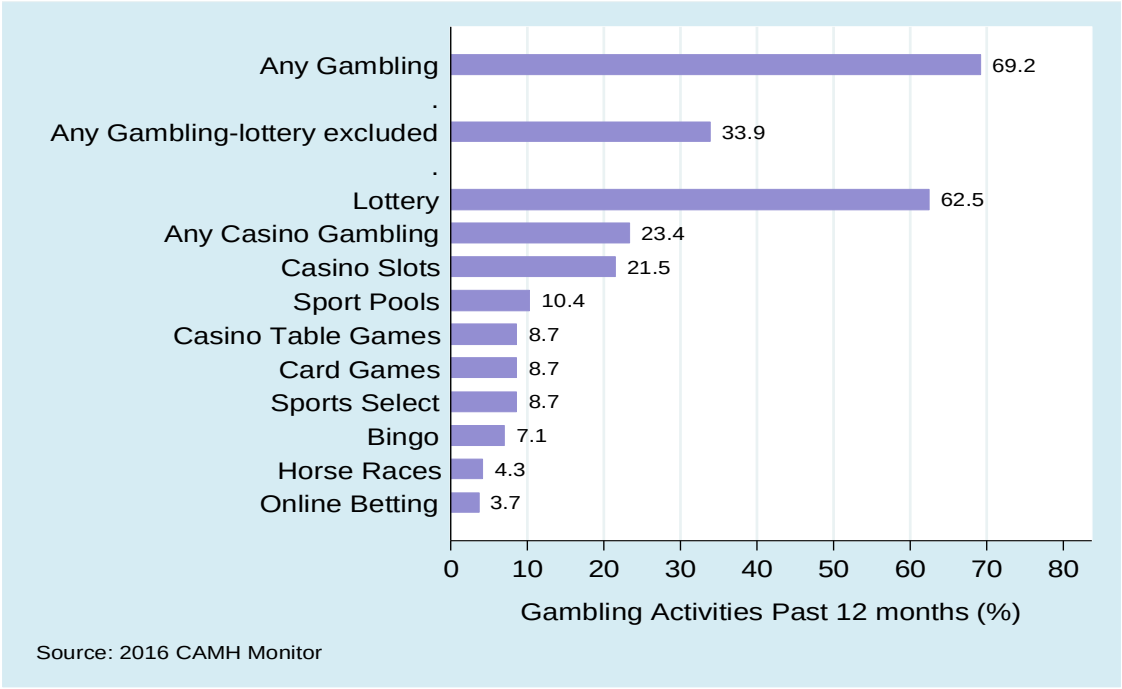
Among **men**, rates of online gambling increased significantly from 4.3% to 8.9% between 2000 and 2003. Rates had declined to 5.1% by 2016.

Among **women**, rates of online gambling showed a significant linear decline from 6.3% in 2000 to 2.4% in 2016.

Rates of online gambling increased significantly among **18 to 29** year olds from 4.4% in 2000 to 13.8% in 2003 and **declined** to 6.7% in 2016. Among respondents aged **65 and older**, rates **declined** from 8.1% in 2000 to less than 1% in 2016.

Figure 9.1.1

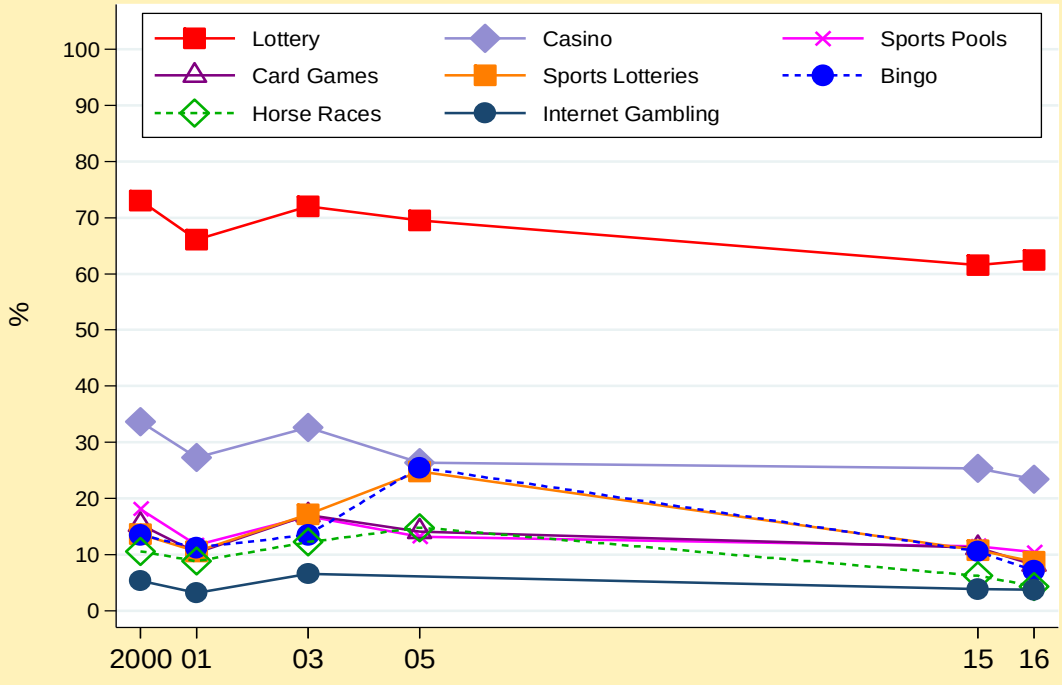
Percentage Reporting Gambling Participation and Gambling Activities in the Past Year, Ontarians Aged 18+, 2016 (N=1014)



Source: 2016 CAMH Monitor

Figure 9.1.2

Percentage Reporting Gambling Activities in the Past Year, Ontarians Aged 18+, 2000-2016



Source: CAMH Monitor

Table 9.1.1: Percentage Reporting ***Any Gambling Participation*** in the Past 12 Months, and Adjusted Group Differences, Ontarians Aged 18+, 2016

	N	%	95% CI	Adjusted Odds Ratio (N=986)
Total [1]	1014	**69.2**	(65.2, 72.8)	—
Sex				NS
Men	396	**69.7**	(63.2, 75.4)	0.97
Women *(Comparison Group)*	618	**68.7**	(63.9, 73.2)	—
Age				NS
18-29 *(Comparison Group)*	72	**66.6**	(53.7, 77.5)	—
30-39	91	**76.5**	(65.9, 84.6)	1.59
40-49	160	**67.9**	(58.4, 76.0)	0.98
50-64	339	**71.0**	(64.8, 76.5)	1.28
65+	347	**63.6**	(57.2, 69.6)	1.12
Region				NS
Toronto *(vs. Provincial Average)*	184	**64.2**	(55.0, 72.5)	0.78
Central East	169	**74.9**	(65.5, 82.5)	1.34
Central West	169	**70.0**	(60.7, 78.0)	1.02
West	174	**68.0**	(59.2, 75.7)	0.92
East	173	**62.5**	(52.9, 71.2)	0.76
North	145	**80.2**	(72.2, 86.4)	**1.71***
Marital Status				NS
Married/Partner *(Comparison Group)*	642	**71.3**	(67.0, 75.3)	—
Previously Married	249	**64.6**	(56.3, 72.0)	0.91
Never Married	118	**65.5**	(54.1, 75.4)	0.95
Education				NS
High school not completed *(Comp. Group)*	88	**60.7**	(44.9, 74.5)	—
Completed high school	199	**65.8**	(56.3, 74.1)	1.13
Some college or university	314	**74.7**	(67.8, 80.5)	1.47
University degree	404	**68.3**	(62.1, 73.8)	0.98
Household Income				**
< $30,000 *(Comparison Group)*	104	**72.3**	(60.7, 81.6)	—
$30,000-$49,999	124	**57.2**	(44.3, 69.2)	**0.47***
$50,000-$79,999	167	**69.8**	(59.6, 78.4)	0.72
$80,000+	400	**75.9**	(70.3, 80.8)	1.14
Not stated	219	**56.9**	(47.8, 65.5)	**0.47***

Notes: (1) All analyses are sample design adjusted; *p<.05**;** **p<.01; ***p<.001; CI = 95% confidence interval; NS – not statistically significant; † Estimate unstable or supressed; [1] Asked only of a random subsample.
(2) Asterisks in group row indicate a statistically significant group effect, based on Wald test.
(3) ORs greater than 1.0 indicate that the odds of gambling are higher relative to the comparison group; ORs less than 1.0 indicate that the odds are lower relative to the comparison group.
(4) Adjusted odds ratio holding fixed values for sex, age, region, marital status, education and income.

Def'n: *Any Gambling is defined as having participated in at least one gambling activity in the past 12 months (lotteries included).*

Source: The *CAMH Monitor*, Centre for Addiction and Mental Health

Table 9.1.2: Percentage Reporting ***Casino Gambling*** in the Past 12 Months, and Adjusted Group Differences, Ontarians Aged 18+, 2016

	N	%	95% CI	Adjusted Odds Ratio (N=992)
Total [1]	1014	**23.4**	(19.9, 27.3)	—
Sex				NS
Men	396	**22.7**	(17.5, 28.7)	0.92
Women *(Comparison Group)*	618	**24.0**	(19.5, 29.3)	—
Age				*
18-29 *(Comparison Group)*	72	**31.2**	(20.1, 45.0)	—
30-39	91	**34.3**	(24.1, 46.1)	1.38
40-49	160	**14.1**	(9.1, 21.3)	0.44
50-64	339	**20.4**	(16.1, 25.5)	0.72
65+	347	**20.0**	(15.6, 25.3)	0.78
Region				NS
Toronto *(vs. Provincial Average)*	184	**25.0**	(17.8, 34.1)	1.06
Central East	169	**25.1**	(17.6, 34.6)	1.17
Central West	169	**27.8**	(19.1, 38.7)	1.28
West	174	**21.8**	(15.2, 30.3)	0.92
East	173	**13.3**	(8.5, 20.3)	0.54
North	145	**22.3**	(14.0, 33.7)	0.97
Marital Status				NS
Married/Partner *(Comparison Group)*	642	**21.5**	(17.7, 25.8)	—
Previously Married	249	**22.2**	(16.6, 29.0)	1.32
Never Married	118	**29.8**	(20.3, 41.6)	1.30
Education				NS
High school not completed *(Comp. Group)*	88	**16.0**	(9.2, 26.3)	—
Completed high school	199	**21.0**	(14.5, 29.6)	1.04
Some college or university	314	**26.3**	(20.2, 33.4)	1.41
University degree	404	**23.6**	(18.1, 30.3)	1.29
Household Income				NS
< $30,000 *(Comparison Group)*	104	**24.0**	(14.8, 36.6)	—
$30,000-$49,999	124	**20.8**	(13.1, 31.4)	0.89
$50,000-$79,999	167	**23.7**	(16.8, 32.4)	1.06
$80,000+	400	**26.7**	(21.3, 33.0)	1.20
Not stated	219	**16.3**	(10.1, 25.1)	0.64

Notes: (1) All analyses are sample design adjusted; *p<.05**;** **p<.01; ***p<.001; CI = 95% confidence interval; NS – not statistically significant; † Estimate unstable or supressed; [1] Asked only of a random subsample.
(2) Asterisks in group row indicate a statistically significant group effect, based on Wald test.
(3) ORs greater than 1.0 indicate that the odds of gambling are higher relative to the comparison group; ORs less than 1.0 indicate that the odds are lower relative to the comparison group.
(4) Adjusted odds ratio holding fixed values for sex, age, region, marital status, education and income (complete case sample N=992).

Def'n: *Casino Gambling is defined as having participated in at least one gambling activity in a casino in the past 12 months.*

Source: The *CAMH Monitor*, Centre for Addiction and Mental Health

Table 9.1.3: Percentage Reporting ***Online Gambling*** in the Past 12 Months, and Adjusted Group Differences, Ontarians Aged 18+, 2016

	N	%	95% CI	Adjusted Odds Ratio (N=1009)
Total [1]	1014	**†3.7**	(2.2, 6.0)	—
Sex				NS
Men	396	**†5.1**	(3.0, 8.6)	2.05
Women *(Comparison Group)*	618	**†2.4**	(1.0, 6.6)	—
Age				NS
18-29 *(Comparison Group)*	72	**†6.7**	(2.2, 18.6)	—
30-39	91	**†5.4**	(2.0, 14.0)	1.01
40-49	160	**†2.5**	(1.0, 6.0)	0.44
50+	686	**†2.3**	(1.3, 4.1)	0.39
Region				NS
Toronto *(vs. Provincial Average)*	184	**†7.2**	(3.5, 14.4)	2.06
Rest of Ontario	830	**†2.6**	(1.3, 5.0)	0.80

Notes: (1) All analyses are sample design adjusted; *p<.05**;** **p<.01; ***p<.001; CI = 95% confidence interval; NS – not statistically significant; † Estimate unstable or supressed; [1] Asked only of a random subsample.
(2) Asterisks in group row indicate a statistically significant group effect, based on Wald test.
(3) ORs greater than 1.0 indicate that the odds of gambling are higher relative to the comparison group; ORs less than 1.0 indicate that the odds of gambling are lower relative to the comparison group.
(4) Adjusted odds ratio holding fixed values for sex, age, and region (complete sample N=1009).
Def'n: *Online Gambling is defined as betting money on at least one gambling activity over the internet in the past 12 months.*
Source: The *CAMH Monitor*, Centre for Addiction and Mental Health

Table 9.1.4: Percentage Reporting ***Any Gambling Participation*** in the Past 12 Months by Demographic Characteristics, Ontarians Aged 18+, 2000–2016

(N=)	2000 (1294)	2001 (1395)	2003 (1446)	2005 (1227)	2015 (3002)	2016 (1014)	Trend	
Total Sample[1]	**80.3**	**75.1**	**78.4**	**78.2**	**68.1**	**69.2**	**T**	**–**
(95% CI)[a]	(77.6, 82.7)	(72.3, 77.7)	(75.8, 80.8)	(75.3, 80.2)	(65.8, 70.2)	(65.2, 72.8)		
Sex								
Men	**82.0**	**80.4**	**78.9**	**80.7**	**72.1**	**69.7**	**T**	**–**
	(78.1, 85.4)	(76.3, 83.9)	(74.5, 81.1)	(76.4, 84.4)	(68.6, 75.3)	(63.2, 75.4)		
Women	**78.7**	**70.5**	**77.9**	**76.0**	**64.4**	**68.7**	**T**	**–**
	(74.9, 82.1)	(66.5, 74.2)	(74.9, 82.3)	(72.0, 79.5)	(61.4, 67.2)	(63.9, 73.2)		
Age								
18-29	**79.2**	**79.5**	**78.2**	**75.2**	**63.2**	**66.6**	**T**	**–**
	(72.7, 84.6)	(72.6, 84.9)	(72.1, 83.3)	(66.7, 82.2)	(55.9, 69.9)	(53.7, 77.5)		
30-39	**81.6**	**78.8**	**79.8**	**80.6**	**66.6**	**76.5**	**T**	**–**
	(75.5, 86.4)	(72.4, 84.0)	(73.1, 85.2)	(74.0, 85.8)	(60.0, 72.7)	(65.9,84.6)		
40-49	**82.7**	**75.9**	**80.0**	**83.7**	**69.4**	**67.9**	**T**	**–**
	(76.7, 87.3)	(70.0, 80.9)	(74.7, 84.4)	(78.7, 87.7)	(64.1, 74.3)	(58.4, 76.0)		
50-64	**79.1**	**76.7**	**78.1**	**81.1**	**74.3**	**71.0**	**–**	**–**
	(72.8, 84.3)	(70,2, 82.1)	(72.3, 82.9)	(75.2, 85.9)	(71.0, 77.4)	(64.8, 76.5)		
65+	**79.2**	**69.5**	**74.8**	**71.1**	**63.0**	**63.6**	**T**	**–**
	(72.1, 84.9)	(62.1, 76.0)	(67.9, 80.6)	(63.8, 77.4)	(59.4, 66.5)	(57.2, 69.6)		
Region								
Toronto	**81.4**	**72.5**	**76.0**	**76.8**	**62.2**	**64.2**	**T**	**–**
	(74.2, 86.4)	(64.9, 78.9)	(70.0, 81.1)	(69.7, 82.7)	(56.7, 67.3)	(55.0,72.5)		
Central East	**77.1**	**75.3**	**77.6**	**83.3**	**71.7**	**74.9**	**T**	**–**
	(70.5, 82.6)	(68.5, 81.0)	(71.2, 82.9)	(76.9, 88.2)	(66.7, 76.3)	(65.5, 82.5)		
Central West	**82.0**	**80.8**	**80.0**	**77.0**	**67.5**	**70.0**	**T**	**–**
	(75.4, 87.1)	(74.2, 86.0)	(73.5, 85.2)	(69.5, 83.2)	(62.1, 72.4)	(60.7, 78.0)		
West	**78.6**	**70.7**	**76.3**	**80.4**	**68.8**	**68.0**	**T**	**–**
	(72.1, 84.0)	(63.8, 77.3)	(69.7, 81.9)	(74.2, 85.4)	(63.7, 73.5)	(59.2, 75.7)		
East	**79.3**	**70.6**	**79.9**	**68.0**	**66.2**	**62.5**	**T**	**–**
	(72.8, 84.7)	(63.3, 77.0)	(73.7, 85.0)	(60.3, 74.9)	(60.9, 71.2)	(52.9, 71.2)		
North	**84.8**	**80.8**	**83.7**	**83.8**	**76.1**	**80.2**	**T**	**–**
	(78.8, 89.4)	(76.3, 84.7)	(78.0, 88.1)	(77.7, 88.5)	(71.3, 80.3)	(72.2, 86.4)		
Marital Status								
Married/Partner	**78.9**	**72.9**	**78.7**	**78.7**	**68.0**	**71.3**	**T**	**–**
Previously Married	**87.1**	**74.9**	**78.3**	**81.2**	**73.9**	**64.6**	**T**	**–**
Never Married	**81.5**	**81.9**	**77.6**	**75.6**	**65.2**	**65.5**	**T**	**–**
Education								
Less Than High School	**81.4**	**75.2**	**77.3**	**80.3**	**66.5**	**60.7**	**T**	**–**
Completed High School	**82.0**	**80.1**	**83.7**	**79.4**	**72.3**	**65.8**	**T**	**–**
Some College or University	**84.9**	**75.2**	**82.2**	**77.6**	**69.2**	**74.7**	**T**	**–**
University Degree	**72.3**	**70.7**	**69.8**	**78.2**	**64.9**	**68.3**	**–**	**–**

Notes: [1]Estimates based on random subsamples (2000 to 2016); † Estimate suppressed or unstable;
(1) [a] 95% confidence interval; all analyses are sample design adjusted; *p<.05**;** **p<.01; ***p<.001;
(2) Trend Analysis: **–** change not statistically significant at p<.05; **T** significant change (p<.05) between 2000-2016;
Def'n: *Any Gambling is defined as having participated in at least one gambling activity in the past 12 months.*
Source: The *CAMH Monitor*, Centre for Addiction and Mental Health

Table 9.1.5: Percentage Reporting ***Casino Gambling*** in the Past 12 Months by Demographic Characteristics, Ontarians Aged 18+, 2000–2016

(N=)	2000 (1294)	2001 (1395)	2003 (1446)	2005 (1227)	2015 (3002)	2016 (1014)	Trend	
Total Sample[1]	**33.7**	**27.3**	**32.6**	**26.4**	**25.4**	**23.4**	**T**	**–**
(95% CI)[a]	(30.8, 36.7)	(24.6, 30.2)	(29.9, 35.4)	(23.6, 29.5)	(23.4, 27.5)	(19.9,27.3)		
Sex								
Men	**35.0**	**28.5**	**31.6**	**26.0**	**28.1**	**22.7**	**T**	**–**
	(31.7, 39.6)	(22.9, 30.1)	(27.7, 35.8)	(21.8, 30.7)	(24.9, 31.6)	(17.5, 28.7)		
Women	**32.5**	**26.3**	**33.6**	**26.8**	**22.9**	**24.1**	**T**	**–**
	(30.8, 36.7)	(24.4, 32.9)	(29.9, 37.4)	(23.1, 30.8)	(20.6, 25.4)	(19.5,29.3)		
Age								
18-29	**35.7**	**36.4**	**41.3**	**32.4**	**28.3**	**31.2**	**T**	**–**
	(29.2, 42.7)	(29.4, 44.1)	(34.8, 48.1)	(25.2, 40.5)	(22.3, 35.3)	(20.1,45.0)		
30-39	**35.4**	**28.8**	**33.8**	**22.6**	**28.7**	**34.3**	**–**	**–**
	(29.5, 41.8)	(22.8, 35.7)	(27.5, 40.7)	(16.7, 29.7)	(23.1, 35.0)	(24.1,46.1)		
40-49	**29.7**	**23.8**	**32.1**	**25.5**	**25.2**	**14.1**	**–**	**–**
	(24.0, 36.1)	(19.0, 29.3)	(26.9, 37.7)	(20.1, 31.8)	(20.8, 30.2)	(9.1,21.3)		
50-64	**32.4**	**27.2**	**27.2**	**26.8**	**24.3**	**20.4**	**T**	**–**
	(26.1, 39.5)	(21.6, 33.6)	(22.1, 32.9)	(21.5, 32.9)	(21.4, 27.6)	(16.1,25.5)		
65+	**34.4**	**22.4**	**27.5**	**26.1**	**22.2**	**20.0**	**T**	**–**
	(27.1, 42.4)	(16.9, 29.2)	(21.4, 34.4)	(19.5, 34.1)	(19.4, 25.4)	(15.6,25.3)		
Region								
Toronto	**29.4**	**27.6**	**25.5**	**25.9**	**19.5**	**25.0**	**–**	**–**
	(22.7, 37.0)	(21.2, 35.1)	(20.1, 31.7)	(19.6, 33.3)	(15.3, 24.5)	(17.8,34.1)		
Central East	**30.0**	**27.8**	**32.7**	**25.8**	**25.4**	**25.1**	**–**	**–**
	(23.7, 37.0)	(21.8, 34.8)	(26.5, 39.6)	(19.8, 32.9)	(21.1, 30.2)	(17.6,34.6)		
Central West	**34.7**	**27.4**	**36.5**	**29.6**	**25.8**	**27.8**	**T**	**–**
	(28.2, 41.87)	(21.3, 34.5)	(30.1, 43.5)	(23.0, 37.2)	(21.6, 30.6)	(19.1,38.7)		
West	**42.0**	**28.5**	**34.0**	**27.7**	**32.9**	**21.8**	**T**	**–**
	(35.1, 49.2)	(22.4, 35.6)	(27.7, 40.9)	(21.6, 34.7)	(28.0, 38.1)	(15.2,30.3)		
East	**32.1**	**21.3**	**36.0**	**26.1**	**25.7**	**13.3**	**T**	**–**
	(25.7, 39.4)	(16.1, 27.6)	(29.6, 42.9)	(20.0, 33.3)	(21.0, 31.2)	(8.5,20.3)		
North	**40.5**	**32.0**	**38.2**	**18.8**	**28.6**	**22.3**	**T**	**–**
	(33.6, 47.8)	(26.2, 36.5)	(32.0, 44.8)	(13.6, 25.3)	(23.8, 33.9)	(14.0,33.7)		
Marital Status								
Married/Partner	**31.2**	**26.6**	**29.9**	**27.5**	**24.6**	**21.5**	**T**	**–**
Previously Married	**38.0**	**21.7**	**33.9**	**20.2**	**26.7**	**22.2**	**T**	**–**
Never Married	**38.1**	**32.9**	**39.8**	**27.4**	**27.0**	**29.8**	**T**	**–**
Education								
Less Than High School	**31.4**	**19.7**	**32.2**	**32.5**	**28.2**	**16.0**	**–**	**–**
Completed High School	**34.6**	**32.5**	**41.0**	**26.6**	**27.4**	**21.0**	**T**	**–**
Some College or University	**40.2**	**27.4**	**32.2**	**27.8**	**26.1**	**26.3**	**T**	**–**
University Degree	**26.5**	**27.0**	**26.9**	**23.0**	**23.5**	**23.6**	**–**	**–**

Notes: [1]Estimates based on random subsamples (2000 to 2016); † Estimate suppressed or unstable;
(1) [a] 95% confidence interval; all analyses are sample design adjusted; *p<.05**;** **p<.01; ***p<.001;
(2) Trend Analysis: **–** change not statistically significant at p<.05; **T** significant change (p<.05) between 2000-2016;
Def'n: *Casino Gambling is defined as having participated in at least one gambling activity in a casino in the past 12 months.*
Source: The *CAMH Monitor*, Centre for Addiction and Mental Health

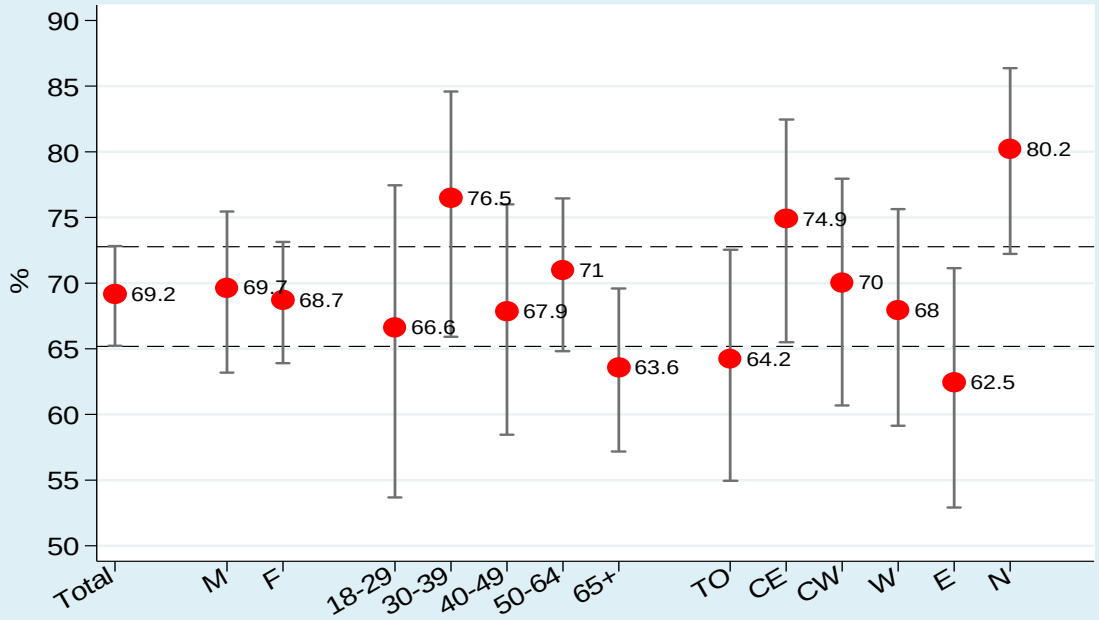
Table 9.1.6: Percentage Reporting ***Online Gambling*** in the Past 12 Months by Demographic Characteristics, Ontarians Aged 18+, 2000–2016

(N=)	2000 (1294)	2001 (1395)	2003 (1446)	2015 (3002)	2016 (1014)	Trend
Total Sample[1]	**5.3**	**3.2**	**6.6**	**3.8**	**3.7**	**T –**
(95% CI)[a]	(4.1, 6.1)	(2.3, 4.5)	(5.2, 8.3)	(2.9, 4.9)	(2.2, 6.0)	
Sex						
Men	**4.3**	**4.7**	**8.9**	**†5.4**	**†5.1**	**T –**
	(2.7, 6.8)	(3.1, 7.0)	(6.5, 12.1)	(3.8, 7.5)	(3.0, 8.6)	
Women	**6.3**	**2.0**	**4.4**	**†2.8**	**†2.4**	**T –**
	(4.5, 8.6)	(1.1, 3.5)	(3.1, 6.1)	(1.5, 3.6)	(1.0, 6.6)	
Age						
18-29	**4.4**	**6.9**	**13.8**	**†5.7**	**†6.7**	**T –**
	(2.4, 8.0)	(3.8, 12.1)	(9.6, 19.5)	(3.2, 9.9)	(2.2, 18.6)	
30-39	**6.9**	**3.1**	**9.5**	**†9.1**	**†5.4**	**– –**
	(4.3, 10.9)	(1.6, 6.0)	(4.2, 12.2)	(5.7, 14.3)	(2.0, 14.0)	
40-49	**5.6**	**2.5**	**6.3**	**†3.6**	**†2.5**	**– –**
	(3.2, 9.6)	(1.2, 5.1)	(4.0, 9.6)	(2.0, 6.1)	(1.0, 6.0)	
50-64	**1.5**	**2.7**	**3.0**	**†1.4**	**†3.0**	**– –**
	(0.5, 4.2)	(1.3, 5.7)	(1.6, 5.3)	(0.8, 2.5)	(1.6, 5.7)	
65+	**8.1**	**1.2**	**3.8**	**†1.1**	**†**	**T –**
	(4.4, 14.5)	(0.5, 3.7)	(1.7, 8.0)	(0.5, 2.4)	–	
Region						
Toronto	**7.7**	**2.5**	**7.1**	**†5.4**	**†7.2**	**– –**
	(4.4, 13.3)	(1.1, 5.6)	(4.2, 11.8)	(2.7, 8.5)	(3.5, 14.4)	
Central East	**3.9**	**2.3**	**5.7**	**†4.6**	**†2.5**	**– –**
	(2.0, 7.5)	(0.8, 6.2)	(3.1, 10.1)	(2.7, 7.8)	(1.1, 5.7)	
Central West	**3.5**	**4.1**	**6.5**	**†3.1**	**†**	**– –**
	(1.6, 7.4)	(1.8, 8.8)	(3.8, 11.1)	(1.6, 5.9)	–	
West	**5.2**	**3.9**	**5.9**	**†3.1**	**†**	**– –**
	(2.9, 8.9)	(1.8, 8.3)	(3.4, 10.1)	(1.5, 6.3)	–	
East	**7.1**	**3.9**	**6.5**	**†4.8**	**†**	**– –**
	(4.3, 11.6)	(1.9, 7.9)	(3.6, 11.4)	(2.7, 8.6)	–	
North	**4.3**	**3.3**	**8.3**	**†2.5**	**†**	**T –**
	(2.1, 8.6)	(1.8, 6.0)	(15.3, 12.7)	(1.2, 5.2)	–	
Marital Status						
Married/Partner	**4.9**	**2.6**	**5.3**	**†3.2**	**†2.2**	**T –**
Previously Married	**10.9**	**1.6**	**3.3**	**†1.7**	**†2.9**	**T –**
Never Married	**3.5**	**6.2**	**12.2**	**†6.4**	**†8.3**	**T –**
Education						
Less Than High School	**6.8**	**2.2**	**9.2**	**†**	**†**	**T –**
Completed High School	**6.0**	**3.6**	**6.7**	**†5.0**	**†4.3**	**– –**
Some College or University	**5.4**	**2.9**	**5.2**	**†3.7**	**†3.0**	**– –**
University Degree	**3.6**	**3.9**	**7.1**	**†3.6**	**†4.4**	**– –**

Notes: [1]Estimates based on random subsamples (2000 to 2016); † Estimate suppressed or unstable;
(1) [a] 95% confidence interval; all analyses are sample design adjusted; *p<.05**;** **p<.01; ***p<.001;
(2) Trend Analysis: **–** change not statistically significant at p<.05; **T** significant change (p<.05) between 2000-2016;
Def'n: Online Gambling is defined as betting money on at least one gambling activity over the internet in the past 12 months.
Source: The *CAMH Monitor*, Centre for Addiction and Mental Health

Figure 9.1.3

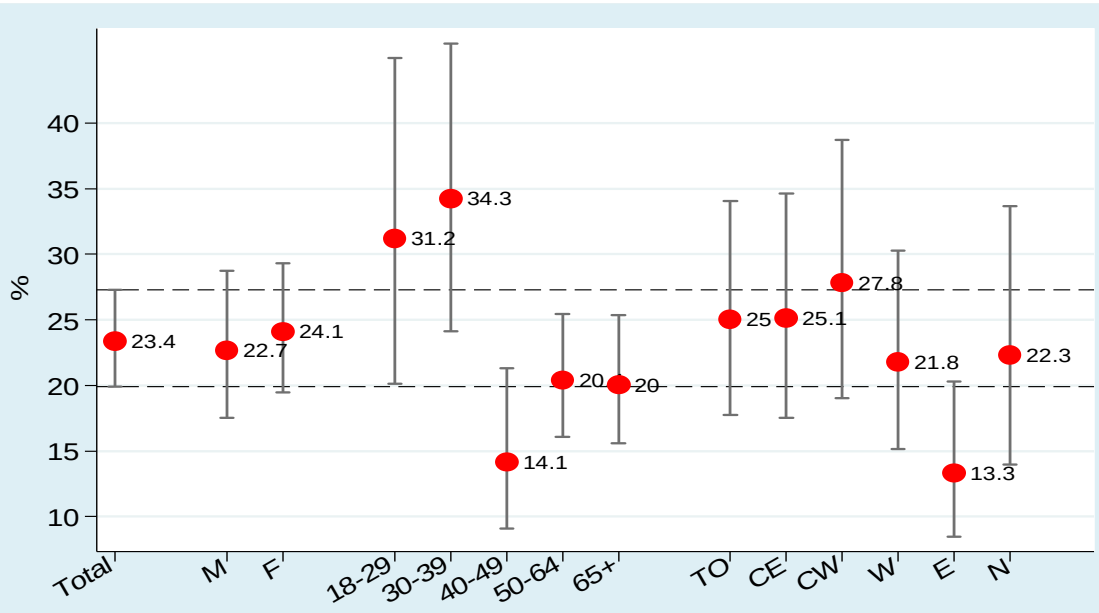
Percentage Reporting Any Gambling Participation in the Past Year, by Sex, Age and Region, Ontarians Aged 18+, 2016 (N=1014)



Note: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal bar represents 95% confidence interval for total estimate
Source: 2016 CAMH Monitor

Figure 9.1.4

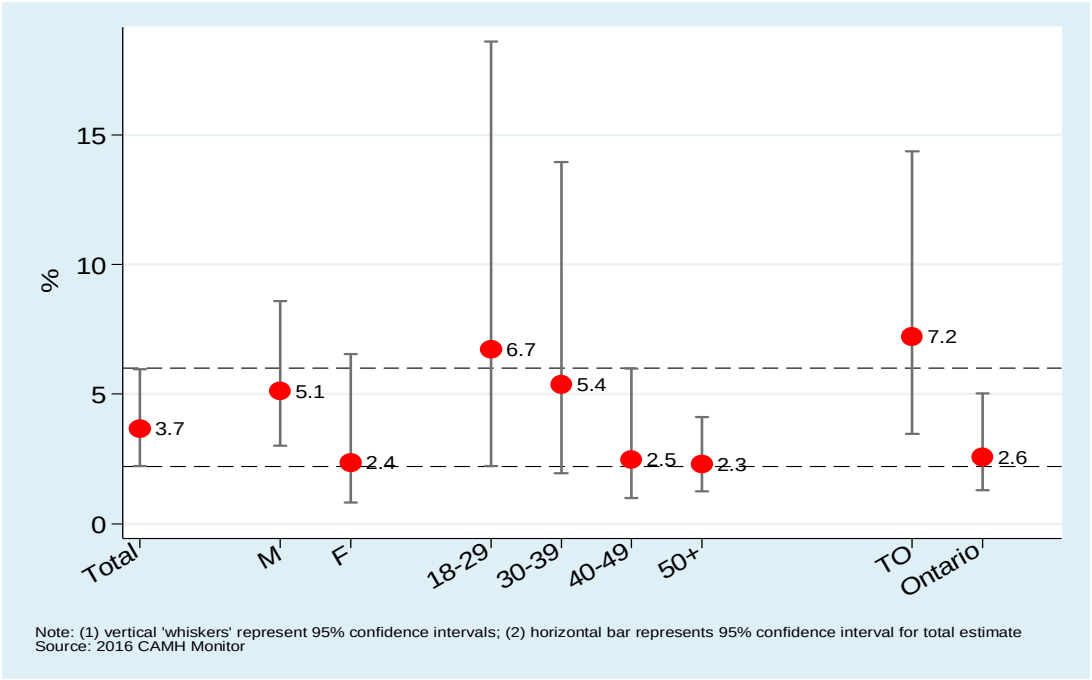
Percentage Reporting Any Casino Gambling in the Past Year, by Sex, Age and Region, Ontarians Aged 18+, 2016 (N=1014)



Note: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal bar represents 95% confidence interval for total estimate
(3) significant difference by age (p<.05)
Source: 2016 CAMH Monitor

Figure 9.1.5

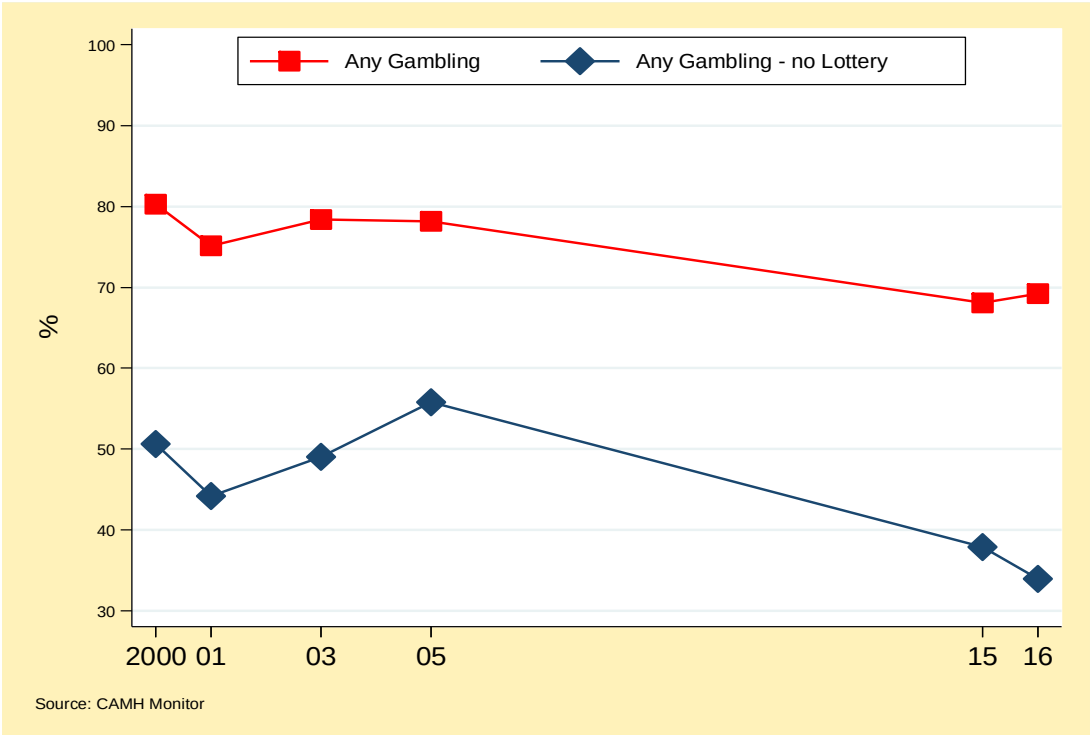
Percentage Reporting Any Online Gambling in the Past Year, by Sex, Age and Region, Ontarians Aged 18+, 2016 (N=1014)



Note: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal bar represents 95% confidence interval for total estimate
Source: 2016 CAMH Monitor

Figure 9.1.6

Percentage Reporting Any Gambling in the Past Year, Ontarians Aged 18+, 2000-2016



Source: CAMH Monitor

9.2 Problem Gambling

To assess gambling problems, we used the 9-item *Problem Gambling Severity Index* (PGSI), a validated measure of problem gambling that is part of the *Canadian Problem Gambling Index* (Ferris & Wynne, 2001; Wiebe et al., 2001). Although the PGSI does not provide a clinical diagnosis of a psychiatric disorder, it does provide an indication of an individual's risk of future problems. The PGSI items were asked in the survey in 2005, 2015, and 2016.

The following nine questions were asked, each question referring to the past 12 months:

- *…how often have you bet more than you could really afford to lose?*
- *… how often have you needed to gamble with larger amounts of money to get the same feeling of excitement?*
- *… when you gambled, how often did you go back another day to try to win back the money you lost?*
- *… how often have you borrowed money or sold anything to get money to gamble?*
- *… how often have you felt that you might have a problem with gambling?*
- *… how often has gambling caused you any health problems, including stress or anxiety?*
- *… how often have people criticized your betting or told you that you had a gambling problem, regardless of whether or not you thought it was true?*
- *… how often has your gambling caused any financial problems for you or your household?*
- *… how often have you felt guilty about the way you gamble or what happens when you gamble?*

Response options for the first seven items ranged from (1) *Never* to (4) *Almost always*, and were rescaled ranging from 0 to 3. A summated score ranging from 0 to 27 was computed for the total sample of respondents who answered all nine items. Four risk categories (of developing a gambling problem) were derived from this summated score: (1) No Risk (score =0), (2) Low Risk (score=1-2), (3) Moderate Risk (score =3-7), and (4) High Risk (scores of 8 or higher).

For the purpose of our analyses, the Moderate Risk and High Risk categories have been combined into the "Problem Gambling" category (score = 3 or higher).

9.2.1 Problem Gambling Symptoms

2016 ..... Table 9.2.1

The most common symptoms experienced by respondents at least *sometimes* during the past 12 months were: feeling guilty about the way they gambled (2.8%), followed by went back another day to win back money (2.2%) and needed to gamble with larger amounts of money (1.4%). The least reported symptoms were borrowed money to gamble and gambling caused financial problems (less than 1%).

9.2.2 Gambling Problems (Moderate/High Risk)

2016 ..... Table 9.2.1, 9.2.2

An estimated **1.2%** (95% CI: 0.7% to 2.1%) of Ontario adults met the criteria for moderate to high risk of gambling problems in the past 12 months. The corresponding population estimate is 122,000 Ontario adults.

Only **age** was significantly related to gambling problems.

- The adjusted odds of problem gambling were higher among those aged 55 and older when compared to those aged 18 to 29 (OR=3.15). While it is concerning that problem gambling rates are significantly higher among older respondents, the restricted sample suggests that this observation should be treated with caution.

Trends

2005-2016..... Table 9.2.1

The overall prevalence of problem gambling in 2016 (1.2%) was not significantly different from 2015 (1.7%) or 2005 (1.9%).

Table 9.2.1. Percentage Reporting ***Problem Gambling Symptoms (PGSI)*** in the Past 12 Months, Ontarians Aged 18+, 2005, 2015-2016

PGSI Item[1]	**2005 (N=1,227)**	**2015 (N=3,002)**	**2016 (N=1014)**
1. Bet more than could really afford to lose	**†2.0**	**†1.1**	**†0.7**
	(1.2, 3.1)	(0.8, 1.7)	(0.3, 1.5)
2. Needed to gamble with larger amounts of money to get the same feeling of excitement	**†1.2**	**†1.3**	**†1.4**
	(0.6, 2.2)	(0.8, 2.1)	(0.5, 3.3)
3. Went back another day to try to win back the money you lost	**†1.7**	**1.8**	**†2.2**
	(1.1, 2.7)	(1.3, 2.5)	(1.4, 3.5)
4. Borrowed money or sold anything to get money to gamble	†	†	†
	—	—	—
5. Felt that you might have a problem with gambling	**†1.5**	**†1.1**	**†0.7**
	(1.0, 2.5)	(0.7, 1.8)	(0.4, 1.4)
6. Gambling caused you any health problems, including stress or anxiety	†	**†0.7**	**†0.7**
	—	(0.4, 1.2)	(0.3, 1.4)
7. People criticized your betting or told you that you had a gambling problem, regardless of whether or not you thought it was true	**†1.0**	**†1.2**	**†0.8**
	(0.5, 1.7)	(0.7, 2.0)	(0.4, 1.6)
8. Gambling caused any financial problems for you or your household	**†1.0**	**†0.8**	†
	(0.5, 1.3)	(0.4, 1.3)	—
9. Felt guilty about the way you gamble or what happens when you gamble	**†3.2**	**2.3**	**†2.8**
	(2.1, 4.7)	(1.7, 3.2)	(1.4, 5.5)
Problem Gambling (PGSI score of 3 or higher)	**†1.9**	**†1.7**	**†1.2**
	(1.2, 3.0)	(1.1, 2.5)	(0.7, 2.1)

Note: [1]percentage who responded at least "sometimes" in the past 12 months; † Estimate supressed or unstable; no statistically significant difference for problem gambling between 2005, 2015 and 2016; based on random subsamples.
Def'n: *Problem Gambling - based on a "Problem Gambling Severity Index" score of 3 or higher*
Source: The *CAMH Monitor*, Centre for Addiction and Mental Health.

Table 9.2.2 Percentage Reporting ***Gambling Problems (PGSI 3+)*** During the Past 12 Months and Adjusted Group Differences, Ontarians Aged 18+, 2016

	N	%	95% CI	Adjusted Odds Ratio (N=1006)
Total [1]	1014	**†1.2**	(0.7, 2.1)	—
Sex				NS
Men	396	**†1.5**	(0.7, 3.2)	1.84
Women *(Comparison Group)*	618	**†1.0**	(0.7, 2.1)	—
Age				*
18-34	102	†	—	—
35-54	327	†	—	0.46
55 and older *(Comparison Group)*	580	**†2.3**	(1.2, 4.3)	**3.15***

Notes: [1]Items asked of a random sub-sample; all analyses are sample design adjusted; *p<.05**;** **p<.01; ***p<.001; CI = 95% confidence interval; NS – not statistically significant; † Estimate unstable or supressed.
(2) Asterisks in group row indicate a statistically significant group effect, based on Wald test.
(3) ORs greater than 1.0 indicate that the odds of gambling problems are higher relative to the comparison group; ORs less than 1.0 indicate that the odds are lower relative to the comparison group.
(4) Adjusted odds ratio holding fixed values for sex and age (complete sample N= 1006).
Def'n: Based on "Problem Gambling Severity Index" score of 3 or higher
Source: The *CAMH Monitor*, Centre for Addiction and Mental Health.

9.3 Gaming and Technology Use

The survey asked participants about their use of technology and electronic devices (such as computers, laptops, electronic tablets, smartphones, or gaming consoles) in the past 12 months, not counting use for work or school. These items were asked of a random subsample of respondents in 2015 (N=3,007) and 2016 (N=1,014). These items were not asked in 2017.

Participants were asked about their use of technology and electronic devices for:

(1) playing computer or video games, and
(2) emailing, chatting, text messaging, watching videos, accessing social media, or for surfing the web

Participation in each of these activities was measured using a question about the frequency of use in the past 12 months and a question about hours spent using electronic devices on those days when these devices were used.

Response categories for the frequency item ranged from (1) *Once a day* to (7) *Never in past 12 months*. Response categories for hours spent using electronic devices ranged from (0) *never*, (1*) less than one hour* to (5) *7 or more hours (per day)*.

The estimated average number of hours spent weekly using electronic devices is based on the respondent's recall of both the frequency of using these devices and the number of hours spent on a typical day when using these devices. It is an indicator of the typical amount of time spent weekly using these devices.

9.3.1 Average Number of Hours Spent Weekly Playing Computer or Video Games

2016 ……Table 9.3.1; Fig. 9.3.1

Overall, about 43.1% of Ontario adults did not play video games in the past year. About 18.3% reported spending one hour or less playing video or computer games weekly, and 5.6% reported playing more than 14 hours weekly.

On average, Ontarians reported spending **4.0** (95% CI: 3.2 to 4.8) hours playing video or computer games weekly.

Of the demographic factors examined, there were significant effects for **sex** and **age**.

- Men spent an average of 4.9 hours weekly playing games, compared to only 3.2 hours for women.
- The average number of hours decreased significantly with age. It was highest among the youngest age groups (7.6 hours) and lowest among those aged 50 and older (2.8 hours).

There were no significant differences by region.

Trends

2015-2016…… Table 9.3.2

The average number of hours spent weekly playing video games did not significantly change between 2015 and 2016 (3.7% hours vs. 4.9 hours, respectively). There were no significant differences among the demographic subgroups.

9.3.2 Average Number of Hours Spent Weekly on Social Media, Email, Surfing the Web, Chatting, etc.

2016 ……Table 9.3.1; Fig. 9.3.2

The majority of Ontario adults reported spending 11 to 30 hours weekly (54%) using electronic devices for email, social media, surfing the web, or chatting, outside of work or school. About 7.2% reported spending more than 30 hours weekly, and 8.4% did not use electronic devices.

On average, Ontarians reported spending **12.4** (95% CI: 11.3 to 13.5) hours per week using electronic devices for email, social media, surfing the web, chatting, etc.

Of the demographic factors examined, there were significant effects only for **age.**

- The average number of hours decreased significantly with age. It was highest among the youngest age groups (21.2 hours) and lowest among those aged 50 and older (7.8 hours).

There were no significant differences for region.

Trends

2015-2016 …… Table 9.3.2

There was no overall significant change in the estimated average number of hours spent on social media, email, etc. between 2015 (11.5 hours) and 2016 (12.4 hours), and there were no significant changes among subgroups.

Table 9.3.1: Estimated ***Average Number of Hours Spent Using Electronic Devices Weekly*** in the Past 12 Months, Ontarians, Aged 18+, 2016

		Using email, social media, etc.		Playing Video Games	
	N	*Mean*	95% CI	*Mean*	95% CI
Total[1]	1014	**12.4**	(11.3, 13.5)	**4.0**	(3.2, 4.8)
Sex		NS		*	
Men	396	**11.5**	(10.0, 13.1)	**4.9**	(3.4, 6.5)
Women	618	**13.2**	(11.8, 14.7)	**3.2**	(2.5, 3.8)
Age		***		*	
18-29	72	**21.2**	(17.2, 25.2)	**7.6**	(4.1, 11.1)
30-39	91	**15.0**	(12.5, 17.4)	**4.4**	(2.4, 6.3)
40-49	160	**12.4**	(10.9, 13.9)	**3.2**	(2.4, 4.0)
50+	686	**7.8**	(7.2, 8.5)	**2.8**	(2.3, 3.2)
Region		NS		NS	
Toronto	184	**14.2**	(11.5, 17.0)	**3.6**	(1.4, 5.8)
Central East	169	**12.8**	(10.8, 14.8)	**4.9**	(2.9, 6.9)
Central West	169	**12.1**	(9.0, 15.1)	**4.0**	(2.2, 5.8)
West	174	**10.7**	(8.8, 12.6)	**3.5**	(2.2, 4.7)
East	173	**11.5**	(9.7, 13.3)	**2.8**	(1.9, 3.7)
North	145	**11.0**	(8.6, 13.5)	**5.4**	(3.6, 7.2)

Notes: [1]Items asked of a random sub-sample; all analyses are sample design adjusted; *p<.05; **p<.01; ***p<.001; based on F-tests; CI = 95% confidence interval; NS – no statistically significant difference;

Def'n: Product of the frequency of using electronic devices and the number of hours spent on a typical day when using these devices.

Source: The *CAMH Monitor*, Centre for Addiction and Mental Health.

Table 9.3.2. Estimated ***Average Number of Hours Spent Using Technology/Electronic Devices Weekly*** in the Past 12 Months, Ontarians, Aged 18+, 2015-2016

Average Number of Hours Spent Weekly[1]	**2015 (N=3,002)**	**2016 (N=1014)**
1. Using email, social media, text messaging, chatting, or surfing the web	**11.5** (10.9, 12.0)	**12.4** (11.3, 13.5)
Sex		
Men	**10.7** (10.0, 11.5)	**11.5** (10.0, 13.1)
Women	**12.1** (11.3, 12.9)	**13.2** (11.8, 14.7)
Age		
18-29	**19.1** (17.1, 21.1)	**21.2** (17.2, 25.2)
30-39	**12.3** (11.2, 13.5)	**15.0** (12.5, 17.4)
40-49	**11.3** (10.5, 12.2)	**12.4** (10.9, 13.9)
50+	**8.2** (7.8, 8.7)	**7.8** (7.2, 8.5)
2. Playing Video Games	**3.7** (3.4, 4.1)	**4.0** (3.2, 4.8)
Sex		
Men	**4.3** (3.6, 4.9)	**4.9** (3.4, 6.5)
Women	**3.2** (2.9, 3.6)	**3.2** (2.5, 3.8)
Age		
18-29	**7.1** (5.6, 8.6)	**7.6** (4.1, 11.1)
30-39	**4.0** (2.9, 5.1)	**4.4** (2.4, 6.3)
40-49	**3.1** (2.6, 3.6)	**3.2** (2.4, 4.0)
50+	**2.6** (2.4, 2.9)	**2.8** (2.3, 3.2)

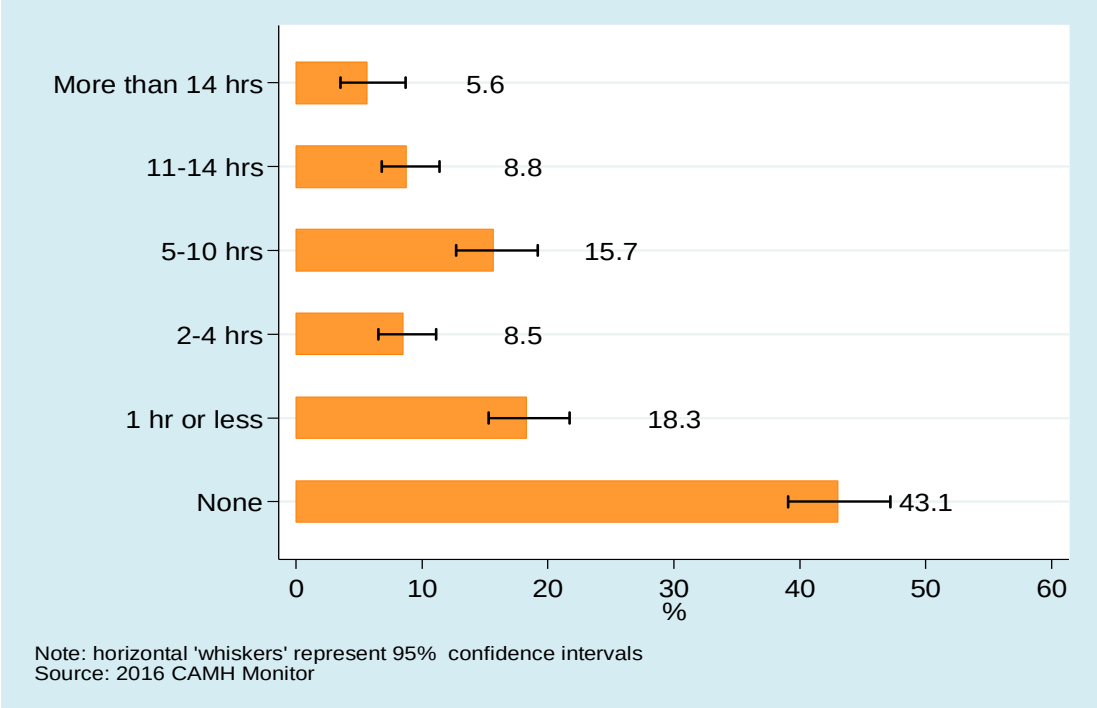
Notes: [1]Estimates based on random sub-samples; all estimates and analyses are sample design adjusted; no statistically significant differences overall or by subgroups between 2015 and 2016;

Def'n: Product of the frequency of using electronic devices and the number of hours spent on a typical day when using these devices for a specific activity.

Source: The *CAMH Monitor*, Centre for Addiction and Mental Health.

Figure 9.3.1

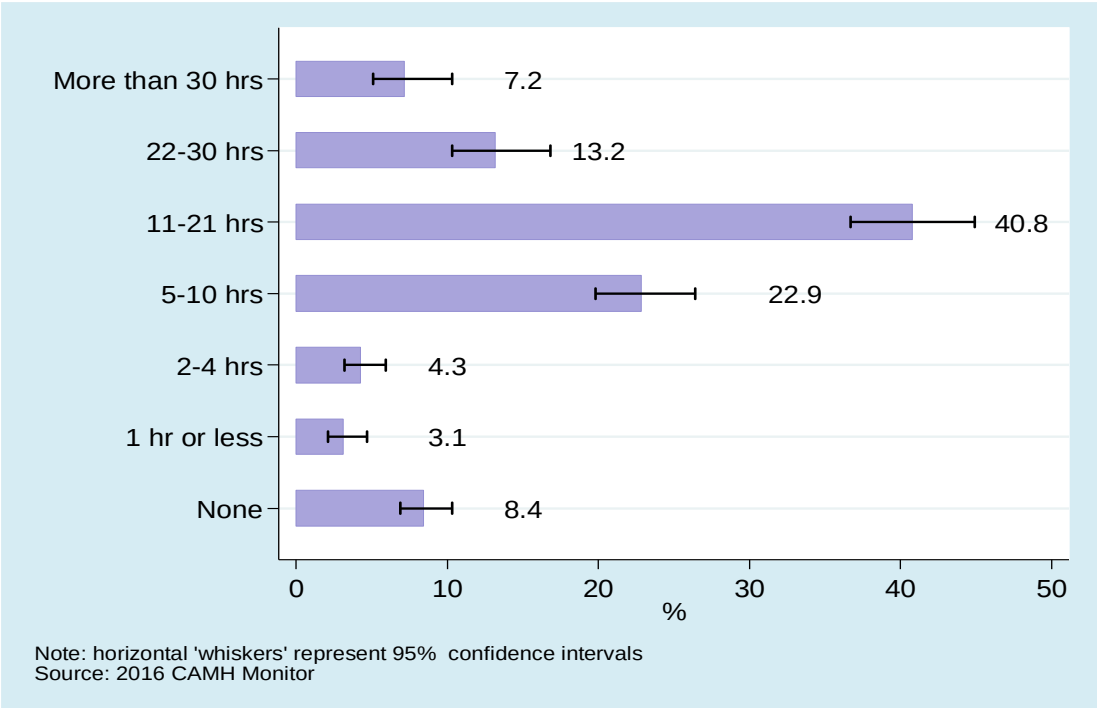
Average Number of Hours per Week Playing Video Games in the Past Year, Ontarians Aged 18+, 2016 (N=1014)



Note: horizontal 'whiskers' represent 95% confidence intervals
Source: 2016 CAMH Monitor

Figure 9.3.2

Average Number of Hours per Week Using Email, Social Media, Surfing the Web, Chatting, etc. in the Past Year, Ontarians Aged 18+, 2016 (N=1014)



Note: horizontal 'whiskers' represent 95% confidence intervals
Source: 2016 CAMH Monitor

9.4 Problematic Technology Use

Six questions were used to assess at risk/problematic use of technology or electronic devices. These items have been previously used to measure problematic internet use (Liu et al., 2011; Yau, Potenza, & White, 2013) and were adapted from the *Minnesota Impulsive Disorder Interview*, a valid and reliable instrument used to screen for impulse control disorders (Grant, 2008; Grant, Levine, Kim & Potenza, 2005).

The module begins with the wording: *"Thinking about your use of these electronic devices in the past 12 months, for games, social media, chatting or other uses, but not counting use of these electronic devices for work or school…"*

- *Have you ever tried to cut back on your use of electronic devices?*
- *Has a family member ever expressed concern about the amount of time you use electronic devices?*
- *Have you ever missed school, work, or important social activities because you were using electronic devices?*
- *Did you think you have a problem with excessive use of electronic devices?*
- *Have you ever experienced an irresistible urge or uncontrollable need to use electronic devices?*
- *Have you ever experienced a growing tension or anxiety that can only be relieved by using electronic devices?*

The response categories for the six items were "*yes*" or "*no*".

Given the absence of formal criteria for problematic use of electronic devices, we used two thresholds to classify individuals as having problems with their use of electronic devices.

A liberal cut-off score of one or higher (out of six) was used to describe the percentage experiencing at least one symptom of problematic use during the past year as "any problematic use." A cut-off score of three or higher (out of six) was used to describe the percentage experiencing "moderate to severe problematic use."

These items were asked of a random subsample of respondents in 2015 (N=3,007) and 2016 (N=1,014). The items were not asked in 2017.

9.4.1 Symptoms of Problematic Use

2016 ……Table 9.4.1

The most common symptoms experienced by respondents during the past 12 months were: tried to cut back on your use of technology/ electronic devices (27.1%), followed by family member expressed concern about the amount of time you use (17.1%), and experienced an irresistible urge or uncontrollable need to use (11.9%). The least reported symptom was missed school, work, or important social activities because you were using electronic devices (1.8%). There were no significant differences by sex in experiencing these symptoms (data not shown).

9.4.2 Problematic Use of Technology/ Electronic Devices

Any Problematic Use

2016 ……Table 9.4.2, Fig. 9.4.1

An estimated **40.4%** (95% CI: 36.2% to 44.7%) of Ontario adults met the criteria for **any problematic use** of technology/electronic devices in the past 12 months. The corresponding population estimate is 4,255,000 Ontario adults.

There were no significant differences by sex or by region related to reporting any problematic use in the past 12 months, when holding demographic factors constant.
Only **age** was significantly related to reporting any problematic use in the past 12 months.

- The prevalence of any problematic use **decreased** significantly with **age**, from 72.3% of 18 to 29 year olds to 19.6% of those aged 50 and older. Compared to those aged 50 and older, the adjusted odds of any problematic use were 11 times higher among those aged 18 to 29 (OR=11.2), 5 times higher among those aged 30 to 39 and almost 4 times higher among those aged 40 to 49 (OR=5.2 and OR=3.9, respectively).

Trends

2015-2016…… Table 9.4.1
The prevalence of any problematic use in the past 12 months in 2016 (40.4%) was not significantly different from 2015 (35.1%).

Moderate-to-Severe Problematic Use

2016 ……Table 9.4.2, Fig. 9.4.2

An estimated **8.2%** (95% CI: 5.9% to 11.1%) of Ontario adults met the criteria for **moderate-to-severe problematic use** of technology/ electronic devices in the past 12 months. The corresponding population estimate is 859,100 Ontario adults.

There were no significant differences by sex or by region related to reporting moderate/severe problematic use in the past 12 months, when adjusting for other demographic factors.

Only **age** was significantly related to reporting moderate/severe problematic use in the past 12 months.

- The prevalence of moderate/severe problematic use significantly **decreased** with **age**, from 21.5% of 18 to 29 year olds to 2.4% of those aged 50 and older. Compared to those aged 50 and older, the adjusted odds of moderate/severe problematic use were almost 12 times higher among those aged 18 to 29 (OR=11.9) and almost 4 times higher among those aged 30 to 39 and those aged 40 to 49 (OR=4.3 and OR=3.8, respectively).

Trends

2015-2016…… Table 9.4.1
The prevalence of moderate/severe problematic use in the past 12 months in 2016 (8.2%) was not significantly different from 2015 (7.1%).

Table 9.4.1. Percentage Reporting Symptoms of ***Problematic Use of Technology/ Electronic Devices*** in the Past 12 Months, Ontarians Aged 18+, 2015-2016

Item[1]	2015 (N=3,002)	2016 (N=1014)
1. Tried to cut back on your use of electronic devices	**23.6** (21.5, 25.8)	**27.1** (23.4, 31.2)
2. Family member expressed concern about the amount of time you use electronic devices	**13.9** (12.1, 15.8)	**17.1** (13.8, 21.1)
3. Missed school, work, or important social activities because you were using electronic devices	**†2.3** (1.5, 3.3)	**†1.8** (1.0, 3.7)
4. You think you have a problem with excessive use of electronic devices	**6.3** (5.1, 7.7)	**†6.0** (4.1, 8.7)
5. Experienced an irresistible urge or uncontrollable need to use electronic devices	**9.9** (8.5, 11.7)	**11.9** (9.1, 15.3)
6. Experienced a growing tension or anxiety that can only be relieved by using electronic devices	**6.7** (5.4, 8.2)	**7.2** (5.1, 10.1)
Any Problematic Use (1+ symptoms)	**35.1** (32.8, 37.5)	**40.4** (36.2, 44.7)
Moderate-to-Severe Problematic Use (3+ symptoms)	**7.1** (5.8, 8.7)	**8.2** (5.9, 11.1)

Note: [1]percentage who responded "yes" in the past 12 months; † Estimate unstable; estimates based on random subsamples;
Def'n: *"Any Problematic Use"* defined as reporting 1 or more symptoms in the past 12 months*; "Moderate-to-Severe Problematic Use"* defined as reporting 3 or more symptoms in the past 12 months.
Source: The *CAMH Monitor*, Centre for Addiction and Mental Health.

Table 9.4.2: Percentage Reporting ***Problematic Use of Technology/ Electronic Devices*** in the Past 12 Months, Ontarians, Aged 18+, 2016

		Any Problematic Use			Moderate/Severe Problematic Use		
	N	%	95% CI	Adjusted Odds Ratio (N=1009)	%	95% CI	Adjusted Odds Ratio (N=1009)
Total[1]	1014	**40.4**	(36.2, 44.7)	—	**8.2**	(5.9, 11.1)	—
Sex				NS			NS
Men	396	**38.4**	(31.9, 45.3)	0.73	**†8.3**	(4.9, 13.5)	0.87
Women *(Comparison Group)*	618	**42.2**	(37.0, 47.6)	—	**†8.1**	(5.4, 11.8)	—
Age				***			***
18-29	72	**72.3**	(59.1, 82.5)	**11.20*** **	**21.5**	(12.7, 34.1)	**11.89*** **
30-39	91	**54.4**	(43.1,65.2)	**5.16*** **	**†8.9**	(4.7, 16.2)	**4.28** **
40-49	160	**46.9**	(37.2, 56.8)	**3.87** **	**†8.0**	(4.3, 14.3)	**3.79** **
50+ *(Comparison Group)*	686	**19.6**	(16.2, 23.4)	**—**	**†2.4**	(1.4, 4.0)	**—**
Region				NS			NS
Toronto *(vs. Provincial Average)*	184	**47.0**	(37.8, 56.3)	1.31	**†12.6**	(6.7, 22.3)	1.56
Central East	169	**39.5**	(30.1, 49.7)	0.92	**†6.9**	(3.4, 13.5)	0.85
Central West	169	**37.5**	(28.0, 48.2)	0.88	**†5.2**	(2.1, 12.0)	0.65
West	174	**35.5**	(27.0, 45.1)	0.73	**†4.5**	(2.0, 10.0)	0.56
East	173	**41.6**	(32.6, 51.2)	1.31	**†11.3**	(6.1, 20.0)	**2.06***
North	145	**35.9**	(25.8, 47.5)	0.99	**†6.6**	(2.9, 14.4)	1.01

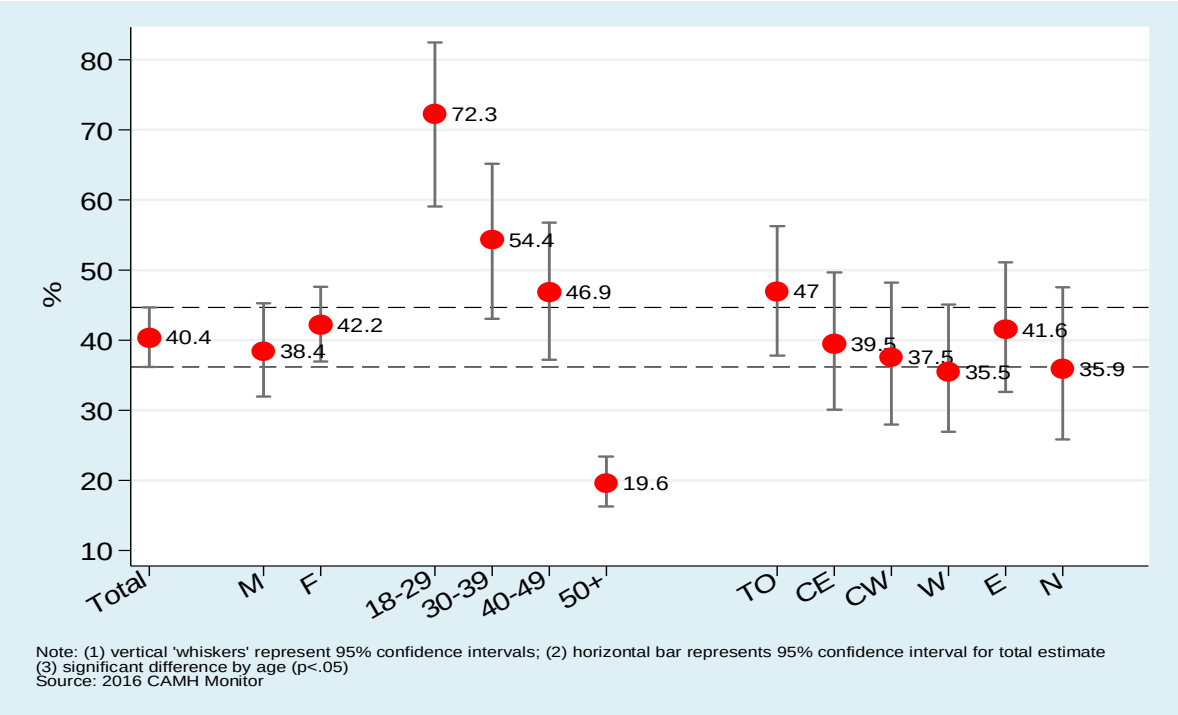
Notes: [1]Items were asked of a random sub-sample; all estimates and analyses are sample design adjusted.
(1) *p<.05**;** **p<.01; ***p<.001; CI = 95% confidence interval; NS – no statistically significant difference; † Estimate suppressed or unstable.
(2) Asterisks in group row indicate a statistically significant group effect, based on Wald test.
(3) ORs greater than 1.0 indicate that the odds of problematic use are higher in the group being compared to the comparison group; ORs less than 1.0 indicate that the odds are lower in the group being compared to the comparison group.
(4) Adjusted odds ratio holding fixed values for sex, age, and region (complete case sample size N= 1009).

Def'n: *"Any Problematic Use" defined as reporting 1 or more symptoms in the past 12 months; "Moderate-to-Severe Problematic Use" defined as reporting 3 or more symptoms in the past 12 months.*

Source: The *CAMH Monitor*, Centre for Addiction and Mental Health.

Figure 9.4.1

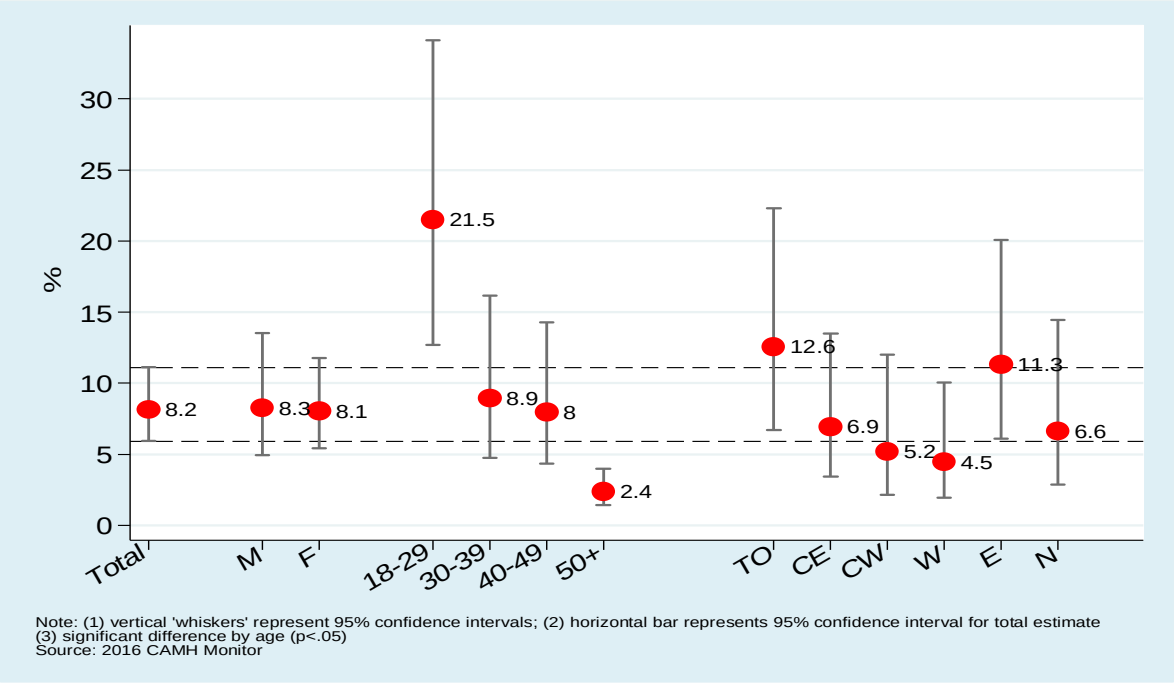
Percentage Reporting *Any* Problematic Use of Technology (1+) in the Past Year by Sex, Age, and Region, Ontarians Aged 18+, 2016 (N=1014)



Note: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal bar represents 95% confidence interval for total estimate
(3) significant difference by age (p<.05)
Source: 2016 CAMH Monitor

Figure 9.4.2

Percentage Reporting *Moderate-to-Severe* Problematic Use of Technology (3+) in the Past Year by Sex, Age, and Region, Ontarians Aged 18+, 2016 (N=1014)



Note: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal bar represents 95% confidence interval for total estimate
(3) significant difference by age (p<.05)
Source: 2016 CAMH Monitor

10. REGIONAL LHIN OVERVIEW

Substance Use and Health Indicators among Ontario LHINs

This chapter provides estimates of substance use and health indicators according to Ontario's Local Health Integration Networks (LHINs).

In 2006, the province of Ontario designated 14 geographic areas as LHINs, each to function as health systems that plan, integrate and fund local health services (see http://www.lhins.on.ca).

The 14 LHIN regions are as follows:

Erie St. Clair
South West
Waterloo Wellington
Hamilton Niagara Haldimand Brant
Central West
Mississauga Halton
Toronto Central
Central
Central East
South East
Champlain
North Simcoe Muskoka
North East and,
North West.

The respondents were assigned to each LHIN according to the first three digits of their postal code (forward sortation area). Data from the **2014, 2015, 2016,** and **2017** surveys were merged in order to obtain sufficient sample sizes per LHIN. The present analyses are based on a total sample size of **13,910** (2,822 in 2014, 4,615 in 2015, 2,834 in 2016, and 2,759 in 2017). About 6% of respondents did not provide a postal code and therefore were excluded from the analyses**.**

All survey estimates were weighted, and variance and statistical tests were corrected for the sampling design.[37]

Combined 2014-2017 Data

…….. Tables 10.1- 10.3

Table 10.1 presents estimates for substance use and health indicators for each LHIN.

Almost all LHINs (13 of 14) differ from the province on at least one measure. Six LHINs display **below average** estimates for multiple measures, compared to the provincial average.

Respondents from the **South West** reported lower estimates for past year cannabis use, lifetime cannabis use, lifetime cocaine use, and moderate psychological distress. Respondents from **Waterloo Wellington** reported lower than average estimates for current smoking and lifetime cannabis use. **Central West** respondents reported lower estimates for: past year drinking, lifetime cannabis use, lifetime cocaine use, and lifetime traumatic brain injury (TBI). Respondents from **Toronto Central** reported lower than average estimates for daily smoking, fair or poor overall health, and any use of prescription opioids. Respondents from the **Central LHIN** reported lower than average estimates for past year drinking, daily drinking, binge

[37] For each outcome in Table 10.1, a design-based logit regression was estimated in which the LHIN predictor variable (effect coded – i.e., deviation contrasts – to the provincial average) was regressed on the binary response variable. This strategy compares the estimates for respondents in a given LHIN to the provincial average (specifically, the grand mean, the mean of all the LHIN regions).

drinking, hazardous or harmful drinking, daily smoking, and lifetime cannabis use. Respondents from **Champlain** reported lower than average estimates for fair or poor overall health.

Eight LHINs displayed **above average** estimates for multiple measures.

Respondents from **Hamilton Niagara Haldimand Brant** reported higher than average estimates for current smoking, nonmedical use of prescription opioids and past year use of antidepressant medication. Respondents from **Mississauga Halton** reported higher than average estimates for past year cannabis use.

Toronto Central respondents had above average estimates for lifetime cannabis use, lifetime cocaine use, past year cannabis use, and daily drinking. **Central East** respondents reported higher than average estimates for moderate psychological distress. **South East** respondents reported above average estimates for daily drinking, fair or poor overall health, and past year use of antidepressant medication.

Respondents from **North Simcoe Muskoka** reported above average estimates for weekly binge drinking, drinking and driving, and lifetime and past year cannabis use. **North East** respondents had above average estimates for hazardous or harmful drinking, current and daily smoking, self-rated fair or poor overall health and past year cannabis use. **North West** respondents had above average estimates for past year alcohol use and driving after cannabis use.

Tables 10.2 and 10.3 summarize which LHINs are significantly different from the provincial average on various substance use and health related indicators.

Compared to the **provincial estimate**:

- **Past year drinking** was significantly higher in North West, and significantly lower in the Central West and Central LHINs.
- **Past year daily drinking** was significantly higher in Toronto Central, and the South East LHIN, and significantly lower in the Central LHIN.
- The percentage reporting **weekly binge drinking** in the past year was significantly lower in the Central LHIN and significantly higher in North Simcoe Muskoka.
- The percentage reporting **hazardous or harmful drinking** in the past year was significantly lower in the Central LHIN and significantly higher in the North East LHIN.
- Current **cigarette smoking** was significantly higher in Hamilton Niagara Haldimand Brant and the North East LHINs and significantly lower in Waterloo Wellington LHIN.
- **Daily cigarette smoking** was significantly higher in the North East LHIN, and significantly lower in Toronto Central and Central LHINs.
- **Lifetime cannabis** use was significantly higher in Toronto Central, North Simcoe Muskoka and the North East LHINs, and significantly lower in the South West, Waterloo Wellington, Central West, and the Central LHINs.

- **Past year cannabis** use was significantly higher in Mississauga Halton, Toronto Central and North Simcoe Muskoka LHINs, and significantly lower in the South West LHIN.

- **Lifetime cocaine** use was significantly higher in the Toronto Central LHIN, and significantly lower in the South West and Central West LHINs.

- Past year use of **any prescription opioids** was significantly lower in Toronto Central LHIN. Past year use of **nonmedical prescription opioids** was significantly higher in Hamilton Niagara Haldimand Brant LHIN.

- Past year **driving after drinking** was significantly higher in North Simcoe Muskoka LHIN. **Driving after cannabis use** was significantly higher in the North West LHIN.

- The percentage reporting **self-rated fair or poor health in general** was significantly higher in the South East and North East LHINs, and significantly lower in Toronto Central and Champlain LHINs.

- The percentage reporting **lifetime TBI** was significantly lower in the Central West LHIN.

- The percentage reporting **moderate psychological distress** was significantly lower in the South West LHIN and significantly higher in the Central East LHIN.

- The percentage reporting **past year use of antidepressant medication** was significantly higher in Hamilton Niagara Haldimand Brant and the South East LHINs.

Table 10.1: Percentage of Ontario Adults (18+) Reporting ***Major Substance Use and Health*** Indicators by Ontario LHINs, CAMH Monitor, Combined 4-Year Data, 2014-2017

	Erie St.Clair	South West	Waterloo Wellington	Hamilton Niagara Haldimand Brant	Central West	Mississauga Halton	Toronto Central	Central	Central East	South East	Champlain	North Simcoe Muskoka	North East	North West	ONT
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
Total N =	812	1355	639	1182	355	590	1042	1018	1260	675	1542	568	1342	650	13910
Alcohol															
Alcohol Use (past 12m)	**83.1**	**79.8**	**80.0**	**82.2**	**69.7↓**	**82.6**	**83.1**	**77.9↓**	**80.0**	**80.1**	**82.8**	**84.2**	**82.1**	**84.5↑**	**80.8**
	(79.9, 85.9)	(77.1, 82.2)	(76.0, 83.5)	(79.5, 84.7)	(63.3, 75.4)	(78.6, 86.0)	(79.9, 86.0)	(74.5, 80.9)	(77.2, 82.5)	(76.5, 83.4)	(80.4, 85.0)	(80.0, 87.7)	(79.7, 84.3)	(81.2, 87.4)	(79.8, 81.6)
Daily Drinking (past 12m)	**5.8**	**8.5**	**5.4**	**7.3**	**†7.4**	**†5.2**	**9.7↑**	**5.0↓**	**6.3**	**10.4↑**	**7.6**	**7.8**	**7.2**	**6.8**	**7.1**
	(4.3, 7.7)	(6.9, 10.4)	(4.0, 7.4)	(5.8, 9.3)	(4.4, 12.2)	(3.7, 7.2)	(8.0, 11.8)	(3.8, 6.4)	(5.0, 7.9)	(8.0, 13.3)	(6.3, 9.2)	(5.7, 10.6)	(5.8, 8.9)	(5.0, 9.2)	(6.6,7.6)
Binge Drinking Weekly (past 12m)	**†6.9**	**6.2**	**†5.8**	**7.7**	**†7.9**	**†8.0**	**6.2**	**†4.5↓**	**7.7**	**†6.7**	**5.8**	**†10.5↑**	**7.9**	**†7.1**	**6.8**
	(4.9, 9.5)	(4.6, 8.3)	(3.9, 8.5)	(5.8, 10.2)	(4.4, 13.9)	(5.3, 11.9)	(4.6, 8.4)	(3.1, 6.4)	(6.0, 9.9)	(4.7, 9.6)	(4.5, 7.6)	(7.4, 14.8)	(6.2, 10.0)	(5.0, 9.9)	(6.2,7.5)
Hazardous/Harmful Drinking (AUDIT 8+) (past 12m)	**12.7**	**11.9**	**12.9**	**11.8**	**†10.6**	**14.6**	**15.3**	**8.9↓**	**14.9**	**12.9**	**14.2**	**15.6**	**15.7↑**	**14.6**	**13.1**
	(9.9, 16.0)	(9.8, 14.4)	(9.6, 17.0)	(9.5, 14.7)	(6.7, 16.5)	(10.9, 19.2)	(12.6, 18.4)	(6.8, 11.5)	(12.3, 17.8)	(9.7, 16.9)	(12.0, 16.7)	(11.9, 20.3)	(13.2, 18.5)	(11.2, 18.8)	(13.2, 15.0)
Tobacco															
Current Smoking (past 30 days)	**11.3**	**14.0**	**9.9↓**	**17.0↑**	**†13.2**	**15.4**	**12.9**	**11.8**	**12.6**	**17.6**	**14.0**	**17.1**	**21.4↑**	**15.3**	**14.1**
	(9.0, 14.1)	(11.7, 16.6)	(7.4, 13.1)	(14.3, 20.0)	(9.3, 18.4)	(11.8, 19.9)	(10.5, 15.7)	(9.3, 14.8)	(10.4, 15.2)	(13.9, 21.9)	(11.9, 16.4)	(13.2, 21.9)	(18.8, 24.2)	(12.0, 19.1)	(13.3, 14.9)
Daily Smoking	**9.4**	**11.8**	**8.6**	**12.8**	**†9.5**	**11.7**	**8.5↓**	**7.8↓**	**9.5**	**13.9**	**9.8**	**13.8**	**16.6↑**	**12.3**	**10.6**
	(7.3, 11.9)	(9.8, 14.3)	(6.3, 11.7)	(10.5, 15.4)	(6.4, 13.9)	(8.5, 15.8)	(6.6, 10.8)	(5.9, 10.3)	(7.6,11.8)	(10.6, 18.0)	(8.1, 11.8)	(10.2,18.3)	(14.4, 19.1)	(9.4, 16.0)	(9.9, 11.3)
Other Drugs															
Cannabis Use (lifetime)	**45.8**	**41.0↓**	**41.1↓**	**43.8**	**37.5↓**	**51.7**	**59.5↑**	**40.4↓**	**45.7**	**46.2**	**49.3**	**55.8↑**	**50.7↑**	**47.9**	**46.7**
	(41.7, 50.0)	(37.8, 44.3)	(36.4, 45.8)	(40.2, 47.4)	(31.2, 44.2)	(46.6, 56.7)	(55.6, 63.2)	(36.7, 44.3)	(42.3, 49.2)	(41.6, 50.8)	(46.2, 52.4)	(50.4, 61.2)	(47.4, 53.9)	(43.1, 52.7)	(45.6, 47.8)
Cannabis Use (past 12m)	**13.5**	**10.7↓**	**12.1**	**15.8**	**†17.0**	**22.1↑**	**19.4↑**	**13.8**	**16.5**	**15.4**	**13.8**	**20.8↑**	**17.3**	**13.5**	**15.8**
	(10.6, 17.1)	(8.7, 13.1)	(9.0, 16.0)	(13.0, 19.0)	(11.9,23.7)	(17.6, 27.4)	(16.5, 22.8)	(11.0, 17.2)	(13.9, 19.6)	(11.8, 19.8)	(11.7, 16.3)	(16.1, 26.3)	(14.6,20.3)	(10.2, 17.7)	(14.9,16.8)

	Erie St.Clair	South West	Waterloo Wellington	Hamilton Niagara Haldimand Brant	Central West	Mississauga Halton	Toronto Central	Central	Central East	South East	Champlain	North Simcoe Muskoka	North East	North West	ONT
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
Total N =	812	1355	639	1182	355	590	1042	1018	1260	675	1542	568	1342	650	13910
Cocaine (lifetime)	**†7.3**	**6.4↓**	**†6.5**	**9.2**	**†3.6↓**	**†12.1**	**15.5↑**	**†6.8**	**9.0**	**†9.2**	**11.1**	**†12.1**	**10.7**	**†11.6**	**9.4**
	(5.2, 10.3)	(4.7, 8.7)	(4.1, 10.4)	(6.8, 12.4)	(1.7, 7.3)	(8.4, 17.2)	(12.6, 19.0)	(4.6, 9.8)	(6.8, 11.8)	(5.8, 14.3)	(9.0, 13.7)	(8.1, 17.6)	(8.3, 13.8)	(8.2, 16.2)	(8.6, 10.3)
Prescription Opioids (any use; past 12m)	**25.9**	**23.8**	**21.9**	**24.9**	**20.1**	**22.5**	**18.3↓**	**19.5**	**24.4**	**24.0**	**20.9**	**24.6**	**23.2**	**25.7**	**22.5**
	(21.9, 30.3)	(20.8, 27.1)	(17.8, 26.7)	(21.5, 28.7)	(14.4, 27.2)	(18.0, 27.9)	(15.1, 22.0)	(16.3, 23.1)	(21.1, 28.1)	(19.8, 28.9)	(18.1, 23.9)	(19.5, 30.5)	(20.2, 26.5)	(20.6, 31.6)	(21.4, 23.6)
Prescription Opioids (nonmedical use; past 12m)	**†2.6**	**†3.4**	**†3.8**	**†5.8↑**	**†4.9**	**†2.3**	**†2.4**	**†2.3**	**†3.2**	**†4.4**	**†2.6**	**†4.2**	**†4.1**	**†4.9**	**3.4**
	(1.5, 4.4)	(2.2, 5.3)	(2.1, 6.5)	(3.9, 8.7)	(2.1, 10.7)	(0.9, 5.6)	(1.4, 4.3)	(1.4, 3.8)	(1.9, 5.4)	(2.5, 7.6)	(1.6, 4.1)	(2.1, 8.2)	(2.8, 6.0)	(2.5, 9.4)	(2.9, 4.0)
Driving															
Drinking & Driving (past 12m)	**†6.0**	**†4.9**	**†8.0**	**†5.6**	**†**	**†3.0**	**†3.2**	**†6.8**	**†5.7**	**†**	**†5.8**	**†11.0↑**	**†3.8**	**†4.7**	**5.4**
	(3.3, 10.8)	(3.0, 7.8)	(4.6, 13.7)	(3.3, 9.2)	†	(1.5, 6.2)	(1.7, 5.8)	(4.1, 11.1)	(3.4, 9.2)	†	(3.7, 9.1)	(5.5, 20.9)	(2.3, 6.3)	(2.6, 8.5)	(4.5, 6.4)
Cannabis & Driving (past 12m)	†	†	†	†	†	†	†	†	†	†	**†3.5**	†	†	**†6.8↑**	**2.5**
	†	†	†	†	†	†	†	†	†	†	(1.8, 6.8)	†	†	(3.4, 3.3)	(1.9, 3.2)
Overall Health															
Fair/Poor Overall Health (in general)	**10.8**	**9.9**	**8.5**	**10.9**	**†9.5**	**10.0**	**8.1↓**	**9.6**	**9.9**	**17.7↑**	**8.3↓**	**10.4**	**14.2↑**	**11.5**	**10.1**
	(8.6, 13.4)	(8.4, 11.7)	(6.3, 113)	(9.0, 13.2)	(6.2, 14.3)	(7.6, 13.2)	(6.3, 10.5)	(7.7, 12.0)	(8.1, 12.0)	(14.4, 21.7)	(7.0, 9.9)	(7.8, 13.7)	(12.2, 16.4)	(9.0, 14.5)	(9.5, 10.8)
TBI (lifetime)	**11.8**	**16.0**	**18.4**	**16.4**	**†9.2↓**	**14.6**	**13.2**	**14.8**	**14.9**	**14.8**	**16.5**	**18.4**	**17.0**	**18.2**	**15.2**
	(9.1, 15.2)	(13.2, 19.2)	(14.1, 23.6)	(13.3, 20.1)	(5.7, 14.5)	(10.5, 20.0)	(10.5, 16.5)	(11.8, 18.3)	(12.3, 18.0)	(11.2, 19.3)	(14.0, 19.5)	(13.5, 24.5)	(14.3, 20.2)	(13.9, 23.6)	(14.2, 16.2)
Mental Health															
Psychological Distress (K6 5+) (past 12m)	**20.7**	**19.5↓**	**22.4**	**25.5**	**18.7**	**26.6**	**23.6**	**23.9**	**26.8↑**	**26.6**	**23.8**	**22.4**	**21.8**	**21.1**	**23.6**
	(17.0, 25.0)	(16.4, 23.0)	(17.7, 27.8)	(21.7, 29.6)	(13.5, 25.3)	(21.3, 32.6)	(19.8, 28.0)	(20.1, 28.2)	(23.2, 30.7)	(21.7, 32.1)	(20.7, 27.2)	(17.2, 28.7)	(18.7, 25.2)	(16.5, 26.6)	(22.4, 24.8)
Fair/Poor Overall Mental Health (in general)	**8.0**	**7.0**	**†6.0**	**8.8**	**†8.4**	**†6.9**	**7.7**	**6.6**	**6.5**	**10.1**	**7.9**	**†7.0**	**8.8**	**†5.9**	**7.5**
	(5.9, 10.9)	(5.5, 9.0)	(4.2, 8.6)	(6.9, 11.3)	(5.3, 13.1)	(4.6, 10.2)	(6.0, 9.9)	(4.8, 8.9)	(4.9, 8.4)	(7.2, 13.8)	(6.3, 9.9)	(4.7, 10.2)	(7.2, 10.7)	(4.0, 8.7)	(6.9,8.1)

	Erie St.Clair	South West	Waterloo Wellington	Hamilton Niagara Haldimand Brant	Central West	Mississauga Halton	Toronto Central	Central	Central East	South East	Champlain	North Simcoe Muskoka	North East	North West	ONT
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
Total N =	812	1355	639	1182	355	590	1042	1018	1260	675	1542	568	1342	650	13910
Antianxiety Medication (past 12 months)	**12.0**	**9.5**	**†7.4**	**14.1**	**†9.3**	**†8.3**	**8.7**	**10.1**	**11.3**	**14.2**	**10.7**	**†11.6**	**11.7**	**†10.6**	**10.6**
	(9.2, 15.5)	(7.5, 11.8)	(5.3, 10.2)	(11.3, 17.5)	(5.5, 15.4)	(5.7, 12.0)	(6.6, 11.3)	(7.6, 13.4)	(8.9, 14.2)	(10.7, 18.7)	(8.7, 13.1)	(8.1, 16.2)	(9.5, 14.2)	(7.6, 14.7)	(9.8, 11.5)
Antidepressant Medication (past 12 months)	**7.4**	**7.6**	**†7.2**	**12.5↑**	**†4.7**	**†6.8**	**9.2**	**†7.2**	**9.4**	**12.2↑**	**9.8**	**†10.1**	**10.4**	**†7.6**	**8.9**
	(5.3, 10.2)	(5.8, 9.8)	(5.0, 10.4)	(9.9, 15.7)	(2.3, 9.5)	(4.4, 10.4)	(7.0, 11.9)	(5.0, 10.3)	(7.2, 12.1)	(9.1, 16.1)	(7.9, 12.2)	(6.9, 14.7)	(8.4, 12.8)	(5.0, 11.4)	(8.1,9.6)
Suicidal Ideation (past 12 months)	**†1.8**	**†2.1**	**†1.7**	**†4.3**	**†**	**†**	**†3.3**	**†1.7**	**†3.8**	**†4.2**	**†2.5**	**†4.1**	**†2.1**	**†2.5**	**2.8**
	(0.9, 3.7)	(1.3, 3.5)	(0.8, 3.6)	(2.5, 7.3)	†	†	(1.7, 6.2)	(0.9,3.1)	(2.2, 6.4)	(2.3, 7.6)	(1.5, 4.2)	(2.0, 8.3)	(1.3, 3.4)	(1.2, 5.1)	(2.3, 3.4)

Notes: (1) entries in brackets are 95% confidence intervals; (2) underlined entries are significantly different from Ontario estimate - higher (↑) or lower (↓); (3) Driving questions were asked only of random subsample of respondents with a valid driver's licence; (4) K6 data available for 2015-2017 only; (5) † Estimate suppressed or unstable.

Legend: **Alcohol Use** (percentage consuming alcohol in the past 12 months); **Daily Drinking** (percentage consuming alcohol daily in the past 12 months); **Binge Drinking Weekly** (percentage consuming five or more drinks on a single occasion weekly in the past 12 months); **Hazardous/Harmful Drinking** (percentage reporting hazardous or harmful drinking based on the AUDIT 8+); **Current Smoking** (percentage reporting smoking cigarettes in the past 30 days); **Daily Smoking** (percentage smoking cigarettes daily); **Cannabis Use** (percentage reporting using in lifetime and past year); **Cocaine** (percentage using in lifetime); **Any Use of Prescription Opioids** (percentage using in the past 12 months with or without a doctor's prescription); **Nonmedical Use of Prescription Opioids** (percentage using in the past 12 months without a doctor's prescription); **Drinking & Driving** (percentage driving after drinking - among licensed drivers); **Cannabis & Driving** (percentage driving after using cannabis- among licensed drivers); **Poor Health** (percentage reporting fair or poor health in general); **Lifetime TBI** (percentage reporting one or more traumatic brain injuries in lifetime); **K6 -5+** (moderate psychological distress – percentage reporting a score of 5 of more on the K6 scale - past 30 days); **Poor Mental Health** (percentage reporting fair or poor mental health in general); **Antianxiety Medication** (percentage using in the past 12 months with a doctor's prescription); **Antidepressant Medication** (percentage using in the past 12 months with a doctor's prescription); **Suicidal Ideation** (percent reporting seriously contemplating suicide in the past 12 months).

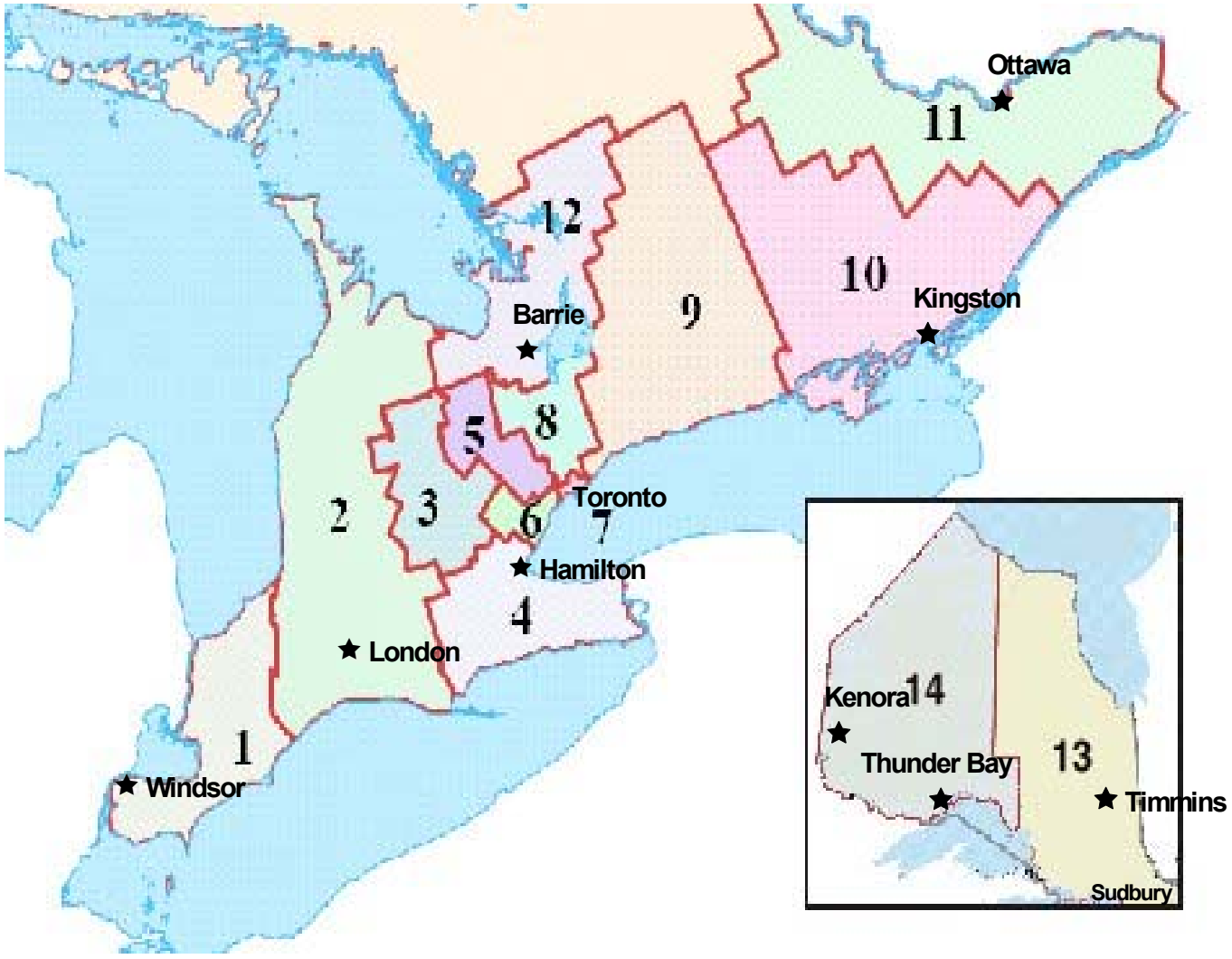
Table 10.2: Summary of LHIN Substance Use and Health Indicators Significantly ***Lower*** than the Province, Ontario Adults (18+), 2014-2017 CAMH Monitor

LHIN	Significantly Lower than the Province (↓)
South West	• Lifetime Cannabis Use (41.0% vs. 46.7%) • Past Year Cannabis Use (10.7% vs. 15.8%) • Lifetime Cocaine Use (6.4% vs. 9.4%) • Moderate Psychological Distress (past 30 days) (19.5 % vs. 23.6%)
Waterloo Wellington	• Current Smoking (9.9% vs. 14.1%) • Lifetime Cannabis Use (41.1% vs. 46.7%)
Central West	• Past Year Alcohol Use (69.7% vs. 80.8%) • Lifetime Cannabis Use (37.5% vs. 46.7%) • Lifetime Cocaine Use (3.6% vs. 9.4%) • Traumatic Brain Injury (lifetime) (9.2% vs. 15.2%)
Toronto Central	• Daily Smoking (8.5% vs. 10.6%) • Any Use of Prescription Opioids (past year) (18.3% vs. 22.5%) • Fair/Poor Overall Health (8.1% vs. 10.1%)
Central	• Past Year Alcohol Use (77.9% vs. 80.8%) • Daily Drinking (5.0% vs. 7.1%) • Binge Drinking Weekly (4.5% vs. 6.8%) • Hazardous/Harmful Drinking (8.9% vs. 13.1%) • Daily Smoking (7.8% vs. 10.6%) • Lifetime Cannabis Use (40.4% vs. 46.7%)
Champlain	• Fair/Poor Overall Health (8.3% vs. 10.1%)

Table 10.3: Summary of LHIN Substance Use and Health Indicators Significantly ***Higher*** than the Province, Ontario Adults (18+), 2014-2017 CAMH Monitor

LHIN	Significantly Higher than the Province (↑)
Hamilton Niagara Haldimand Brant	• Current Smoking (17.0% vs. 14.1%) • Nonmedical Use of Prescription Opioids (past year) (5.8% vs. 3.4%) • Use of Antidepressant Medication (past year) (12.5% vs. 8.9%)
Mississauga Halton	• Past Year Cannabis Use (22.1% vs. 15.8%)
Toronto Central	• Daily Drinking (9.7% vs.7.1%) • Lifetime Cannabis Use (59.5% vs. 46.7%) • Past Year Cannabis Use (19.4% vs. 15.8%) • Lifetime Cocaine Use (15.5% vs. 9.4%)
Central East	• Moderate Psychological Distress (past 30 days) (26.8% vs. 23.6%)
South East	• Daily Drinking (10.4% vs.7.1%) • Fair/Poor Overall Health (17.7% vs. 10.1%) • Use of Antidepressant Medication (past year) (12.2% vs. 8.9%)
North Simcoe Muskoka	• Binge Drinking Weekly (10.5% vs. 6.8%) • Lifetime Cannabis Use (55.8% vs. 46.7%) • Past Year Cannabis Use (20.8% vs. 15.8%) • Drinking and Driving (11.0% vs. 5.4%)
North East	• Hazardous/Harmful Drinking (15.7% vs. 13.1%) • Current Smoking (21.4% vs. 14.1%) • Daily Smoking (16.6 % vs. 10.6%) • Lifetime Cannabis Use (50.7% vs. 46.7%) • Fair/Poor Overall Health (14.2% vs. 10.1%)
North West	• Past Year Alcohol Use (84.5% vs. 80.8%) • Cannabis Use and Driving (6.8% vs. 2.5%)

14 LHINs of Ontario



1 Erie St.Clair

2 South West

3 Waterloo Wellington

4 Hamilton Niagara Haldimand Brant

5 Central West

6 Mississauga Halton

7 Toronto Central

8 Central

9 Central East

10 South East

11 Champlain

12 North Simcoe Muskoka

13 North East

14 North West

11. SUMMARY AND DISCUSSION

The Public Health Approach towards Substance Use and Mental Health

Timely and relevant data on mental health issues and alcohol and other drug use are necessary prerequisites for effective health and social policy and programming, and for the monitoring and evaluation of established health objective targets.

Designating substance use and mental health harms, impairments and disabilities as matters of public health enables health professionals from various disciplines to collaborate on prevention efforts. Preventing harms from occurring, or minimizing the risks, is preferable to treating them.

The public health approach involves the following:

- identifying the extent of mental health concerns, alcohol and other drug use, and related impairments and disabilities among the general population;
- identifying timing and pattern during the life course;
- tracking trends in the prevalence, incidence and harms with time;
- identifying risk and protective factors;
- designing preventive programs and active health promotion programs; and
- disseminating findings to stakeholders and the general public.

Data Limitations

Before discussing our findings, we should acknowledge the limitations of this study. Although sample surveys are the most feasible means to establish and monitor substance use and mental health problems in the general population, those interpreting *CAMH Monitor* (CM) data should consider the following.

Telephone Households. The *CAMH Monitor* is based on a target population of landline and cellular telephone numbers whose subscribers reside in Ontario households. Based on the most recent *Residential Telephone Service Survey* (RTSS), Statistics Canada estimated that 21% of households had a cell-phone only and 3% used cable telephone only (Statistics Canada, 2014).[38] As well, by design, the target sample of the *CAMH Monitor* excludes several high risk groups (e.g., the homeless, adults residing in prisons, hospitals, etc.). Finally, telephone surveys often over-represent those with higher education and thus under-represent those with lower education (Trewin & Lee, 1988).

Interview Barriers. Some interviews could not be completed because respondents could not adequately converse in English, or were too ill or aged.

[38] This concern regarding coverage and potential bias was significantly reduced in 2017 when the selection was revised to a list-assisted RDD + a cell-phone sampling frame, which included the sampling of wireless cell phones and unlisted numbers.

Self-Reports. Our data are based on self-reports, which cannot be readily verified. However, reviews of self-report methods for alcohol and drug use suggest that although surveys tend to underestimate true usage, they are still regarded as the best available means to estimate such individual behaviours in the population (Harrison et al., 1993; Turner et al., 1992). Moreover, although these biases influence alcohol and drug use estimates at a single point in time, they should have less impact on estimating trends as long as under-reporting remains constant.

Repeated Cross-Sectional Survey. The *CAMH Monitor*, a repeated cross-sectional survey, can assess only specific types of change. Because we do not survey the same individuals at different times, we cannot identify *causes* of individual change or the *temporal ordering* of effects (e.g., whether unemployment causes drug use or whether drug use causes unemployment).

The findings in such a large study are numerous and complex and 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 greater emphasis on change occurring over multiple survey time points.

Despite these limitations, monitoring studies excel at identifying the extent of and change in various health behaviours and measures in the general population. Surveillance studies identify which groups of the population are at the greatest risk for impaired health measures; identify areas requiring more research; and identify trends that may have implications for future service and programming needs.

2017 Demographic Correlates

In Tables 11.1-11.3, we summarize statistically significant associations among various respondent characteristics and substance use and other health indicators. Given substantial age, sex and other social and socio-economic differences that occur in illness and health generally (D'Arcy, 1998), it should not be surprising that many of these same factors are associated with alcohol use, other drug use and mental health. As indicated in these tables, **sex, age, marital status, education** and **income** showed important associations with rates of substance use and mental health indicators.

Sex. Men were more likely than women to report use of alcohol, electronic cigarettes, cannabis, and cocaine, to report driving and substance use, lifetime traumatic brain injury, and playing videogames. Women were more likely to report use of prescription opioid pain relievers.

Age. Substance use and mental health problems often declined with age or were highest among 18 to 29 year olds. However, daily drinking, gambling problems, and poor physical health increased with age.

Weekly binge drinking, drinking hazardously or harmfully, symptoms of alcohol dependence, past year e-cigarette use, past year cannabis use, cannabis use problems, past year cocaine use, non-medical prescription opioid use, cannabis use and driving, psychological distress, suicidal ideation, use of social media and gaming, and problematic use of electronic devices, showed higher levels among young adults aged 18 to 29.

Marital status. Substance use and mental health concerns were higher among never married or previously married (divorced or widowed) respondents. Those previously married reported higher estimates of smoking, daily smoking, and psychological distress. Those never married reported higher estimates of hazardous drinking and past year non-medical use of prescription opioids.

Education. With the exception of past year drinking and texting while driving (which increased with education), the most common education-related pattern noted was that substance use or mental health concerns declined with increasing education. Rates of weekly binge drinking, cigarette smoking (current and daily), electronic cigarette use, past year cannabis use, poor health, and any use of opioids (prescription and any non-medical use) decreased with education level or were lower among those who graduated university.

Region. Compared to the provincial estimate, past year drinking was higher in the North, electronic cigarette use was higher in Toronto and in the East, and non-medical use of prescription opioids was above the provincial average in the Central West.

Household income. The general pattern showed that the rates of past year drinking, past year cannabis use and texting and driving tended to increase with increasing income or were highest among those with higher incomes. Poor mental health, frequent mental distress days, poor self-rated health, frequent physically unhealthy days, and past year gambling decreased with increasing incomes or were lowest among those with higher incomes.

Trends

Changes between 2016 and 2017 are summarized in **Table 11.4**.

2016–2017

Five indicators show evidence of total sample **increases** between the past two survey cycles. Past year **cannabis use** increased significantly between 2016 and 2017, from 15.7% to 19.4%. This increase was evident especially among women and those aged 50 and older.

There was a significant increase overall in reports of **fair or poor self-rated mental health** (from 7.0% in 2016 to 10.1% in 2017) among both men and women and among most age groups. There was also an increase in reporting **frequent mental distress days** in the past 30 days (from 7.4% in 2016 to 11.7% in 2017) especially among women.

We found also a significant increase in reporting **fair or poor self-rated health** (from 9.1% in 2016 to 12.0% in 2017) especially among men and those with lower incomes.

And finally, we found a significant increase in reporting **suicidal ideation.** The percentage reporting suicidal ideation was significantly **higher** in 2017 (4.1%) compared to 2016 (2.3%).

1996–2017

In the longer term (1996-2017), there are several findings that are worthy of attention (**Table 11.4**).

Alcohol

First, some important changes were seen in **alcohol use**. These changes involve primarily significant declines in binge drinking (defined as consuming five or more drinks on a single occasion weekly), and reporting symptoms of alcohol dependence (as defined by the AUDIT), and significant increases in daily drinking, and the average number of drinks consumed weekly.

A significant **decline** in **binge drinking** was especially evident between 2007 and 2017. Binge drinking declined from 11.2% in 2007 to 6.9% in 2017 among the total sample and, from 13.8% to 8.6% among drinkers. This decline was evident for all demographic subgroups examined. Such a decline in binge drinking has public health significance because this pattern of drinking has been strongly linked to both intentional and unintentional injury (Rehm et al., 2010).

Significant **declines** were also seen in reporting **symptoms of alcohol dependence** (from 9.4% in 1998 to 6.0% in 2017) and these declines were evident especially among men and 18 to 29 year olds.

A significant overall **increase** occurred for **daily drinking** and the **average number of drinks** consumed per week. There was a significant increase in daily drinking among drinkers, from 5.3% in 2002 to 9.0% in 2017. Significant increases were found among both male drinkers (from 7.1% in 2005 to 11.3% in 2017), and female drinkers (from a low of 2.6% in 2001 to 6.8% in 2017).

We found a significant overall **increase** in the average **number of drinks** consumed **weekly** between 1996 and 2017 (from 3.3 in 1996 to 4.9 in 2017). This increase was evident among both men and women. The number of drinks consumed among male drinkers increased from 4.8 drinks in 1996 to 6.2 drinks in 2017, and among female drinkers**,** from 1.9 drinks in 1996 to 3.6 drinks in 2017.

Tobacco

Another important change was the **decline** in **current smoking**. Although the prevalence of current cigarette smoking in 2017 (15.1%) was not significantly different from 2016 (13.5%), there was a significant **decline** in current smoking between 1996 and 2017**.**

Current **cigarette smoking** declined significantly from 26.7% in 1996 to 21.6% in 2007, and 15.1% in 2017. There were also significant declines for all sex, age, region, marital status and education subgroups.

Daily smoking declined also, by more than half, from 23.0% in 1996 to 11.0% in 2017.

Cannabis

A significant change was evident for past year **cannabis use.** Past year cannabis use **increased** steadily (more than doubled) from 8.7% in 1996 to 19.4% in 2017, and the 2017 estimate is the highest on record. This long-term increase was evident among both men and women**,** and for all region, marital status, and education subgroups.

Significant increases in cannabis use were found for all age groups, but especially among 18 to 29 year olds (from 18.3% in 1996 to 39.1% in 2017) and among those aged 50 and older (from 1.4% in 1998 to 11.4% in 2017). Between 1996 and 2017, among cannabis users, the percentage who are aged 50 years and older increased from 2% to 29%.

Other Drugs

Although past year use of **cocaine** remained low, we found a significant **increase** from 1% in 1996 to 2.5% in 2017, and this increase was evident among both men and women, and all age groups.

Another measure worthy of attention is past year use of **prescription opioid** pain relievers. Overall, there was a significant **decline** in any past year use of prescription opioids between 2010 and 2017 (from 26.6% to 21.2%).

Past year **nonmedical use** of prescription opioids displayed a significant decline, from 7.7% in 2010 to 2.8% in 2017 and this decline was evident for all demographic subgroups.

Driving

Between 1996 and 2017, the prevalence of **driving after drinking** among drivers has displayed a steady decline from 13.1% to 5.2%. The decline was seen among male drivers (from 21.2% in 1996 to 8.1% in 2017) and among young adult drivers aged 18 to 29 (from 20.1% in 1996 to 9.2% in 2017).

However, there was a small, but significant, **increase** in **driving after cannabis use** from 1.3% in 2012 to 2.6% in 2017 and this increase was seen especially among male drivers, from 1.9% in 2012 to 3.9% in 2017.

The percentage of adult drivers reporting **texting while driving** was significantly **lower** in 2017 (27.5%) compared to 2015 (36.8%), and rates were significantly lower among women and the older age groups.

Mental Health

Some significant **increases** were seen in **mental health problem** indicators.

Between 2003 and 2017, there was a significant overall **increase** in self-rated **poor/fair mental health** (from 4.7% to 10.1%). Reports of poor/fair mental health **increased** significantly among both men and women, and among most demographic groups analysed.

There was also a significant **increase** overall in reporting **frequent mental distress days** in the past 30 days, from 5.4% in 2003 to 11.7% in 2017. This increase was evident among both men and women, and among most demographic groups analysed.

Since 1997, use of **antianxiety prescription medication** among the total sample has displayed a significant **linear increase**, from 4.7% to 11.3% in 2017. There were significant increases during this period for both men and women, and all age, region, marital status, and education subgroups.

Use of **prescription antidepressants** also has significantly **increased**, from 3.9% in 1997 to 8.8% in 2017. There were significant increases during this period for both men and women, and all age, region, marital status, and education subgroups.

The percentage of respondents reporting **suicidal ideation** in the past year was significantly **higher** in 2017 (4.1%) compared to 2013 (2.2%). There were no significant changes among the demographic subgroups.

Overall Health

Overall, between 2003 and 2017, there was a significant **increase** in ratings of frequent physically **unhealthy days** in the past 30 days, from 5.9% in 2004 to 10.5% in 2017. Rates increased significantly among both men and women, and almost all age groups.

Gambling

Overall, between 2000 and 2016, all specific past year gambling activities measured in the survey (i.e., lottery, Sport Select, bingo, horse racing, casino gambling, card games, sports pools, and online gambling) have shown a significant **downward trend**.

The prevalence of **any gambling** declined significantly from 80.3% in 2000 to 69.2% in 2016. Significant subgroup declines were also evident for sex, age, region, marital status and education.

The prevalence of **casino gambling** declined significantly overall from 33.7% in 2000 to 23.4% in 2016, and **online gambling** declined from 6.6% in 2003 to 3.7% in 2016. Significant subgroup declines were also evident for most subgroups analysed.

However, the overall prevalence of **problem gambling** in 2016 (1.2%) was not significantly different from 2005 (1.9%), the first year of monitoring.

Longer-Term Trends 1977–2017

Long-term changes in substance use are particularly noteworthy in two areas.

The first area is the significant long-term trend reflecting **increases** in past year **cannabis** use and the **aging** of cannabis users. Past year cannabis use **increased** significantly, from 8.1% in 1977 to 19.4% in 2017.

In 1977, cannabis use was the domain of young adults, with only one-in-seven users aged 30 to 49 years. Current estimates, however, show that, on average, **cannabis** users in 2017 were older than their counterparts in 1977 (average age of 38.2 years vs. 25.6 years, respectively). In 1977, 82% of cannabis users were aged 18-29 compared to 42% in 2017. In contrast, the proportion of past year cannabis users aged 30 to 49 years increased significantly from 15% in 1977 to 29% in 2017, and the proportion of past year cannabis users aged 50 and older increased almost ten-fold, from 3% to 29% during the same period.

The second noteworthy area is the long-term trend reflecting changes in patterns of alcohol use. Although the percentage drinking alcohol was generally stable between 77% and 87%, there were significant changes since 1977 in **daily drinking** and weekly **binge drinking**.

In the longer term, between 1977 and 2017, **daily drinking** among drinkers **decreased** steadily until 2006. From a high of 13.4% in 1977, it decreased by about two thirds to a low of 4.1% in 1992 and remained between 5.3% and 5.9% until 2006.

But this trend has reversed in the past decade, **increasing** significantly from 5.9% in 2006 to 9.0% in 2017. This non-linear trend was especially prominent among male drinkers, whose daily drinking dropped from 19.5% in 1977 to 7.1% in 2005 and then increased to 11.3% in 2017.

Three distinct periods are evident in weekly **binge drinking** between 1977 and 2017. Binge drinking remained **stable** between 1977 and 1995 (varying between 7.0% and 8.9%). There was a significant **increase** among the total sample (from 7.0% in 1995 to 11.7% in 1996), and among past year drinkers (from 8.2% to 14.8%) and the rate of binge drinking remained at this elevated level until 2007. The increases were especially notable among men and 18 to 29 year olds. This was followed by a significant **decline** in weekly binge drinking, from 11.2% in 2007 to 6.9% in 2017. This decline during the past decade was evident for all sex, age, region, marital status, and education subgroups

Some Encouraging Findings

The following findings should be considered as encouraging.

Cigarettes: The vast majority of Ontario adults (84.9%) do not smoke cigarettes. Current cigarette smoking has significantly **declined** since 1996. Daily smoking also shows a long-term decline (from 23.0% in 1996 to 11.0% in 2017).

Alcohol: Although the majority of Ontario adults (79.5%) are past year drinkers, most do not drink excessively. The survey noted that 91% of drinkers do not binge drink weekly, 80% do not exceed recommended drinking guidelines and 84% do not exceed the AUDIT threshold for hazardous or harmful drinking.

There were also significant **declines** overall in **binge drinking** between 2007 (11.2%) and 2017 (6.9%). This decline was generally robust, occurring among all demographic subgroups, but was especially evident among men (from 17.5% in 2007 to 10.0% in 2017) and among those aged 18 to 29 (from 26.1% in 2007 to 9.2% in 2017).

Driving: Among drivers, **driving after drinking** alcohol declined by more than half, from 13.1% in 1996 to 5.2% in 2017. Moreover, this decline occurred among several subgroups, including men (whose estimate fell from 21.2% to 8.1%) and young drivers aged 18 to 29 (from 20.1% in 1996 to 9.2% in 2017). There was also a significant **decline** in the percentage of adult drivers reporting texting while driving, from 36.8% in 2015 to 27.5% in 2017. These declines occurred over a period when the province introduced several measures designed to reduce rates of driving after drinking, including increased sanctions for 'warn-range' drivers and measures to increase the use of ignition interlock devices by convicted offenders. As well, the province introduced increased penalties for distracted driving accompanied by a public information campaign in September 2015, which may have contributed to the decline in texting while driving.

Prescription Opioids: The proportion of the Ontario adult population who report nonmedical use of prescription opioid pain relievers declined from 7.7% in 2010 to 2.8% in 2017. This decline occurred during a period when provincial programs and policies to reduce nonmedical use of these substances were introduced (Fischer, Ialomiteanu, Kurdyak, Mann, & Rehm, 2015).

Gambling: Gambling remains common in the Ontario population, but the proportion reporting any gambling in the past year, as well as specifically

lottery, Sport Select, bingo, horse racing, online and casino gambling, have significantly declined since the early 2000s. However, the proportion of the population who are problem gamblers remains unchanged.

Some Public Health Concerns

There are several public health concerns – findings that point to potential public health problems that require continued monitoring – raised by these *CAMH Monitor* findings.

Cannabis: Past year use of cannabis **increased** significantly from 8.7% in 1996 to 19.4% in 2017 (about 2 million Ontario adults). The increase was seen for both men and women and among all age groups. Among 18 to 29 year olds, cannabis use increased more than two-fold, from 18.3% in 1996 to 39.1% in 2017.

Among past year cannabis users, more than half (59%) report using cannabis once a month or more often, and the percentage reporting **daily use** was 21%. Such daily use may increase the likelihood of respiratory illnesses and other health problems (Calabria et al., 2010). Moreover, the potential medical complications related to the **aging of cannabis users** and especially the increase in past year cannabis use among middle-aged and older adults is worthy of further study.

Almost one third (31%) of Ontario adults perceive that there is **no risk** or only a **slight risk** in consuming cannabis daily or almost daily. This perceived low risk from using cannabis raises concerns because it may be a leading indicator of future increases in use (Okaneku et al., 2015).

The 2017 cycle of the survey asked cannabis users about the different ways they consumed cannabis in the past year. Smoking cannabis in a joint, a waterpipe or a bong were the most common modes of use. About half of cannabis users (48%) used **cannabis edibles** (e.g., cookies, candy). There is an increased risk in consuming cannabis edibles because the dosage and potency of cannabis edible products are commonly not known, and the lag between consumption and feeling the physiological effects can lead to overconsumption and serious consequences related to cannabis toxicity (Barrus et al, 2016).

Tobacco Cigarettes: Despite the fact that the rate of cigarette smoking among Ontario adults has declined substantially over the long-term, there is still a significant proportion (15.1%) of Ontario adults that smoke cigarettes (about 1.6 million Ontario adults). Further, the consistent decline in smoking seen throughout the 2000s appears to have stagnated in recent years.

Alcohol: Alcohol remains the most commonly used drug among Ontario adults. Almost 80% reported drinking alcohol in the past year. Despite a declining trend in binge drinking, we found significant increases in the **average number of drinks** consumed weekly, and in **daily drinking** among past year drinkers, especially among **women** (from 2.6% in 2001 to 6.8% in 2017). Such an increase in daily alcohol use among women is of concern given the harmful effects of heavy alcohol use.

Prescription Opioids: In spite of a decline in use, 2.8% of the Ontario adult population (about 300,000 adults) report **nonmedical use** of prescription opioid pain relievers in 2017. These are powerful and addictive drugs that have been linked to increased use of illicit opiates and death from overdose.

Mental Health: About 25.8% (2.7 million Ontario adults) report experiencing moderate **psychological distress** in the past 30 days. We found significant **increases** in self-reports of **poor/fair mental health** from 4.7% in 2003 to 10.1% in 2017 and of **frequent mental distress days** in the past 30 days, from 5.4% in 2003 to 11.7% in 2017. Nearly one-in-eight (11.3%) used prescribed medication to treat **anxiety** (1.2 million Ontario adults) and one in eleven (8.8%) used prescribed medication to treat **depression** (930,000 adults). The percentage of Ontario adults reporting past year use of **prescribed depression** and **anxiety medication** increased significantly between 1999 and 2017 (from 3.6% to 8.8%, and from 4.5% to 11.3%, respectively). In addition, the percentage of respondents reporting **suicidal ideation** has increased from 2.2% in 2013 to 4.1% in 2017 (427,000 adults).

Driving: Motor vehicle collisions are a leading cause of preventable death and injury, and driving under the influence of alcohol, cannabis and other drugs, and driving while distracted, have been identified as major causes of these collisions (Asbridge, Mann, Cusimano, et al., 2014; Redelmeier & Tibshirani, 1997).

Driving after cannabis use displayed a small but significant linear increase from 1.5% in 2010 to 2.6% in 2017 (about 244,000 licensed drivers). In addition, in 2017, an estimated 27.5% of Ontario licensed drivers reported **texting while driving** at least once during the past 12 months (about 2.6 million drivers) and 3.5% reported texting while driving 30 times or more in the past 30 days.

Concluding Comments

In general, **alcohol** and **tobacco** cause greater harms to individuals, communities, and society than do **illicit drugs**. We can never ignore the tragedy of human suffering caused by illegal drug use; but we must put these numbers into a broader context. If public concern and health policy are to be based on the harm caused to the greatest number of individuals, then clearly, alcohol and tobacco each outweigh the harms caused by illegal drugs.

It is important also to recognize that these data were collected at a time preceding a very significant change in Canadian laws related to illegal drugs, the legalization of recreational use of cannabis in October, 2018. Legalization had been recommended by many groups, for reasons related to its relatively lower level of harm compared to both legal and illegal drugs, the social and economic costs of prohibition, and indications that controlling harmful cannabis use might be better accomplished with public health regulation than by prohibition (e.g., Crépault et al, 2016), The increase in cannabis use observed here may be related to anticipation of legalization, and continued monitoring of cannabis use and related measures will be a priority in the future.

Our findings also speak to the issue of **mental well-being** among Ontario adults. A sizeable percentage of Ontarians experience symptoms that reduce their ability to function productively in their emotional, social, and occupational worlds. We found that about one quarter of Ontario adults (26%) report moderate psychological distress, 4% report serious psychological distress**,** one-in-ten (10.1%) rated their mental health as poor, 4.1% reported contemplating suicide in the past year, and the

percentage of Ontario adults reporting past year use of prescribed antidepressants and antianxiety medication doubled over the past two decades. The *World Health Organization* (WHO, 2008, 2012) reports that depression is the leading cause of disability in the world and the leading cause of disease burden in high- and middle-income countries. In Canada, recognition of the burden of mental disorders has led to the development of the country's first mental health strategy to improve mental health (Mental Health Commission of Canada, 2012).

The *CAMH Monitor* is an exceptional vehicle to monitor matters of addiction and mental health in Ontario. Timely and relevant data on alcohol and other drug use and mental health are prerequisites for effective health and social policy and prevention programming. Monitoring such health-risk behaviours and measures provides valuable information about determinants, trends, the co-occurrences of these risk behaviours, and as well provincial and cross-national differences. Such data also enable us to evaluate the impact of changes in policies, educational programs and legislation, and whether health targets are achieved.

Table 11.1 Summary Findings: Statistically Significant Associations for ***Past Year Substance Use Indicators*** by Demographic Characteristics, Ontarians Aged 18+, CAMH Monitor, 2017

	1	2	3	4	5	6	7	8	9	10	11	12	13
	Alcohol							Tobacco (cigarettes)			Cannabis		
	Past Year Drinking	Daily Drinking	Avg No. Drinks Weekly†	Exceeding Drinking Guidelines[1]	Weekly Binge Drinking	Hazardous Drinking (AUDIT 8+)	Alcohol Dependence (AUDIT)	Current Smoking	Daily Smoking	Electronic Cigarettes	Cannabis	Cannabis Problems (ASSIST-CIS)	Cannabis Medical Use
Sex	Men higher	Men higher	Men higher	Men higher	Men higher	Men higher	Men higher	—	—	Men higher	Men higher	Men higher	Men higher
Age	—	Increase 65+ higher	Increase	—	Decrease 30-39 highest	Decrease 18-29 highest	Decrease 18-29 highest	65+ lowest	65+ lowest	Decrease 18-29 highest	Decrease 18-29 highest	18-29 highest	18-29 highest
Marital Status	—	—	—	—	—	Never married highest	—	Prev. married higher	Prev. married higher	—	—	—	—
Region	North higher	—	—	—	—	—	—	—	—	Toronto and East higher	—	—	—
Education	Increase Univ degree highest	—	—	Increase with higher education	Decrease Univ degree lowest	< HS lowest	—	Decrease with higher education	Decrease with higher education	Decrease Univ degree lowest	Decrease Univ degree lowest	—	—
Household Income	Increase $80,000 highest	—	—	—	—	—	—	—	—	—	Higher among lowest and highest incomes	—	—

Notes: [1] data available for 2016 only; — No significant difference; † Unadjusted associations; all other associations are adjusted for sex, age, region, marital status, education, and income.
Legend:
Past Year Drinking (percentage drinking alcohol in past year); **Daily Drinking** (percentage drinking daily**)**; **Avg. No. Drinks Weekly** (average number of drinks consumed weekly among drinkers); **Exceeding Drinking Guidelines** (percentage exceeding a weekly consumption of 16 drinks or more for men or 11 or more drinks for women, or exceeding a daily consumption of two drinks for women or three drinks for men); **Weekly Binge Drinking** (percentage consuming five or more drinks on a single occasion weekly); **Hazardous Drinking** (percentage reporting hazardous or harmful drinking based on the AUDIT 8+); **Alcohol Dependence** (percentage reporting one or more (of 3) AUDIT dependence indicators); **Current Smoking** (percentage currently smoking cigarettes); **Daily Smoking** (percentage smoking cigarettes daily); **Cannabis** (percentage reporting using cannabis past year); **Cannabis problems** (percentage scoring 4+ on the WHO-ASSIST-CIS); **Cannabis Medical Use** (percentage reporting using cannabis for medical purposes past year).

Table 11.2 Summary Findings: Statistically Significant Associations for ***Past Year Substance Use and Mental Health Indicators*** by Demographic Characteristics, Ontarians Aged 18+, CAMH Monitor, 2017

	14	15	16	17	18	19	20	21	22	23	24	25	26
	Other Drugs				Impaired and Distracted Driving			Mental Health					
	Cocaine (Lifetime)	Cocaine	Any Opioid Pain Relievers	Non-med Opioid Pain Relievers	Drinking & Driving	Cannabis & Driving	Texting and Driving	Psychological Distress K6/5+	Poor Mental Health	Frequent mental distress days	Anxiety Medication	Depression Medication	Suicidal Ideation
Sex	Men higher	—	Women higher	—	Men higher	Men higher	Men higher	—	—	—	—	—	—
Age	—	18-29 highest	—	Decrease 18-29 highest	Decrease 65+ lowest	18-29 highest	65+ lowest	Decrease 18-29 highest	65+ lowest	65+ lowest	—	—	18-34 highest
Marital Status	—	—	—	Never married highest	—	—	—	Prev. married higher	—	—	—	—	—
Region	—	—	—	C-W highest	—	—	—	—	—	—	—	—	—
Education	—	—	Univ degree lowest	Univ degree lowest	—	—	Increase Univ degree highest	—	Univ degree lowest	—	—	—	—
Household Income	—	—	—	Increase $80,000 higher	—	—	Increase $80,000 highest	—	Decrease $80,000 lowest	Decrease $80,000 lowest	—	—	—

Notes: — No significant difference; † Unadjusted associations; all other associations are adjusted for sex, age, region, marital status, education, and income.
Legend:
Cocaine Life (percentage reporting using cocaine in lifetime); **Cocaine 12m** (percentage reporting using cocaine past year); **Any Opioid Pain Relievers** (percentage reporting using prescription opioid pain relievers for medical or nonmedical purposes); **Nonmedical Opioid Pain Relievers** (percentage reporting using prescription opioid pain relievers for nonmedical purposes); **Drinking & Driving** (percentage drinking alcohol and driving among drivers); **Cannabis & Driving** (percentage driving after using cannabis among drivers);); **Texting & Driving** (percentage texting while driving among drivers); **Psychological Distress** (moderate-to-serious psychological distress - percent scoring 5+ on the K6 screener); **Poor Mental Health** (percentage reporting fair or poor mental health in general); **Frequent Mental Distress Days** (percent reporting 14 or more mental distress days during the past 30 days); **Anxiety Medication** (percentage using prescription antianxiety medication past year); **Depression Medication** (percentage using prescription antidepressant medication past year); **Suicidal Ideation (**percentage reporting seriously contemplating suicide in the past year**).**

Table 11.3 Summary Findings: Statistically Significant Associations for ***Past Year Health and Gambling Indicators*** by Demographic Characteristics, Ontarians Aged 18+, CAMH Monitor, 2016/2017

	27	28	29	30	31	32	33	34	35	36
	Physical/Overall Health			Gambling, Gaming and Technology Use [1]						
	Poor Health	Frequent Physically Unhealthy Days	Traumatic Brain Injury Lifetime	Any Gambling	Casino Gambling	Online Gambling	Problem Gambling PGSI/3+	Avg. No. Hours Using Email/ Social Media Weekly†	Avg. No. Hours Playing Video Games Weekly†	Problematic Use of Electronic Devices
Sex	—	—	Men higher	—	—	—	—	—	Men higher	—
Age	Increase 50+ highest	—	—	—	18-29 and 30-39 higher	—	Increase 55+ highest	Decrease 18-29 higher	Decrease 18-29 higher	Decrease 18-29 highest
Marital Status	—	—	—	—	—	—	—	—	—	—
Region	—	—	—	—	—	—	—	—	—	—
Education	Decrease Univ degree lower	—	—	—	—	—	—	—	—	—
Household Income	Decrease $80,000 lower	Decrease $80,000 lower	—	Decrease $80,000 lower	—	—	—	—	—	—

Notes: [1] data available for **2016** only; — No significant difference; † Unadjusted associations; all other associations are adjusted for sex, age, region, marital status, education, and income.
Legend:
Poor Health (percentage reporting fair or poor health in general); **Frequent Physically Unhealthy Days** (percent reporting 14 or more physically unhealthy days during the past 30 days); **Traumatic Brain Injury- lifetime** (percentage reporting at least one lifetime head injury that resulted in being unconscious for at least 5 minutes or resulted in an overnight hospital stay); **Any gambling (**percentage participating in at least one gambling activity in the past 12 months); **Casino gambling** (percentage having participated in at least one gambling activity in a casino in the past 12 months); **Online gambling** (percentage having participated in at least one gambling activity over the internet in the past 12 months); **Problem gambling** (percent scoring 3 or more on the Problem Gambling Severity Index); **Average no. of hours spent weekly using electronic devices** (based on the product of the frequency of using these devices and the number of hours spent on a typical day when using these devices for email/social media or for video games); **Problematic use of electronic devices** (percentage reporting 3 or more symptoms of problematic use).

Table 11.4 Summary of ***Changes in Substance Use and Health Indicators***, CAMH Monitor, **1977–2017**

Indicator	2016 vs. 2017	Trends: 1996–2017	Trends: 1977–2017
ALCOHOL			
Past year drinking	• **Stable** among total sample (79.7% vs. 79.5%). • Stable for all subgroups.	• Overall **stable**, with a low in 1998 at 77.1% and a high of 81.5% in 2007. • Significant **non-linear decline** among 18 to 29 year olds (from 89.5% in 2007 to 79.8% in 2017), and a significant increase among those aged 50 to 64 (from 76.0% in 1996 to 81.2% in 2017) and among those aged 65 years and older (from 58.8% in 1997 to 73.1% in 2016). • Significant **non-linear variations** among married, previously married, and never married respondents, and those with lower education and completed high-school.	• Significant linear and non-linear trends; with peaks in the mid-1980s, the early 1990s and again in 2014.
Daily drinking (among past year drinkers)	• **Stable** among total sample (9.2% vs. 9.0%). • Stable for all subgroups.	• Overall significant **increase** in daily drinking among drinkers, from 5.3% in 2002 to 9.0% in 2017. • Significant **increase** in daily drinking among drinking men (from a low of 7.1% in 2005 to 11.3% in 2017), drinking women (from a low of 2.6% in 2001 to 6.8% in 2017), and a non-linear upward trend among those aged 65 and older (from a low of 13.2% in 2003 to 20.8% in 2016). • Significant **increases** for all regions, for married and previously married respondents, and for all education sub-groups.	• Significant linear and non-linear trends • Overall **decline** from 13.4% in 1977 to 7.3% in 2005; • Trend has reversed in the past ten years **increasing** significantly from 5.9% in 2006 to 9.0% in 2017, and this increase was evident among almost all demographic subgroups.
Average number of drinks per week (among past year drinkers)	• **Stable** among total sample (4.5 vs. 4.9) • No significant subgroup changes.	• Overall significant **increase** (from 3.3 in 1996 to 4.9 in 2017). • Significant **increases** among drinking men (from 4.8 in 1997 to 6.2 in 2017), among drinking **women** (from 1.9 in 1996 to 3.6 in 2017), and for all demographic factors examined (all age groups, all regions, all marital status and all education subgroups).	• Not available.
Percent exceeding the low-risk drinking guidelines (LRDG)	• Available for **2014-2016** only • **Stable** among total sample (14.2% vs. 16.4%). • Stable for all subgroups.	• Available **2003 – 2016** only • Overall significant **linear decline** from 21.5% in 2005 to 16.4% in 2016 • Significant non-linear declining trends were found among **women**, among those aged 18 to 29, among respondents living in the Central East, in the West and in the East, among those never married, and among those less than high school education and those with university education.	• Not available.

Indicator	2016 vs. 2017	Trends: 1996–2017	Trends: 1977–2017
Weekly binge drinking (5+ drinks/ occasion weekly)	• **Stable** among total sample (6.2% vs.6.9%). • Stable for all subgroups.	• Overall **stable** between 1996 and 2006, varying between 10.5% and 12.7% among the total sample, and between 13.1% and 16.5% among past year drinkers • Significant **decline** between 2007 and 2017, from 11.2% in 2007 to 6.9% in 2017 for the total sample and from 13.8% to 8.6% among drinkers. • Significant subgroup **declines** for **all demographic factors** examined (sex, age, region, marital status, and education).	• Significant linear and non-linear trends. • **Three distinct periods** are evident. Binge drinking remained **stable** between 1977 and 1995, and then **increased** significantly in 1996 (from 7.0% to 11.7%) and remained at this elevated level until 2007. The **increases** were especially notable among **men** (from 10.7% in 1995 to 20.7% in 2001), and **18 to 29** year olds (from 10.6% in 1995 to 26.1% in 2007). • Binge drinking started **declining** in 2008 and significant **declines** were evident for sex, age, region, marital status, and education.
Hazardous/Harmful drinking (AUDIT 8+)	• **Stable** among total sample (11.6% vs. 12.5%). • Stable for most subgroups. • Significant subgroup **increases** only among those aged 50 to 64 (from 10.5% to 15.1%).	• Available 1998–2017. • Overall **stable:** lowest in 2005 (10.4%) and highest in 2007 (15.6%), but has subsequently stabilized. • Significant **decline** among **18 to 29 year olds** from 31.8% in 2010 to 18.4% in 2017. Significant subgroup declines were found for the West and North regions and for never married respondents.	• Not available.
Symptoms of alcohol dependence (AUDIT)	• **Stable** among total sample (6.4% vs. 6.0%). • Stable for all subgroups.	• Available 1998–2017. • Overall significant **non-linear change:** declined from 9.4% in 1998 to 6.0% in 2017. • Significant non-linear **declines** were found among men, those aged 18 to 29, respondents from the Central East and Central West, those never married and those with completed high school education.	• Not available.
TOBACCO – CIGARETTES			
Current smoking	• **Stable** among total sample (13.5% vs. 15.1%). • Stable for all subgroups.	• Overall significant steady linear **decline** from 26.7% in 1996 to 21.6% in 2007 and 15.1% in 2017. • Significant **declines** for **men** and **women**, and all **age**, **regions**, **marital status** and **education** subgroups.	• Not available.
Electronic Cigarettes	• **Stable** among total sample (9.6% vs. 8.5%). • Stable for all subgroups.	• Available 2013–2017. • Overall **stable** between 2013 and 2017. • Significant **declines** among women, among those aged 40 to 49 and those aged 50 and older, and among respondents from the West and Central West regions	• Not available.

Indicator	2016 vs. 2017	Trends: 1996–2017	Trends: 1977–2017
CANNABIS AND OTHER DRUGS			
CANNABIS **Past year use**	• **Overall significant increase** in cannabis use (15.7% vs. 19.4%). • Significant **increases** among **women** (9.8% vs. 13.5%), among those **aged 50** years and older (11.4% vs. 8.9%), among Toronto and East residents, and among those with university degrees.	• Overall significant **increase** in cannabis use (more than double), from 8.7% in 1996 to 19.4% in 2017, and the 2017 estimate is the **highest** on record. • Significant **increases** among **all age groups** but especially among 18 to 29 year olds from 18.3% to 39.1%, and among those aged 50 and older, from 1.4% in 1998 to 11.4% in 2017 (the 2017 estimate is the **highest** on record for this age group). • Significant **increases** also occurred for both **men** and **women**, and among all **region**, **marital status** and **education** subgroups.	• Overall significant **increase** from 8.1% in 1977 to 19.4% in 2015. • Significant **increases** over the long-term among **men** (from 9.1% in 1992 to 25.8% in 2017), **women** (from 4.5% in 1977 to 13.6% in 2017) and among **all age groups**. • Significant **aging of cannabis users** - in 1977, 82% of past year cannabis users were aged 18 to 29 versus 42% in 2017; the proportion of cannabis users aged 30 to 49 increased from 15% to 29%, and the proportion aged 50 and older increased almost 10-fold from 3% to 29% during the same period.
COCAINE **Past year use**	• **Stable** among total sample (2.2% vs. 2.5%). • No subgroup changes.	• Overall significant **increase** from 1.0% in 1996 to 2.5% in 2017. • Significant **increase** among both men and women and all age groups.	• Not available.
PRESCRIPTION OPIOIDS **Any past year use**	• **Stable** among total sample (22.9% vs. 21.2%). • No subgroup changes.	• Available 2010–2017. • Overall **significant decline** from 26.6% in 2010 to 21.2% in 2017. • Significant **declines** among those aged 40 to 49, those aged 50 years or older, in Toronto, the Central East and the North regions, among those who were married, and respondents with completed high school and university degrees.	• Not available.
Any nonmedical past year use	• Overall **stable** among total sample (3.5% vs. 2.8%). • No subgroup changes.	• Available 2010–2017. • Overall **declined** significantly from 7.7% in 2010 to 2.8% in 2017. • Significant **declines** among all demographic subgroups.	• Not available.

Indicator	2016 vs. 2017	Trends: 1996–2017	Trends: 1977–2017
IMPAIRED AND DISTRACTED DRIVING			
Driving after drinking (past year - among drivers)	• **Stable** among total sample (6.0% vs. 5.2%) • Stable for all subgroups.	• Overall significant linear **decline** from 13.1% in 1996 to 5.2% in 2017. • Significant **declines** for both **men** and **women** and all age groups. There were significant declines especially among **male drivers**, from 21.2% in 1996 to 8.1% in 2017 and among young adult drivers **aged 18** to **29**, from 20.1% in 1996 to 9.2% in 2017. • Significant **declines** among **all regions**, all marital status, and all education subgroups.	• Not available.
Driving after using cannabis (past year - among drivers)	• **Stable** among total sample (2.9% vs. 2.6%). • Stable for all subgroups.	• Available 2002 to 2017. • Overall significant **linear increase** from 1.5% in 2010 to 2.6% in 2017. • Significant linear **increases** were evident especially among **men**, from 1.9% in 2012 to 3.9% in 2017.	• Not available.
Texting while driving (past year - among drivers)	• **Stable** among total sample (26.3% vs. 27.5%). • Significant **declines** among the older age groups.	• Available 2015 to 2017. • Overall significant **decline** from 36.8% in 2015 to 27.5% in 2017. • Significant **declines** among women, among respondents aged 30 to 39, those aged 50 to 64 and aged 65 and older, among respondents living in Central East, West, and North regions, among those married and previously married and among those with lower education.	• Not available.
MENTAL HEALTH			
Moderate-to-Serious Psychological Distress (K6 5+) (past year)	• **Stable** among total sample (22.3% vs 25.8%). • Significant **increases** among respondents from the Central East and West regions.	• Available 2015 to 2017. • Overall **stable** and for most subgroups. Significant **increases** among respondents from the West region.	• Not available.
Poor self-rated mental health (past year)	• Significant **increase** among total sample (7.0% vs. 10.1%). • Significant **increases** among both men and women, among respondents aged 30 to 39, those aged 40 to 49, those aged 50 to 64, among respondents living in the West, those married and those with the highest education.	• Available 2003 to 2017. • Significant **increase** overall, from 4.7% in 2003 to10.1% in 2017. • Significant **increases** among both **men** and **women**, among most age groups, most regions, among those married and those never married and among all education subgroups.	• Not available.

Indicator	2016 vs. 2017	Trends: 1996–2017	Trends: 1977–2017
Frequent mental distress days (past 30 days)	• Significant **increase** among total sample (7.4% vs. 11.7%). • Significant **increases** among women (from 7.5% to 13.3%), for those aged 40-49 (from 6.0% to 14.7%), for married respondents (from 5.6% to 8.9%) and for those with lower education (from 9.3% to 14.0%).	• Available 2003 to 2017. • Significant **increase** overall, from 5.4% in 2003 to 11.7% in 2017. • Significant **increases** among both **men** and **women**, among most age groups, most regions, among all marital status and all education subgroups.	• Not available.
Antianxiety medication (past year)	• **Stable** among total sample (9.5% vs. 11.3%). • Stable for all subgroups.	• Available 1997-2017. • Significant overall linear **increase**, from 4.7% in 1997 to 11.3% in 2017. • Significant **increases** among both men and women, all age, region, marital status, and education subgroups.	• Not available.
Antidepressant medication (past year)	• **Stable** among total sample (7.7% vs. 8.8%). • Stable for all subgroups.	• Available 1997-2017. • Significant overall linear **increase**, from 3.9% in 1997 to 8.8% in 2017. • Significant **increases** among both men and women, all age, region, marital status, and education subgroups.	• Not available.
Suicidal Ideation (past year)	• Significant **increase** among total sample (2.3% vs. 4.1%).	• Available 2013 to 2017. • Significant overall **increase**, from 2.2% in 2013 to 4.1% in 2017.	• Not available.
PHYSICAL AND OVERALL HEALTH			
Fair or poor self-rated health (past year)	• Significant **increase** among total sample (9.1% vs. 12.0%). • Significant **increases** among men, among those aged 40 to 49, among respondents living in Central East, those previously married and those with the lowest incomes.	• Available 2003 to 2017. • Overall **stable** (varying from 10.2% in 2003 to 12.0% in 2017). • Stable for all demographic subgroups.	• Not available.
Frequent physically unhealthy days (past 30 days)	• **Stable** among total sample (8.8% vs. 10.5%). • Stable for all subgroups.	• Available 2003 to 2017. • Significant **increase** overall from 5.9% in 2004 to 10.5% in 2017. • Significant **increases** for both men and women, almost all age groups, most regions, those married and those never married and among those with higher education.	• Not available.
Traumatic Brain Injury (TBI) (lifetime)	• **Stable** among total sample (14.2% vs. 15.1%); stable for all subgroups.	• Available 2011 to 2017. • Overall **stable**; stable for all demographic subgroups.	• Not available.

Indicator	2016 vs. 2017	Trends: 1996–2017	Trends: 1977–2017
GAMBLING			
Any gambling (past year)	• Not available.	• Available 2000-2005 and 2015-2016. • Overall significant linear **decline** from 80.3% in 2000 to 69.2% in 2016. Significant subgroup declines were also evident for sex, age, region, marital status and education.	• Not available.
Any casino gambling (past year)	• Not available.	• Available 2000-2005 and 2015-2016. • Overall significant linear **decline** from 33.7% in 2000 to 23.4% in 2016. Significant subgroup declines were also evident for most subgroups analysed (sex, age, region, marital status and education).	• Not available.
Any online gambling (past year)	• Not available.	• Available 2000-2005 and 2015-2016. • Overall significant linear **decline** from 6.6% in 2003 to 3.7% in 2016. Significant non-linear **declines** for both men and women, among 18 to 29 year olds and those aged 65 and older and all marital status subgroups.	• Not available.
Problem gambling (past year)	• Not available.	• Available 2005 and 2015-2016. • Overall **stable** (varying from 1.9% in 2005 to1.2% in 2016).	• Not available.

Appendix A

Sample Design

Table A-1:
CAMH Monitor 2017
Regional Stratification of Ontario's Area Codes for the *Landline/List-assisted Sample*

Region	County	Area Code
Toronto	City of Toronto	416, 647
Central West	Halton; Hamilton-Wentworth; Peel; Waterloo; Wellington; Dufferin; Niagara; Brant; Haldimand-Norfolk	519, 905, 289, 226
Central East	Simcoe; York; Haliburton; Peterborough; Kawartha Lakes; Northumberland; Durham	705, 905, 289
West	Kent-Chatham; Huron; Perth; Elgin; Oxford; Middlesex; Grey; Bruce; Lambton; Essex	519, 226
East	Stormont, Dundas and Glengarry; Prescott-Russell; Ottawa-Carleton; Renfrew; Lanark; Leeds-Grenville; Hastings; Prince Edward; Frontenac; Lennox and Addington	613, 343
North	Kenora; Rainy River; Thunder Bay; Muskoka; Parry Sound; Nipissing; Timiskaming; Algoma; Manitoulin; Sudbury RM; Sudbury TD; Cochrane	705, 807

Note: Over the years area codes were overlaid: 647 with 416; 289 with 905; 226 with 519; and 343 with 613.

Table A-2:
CAMH Monitor 2017
Regional Stratification of Ontario's Area Codes for the *Cell-Phone Sample*

Region	County	Area Code
Toronto	City of Toronto	226, 416, 519, 613, 647, 705, 905
Central West	Halton; Hamilton-Wentworth; Peel; Waterloo; Wellington; Dufferin; Niagara; Brant; Haldimand-Norfolk	289, 226, 416, 519, 647, 905
Central East	Simcoe; York; Haliburton; Peterborough; Kawartha Lakes; Northumberland; Durham	289, 416, 613, 647, 705, 905
West	Kent-Chatham; Huron; Perth; Elgin; Oxford; Middlesex; Grey; Bruce; Lambton; Essex	519, 226
East	Stormont, Dundas and Glengarry; Prescott-Russell; Ottawa-Carleton; Renfrew; Lanark; Leeds-Grenville; Hastings; Prince Edward; Frontenac; Lennox and Addington	289, 613, 519, 343
North	Kenora; Rainy River; Thunder Bay; Muskoka; Parry Sound; Nipissing; Timiskaming; Algoma; Manitoulin; Sudbury RM; Sudbury TD; Cochrane	226, 289, 613, 647, 705, 807

Table A-3a: Number of Interviews by Sex, Age, and Region of Respondent, 1977–2000

	1977	1982	1984	1987	1989	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
(N=)	(1059)	(1040)	(1051)	(1084)	(1101)	(1047)	(1058)	(1034)	(2022)	(994)	(2721)	(2776)	(2509)	(2436)	(2406)
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
	(N)	(N)	(N)	(N)	(N)	(N)	(N)	(N)	(N)	(N)	(N)	(N)	(N)	(N)	(N)
Sex															
Male	52.2	50	48.5	48.5	48.4	49.0	46.7	48.2	46.8	49.7	47.0	47.4	47.5	48.0	47.5
	(529)	(517)	(524)	(539)	(551)	(495)	(490)	(481)	(1092)	(477)	(1206)	(1260)	(1088)	(1061)	(1052)
Female	47.8	50	51.5	51.5	51.6	51.0	53.3	51.8	53.2	50.3	53.0	52.6	52.5	52.0	52.5
	(529)	(523)	(527)	(545)	(550)	(552)	(568)	(553)	(930)	(517)	(1515)	(1516)	(1421)	(1375)	(1354)
Age															
18-29	30.0	31.9	29.6	29.6	28.0	29.5	29.6	26.8	26.7	26.9	24.3	26.1	23.1	21.7	23.3
	(296)	(270)	(274)	(238)	(245)	(267)	(272)	(241)	(472)	(240)	(533)	(560)	(457)	(427)	(458)
30-39	21.7	23.2	20.4	22.5	23.2	24.4	25.1	25.8	26.1	23.3	24.0	23.2	21.7	22.1	21.4
	(222)	(253)	(248)	(283)	(290)	(264)	(283)	(280)	(541)	(240)	(685)	(654)	(580)	(567)	(538)
40-49	17.1	13.2	15.7	13.6	14.5	20.7	20.0	20.3	21.2	22.5	20.7	20.5	21.9	19.4	20.5
	(181)	(143)	(190)	(171)	(181)	(215)	(207)	(208)	(434)	(212)	(562)	(571)	(567)	(505)	(507)
50-64	18.3	20.1	21.5	19.2	19.3	14.5	14.7	16.4	15.6	17.1	17.1	18.4	16.8	18.7	18.3
	(197)	(213)	(205)	(213)	(211)	(150)	(153)	(162)	(320)	(168)	(483)	(508)	(448)	(470)	(466)
65+	12.9	11.7	12.8	15.1	14.9	11.0	10.5	10.7	10.4	10.3	11.9	11.8	16.4	16.1	16.5
	(155)	(125)	(122)	(168)	(163)	(134)	(129)	(132)	(237)	(123)	(406)	(407)	(376)	(420)	(378)
Region															
Toronto	30.6	32.3	31.9	32.8	35.1	24.9	22.5	22.0	21.3	22.5	23.2	20.7	22.9	23.5	23.8
	(314)	(329)	(331)	(351)	(383)	(237)	(239)	(214)	(435)	(230)	(427)	(390)	(421)	(410)	(424)
Non-Toronto	69.4	67.7	68.1	67.2	64.9	75.1	77.5	78.0	78.7	77.5	76.8	79.3	77.1	76.5	76.2
	(745)	(711)	(720)	(733)	(718)	(705)	(772)	(785)	(1519)	(740)	(2294)	(2386)	(2088)	(2026)	(1982)

Notes: % based on weighted data; (N) based on number of interviews (unweighted)
Source: The CAMH Monitor, Centre for Addiction and Mental Health

Table A-3b: Number of Interviews by Sex, Age, and Region of Respondent, 2001–2017

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
(N=)	(2627)	(2421)	(2411)	(2611)	(2445)	(2016)	(2005)	(2024)	(2037)	(3030)	(3039)	(3030)	(3021)	(3043)	(5013)	(3042)	(2813)
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
	(N)	(N)	(N)	(N)	(N)	(N)	(N)	(N)	(N)	(N)	(N)	(N)	(N)	(N)	(N)	(N)	(N)
Sex																	
Male	48.5	48.6	48.5	48.3	48.2	48.6	48.5	48.2	48.5	48.5	48.2	47.8	48.1	48.1	48.1	48.0	48.2
	(1216)	(1100)	(1062)	(1122)	(1037)	(884)	(840)	(842)	(877)	(1303)	(1212)	(1232)	(1232)	(1232)	(1912)	(1182)	(1150)
Female	51.5	51.4	51.5	51.7	51.8	51.4	51.5	51.8	51.5	51.5	51.8	52.2	51.9	51.9	51.9	52.0	51.8
	(1411)	(1321)	(1349)	(1489)	(1408)	(1132)	(1165)	(1182)	(1160)	(1727)	(1827)	(1798)	(1789)	(1811)	(3101)	(1860)	(1662)
Age																	
18-29	20.9	21.2	22.4	20.0	20.8	20.9	19.5	19.7	18.9	19.6	19.7	17.6	17.1	17.4	19.3	19.0	20.8
	(473)	(426)	(427)	(391)	(354)	(264)	(258)	(200)	(198)	(311)	(267)	(234)	(182)	(190)	(410)	(217)	(283)
30-39	19.8	22.4	19.0	21.3	20.3	20.8	19.2	19.2	18.8	18.3	19.0	17.3	16.2	16.6	15.9	15.3	12.0
	(547)	(523)	(438)	(463)	(453)	(338)	(315)	(279)	(289)	(372)	(396)	(394)	(303)	(293)	(482)	(241)	(199)
40-49	21.7	20.6	23.3	21.8	22.3	20.7	21.0	21.4	21.9	21.3	20.0	19.3	20.4	19.3	18.1	18.5	16.6
	(597)	(513)	(575)	(552)	(569)	(421)	(402)	(415)	(426)	(600)	(551)	(533)	(556)	(482)	(782)	(454)	(366)
50-64	19.1	19.4	18.9	20.5	20.2	21.3	23.7	23.0	23.9	24.2	24.7	27.4	27.9	28.2	28.3	28.6	29.6
	(531)	(518)	(521)	(651)	(570)	(561)	(551)	(595)	(608)	(976)	(923)	(956)	(1015)	(996)	(1700)	(1032)	(843)
65+	15.9	16.4	16.3	16.3	16.4	16.4	16.6	16.6	16.6	16.6	16.6	18.5	18.5	18.5	18.5	18.5	20.9
	(412)	(384)	(396)	(494)	(436)	(397)	(417)	(462)	(461)	(709)	(814)	(853)	(909)	(1014)	(1597)	(1086)	(1110)
Region																	
Toronto	24.5	22.4	23.9	25.2	21.6	21.4	22.2	22.0	21.5	22.1	21.2	21.0	20.1	21.2	22.7	22.0	22.8
	(417)	(407)	(411)	(390)	(396)	(347)	(317)	(352)	(327)	(510)	(503)	(501)	(503)	(503)	(833)	(515)	(394)
Non-Toronto	75.5	77.6	76.1	74.8	78.4	78.6	77.8	78.0	78.5	77.9	78.8	79.0	79.9	78.8	77.3	78.0	77.3
	(2210)	(2014)	(2000)	(2221)	(2049)	(1669)	(1688)	(1672)	(1710)	(2520)	(2536)	(2529)	(2518)	(2540)	(4180)	(2527	(2418)

Notes: % based on weighted data; (N) based on number of interviews (unweighted)
Source: The CAMH Monitor, Centre for Addiction and Mental Health

REFERENCES

Adlaf, E. M., & Ialomiteanu, A. (2001a). *The 1999 CAMH Monitor Substance Use and Mental Health Indicators Among Ontario Adults 1977-1999 (CAMH Research Document Series No. 6).* Toronto: Centre for Addiction and Mental Health.

Adlaf, E. M., & Ialomiteanu, A. (2001b). *CAMH Monitor eReport: Addiction and Mental Health Indicators Among Ontario Adults 1977-2000 (CAMH Research Document Series No. 10).* Toronto: Centre for Addiction and Mental Health.

Adlaf, E. M., & Ialomiteanu, A. (2002a). *CAMH Monitor 2001: Technical Guide (electronic document)* Toronto: Centre for Addiction and Mental Health.

Adlaf, E. M., & Ialomiteanu, A. (2002b). *CAMH Monitor eReport: Addiction and Mental Health Indicators Among Ontario Adults in 2001, and Changes Since 1977 (CAMH Research Document Series No. 12)* Toronto: Centre for Addiction and Mental Health.

Adlaf, E. M., Ialomiteanu, A., & Paglia, A. (2000). *The 1999 CAMH Monitor: Technical Guide*. Toronto: Centre for Addiction and Mental Health.

Adlaf, E. M., Ialomiteanu, A., & Paglia, A. (2001). *The CAMH Monitor 2000: Technical Guide (electronic document)*. Toronto: Centre for Addiction and Mental Health.

Adlaf, E. M., Ialomiteanu, A. R., & Rehm, J. (2008). *CAMH Monitor eReport: Addiction & Mental Health Indicators Among Ontario Adults, 1977-2005 (CAMH Research Document Series No. 24).* Toronto, ON: Centre for Addiction & Mental Health.

Adlaf, E. M., Ivis, F., Bondy, S., Rehm, J., Room, R., & Walsh, G. (1997). *The Ontario Drug Monitor 1996: Technical Guide*. Toronto: Addiction Research Foundation.

Adlaf, E. M., Ivis, F., & Ialomiteanu, A. (1998). *Alcohol, tobacco and Cannabis Use Among Ontario Adults in 1997 and Changes Since 1977: Epidemiological Findings from the Ontario Drug Monitor*. Toronto: Centre for Addiction and Mental Health.

Adlaf, E. M., Ivis, F., Ialomiteanu, A., Walsh, G., & Bondy, S. (1997). *Alcohol, Tobacco and Illicit Drug Use Among Ontario Adults: 1977-1996: The Ontario Drug Monitor, 1996*. Toronto: Addiction Research Foundation.]

Adlaf, E. M., Ivis, F. J., Ialomiteanu, A., Bondy, S., Rehm, J., Room, R., et al. (1998). *The Ontario Drug Monitor 1997: Technical Guide*. Toronto: Addiction Research Foundation.

Adlaf, E. M., Ivis, F. J., & Smart, R. G. (1994). *Alcohol and Other Drug Use Among Ontario Adults in 1994 and Changes Since 1977*. Toronto: Addiction Research Foundation.

Adlaf, E. M., Paglia, A., & Ialomiteanu, A. (1999). *Ontario Drug Monitor 1998: Alcohol, Tobacco and Illicit Drug Use, 1977-1998*. Toronto: Centre for Addiction and Mental Health.

Adlaf, E. M., Paglia, A., Ivis, F., & Ialomiteanu, A. (1999). *Ontario Drug Monitor 1998: Technical Guide*. Toronto: Centre for Addiction and Mental Health.

Adlaf, E. M., Paglia, A., Ivis, F. J., & Ialomiteanu, A. (2000). Increases in non-medical drug use among adolescent students: Highlights from the 1999 Ontario Student Drug Use Survey. *Canadian Medical Association Journal, 162*(12), 1677-1680.

Adlaf, E. M., & Smart, R. G. (1989). *The Ontario Adult Alcohol and Other Drug Use Survey 1977-1989*. Toronto: Addiction Research Foundation.

Adlaf, E. M., Smart, R. G., & Canale, M. D. (1991). *Drug Use Among Ontario Adults, 1977-1991*. Toronto: Addiction Research Foundation.

Alexander, C. H. (2002). Still Rolling: Leslie Kish's Rolling Samples and the American Community Survey. *Survey Methodology 28*(1), 35-41.

Anglin, L. (1995). *The Ontario Experience of Alcohol and Tobacco: New Focus on Accessibility, Violence and Mandatory Treatment*. Toronto: Addiction Research Foundation.

Asbridge, M., Mann, R., Cusimano, M. D., Trayling, C., Roerecke, M., TallonA, J. M., . . . Rehm, J. (2014). Cannabis and traffic collision risk: findings from a case-crossover study of injured drivers presenting to emergency departments. *Int J Public Health, 59*, 395. doi: 10.1007/s00038-013-0512-z

Ashley, M., Ferrence, R., Room, R., Rankin, J., & Single, E. (1994). Moderate drinking and health: Report of an international symposium. *CMAJ*(151), 809-828.

Babor, T. F., Higgins-Biddle, J. C., Saunders, J. B., & Monteiro, M. G. (2001). *AUDIT: The Alcohol Use Disorders Identification Test. Guidelines for Use in Primary Care*. Geneva: World Health Organization.

Barrus, D. G., Capogrossi, K. L., Cates, S. C., Gourdet, C. K., Peiper, N. C., Novak, S. P., Lefever, T. W., … Wiley, J. L. (2016). Tasty THC: Promises and Challenges of Cannabis Edibles. *Methods report (RTI Press)*, *2016*, 10.3768/rtipress.2016.op.0035.1611.

Butt, P., Beirness, D., Gliksman, L., Paradis, C., & Stockwell, T. (2011). *Alcohol and health in Canada: A summary of evidence and guidelines for low risk drinking.* Ottawa, ON: Canadian Centre on Substance Abuse. Retrieved from http://www.ccsa.ca/Resource%20Library/2011-Summary-of-Evidence-and-Guidelines-for-Low-Risk%20Drinking-en.pdf

Biemer, P. P., & Lyberg, L. E. (2003). *Introduction to Survey Quality*. New York: Wiley.

Binson, D., Canchola, J. A., & Catania, J. A. (2000). Random Selection in a National Telephone Survey: A Comparison of the Kish, Next-Birthday, and Last-Birthday Methods. *Journal of Official Statistics, 16*(1), 53-59.

Blumberg, S. J., Luke, J. V., & Cynamon, M. L. (2006). Telephone Coverage and Health Survey Estimates: Evaluating the Need for Concern About Wireless Substitution. *American Journal of Public Health 96*(5), 926-931.

Boak, A., Hamilton, H. A., Adlaf, E. M., & Mann, R. E. (2015). *Drug Use Among Ontario Students, 1977-2015: Detailed OSDUHS findings (CAMH Research Document Series No. 41)*. Toronto, ON: Centre for Addiction and Mental Health.

Bondy, S. (1994). *Attitudes and Experiences with Treatment of Alcohol and Tobacco Problems. A Report of the Ontario Alcohol and Other Drug Opinion Survey, 1993*. Toronto: Addiction Research Foundation.

Bondy, S., Rehm, J., Ashley, M., Walsh, G., Single, E., & Room, R. (1999). Low-risk Drinking Guidelines: The Scientific Evidence. *Canadian Journal of Public Health, 90*(4), 264-270.

Brands, B., Sproule, B., & Marshman, J. (Eds.). (1998). *Drugs and Drug Abuse* (Third ed.). Toronto, ON: Addiction Research Foundation.

Calabria, B., Degenhardt, L., Hall, W., & Lynskey, M. (2010). Does cannabis use increase the risk of death? Systematic review of epidemiological evidence on adverse effects of cannabis use. *Drug and Alcohol Review, 29*, 318-310.

Casady, R. J., & Lepkowski, M. (1999). Telephone sampling. In P. S. Levy & S. Lemeshow (Eds.), *Sampling of Population* (pp. 455-479). New York: Wiley.

Centers for Disease Control and Prevention. (2011). National Health and Nutrition Examination Survey (NHANES). Retrieved March, 2011, from http://www.cdc.gov/brfss/technical_infodata/quality.htm

Chang, L., & Krosnick, J. A. (2009). National surveys via RDD telephone interviewing versus internet : Comparing sample representativeness and response quality. *Public Opinion Quarterly, 73*(4), 641-678.

Cochran, W. G. (1977). *Sampling Techniques (3rd edition)*. New York: John Wiley.

Couper, M. P., & Nicholls II, W. (1998). The History and Development of Computer Assisted Survey Information Collection Methods. In M. P. Couper, R. Baker, J. Bethlehem, C. Clark, J. Martin, W. Nicholls II & J. O'Reilly (Eds.), *Computer Assisted Survey Information Collection* (pp. 1-22). New York: Wiley.

Crépault, J. F., Rehm, J., & Fischer, B. (2016). The Cannabis Policy Framework by the Centre for Addiction and Mental Health: a proposal for a public health approach to cannabis policy in Canada. International Journal of Drug Policy, 34, 1-4.

Curtin, R., Presser, S., & Singer, E. (2005). Changes in telephone survey nonresponse over the past quarter century. *Public Opinion Quarterly, 69*(1), 87-98.

D'Arcy, C. (1998). Social distribution of health among Canadians. In D. Coborn, C. D'Arcy & G. Torrance (Eds.), *Health and Canadian Society: Sociological Perspectives* (Vol. 3, pp. 73-101). Toronto: University of Toronto Press.

Dijkers, M. (2004). Quality of life after traumatic brain injury: a review of research approaches and findings. *Archives of Physical Medicine and Rehabilitation, 85*(Supplement 2), S21-35. doi: 10.1016/j.apmr.2003.08.119

Erickson PG, Adlaf, EM, Smart, RG & Murray, GF. (1994). The Steel Drug: Cocaine and Crack in Perspective (Second Edition). Lexington, NY.

Fagerström, K.O. (1978). Measuring degree of physical dependence to tobacco smoking with reference to individualization of treatment. *Addictive Behaviors, 3*(3-4), 235-241.

Ferris, J., Templeton, L., & Wong, S. (1994). *Alcohol, Tobacco and Marijuana: Use, Norms, Problems and Policy Attitudes among Ontario Adults. A Report of the Ontario Alcohol and Other Drug Opinion Survey, 1992*. Toronto: Addiction Research Foundation.

Ferris, J., & Wynne, H. (2001). *The Canadian Problem Gambling Index : final report.* Ottawa: Canadian Centre on Substance Abuse.

Fischer, B., Ialomiteanu, A., Kurdyak, P., Mann, R. E., & Rehm, J. (2013). Reductions in non-medical prescription opioid use among adults in Ontario, Canada: are recent policy interventions working? *Substance Abuse, Treatment, Prevention, and Policy, 8*, 7. doi:10.1186/1747-597X-8-7.

Fischer, B., Gittins, J., & Rehm, J. (2008). Characterizing the 'awakening elephant': prescription opioid misuse in North America: Epidemiology, harms, interventions *Contemporary Drug Problems, 35*(2/3), 397-426.

Fischer, B., Nakamura, N., Ialomiteanu, A., Boak, A., & Rehm, J. (2010). Assessing the prevalence of non-medical prescription opioid use in the general Canadian population: Methodological issues and questions. *Canadian Journal of Psychiatry, 55*(9), 606-609.

Gfroerer, J., Wright, D., & Kopstein, A. (1997). Prevalence of youth substance use: the impact of methodological differences between two national surveys. *Drug and Alcohol Dependence, 47*, 19-30.

Grant, J. E. (2008). *Impulse Control Disorders*: New York, NY: Norton and Co.

Grant, J. E., Levine, L., Kim, D., & Potenza, M. N. (2005). Prevalence of impulse control disorders in adult psychiatric inpatients. *American Journal of Psychiatry, 162*, 2184–2188.

Groves, R. M. (2011). "Three Eras of Survey Research." *Public Opinion Quarterly, 75:* 861-871.

Groves, R. M., & Couper, M. P. (1998). *Nonresponse in Household Interview Surveys*. New York: Wiley.

Groves, R. M., Fowler, F. J., Couper, M. P., Lepkowski, J. M., Singer, E., & Tourangeau, R. (2004). *Survey Methodology*. Hoboken, New Jersey: Wiley.

Groves, R. M., Fowler, F. J., Couper, M. P., Lepkowski, J. M., Singer, E., & Tourangeau, R. (2009). *Survey Methodology, Second Edition*. Hoboken, New Jersey: Wiley.

Groves, R. M., & Kahn, R. (1979). *Surveys by Telephone: A National Comparison with Personal Interviews*. New York: Academic Press.

Groves, R. M., & Peytcheva, E. (2008). The impact of nonresponse rates on nonresponse bias: A meta-analysis. *Public Opinion Quarterly, 72*(2), 167-189.

Harrison, E., Haaga, J., & Richards, T. (1993). Self-reported drug use data: What do they reveal? *American Journal of Drug and Alcohol Abuse, 19*, 423-441.

Health Canada. (2012). The Canadian Alcohol and Drug Use Monitoring Survey (CADUMS): Summary of Results for 2012. [Electronic Version], from http://www.hc-sc.gc.ca/hc-ps/drugs-drogues/stat/_2012/summary-sommaire-eng.php

Heatherton, T. F., Kozlowski, L. T., Frecker, R. C., Rickert, W. S., & Robinson, J. (1989). Measuring the heaviness of smoking using self-reported time to the first cigarette of the day and number of cigarettes smoked per day. *British Journal of Addiction, 84*, 791-800.

Heeringa, S. G., West, B. T., & Berglund, P. A. (2010). *Applied Survey Data Analysis*. Boca Raton, FL: Chapman & Hall/ CRC.

Hilbe, J. M. (2009). *Logistic regression models*. London: Chapman & Hall /CRC Press.

Ialomiteanu, A., & Adlaf, E. M. (2003). *CAMH Monitor 2002: Technical Guide*. Toronto: Centre for Addiction and Mental Health.

Ialomiteanu, A., & Adlaf, E. M. (2004). *CAMH Monitor 2003: Technical Guide*. Toronto: Centre for Addiction and Mental Health.

Ialomiteanu, A., & Adlaf, E. M. (2005). *CAMH Monitor 2004: Technical Guide*. Toronto: Centre for Addiction and Mental Health.

Ialomiteanu, A., & Adlaf, E. M. (2006). *CAMH Monitor 2005: Technical Guide*. Toronto: Centre for Addiction and Mental Health.

Ialomiteanu, A., & Adlaf, E. M. (2007). *CAMH Monitor 2006: Technical Guide*. Toronto: Centre for Addiction and Mental Health.

Ialomiteanu, A.R., & Adlaf, E. M. (2008). *CAMH Monitor 2007: Technical Guide*. Toronto: Centre for Addiction and Mental Health.

Ialomiteanu, A.R., & Adlaf, E. M. (2009). *CAMH Monitor 2008: Technical Guide*. Toronto: Centre for Addiction and Mental Health.

Ialomiteanu, A.R., & Adlaf, E. M. (2010). *CAMH Monitor 2009: Technical Guide*. Toronto, ON: Centre for Addiction and Mental Health.

Ialomiteanu, A.R., & Adlaf, E. M. (2011). *CAMH Monitor 2010: Technical Guide*. Toronto, ON: Centre for Addiction and Mental Health.

Ialomiteanu, A.R., & Adlaf, E. M. (2012). *CAMH Monitor 2011: Metadata User's Guide*. Toronto, ON: Centre for Addiction and Mental Health.

Ialomiteanu, A.R., & Adlaf, E. M. (2013). *CAMH Monitor 2012: Metadata User's Guide (electronic document).* Toronto, ON: Centre for Addiction and Mental Health.

Ialomiteanu, A.R., & Adlaf, E. M. (2014). *CAMH Monitor 2013: Metadata User's Guide (electronic document).* Toronto, ON: Centre for Addiction and Mental Health.

Ialomiteanu, A.R., & Adlaf, E. M. (2015). *CAMH Monitor 2014: Metadata User's Guide (electronic document).* Toronto, ON: Centre for Addiction and Mental Health.

Ialomiteanu, A.R., Adlaf, E. M., & Mann, R. E. (2016). *CAMH Monitor 2015: Metadata User's Guide (electronic document).* Toronto, ON: Centre for Addiction and Mental Health. Available: http://www.camh.ca/camh-monitor.

Ialomiteanu, A.R., Adlaf, E. M., & Mann, R. E. (2017). *CAMH Monitor 2016: Metadata User's Guide (electronic document).* Toronto, ON: Centre for Addiction and Mental Health. Available: http://www.camh.ca/camh-monitor.

Ialomiteanu, A.R., Adlaf, E. M., & Mann, R. E. (2018). *CAMH Monitor 2017: Metadata User's Guide (electronic document).* Toronto, ON: Centre for Addiction and Mental Health. Available: http://www.camh.ca/camh-monitor.

Ialomiteanu, A.R., Adlaf, E. M., Mann, R. E., & Rehm, J. (2009). *CAMH Monitor eReport: Addiction & Mental Health Indicators Among Ontario Adults, 1977-2007 (CAMH Research Document Series No. 25).* Toronto, ON: Centre for Addiction & Mental Health.

Ialomiteanu, A.R., Adlaf, E. M., Mann, R. E., & Rehm, J. (2011). *CAMH Monitor eReport: Addiction & Mental Health Indicators Among Ontario Adults, 1977-2009 (CAMH Research Document Series No. 31).* Toronto, ON: Centre for Addiction & Mental Health.

Ialomiteanu, A.R., Adlaf, E. M., Hamilton, H.A., & Mann, R. E. (2012). *CAMH Monitor eReport: Addiction & Mental Health Indicators Among Ontario Adults, 1977-2011 (CAMH Research Document Series No. 35).* Toronto, ON: Centre for Addiction & Mental Health.

Ialomiteanu, A.R., Hamilton, H.A., Adlaf, E. M., & Mann, R. E. (2014). *CAMH Monitor eReport: Substance Use, Mental Health and Well-Being Among Ontario Adults, 1977-2013 (CAMH Research Document Series No. 40).* Toronto, ON: Centre for Addiction & Mental Health.

Ialomiteanu, A.R., Hamilton, H.A., Adlaf, E. M., & Mann, R. E. (2016). *CAMH Monitor eReport: CAMH Monitor eReport: Substance Use, Mental Health and Well-Being Among Ontario Adults, 1977-2015 (CAMH Research Document Series No. 45).* Toronto, ON: Centre for Addiction & Mental Health.

Ialomiteanu, A.R., Hamilton, H.A., Adlaf, E. M., & Mann, R. E. (2018). *CAMH Monitor eReport: CAMH Monitor eReport: Substance Use, Mental Health and Well-Being Among Ontario Adults, 1977-2017 (CAMH Research Document Series No. 48).* Toronto, ON: Centre for Addiction & Mental Health. Available: http://www.camh.ca/camh-monitor.

Ialomiteanu, A.R., & Bondy, S. (1997). *The Ontario Alcohol and Other Drug Opinion Surveys (OADOS): 1992-1995. User's Guide*. Toronto: Addiction Research Foundation.

Idler, E. L., & Benyamini, Y. (1997). Self-rated health and mortality: A review of twenty-seven community studies. *Journal of Health and Social Behavior, 38*(1), 21-37.

Ilie, G., Adlaf, E. M., Mann, R. E., Ialomiteanu, A. R., Hamilton, H., Rehm, J., . . . Cusimano, M. D. (2015). Associations between a History of Traumatic Brain Injuries and Current Cigarette Smoking, Substance Use, and Elevated Psychological Distress in a Population Sample of Canadian Adults. *Journal of Neurotrauma, 32*(4), 1130-1134. doi: 10.1089/neu.2014.3619

Kalton, G. (2009). Methods for oversampling rare subpopulations in social surveys. *Survey Methodology 35*(2), 125-141.

Kandel, D. (1991). The social demography of drug use. *The Millbank Quarterly, 69*, 356-414.

Keeter, S., Miller, C., Kohut, A., Groves, R. M., & Presser, S. (2000). Consequences of reducing nonresponse in a national telephone survey. *Public Opinion Quarterly, 64*, 125-148.

Kessler, R. C., Andrews, G., Colpe, L. J., Hiripi, E., Mroczek, D. K., Normand, S.-L. T., . . . , & Zaslavsky, A. M. (2002). Short screening scales to monitor population prevalences and trends in non-specific psychological distress. *Psychological Medicine, 32* (6), 959-976. doi: 10.1017/S0033291702006074

Kessler, R. C., Barker, P. R., Colpe, L. J., Epstein, J. F., Gfroerer, J. C., Hiripi, E., . . . , & Zaslavsky, A. M. (2003). Screening for serious mental illness in the general population. *Archives of General Psychiatry, 60*(2), 184-189. doi: 10.1001/archpsyc.60.2.184

Kish, L. (1965). *Survey Sampling*. New York: Wiley & Sons.

Kish, L. (1999). Combining/cumulating population surveys. *Survey Methodology, Vol. 25*(2), 129-138.

Korn, E. L., & Graubard, B. I. (1999). *Analysis of Health Surveys*. New York: John Wiley & Sons.

Liu, T. C., Desai, R. A., Krishnan-Sarin, S., Cavallo, D. A., & Potenza, M. N. (2011). Problematic Internet use and health in adolescents: Data from a high school survey in Connecticut. *The Journal of Clinical Psychiatry, 72*(6), 836–845.

Lohr, S. L. (1999). *Sampling: Design and Analysis*. Pacific Groves, CA: Duxbury Press.

Mann, R. E., Smart, R. G., Stoduto, G., Adlaf, E. M., Vingilis, E., Beirness, D., Lamble, R., & Asbridge, M. (2003). The effects of drinking-driving laws: a test of the differential deterrence hypothesis. *Addiction, 98*, 1531-1536.

Medway, R., & Fulton, J. (2012). When more gets you less: A meta-analysis of the effect of concurrent web options on mail survey response rates. *Public Opinion Quarterly, 76*, 733-746.

McDowell, I. (2006). *Measuring health: A guide to rating scales and questionnaires* (3rd ed.). New York: Oxford University Press.

Mental Health Commission of Canada. (2012). *Changing directions, changing lives: The mental health strategy for Canada*. Calgary, AB.

Miller, P. V. (2017). Is there a future for surveys? *Public Opinion Quarterly, 81(Special Issue)*, 205-212.

Moriarty, D. G., Zack, M. M., & Kobau, R. (2003). The Centers for Disease Control and Prevention's Health Days Measures - Population tracking of perceived physical and mental health over time. *Health and Quality of Life Outcomes, 1*(37).

Murray, C. J. L., & Lopez, A. D. (1996). *The Global Burden of Disease: a comprehensive assessment of mortality and disability from diseases, injuries, and risk factors in 1990 and projected to 2020*. Boston: Harvard School of Public Health, World Health Organization, world Bank, 1996.

Ôunpuu, S., Krueger, P., Vermeulen, M., & Chambers, L. (2000). Using the U.S. Behavior Risk Factor Surveillance System's Health Related Quality of Life Survey Tool in a Canadian City. *Canadian Journal of Public Health, 91*(1), 67-72.

Okaneku, J., Vearrier, D., McKeever, R. G., LaSala, G. S., & Greenberg, M. I. (2015). Change in perceived risk associated with marijuana use in the United States from 2002 to 2012. *Clinical Toxicology, 53*(3), 151–155. doi:10.3109/15563650.2015.1004581

Paglia-Boak, A., Adlaf, E. M., & Mann, R. (2011). *Drug Use Among Ontario Students, 1977-2011: Detailed OSDUHS findings (CAMH Research Document Series No. 32)*. Toronto, ON: Centre for Addiction and Mental Health.

Paglia, A. (1995). *Alcohol, Tobacco and Drugs: Dependence, Problems and Consequences of Use. A Report of the 1994 Ontario Alcohol and Other Drug Opinion Survey*. Toronto: Addiction Research Foundation.

Prochaska, J. J., Sung, H.-Y., Max, W., Shi, Y., & Ong, M. (2012). Validity study of the K6 scale as a measure of moderate mental distress based on mental health treatment need and utilization. *International Journal of Methods in Psychiatric Research, 21*(2), 88-97. doi: 10.1002/mpr.1349

Ratnasingham, S., Cairney, J., Rehm, J., Manson, H., & Kurdyak, P. A. (2012). *Opening Eyes, Opening Minds: The Ontario Burden of Mental Illness and Addictions Report. An ICES/PHO Report*. Retrieved November 7, 2012, from http://www.oahpp.ca/opening-eyes-opening-minds/index.html

Redelmeier, D. A., & Tibshirani, R. J. (1997). Association between Cellular-Telephone Calls and Motor Vehicle Collisions. *New England Journal of Medicine*(336), 453-458. doi: 10.1056/NEJM199702133360701

Rehm, J., Baliunas, D., Borges, G. L. G., Graham, K., Irving, H., Kehoe, T., et al. (2010). The relation between different dimensions of alcohol consumption and burden of disease: an overview. *Addiction, 105*, 817-843.

Rehm, J., Baliunas, D., Brochu, S., Fischer, B., Gnam, W., Patra, J., et al. (2006). *The costs of substance abuse in Canada 2002*. Ottawa: Canadian Centre on Substance Abuse.

Rehm, J., Gnam, W., Popova, S., Baliunas, D., Brochu, S., Fischer, B., et al. (2007). The costs of alcohol, illegal drugs, and tobacco in Canada, 2002. *J Stud Alcohol Drugs, 68*(6), 886-895.

Rizzo, L., Brick, M. J., & Park, I. (2004). A minimally intrusive method for sampling persons in random digit dial surveys. *Public Opinion Quarterly, 68*(2), 267-274.

Rossi, P. H. (1989). *Down and Out in America: The Origins of Homelessness*. Chicago: University of Chicago Press.

Saunders, J. B., Aasland, O. G., Babor, T. F., De la Fuente, J. R., & Grant, M. (1993). Development of the Alcohol Use Disorders Identification Test (AUDIT): WHO collaborative project on early detection of persons with harmful alcohol consumption BII. *Addiction, 88*, 791-804.

Schmidt, LA, Mäkelä, P, Rehm, J, & Room, R (2010). Alcohol: Equity and social determinants. In: Blas, E & Kurup, AS (eds). Equity, social determinants and public health programmes. World Health Organization, Geneva.

Single, E., Rehm, J., Robson, L., & Van Truong, M. (2000). The relative risks and aetiologic fractions of different causes of death and disease attributable to alcohol, tobacco and illicit drug use in Canada. *Canadian Medical Association Journal, 162*(23), 1669-1675.

Sloboda, Z. (2005). *Epidemiology of Drug Abuse*. New York: Springer.

Sloboda, Z., McKetin, R., & Kozel, N. (2005). Use of archival data. In Z. Sloboda (Ed.), *Epidemiology of Drug Abuse* (pp. 63-78). New York: Springer.

Smart, R. G., & Adlaf, E. M. (1982). *Trends in Alcohol and Drug Use Among Ontario Adults: Report of a Household Survey, 1982*. Toronto: Addiction Research Foundation.

Smart, R. G., & Adlaf, E. M. (1984). *Alcohol and Drug Use Among Ontario Adults in 1984 and Changes since 1982*. Toronto: Addiction Research Foundation.

Smart, R. G., & Adlaf, E. M. (1987). *Alcohol and Other Drug Use Among Ontario Adults 1977-1987*. Toronto: Addiction Research Foundation.

Smart, R. G., & Goodstadt, M. S. (1977). *Alcohol and Drug Use Among Ontario Adults: Report of a Household Survey, 1977*. Toronto: Addiction Research Foundation.

StataCorp. (2013). *Stata Statistical Software: Release 13.0*. College Station, TX: Stata Corporation.

Statistics Canada. (2013) Table 105-1101 - Mental Health Profile, Canadian Community Health Survey –Mental Health (CCHS), by age group and sex, Canada and provinces, occasional (number unless otherwise noted) (accessed: October 22, 2014).

Statistics Canada. (2018). *2016 Census*. Retrieved from: http://www12.statcan.ca/census-recensement/index-eng.cfm.

Statistics Canada. (2014). Residential Telephone Service Survey 2013 (RTSS). [Electronic Version], from http://www.statcan.gc.ca/daily-quotidien/140623/dq140623a-eng.htm

Stephens, T., & Joubert, N. (2001). The Economic Burden of Mental Health Problems in Canada. *Chronic Diseases in Canada, 22*(1), 18-23.

Stockwell, T., Gruenewald, P. J., Toumbourou, J. W., & Loxley, W. (Eds.). (2005). *Preventing harmful substance use: The evidence base for policy and practice*. West Sussex, England: John Wiley & Sons, Ltd.

Thomas, N., Raghunathan, T. E., Schenker, N., Katzoff, M. J., & Johnson, C. L. (2006). An Evaluation of Matrix Sampling Methods Using Data from the National Health and Nutrition Examination Survey. *Survey Methodology, 32*(2), 217-231.

Trewin, D., & Lee, G. (1988). International Comparisons of Telephone Coverage. In R. M. Groves, P. P. Biemer, L. E. Lyberg, J. T. Massy, W. I. Nicholls & J. Waksberg (Eds.), *Telephone Survey Methodology* (pp. 9-24). New York: John Wiley & Sons.

Tsuang, M. T., & Tohen, M. (Eds.). (2002). *Textbook in psychiatric epidemiology*. New York: Wiley-Liss.

Turner, C., Lessler, J., & Gfroefer, J. (1992). *Survey Measurement of Drug Use: Methodological Studies*. Washington: U.S. Government Printing Office.

U.S. Department of Health and Human Services. (2010). *Healthy People 2020*. Retrieved October, 2014, from: http://www.healthypeople.gov/2020/topicsobjectives2020/default

Üstün, T. B. (1999). The Global Burden of Mental Disorders. *American Journal of Public Health, 89*, 1315-1318.

Voigt, L. F., Schwartz, S. M., Doody, D. R., Lee, S. C., & Li, C. I. (2011). Feasibility of Including Cellular Telephone Numbers in Random Digit Dialing for Epidemiologic Case-Control Studies. *American Journal Epidemiology, 173*(1), 118-126.

WHO (World Health Organization). (2008). *The Global Burden of Disease: 2004 Update. Geneva, Switzerland: WHO Press.* Retrieved October 25, 2012, from http://www.who.int/healthinfo/global_burden_disease/GBD_report_2004update_full.pdf

WHO (World Health Organization). (2012). Depression: A global public health concern. [Electronic Version]. Retrieved October 25, 2012, from http://www.who.int/mental_health/management/depression/who_paper_depression_wfmh_2012.pdf

WHO ASSIST Working Group. (2002). Alcohol, smoking and substance involvement screening test (ASSIST): Development, reliability and feasibility. *Addiction, 97*(9), 1183-1194.

Wiebe, J., Single, E., & Falkowski-Ham, A. (2001). *Measuring gambling and problem gambling in Ontario*. Toronto: Canadian Centre on Substance Abuse and Responsible Gambling Council.

Wonnacott, T. H., & Wonnacott, R. J. (1972). *Introductory Statistics*. New York: Wiley.

Yau, Y. H. C., Potenza, M. N., & White, M. A. (2013). Problematic Internet use, mental health and impulse control in an online survey of adults. *Journal of Behavioral Addictions, 2*(2), 72–81 doi: 10.1556/JBA.1.2012.015

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