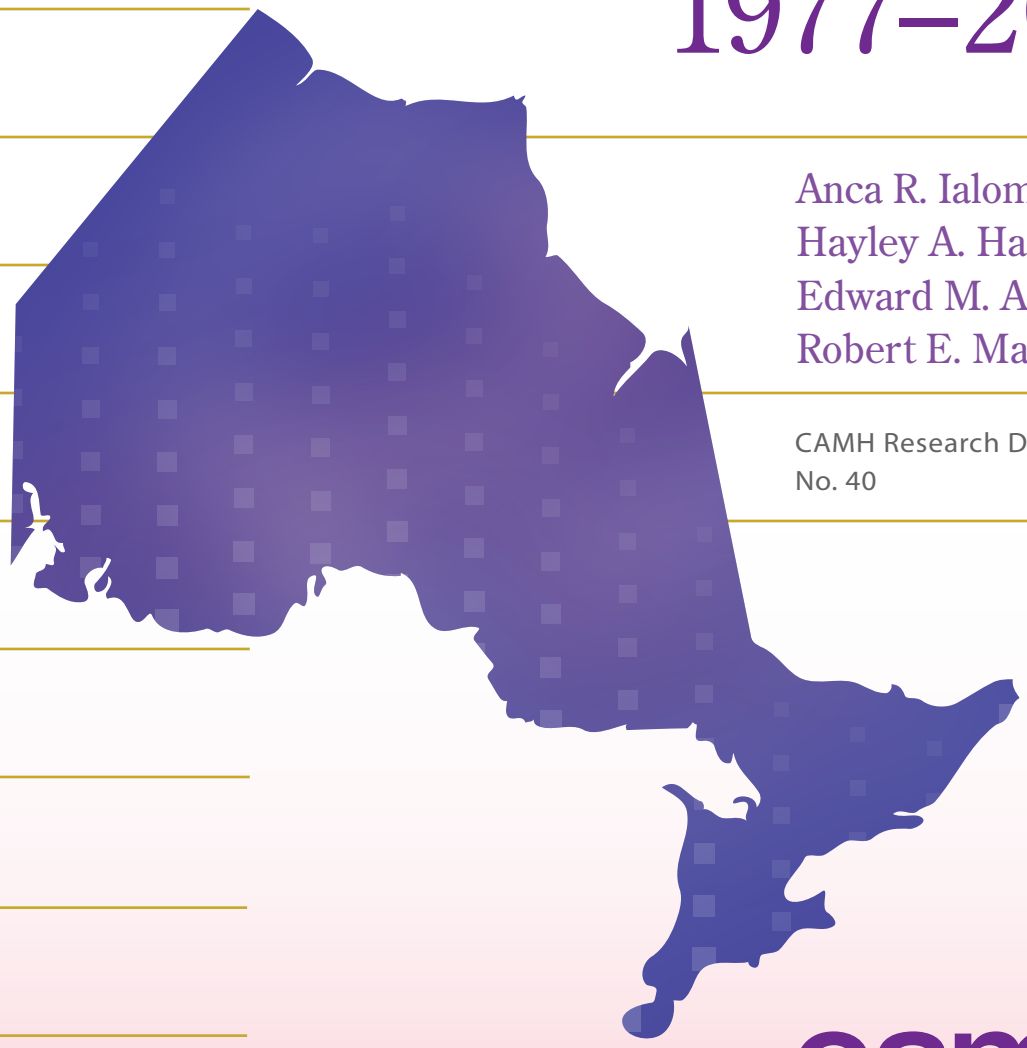
2013

# CAMH Monitor *e*Report

## Substance Use, Mental Health and Well-Being Among Ontario Adults 1977–2013

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CAMH Research Document Series
No. 40



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Centre for Addiction and Mental Health
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Collaborating Centre
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# THE 2013 CAMH MONITOR *e*REPORT
# Executive Summary

The Centre for Addiction and Mental Health's *CAMH Monitor* is the longest ongoing representative survey of adult substance use in Canada. The study, which now spans **37 years**, is based on 28 cross sectional probability surveys, conducted between 1977 and 2013. The 2013 cycle of the *CAMH Monitor* is based on telephone interviews with **3,021** adults aged 18 and older across Ontario (response rate - 48% of eligible respondents). This report presents the 2013 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.

## Substance Use, Mental Health and Well-Being Indicators, 2013 CAMH Monitor

| | Measure | Percent Estimate % | | | Total Population Estimate [1] |
|---|---|---|---|---|---|
| | | Total | Men | Women | |
| Alcohol | Percentage drinking alcohol - past 12 months | **78.4** | 83.1 | 74.1 * | **7,958,700** |
| | Percentage drinking daily - total sample | **6.7** | 9.4 | 4.2 * | **675,100** |
| | - among drinkers | **8.5** | 11.4 | 5.6 * | |
| | Average number of drinks consumed weekly - among drinkers (mean) | **5.1** | 7.4 | 2.8 * | |
| | Percentage exceeding low-risk drinking guidelines - total sample | **18.8** | 26.0 | 12.8 * | **1,760,300** |
| | - among drinkers | **23.5** | 29.9 | 17.3 * | |
| | Percentage consuming 5 or more drinks on a single occasion weekly (weekly binge drinking) - total sample | **6.8** | 12.5 | 1.5 * | **682,200** |
| | - among drinkers | **8.7** | 15.1 | 2.0 * | |
| | Percentage reporting hazardous or harmful drinking (AUDIT 8+) - total sample | **13.7** | 22.1 | 6.1 * | **1,353,500** |
| | - among drinkers | **17.7** | 26.9 | 8.3 * | |
| | Percentage reporting symptoms of alcohol dependence (based on the AUDIT) - total sample | **6.6** | 9.1 | 4.3 * | **664,700** |
| Tobacco | Percentage currently smoking cigarettes | **16.8** | 19.3 | 14.4 * | **1,698,300** |
| | - smoking daily | **13.2** | 15.3 | 11.2 * | **1,333,000** |
| | Average number of cigarettes smoked daily - among smokers (mean) | **11.1** | 12.4 | 9.6 * | |
| | Percentage of daily smokers reporting high smoking dependence - among daily smokers | **9.9** | 11.3 | 8.1 | **130,600** |
| Cannabis | Percentage using cannabis in lifetime | **42.6** | 48.7 | 36.8 * | **4,298,800** |
| | Percentage using cannabis - past 12 months | **14.1** | 17.6 | 10.8 * | **1,417,500** |
| | Percentage reporting moderate or high risk of cannabis problems (ASSIST-CIS 4+) - total sample | **7.5** | 9.6 | 5.4 * | **788,200** |
| | - among users | **55.4** | 62.4 | 46.3 | |

| | Measure | Percent Estimate % | | | Total Population Estimate [1] |
|---|---|---|---|---|---|
| | | Total | Men | Women | |
| Cocaine | Percentage using cocaine in lifetime | **7.7** | 10.8 | 4.9 * | **783,700** |
| | Percentage using cocaine - past 12 months | **1.5** | 2.2 | 1.0 | **153,700** |
| Prescription opioid pain relievers | Percentage reporting any use of prescription opioid pain relievers - past 12 months | **22.2** | 21.5 | 22.9 | **2,324,800** |
| | Percentage using prescription opioid pain relievers for nonmedical purposes past 12 months | **2.8** | 3.6 | 2.1 | **294,550** |
| Driving [2] | Percentage of drivers who drove after drinking two or more drinks in the previous hour - past 12 months | **5.1** | 8.2 | 2.0 * | **483,100** |
| | Percentage of drivers who drove after using cannabis in the previous hour - past 12 months | **2.3** | 3.4 | 1.2 * | **215,000** |
| Mental Health | Percentage reporting elevated psychological distress during the past few weeks (GHQ 3+) | **13.1** | 12.4 | 13.8 | **1,380,500** |
| | Percentage using prescribed antianxiety medication - past 12 months | **8.9** | 7.1 | 10.7 * | **938,300** |
| | Percentage using prescribed antidepression medication - past 12 months | **7.5** | 5.2 | 9.7 * | **786,400** |
| | Percentage reporting poor mental health in general | **7.1** | 8.3 | 5.9 | **716,200** |
| | Percentage reporting frequent mental distress days (14+) during the past 30 days | **7.3** | 7.1 | 7.4 | **756,700** |
| | Percentage reporting suicidal ideation – past 12m | **2.2** | 2.8 | 1.6 | **231,500** |
| Physical Health | Percentage reporting fair or poor health in general | **9.4** | 9.4 | 9.5 | **955,300** |
| | Percentage reporting frequent physically unhealthy days (14+) during the past 30 days | **6.7** | 6.5 | 7.0 | **703,200** |

Notes: [1] population estimates for total sample, based on an adult population of 10,157,960 are rounded to the nearest hundred; [2] estimates are based on licensed drivers; * indicates a significant sex difference ($p<.05$) when controlling for other demographic factors.

## 2013 Estimates for Substance Use and Related Factors

Substance use was strongly associated with the following demographic factors:

- **Sex** was significantly associated with most substance use measures.

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

  - drink alcohol in the past 12 months
  - drink alcohol daily
  - consume more drinks weekly
  - exceed the low-risk drinking guidelines
  - report weekly binge drinking (5 or more drinks on a single occasion)
  - drink hazardously or harmfully
  - report symptoms of alcohol dependence
  - currently smoke cigarettes
  - smoke cigarettes daily
  - use cannabis during lifetime
  - use cannabis during the past year
  - report cannabis use problems
  - use cocaine during lifetime
  - report drinking and driving
  - report cannabis use and driving.

- **Age** of respondent was also significantly associated with substance use measures. In most cases, use declined with age or was highest among 18 to 29 year olds. One exception was daily drinking, which increased with age. When adjusting for other demographic characteristics, **18 to 29** year olds were significantly more likely than older respondents to:

  - exceed the low-risk drinking guidelines
  - report weekly binge drinking
  - drink hazardously or harmfully
  - report symptoms of alcohol dependence
  - use cannabis during the past year
  - report cannabis use problems
  - use cocaine during the past year
  - use nonmedical prescription opioids during the past year
  - report cannabis use and driving.

- **Marital status** was significantly associated with eight substance use measures. In all cases, use was higher among never married or previously married respondents. After adjusting for other factors, **never married** respondents were more likely to:

  - report weekly binge drinking
  - exceed the low-risk drinking guidelines
  - drink hazardously or harmfully
  - report current smoking
  - use cannabis during the past year.

- **Education level** was significantly associated with seven substance use 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 reported the lowest number of drinks per week and were less likely to use cocaine during their lifetime. Respondents **not completing high school** were significantly more likely to:

  - report current smoking
  - report daily smoking
  - use any opioid pain relievers.

- There was no dominant pattern in **regional differences**. Statistically significant differences by **region** were evident for only one indicator: past year drinking. Past year drinking was lowest in Toronto and highest in the East and in the North. Although the overall association between several substance use and health indicators and region did not reach our criteria of statistical significance, there are some regional contrasts that are worthy of mention. Compared to the provincial estimate, current cigarette smoking and daily smoking were above the provincial estimate in the Central East and in the Central South, respectively.

- **Income** was significantly associated with nine substance use indicators. In most cases, substance use tended to increase with income or was highest among those with higher incomes. However, rates of smoking and past year cannabis use were highest among those with the lowest incomes. Specifically, when adjusting for other demographic characteristics, respondents with **higher incomes** were significantly more likely to:

  - drink alcohol daily
  - exceed the low-risk drinking guidelines
  - drink hazardously or harmfully
  - report symptoms of alcohol dependence
  - report drinking and driving.

## 2013 Estimates for Mental Health and Well-Being

### Elevated Psychological Distress

Provincially, almost one-in-seven (13.1%) adults reported symptoms of **elevated psychological distress** in 2013.

Elevated psychological distress was associated with age and household income, when adjusting for other demographic characteristics.

- Elevated distress was highest among those aged 18 to 29 and lowest among those aged 65 years and older.
- When adjusting for other factors, respondents with lower incomes were most likely to report elevated distress in the past few weeks.

### Poor Mental Health

Overall, an estimated 7.1% of Ontario adults rated their mental health as poor (defined as the percentage reporting "fair" or "poor" mental health in general) in 2013. Marital status and education were significantly related to self-reported poor mental health.

- Ratings of poor mental health among those previously married (widowed or divorced) were almost two times higher than among those who were married.
- Ratings of poor mental health tended to decrease significantly with higher education. Ratings were highest among those without high school completion and lowest among university graduates.

### Frequent Mental Distress Days

About 7.3% of Ontario adults reported frequent mental distress days during the past 30 days (defined as the percentage reporting 14 or more mentally unhealthy days).

Age, marital status and education were significantly related to reporting frequent mental distress days, after adjusting for other demographic characteristics.

- The rates of experiencing frequent mental distress days declined with age, dropping from 9.9% of 18 to 29 year olds to 3.8% of those 65 and older.
- The rates of reporting frequent mental distress days were almost three times higher among those previously married than among married respondents.
- Compared to those not completing high school, rates of reporting frequent mental distress days were significantly lower among respondents with a university degree.

### Prescribed Medication to Treat Anxiety and Depression

#### Antianxiety medication (anxiolytics)

An estimated 8.9% of adults reported using a prescribed medication for anxiety in 2013. Only sex was significantly related to past year use of antianxiety medication.

- Use of anxiety medication was significantly higher among women than among men (10.7% vs. 7.1%, respectively).

#### Antidepressants

An estimated 7.5% of Ontario adults reported using a prescribed medication for depression (antidepressants) during the 12 months before the survey. Use of antidepressants was significantly related to sex and income.

- Use of antidepressants was significantly higher among women than among men (9.7% vs. 5.2%, respectively), and those with the lowest income reported the highest rate.

### Suicidal Ideation and Attempts

For the first time in 2013, the survey included questions about suicidal ideation and attempts.

An estimated 2.2% of Ontario adults (231,500) reported that they seriously **contemplated suicide** during the 12 months before the survey, and less than 0.5% reported **attempting suicide** in the past year.

- Suicidal ideation did not differ significantly by sex, but those aged 18 to 34 were 2.7 times more likely to report suicidal ideation than respondents aged 55 and older (4.8% vs. 1.9%, respectively).

### Poor Self-Rated Health

Overall, an estimated 9.4% of Ontario adults rated their overall health as poor (defined as the percentage reporting "fair" or "poor" overall health in general) in 2013. Age, marital status, education, and income were significantly related to self-reported poor health.

- Ratings of poor health increased with age, from 4.5% of 18 to 29 year olds to 15.4% of those 65 and older.
- Ratings of poor health among those previously married (widowed or divorced) were almost two times higher than among those who were married (17.7% vs. 8.7%, respectively).
- Ratings of poor health tended to decrease significantly with higher education and higher incomes. Ratings were highest among those without high school completion and among those with lowest incomes.

### Frequent Physically Unhealthy Days

About 6.7% of Ontario adults experienced frequent physically unhealthy days (14+ days) in the past 30 days. Age and income were significantly related to reporting frequent physically unhealthy days, after adjusting for other demographic characteristics.

- The rates of experiencing frequent physically unhealthy days increased with age, from 4.5% of 18 to 29 year olds to 15.4% of those 65 and older.
- Rates of frequent unhealthy days declined from 19.0% among those with incomes of less than $30,000 to 4.1% among those with incomes of $80,000 and higher.

## Trends in Substance Use

### 2012 vs. 2013

Among the total sample, there were no major significant changes in substance use between the 2012 and the 2013 surveys. There was only one significant overall increase: prevalence of **cannabis use problems** was significantly higher in 2013 compared to 2012 (7.5% vs. 4.7%). Among cannabis users, rates of cannabis use problems **increased** significantly from 38.5% in 2012 to 55.4% in 2013 and the increases were especially evident among **men** and among those **aged 30 and older**.

Among subgroups, there was only one significant **decrease:** weekly **binge drinking** among **women** decreased from 3.3% in 2012 to 1.5% in 2013.

## 1996–2013 Trends

### Alcohol

- Prevalence of **past year drinking** remained **stable** between 1996 and 2013, ranging from a low of 77.1% in 1998 to a high of 81.5% in 2007.

- There was a significant **nonlinear decline** in past year drinking among **18 to 29 year olds** (from 89.5% in 2007 to 80.1% in 2013) and among those aged **30 to 39** (from 86.5% in 2001 to 78.4% in 2013), and a **significant increase** among those aged **65 years and older** (from 58.8% in 1997 to 70.5% in 2013). There was also non-linear variation in past year drinking among respondents living in the East, married and previously married respondents and among those who completed high school.

- **Daily drinking** among drinkers **increased** significantly from 5.3% in 2002 to 8.5% in 2013. Significant **increases** were found among drinking **men** (from 7.1% in 2005 to 11.4% in 2013), drinking **women** (from a low of 2.6% in 2001 to 5.6% in 2013), among 40 to 49 year olds (from 3.0% in 2002 to 7.1% in 2011), and among those aged 65 and older (from 13.2% in 2003 to 22.8% in 2011). Significant increases were evident for most regions, for married and previously married respondents, and for all education sub-groups.

- The **average number of standard drinks** consumed per week among past year drinkers **increased** significantly from 3.3 in 1996 to 5.1 in 2013. There were also significant **increases** among drinking **men** (from 4.8 in 1996 to 7.4 in 2013), among drinking **women** (from 1.9 in 1996 to 2.8 in 2013), and for all other demographics (all age groups, all regions, all marital status and all education subgroups.

- The percentage of Ontarians **exceeding the low-risk drinking guidelines** remained **stable,** varying between 17.6% in 2003 and 18.8% in 2013. The only significant non-linear variation was found among residents of the South West (from 17.8% in 2003 to 27.2% in 2006 and back down to 13.6% in 2013**).**

- **Weekly binge drinking** estimates remained stable between 1996 and 2005, varying between 10.5% and 12.7% among the total sample, and between 13.1% and 16.5% among past year drinkers, but **declined** significantly afterwards, from 12.3% in 2006 to 6.8% in 2013 for the total sample and from 15.9% to 8.7% among drinkers. Significant subgroup **declines** were also evident during this period for all demographic subgroups (sex, age, region, marital status and education).

- **Hazardous or harmful drinking (AUDIT 8+)** remained stable among the total sample, varying between 10.4% in 2005 to 13.7% in 2013. A significant **non-linear trend** was evident only among **women,** increasing from 4.8% in 1998 to 7.9% in 2011, but declining to 6.1% in 2013.

- There was a significant **non-linear** variation in the proportion of Ontario adults reporting at least **one of the alcohol dependence indicators.** It **declined** from 9.4% in 1998 to 5.9% in 2003, **increased** again to 8.1% in 2011 and then **declined** to 6.6% in 2013. Significant non-linear subgroup variation was found during this period only for those **aged 50 to 64**.

### Tobacco - Cigarettes

- Current **cigarette smoking** significantly **declined** from 26.8% in 1996 to 16.8% in 2013. Declines were evident among all sex, age, region, marital status and education subgroups. Daily smoking showed the same pattern, declining from 23.0% in 1996 to 13.2% in 2013.

**Cannabis**

- Past year **cannabis** use **increased steadily** from 8.7% in 1996 to 14.1% in 2013. Increases were evident for all subgroups: men, women, and all age, region, marital status and education subgroups.

- Estimates of **cannabis use problems** were generally stable between 2004 and 2013 among the total sample, varying between 5.2% and 7.5%.

**Cocaine**

- Lifetime cocaine use **increased** significantly between 1996 and 2010, from 4.9% to 9.6%, but then dropped to 7.7% in 2013. Past year cocaine use remained low (under 2.2%) during the same period.

**Prescription Opioid Pain Relievers**

- Past year use of **any prescription opioid** pain relievers **declined** significantly from 26.6% in 2010 to 22.2% in 2013.

- Past year **nonmedical use** of prescription opioid pain relievers displayed similar declining trends. The proportion of Ontario adults who reported past year **nonmedical use** of prescription opioid pain relievers **dropped** significantly from 7.7% in 2010 to 2.8% in 2013 and significant declines were evident for most demographic subgroups (sex, region, marital status and education). However, the estimates remained **stable** for 18-29 year olds (7.0% in 2010 vs. 7.4% in 2013).

**Driving and Substance Use**

- Since 1996, driving after drinking has displayed a significant **linear decline** from 13.1% to 5.1% in 2013.

- There were significant declines in driving after drinking since 1996 for all demographic subgroups. The most striking **decline** was seen among **male drivers**, from 21.2% in 1996 to 8.2% in 2013 and among young adult drivers **aged 18 to 29**, from 20.1% in 1996 to 8.9% in 2013. A significant declining linear trend between 1996 and 2011 was found for all regions, but was especially dramatic among drivers living in **Toronto** (from 14.1% to 4.1%).

- Between 2002 and 2013, **driving after cannabis use** remained **stable** (2.9% vs. 2.3%). The only significant non-linear trend was found among those **aged 18 to 29**. Significant non-linear trends were found only among young drivers **aged 18 to 29**. Driving after consuming cannabis **increased among young drivers** from 7.2% in 2002 to 11.9% in 2006, then declined to 2.8% in 2009 and then increased almost three-fold in 2013 to 8.3%. No other subgroup changes were evident.

## Long-Term Trends: 1977–2013

**Alcohol**

In two areas, long-term changes related to alcohol use are particularly worth mentioning: daily drinking and binge drinking.

- The percentage of past year drinkers who reported **drinking daily decreased** steadily from 13.4% in 1977 to 5.9% in 1995, and remained stable around 6% until 2006. During the past seven years, however, this trend has reversed, and daily drinking **increased** significantly from 5.9% in 2006 to 8.5% in 2013. 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 11.4% in 2013.

- For **binge drinking**, three distinct periods are evident over the longer term. 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). However, after 2007 binge drinking has shown a **downward** trend, from 11.2% in 2007 to 6.8% in 2013. Significant **declines** since 2007 were evident among all demographic subgroups (sex, age, region, marital status and education).

**Cannabis**

- Two long-term changes related to cannabis use are particularly noteworthy: the significant **increase** in past year **cannabis use** and the **aging of cannabis users**. Past year cannabis use **increased** significantly from 8.1% in 1977 to 14.1% in 2013. There were also significant increases over the longer term among **men** (from 9.1% in 1992 to 19.9% in 2010); **women** (from 4.5% in 1977 to 10.8% in 2013), and **all age groups**, especially 18 to 29 year olds (from 22.6% in 1977 to 40.4% in 2013) and those 50 years and older (from 1.2% in 1977 to 5.9% in 2013).

- Another important long-term trend is the **continuing aging of cannabis users**. Current estimates show that, on average, **cannabis users in 2013 were older** than their counterparts in 1977 (average age of 33.9 years vs. 25.6 years, respectively). In 1977, 82% of cannabis users were aged 18 to 29 compared to only 49% in 2013. In contrast, the proportion of past year cannabis users aged 30 to 49 years more than doubled from 15% in 1977 to 32% in 2013, and the proportion of past year cannabis users aged 50 and older increased six-fold, from 3% to 19% during the same period.

## Trends in Mental Health and Well-Being Indicators

### 2012 vs. 2013

Among the total sample, there were no significant changes in mental health or well-being indicators between the 2012 and the 2013 surveys. There were only two significant subgroup **increases** in **antidepressant medication** among those aged 18 to 29 (from 2.4% to 8.0%) and among residents of the Central East region (from 3.3% to 7.3%).

### 1996–2013 Trends

**Elevated Psychological Distress**

- Elevated psychological distress remained stable between 2000 and 2013 among the total sample (12.7% vs. 13.1%), and estimates among all demographic subgroups remained stable.

**Prescribed Antianxiety Medication**

- Since 1997, use of antianxiety medication among the total sample has displayed a significant **linear increase** from 4.5% in 1999 to 8.9% in 2013, especially among **women** (from 5.6% to 10.7%) and among **18 to 29** year olds (from 1.7% to 10.8%).

**Prescribed Antidepressant Medication**

- Since 1997, use of antidepressants among the total population has significantly **increased**, from 3.6% in 1999 to 7.5% in 2013. Significant subgroup increases were also evident for all sex, region, marital status, and education subgroups. Increases were strongest among the youngest respondents. Between 1997 and 2013, use of anti-depressants **increased** four-

fold among **18 to 29** year olds from 2.0% to 8.0%.

**Poor Mental Health**

- Between 2003 and 2013, there was a significant overall **increase** in **self-rated poor mental health** (from 4.7% to 7.1%) and significant increases were especially evident for **18 to 29** year olds (from 2.9% in 2009 to 12.1% in 2013).

**Frequent Mental Distress Days**

- Between 2003 and 2013, there was a significant **increase** in reporting frequent mental distress days in the past 30 days, from 5.4% in 2003 to 7.3% in 2013. Significant increases were found especially among **men** (from 4.2% in 2003 to 7.1% in 2013).

**Poor Self-Rated Health**

- Poor self-rated health remained stable between 2003 and 2013 (at about 10%) and estimates for all demographic subgroups also remained stable.

**Frequent Physically Unhealthy Days**

- The percentage reporting frequent physically unhealthy days in the past 30 days in 2013 (6.7%) was unchanged from 2003 (6.7%), and rates were stable for most demographic subgroups. Significant subgroup increases were found only for respondents living in Toronto and in the South West and among those aged 30 to 39.

## Some Encouraging Findings

The following findings should be considered as encouraging.

**Cigarettes:** The majority (83.2%) of Ontario adults do not smoke cigarettes. Current cigarette smoking has significantly declined since 1996 (from 26.7% in 1977 to 16.8% in 2013), as has daily smoking (from 23.0% in 1977 to 13.2% in 2013).

**Alcohol:** Although the majority (78.4%) of Ontario adults are past year drinkers, most do not drink excessively. Indeed, the survey noted that 93% of drinkers do not binge drink weekly, 81% of drinkers do not exceed recommended drinking guidelines and 86% do not exceed the AUDIT threshold for hazardous or harmful drinking. There were also significant declines in binge drinking (defined as consuming five or more drinks on a single occasion weekly) between 2006 (12.3%) and 2013 (6.8%). This decline was generally robust, occurring among several subgroups, but was especially evident among men (from 20.7% in 2001 to 12.5% in 2013).

**Cannabis:** Although the percentage that used cannabis in the past year has increased over the long-term, use is generally infrequent. For example, among lifetime users, only 19.7% reported using cannabis once a month or more frequently.

**Driving After Drinking**: From 1996 to 2013, driving after drinking among drivers, declined by more than half (from 13.1% to 5.1%). Moreover, this decline occurred among several subgroups, including men (whose estimate fell from 21.2% to 8.2%). These declines occurred over a period when the province introduced several measures designed to reduce impaired driving rates, including increased sanctions for 'warn-range' drivers and measures to increase the use of ignition interlock devices by convicted offenders.

**Prescription Opioid Pain Relievers**: The proportion of the Ontario adult population who report nonmedical use of prescription opioid pain relievers dropped significantly from 7.7% in 2010 to 2.8% in 2013. This decline occurred during a period when provincial programs and policies to reduce nonmedical use of these substances were introduced.

## Some Public Health Concerns

There are several public health concerns – findings that point to potential public health problems that require scrutiny and monitoring – raised by these *CAMH Monitor* findings.

**Cigarettes:** One of the health targets set by Cancer Care Ontario (CCO) (Cancer 2020 Steering Committee, 2003), is that *adult smoking should be reduced to 5% by 2020*. Despite the fact that the rate of cigarette smoking among Ontario adults has declined substantially, the current rate of 16.8% is more than three times higher than the CCO target of 5%.

**Cannabis:** Past year use of cannabis **increased** significantly from 8.7% in 1996 to 14.1% in 2013, 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 40.4% in 2013. Although cannabis use is generally infrequent (40% of past year users report using less than once a month), the percentage of users reporting **daily use** is **19%**. In addition, 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.

**Alcohol:** A sizeable percentage of drinkers consume alcohol at levels exceeding recommended **low-risk drinking guidelines**. Nearly one-in-five drinkers (18.8%) report exceeding these guidelines. There was also a significant increase in the **average number of** drinks consumed weekly, from 3.3 in 1996 to 5.1 in 2013. Increases were also found in **daily drinking** among past year drinkers, from 5.3% in 2002 to 8.5% in 2013. This increase was especially prominent among **women** (from 2.6 % in 2001 to 5.6% in 2013). Such an increase in use among women is of concern given the harmful effects of heavy alcohol use.

**Prescription Opioid Pain Relievers**: In spite of a decline in use, 3% of the Ontario adult population (about 295,000) report **nonmedical use** of prescription opioid pain relievers in 2013. These are powerful and addictive drugs that have been linked to increased use of illicit opiates. In addition, no decline was seen in the estimates for 18-29 year olds (7.0% in 2010 vs. 7.4% in 2013).

**Mental Health:** About 13.1% (1.3 million Ontario adults) experienced **elevated psychological distress** in 2013 and we found a significant **increase** in self-reports of **poor mental health** from 4.7% in 2003 to 7.1% in 2013. About one-in-ten (8.9%) adults used prescribed medication to treat **anxiety** (about 939,300 Ontario adults) and one-in-thirteen (7.5%) used prescribed medication to treat **depression** (about 786,400 Ontario adults). The percentage reporting past year use of **prescribed depression and anxiety medication** increased significantly between 1999 and 2013 (from 3.6% to 7.5%, and from 4.5% to 8.9%, respectively). In addition, in 2013, an estimated 2.2% of Ontario adults (about 231,500) reported that they seriously **contemplated suicide** during the 12 months before the survey.

# INDICATEUR DE CAMH (RAPPORT ÉLECTRONIQUE) 2013
# Sommaire

L'*Indicateur de CAMH*, publié par le Centre de toxicomanie et de santé mentale, est la plus ancienne étude représentative permanente sur l'utilisation de substances intoxicantes par les adultes réalisée au Canada. Effectuée depuis **37 ans**, cette étude porte sur 28 sondages probabilistes transversaux menés entre 1977 et 2013. Le cycle de 2013 de l'*Indicateur de CAMH* repose sur des entrevues téléphoniques menées auprès de **3 021** adultes âgés de 18 ans et plus (taux de réponse : 48 % des répondants admissibles) en Ontario. Le rapport présente les estimations des problèmes liés à l'utilisation de substances intoxicantes et des méfaits connexes en 2013, ainsi que les indicateurs de la santé mentale et du bien-être chez les adultes ontariens. Il décrit également l'évolution de l'utilisation de substances intoxicantes et d'indicateurs de la santé depuis 1996 et depuis 1977, dans les cas où des données ont été obtenues.

## *Indicateur de CAMH* 2013 : Indicateurs de l'utilisation de substances intoxicantes, de la santé mentale et du bien-être

| | Mesure | Estimation % | | | Population estimative[1] |
|---|---|---|---|---|---|
| | | Total | Hommes | Femmes | |
| Alcool | Pourcentage de personnes ayant bu de l'alcool – au cours des 12 mois écoulés | **78,4** | 83,1 | 74,1 * | **7 958 700** |
| | Pourcentage de personnes ayant bu tous les jours<br>- échantillon total<br>- chez les buveurs | <br>**6,7**<br>**8,5** | <br>9,4<br>11,4 | <br>4,2 *<br>5,6 * | **675 100** |
| | Nombre moyen de verres par semaine<br>- chez les buveurs (moyenne) | <br>**5,1** | <br>7,4 | <br>2,8 * | |
| | Pourcentage de personnes ayant bu plus d'alcool que la quantité jugée acceptable dans les directives de consommation d'alcool à faible risque<br>- échantillon total<br>- chez les buveurs | <br>**18,8**<br>**23,5** | <br>26<br>29,9 | <br>12,8 *<br>17,3 * | **1 760 300** |
| | Pourcentage de personnes ayant bu cinq verres ou plus en une occasion, par semaine (excès d'alcool hebdomadaires)<br>- échantillon total<br>- chez les buveurs | <br>**6,8**<br>**8,7** | <br>12,5<br>15,1 | <br>1,5 *<br>2 * | **682 200** |
| | Pourcentage de personnes ayant signalé une consommation d'alcool dangereuse ou nocive (AUDIT 8+)<br>- échantillon total<br>- chez les buveurs | <br>**13,7**<br>**17,7** | <br>22,1<br>26,9 | <br>6,1 *<br>8,3 * | **1 353 500** |
| | Pourcentage de personnes ayant signalé des symptômes de dépendance à l'alcool (en se basant sur l'AUDIT)<br>- échantillon total | <br>**6,6** | <br>9,1 | <br>4,3 * | **664 700** |
| Tabac | Pourcentage de personnes qui fument la cigarette<br>- personnes qui fument tous les jours | <br>**16,8**<br>**13,2** | <br>19,3<br>15,3 | <br>14,4 *<br>11,2 * | **1 698 300**<br>**1 333 000** |
| | Nombre moyen de cigarettes fumées tous les jours<br>- chez les fumeurs (moyenne) | <br>**11,1** | <br>12,4 | <br>9,6 * | |
| | Pourcentage des fumeurs quotidiens ayant signalé une forte dépendance au tabac – chez les fumeurs quotidiens | **9,9** | 11,3 | 8,1 | **130 600** |

| | Mesure | Estimation % | | | Population estimative[1] |
|---|---|---|---|---|---|
| | | Total | Hommes | Femmes | |
| **Cannabis** | Pourcentage de personnes ayant consommé du cannabis au cours de leur vie | **42,6** | 48,7 | 36,8 * | **4 298 800** |
| | Pourcentage de personnes ayant consommé du cannabis – au cours des 12 mois écoulés | **14,1** | 17,6 | 10,8 * | **1 417 500** |
| | Pourcentage de personnes ayant signalé un risque modéré ou élevé de problèmes liés à la consommation de cannabis (ASSIST-CIS 4+)<br>- échantillon total<br>- chez les usagers | <br><br>**7,5**<br>**55,4** | <br><br>9,6<br>62,4 | <br><br>5,4 *<br>46,3 | **788 200** |
| **Cocaïne** | Pourcentage de personnes ayant consommé de la cocaïne au cours de leur vie | **7,7** | 10,8 | 4,9 * | **783 700** |
| | Pourcentage de personnes ayant consommé de la cocaïne – au cours des 12 mois écoulés | **1,5** | 2,2 | 1 | **153 700** |
| **Analgé-siques opioïdes sur ordonnance** | Pourcentage de personnes qui ont déclaré avoir pris des analgésiques opioïdes sur ordonnance – au cours des 12 mois écoulés | **22,2** | 21,5 | 22,9 | **2 324 800** |
| | Pourcentage de personnes qui ont pris des analgésiques opioïdes sur ordonnance à des fins non médicales – au cours des 12 mois écoulés | **2,8** | 3,6 | 2,1 | **294 550** |
| **Conduite[2]** | Pourcentage de conducteurs ayant pris le volant après avoir bu deux verres ou plus dans la dernière heure – au cours des 12 mois écoulés | **5,1** | 8,2 | 2 * | **483 100** |
| | Pourcentage de conducteurs ayant pris le volant après avoir consommé du cannabis dans la dernière heure – au cours des 12 mois écoulés | **2,3** | 3,4 | 1,2 * | **215 000** |
| **Santé mentale** | Pourcentage de personnes ayant signalé un niveau élevé de détresse psychologique au cours des dernières semaines (GHQ 3+) | **13,1** | 12,4 | 13,8 | **1 380 500** |
| | Pourcentage de personnes ayant pris des anxiolytiques sur ordonnance – au cours des 12 mois écoulés | **8,9** | 7,1 | 10,7 * | **938 300** |
| | Pourcentage de personnes ayant pris des antidépresseurs sur ordonnance – au cours des 12 mois écoulés | **7,5** | 5,2 | 9,7 * | **786 400** |
| | Pourcentage de personnes ayant signalé une mauvaise santé mentale en général | **7,1** | 8,3 | 5,9 | **716 200** |
| | Pourcentage de personnes ayant signalé un nombre élevé de jours de détresse mentale (14 et plus) au cours des 30 jours écoulés | **7,3** | 7,1 | 7,4 | **756 700** |
| | Pourcentage de personnes ayant signalé des idées suicidaires – au cours des 12 mois écoulés | **2,2** | 2,8 | 1,6 | **231 500** |
| **Santé physique** | Pourcentage de personnes ayant signalé une santé passable ou mauvaise en général | **9,4** | 9,4 | 9,5 | **955 300** |
| | Pourcentage de personnes ayant signalé un nombre élevé de jours de mauvaise santé physique (14 et plus) au cours des 30 jours écoulés | **6,7** | 6,5 | 7 | **703 200** |

Nota : [1] Population estimative pour l'échantillon total, d'après une population adulte de 10 157 960, arrondie à une centaine près; [2] Les estimations reposent sur le nombre de titulaires d'un permis de conduire; * indique qu'il y a une différence importante entre les hommes et les femmes ($p < 0,05$) en tenant compte d'autres facteurs démographiques.

## Estimations de l'utilisation d'une substance intoxicante et des facteurs connexes en 2013

L'utilisation d'une substance était intimement liée aux facteurs démographiques suivants :

- Le **sexe** des répondants avait une influence considérable sur la plupart des mesures de l'utilisation d'une substance.

  La prévalence était plus élevée chez les **hommes** que chez les femmes pour toutes les mesures de l'utilisation d'une substance où des différences ont été relevées. Les hommes étaient nettement plus susceptibles :

  - d'avoir bu de l'alcool au cours des 12 mois écoulés
  - de consommer de l'alcool tous les jours
  - de prendre davantage de verres par semaine
  - de boire plus d'alcool que la quantité jugée acceptable dans les directives de consommation d'alcool à faible risque
  - de boire cinq verres ou plus en une occasion, par semaine (excès d'alcool)
  - de boire de l'alcool de façon dangereuse ou nocive
  - de signaler des symptômes de dépendance à l'alcool
  - de fumer des cigarettes au moment de l'étude
  - de fumer des cigarettes tous les jours
  - d'avoir consommé du cannabis au cours de leur vie
  - d'avoir consommé du cannabis au cours de l'année écoulée
  - de déclarer avoir des problèmes liés à la consommation de cannabis
  - d'avoir consommé de la cocaïne au cours de leur vie
  - de déclarer avoir pris le volant en état d'ivresse
  - de déclarer avoir pris le volant après avoir consommé du cannabis.

- L'**âge** des répondants avait lui aussi une influence importante sur l'utilisation d'une substance. Dans la plupart des cas, l'utilisation diminuait avec l'âge ou était la plus élevée chez les personnes de 18 à 29 ans. La consommation d'alcool tous les jours fait exception, car elle augmentait avec l'âge. En tenant compte d'autres caractéristiques démographiques, les personnes de **18 à 29** ans étaient nettement plus susceptibles :

  - de boire plus d'alcool que la quantité jugée acceptable dans les directives de consommation d'alcool à faible risque
  - de déclarer faire des excès d'alcool hebdomadaires
  - de boire de l'alcool de façon dangereuse ou nocive
  - de signaler des symptômes de dépendance à l'alcool
  - d'avoir consommé du cannabis au cours de l'année écoulée
  - de déclarer avoir des problèmes liés à la consommation de cannabis
  - d'avoir consommé de la cocaïne au cours de l'année écoulée
  - d'avoir pris des opioïdes sur ordonnance à des fins non médicales au cours de l'année écoulée
  - de déclarer avoir pris le volant après avoir consommé du cannabis.

- L'**état civil** avait une influence considérable sur huit mesures de l'utilisation d'une substance. Dans tous les cas, l'utilisation était plus élevée parmi les répondants qui n'ont jamais été mariés ou qui ne le sont plus. Après avoir tenu compte d'autres facteurs, on a constaté que les répondants qui n'avaient **jamais été mariés** étaient les plus susceptibles :

  - de déclarer faire des excès d'alcool hebdomadaires

- de boire plus d'alcool que la quantité jugée acceptable dans les directives de consommation d'alcool à faible risque
- de boire de l'alcool de façon dangereuse ou nocive
- de déclarer qu'ils fumaient au moment de l'étude
- d'avoir consommé du cannabis au cours de l'année écoulée.

- Le **niveau de scolarité** avait une influence considérable sur sept indicateurs. Selon la tendance dominante, l'utilisation d'une substance diminuait lorsque le niveau de scolarité augmentait. En tenant compte d'autres caractéristiques démographiques, on a constaté que les répondants ayant un diplôme universitaire ont déclaré boire le moins grand nombre de verres par semaine et qu'ils étaient moins susceptibles d'avoir pris de la cocaïne au cours de leur vie. Les répondants **n'ayant pas terminé leurs études secondaires** étaient nettement plus susceptibles de :

  - déclarer qu'ils fumaient au moment de l'étude
  - déclarer qu'ils fumaient tous les jours
  - prendre des analgésiques opioïdes.

- On n'a relevé aucune tendance dominante sur le plan des **différences régionales**. On a relevé des différences statistiquement significatives par **région** pour un seul indicateur : la consommation d'alcool au cours de l'année écoulée. Cette consommation était la plus faible à Toronto et la plus élevée dans l'Est et le Nord. Malgré le fait que l'on n'ait pas noté en général un lien statistiquement significatif entre plusieurs indicateurs d'utilisation d'une substance et de santé, d'une part, et telle ou telle région, d'autre part, on peut noter quelques contrastes régionaux. Ainsi, l'usage fréquent de cigarettes et l'usage quotidien de cigarettes dans le Centre-Est et le Centre-Sud respectivement étaient supérieurs à l'estimation pour l'ensemble de la province.

- Le **revenu** avait une influence considérable sur neuf indicateurs de l'utilisation d'une substance intoxicante. Dans la plupart des cas, l'utilisation d'une telle substance avait tendance à augmenter avec le revenu ou était la plus fréquente chez les personnes dont le revenu était plus élevé. Toutefois, les taux d'usage du tabac et d'utilisation de cannabis au cours de l'année écoulée étaient les plus élevés chez les personnes au revenu le plus faible. Plus précisément, en tenant compte d'autres caractéristiques démographiques, on a constaté que les répondants dont le **revenu était plus élevé** étaient nettement plus susceptibles de :

  - consommer de l'alcool tous les jours
  - boire plus d'alcool que la quantité jugée acceptable dans les directives de consommation d'alcool à faible risque
  - boire de l'alcool de façon dangereuse ou nocive
  - signaler des symptômes de dépendance à l'alcool
  - déclarer avoir pris le volant en état d'ivresse.

## Estimations de 2013 concernant la santé mentale et le bien-être

**Niveau élevé de détresse psychologique**

À l'échelle de la province, près d'un adulte sur sept (13,1 %) a signalé des symptômes d'un **niveau élevé de détresse psychologique** en 2013.

En tenant compte d'autres caractéristiques démographiques, le niveau élevé de détresse psychologique était associé à l'âge et au revenu du ménage.

- Le niveau de détresse psychologique était à son plus haut chez les répondants âgés de 18 à 29 ans et à son plus bas chez les répondants de 65 ans et plus.

- En tenant compte d'autres facteurs, on a constaté que les répondants au revenu plus faible étaient les plus susceptibles de signaler un niveau élevé de détresse psychologique au cours des dernières semaines.

**Mauvaise santé mentale**

Dans l'ensemble, on estime à 7,1 % le pourcentage d'adultes ontariens qui ont signalé une mauvaise santé mentale en 2013 (pourcentage de répondants ayant signalé une santé mentale « passable » ou « mauvaise » en général). L'état civil et le niveau de scolarité avaient une influence considérable sur la mauvaise santé mentale déclarée.

- Le taux de répondants ayant signalé une mauvaise santé mentale était presque deux fois plus élevé chez les personnes qui avaient été mariées (personnes veuves ou divorcées) que chez les répondants qui étaient mariés.

- Le taux de répondants ayant signalé une mauvaise santé mentale tendait à diminuer considérablement à mesure que le niveau de scolarité augmentait. Il était le plus élevé chez les personnes n'ayant pas terminé leurs études secondaires et le plus faible chez les diplômés universitaires.

**Nombre élevé de jours de détresse mentale**

Environ 7,3 % des adultes ontariens ont déclaré avoir éprouvé une détresse mentale pendant plusieurs jours (soit 14 jours ou plus) au cours des 30 jours écoulés. L'âge, l'état civil et le niveau de scolarité étaient liés de près à cet indicateur, après avoir tenu compte d'autres caractéristiques démographiques.

- Le pourcentage de répondants ayant éprouvé une détresse mentale pendant plusieurs jours diminuait avec l'âge, passant de 9,9 % chez les personnes âgées de 18 à 29 ans à 3,8 % chez celles de 65 ans et plus.

- Le taux de répondants ayant déclaré avoir éprouvé une détresse mentale pendant plusieurs jours était presque trois fois plus élevé chez les répondants qui avaient été mariés que chez les répondants qui étaient mariés.

- On a noté que le taux de répondants ayant déclaré avoir éprouvé une détresse mentale pendant plusieurs jours était nettement plus bas chez les diplômés universitaires que chez les personnes n'ayant pas terminé leurs études secondaires.

**Anxiolytiques et antidépresseurs sur ordonnance**

**Médicaments contre l'anxiété (anxiolytiques)**

On estime à 8,9 % le pourcentage d'adultes ayant déclaré avoir pris des anxiolytiques sur ordonnance en 2013. Seul le sexe des répondants avait une influence importante sur l'utilisation de ces médicaments au cours de l'année écoulée.

- Un pourcentage nettement plus élevé de femmes (10,7 %) que d'hommes (7,1 %) prenait des anxiolytiques.

**Antidépresseurs**

On estime à 7,5 % le pourcentage d'adultes ontariens ayant déclaré qu'ils avaient pris des antidépresseurs sur ordonnance au cours des 12 mois précédant le sondage. Il y avait un lien étroit entre l'utilisation de ces médicaments, d'une part, et le sexe des répondants et leur revenu, d'autre part.

- Un pourcentage nettement plus élevé de femmes (9,7 %) que d'hommes (5,2 %) prenait des antidépresseurs. Le taux d'utilisation était le plus élevé chez les personnes au revenu le plus faible.

**Idées et tentatives de suicide**

Pour la première fois, le sondage de 2013 comprenait des questions sur les idées et les tentatives de suicide.

On estime à 2,2 % le pourcentage d'adultes ontariens (231 500 adultes) ayant déclaré qu'ils avaient sérieusement **envisagé de se suicider** au cours des 12 mois précédant le sondage et à moins de 0,5 % le pourcentage de répondants ayant **tenté de se suicider** au cours de l'année écoulée.

- On n'a pas relevé de différences importantes sur le plan des idées suicidaires entre les hommes et les femmes. Toutefois, les personnes âgées de 18 à 34 ans étaient 2,7 fois plus susceptibles de déclarer avoir eu des idées suicidaires que les répondants âgés de 55 ans et plus (4,8 % et 1,9 %, respectivement).

**Mauvaise santé signalée**

Dans l'ensemble, on estime à 9,4 % le pourcentage d'adultes ontariens qui ont signalé une mauvaise santé en 2013 (pourcentage de répondants ayant signalé une santé « passable » ou « mauvaise » en général). L'âge, l'état civil, le niveau de scolarité et le revenu avaient une influence importante sur la mauvaise santé signalée par les répondants.

- Le pourcentage de répondants ayant signalé une mauvaise santé augmentait avec l'âge, passant de 4,5 % des personnes de 18 à 29 ans à 15,4 % des personnes de 65 ans et plus.

- Le taux de répondants qui ont signalé une mauvaise santé était presque deux fois plus élevé chez les personnes qui avaient été mariées (personnes veuves ou divorcées) que chez les répondants qui étaient mariés (17,7 % comparativement à 8,7 % respectivement).

- Le taux de répondants ayant signalé une mauvaise santé tendait à diminuer considérablement à mesure que le niveau de scolarité et le revenu augmentaient. Il était le plus élevé chez les personnes n'ayant pas terminé leurs études secondaires et celles au revenu le plus faible.

**Problème de santé physique durant plusieurs jours**

Environ 6,7 % des adultes ontariens ont eu un problème de santé physique pendant plusieurs jours (14 jours ou plus) au cours des 30 jours écoulés. Il y avait un lien étroit entre l'âge et le revenu, d'une part, et le pourcentage de répondants ayant déclaré qu'ils avaient eu un problème de santé physique pendant plusieurs jours, d'autre part, après avoir tenu compte d'autres caractéristiques démographiques.

- Le taux de répondants ayant déclaré qu'ils avaient eu un problème de santé physique pendant plusieurs jours augmentait avec l'âge, passant de 4,5 % des personnes 18 à 29 ans à 15,4 % des personnes de 65 ans et plus.

- Le pourcentage de répondants ayant déclaré qu'ils avaient eu un problème de santé physique pendant plusieurs jours variait de 19,0 % des répondants ayant un revenu inférieur à 30 000 $ à 4,1 % des répondants ayant un revenu de 80 000 $ et plus.

## Tendances en matière d'utilisation de substances intoxicantes

### Comparaison entre 2012 et 2013

Parmi l'échantillon total, il n'y a pas eu de variations majeures au chapitre de l'utilisation de substances intoxicantes de 2012 à 2013. Il y a eu une seule augmentation globale majeure : la prévalence des **problèmes liés à l'utilisation de cannabis** a augmenté considérablement de 2012 à 2013, passant de 4,7 % à 7,5 %. Le pourcentage de consommateurs de cannabis ayant éprouvé des problèmes liés à l'utilisation de cette substance a **augmenté** considérablement, passant de 38,5 % en 2012 à 55,4 % en 2013. Cette augmentation a été marquée chez les **hommes** et les personnes **âgées de 30 ans et plus**.

Parmi les sous-groupes, on a relevé une seule **baisse** importante : les **excès d'alcool** hebdomadaires chez les **femmes** ont diminué, passant de 3,3 % en 2012 à 1,5 % en 2013.

### Tendances de 1996 à 2013

#### Consommation d'alcool

- La prévalence de la **consommation d'alcool au cours de la dernière année** est restée **stable** entre 1996 et 2013, passant d'un creux de 77,1 % en 1998 à un pic de 81,5 % en 2007.

- Il y a eu une **baisse non linéaire** marquée au chapitre de la consommation d'alcool au cours de l'année écoulée chez les personnes de **18 à 29 ans** (de 89,5 % en 2007 à 80,1 % en 2013) et chez celles de **30 à 39 ans** (de 86,5 % en 2001 à 78,4 % en 2013), ainsi qu'une **hausse importante** à ce chapitre chez les personnes de **65 ans et plus** (de 58,8 % en 1997 à 70,5 % en 2013). On a noté une variation non linéaire pour ce qui est de la consommation d'alcool au cours l'année écoulée chez les répondants résidant dans l'Est, les répondants qui sont mariés et qui ont été mariés ainsi que les répondants ayant terminé leurs études secondaires.

- La **consommation d'alcool tous les jours** chez les buveurs a **augmenté** considérablement, passant de 5,3 % en 2002 à 8,5 % en 2013. Il y a eu des **hausses** importantes chez les **hommes** qui boivent (de 7,1 % en 2005 à 11,4 % en 2013), les **femmes** qui boivent (d'un creux de 2,6 % en 2001 à 5,6 % en 2013), les personnes de 40 à 49 ans (de 3,0 % en 2002 à 7,1 % en 2011) et celles de 65 ans et plus (de 13,2 % en 2003 à 22,8 % en 2011). On a relevé des hausses importantes dans la plupart des régions, chez les répondants mariés et qui avaient été mariés et pour tous les sous-groupes du niveau de scolarité.

- Le **nombre moyen de verres standard** par semaine chez les personnes ayant consommé de l'alcool au cours de l'année écoulée a **augmenté** considérablement, passant de 3,3 en 1996 à 5,1 en 2013. On a relevé également des **augmentations** importantes chez les **hommes** qui boivent (de 4,8 en 1996 à 7,4 en 2013), les **femmes** qui boivent (de 1,9 en 1996 à 2,8 en 2013) et pour toutes les autres caractéristiques démographiques (tous les groupes d'âge, toutes les régions, tous les états civils et tous les sous-groupes du niveau de scolarité).

- Le pourcentage d'Ontariens qui ont **bu plus d'alcool que la quantité jugée acceptable dans les directives de consommation d'alcool à faible risque** est demeuré **stable**, passant de 17,6 % en 2003 à 18,8 % en 2013. La seule variation non linéaire importante a été relevée chez les résidents du Sud-Ouest. Pour ce groupe, le pourcentage est passé de 17,8 % en 2003 à 27,2 % en 2006, puis a baissé pour s'établir à 13,6 % en 2013.

- Les estimations des **excès d'alcool hebdomadaires** sont demeurées stables entre 1996 et 2005, variant de 10,5 % à 12,7 % au sein de l'échantillon total et de 13,1 % à 16,5 % au sein des personnes ayant consommé de l'alcool au cours de l'année écoulée. Toutefois, il y a eu une **baisse** considérable par la suite, ce pourcentage passant de 12,3 % en 2006 à 6,8 % en 2013 pour l'échantillon total et de 15,9 % à 8,7 % chez les buveurs. Il y a également eu des **baisses** considérables pendant cette période parmi tous les sous-groupes démographiques : hommes et femmes, âge, région, état civil et niveau de scolarité).

- Le pourcentage de répondants ayant une **consommation d'alcool dangereuse ou nocive (AUDIT 8+)** est demeuré stable au sein de l'échantillon total, passant de 10,4 % en 2005 à 13,7 % en 2013. On a relevé une **tendance non linéaire** importante uniquement chez les **femmes,** dont le pourcentage a augmenté, passant de 4,8 % en 1998 à 7,9 % en 2011, puis a diminué pour s'établir à 6,1 % en 2013.

- On a relevé une variation **non linéaire** importante pour ce qui est de la proportion d'adultes ontariens ayant signalé au moins **un indicateur de dépendance à l'alcool**. Cette proportion a **diminué** (passant de 9,4 % en 1998 à 5,9 % en 2003), a **augmenté** à nouveau pour atteindre 8,1 % en 2011, puis a **diminué** pour s'établir à 6,6 % en 2013. Pendant cette période, on a remarqué une variation non linéaire importante uniquement au sein du sous-groupe des personnes **âgées de 50 à 64 ans**.

**Tabac : cigarettes**

- Il y a eu une **baisse** importante de **l'usage de la cigarette**, qui est passé de 26,8 % en 1996 à 16,8 % en 2013. Il y a eu des baisses perceptibles dans tous les sous-groupes : hommes et femmes, âge, région, état civil et niveau de scolarité. L'usage quotidien des cigarettes a suivi cette tendance, passant de 23,0 % en 1996 à 13,2 % en 2013.

**Cannabis**

- La consommation de **cannabis** au cours de l'année écoulée a **augmenté graduellement**, passant de 8,7 % en 1996 à 14,1 % en 2013. Il y a eu des hausses dans tous les sous-groupes : chez les hommes et les femmes et au sein de tous les sous-groupes (âge, région, état civil et niveau de scolarité).

- Les estimations de **problèmes liés à l'utilisation de cannabis** entre 2004 et

2013 sont généralement restées stables au sein de l'échantillon total, passant de 5,2 % à 7,5 %.

**Cocaïne**

- Le taux de consommation de cocaïne au cours de la vie a **augmenté** considérablement entre 1996 et 2010, passant de 4,9 % à 9,6 % pour ensuite revenir à 7,7 % en 2013. Le taux de consommation de cocaïne au cours de l'année écoulée est demeuré faible (moins de 2,2 %) au cours de la même période.

**Analgésiques opioïdes sur ordonnance**

- L'utilisation d'analgésiques **opioïdes sur ordonnance, quels qu'ils soient**, a **diminué** considérablement, passant de 26,6 % en 2010 à 22,2 % en 2013.

- L'**usage non médical** d'analgésiques opioïdes sur ordonnance au cours de l'année écoulée a lui aussi diminué. La proportion des adultes de l'Ontario qui ont signalé l'**usage non médical** d'analgésiques opioïdes sur ordonnance au cours de l'année écoulée a considérablement **diminué**, passant de 7,7 % en 2010 à 2,8 % en 2013. On a relevé des baisses importantes dans la plupart des sous-groupes démographiques (hommes et femmes, région, état civil et niveau de scolarité). Toutefois, les estimations sont demeurées **stables** pour les personnes de 18 à 29 ans, passant de 7,0 % en 2010 à 7,4 % en 2013.

**Conduite et utilisation de substances intoxicantes**

- Il y a eu une **baisse linéaire** importante au chapitre de la conduite en état d'ivresse, le taux passant de 13,1 % en 1996 à 5,1 % en 2013.

- Il y a également eu des baisses importantes depuis 1996 dans tous les sous-groupes démographiques. La **baisse** la plus marquante s'est produite chez les **conducteurs de sexe masculin**, dont le taux est passé de 21,2 % en 1996 à 8,2 % en 2013, et les conducteurs **âgés de 18 à 29 ans**, dont le taux est passé de 20,1 % en 1996 à 8,9 % en 2013. On a noté une importante tendance linéaire à la baisse dans toutes les régions entre 1996 et 2011, mais tout particulièrement parmi les conducteurs résidant à **Toronto** (de 14,1 % à 4,1 %).

- Entre 2002 et 2013, le pourcentage de répondants qui ont déclaré **avoir pris le volant après avoir consommé du cannabis** est demeuré **stable**, passant de 2,9 % à 2,3 %. La seule tendance non linéaire importante a été relevée chez les répondants **âgés de 18 à 29 ans**. Le pourcentage de **jeunes conducteurs** ayant pris le volant après avoir consommé du cannabis a **augmenté** de 7,2 % en 2002 à 11,9 % en 2006, taux ayant tombé à 2,8 % en 2009, mais qui a ensuite presque triplé en 2013 pour atteindre 8,3 %. On n'a pas relevé d'autres tendances marquées au sein d'autres sous-groupes.

## Tendances à long terme, de 1977 à 2013

**Consommation d'alcool**

Au chapitre de la consommation d'alcool, on a relevé deux variations à long terme qui méritent d'être soulignées : la consommation quotidienne d'alcool et les excès occasionnels d'alcool.

- Le pourcentage de personnes ayant consommé de l'alcool au cours de l'année écoulée qui ont déclaré **avoir bu tous les jours a diminué** graduellement, passant de 13,4 % en 1977 à 5,9 % en 1995, et est demeuré autour de 6 % jusqu'en 2006. Toutefois, au cours des sept dernières années, cette tendance s'est inversée. La consommation quotidienne d'alcool a **augmenté**

considérablement, passant de 5,9 % en 2006 à 8,5 % en 2013. Cette tendance non linéaire est particulièrement prononcée chez les **hommes qui boivent**, dont le taux de consommation d'alcool tous les jours est passé de 19,5 % en 1977 à 7,1 % en 2005 pour revenir à 11,4 % en 2013.

- Pour ce qui est des **excès occasionnels d'alcool**, on a relevé trois périodes distinctes à long terme. Les excès occasionnels d'alcool sont demeurés **stables** entre 1977 et 1995, puis ont **augmenté** considérablement en 1996 (de 7,0 % à 11,7 %) et sont demeurés à ce niveau élevé jusqu'en 2007. Les **hausses** ont été particulièrement marquées chez les **hommes** (de 10,7 % en 1995 à 20,7 % en 2001) et les personnes **de 18 à 29 ans** (de 10,6 % en 1995 à 26,1 % en 2007). Toutefois, après 2007, on a noté une tendance à la **baisse** en ce qui concerne les excès occasionnels d'alcool, dont le pourcentage est passé de 11,2 % en 2007 à 6,8 % en 2013. On a relevé des **baisses** marquées depuis 2007 au sein de tous les sous-groupes démographiques (hommes et femmes, âge, région, état civil et niveau de scolarité).

**Cannabis**

- Deux changements à long terme liés à l'utilisation du cannabis méritent d'être soulignés : l'**augmentation** importante de l'**utilisation de cannabis** au cours de l'année écoulée et le **vieillissement des utilisateurs de cannabis**. L'utilisation de cannabis au cours de l'année écoulée a **augmenté** considérablement, passant de 8,1 % en 1977 à 14,1 % en 2013. De plus, il y a eu des augmentations considérables à long terme chez les **hommes** (de 9,1 % en 1992 à 19,9 % en 2010); chez les **femmes** (de 4,5 % en 1977 à 10,8 % en 2013) et au sein de **tous les groupes d'âge**, notamment chez les répondants âgés de 18 à 29 ans (de 22,6 % en 1977 à 40,4 % en 2013) et ceux âgés de 50 ans et plus (de 1,2 % en 1977 à 5,9 % en 2013).

- Le **vieillissement des utilisateurs de cannabis** est une autre tendance importante à long terme. On estime actuellement que, en moyenne, les **utilisateurs de cannabis étaient plus âgés en 2013** que ceux de 1977 (âge moyen de 33,9 ans comparativement à 25,6 ans). En 1977, 82 % des utilisateurs de cannabis avaient entre 18 et 29 ans comparativement à 49 % seulement en 2013. En revanche, la proportion de personnes de 30 à 49 ans ayant consommé du cannabis au cours de l'année écoulée a plus que doublé, passant de 15 % en 1977 à 32 % en 2013, et la proportion de personnes de 50 ans et plus ayant utilisé cette substance au cours de la dernière année a augmenté de 600 %, passant de 3 % à 19 % pendant la même période.

## Tendances quant aux indicateurs de santé mentale et de bien-être

### Comparaison entre 2012 et 2013

Parmi l'échantillon total, il n'y a pas eu de variations majeures en ce qui concerne les indicateurs de santé mentale et de bien-être de 2012 à 2013. On a relevé des **augmentations** importantes de l'utilisation d'**antidépresseurs** uniquement chez les personnes de 18 à 29 ans (de 2,4 % à 8,0 %) et les résidents du Centre-Est (de 3,3 % à 7,3 %).

### Tendances de 1996 à 2013

**Niveau élevé de détresse psychologique**

- Les indicateurs de niveau élevé de détresse psychologique sont demeurés stables entre 2000 et 2013 au sein de l'échantillon total (12,7 % par rapport à 13,1 %). Les estimations pour tous les

sous-groupes démographiques sont elles aussi demeurées stables.

**Anxiolytiques sur ordonnance**

- Depuis 1997, une importante tendance **linéaire à la hausse** est perceptible en ce qui concerne l'utilisation d'anxiolytiques au sein de l'échantillon total. En effet, le taux d'utilisation est passé de 4,5 % en 1999 à 8,9 % en 2013. Cela est particulièrement manifeste chez les **femmes** (de 5,6 % à 10,7 %) et les personnes de **18 à 29** ans (de 1,7 % à 10,8 %).

**Antidépresseurs sur ordonnance**

- Depuis 1997, l'utilisation d'antidépresseurs au sein de la population totale a **augmenté** considérablement. Le taux d'utilisation est passé de 3,6 % en 1999 à 7,5 % en 2013. Il y a eu des hausses considérables dans tous les sous-groupes (hommes et femmes, région, état civil et niveau de scolarité). Les augmentations ont été les plus fortes chez les répondants les plus jeunes. De 1997 à 2013, l'utilisation d'antidépresseurs a **quadruplé** chez les personnes de **18 à 29** ans, passant de 2,0 % à 8,0 %.

**Mauvaise santé mentale**

- Entre 2003 et 2013, il y a eu une **augmentation** importante du pourcentage de répondants ayant **signalé une mauvaise santé mentale** (de 4,7 % à 7,1 %), particulièrement les personnes de **18 à 29** ans (de 2,9 % en 2009 à 12,1 % en 2013).

**Nombre élevé de jours de détresse mentale**

- Entre 2003 et 2013, il y a eu une **augmentation** considérable du pourcentage de répondants ayant signalé un nombre élevé de jours de détresse mentale au cours des 30 jours écoulés (de 5,4 % en 2003 à 7,3 % en 2013). On a relevé des hausses importantes chez les **hommes** (de 4,2 % en 2003 à 7,1 % en 2013).

**Mauvaise santé déclarée**

- Entre 2003 et 2013, environ 10 % des répondants ont déclaré qu'ils étaient en mauvaise santé. Ce pourcentage et les estimations pour tous les sous-groupes démographiques sont demeurés stables.

**Nombre élevé de jours de mauvaise santé physique**

- Le pourcentage de répondants qui ont signalé un nombre élevé de jours de mauvaise santé physique au cours des 30 jours écoulés était le même en 2003 et en 2013 (6,7 %). Les taux étaient stables pour la plupart des sous-groupes démographiques. On a relevé des augmentations importantes uniquement pour le sous-groupe des répondants habitant à Toronto et dans le Sud-Ouest, ainsi que pour ceux âgés de 30 à 39 ans.

## Constatations encourageantes

Les constatations suivantes devraient être considérées comme encourageantes.

**Cigarette :** La plupart des adultes ontariens (83,2 %) ne fument pas la cigarette. L'usage fréquent de la cigarette a diminué considérablement depuis 1996 (de 26,7 % en 1977 à 16,8 % en 2013), tout comme l'a fait l'usage quotidien de la cigarette (de 23,0 % à 13,5 % au cours de cette période).

**Alcool :** Bien que la majorité des adultes ontariens (78,4 %) aient bu de l'alcool au cours de l'année écoulée, la plupart d'entre eux boivent sans faire d'excès. En effet, l'étude a montré que 93 % des buveurs ne font pas d'excès d'alcool hebdomadaires et que 81 % des buveurs ne dépassent pas la quantité jugée acceptable dans les directives de consommation d'alcool. Elle a aussi

montré que 86 % des buveurs ne dépassent pas le seuil de consommation d'alcool dangereuse ou nocive AUDIT. On a également relevé une diminution importante des excès occasionnels d'alcool (boire cinq verres ou plus en une occasion par semaine) entre 2006 (12,3 %) et 2013 (6,8 %). Cette baisse était conséquente dans l'ensemble, se produisant dans plusieurs sous-groupes, mais elle était particulièrement marquée chez les hommes (de 20,7 % en 2001 à 12,5 % en 2013).

**Cannabis :** Bien que le pourcentage de personnes ayant consommé du cannabis au cours de l'année écoulée ait augmenté à long terme, l'usage est généralement peu fréquent. Par exemple, parmi les personnes en ayant consommé au cours de leur vie, seulement 19,7 % d'entre elles ont déclaré en prendre une fois par mois ou plus souvent.

**Conduite en état d'ivresse :** La conduite en état d'ivresse parmi les titulaires d'un permis de conduire a diminué de plus de la moitié entre 1996 et 2013, passant de 13,1 % à 5,1 %. De plus, cette diminution a eu lieu dans plusieurs sous-groupes, dont les hommes (l'estimation pour ce sous-groupe est passée de 21,2 % à 8,2 %). Ces baisses sont survenues à une époque où la province a introduit plusieurs mesures visant à réduire les taux de conduite avec facultés affaiblies, y compris des sanctions accrues pour les conducteurs dont l'alcoolémie se situe dans la fourchette d'avertissement et des mesures visant à accroître l'utilisation d'un antidémarreur par les personnes reconnues coupables.

**Analgésiques opioïdes sur ordonnance :** La proportion de la population adulte de l'Ontario qui signale l'utilisation non médicale d'analgésiques opioïdes sur ordonnance a considérablement diminué, passant de 7,7 % en 2010 à 2,8 % en 2013. Cette baisse s'est produite au cours d'une période où les politiques et programmes provinciaux visant à réduire l'usage non médical de ces substances ont été introduits.

## Préoccupations en matière de santé publique

L'*Indicateur de CAMH* a permis de repérer plusieurs problèmes potentiels de santé publique devant être surveillés et étudiés plus à fond.

**Cigarettes :** Un des objectifs fixés par Action Cancer Ontario (ACO) en matière de santé (comité directeur Cancer 2020) est de *réduire le pourcentage d'adultes qui font usage de tabac pour le ramener à 5 % d'ici 2020*. Bien que le taux d'adultes ontariens qui fument la cigarette ait diminué considérablement, le taux actuel de 16,8 % est plus de trois fois supérieur à l'objectif de 5 % d'ACO.

**Cannabis :** La consommation de cannabis au cours de l'année écoulée a **augmenté** considérablement, passant de 8,7 % en 1996 à 14,1 % en 2013, tant chez les **hommes** que chez les **femmes** et pour **tous les groupes d'âge**. La consommation de cannabis a plus que doublé chez les personnes de **18 à 29 ans**, passant de 18,3 % en 1996 à 40,4 % en 2013. Bien que l'utilisation de cannabis soit généralement peu fréquente (40 % des personnes en ayant consommé au cours de l'année écoulée ont déclaré en prendre moins d'une fois par mois), **19 %** des utilisateurs ont déclaré en prendre **tous les jours**. De plus, le risque de complications médicales liées au **vieillissement des utilisateurs de cannabis** et, plus particulièrement, l'augmentation du nombre d'adultes d'âge moyen et d'ainés ayant consommé du cannabis au cours de l'année écoulée méritent d'être étudiés plus à fond.

**Alcool :** La consommation d'alcool d'un pourcentage important de personnes est supérieure au niveau recommandé dans les **directives sur la consommation d'alcool à faible risque**. Près d'un buveur sur cinq (18,8 %) a déclaré que sa consommation d'alcool était supérieure à la quantité recommandée dans ces directives. De plus, il y a eu une hausse importante du **nombre moyen** de verres consommés par semaine,

qui est passé de 3,3 en 1996 à 5,1 en 2013, ainsi qu'une hausse du taux de **consommation d'alcool tous les jours** chez les personnes ayant bu de l'alcool au cours de l'année écoulée, qui est passé de 5,3 % en 2002 à 8,5 % en 2013. Ces hausses étaient particulièrement importantes chez les **femmes** (de 2,6 % en 2001 à 5,6 % en 2013). L'augmentation de la consommation d'alcool chez les femmes est préoccupante compte tenu des effets nocifs d'une consommation élevée.

**Analgésiques opioïdes sur ordonnance :** Malgré une baisse de l'utilisation, 3 % de la population adulte de l'Ontario (environ 295 000 personnes) a déclaré prendre des analgésiques opioïdes sur ordonnance **à des fins non médicales** en 2013. Ces médicaments puissants peuvent entraîner une dépendance et sont liés à une utilisation accrue d'opiacés illicites. De plus, on n'a relevé aucune diminution des estimations de l'utilisation de ces substances chez les personnes de 18 à 29 ans (7,0 % en 2010 par rapport à 7,4 % en 2013).

**Santé mentale :** Environ 13,1 % des adultes ontariens (1,3 million de personnes) ont éprouvé un **niveau élevé de détresse psychologique** en 2013. De plus, nous avons relevé une **augmentation** importante du pourcentage de répondants ayant déclaré avoir une **mauvaise santé mentale**, qui est passé de 4,7 % en 2003 à 7,1 % en 2013. Environ un adulte sur dix (8,9 %) a pris des **anxiolytiques** sur ordonnance (environ 939 300 adultes ontariens) et un adulte sur treize (7,5 %) a pris des **antidépresseurs** sur ordonnance (environ 786 400 adultes ontariens). Le pourcentage de répondants ayant déclaré qu'ils avaient pris des **anxiolytiques et des antidépresseurs sur ordonnance** au cours de l'année écoulée a augmenté considérablement entre 1999 et 2013 (passant de 3,6 % à 7,5 % et de 4,5 % à 8,9 %, respectivement). De plus, en 2013, environ 2,2 % des adultes ontariens (environ 231 500 personnes) ont déclaré qu'ils avaient **envisagé** sérieusement **de se suicider** au cours des 12 mois ayant précédé le sondage.

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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 biennial report is threefold. *First*, we describe the prevalence of substance use – alcohol, tobacco, cannabis and other drugs – and their attributable harms as well as indicators of impaired mental health – elevated distress, use of antianxiety and antidepressant medication and mental health-related quality of life indicators – among Ontario adults in 2013.[1] *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 28 repeated cross-sectional surveys conducted during a 37-year period between 1977 and 2013, we examine trends in alcohol and other drug use, health and mental health indicators.[2]

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] The Province of Ontario has the largest population of the ten Canadian provinces, representing over one in three Canadians (38%).

[2] Mental health measures were introduced into the *CAMH Monitor* in 2000, thus limiting the available trend to a shorter period.

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

- First and foremost, monitoring **provides a surveillance function** that has the ability 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.[3] 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 nondrinkers. 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.

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

## 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:[4]

- a dedicated addiction/mental health survey has greater depth of content than general health surveys with limited addiction/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 2013 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, second only to Sweden (Trewin & Lee, 1988). For example, based on the most recent *Residential Telephone Service Survey* (RTSS), Statistics Canada estimated that although more than one-in-five Canadian households in 2013 had no landline telephone, of which 21% had a cellphone only and 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 noncoverage

[4] 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.

depends not only upon the *difference* in drug use (or mental health impairments) between respondents and nonrespondents, 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 nonrespondents 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. At times, purposive studies may be necessary to build and complement knowledge of hard-to-reach or hidden populations (e.g., Erickson et al, 1994). 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; 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 2013 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 **28 repeated cross-sectional surveys** conducted during a 37-year period between the years **1977** and **2013** and targeting a population of noninstitutionalized Ontarians aged 18 and older.[5] 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 2.1.1).[6] 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.[7]

### 2.1.1 Sampling Designs 1977–1995 Series

As seen in Table 2.1.1, the five modified-probability (a stratified, three-stage area sample)[8] 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 23 surveys conducted annually between **1991** and **2013** employed computer assisted telephone interviewing (CATI) (see Textbox 3). Using 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).[9]

[5] 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).

[6] 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.

[7] 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.

[8] 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.

[9] 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 postcollection data preparation (e.g., creation of derived variables and poststratified 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 1996–2013

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*).[10]

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 2 to 4 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;[11]
   - 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 2.4.1` 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. (Note, however, that this improvement comes at a cost to larger regions, such as the Central East, 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 9).

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. The *CAMH Monitor* **sample size was increased** from earlier cycles – now approaching or exceeding 3,000 per year. Between 1996 and 2013, the annual sample size varied from 2,005 to 3,039 respondents.[12]

[10] 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.

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

[12] Beginning in 2010, the allocated sample was increased to 3,000 completions. Thus, compared to most similar national surveys, the *CAMH Monitor's* Ontario sample often exceeds the Ontario strata from many national surveys.

## The *CAMH Monitor* Sampling Plan

The 2013 *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 2013 (N=10,157,960). 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 from which corresponding adult household members residing in Ontario during 2013 and who were capable of completing the interview in English were selected. Thus, **excluded from selection** were adults without a phone, those who were institutionalized, and those who were unable to complete the interview in English.

**Textbox 1**
**2013 *CAMH Monitor* Target and Sample Population**

Target population
- noninstitutionalized Ontario adults aged 18 and older residing in Ontario during 2013 (N=10,157,960)

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 2013
- 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

The *CAMH Monitor* sampling plan employs a **stratified** (by six equally allocated regional area codes[13]) **two-stage** (telephone number–respondent) **list-assisted RDD**[14] rolling quarterly[15] probability sampling procedure, interviewing Ontario residents aged 18 and older, capable of completing a telephone interview in English. Each calendar year, the four quarterly (or 12 monthly, for cycles before 2011) non-overlapping samples were cumulated to provide single calendar year data (Alexander, 2002; Kish, 1999).

The *CAMH Monitor* series has been was administered by the Institute for Social Research, York University since 1991.

**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 last birthday method | None |

[13] See **Table 2.4.1** for area code-region designations. In instances where area codes overlapped, multiple regional strata, postal codes and other sources were used to generate nonoverlapping regional strata.

[14] Between 1991 and 1999, the stage 1 sampling frame consisted of landline telephone numbers only. In 2000, the frame was expanded to a list-assisted RDD, including the possible selection of cell/wireless/mobile phones, unlisted and newly listed or connected numbers. Although the movement away from exclusive landline selection loosens the notion of "household," we contend that this revision improves our sample.

[15] In 2011, the field period was lengthened from 12 monthly to 4 quarterly samples to allow for a longer period to re-contact unanswered calls.

## Building the List-assisted Frame

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).

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. Because **unlisted numbers, cell phone numbers and newly connected or published numbers** are interspersed among published numbers, this strategy provides a superior sample than one based on listed landline numbers alone.[16]

## 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[17] was subsampled according to the last-birthday method (Binson, Canchola, & Catania, 2000; Rizzo, Brick, & Park, 2004).[18] A minimum of 12 call backs were placed to unanswered numbers[19] and **refusal conversion attempts** were made with all respondents who refused to participate on the first contact.[20] (In 2013, refusal conversion attempts recovered 14% of initial refusals (N=423.)

[16] Including cell phone numbers should improve the sample quality given the increased coverage and the recent research suggesting that exclusive landline surveys underestimate several health behaviours including binge drinking and smoking (Blumberg, Luke, & Cynamon, 2006). More recently, Voigt et al (2011) in their description of select national US surveys similarly found elevated prevalence of current smoking and alcohol use among cell-only users than landline users.

[17] With the introduction of the RDD series in 1991, both English and French CATIs were available to all respondents. However, because most Francophone respondents preferred to complete the English interview, in 1998 the CATI became exclusively English.

[18] 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. The potential limitation of such methods is that if the month/day of a birthday is correlated with the survey variables there is potential for sample bias (Groves et al., 2009).

[19] Call attempts ranged from 1 through 41 (mean = 5.7 calls; 85% were contacted by the 11th call).

[20] 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 recontacted.

To help maximize the response rate, all selected telephone subscribers were mailed (addresses retrieved from reverse directories) a **prenotification 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, thereby improving within region estimates and cross-region comparisons, the sample was equally allocated among six strata derived from adjacent telephone area codes, thus resulting in a **disproportional-to-population** allocation (see Table A1).[21]

[21] Earlier proportional stratified sampling posed fitness-for-use difficulties because the region often displaying elevated indicators (i.e., Northern Ontario) also had one of the smallest sample sizes due to their smaller population share (Although not the smallest region, the Northern samples for the 12 cycles between 1991 and 2013 ranged from 309 to 602; mean=426, median=401). Consequently, although the North displayed elevated indicators, especially for alcohol, such differences did not reach statistical significance and therefore we were unable to eport such findings despite their potential public health importance.

## Table 2.1.1: **ARF/CAMH – Ontario Adult Population Survey Program, 1977–2013**

| 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)**<br><br>**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<br>**12m rolling:**<br>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<br>12m rolling:<br>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<br>12m rolling:<br>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*)**<br><br>**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).<br>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<br>12m rolling:<br>Jan 20- Dec 21 | RR=69% | 6 SE strata; 2436 SECU; 2430 design df | (Adlaf & Ialomiteanu, 2001; Adlaf, Ialomiteanu, & Paglia, 2000) |
| 2000 (15) | Telephone | ISR | | N=2,406<br>12m rolling:<br>Jan 20- Dec 21 | RR=61% | 6 SE strata; 2406 SECU; 2400 design df | (Adlaf & Ialomiteanu, 2001; Adlaf, Ialomiteanu, & Paglia, 2001 ) |
| 2001 (16) | Telephone | ISR | | N= 2,627<br>12m rolling:<br>Jan 25- Dec 20 | RR=61% | 6 SE strata; 2627 SECU; 2621 design df | (Adlaf & Ialomiteanu, 2002a, 2002b) |

| Year | Mode of Interview | Survey Organization | Sample Design | Sample (N) Date | RR *deff* | Standard Error Calculation Model | Source |
|---|---|---|---|---|---|---|---|
| 2002 (17) | 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.<br><br>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..<br><br>In 2006, the target sample was reduced to 2,000 completions.<br><br>In 2009, all selected numbers received advance letter. | N= 2,421<br>12m rolling:<br>Jan 10- Dec 22 | RR=58% | 6 SE strata;<br>2421 SECU;<br>2415 design df | (Ialomiteanu & Adlaf, 2003) |
| 2003 (18) | Telephone | ISR | | N= 2,411<br>12m rolling:<br>Jan 10- Dec 30 | RR=58% | 6 SE strata;<br>2411 SECU;<br>2405 design df | (Ialomiteanu & Adlaf, 2004) |
| 2004 (19) | Telephone | ISR | | N= 2,611<br>12m rolling:<br>Jan 03- Dec 30 | RR=59% | 6 SE strata;<br>2611 SECU;<br>2605 design df | (Ialomiteanu & Adlaf, 2005) |
| 2005 (20) | Telephone | ISR | | N= 2,445<br>12m rolling:<br>Jan 10- Dec 22 | RR=61% | 6 SE strata;<br>2445 SECU;<br>2439 design df | (Adlaf, Ialomiteanu, & Rehm, 2008; Ialomiteanu & Adlaf, 2006) |
| 2006 (21) | Telephone | ISR | | N= 2,016<br>12m rolling:<br>Jan 03- Dec 30 | RR=61% | 6 SE strata;<br>2016 SECU;<br>2010 design df | (Ialomiteanu & Adlaf, 2007) |
| 2007 (22) | Telephone | ISR | | N= 2,005<br>12m rolling:<br>Jan 02- Dec 30 | RR=53% | 6 SE strata;<br>2005 SECU;<br>1999 design df | (Ialomiteanu & Adlaf, 2008; Ialomiteanu, Adlaf, Mann, & Rehm, 2009) |
| 2008 (23) | Telephone | ISR | | N= 2,024<br>12m rolling:<br>Jan 05- Dec 28 | RR=55% | 6 SE strata;<br>2024 SECU;<br>2018 design df | (Ialomiteanu & Adlaf, 2009) |
| 2009 (24) | Telephone | ISR | | N=2,037<br>12m rolling:<br>Jan 2- Dec 30 | RR=57% | 6 SE strata;<br>2037 SECU<br>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<br>12m rolling:<br>Jan 2- Dec 28 | RR=51% | 6 SE strata;<br>3030 SECU<br>3024 design df | (Ialomiteanu & Adlaf, 2011) |

| Year | Mode of Interview | Survey Organization | Sample Design | Sample (N) Date | RR *deff* | Standard Error Calculation Model | Source |
|---|---|---|---|---|---|---|---|
| 2011 (26) | Telephone | ISR | | N=3039<br>**4Q rolling:**<br>Jan 4–Dec 20 | RR=51% | 6 SE strata;<br>3039 SECU<br>3033 design df | (Ialomiteanu & Adlaf, 2012; Ialomiteanu, Adlaf, Hamilton, & Mann, 2012) |
| 2012 (27) | Telephone | ISR | | N=3030<br>**4Q rolling:**<br>Jan 3–Dec 28 | RR=51% | 6 SE strata;<br>3030 SECU<br>3024 design df | (Ialomiteanu & Adlaf, 2013) |
| 2013 (28) | Telephone | ISR | | N=3021<br>**4Q rolling:**<br>Jan 2–Dec 20 | RR=48% | 6 SE strata;<br>3021 SECU<br>3015 design df | (Ialomiteanu & Adlaf, 2013; Ialomiteanu, Adlaf, Hamilton, & Mann, 2014) |

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

## 2.2 Computer Assisted Telephone Interviewing (CATI)

**Two split-ballot interview panels** are employed in the 2013 *CAMH Monitor*, both of which include **core items** – questions asked among all respondents and which represent the majority of the interview – and **panel items** – questions asked among a single panel of respondents only. The CATI system randomizes respondents to one of two panels, Panel A or B, both of which were administered **concurrently** throughout the 2013 calendar year.[22]

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.

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 substudies on question wording, order, etc.[23] 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).

**Textbox 3**
**CATI Systems**

CATI systems are one of the most widely used of the computer assisted interviewing technologies. Interviewer-administered CATI systems function to manage aspects of the interview process, including such functions as editing, coding and data collection. Operating from a centralized facility, CATI systems employ computerized instruments to manage the interaction between the interviewer and respondent. The process can be described as follows.

Interview questions, precoded and open-ended responses, and related interviewer instructions are keyed and saved electronically. The CATI system stores this information and then the presented order of questions and any question branching instructions (i.e., item skipping) is programmed. This programming automates the interview process and ensures that only designated questions are asked of each respondent.

Once the system is ready, telephone numbers (previously stored) are randomly selected and dialed by the system. In most software, the calling schedule is also automated to maximize respondent contact. After the interviewer establishes contact and eligibility of the respondent, the interviewer begins the interview. One-by-one, each question appears on the interviewer's computer screen. The interviewer then reads the question over the telephone headset to the respondent and waits for a response. The respondent's answer is entered directly into the system by the interviewer, thus automatically capturing interview data and eliminating the need for a separate stage of data entry, and, in turn, provides quick access to the final data file.

Questions automatically route to the next designated question depending on the respondent's prior answers (e.g., past year drinking) or based on their demographic characteristics (e.g., sex, age) or any prior questions.

The CATI system employed by the *CAMH Monitor* since 1991 has been continuously operated since 1996.

See (Biemer & Lyberg, 2003; Caitlin & Ingram, 1988; Couper & Nicholls II, 1998) for reviews of CATI systems.

[22] Beginning in 2010, the two CATI panels (A and B) were reallocated to produce samples of 1,000 and 2,000 completions, respectively. Panel A is allocated to tobacco content (a sample sponsored by the Ontario Tobacco Research Unit), while the larger Panel B is allocated to general prevalence and surveillance. Prior to 2010, both panels were allocated near equal samples of 1,000 and were administered consecutively in 6-month segments; in 2010, both panels became concurrently administered in 12-month periods.

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

To assess usability – how well the instrument works in practice – full interviews with special attention paid to new items in the 2013 *CM* 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.

In 2013, the CATI included 238 questions allocated between the two panels, with a maximum of 141 and 173 items in Panels A and B, respectively. Interviews, which averaged **24 minutes** (range 12–78 min.; median 23 min.; 88% of interviews completed within 30 min.), were conducted by 36 ISR interviewers, many with considerable CATI experience, including prior *CAMH Monitor* interviewing. Interviews were scheduled across a six-day week (Fridays excluded) and time of day.[24]

## 2.3 Data Quality: Participation, Sample Characteristics and Representativeness

**Participation —** Of the 8,846 telephone numbers randomly dialed during the four quarters of interviewing in 2013, 6,297 were known or estimated to be, eligible,[25] of which **3,021 respondents participated between January 2 and December 20, 2013** (961 and 2,060 in Panels A and B, respectively)**.** Participating respondents represent an **unweighted response rate of 48%** ([3021/6297]*100). Quarterly response rates varied from 45% to 51% – 49% in Q1, 51% in Q2, 45% in Q3 and 48% in Q4 – and regional rates varied from 43% to 53% – 43% for Toronto, 44% for the Central East, 50% for the Central West, 49% for the East, 53% for the West and 51% for the North.[26] Whereas the unweighted response rate is best viewed as a process indicator of the success of the fieldwork, the **weighted response rate of 47%** is best viewed as an indicator of potential response bias in the presence of unequal inclusion probabilities – is similar to the unweighted rate.[27]

CAMH Monitor response rates compare favorably to similar surveys in Canada and the US. Although caution is always needed when comparing response rates across surveys (due to differing calculation methods) the following comparisons involve similar designs and methods. The *CAMH Monitor* unit response rates are marginally higher than recent Canadian alcohol and drug use RDD surveys, including the 2004 *Canadian Addiction Survey* (response rate = 47%) (Adlaf, Begin, & Sawka, 2005) and the more recent 2011 and 2012 CADUMS (*Canadian Alcohol and Drug Use Monitor Survey*) (Health Canada, 2012), which achieved an overall response rate of 44% and 40%, respectively. In the US, the *Behavioral Risk Factor Surveillance Survey* (BRFSS), the largest health risk RDD survey coordinated by the Centers for Disease Control and Prevention, achieved, in 2010, a median state response rate of 53% and a median overall response rate of 36%.[28]

The decline in response rates in the past decade is common among many respected large-scale surveys. A case in point is the University of Michigan's *Survey of Consumer Attitudes*, which posted a 12 percentage point decline in

[24] Interviews were conducted from 10 AM to 5 PM and 6 PM to 9:45 PM, Monday through Thursday and from 10 AM to 6 PM on Saturday and 2 PM to 9:45 PM on Sunday. Two-thirds (65%) of interviews were completed during the evening, 25% during the afternoon and 10% during the morning.

[25] Whether eligible respondents reside in noncontacted households is unknown, but is estimated based on the eligible proportion of respondents derived among contacted households. This issue is not unimportant to telephone surveys because ignoring unknown eligibles overstates the response rate (because such practice deflates the denominator).

[26] We employ the American Association for Public Opinion Research's (AAPOR) response rate calculation #3, which includes an estimate of unknown eligibles (see Standard Definitions at http://www.AAPOR.org). AAPOR RR3= $I / ((I+P) + (R+NC+O) + e(UH + UO))$, where *I*=completions; *P*=partial completions; *R*=refusals/breakoffs; *NC*=noncontacts; *O*=other; *e*=estimated proportion of cases of unknown eligibility that are eligible; *UH*=unknown if household; *UO*=unknown other.

[27] The weighted response rate is 47.3% = the sum of the product of the regional weighted distribution and the unweighted response rate: *Toronto* (.200 × .43) + *Central East* (.268 × .44) + *Central West* (.208 × .50) + *West* (.130 × .53) + *East* (.128 × .49) + *North* (.066 × .51).

[28] CDC, www.cdc.gov/brfss/annual_data/2010/2010_Summary_Data_Quality_Report.docx (Accessed March 5, 2014).

response rates from 60% in 1996 to 48% in 2003 (Curtin, Presser, & Singer, 2005).

***CAMH Monitor* Response Rate Trends —** Like many large-scale surveys, the *CAMH Monitor's* response rate continues to decline over time. Unit response rates for the 23 RDD surveys conducted between 1991 and 2013 (see **Table 2.1.1**) vary from 48% to 69% with a mean and median of 60% and 61%, respectively. Regressing response rates (in proportions) on these 23 survey years showed a small, but cumulating **linear annual decline** of **0.8 percentage points** ($b_{\text{year}}$ = -.764, $p$<.001).[29] 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 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).

[29] Attempts have been made to stall this declining trend in response rates. Beginning in 2009, all telephone households received a prenotification (advance) letter informing the household that they would soon be contacted by telephone by ISR. Despite this prior notification response rates have not been markedly altered (Ialomiteanu & Adlaf, 2014). Nonetheless, interviewers commented that the advance letter served to prepare respondents for the initial telephone contact, as well as easing the initial interviewer-respondent contact.

**Sample Representativeness —** The 2013 *CM* sample represents noninstitutionalized residents aged 18 and older residing in Ontario during calendar year 2013 (a population of approximately 10,157,960 adults). To evaluate the representativeness of our sample, we compared characteristics of respondents aged 18 and older with comparable 2011 Ontario Census figures (Statistics Canada, 2012).[30]

**Textbox 4**
**The 2013 CAMH Monitor Sample**

- Target population – noninstitutionalized Ontario adults aged 18 and older
- 8,846 randomly selected telephone numbers (including landline, cell/mobile, unlisted and newly-published), of which 6,050 were known or estimated to be eligible
- **3,021** respondents aged 18 and older participated, (panel A= **961**; panel B=**2060**), representing a **48%** unweighted response rate (**47%** weighted)
- Computer assisted telephone interviews (CATI) were conducted in English throughout the 2013 calendar year (January 2 – December 20), and averaged **24** minutes in length
- Sample represents **10,157,960** Ontarians aged 18 and older; each respondent represents 3,362 Ontario adults.
- **48%** men (*n*=1232); **52%** women (*n*=1789)
- Mean age of **47.9** (range 18–97)
- Sample equally allocated within six telephone area code regions (n=497–512)
- Compared to the available demographic characteristics for Ontario residents from the 2011 Census, the 2013 *CM* respondents were similar for sex and age; *underrepresented* those never married, widowed, divorced or separated, and those living in Toronto and conversely, *overrepresented* those married and those living outside Toronto.

Of the four comparisons available, two – sex and age – showed no significant differences between the 2013 *CM* and 2011 Census distributions, indicating that the sample with its postadjusted weights calibrate well to the population for these characteristics.

[30] 2013 *CM* respondent characteristics were derived using final postadjusted weights. Significant differences were determined if the Census figure fell outside the 2013 *CM* confidence interval.

Additional demographic comparisons were available only for marital status and region. There were differences between the Census and 2013 *CM* figures for both marital status and region. Compared to Ontario Census figures from 2011, the 2013 sample **underrepresented** those never married (21.8% vs. 27.6%), those widowed, divorced or separated (11.0% vs. 17.9%) and respondents living in Toronto (20.0% vs. 21.8%). Correspondingly, the sample **overrepresented** those married or living with a partner (67.3% vs. 54.5%) and those living outside Toronto (80.0% vs. 78.2%). Information regarding selected sample characteristics is presented in Appendix A.

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.

Further details describing the *2013 CAMH Monitor*, including procedures, CATI questions, and data quality reporting are available in a companion technical report (Ialomiteanu & Adlaf, 2014) available in PDF at http://ww.camh.ca/en/research/news_and_publications/Pages/camh_monitor.aspx.

## 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 elevated psychological distress (GHQ – *General Health Questionnaire*) (see Table 2.4.2). Additional standardized measures include two mental health related items – self-rated mental health status and mental unhealthy days – from the CDC developed *Health-Related Quality of Life* scale (HRQoL–4). (Note: the corresponding Results sections describe each of these measures in further detail.)

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 28 surveys. 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).[31]

Regarding demographic characteristics, we have restricted our attention to the few critical social determinants of addiction and mental health risk factors (Tables 2.4.1 and 2.4.2).

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

Table 2.4.1
**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 | **Design Strata** – based on adjacent regional area codes: Toronto (416, 647 area codes); Central East (705, 905, 289); Central West (519, 905, 289) ; West (519, 226); East (613, 343); North (705, 807) (Also see Appendix A, Table A-1) |
| | 7 | **Public Health Region** – based on Ontario Ministry of Health 7 planning regions: Toronto; Central South; Central West; South West; Central East; East; North (Also see Appendix A, Table A-2) |
| | 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 |
| **Immigrant Status** | 2 | Born outside Canada; born in Canada |

## Table 2.4.2: **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)<br><br>(Available 1977, 1982, 1984, 1987, 1989, 1991–2013) |
| **Past Year Drinking** | Percentage reporting drinking alcohol at least once during the 12 months before the survey<br><br>(Available 1977, 1982, 1984, 1987, 1989, 1991–2013). |
| **Daily Drinking** | Percentage reporting drinking at least one alcoholic drink every day during the 12 months before the survey<br><br>(Available 1977, 1982, 1984, 1987, 1989, 1991–2013) |
| **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<br><br>(Available 1977, 1982, 1984, 1987, 1989, 1991, 1994–2013) |
| **Number of Drinks Consumed in Past Year** | Estimated number of alcoholic drinks consumed in 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<br><br>(Available 1992–2013) |
| **Exceeding Low-Risk Drinking Guidelines** | Percentage exceeding the 2011 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.<br><br>(Available 2003–2009; 2011–2013; 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.<br><br>(Available 1998–2013) |
| **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)<br><br>(Available 1996–2013) |
| **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<br><br>(Available 1991–2013) |
| **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<br><br>(Available 1996–2013) |
| **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.<br><br>(Available 1996–2013) |
| **CANNABIS USE** | |
| **Lifetime Cannabis Use** | Percentage reporting the use of marijuana or hashish at least once in their lifetime<br><br>(Available 1977, 1982, 1984, 1987, 1989, 1991–2013, 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<br><br>(Available 1977, 1982, 1984, 1987, 1989, 1991–2013; 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<br><br>(Available 2004–2013; Panel B subsample) |
| **OTHER DRUG USE** | |
| **Lifetime Cocaine Use** | Percentage reporting the use of cocaine at least once in their lifetime<br><br>(Available 1984, 1987, 1989, 1991, every even year since 1994 until 2010; 2011–2013; Panel B subsample) |
| **Past Year Cocaine Use** | Percentage reporting the use of cocaine at least once during the 12 months before the survey<br><br>(Available 1984, 1987, 1989, 1991, every even year since 1994 until 2010; 2011–2013; Panel B 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<br><br>(Available 2010–2013; Panel B 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<br><br>(Available 1996–2013) |
| **Driving after Cannabis Use** | Percentage of drivers with a valid licence reporting driving within two hours of consuming cannabis during the past 12 months<br><br>(Available 2002–2013) |
| **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)<br><br>(Available 2003–2013; Panel B subsample) |
| **MENTAL HEALTH** | |
| **Elevated Psychological Distress (GHQ12)** | Percentage reporting 3 of more of the 12 GHQ symptoms. The 12 items assess symptoms of anxiety, depression, and social functioning over the past few weeks.<br>(Available 2000–2013; Panel B subsample) |
| **Use of Prescribed Antianxiety Medication** | Percentage reporting the use of prescribed antianxiety medication at least once during the 12 months before the survey<br><br>(Available 1997, 1999–2013, excl. 2000, 2005, 2007; Panel B subsample) |
| **Use of Prescribed Antidepressant Medication** | Percentage reporting the use of prescribed antidepressant medication at least once during the 12 months before the survey<br><br>(Available 1997, 1999–2013, excl. 2000, 2005, 2007; Panel B subsample). |
| **Mental Health-Related Quality of Life (MHQoL)** | 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)<br><br>(Available 2003–2013; Panel B 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 (see Appendix B). 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) poststratified calibration to census figures based on eight age-by-sex classes.[32] In the 2013 *CM*, on average, each respondent represents or "stands in" for 3,362 Ontario adults.[33]

**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%)[34] 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, but quantify errors due to our surveying only a single sample of the total population. 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). Thus, the reader should be mindful that 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).[35]

**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 2013 *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

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

[33] Both relative (i.e., sample size scaled) and expansion (i.e., population scaled) weights employed in the *CM2013* are rescaled versions of one other. The **relative weights** are scaled to sum to the interviewed sample size ($n$=3021). This weight averages 1.0 (ranging from .107 to 7.61; IQR = 0.78; skewness = 2.49). The **expansion weights**, are scaled to sum to the Ontario adult population ($N$=10,157,960). This weight averages 3362.5, (ranging from 291.9 to 25607.2; IQR = 2618.38; skewness = 2.49).

[34] For percentages, 50% represents the maximum variance. Thus, CIs calculated on this value will provide the widest confidence limits.

[35] An additional application of the CV is in evaluating whether the use of sampling weights signals inefficiency in estimation (Korn & Graubard, 1999:172–176).

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).

Based on this CV suppression rule, estimates for the 2013 *CM* total sample are reportable as low as 1.5% without suppression and estimates above 18% are deemed trustworthy without the need for caution. (Note that reportable percentage estimates for subpopulations, e.g., men, women, with smaller samples will have higher maximum suppression thresholds.)

**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 Analysis

Complex survey data do not conform to many estimating assumptions, including maximum likelihood, generalized linear and, most importantly, simple random sampling.[36] 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 naively 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

[36] 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 1,948 (i.e., 3039/1.56). Most variables in complex samples tend to have *deff*s larger than 1.0, and variances and standard errors larger than an equivalent SRS.[37] 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*,[38] 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).

Our analyses have several features:

- All 2013 estimates (and estimates since 1996) are based on robust[39] methods implemented in the Stata® (version 13) suite of survey estimation procedures, which employ **pseudo-maximum likelihood estimation (PMLE)**[40] (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.[41]

[37] Although less common, a *deff* can also be less than 1.0 (more efficient than an SRS), resulting in lower variance and statistical tests with greater power relative to an SRS.

[38] This is often due to the selection of nonclustered primary stage units and the selection of only one respondent per household, and that many RDD designs do not exceed two stages (Groves et al., 2009; Groves & Kahn, 1979). Indeed, for 47 major demographic categories of this CM2013 monograph, *deffs* range from 0.6 through 2.9 (mean=1.7, median=1.7, IQR=.45) (Ialomiteanu & Adlaf, 2012: Table 3.6)

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

[40] 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.

[41] The Stata *sampling error calculation model* used for this analysis was as follows: *svyset IDNUM [pweight = FWGHT], strata (REGION*), where IDNUM represents respondents (the PSU or cluster codes); FWGHT represents the final normalized (or "sample-scaled") weight factor, whereas XWGHT 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

- Population estimates are provided for select health behaviours using Stata's *svy: total* command and expansion-scaled weights.
- **For variance estimation**, the 2-stage design can be approximated by the primary stage selection of 3,021 telephone numbers (PSUs) from each of the 6 area code strata. In addition, our negligible sampling fraction allows us to ignore the finite population correction factor (fpc) in our estimation.[42]
- Complex sampling estimation employs a design-based fixed-rule calculation for the **degrees of freedom**: *df = (# PSUs) – (# strata*). In the 2013 *CM* this value for the total sample is 3015 = (3,021) – (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 2.1.1).
- 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.[43] 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.[44]
- In the case of region, when the combined influence of a multi-categorical risk factor (i.e., the joint or overall test),) is not statistically significant according to the Wald test, but one or more category ORs are statistically significant, we interpret some of these ORs.[45] Otherwise, we display both the overall and OR category tests, but do not comment on category ORs in the absence of a significant overall test.
- 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 2013 Cross-Sectional Analyses —** In reporting the 2013 *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 2.4.1 – sex,

to stage 1 sampling units given that stage 2 variances "roll-up" into stage 1 PSUs (Heeringa et al., 2010:67). In all, the 2013 CM has 6 sampling error strata and 3,021 sampling error computation units (respondents), resulting in 3,015 design-based degrees of freedom.

[42] 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 2013 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).

[43] 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.

[44] 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).

[45] We interpret such instances for several reasons. First, the needs of survey users are diverse, and it is quite appropriate for a user from the North to ask whether differences in the North are statistically significant, *regardless of the overall association*. Second, our analyses are descriptive and based on a common set of risk factors; the analyses are not a model-building activity. It is also important to note that there are reasons for the overall Wald test and the OR category test might differ.

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. Although such multivariable analysis complicates the reporting of results, we contend that this approach will reduce misinterpretation of data that are common to simple descriptive reporting, and will provide a more useful and accurate interpretation of these data. For example, it is often reported that alcohol and other drug use varies by marital status, being especially elevated among never married respondents. However, those who have never been married are typically the youngest, a group also displaying elevated rates. Thus, without concurrently separating the influence of age from marital status, we cannot know whether marital status differences in drug use are due to the unique aspects of marital status and its roles and obligations, or whether they are rather due to age differences. Holding values of age (and other predictors) constant when assessing the influence of marital status reduces the possible misinterpretation of such relationships.

Our **2013 cross-sectional analyses** employ **design-based multivariable logit models**.[46] For each binary indicator or response, we employ a predictor set of maximum six risk factors represented by 25 categories and 19 regressors (i.e., 25 categories – 6 referents). The categories *women* (SEX), *18–29* (AGE), *Toronto* (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 AGE (which employed previous group contrasts, also known as reverse adjacent contrasts – i.e., 30–39 vs 18–29; 40–49 vs 30–39, etc.)[47] and REGION (which contrasted regional categories to the weighted grand mean),[48] all predictor variables employed indicator coding. 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.[49] 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 Cumulated 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 18 surveys for the years **1996 through 2013**, culminating in a **18-year data set** with **45,565** respondents dispersed among 108 strata (6 area code strata × 18 survey years).[50] (Earlier surveys from1977 to1995

[46] The cross-sectional model fitted was as follows:
svy: logit DV sex i.agecat5 i.marstat3 i.educat4 i. hinccat5 i.regph7, or
estat gof
contrast ar.agecat5 gw.regph7 r.marstat3 r.hinccat5, or
asobserved effects

[47] To reduce the problem of data sparseness, analyses performed on outcomes with a low prevalence may use AGE in a 4-category rather than a 5-category format.

[48] Weighted grand mean contrasts compare a regional category to the mean of all regional means. The weighted aspect of this contrast allows for regions to have varying sample sizes.

[49] 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.

[50] 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).

were not combined due to differing sample designs.[51])

**Textbox 7**
**A Comment on Subgroup Trends**

Pairwise or two-way interactions are relationship in which the association between two factors (e.g., year and drinking) are moderates (or differentially vary) by a third factor (e.g., sex). Thus, a significant year-by-sex interaction identifies that trends in drinking (the year factor) are different for men and women.

In assessing trends, our analytic strategy proceeded in two stages. First, we assessed cross-time **change in the target population** by contrasting 2013 to all prior years through 1996, with a special emphasis on the most recent period between 2013 and 2012 (or 2011). Differences between years were assessed by odds ratios of a logit model.[52] Following an assessment of 2013 contrasts, we evaluated **linear (straight line) and nonlinear trends** for the 18-year period from 1996 through 2013.[53] This analysis informs us as to the pattern of trends in our data.

Second, we evaluated whether trends evident in the total population equally held for all categories of sex, age, region, marital status, education, and income. To this end, we assessed six pairwise YEAR × FACTOR interactions.[54]

## 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).

**51** See Alexander, 2002, Kish, 1999, and Korn and Graubard, 1999for advice on combining and cumulating multiple complex survey datasets.

[52] Each logit model assessed the YEAR factor by contrasting 2013 to each prior year through 1996. The Stata command was as follows: svy: logit RESPONSE ib(last).YEAR, or.

[53] Linear and nonlinear trends were evaluated by orthogonal polynomials with the following Stata command (following the logit command):
.contrast q.YEAR, or asobserved effects.

[54] Each of the six pairwise interactions was assessed separately with a logit model containing YEAR, CATEGORICAL FACTOR, YEAR × CATEGORICAL FACTOR, with the following Stata commands (SEX example)**:**

svy: logit RESPONSE SEX## ib(last).YEAR, or
contrast q.YEAR@SEX, or asobserved
contrast q(1/3).YEAR@SEX, or asobserved

## Table Description

Below is a brief description of the tabular material.

Percentage ***Drinking Alcohol*** During the Past 12 Months, Adjusted Group Differences, Ontarians Aged 18+

| | | % | 95%CI | | Adjusted Odds Ratios |
|---|---|---|---|---|---|
| Total Sample | | **77.2** | (75,1, 79.1) | | |
| 1) Sex | | | | | *** |
| Women | (Comparison Group) | **73.0** | (70.1, 75.7) | | --- |
| Men | | **81.7** | (78.8, 84.3) | | 1.49 |
| 2) Age | | ❶ | ❷ | | ❸ NS |
| 18-29 | (Comparison Group) | **85.7** | (81.5, 89.1) | | --- |
| 30-39 | | **80.3** | (75.8, 84.1) | | 0.76 |
| 40-49 | | **79.2** | (74.8, 83.0) | | 0.70 |
| 50-64 | | **76.5** | (71.7, 80.7) | | 0.68 |
| 65+ | | **61.9** | (56.2, 67.3) | | 0.50* |

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 77.2% 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 75.1% and 79.1% 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 is 1.49 times higher (or 49% 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. If the prevalence of the response is less than 10% the OR may also be expressed in risk language (Hilbe, 2009): "*The adjusted odds of past year drinking is 49% **more likely** among men than women*". For consistency, however, we have retained the OR interpretation throughout this report.

# 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.*

**2013**……..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 **78.4%** (95% CI: 76.4% to 80.3%). In addition, 14.3% did not drink alcohol during the past 12 months and 7.3% were lifetime abstainers. The corresponding population estimate is 7,958,700 past year drinkers (95% CI: 7,672,000 to 8,245,400).

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

- The adjusted odds of drinking among men were 1.6 times higher than among women (83.1% vs. 74.1%; OR=1.64).
- Compared to the provincial average, prevalence of drinking was significantly higher among those living in the East (83.7%; OR=1.3) and those living in the North (82.2%; OR=1.4) and significantly lower among those living in Toronto (72.3%; OR=0.7).
- The use of alcohol tended to increase with education. Use was lowest among those who have not completed high school (62.0%) and highest among those with university education (83.5%; OR=2.3).
- Past year drinking increased significantly with income. Relative to those with a household income of less than $30,000 (61.8%), the odds of drinking were two times higher for those with incomes of $50,000 to $79,999 (80.7%; OR=2.1) and three times higher for those with incomes of $80,000 or more (87.9%; OR=3.1).

There were no significant differences in past year drinking by age and marital status.

### Frequency of Drinking ……
Fig. 3.1.3–3.1.4

Among past year drinkers, the most common frequency of drinking in 2013 was less than once a month (20.7%). One-in-five drinkers (20.2%) drank two to three times a week and about one in 11 (8.5%) drank on a daily basis.

### Trends
**1977–2013**……Table 3.1.2; Fig. 3.1.5 - 3.1.7.

#### 2012–2013
Between 2012 and 2013, past year drinking did not change significantly (78.9% vs. 78.4%). In addition, prevalence of past year drinking was stable for all sex, age, region, marital status, and education subgroups.

### 1996–2013

Overall, between 1996 and 2013, past year drinking did not change significantly, varying between 77.1% and 81.5%.

**Year did not interact** significantly with any of the six demographic factors analysed, suggesting trends in each subgroup were not significantly dissimilar.

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 80.1% in 2013) and among those aged 30 to 39 (from 86.5% in 2001 to 78.4% in 2013), and a significant increase among those aged 65 years and older (from 58.8% in 1997 to 70.5% in 2013). There were also significant non-linear variations in past year drinking among respondents living in the East, married and never married respondents, and those who completed high school.

Despite some fluctuations in the **frequency of drinking** among the total sample, and among drinkers, between 1996 and 2013, there were no dominant changes within either group. Over the long-term, between 1977 and 2013, overall there was a decline in daily drinking among drinkers and among the total sample, but this decline seemed to have levelled off in 2007.

### 1977–2013

Long-term trend analysis between 1977 and 2013 revealed both a significant linear and non-linear trend in past year drinking with peaks in the mid-1980s and again in the early 1990s.

Table 3.1.1: Percentage ***Drinking Alcohol*** During the Past 12 Months and Adjusted Group Differences, Ontarians Aged 18+, 2013

| | N | % | 95% CI | Adjusted Odds Ratio (N= 2914) |
|---|---|---|---|---|
| **Total** | 3021 | **78.4** | (76.4, 80.3) | — |
| **Sex** | | | | ******* |
| Men | 1232 | **83.1** | (80.1, 85.8) | **1.64**** |
| Women *(Comparison Group)* | 1789 | **74.1** | (71.3, 76.6) | — |
| **Age** | | | | |
| *(Comparison Group is previous age group)* | | | | NS |
| 18-29 | 182 | **80.1** | (72.3, 86.1) | — |
| 30-39 | 303 | **78.4** | (72.3, 83.4) | 0.56 |
| 40-49 | 556 | **83.6** | (79.6, 87.0) | 1.29 |
| 50-64 | 1015 | **79.4** | (76.3, 82.2) | 0.87 |
| 65+ | 909 | **70.5** | (67.0, 73.8) | 0.88 |
| **Public Health Region** | | | | ***** |
| Toronto *(vs. Provincial Average)* | 503 | **72.3** | (66.9, 77.2) | **0.73*** |
| Central South | 238 | **80.4** | (74.3, 85.4) | 1.14 |
| Central West | 403 | **77.9** | (72.7, 82.3) | 0.88 |
| South West | 497 | **78.0** | (73.4, 82.0) | 1.07 |
| Central East | 411 | **79.8** | (74.4, 84.3) | 1.04 |
| East | 502 | **83.7** | (79.6, 87.2) | **1.34*** |
| North | 467 | **82.2** | (78.1, 85.8) | **1.41*** |
| **Marital Status** | | | | NS |
| Married/Partner *(Comparison Group)* | 1926 | **80.6** | (78.5, 82.6) | — |
| Previously Married | 653 | **70.3** | (65.7, 74.5) | 0.90 |
| Never Married | 409 | **76.4** | (70.1, 81.7) | 0.71 |
| **Education** | | | | ******* |
| High school not completed *(Comparison Group)* | 355 | **62.0** | (54.9, 68.6) | — |
| Completed high school | 638 | **73.7** | (68.9, 77.9) | **1.51*** |
| Some college or university | 1053 | **81.0** | (77.5, 84.0) | **2.16**** |
| University degree | 939 | **83.5** | (80.1, 86.5) | **2.32**** |
| **Household Income** | | | | ******* |
| < $30,000 *(Comparison Group)* | 303 | **61.8** | (53.9, 69.1) | — |
| $30,000-$49,999 | 370 | **69.2** | (62.5, 75.1) | 1.21 |
| $50,000-$79,999 | 526 | **80.7** | (76.2, 84.5) | **2.12**** |
| $80,000+ | 1089 | **87.9** | (85.2, 90.1) | **3.14**** |
| Not stated | 733 | **69.0** | (64.2, 73.5) | 1.25 |

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 (complete case sample size N=2914).

*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 3.1.2: Percentage ***Drinking Alcohol*** During the Past 12 Months, by Demographic Characteristics, Ontarians Aged 18+, 1977–1995

| | 1977 | 1982 | 1984 | 1987 | 1989 | 1991 | 1992 | 1993 | 1994 | 1995 |
|---|---|---|---|---|---|---|---|---|---|---|
| (N=) | (1059) | (1040) | (1051) | (1084) | (1101) | (1047) | (1058) | (941) | (2022) | (994) |
| **Total** | **79.9** | **77.6** | **84.5** | **83.1** | **82.6** | **80.3** | **86.6** | **83.3** | **82.1** | **84.4** |
| (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) |
| **Sex** | | | | | | | | | | |
| Men | **85.9** | **81.6** | **86.8** | **87.6** | **85.8** | **81.8** | **89.7** | **91.6** | **84.7** | **86.8** |
| | (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) |
| Women | **73.4** | **73.6** | **82.3** | **78.8** | **79.6** | **78.7** | **83.9** | **75.4** | **79.8** | **82.0** |
| | (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) |
| **Age** | | | | | | | | | | |
| 18 - 29 | **85.8** | **82.5** | **89.8** | **92.1** | **88.1** | **87.2** | **90.9** | **89.2** | **86.0** | **86.7** |
| | (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) |
| 30 - 39 | **86.0** | **82.5** | **91.1** | **87.7** | **90.8** | **84.2** | **86.7** | **81.7** | **85.1** | **85.2** |
| | (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) |
| 40 - 49 | **88.6** | **80.6** | **88.6** | **87.7** | **87.3** | **81.2** | **90.4** | **85.7** | **84.1** | **86.0** |
| | (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) |
| 50 - 64 | **76.2** | **76.2** | **80.0** | **80.9** | **74.2** | **73.8** | **83.1** | **81.0** | **78.2** | **86.4** |
| | (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) |
| 65+ | **53.5** | **58.5** | **64.8** | **58.2** | **66.8** | **63.8** | **73.6** | **72.0** | **67.0** | **71.6** |
| | (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) |
| **Marital Status** | | | | | | | | | | |
| Married/Partner | — | — | — | — | — | **79.3** | **87.4** | **82.0** | **81.5** | **85.1** |
| Previously Married | — | — | — | — | — | **73.6** | **81.1** | **76.5** | **76.8** | **80.5** |
| Never Married | — | — | — | — | — | **85.8** | **87.5** | **89.5** | **85.8** | **84.8** |
| **Education** | | | | | | | | | | |
| HS not completed | — | — | — | — | — | **64.3** | **84.0** | **78.2** | **72.1** | **79.1** |
| Completed HS | — | — | — | — | — | **81.4** | **84.4** | **81.7** | **83.1** | **83.0** |
| Some college or university | — | — | — | — | — | **87.2** | **90.2** | **81.8** | **85.9** | **84.2** |
| University degree | — | — | — | — | — | **87.4** | **88.2** | **92.4** | **85.3** | **91.4** |

Notes: [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 3.1.3: Percentage ***Drinking Alcohol*** During the Past 12 Months, by Demographic Characteristics, Ontarians Aged 18+, 1996–2013

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Change | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N=) | (2721) | (2776) | (2509) | (2436) | (2406) | (2627) | (2421) | (2411) | (2611) | (2445) | (2016) | (2005) | (2024) | (2037) | (3030) | (3039) | (3030) | (3021) | | |
| **Total** | **79.3** | **79.9** | **77.1** | **79.1** | **77.1** | **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** | – | – |
| (95%CI)[a] | (77.5, 81.1) | (78.1, 81.6) | (75.0, 79.0) | (77.2, 80.9) | (75.1, 79.1) | (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) | | |
| **Sex** | | | | | | | | | | | | | | | | | | | | **NSI** |
| Men | **82.7** | **83.2** | **82.1** | **85.1** | **81.7** | **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** | – | – |
| | (80.6, 84.8) | (81.1, 85.3) | (79.2,84.6) | (82.4, 87.4) | (78.8, 84.3) | (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) | | |
| Women | **76.4** | **76.9** | **72.5** | **73.6** | **73.0** | **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** | – | – |
| | (74.3, 78.5) | (74.8, 79.0) | (69.6, 75.3) | (70.7, 76.3) | (70.1, 75.7) | (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) | | |
| **Age** | | | | | | | | | | | | | | | | | | | | **NSI** |
| 18 - 29 | **83.5** | **83.6** | **82.5** | **86.5** | **85.7** | **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** | T | – |
| | (80.3, 86.7) | (80.5, 86.7) | (77.9, 86.3) | (82.4, 89.8) | (81.5, 89.1) | (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) | | |
| 30 - 39 | **83.6** | **84.4** | **81.5** | **81.4** | **80.3** | **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** | T | – |
| | (80.8, 86.4) | (81.6, 87.2) | (77.5, 84.9) | (77.0, 85.0) | (75.8, 84.1) | (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) | | |
| 40 - 49 | **81.6** | **85.2** | **78.0** | **81.5** | **79.2** | **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** | – | – |
| | (78.4, 84.78 | (82.3, 88.1) | (73.4, 81.9) | (77.1, 85.2) | (74.8, 83.0) | (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) | | |
| 50 - 64 | **76.0** | **77.4** | **77.2** | **78.0** | **76.5** | **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** | – | – |
| | (72.2, 79.8) | (73.8, 81.0) | (72.2, 81.6) | (73.2, 82.1) | (71.7, 80.7) | (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) | | |
| 65+ | **66.2** | **58.8** | **65.5** | **66.6** | **61.9** | **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** | T | – |
| | (61.6, 70.8) | (54.0, 63.6) | (59.8, 70.9) | (61.2, 71.6) | (56.2, 67.3) | (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) | | |
| **Region** | | | | | | | | | | | | | | | | | | | | **NSI** |
| Toronto | **74.1** | **74.2** | **74.1** | **72.0** | **69.7** | **78.8** | **75.1** | **78.4** | **76.0** | **73.9** | **76.4** | **73.6** | **76.0** | **77.6** | **72.3** | **75.4** | **72.3** | **72.3** | – | – |
| | (69.1, 78.5) | (69.2, 78.6) | (68.9, 78.7) | (66.7, 76.6) | (64.4, 74.5) | (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) | | |
| Central South | **80.2** | **78.1** | **77.5** | **81.6** | **78.3** | **78.2** | **77.4** | **85.7** | **83.2** | **80.7** | **76.1** | **82.7** | **83.1** | **83.5** | **81.2** | **81.6** | **82.3** | **80.4** | – | – |
| | (74.2, 85.1) | (71.9, 83.2) | (70.8, 83.1) | (75.6, 86.5) | (71.8, 83.6) | (71.3, 83.9) | (70.5, 83.0) | (79.8, 90.1) | (77.2, 87.8) | (74.3, 85.8) | (67.7,82.8) | (75.6,88.1) | (74.1,89.4) | (76.2, 88.9) | (75.6, 85.8) | (76.1, 86.1) | (76.1, 87.2) | (74.3, 85.4) | | |
| Central West | **81.9** | **81.9** | **77.1** | **83.5** | **77.7** | **77.5** | **81.9** | **77.9** | **83.8** | **77.9** | **78.9** | **80.3** | **74.1** | **72.5** | **76.0** | **83.4** | **80.0** | **77.9** | – | – |
| | (77.1, 85.9) | (75.5, 86.9) | (71.3, 82.0) | (78.6, 87.4) | (72.0, 82.5) | (72.0, 82.2) | (76.8, 86.1) | (72.4, 82.6) | (78.7, 87.8) | (72.6, 82.5) | (72.9,83.9) | (74.1,85.3) | (67.2,80.0) | (65.8, 78.3) | (70.6, 80.6) | (78.7, 87.3) | (74.6, 84.6) | (72.7, 82.3) | | |
| South West | **78.0** | **81.2** | **76.7** | **79.0** | **81.6** | **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** | – | – |
| | (73.9, 81.7) | (77.1, 84.6) | (71.8, 81.0) | (74.2, 83.1) | (77.1, 85.3) | (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) | | |
| Central East | **82.7** | **84.2** | **80.6** | **80.6** | **76.9** | **83.3** | **78.6** | **85.5** | **83.1** | **81.9** | **78.3** | **85.3** | **82.6** | **81.9** | **79.8** | **83.0** | **78.6** | **79.8** | – | – |
| | (77.5, 86.8) | (80.1, 87.5) | (74.9, 85.3) | (75.0, 85.2) | (71.0, 81.9) | (77.8, 87.7) | (72.4, 83.7) | (80.5, 89.4) | (77.6, 87.4) | (76.7, 86.2) | (72.2, 83.4) | (80.3,89.2) | (77.1,86.9) | (76.1, 86.5) | (74.8, 84.0) | (78.4, 86.9) | (73.6, 82.8) | (74.4, 84.3) | | |
| East | **81.1** | **81.2** | **79.5** | **81.7** | **80.8** | **81.4** | **83.3** | **78.2** | **82.6** | **81.6** | **76.0** | **85.6** | **86.3** | **85.6** | **80.3** | **82.4** | **83.5** | **83.7** | T | – |
| | (77.0, 84.5) | (77.2, 84.7) | (74.9, 83.5) | (76.9, 85.6) | (76.2, 84.7) | (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) | | |
| North | **82.0** | **81.1** | **74.8** | **81.2** | **83.2** | **80.0** | **77.7** | **79.6** | **81.1** | **82.2** | **74.6** | **84.8** | **82.7** | **77.2** | **83.6** | **81.6** | **77.3** | **82.2** | – | – |
| | (78.1, 85.4) | (77.0, 84.5) | (69.9, 79.2) | (76.7, 84.9) | (79.1, 86.7) | (76.2, 83.4) | (73.1, 81.7) | (74.9, 83.5) | (77.6, 84.2) | (78.0, 85.8) | (69.0, 79.5) | (80.3, 88.5) | (78.0, 86.6) | (71.7, 81.8) | (79.7, 86.8) | (77.5, 85.1) | (72.6, 81.4) | (78.1, 85.8) | | |

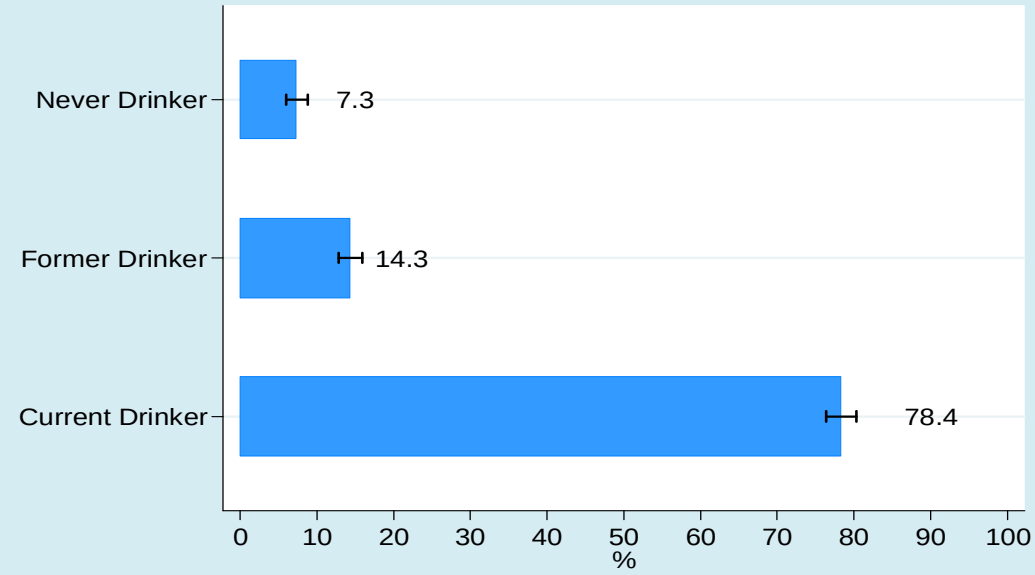
Cont'd

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Change | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N=) | (2721) | (2776) | (2509) | (2436) | (2406) | (2627) | (2421) | (2411) | (2611) | (2445) | (2016) | (2005) | (2024) | (2037) | (3030) | (3039) | (3030) | (3021) | | |
| **Marital Status** | | | | | | | | | | | | | | | | | | | **NSI** | |
| Married/Part. | **79.8** | **79.9** | **77.7** | **78.9** | **76.5** | **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** | **T** | **–** |
| Previously Married | **72.5** | **74.3** | **65.3** | **69.5** | **68.9** | **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** | **–** | **–** |
| Never Married | **82.5** | **82.8** | **81.4** | **85.7** | **83.4** | **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** | **T** | **–** |
| **Education** | | | | | | | | | | | | | | | | | | | **NSI** | |
| HS not completed | **69.4** | **68.7** | **68.4** | **66.7** | **61.1** | **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** | **–** | **–** |
| Completed HS | **79.8** | **77.0** | **73.0** | **78.7** | **76.6** | **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** | **T** | **–** |
| Some College or University | **82.4** | **86.1** | **81.7** | **83.0** | **84.6** | **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** | **–** | **–** |
| University Degree | **84.0** | **83.4** | **83.4** | **83.9** | **79.2** | **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** | **–** | **–** |

Notes: (1) All analyses are sample design adjusted; [a] 95% confidence interval.
(2) Trend Analysis: **–** change not statistically significant (p<.05); **T** statistically significant change (p<.05) between 1996-2013; **2Y** statistically significant change (p<.05) between last two estimates.
(3) **NSI**, non-significant YEAR × FACTOR interaction.
*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

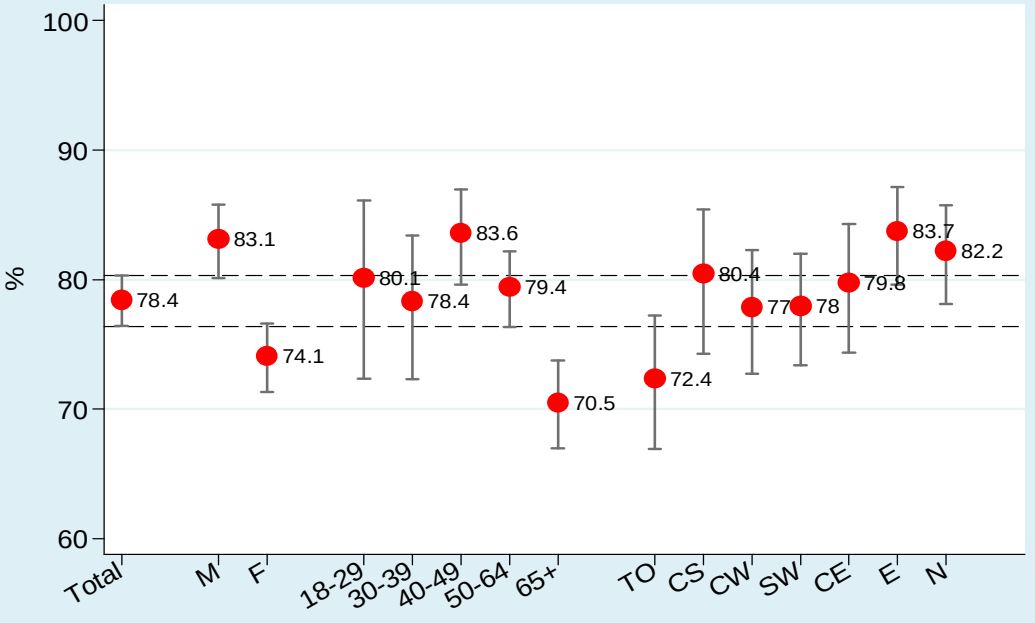
**Drinking Status, Ontarians Aged 18+, 2013 (N=3021)**




Note: horizontal 'whiskers' represent 95% confidence intervals
Source: 2013 CAMH Monitor

Figure 3.1.2

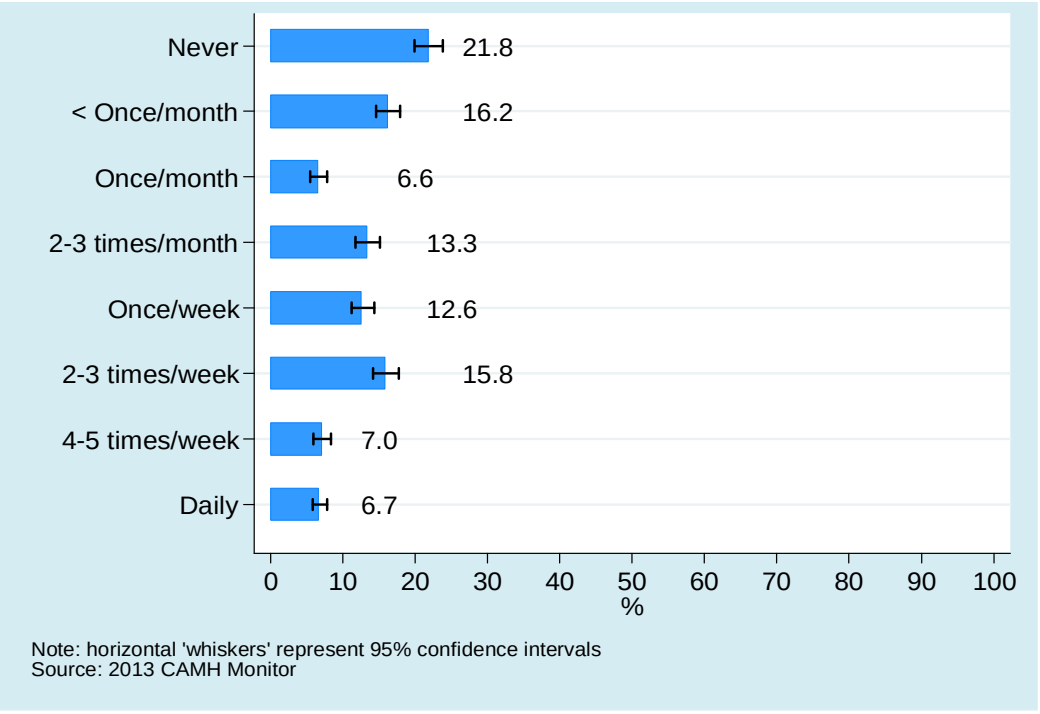
**Past Year Alcohol Use by Sex, Age and Region, Ontarians Aged 18+, 2013 (N=3021)**




Note: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal bar represents 95% confidence interval for total estimate
(3) significant difference by sex and region (p<.05)
Source: 2013 CAMH Monitor

Figure 3.1.3

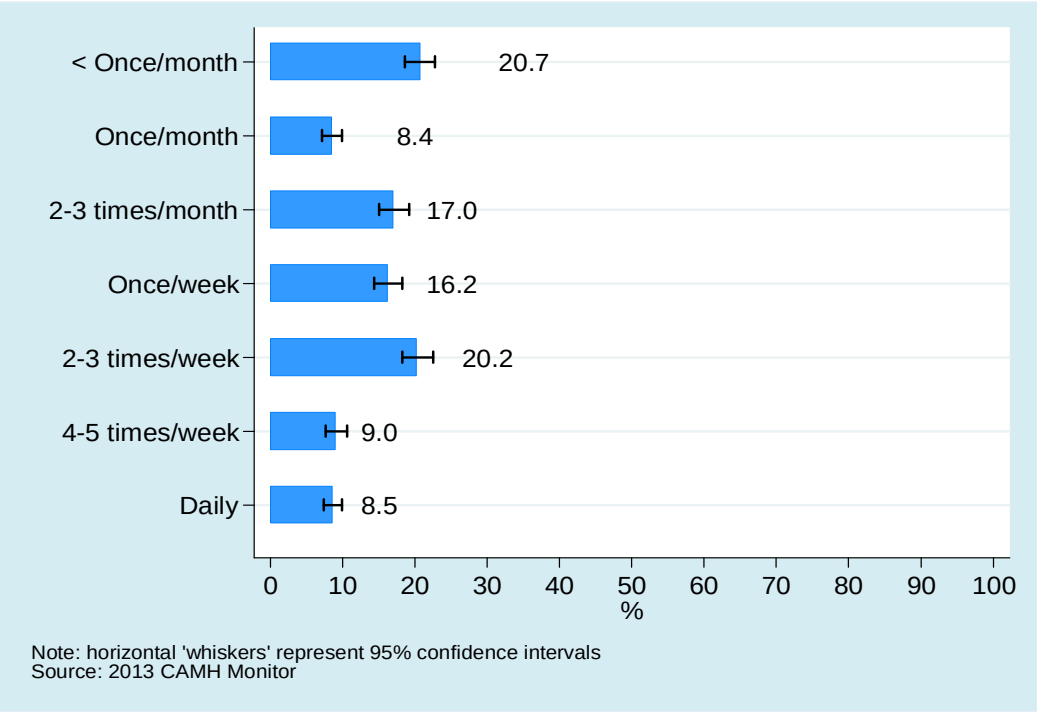
**Past Year Frequency of Drinking Among Ontarians Aged 18+, 2013 (N=3021)**




Note: horizontal 'whiskers' represent 95% confidence intervals
Source: 2013 CAMH Monitor

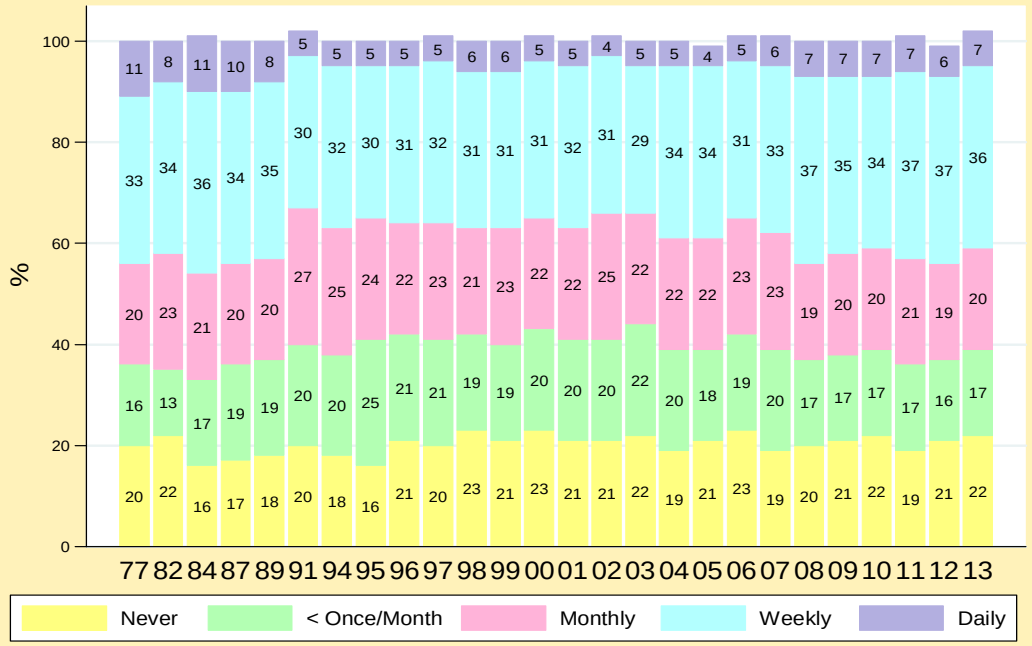
Figure 3.1.4

**Frequency of Drinking Among Past Year Drinkers, Ontarians Aged 18+, 2013 (N=2330)**



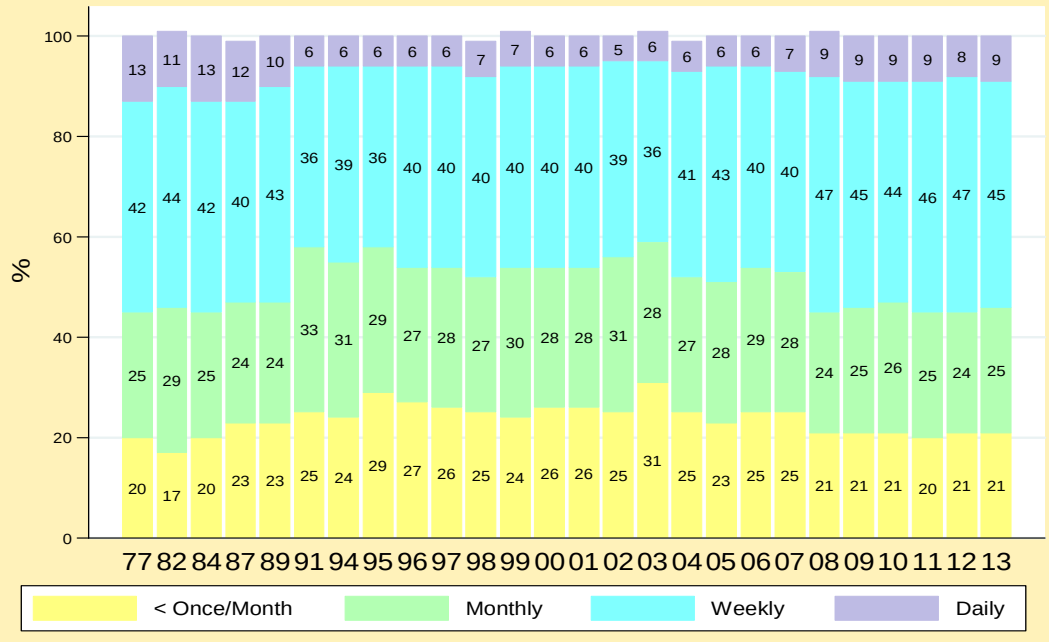

Note: horizontal 'whiskers' represent 95% confidence intervals
Source: 2013 CAMH Monitor

## Figure 3.1.5
**Frequency of Drinking Among Ontarians Aged 18+, 1977–2013**




Source: CAMH Monitor

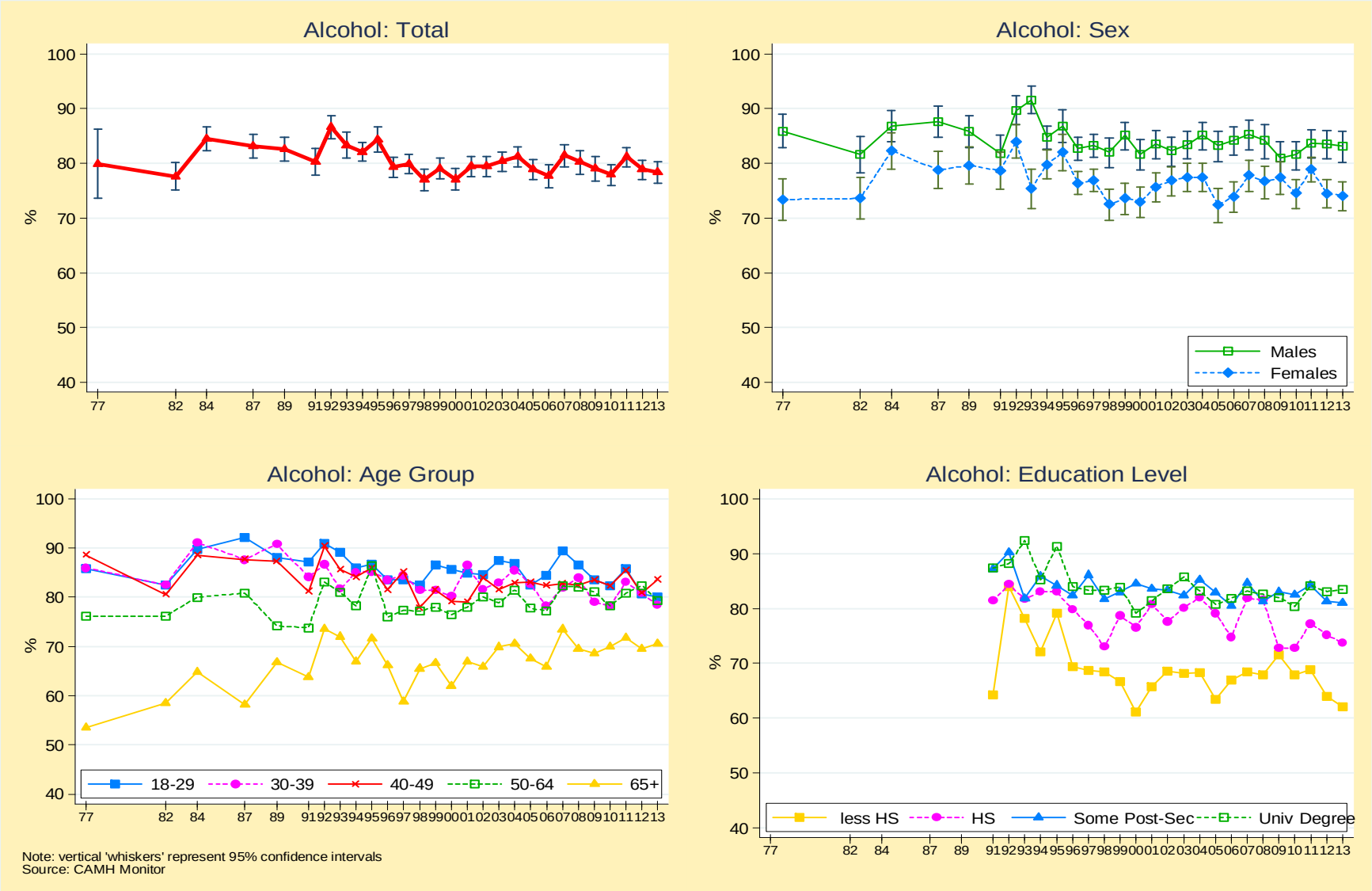
## Figure 3.1.6
**Frequency of Drinking Among Past Year Drinkers Aged 18+, 1977–2013**




Source: CAMH Monitor

Figure 3.1.7

**Past Year Alcohol Use, Ontarians Aged 18+, 1977–2013**




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, however, is not synonymous with a problematic drinking pattern.*

**2013**…….Table 3.2.1, 3.2.2; Fig. 3.2.1

An estimated **6.7%** (95% CI: 5.7% to 7.8%) of Ontario adults drank alcohol daily in the 12 months before the survey. Among past year drinkers, the prevalence was **8.5%** (95% CI: 7.4% to 9.9%). The corresponding population estimate is 675,147 daily drinkers (95% CI: 574,761 to 775,532).

Only **sex** and **age** were significantly related to daily drinking among Ontario adults.

- The adjusted odds of daily drinking were 2.6 times higher for men than women (9.4% vs. 4.2%; OR=2.67).
- Daily drinking increases significantly with age, from 4.3% of those aged 30 to 39 to 12.7% of those aged 65 and older. Two of the four sequential age group comparisons were statistically significant: the adjusted odds of daily drinking were about 1.7 times higher among those aged 50 to 64 than those aged 40 to 49 (OR=1.71; 8.5% vs. 5.1%, respectively) and about 1.6 times higher among those aged 65 and older than those aged 50 to 64 (OR=1.61; 12.7% vs. 8.5%, respectively).

Region, marital status, education and income were not significantly related to daily drinking when controlling for other demographics.

**Past year drinkers** displayed similar patterns related to daily drinking. The adjusted odds of daily drinking were 2.3 times higher for drinking men than drinking women (11.4% vs. 5.6%) and those aged 65 and older reported the highest rates of daily drinking (18.1%).

### Trends

**1977–2013**……Table 3.2.3; Fig. 3.2.2

#### 2012–2013

Daily drinking among past year drinkers in 2013 (8.5%) was **not significantly different** from 2012 (7.9%). In addition, daily drinking was stable for all subgroups.

#### 1996–2013

Between 1996 and 2013, there was a significant **increase** in daily drinking among drinkers, from 5.3% in 2002 to 8.5% in 2013.

**Year did not interact** significantly with any of the demographic factors analysed, suggesting that subgroup trends were not measurably dissimilar.

Trend analyses done separately for each subgroup showed a significant **uptrend** for men and women, for 40 to 49 year olds and those aged 65 and older. There was a significant increase in daily drinking among drinking men (from 7.1% in 2005 to 11.4% in 2013), drinking women (from a low of 2.6% in 2001 to 5.6% in 2013), and a non-linear uptrend among 40 to 49 year olds (from 3.0% in 2002 to 7.1% in 2011) and among those aged 65 and older (from 13.2% in 2003 to 22.8% in 2011).

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

### 1977–2013

In the longer term, between 1977 and 2013, daily drinking among drinkers decreased considerably until 2006. From a high of 13.4% in 1977, it decreased three-fold to a low of 4.1% in 1992 and has varied between 5.3% and 7.4% until 2007. But this trend has reversed in the past five years, increasing significantly from 5.9% in 2006 to 8.5% in 2013. This non-linear change was especially prominent among drinking men, whose daily drinking dropped from 19.5% in 1977 to 7.1% in 2005 and then increased to 11.4% in 2013.

Table 3.2.1: Percentage ***Drinking Alcohol Daily*** During the Past 12 Months and Adjusted Group Differences, ***Ontarians*** Aged 18+, 2013

| | N | % | 95% CI | Adjusted Odds Ratio (N=2902) |
|---|---|---|---|---|
| **Total** | 3021 | **6.7** | (5.7, 7.8) | — |
| **Sex** | | | | ******* |
| Men | 1232 | **9.4** | (7.8, 11.4) | **2.57***** |
| Women *(Comparison Group)* | 1789 | **4.2** | (3.3, 5.3) | — |
| **Age** | | | | |
| *(Comparison Group is previous age group)* | | | | ******* |
| 18-29 | 182 | † | — | — |
| 30-39 | 303 | **†4.3** | (2.4, 7.6) | 2.54 |
| 40-49 | 556 | **†5.1** | (3.3, 7.8) | 1.15 |
| 50-64 | 1015 | **8.5** | (6.7, 10.7) | **1.71*** |
| 65+ | 909 | **12.7** | (10.5, 15.2) | **1.61**** |
| **Public Health Region** | | | | NS |
| Toronto *(vs. Provincial Average)* | 503 | **†5.8** | (4.0, 8.1) | 0.86 |
| Central South | 238 | **†6.3** | (3.4, 11.3) | 1.02 |
| Central West | 403 | **†6.5** | (4.4, 9.4) | 1.01 |
| South West | 497 | **†7.2** | (5.2, 9.8) | 1.05 |
| Central East | 411 | **†6.3** | (4.2, 9.6) | 1.08 |
| East | 502 | **8.2** | (6.0, 11.1) | 1.02 |
| North | 467 | **7.9** | (5.6, 11.0) | 1.01 |
| **Marital Status** | | | | NS |
| Married/Partner *(Comparison Group)* | 1926 | **7.8** | (6.6, 9.2) | — |
| Previously Married | 653 | **8.2** | (6.3, 10.7) | 1.11 |
| Never Married | 409 | **†2.8** | (1.3, 5.7) | 0.87 |
| **Education** | | | | NS |
| High school not completed *(Comparison Group)* | 355 | **†8.5** | (5.9, 12.3) | — |
| Completed high school | 638 | **†6.3** | (4.4, 9.0) | 0.91 |
| Some college or university | 1053 | **6.2** | (4.8, 8.1) | 0.96 |
| University degree | 939 | **6.7** | (5.2, 8.2) | 0.97 |
| **Household Income** | | | | NS |
| < $30,000 *(Comparison Group)* | 303 | **†6.0** | (3.5, 10.2) | — |
| $30,000-$49,999 | 370 | **†9.6** | (6.7, 13.7) | 1.52 |
| $50,000-$79,999 | 526 | **7.8** | (5.6, 10.8) | 1.36 |
| $80,000+ | 1089 | **6.6** | (5.1, 8.5) | 1.26 |
| Not stated | 733 | **5.2** | (3.8, 7.0) | 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; † 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 (complete case sample size N=2902).

*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*** During the Past 12 Months and Adjusted Group Differences, Ontarian ***Past Year Drinkers*** Aged 18+, 2013

| | N | % | 95% CI | Adjusted Odds Ratio (N=2248) |
|---|---|---|---|---|
| **Total** | 2330 | **8.5** | (7.4, 9.9) | — |
| **Sex** | | | | *** |
| Men | 1027 | **11.4** | (9.4, 13.7) | **2.29**** |
| Women *(Comparison Group)* | 1303 | **5.6** | (4.5, 7.1) | — |
| **Age** | | | | |
| *(Comparison Group is previous age group)* | | | | *** |
| 18-29 | 151 | † | — | — |
| 30-39 | 246 | **†5.5** | (3.1, 9.6) | 3.02 |
| 40-49 | 469 | **†6.1** | (4.0, 9.3) | 1.06 |
| 50-64 | 801 | **10.7** | (8.5, 13.4) | **1.79*** |
| 65+ | 629 | **18.1** | (15.1, 21.7) | **1.72**** |
| **Public Health Region** | | | | NS |
| Toronto *(vs. Provincial Average)* | 369 | **†8.0** | (5.6, 11.2) | 0.89 |
| Central South | 182 | **†7.8** | (4.3, 14.0) | 1.05 |
| Central West | 302 | **†8.3** | (5.7, 12.1) | 1.06 |
| South West | 375 | **9.2** | (6.7, 12.6) | 1.03 |
| Central East | 325 | **†8.0** | (5.2, 12.0) | 1.05 |
| East | 410 | **9.8** | (7.2, 13.2) | 0.98 |
| North | 367 | **9.6** | (6.9, 13.4) | 0.94 |
| **Marital Status** | | | | NS |
| Married/Partner *(Comparison Group)* | 1555 | **9.7** | (8.2, 11.4) | — |
| Previously Married | 448 | **11.7** | (8.9, 15.3) | 1.20 |
| Never Married | 307 | **†3.6** | (1.8, 7.4) | 0.95 |
| **Education** | | | | NS |
| High school not completed *(Comparison Group)* | 210 | **†13.9** | (9.5, 19.9) | — |
| Completed high school | 456 | **†8.6** | (6.0, 12.2) | 0.81 |
| Some college or university | 846 | **7.7** | (5.9, 10.0) | 0.80 |
| University degree | 795 | **8.1** | (6.2, 10.5) | 0.81 |
| **Household Income** | | | | NS |
| < $30,000 *(Comparison Group)* | 184 | **†9.7** | (5.7, 16.3) | — |
| $30,000-$49,999 | 266 | **†13.9** | (9.7, 19.7) | 1.33 |
| $50,000-$79,999 | 424 | **9.7** | (7.0, 13.4) | 1.01 |
| $80,000+ | 956 | **7.5** | (5.8, 9.6) | 0.92 |
| Not stated | 500 | **7.6** | (5.6, 10.2) | 0.84 |

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 (complete case sample size N= 2248).

*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 3.2.3: Percentage ***Drinking Daily*** During the Past 12 Months, by Demographic Characteristics, Ontarian ***Past Year Drinkers*** Aged 18+, 1977–1995

| | 1977 | 1982 | 1984 | 1987 | 1989 | 1991 | 1992 | 1993 | 1994 | 1995 |
|---|---|---|---|---|---|---|---|---|---|---|
| (N=) | (818) | (795) | (885) | (893) | (906) | (841) | (916) | (783) | (1660) | (839) |
| **Total** | **13.4** | **10.7** | **12.9** | **11.8** | **10.0** | **6.2** | **4.1** | **6.9** | **6.1** | **5.9** |
| (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) |
| **Sex** | | | | | | | | | | |
| Men | **19.5** | **15.6** | **17.3** | **16.6** | **13.3** | **8.3** | **5.2** | **10.0** | **8.5** | **8.6** |
| Women | **5.7** | **5.2** | **8.6** | **6.7** | **6.7** | **4.1** | **3.0** | **3.6** | **3.8** | **2.9** |
| **Age** | | | | | | | | | | |
| 18 - 29 years | **7.8** | **† 4.1** | **† 5.0** | **6.0** | **† 3.7** | **† 3.0** | **† 1.8** | **† 2.7** | **† 2.0** | **† 1.3** |
| 30 - 39 years | **10.9** | **7.8** | **10.0** | **11.6** | **5.5** | **† 4.5** | **†1.8** | **6.1** | **†4.2** | **†3.6** |
| 40 - 49 years | **18.2** | **19.1** | **15.6** | **12.9** | **11.8** | **8.8** | **†5.8** | **6.1** | **9.0** | **†5.8** |
| 50 - 64 years | **22.1** | **15.7** | **22.2** | **15.7** | **17.6** | **7.9** | **7.8** | **9.7** | **8.0** | **8.2** |
| 65+ years | **13.2** | **19.9** | **21.8** | **19.6** | **23.0** | **11.8** | **8.5** | **20.0** | **15.0** | **23.6** |
| **Marital Status** | | | | | | | | | | |
| Married/Partner | **—** | **—** | **—** | **—** | **—** | **4.7** | **4.5** | **7.8** | **6.0** | **6.6** |
| Previously Married | **—** | **—** | **—** | **—** | **—** | **8.1** | **6.7** | **7.8** | **5.5** | **9.7** |
| Never Married | **—** | **—** | **—** | **—** | **—** | **†4.5** | **†1.8** | **†4.5** | **†2.2** | **†2.3** |
| **Education** | | | | | | | | | | |
| High school not completed | **—** | **—** | **—** | **—** | **—** | **6.4** | **7.2** | **9.1** | **6.3** | **6.3** |
| Completed high school | **—** | **—** | **—** | **—** | **—** | **†4.6** | **†2.7** | **5.9** | **5.1** | **6.7** |
| Some college or university | **—** | **—** | **—** | **—** | **—** | **†4.1** | **†2.7** | **†4.2** | **†2.3** | **6.0** |
| University degree | **—** | **—** | **—** | **—** | **—** | **5.2** | **5.2** | **9.9** | **7.6** | **†4.4** |

Notes: [a] 95% confidence interval; — 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 3.2.4: Percentage ***Drinking Daily*** During the Past 12 Months, by Demographic Characteristics, Ontarian ***Past Year Drinkers*** Aged 18+, 1996–2013

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Change | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N=) | (2141) | (2219) | (1777) | (1938) | (1887) | (2088) | (1933) | (1933) | (2101) | (1906) | (1527) | (1618) | (1599) | (1602) | (2352) | (2401) | (2355) | (2330) | | |
| **Total** | **6.0** | **5.9** | **7.4** | **7.0** | **6.3** | **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** | **T** | **–** |
| (95%CI)[a] | (5.0,7.2) | (4.8,7.1) | (6.0,9.1) | (5.9,8.5) | (5.2,7.7) | (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) | | |
| **Sex** | | | | | | | | | | | | | | | | | | | **NSI** | |
| Men | **8.2** | **8.4** | **9.8** | **10.0** | **8.6** | **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** | **T** | **–** |
| | (6.4,10.3) | (6.7,10.5) | (7.6,12.6) | (2.7,5.4) | (6.8,10.8) | (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) | | |
| Women | **3.9** | **3.4** | **5.0** | **3.9** | **4.1** | **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** | **T** | **–** |
| | (2.9,5.3) | (2.3,4.9) | (3.5,7.0) | (8.1,12.4) | (2.8,5.9) | (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) | | |
| **Age** | | | | | | | | | | | | | | | | | | | **NSI** | |
| 18 - 29 | **† 1.4** | **† 1.8** | **† 3.5** | **† 2.1** | **† 1.3** | **† 1.9** | **†** | **†2.3** | **†2.6** | **†** | **†** | **†** | **†4.0** | **†7.2** | **†3.3** | **†3.1** | **†** | **†** | **–** | **–** |
| | (0.6,3.3) | (0.8,4.0) | (1.7,7.1) | (1.1,4.3) | (0.6,2.9) | (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 | **†3.6** | **†3.3** | **†3.9** | **†3.4** | **†3.8** | **†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** | **–** | **–** |
| | (2.0,6.1) | (2.0,5.5) | (2.1,7.0) | (2.0,5.7) | (2.3,6.2) | (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) | | |
| 40 - 49 | **6.5** | **6.3** | **†5.0** | **†5.1** | **†5.0** | **†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** | **T** | **–** |
| | (4.5,9.4) | (4.0,9.7) | (3.0,8.2) | (3.0,8.3) | (3.2,7.6) | (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) | | |
| 50 - 64 | **9.8** | **9.6** | **12.0** | **13.7** | **10.9** | **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** | **–** | **–** |
| | (7.0,13.6) | (6.8,13.5) | (8.1,17.5) | (10.1,18.4) | (7.3,16.0) | (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) | | |
| 65+ | **16.9** | **17.1** | **19.2** | **16.4** | **16.9** | **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** | **T** | **–** |
| | (12.0,23.2) | (12.3,23.4) | (13.7,26.2) | (11.9,22.1) | (12.3,22.8) | (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) | | |
| **Region** | | | | | | | | | | | | | | | | | | | **NSI** | |
| Toronto | **8.5** | **8.4** | **10.6** | **8.5** | **†5.4** | **†5.8** | **†6.6** | **†6.5** | **†7.2** | **†4.9** | **†6.6** | **†8.6** | **†8.4** | **†8.1** | **†7.5** | **†9.5** | **†7.9** | **†8.0** | **–** | **–** |
| | (5.7,12.4) | (5.6, 12.4) | (7.1,15.6) | (5.7,12.7) | (2.9, 9.6) | (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) | (5.1, 12.5) | (5.1, 11.0) | (6.9,12.9) | (5.6,11.0) | (5.6, 11.2) | | |
| Central South | **7.0** | **7.4** | **8.7** | **7.1** | **8.7** | **†2.6** | **†4.8** | **†3.8** | **†3.7** | **†5.8** | **†7.4** | **11.4** | **†6.8** | **11.3** | **†9.7** | **†8.1** | **†9.6** | **†7.8** | **–** | **–** |
| | (4.0,12.2) | (4.5,12.1) | (4.3,16.7) | (3.7, 13.2) | (5.1,14.4) | (1.0,7.0) | (2.3,9.6) | (1.9,7.8) | (1.7,7.8) | (3.0,10.9) | (3.9,13.4) | (7.0,18.1) | (3.4,12.9) | (6.9, 17.9) | (6.0, 15.3) | (4.6,14.0) | (6.1,14.9) | (4.3, 14.0) | | |
| Central West | **†4.6** | **†3.8** | **7.8** | **7.0** | **7.0** | **†4.3** | **†4.0** | **†5.6** | **†6.1** | **†6.0** | **†4.6** | **†5.6** | **10.4** | **†8.8** | **†9.7** | **†8.8** | **†5.6** | **†8.3** | **T** | **–** |
| | (2.8,7.4) | (1.8,7.7) | (4.7,12.7) | (4.4,10.9) | (4.3,11.1) | (2.3,7.8) | (2.2,7.2) | (3.2,9.7) | (3.6,10.1) | (3.5,10.2) | (2.6,8.0) | (3.3,9.5) | (6.7, 15.8) | (5.4, 13.9) | (6.8, 13.6) | (5.9,13.1) | (3.6, 8.8) | (5.7, 12.1) | | |
| South West | **†4.2** | **†4.3** | **7.2** | **†6.2** | **†3.4** | **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** | **T** | **–** |
| | (2.4,7.0) | (2.4,7.5) | (4.3,11.8) | (3.9,9.6) | (1.9,6.2) | (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) | | |
| Central East | **†5.1** | **†6.4** | **†2.8** | **7.3** | **7.0** | **8.0** | **†5.1** | **†5.2** | **†6.5** | **†4.3** | **†5.8** | **†5.9** | **†7.2** | **14.0** | **†9.2** | **†7.0** | **†8.9** | **†8.0** | **T** | **–** |
| | (2.9,8.8) | (4.2,9.7) | (1.2,6.5) | (4.4,11.7) | (4.2,11.4) | (4.9,12.6) | (2.8,9.1) | (3.0,8.9) | (3.7,11.3) | (2.3,7.8) | (3.2,10.3) | (3.3,10.1) | (4.3,11.7) | (9.1, 20.9) | (6.2, 13.4) | (4.6,10.4) | (6.0,13.0) | (5.2, 12.0) | | |
| East | **†5.9** | **†4.8** | **†6.7** | **†5.7** | **†6.2** | **†5.2** | **†4.6** | **†7.0** | **†7.6** | **†5.0** | **†5.9** | **†7.1** | **11.0** | **†8.1** | **†7.4** | **†11.5** | **7.4** | **9.8** | **T** | **–** |
| | (3.9,8.9) | (2.9,7.7) | (4.2,10.5) | (3.5,9.1) | (3.9,9.7) | (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) | | |
| North | **†5.4** | **†3.6** | **†6.0** | **†6.6** | **8.4** | **6.9** | **†6.1** | **8.5** | **†6.0** | **†6.6** | **†6.1** | **†3.1** | **10.4** | **†8.4** | **†8.9** | **†7.8** | **†9.8** | **9.6** | **T** | **–** |
| | (3.4,8.4) | (2.1,6.1) | (3.4,10.3) | (4.2,10.2) | (5.7,12.2) | (4.7,10.0) | (3.8,9.7) | (5.7,12.5) | (4.2,8.6) | (4.3,10.1) | (3.7,9.8) | (1.6,5.9) | (6.9,15.3) | (5.5, 12.6) | (6.3, 12.6) | (5.2,11.6) | (6.9,13.6) | (6.9, 13.4) | | |

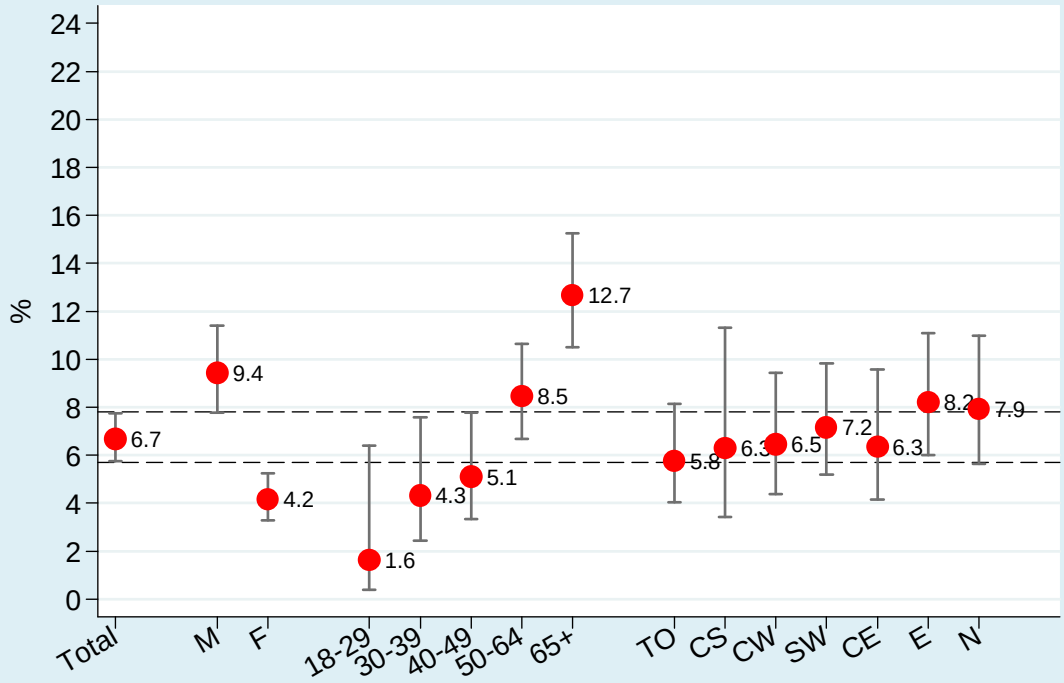
Cont'd

| (N=) | 1996 (2141) | 1997 (2219) | 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) | Change | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Marital Status** | | | | | | | | | | | | | | | | | | | **NSI** | |
| Married/Partner | **6.6** | **6.6** | **8.1** | **8.1** | **7.4** | **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** | **T** | **–** |
| Previously Married | **9.2** | **9.3** | **9.7** | **8.8** | **10.8** | **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** | **T** | **–** |
| Never Married | **†3.1** | **†2.7** | **†4.4** | **† 3.2** | **† 1.8** | **† 3.0** | **†1.7** | **†2.4** | **†4.5** | **†** | **†3.6** | **†2.1** | **†4.5** | **†4.7** | **†3.2** | **†3.3** | **†3.4** | **†3.6** | **–** | **–** |
| **Education** | | | | | | | | | | | | | | | | | | | **NSI** | |
| High School not completed | **†7.5** | **9.8** | **†5.6** | **12.2** | **9.8** | **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** | **T** | **–** |
| Completed high school | **†5.3** | **†6.0** | **8.7** | **†7.7** | **†6.6** | **†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** | **T** | **–** |
| Some college or university | **5.1** | **†4.5** | **6.2** | **†4.5** | **†4.5** | **† 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** | **T** | **–** |
| University degree | **6.7** | **†4.9** | **8.0** | **6.8** | **6.7** | **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** | **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** statistically significant change (p<.05) between 1996-2013; **2Y** statistically significant change (p<.05) between last two estimates.
(3) **NSI**, non-significant YEAR × FACTOR interaction.
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

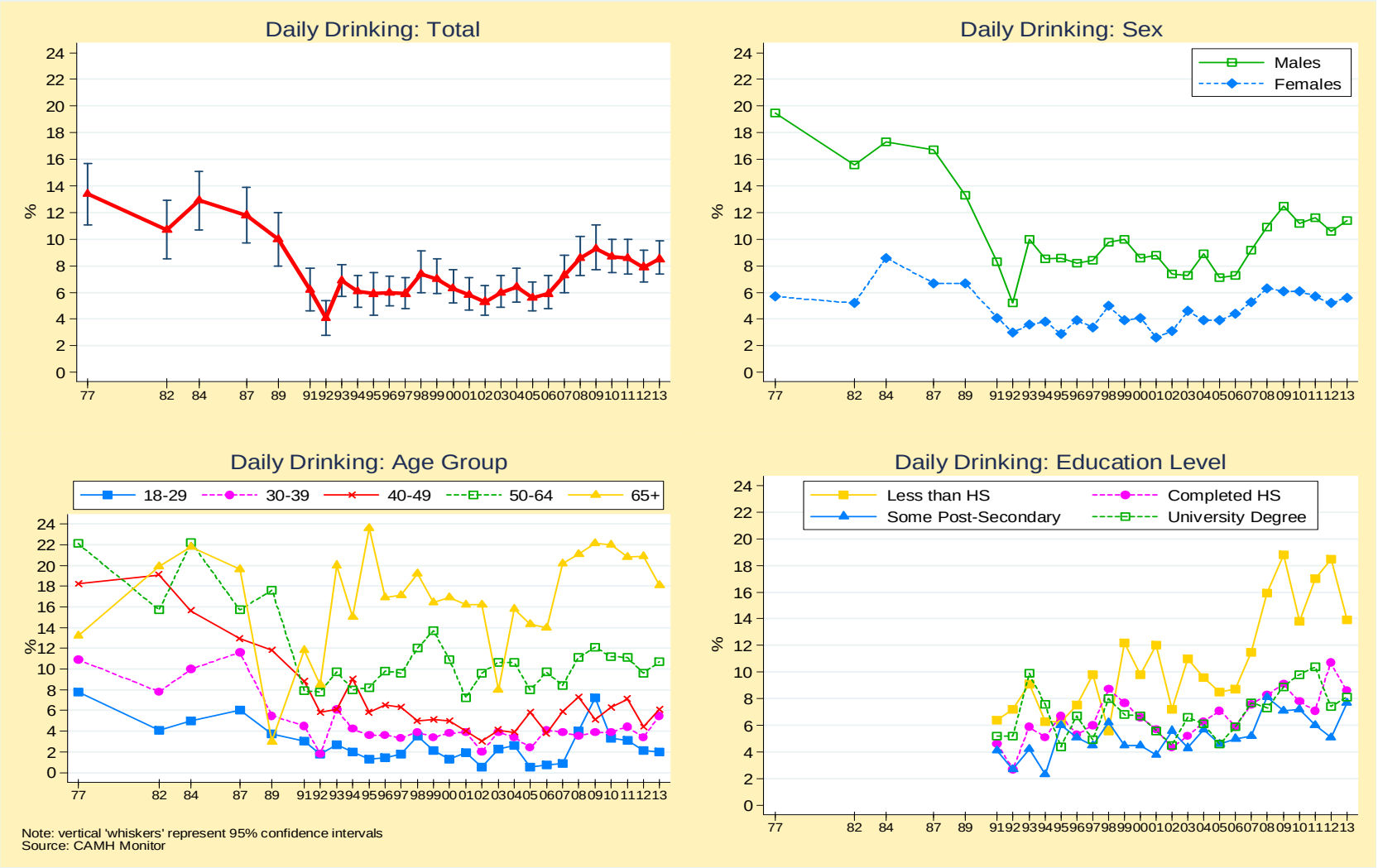
**Past Year Daily Drinking by Sex, Age and Region, Ontarians Aged 18+, 2013 (N=3021)**




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: 2013 CAMH Monitor

Figure 3.2.2

**Daily Drinking, Ontarian Past Year Drinkers Aged 18+, 1977–2013**




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.*

**2013**……Table 3.3.1

On average, Ontarian **past year drinkers** reported consuming **5.1** (95% CI: 4.4 to 5.8) **drinks weekly**.

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

- Male drinkers consumed an average of 7.4 drinks weekly, compared to only 2.8 drinks for female drinkers.
- The average number of drinks tended to decrease with education. It was highest among those not completing high school (8.1 drinks) and lowest among those with university degree (4.0 drinks).

There were no significant differences for age, region, marital status, and income.

### Trends

**1996–2013**……Table 3.3.1; Fig.3.3.1

#### 2012–2013

The average number of drinks consumed weekly did not change significantly between 2012 and 2013 (4.4 vs. 5.1). In addition, the number of drinks consumed was **stable** for all sex, age, region, marital status, education and income subgroups.

#### 1996–2013

Between 1996 and 2013, there was a **significant increase** in the average number of drinks consumed weekly, from 3.3 in 1996 to 5.1 in 2013.

There were also significant increases in the number of drinks consumed among drinking men (from 4.8 in 1996 to 7.4 in 2013), among drinking women (from 1.9 in 1996 to 2.8 in 2013), and for all demographic factors examined (all age groups, all regions, all marital status and all education subgroups).

During this period, there was a notable upturn from 2007 to 2008 (3.7 to 5.0), which was especially evident for men (5.0 to 7.0) and 18 to 29 year olds (4.5 to 6.7).

Table 3.3.1: Estimated ***Average Number of Drinks Consumed Per Week*** During the Past 12 Months, Ontarian ***Past Year Drinkers*** Aged 18+, 1996–2013

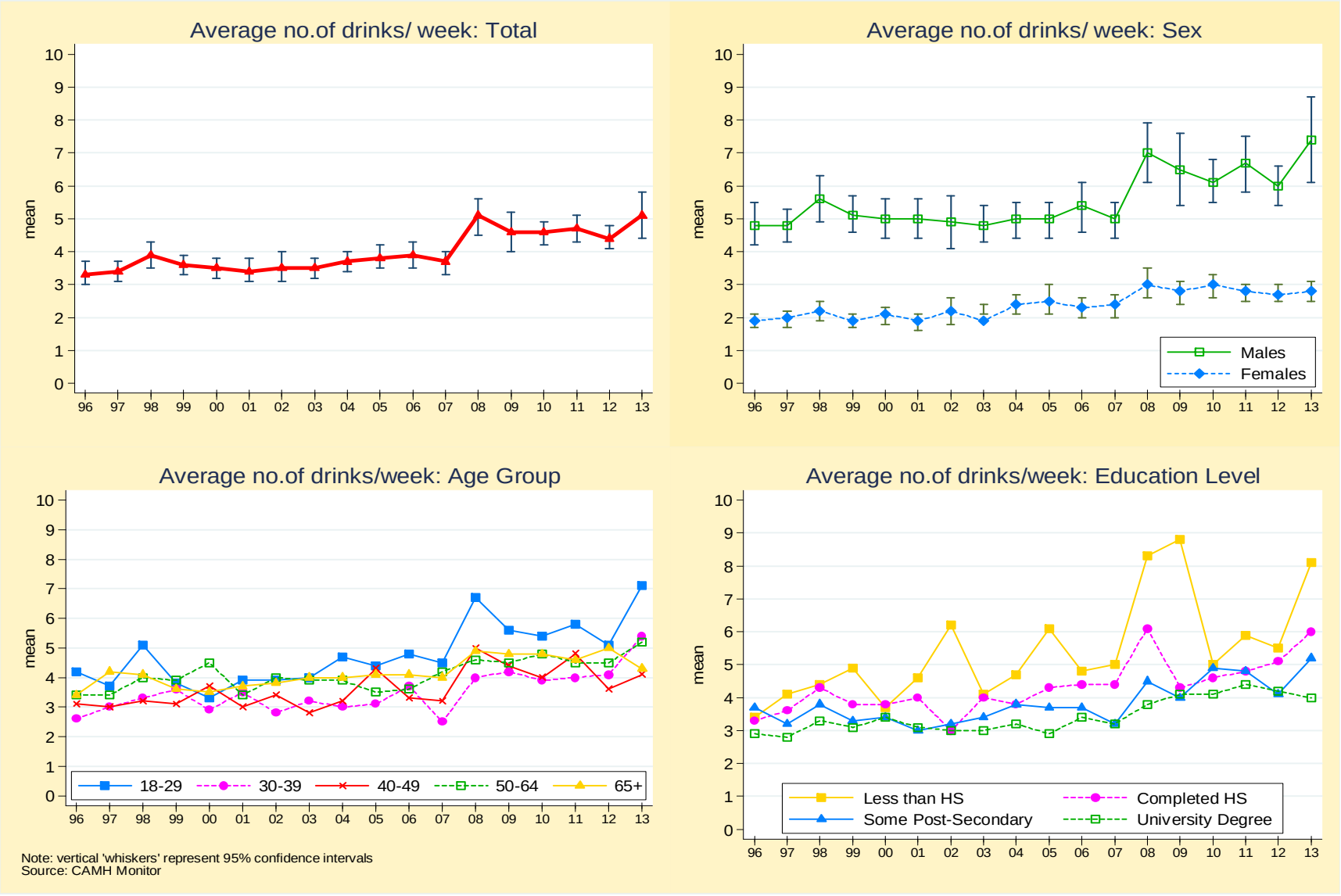
| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Change |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N= ) | (2141) | (2219) | (1582) | (1938) | (1887) | (2088) | (1933) | (1933) | (2101) | (1906) | (1527) | (1618) | (1599) | (1602) | (2352) | (2401) | (2355) | (2330) | |
| **Total** | **3.32** | **3.38** | **3.90** | **3.58** | **3.53** | **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** | **T –** |
| (95% CI) | (2.97,3.68) | (3.09,3.66) | (3.50,4.30) | (3.25,3.91) | (3.19,3.88) | (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) | |
| **Sex** | | | | | | | | | | | | | | | | | | *** | |
| Men | **4.84** | **4.82** | **5.62** | **5.12** | **5.01** | **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** | **T –** |
| | (4.16, 5.52) | (4.31,5.32) | (4.91,6.34) | (4.55,5.69) | (4.40,5.61) | (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) | |
| Women | **1.87** | **1.97** | **2.19** | **1.94** | **2.06** | **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** | **T –** |
| | (1.67, 2.08) | (1.74,2.19) | (1.89,2.49) | (1.68,2.21) | (1.77,2.34) | (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) | |
| **Age** | | | | | | | | | | | | | | | | | | NS | |
| 18 - 29 | **4.16** | **3.74** | **5.14** | **3.84** | **3.29** | **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** | **T –** |
| | (3.04, 5.28) | (3.10,4.37) | (4.04,6.24) | (3.01,4.68) | (2.72,3.86) | (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) | |
| 30 - 39 | **2.64** | **2.98** | **3.33** | **3.55** | **2.88** | **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** | **T –** |
| | (2.20, 3.07) | (2.50,3.46) | (2.49,4.17) | (2.80,4.31) | (2.37,3.38) | (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) | |
| 40 - 49 | **3.11** | **2.99** | **3.18** | **3.11** | **3.67** | **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** | **T –** |
| | (2.52, 3.70) | (2.45,3.53) | (2.61,3.74) | (2.61,3.61) | (2.82,4.54) | (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) | |
| 50 - 64 | **3.44** | **3.42** | **3.95** | **3.87** | **4.53** | **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** | **T –** |
| | (2.86, 4.03) | (2.82,4.02) | (3.18,4.73) | (3.18,4.56) | (3.42,5.64) | (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) | |
| 65+ | **3.39** | **4.17** | **4.14** | **3.58** | **3.50** | **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** | **T –** |
| | (2.73, 4.04) | (3.08,5.25) | (3.11,5.18) | (2.83,4.32) | (2.73,4.27) | (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) | |
| **Region** | | | | | | | | | | | | | | | | | | NS | |
| Toronto | **3.59** | **3.15** | **4.20** | **3.67** | **3.07** | **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** | **T –** |
| | (2.89, 4.29) | (2.55, 3.76) | (3.26, 5.14) | (2.91, 4.42) | (2.43, 3.70) | (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) | |
| C- South | **3.16** | **4.03** | **3.80** | **3.29** | **4.14** | **3.00** | **3.52** | **2.97** | **3.46** | **3.90** | **5.16** | **3.78** | **4.44** | **6.12** | **5.24** | **3.82** | **4.05** | **5.32** | **T –** |
| | (2.52, 3.80) | (3.09, 4.97) | (2.64, 4.97) | (2.54, 4.04) | (2.56, 5.73) | (2.00, 4.00) | (2.24, 4.80) | (2.23, 3.71) | (2.13, 4.79) | (2.83, 4.98) | (3.51,6.81) | (2.76,4.80) | (3.08, 5.80) | (4.16, 8.07) | (3.95, 6.53) | (2.87, 4.77) | (3.03, 5.08) | (3.61, 7.02) | |
| C-West | **2.66** | **3.09** | **3.37** | **3.33** | **3.41** | **3.00** | **2.97** | **3.73** | **3.46** | **4.27** | **3.62** | **3.63** | **5.75** | **4.37** | **4.75** | **5.42** | **3.84** | **3.82** | **T –** |
| | (2.21, 3.12) | (2.38, 3.81) | (2.47, 4.27) | (2.45, 4.21) | (2.71, 4.12) | (2.39, 3.62) | (2.41, 3.52) | (2.70, 4.75) | (2.63, 4.29) | (3.35, 5.19) | (2.28,4.97) | (2.53,4.72) | (4.16, 7.35) | (3.32, 5.42) | (3.72, 5.78) | (3.88, 6.96) | (2.89, 4.79) | (2.98, 4.67) | |
| S-West | **3.67** | **2.99** | **3.97** | **3.79** | **3.49** | **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** | **T –** |
| | (1.84, 5.50) | (2.26, 3.72) | (3.04, 4.90) | (2.96, 4.63) | (2.67, 4.31) | (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) | (3.50, 6.11) | |
| C- East | **3.20** | **3.40** | **3.04** | **3.70** | **3.55** | **3.50** | **4.43** | **3.31** | **3.94** | **3.87** | **3.19** | **2.76** | **5.35** | **6.01** | **4.48** | **4.54** | **4.39** | **6.81** | **T –** |
| | (2.61, 3.80) | (2.75, 4.05) | (2.19, 3.88) | (2.82, 4.58) | (2.79, 4.30) | (2.57, 4.42) | (2.21, 6.65) | (2.59, 4.03) | (3.04, 4.84) | (2.83, 4.91) | (2.28,4.10) | (2.15,3.36) | (3.99, 6.72) | (3.46, 8.55) | (3.45, 5.51) | (3.64, 5.44) | (3.66, 5.11) | (4.08, 9.55) | |
| East | **3.39** | **4.07** | **4.33** | **3.46** | **3.53** | **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** | **T –** |
| | (2.48,4.29) | (3.20, 4.94) | (3.40, 5.26) | (2.66, 4.26) | (2.57, 4.48) | (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) | |
| North | **3.65** | **2.92** | **4.03** | **3.92** | **4.23** | **4.42** | **3.64** | **4.19** | **3.83** | **4.67** | **3.67** | **2.78** | **5.69** | **5.67** | **5.26** | **4.93** | **5.53** | **5.07** | **T –** |
| | (2.53, 4.77) | (2.29, 3.56) | (3.09, 4.96) | (2.65, 5.19) | (2.97, 5.48) | (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) | (3.96, 7.11) | (4.24, 5.90) | |

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Change |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N= ) | (2141) | (2219) | (1582) | (1938) | (1887) | (2088) | (1933) | (1933) | (2101) | (1906) | (1527) | (1618) | (1599) | (1602) | (2352) | (2401) | (2355) | (2330) | |
| **Marital Status** | | | | | | | | | | | | | | | | | | NS | |
| Married/ Partner | **2.70** | **3.04** | **3.02** | **3.26** | **3.30** | **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** | **T –** |
| Prev. Married | **3.94** | **4.05** | **3.36** | **3.45** | **3.39** | **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** | **T –** |
| Never married | **4.63** | **3.75** | **5.41** | **4.57** | **4.91** | **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*** | **T –** |
| **Education** | | | | | | | | | | | | | | | | | | * | |
| HS not completed | **3.41** | **4.13** | **4.39** | **4.86** | **3.67** | **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** | **T –** |
| Completed HS | **3.31** | **3.57** | **4.26** | **3.82** | **3.81** | **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** | **T –** |
| Some College or Univ | **3.65** | **3.19** | **3.82** | **3.27** | **3.40** | **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** | **T –** |
| Univ Degree | **2.93** | **2.84** | **3.32** | **3.08** | **3.36** | **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** | **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.
(2) Trend Analysis: **–** change not statistically significant (p<.05); **T** statistically significant change (p<.05) between 1996-2013; **2Y** statistically 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+, 1996–2013**




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.*

*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 low-risk drinking guidelines 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) in any given day over the past week. In 2013, the LRDG items were asked only of a **random subsample** of respondents (Panel A, n=961).*

**2013**……. Table 3.4.1; Fig. 3.4.1

An estimated **18.8%** (95% CI: 15.3% to 22.8%) of Ontarians exceeded the low-risk drinking guidelines during the past 12 months. Among past year drinkers, the prevalence was **23.5%** (95% CI: 19.3% to 28.2%). The corresponding population estimate is 1,760,300 Ontario adults who exceeded the guidelines (95% CI: 1,381,700 to 2,138,800).

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

- The adjusted odds of exceeding the drinking guidelines among men were 2.3 times higher than among women (26.0% vs. 12.8%).
- Exceeding the drinking guidelines showed a significant decline with age, dropping from 35.9% of 18 to 29 year olds to 8.3% of those 65 years and older.
- The adjusted odds of drinking at this level were significantly higher among those previously married and those never married compared to those who were married (OR=2.1 and OR=2.3; 14.2% and 31.0% vs. 15.5%, respectively).

- The odds of exceeding the low-risk drinking guidelines were 3.7 times higher among persons in the highest level of income (28.9%) compared to persons earning less than $30,000 (12.9%).

Region and education were not significantly related to exceeding the low-risk drinking guidelines, when controlling for other factors.

## Trends

**2003–2013** ……. Table 3.4.2; Fig 3.4.2

### 2012–2013

The percent of Ontarians exceeding the low-risk drinking guidelines in 2013 (18.8%) was statistically **unchanged** from 2012 (17.6%). In addition, rates of exceeding the drinking guidelines were stable for all subgroups.

### 2003–2013

Between 2003 and 2013, exceeding the guidelines did not change significantly, varying between 17.6% in 2003 and 18.8% in 2013 .

**Year did not interact** significantly with any of the demographic categories analysed, suggesting that subgroup trends were not dissimilar.

Although there was no evidence of measurable differential subgroup trends, there was significant non-linear trending among residents of the South West (from 17.8% in 2003 to 27.2% in 2006 and down to 13.6% in 2013).

Table 3.4.1: Percentage ***Exceeding Low-Risk Drinking Guidelines*** During the Past 12 Months and Adjusted Group Differences, Ontarians Aged 18+, 2013

| | N | % | 95% CI | Adjusted Odds Ratio (N=928) |
|---|---|---|---|---|
| **Total**[1] | 961 | **18.8** | (15.3, 22.8) | — |
| **Sex** | | | | * |
| Men | 354 | **26.0** | (19.8, 33.3) | **2.27**** |
| Women *(Comparison Group)* | 607 | **12.8** | (9.8, 16.6) | — |
| **Age** | | | | |
| *(Comparison Group is previous age group)* | | | | * |
| 18-29 | 52 | **†35.9** | (22.2, 52.3) | — |
| 30-39 | 96 | **†22.9** | (14.4, 34.4) | 0.86 |
| 40-49 | 178 | **†16.7** | (11.3, 24.0) | 0.60 |
| 50-64 | 348 | **15.5** | (11.4, 20.6) | 0.92 |
| 65+ | 271 | **†8.3** | (5.3, 12.8) | 0.68 |
| **Public Health Region** | | | | NS |
| Toronto *(vs. Provincial Average)* | 168 | **†20.1** | (12.4, 30.8) | 0.99 |
| Central South | 74 | **†12.3** | (6.0, 23.6) | 0.62 |
| Central West | 116 | **†14.4** | (8.2, 23.8) | 0.82 |
| South West | 155 | **†13.6** | (8.5, 21.0) | 0.81 |
| Central East | 121 | **†26.3** | (16.6, 39.1) | 1.38 |
| East | 173 | **†19.2** | (12.6, 28.1) | 1.10 |
| North | 154 | **†22.1** | (14.9, 31.5) | 1.62 |
| **Marital Status** | | | | * |
| Married/Partner *(Comparison Group)* | 603 | **15.5** | (12.4, 19.3) | — |
| Previously Married | 221 | **†14.2** | (9.2, 21.3) | **2.06*** |
| Never Married | 130 | **†31.0** | (20.5, 43.8) | **2.34*** |
| **Education** | | | | NS |
| High school not completed *(Comparison Group)* | 99 | **†12.7** | (6.4, 23.6) | — |
| Completed high school | 212 | **†20.4** | (12.7, 31.1) | 0.86 |
| Some college or university | 316 | **22.0** | (15.9, 29.5) | 0.87 |
| University degree | 321 | **16.2** | (11.6, 22.2) | 0.50 |
| **Household Income** | | | | ** |
| < $30,000 *(Comparison Group)* | 90 | **†12.9** | (6.3, 24.7) | — |
| $30,000-$49,999 | 124 | **†17.2** | (7.6, 34.2) | 1.49 |
| $50,000-$79,999 | 152 | **†11.7** | (6.4, 20.3) | 1.15 |
| $80,000+ | 347 | **28.9** | (22.9, 35.7) | **3.73*** |
| Not stated | 248 | **†8.8** | (4.7, 15.7) | 0.68 |

Notes: [1] LRDG items were asked of a random subsample in 2013 (N= 961); 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 (complete case sample size N=928).

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*** During the Past 12 Months and Adjusted Group Differences, Ontarians Aged 18+, 2003-2013

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2011 | 2012 | 2013 | Change | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N=) | (2411) | (2611) | (2445) | (2016) | (2005) | (2024) | (2037) | (1040) | (2015) | (961) | | |
| **Total** | **17.6** | **19.5** | **21.5** | **20.6** | **19.1** | **17.6** | **17.8** | **18.4** | **17.6** | **18.8** | **–** | **–** |
| (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) | | |
| **Sex** | | | | | | | | | | | **NSI** | |
| Men | **21.2** | **22.7** | **26.5** | **26.8** | **21.7** | **21.4** | **21.1** | **23.0** | **20.8** | **26.0** | **–** | **–** |
| | (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) | | |
| Women | **14.2** | **16.4** | **17.0** | **14.8** | **16.7** | **14.1** | **14.7** | **13.9** | **14.2** | **12.8** | **–** | **–** |
| | (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) | | |
| **Age** | | | | | | | | | | | **NSI** | |
| 18-29 | **27.1** | **34.9** | **33.5** | **33.7** | **34.3** | **28.3** | **29.1** | **†29.0** | **25.7** | **†35.9** | **–** | **–** |
| | (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) | | |
| 30-39 | **20.9** | **18.9** | **24.0** | **23.1** | **17.5** | **19.0** | **16.2** | **†22.2** | **20.2** | **†22.9** | **–** | **–** |
| | (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) | | |
| 40-49 | **16.9** | **18.0** | **24.0** | **18.9** | **19.9** | **20.0** | **20.7** | **†21.7** | **17.8** | **†16.7** | **–** | **–** |
| | (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) | | |
| 50-64 | **12.2** | **16.8** | **15.9** | **17.1** | **16.3** | **14.2** | **14.5** | **†15.2** | **16.1** | **15.5** | **–** | **–** |
| | (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) | | |
| 65+ | **9.1** | **7.9** | **7.7** | **8.6** | **8.4** | **7.6** | **9.7** | **†4.0** | **8.8** | **†8.3** | **–** | **–** |
| | (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) | | |
| **Region** | | | | | | | | | | | **NSI** | |
| Toronto | **18.1** | **15.7** | **18.5** | **15.5** | **14.3** | **12.6** | **17.1** | **†15.9** | **14.1** | **†20.1** | **–** | **–** |
| | (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) | | |
| Central South | **16.1** | **19.7** | **20.5** | **†22.8** | **†19.5** | **†16.2** | **†21.5** | **†5.2** | **†17.5`** | **†12.3** | **–** | **–** |
| | (11.5, 22.0) | (14.2, 26.7) | (14.8, 27.6) | (15.8, 31.7) | (13.7, 26.9) | (10.5, 24.1) | (15.2, 29.5) | (1.6,15.3) | (11.7, 25.5) | (6.0, 23.6) | | |
| Central West | **18.8** | **21.9** | **24.6** | **19.4** | **†16.6** | **16.7** | **17.2** | **†21.7** | **14.6** | **†14.4** | **–** | **–** |
| | (14.5, 24.2) | (17.1, 27.7) | (19.8, 30.2) | (14.3, 25.7) | (11.7, 22.9) | (12.0, 22.8) | (12.8, 22.6) | (13.7,32.6) | (9.8, 21.3) | (8.2, 23.8) | | |
| South West | **17.8** | **23.9** | **25.1** | **27.2** | **22.2** | **17.1** | **13.6** | **†21.9** | **17.8** | **†13.6** | **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) | | |
| Central East | **16.7** | **18.4** | **20.2** | **19.9** | **19.0** | **19.7** | **20.9** | **†21.4** | **18.2** | **†26.3** | **–** | **–** |
| | (12.4, 22.0) | (13.8, 24.1) | (15.3, 26.1) | (14.4, 26.8) | (13.9, 25.5) | (14.6, 26.1) | (15.3, 27.7) | (13.6,32.0) | (13.2, 24.6) | (16.6, 39.1) | | |
| East | **17.1** | **20.5** | **20.4** | **25.1** | **24.2** | **23.2** | **15.3** | **†15.0** | **21.6** | **†19.2** | **–** | **–** |
| | (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) | | |
| North | **17.7** | **18.9** | **21.9** | **16.6** | **24.0** | **22.1** | **22.1** | **†21.5** | **22.5** | **†22.1** | **–** | **–** |
| | (13.9, 22.2) | (15.7, 22.6) | (17.8, 26.7) | (12.5, 21.5) | (19.0, 29.9) | (17.1, 28.0) | (17.0, 28.4) | (15.2,29.7) | (17.0, 29.1) | (14.9, 31.5) | | |
| **Marital Status** | | | | | | | | | | | **NSI** | |
| Married/Partner | **15.5** | **15.9** | **20.2** | **18.0** | **16.1** | **15.6** | **15.9** | **17.2** | **16.6** | **15.5** | **–** | **–** |
| Previously Married | **15.5** | **16.2** | **14.7** | **13.3** | **19.4** | **14.5** | **16.5** | **†10.6** | **11.3** | **†14.2** | **–** | **–** |
| Never Married | **24.8** | **32.4** | **29.7** | **33.3** | **29.0** | **26.0** | **25.2** | **†25.8** | **22.4** | **†31.0** | **–** | **–** |
| **Education** | | | | | | | | | | | **NSI** | |
| High school not completed | **14.3** | **13.7** | **15.8** | **18.6** | **†17.9** | **20.5** | **†21.5** | **†8.8** | **10.2** | **†12.7** | **–** | **–** |
| Completed high school | **20.6** | **20.5** | **21.5** | **20.5** | **21.2** | **18.8** | **15.7** | **†19.6** | **15.5** | **†20.4** | **–** | **–** |
| Some college or university | **19.1** | **21.4** | **27.1** | **21.6** | **21.8** | **18.8** | **20.4** | **20.7** | **19.9** | **22.0** | **–** | **–** |
| University degree | **15.5** | **19.7** | **17.1** | **20.8** | **14.6** | **14.6** | **15.5** | **18.3** | **18.0** | **16.2** | **–** | **–** |

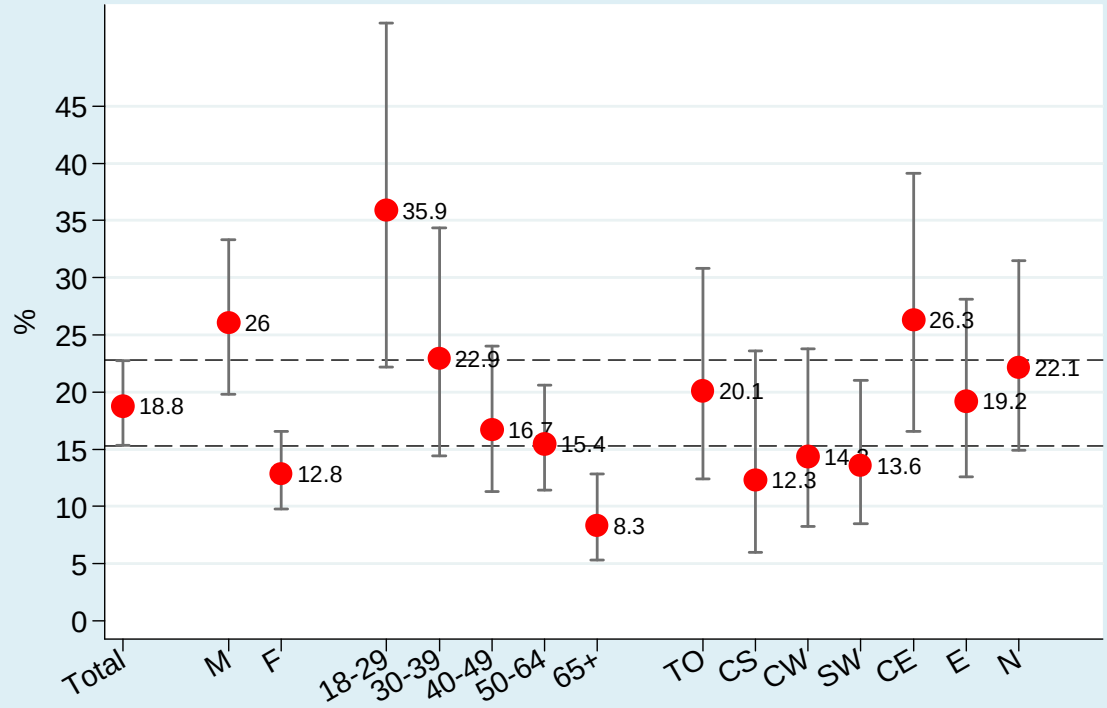
Notes: (1) All analyses are sample design adjusted; [a] 95% confidence interval; † Estimate suppressed or unstable;
(2) Trend Analysis: **–** change not statistically significant (p<.05); **T** statistically significant change (p<.05) between 1996-2013; **2Y** statistically significant change (p<.05) between last two estimates;
(3) **NSI**, non-significant YEAR × FACTOR interaction.

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

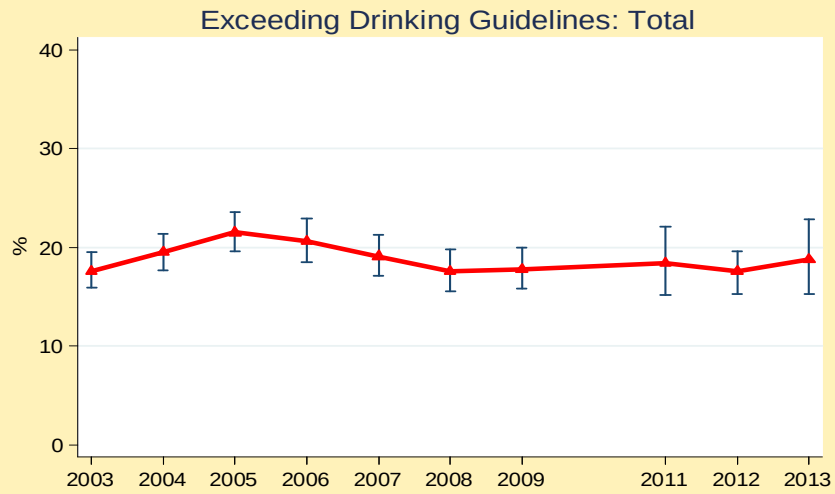
**Percentage Exceeding Low-Risk Drinking Guidelines in the Past Year by Sex, Age and Region, Ontarians Aged 18+, 2013 (N=961)**

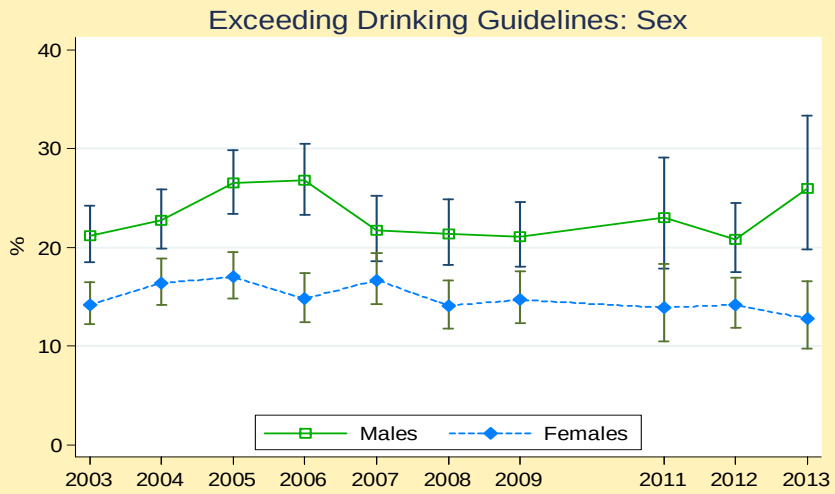


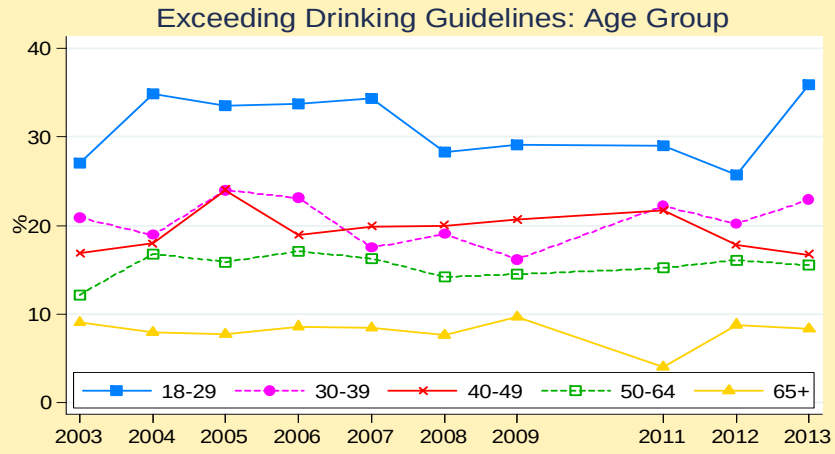

Note: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal bar represents 95% confidence interval for total estimate
(3) significant difference by sex p<.05)
Source: 2013 CAMH Monitor

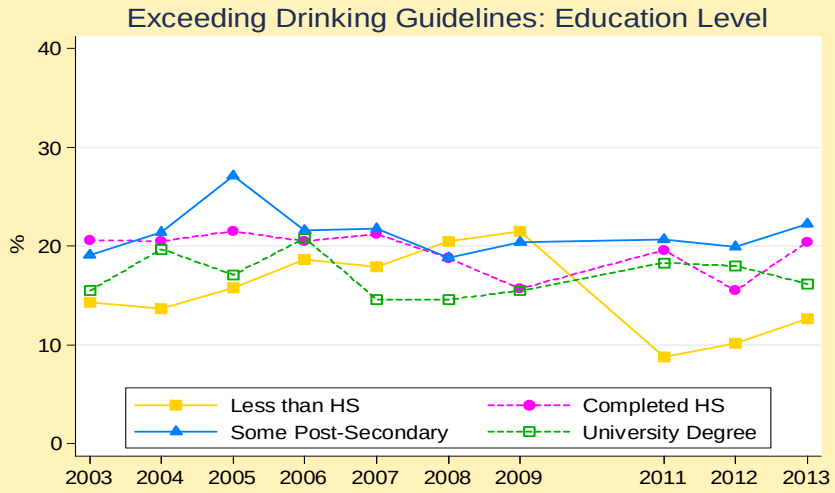
Figure 3.4.2

**Percentage Exceeding Low-Risk Drinking Guidelines in the Past Year, Ontarians Aged 18+, 2003–2013**




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, we must note that the use of this term is a matter of debate among researchers. Readers should also note that this concept is equivalent to the terms "heavy episodic drinking," and more recently, "risky single occasion drinking" (RSOD).*

**2013**……..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 **6.8%** (95% CI: 5.5% to 8.3%). Among past year drinkers, the prevalence was **8.7%** (95% CI: 7.1% to 10.5%). The corresponding population estimate is 682,200 Ontario adults who binge drink weekly (95% CI: 542,500 to 821,900).

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

- The adjusted odds of weekly binge drinking among men were nine times higher than women (12.5% vs. 1.5%; OR=9.45).
- Weekly binge drinking declined with age. Those aged 18 to 29 reported the highest percentage of weekly binge drinking (13.0%), whereas those aged 65 and older reported the lowest rate (2.0%). One of the four sequential age group comparisons was statistically significant: the adjusted odds of weekly binge drinking were significantly lower among those aged 65 and older (by 75%) than 50 to 64 year olds (2.0% vs. 6.4%; OR=0.26).
- The adjusted odds of weekly binge drinking among those never married were 2.4 times higher than among married respondents (13.2% vs. 5.3%; OR=2.36).

Region, education and income were not significantly related to weekly binge drinking.

**Past year drinkers** displayed similar characteristics related to weekly binge drinking: men, those aged 18 to 29, and those never married reported the highest percent of weekly binge drinking among their respective demographic subgroups.

### Trends

**1977–2013**……Tables 3.5.3, 3.5.4; Fig. 3.5.2

#### 2012–2013

Between 2012 and 2013, the prevalence of weekly binge drinking for the total sample remained stable (7.0% vs. 6.8%), and rates of weekly binge drinking were stable for most subgroups. There was only one significant subgroup decrease among women, from 3.3% in 2012 to 1.5% in 2013.

**Past year drinkers** displayed similar characteristics. The estimate of weekly binge drinking was not significantly different in 2013 (8.7%) from 2012 (8.9%), and the rate decreased significantly only among women, from 4.4% in 2012 to 2.0% in 2013.

### 1996–2013

Although 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, there was a significant **decline** in binge drinking between 2007 and 2013. Estimates declined from 11.2% in 2007 to 6.8% in 2013 for the total sample, and from 13.8% to 8.7% among drinkers.

**Year did not interact** significantly with any of the demographic categories analysed, suggesting that subgroup declines were similar. Indeed, significant subgroup declines were evident during this period for sex, age, region, marital status and education.

### 1977–2013

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

Three distinct periods are evident between 1977 and 2013. 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 its decline again in 2008 and significant subgroup declines were evident for 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 During the Past 12 Months and Adjusted Group Differences, ***Ontarians*** Aged 18+, 2013

| | N | % | 95% CI | Adjusted Odds Ratio (N=2895) |
|---|---|---|---|---|
| **Total** | 3021 | **6.8** | (5.5, 8.3) | — |
| **Sex** | | | | ******* |
| Men | 1232 | **12.5** | (10.1, 15.4) | **9.45**** |
| Women *(Comparison Group)* | 1789 | †1.5 | (0.9, 2.4) | — |
| **Age** | | | | |
| *(Comparison Group is previous age group)* | | | | ******* |
| 18-29 | 182 | **†13.0** | (8.3, 19.9) | — |
| 30-39 | 303 | **†8.0** | (5.0, 12.5) | 1.25 |
| 40-49 | 556 | **†6.0** | (3.8, 8.1) | 0.62 |
| 50-64 | 1015 | **6.4** | (4.8, 8.6) | 1.13 |
| 65+ | 909 | **†2.0** | (1.2, 3.2) | **0.26**** |
| **Public Health Region** | | | | NS |
| Toronto *(vs. Provincial Average)* | 503 | **†5.3** | (2.9, 9.6) | 0.80 |
| Central South | 238 | **†9.3** | (5.1, 16.5) | 1.24 |
| Central West | 403 | **†4.5** | (2.7, 7.5) | 0.64 |
| South West | 497 | **†6.6** | (4.0, 10.5) | 0.91 |
| Central East | 411 | **†8.2** | (5.2, 12.9) | 1.31 |
| East | 502 | **†8.2** | (5.5, 12.1) | 1.50 |
| North | 467 | **†6.9** | (4.4, 10.6) | 1.19 |
| **Marital Status** | | | | ***** |
| Married/Partner *(Comparison Group)* | 1926 | **5.3** | (4.2, 6.7) | — |
| Previously Married | 653 | **†3.2** | (2.0, 5.0) | 0.87 |
| Never Married | 409 | **†13.2** | (9.2, 18.8) | **2.36*** |
| **Education** | | | | NS |
| High school not completed *(Comparison)* | 355 | **†8.0** | (4.9, 12.6) | — |
| Completed high school | 638 | **†9.5** | (6.2, 14.3) | 1.10 |
| Some college or university | 1053 | **7.4** | (5.5, 9.9) | 0.91 |
| University degree | 939 | **†4.0** | (2.5, 6.2) | 0.50 |
| **Household Income** | | | | NS |
| < $30,000 *(Comparison Group)* | 303 | **†6.6** | (3.6, 11.8) | — |
| $30,000-$49,999 | 370 | **†10.6** | (5.8, 18.4) | 2.42 |
| $50,000-$79,999 | 526 | **†7.0** | (4.5, 10.7) | 1.47 |
| $80,000+ | 1089 | **6.9** | (5.1, 9.2) | 1.12 |
| Not stated | 733 | **†5.1** | (3.0, 8.4) | 0.82 |

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 (complete case sample size N = 2895).

*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 During the Past 12 Months and Adjusted Group Differences, Ontarian ***Past Year Drinkers*** Aged 18+, 2013

| | N | % | 95% CI | Adjusted Odds Ratio (N=2241) |
|---|---|---|---|---|
| **Total** | 2330 | **8.7** | (7.1, 10.5) | — |
| **Sex** | | | | **** |
| Men | 1027 | **15.1** | (12.3, 18.5) | **9.02**** |
| Women *(Comparison Group)* | 1303 | **†2.0** | (1.3, 3.2) | — |
| **Age** | | | | |
| *(Comparison Group is previous age group)* | | | | ** |
| 18-29 | 151 | **†16.3** | (10.4, 24.6) | — |
| 30-39 | 246 | **†10.2** | (6.5, 15.8) | 1.44 |
| 40-49 | 469 | **†6.7** | (4.6, 9.7) | 0.56 |
| 50-64 | 801 | **8.2** | (6.1, 10.8) | 1.18 |
| 65+ | 629 | **†2.8** | (1.7, 4.5) | **0.26**** |
| **Public Health Region** | | | | NS |
| Toronto *(vs. Provincial Average)* | 369 | **†7.4** | (4.1, 13.1) | 0.86 |
| Central South | 182 | **†11.6** | (6.4, 20.3) | 1.18 |
| Central West | 302 | **†5.9** | (3.5, 9.7) | 0.64 |
| South West | 375 | **†8.5** | (5.2, 13.4) | 0.91 |
| Central East | 325 | **†10.3** | (6.5, 16.0) | 1.28 |
| East | 410 | **†9.8** | (6.6, 14.4) | 1.45 |
| North | 367 | **†8.4** | (5.4, 12.9) | 1.06 |
| **Marital Status** | | | | * |
| Married/Partner *(Comparison Group)* | 1555 | **6.6** | (5.2, 8.3) | — |
| Previously Married | 448 | **†4.5** | (2.8, 7.1) | 0.86 |
| Never Married | 307 | **17.4** | (12.1, 24.3) | **2.61**** |
| **Education** | | | | NS |
| High school not completed *(Comparison )* | 210 | **†13.0** | (8.1, 20.3) | — |
| Completed high school | 456 | **†12.9** | (8.5, 19.2) | 1.01 |
| Some college or university | 846 | **9.2** | (6.8, 12.2) | 0.76 |
| University degree | 795 | **†4.7** | (3.0, 7.5) | 0.40 |
| **Household Income** | | | | NS |
| < $30,000 *(Comparison Group)* | 184 | **†10.7** | (5.8, 18.7) | — |
| $30,000-$49,999 | 266 | **†15.3** | (8.6, 25.8) | 1.64 |
| $50,000-$79,999 | 424 | **†8.8** | (5.7, 13.3) | 0.88 |
| $80,000+ | 956 | **7.8** | (5.8, 10.4) | 0.67 |
| Not stated | 500 | **†7.4** | (4.5, 12.1) | 0.55 |

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 (complete case sample size N = 2241).

*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 3.5.3: ***Weekly Binge Drinking*** – Percentage Drinking ***Five or More Drinks*** on a Single Occasion Weekly During the Past 12 Months, by Demographic Characteristics, ***Ontarians*** Aged 18+, 1977–1995

| | 1977 | 1982 | 1984 | 1987 | 1989 | 1991 | 1994 | 1995 |
|---|---|---|---|---|---|---|---|---|
| (N= ) | (1059) | (1040) | (1051) | (1084) | (1101) | (1047) | (2022) | (994) |
| **Total** | **8.9** | **8.3** | **9.3** | **8.7** | **9.5** | **7.4** | **8.4** | **7.0** |
| (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) |
| **Sex** | | | | | | | | |
| Men | **14.2** | **13.3** | **15.5** | **13.9** | **16.0** | **10.4** | **13.0** | **10.7** |
| | (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) |
| Women | **3.1** | **3.3** | **3.6** | **3.8** | **3.4** | **4.5** | **4.3** | **3.2** |
| | (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) |
| **Age** | | | | | | | | |
| 18 - 29 | **13.6** | **13.7** | **12.2** | **14.2** | **15.8** | **10.0** | **12.7** | **10.6** |
| | (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) |
| 30 - 39 | **4.3** | **9.0** | **11.6** | **8.7** | **6.9** | **8.3** | **9.2** | **9.2** |
| | (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) |
| 40 - 49 | **13.0** | **6.5** | **9.9** | **8.5** | **8.8** | **6.4** | **6.5** | †**5.0** |
| | (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) |
| 50 - 64 | **6.6** | **5.8** | **6.0** | **5.6** | **7.9** | **7.3** | **4.9** | †**4.2** |
| | (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) |
| 65+ | **4.0** | †**0.6** | **4.5** | †**2.1** | †**4.1** | †**1.4** | †**4.5** | †**3.0** |
| | (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) |
| **Marital Status** | | | | | | | | |
| Married/ Partner | — | — | — | — | — | **4.5** | **6.7** | **5.3** |
| Previously Married | — | — | — | — | — | **12.3** | **7.3** | †**5.5** |
| Never Married | — | — | — | — | — | **11.9** | **12.7** | **11.3** |
| **Education** | | | | | | | | |
| HS not completed | — | — | — | — | — | **8.8** | **8.9** | **9.9** |
| Completed HS | — | — | — | — | — | **10.6** | **10.6** | **10.4** |
| Some College or University | — | — | — | — | — | **6.2** | **8.9** | **6.1** |
| University Degree | — | — | — | — | — | †**3.0** | †**4.0** | †**1.8** |

Notes: [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 3.5.4: ***Weekly Binge Drinking*** – Percentage Drinking ***Five or More Drinks*** on a Single Occasion Weekly During the Past 12 Months, by Demographic Characteristics, ***Ontarians*** Aged 18+, 1996–2013

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Change | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N= ) | (2721) | (2776) | (2232) | (2436) | (2406) | (2627) | (2421) | (2411) | (2611) | (2445) | (2016) | (2005) | (2024) | (2037) | (3030) | (3039) | (3030) | (3021) | | |
| **Total** | **11.7** | **11.1** | **11.8** | **11.8** | **12.7** | **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** | **T** | **–** |
| (95%CI)[a] | (10.3, 13.3) | (9.8, 12.6) | (10.3, 13.4) | (10.4, 13.4) | (11.2, 14.3) | (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) | | |
| **Sex** | | | | | | | | | | | | | | | | | | | | * |
| Men | **18.7** | **17.8** | **20.0** | **19.8** | **18.8** | **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** | **T** | **–** |
| | (16.3, 21.5) | (15.5, 20.4) | (17.1, 23.2) | (17.3, 22.7) | (16.3, 21.7) | (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) | | |
| Women | **5.5** | **5.1** | **4.4** | **4.4** | **7.1** | **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** | **T** | **2Y** |
| | (4.3, 7.1) | (4.0, 6.6) | (3.4, 5.8) | (3.3, 5.9) | (5.7, 8.8) | (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) | | |
| **Age** | | | | | | | | | | | | | | | | | | | | **NSI** |
| 18 - 29 | **21.0** | **19.7** | **18.9** | **20.2** | **21.3** | **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** | **T** | **–** |
| | (17.1, 25.4) | (16.3, 23.7) | (14.5, 23.8) | (16.2, 25.1) | (17.3, 25.9) | (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) | | |
| 30 - 39 | **11.7** | **10.7** | **11.1** | **11.0** | **13.1** | **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** | **T** | **–** |
| | (9.2, 14.9) | (8.3, 13.6) | (8.5, 14.5) | (8.6, 14.1) | (10.3, 16.6) | (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) | | |
| 40 - 49 | **9.6** | **7.7** | **10.1** | **11.8** | **11.9** | **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** | **T** | **–** |
| | (7.2, 12.5) | (5.6, 10.5) | (7.5, 13.6) | (8.8, 15.6) | (9.1, 15.4) | (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) | | |
| 50 - 64 | **8.2** | **7.2** | **11.1** | **8.6** | **9.4** | **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** | **T** | **–** |
| | (5.9, 11.2) | (5.1, 10.1) | (8.0, 15.1) | (6.2, 11.8) | (6.8, 12.9) | (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) | | |
| 65+ | **†2.6** | **†5.8** | **†5.8** | **† 6.3** | **† 4.6** | **† 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** | **T** | **–** |
| | (1.4, 4.8) | (3.5, 9.5) | (3.4, 9.6) | (3.9, 9.8) | (2.5, 8.1) | (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) | | |
| **Region** | | | | | | | | | | | | | | | | | | | | **NSI** |
| Toronto | **13.0** | **11.0** | **11.4** | **10.7** | **11.9** | **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** | **T** | **–** |
| | (9.5, 17.4) | (8.2, 14.6) | (8.1, 15.9) | (7.8, 14.6) | (8.8, 16.1) | (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) | | |
| Central South | **13.0** | **11.5** | **10.9** | **12.2** | **13.9** | **10.4** | **10.4** | **7.5** | **11.5** | **†7.7** | **21.3** | **13.8** | **10.4** | **12.1** | **†8.2** | **†6.6** | **†5.1** | **†9.3** | **–** | **–** |
| | (8.8, 18.0) | (7.9, 16.5) | (6.7, 17.3) | (8.0, 18, 2) | (9.4, 20.0) | (6.8, 15.5) | (6.5, 16.3) | (4.6, 12.1) | (7.2, 17.9) | (4.6,12.9) | (14.4,30.4) | (8.9,20.8) | (5.7,18.2) | (7.4,19.3) | (4.8,13.7) | (3.4, 12.6) | (7.4,19.3) | (5.1, 16.5) | | |
| Central West | **8.3** | **10.1** | **9.8** | **11.4** | **13.7** | **9.6** | **11.6** | **12.4** | **13.2** | **13.0** | **12.5** | **10.9** | **†7.7** | **7.8** | **†6.7** | **9.8** | **†4.1** | **†4.5** | **T** | **–** |
| | (5.7, 11.9) | (6.5, 15.2) | (6.7, 14.3) | (8.2, 15.8) | (10.1, 18.4) | (6.9, 13.2) | (8.2, 16.2) | (8.7, 17.4) | (9.1, 18.7) | (9.3,17.8) | (8.3,18.5) | (6.7,17.1) | (4.4,13.3) | (4.8,12.4) | (4.3,10.1) | (6.3, 14.9) | (4.8,12.4) | (2.7, 7.5) | | |
| South West | **13.0** | **9.1** | **14.0** | **12.5** | **11.8** | **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** | **T** | **–** |
| | (9.7, 17.1) | (6.5, 12.6) | (10.4, 18.5) | (9.4, 16.6) | (8.7, 15.9) | (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) | | |
| Central East | **12.4** | **12.9** | **9.5** | **14.5** | **12.2** | **12.8** | **9.4** | **11.6** | **13.1** | **†8.5** | **†6.8** | **†7.9** | **11.4** | **†8.4** | **†8.0** | **†4.6** | **†7.7** | **†8.2** | **T** | **–** |
| | (8.9, 17.0) | (9.8, 16.8) | (6.1, 14.4) | (10.4, 19.9) | (8.6, 17.1) | (9.0, 17.8) | (11.6, 9.2) | (8.0, 16.5) | (9.1, 18.3) | (5.6,12.7) | (4.0,11.1) | (4.7,13.0) | (7.4,17.0) | (4.8,14.4) | (5.1, 12.2) | (2.9, 7.2) | (4.8,14.4) | (5.2, 12.9) | | |
| East | **10.1** | **11.8** | **14.4** | **11.7** | **12.0** | **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** | **T** | **–** |
| | (7.5, 13.6) | (8.8, 15.5) | (10.8, 19.0) | (8.7, 15.6) | (8.9, 15.9) | (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) | | |
| North | **12.9** | **12.7** | **13.2** | **9.1** | **14.4** | **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** | **T** | **–** |
| | (9.8, 16.9) | (9.7, 16.5) | (9.7, 17.7) | (6.5, 12.5) | (10.9, 18.7) | (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) | | |

Cont'd

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Change | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N= ) | (2721) | (2776) | (2232) | (2436) | (2406) | (2627) | (2421) | (2411) | (2611) | (2445) | (2016) | (2005) | (2024) | (2037) | (3030) | (3039) | (3030) | (3021) | | |
| **Marital Status** | | | | | | | | | | | | | | | | | | | **NSI** | |
| Married/ Partner | **8.0** | **8.6** | **7.3** | **8.9** | **10.4** | **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** | **T** | **–** |
| Previously married | **9.4** | **9.6** | **10.3** | **9.0** | **10.4** | **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** | **T** | **–** |
| Never married | **22.7** | **17.8** | **18.8** | **22.5** | **19.4** | **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** | **T** | **–** |
| **Education** | | | | | | | | | | | | | | | | | | | **NSI** | |
| High school not completed | **10.9** | **11.0** | **15.2** | **14.9** | **10.1** | **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** | **T** | **–** |
| Completed high school | **14.6** | **13.0** | **13.8** | **12.2** | **15.0** | **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** | **T** | **–** |
| Some college or university | **13.1** | **12.3** | **10.0** | **12.0** | **15.0** | **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** | **T** | **–** |
| University degree | **8.1** | **7.4** | **9.1** | **9.0** | **8.9** | **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** | **T** | **–** |

Notes: (1) All analyses are sample design adjusted; 95% confidence interval; † Estimate suppressed or unstable.
(2) Trend Analysis: **–** change not statistically significant (p<.05); **T** statistically significant change (p<.05) between 1996-2013; **2Y** statistically significant change (p<.05) between last two estimates;
(3) **NSI**, non-significant YEAR × FACTOR interaction.

*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 3.5.5: ***Weekly Binge Drinking*** – Percentage Drinking ***Five or More Drinks*** in a Single Occasion Weekly During the Past 12 Months, by Demographic Characteristics, Ontarian ***Past Year Drinkers***, Aged 18+, 1977–1995

| | **1977** | **1982** | **1984** | **1987** | **1989** | **1991** | **1994** | **1995** |
|---|---|---|---|---|---|---|---|---|
| (N= ) | (818) | (792) | (891) | (889) | (908) | (841) | (1660) | (839) |
| **Total Drinkers** | **10.9** | **10.6** | **11.1** | **10.5** | **11.5** | **9.2** | **10.2** | **8.2** |
| (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) |
| **Sex** | | | | | | | | |
| Men | **16.3** | **16.1** | **18.0** | **15.9** | **18.6** | **12.7** | **15.4** | **12.4** |
| Women | **4.1** | **4.5** | **4.4** | **4.9** | **4.3** | **5.7** | **5.4** | **3.9** |
| **Age** | | | | | | | | |
| 18 - 29 | **16.0** | **16.8** | **13.6** | **15.4** | **18.0** | **11.5** | **14.8** | **12.2** |
| 30 - 39 | **5.0** | **10.5** | **12.8** | **10.0** | **7.6** | **9.8** | **10.8** | **10.8** |
| 40 - 49 | **14.4** | **8.1** | **11.2** | **9.7** | **10.2** | **7.9** | **7.8** | **5.8** |
| 50 - 64 | **7.9** | **7.1** | **7.6** | **7.0** | **10.6** | **9.9** | **6.3** | †**4.8** |
| 65+ | **6.6** | †**1.1** | **7.0** | †**3.7** | **6.2** | †**2.2** | **6.8** | †**4.1** |
| **Marital Status** | | | | | | | | |
| Married/Partner | — | — | — | — | — | **5.7** | **8.3** | **6.2** |
| Previously Married | — | — | — | — | — | **16.7** | **9.5** | **6.8** |
| Never Married | — | — | — | — | — | **13.9** | **14.8** | **13.4** |
| **Education** | | | | | | | | |
| HS not completed | — | — | — | — | — | **13.7** | **12.4** | **12.5** |
| Completed HS | — | — | — | — | — | **13.1** | **12.8** | **12.5** |
| Some College/Univ | — | — | — | — | — | **7.1** | **10.4** | **7.2** |
| University Degree | — | — | — | — | — | †**3.4** | †**4.7** | †**2.0** |

Notes: [a]95% confidence interval; — data not available; † Estimate suppressed or unstable.
*Q.* *How often during the past 12 month 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 3.5.6: ***Weekly Binge Drinking*** – Percentage Drinking ***Five or More Drinks*** on a Single Occasion Weekly During the Past 12 Months, by Demographic Characteristics, Ontarian ***Past Year Drinkers***, Aged 18+, 1996–2013

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Change |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N= ) | (2141) | (2219) | (1777) | (1938) | (1887) | (2088) | (1933) | (1933) | (2101) | (1906) | (1527) | (1618) | (1599) | (1602) | (2352) | (2401) | (2355) | (2330) | |
| **Total Drinkers** | **14.8** | **13.9** | **14.9** | **15.0** | **16.5** | **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** | **T –** |
| (95%CI)[a] | (13.1, 16.7) | (12.4, 15.7) | (13.0, 16.9) | (13.2, 17.0) | (14.6, 18.5) | (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) | |
| **Sex** | | | | | | | | | | | | | | | | | | | **NSI** |
| Men | **22.7** | **21.4** | **23.7** | **23.4** | **23.1** | **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** | **T –** |
| | (19.7, 25.9) | (18.7, 24.4) | (20.4, 27.2) | (20.4, 26.6) | (20.1, 26.5) | (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) | |
| Women | **7.3** | **6.7** | **5.8** | **6.0** | **9.8** | **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** | **T 2Y** |
| | (5.7, 9.3) | (5.2, 8.6) | (4.4, 7.7) | (4.5, 8.0) | (7.8, 12.1) | (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) | |
| **Age** | | | | | | | | | | | | | | | | | | | **NSI** |
| 18 - 29 | **25.1** | **23.6** | **22.5** | **23.5** | **24.3** | **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** | **T –** |
| | (20.6, 30.3) | (19.6, 28.2) | (17.9, 28.1) | (18.8, 28.9) | (20.2, 30.1) | (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) | |
| 30 - 39 | **14.0** | **12.6** | **13.3** | **13.6** | **16.4** | **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** | **– –** |
| | (11.0, 17.7) | (9.9, 16.0) | (10.2, 17.2) | (10.6, 17.2) | (12.9, 20.6) | (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) | |
| 40 - 49 | **11.8** | **9.1** | **12.7** | **14.5** | **15.1** | **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** | **T –** |
| | (8.9, 15.4) | (6.6, 12.3) | (9.4, 17.0) | (10.9, 19.1) | (11.6, 19.4) | (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) | |
| 50 - 64 | **10.8** | **9.3** | **14.0** | **11.0** | **12.4** | **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** | **T –** |
| | (7.8, 14.7) | (6.6, 13.0) | (10.1, 19.0) | (7.9, 15.1) | (9.0, 16.8) | (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) | |
| 65+ | **4.0** | **9.9** | **8.4** | **9.5** | **7.5** | **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** | **T –** |
| | (2.2, 7.2) | (6.0, 15.9) | (5.0, 13.8) | (6.0, 14.6) | (4.2, 13.1) | (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) | |
| **Region** | | | | | | | | | | | | | | | | | | | **NSI** |
| Toronto | **17.5** | **13.5** | **15.0** | **15.0** | **17.2** | **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** | **T –** |
| | (13.0, 23.2) | (10.1, 17.9)) | (10.7, 20.6) | (10.9, 20.3) | (12.7, 22.9) | (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) | |
| Central South | **15.9** | **14.7** | **13.6** | **15.0** | **17.9** | **13.3** | **13.5** | **8.8** | **13.9** | **9.6** | **28.0** | **16.8** | **12.5** | **14.5** | **†10.1** | **†8.2** | **†6.2** | **†11.6** | **T –** |
| | (11.1, 22.3) | (10.1, 20.9) | (8.4, 21.3) | (9.9, 22.2) | (12.2, 25.4) | (8.8, 19.6) | (8.5, 20.8) | (5.4, 14.1) | (8.7, 21.4) | (5.7,15.8) | (19.2,38.9) | (10.9,25.0) | (6.9,21.5) | (8.9,23.0) | (5.9, 16.8) | (4.2,15.3) | (3.1,12.1) | (6.4, 20.3) | |
| Central West | **10.1** | **12.3** | **12.6** | **13.7** | **17.7** | **12.4** | **14.2** | **16.0** | **15.7** | **16.7** | **15.9** | **13.5** | **10.5** | **10.8** | **†8.8** | **11.8** | **†5.2** | **†5.9** | **T –** |
| | (7.0, 14.5) | (8.0, 18.5) | (8.6, 18.1) | (9.8, 18.9) | (13.1, 23.5) | (9.0, 17.0) | (10.0, 19.6) | (11.3, 22.1) | (10.9, 22.1) | (12.0,22.6) | (10.6,23.2) | (8.4,21.0) | (6.0,17.7) | (6.7,17.0) | (5.8, 13.3) | (7.7,17.8) | (2.6,10.0) | (3.5, 9.7) | |
| South West | **16.7** | **12.3** | **17.6** | **16.0** | **14.6** | **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** | **T –** |
| | (12.6, 21.8) | (8.8, 16.9) | (13.1, 23.1) | (12.0, 20.9) | (10.8, 19.5) | (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) | |
| Central East | **15.0** | **15.3** | **11.5** | **18.1** | **16.0** | **15.4** | **11.9** | **13.6** | **15.7** | **10.3** | **8.6** | **9.3** | **13.8** | **10.3** | **†10.0** | **†5.5** | **†9.9** | **†10.3** | **T –** |
| | (10.8, 20.4) | (11.7, 19.9) | (7.4, 17.3) | (13.0, 24.5) | (11.3, 22.1) | (10.9, 21.2) | (7.9, 17.5) | (9.4, 19.3) | (11.1, 21.9) | (6.8,15.4) | (5.1,14.1) | (5.5,15.1) | (9.0,20.4) | (5.9,17.4) | (6.5, 15.2) | (3.5,8.6) | (6.3,15.1) | (6.5, 16.0) | |
| East | **12.5** | **14.5** | **17.6** | **14.4** | **14.9** | **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** | **T –** |
| | (9.3, 16.7) | (10.9, 19.0) | (13.3, 22.9) | (10.7, 19.1) | (11.1, 19.6) | (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) | |
| North | **15.8** | **15.7** | **17.2** | **11.4** | **17.3** | **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** | **T –** |
| | (12.0, 20.6) | (12.0, 20.3) | (12.7, 22.8) | (8.2, 15.6) | (13.2, 22.4) | (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) | |

Cont'd

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Change | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N= ) | (2141) | (2219) | (1777) | (1938) | (1887) | (2088) | (1933) | (1933) | (2101) | (1906) | (1527) | (1618) | (1599) | (1602) | (2352) | (2401) | (2355) | (2330) | | |
| **Marital Status** | | | | | | | | | | | | | | | | | | | **NSI** | |
| Married/ Partner | **10.0** | **10.8** | **12.3** | **11.3** | **13.7** | **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** | **T** | **–** |
| Previously married | **13.1** | **13.0** | **10.9** | **13.2** | **15.2** | **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** | **T** | **–** |
| Never married | **27.5** | **21.5** | **23.4** | **26.5** | **23.3** | **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** | **T** | **–** |
| **Education** | | | | | | | | | | | | | | | | | | | **NSI** | |
| High school not completed | **15.8** | **16.1** | **21.4** | **22.8** | **16.7** | **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** | **T** | **–** |
| Completed high school | **18.3** | **16.9** | **17.9** | **15.7** | **19.6** | **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** | **T** | **–** |
| Some college or university | **15.9** | **14.3** | **11.9** | **14.5** | **17.7** | **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** | **T** | **–** |
| University degree | **9.6** | **8.9** | **11.0** | **10.8** | **11.2** | **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** | **T** | **–** |

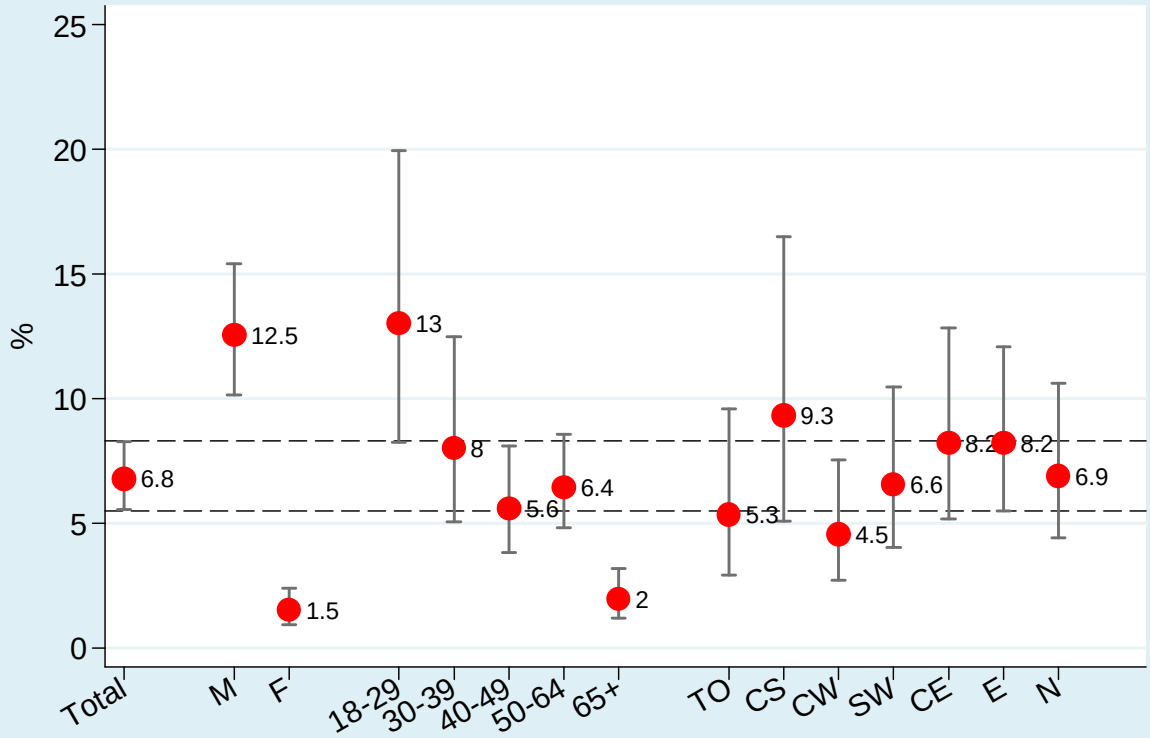
Notes: (1) All analyses are sample design adjusted; [a]95% confidence interval; † Estimate suppressed or unstable.
(2) Trend Analysis: **–** change not statistically significant (p<.05); **T** statistically significant change (p<.05) between 1996-2013; **2Y** statistically significant change (p<.05) between last two estimates;
(3) **NSI**, non-significant YEAR × FACTOR interaction.

*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

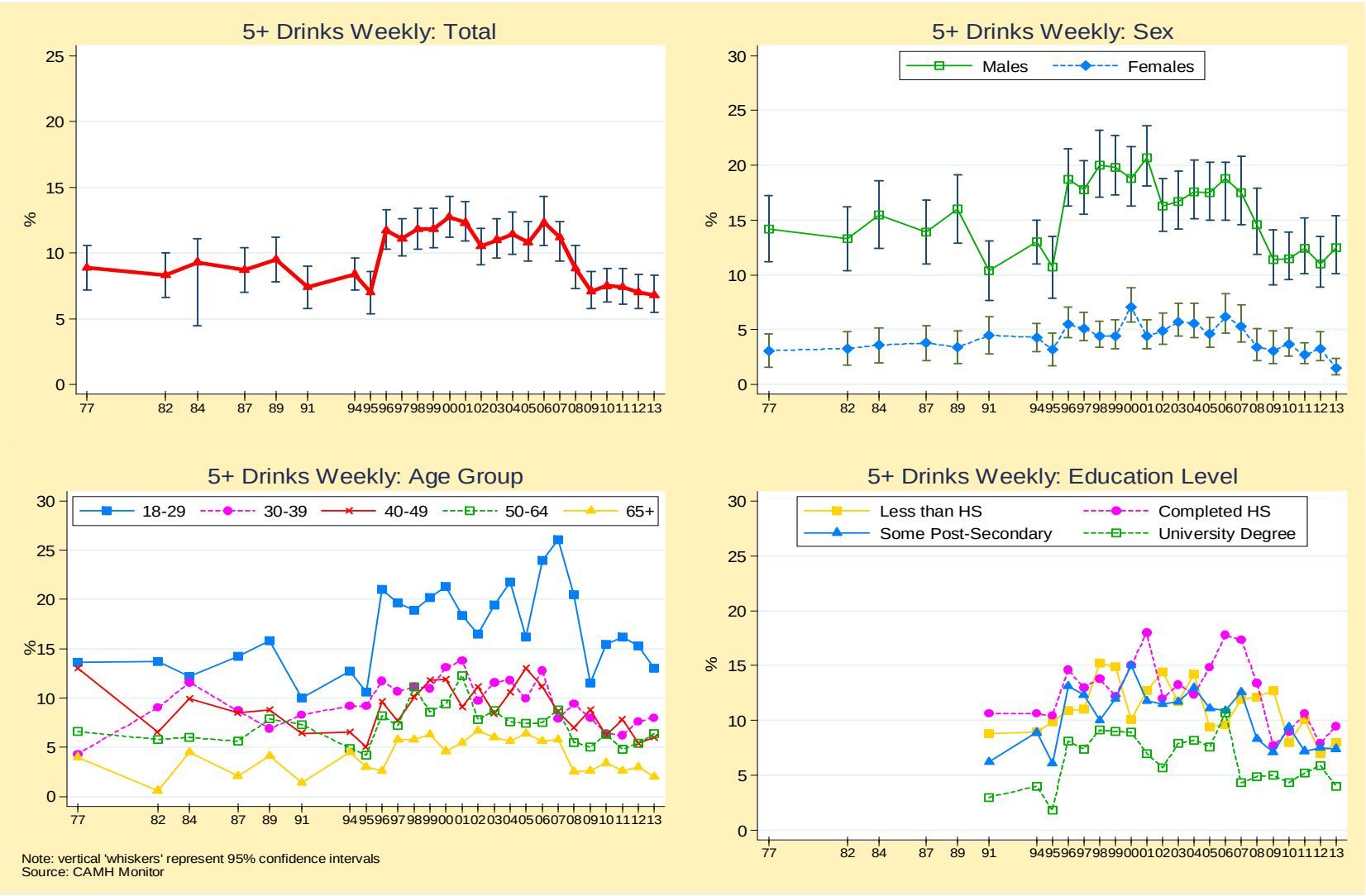
**Percentage Drinking Five or More Drinks on a Single Occasion Weekly in the Past Year by Sex, Age and Region, Ontarians Aged 18+, 2013 (N=3021)**




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: 2013 CAMH Monitor

Figure 3.5.2

**Percentage Drinking Five or More Drinks on a Single Occasion Weekly in the Past Year, Ontarians Aged 18+, 1977–2013**




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 Tes*t (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 consists of 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) and a protocol for scoring responses to these items (see Table 3.6.1).

Conventionally, a score of **8 or more** 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, rather, as a pattern of drinking that is causing current problems or likely to cause future problems.

**2013**……..……....Tables 3.6.1–3.6.3; Fig. 3.6.1

An estimated, **13.7%** (95% CI: 12.0% to 15.7%) of Ontario **adults drank** hazardously or harmfully drinking during the past 12 months before the survey. Among **past year drinkers**, the prevalence was **17.7%** (95% CI: 15.5% to 20.2%). The corresponding population estimate is 1,353,500 hazardous/harmful drinkers (95% CI: 1,155,300 to 1,551,600).

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

- The adjusted odds of hazardous/harmful drinking among men were 4.4 times higher than women (22.1% vs. 6.1%; OR=4.43).

- Hazardous/harmful drinking declined significantly with age, dropping from 30.5% among 18 to 29 year olds to 4.4% among those aged 65 and older. Two of the four sequential age group comparisons were statistically significant. The adjusted odds of hazardous/harmful drinking were significantly lower among 40 to 49 year olds than 30 to 39 year olds (10.5% vs. 17.2%; OR=0.53), and significantly lower among those aged 65 and older compared to 50 to 64 year olds (4.4% vs. 10.2%; OR=0.45).

- The adjusted odds of hazardous/harmful drinking among those never married were 2.4 times higher than among married respondents (28.2% vs. 10.2%; OR=2.35).

- Household income also showed a significant association to hazardous/harmful drinking. The distinguishing feature was an elevated

rate among those with incomes of $30,000 to $49,999 (17.0%), who showed significantly higher adjusted odds (OR=2.33) than those with incomes of less than $30,000 (11.7%).

Region and education were not significantly related to hazardous/harmful drinking.

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 without a high school education and those with incomes of $30,000 to $49,999 displayed the highest rates of hazardous/harmful drinking.

## Trends

**1998–2013** ……Table 3.6.4 -3.6.5; Fig 3.6.2

### 2012–2013

Hazardous/harmful drinking among Ontarians was not significantly different in 2013 (13.7%) from 2012 (12.9). Moreover, rates of hazardous/harmful drinking were stable between 2012 and 2013 for all subgroups.

Past year drinkers displayed similar characteristics. Hazardous/harmful drinking among Ontario drinkers was not significantly different in 2013 (17.7%) from 2012 (16.5%), and rates of hazardous/harmful drinking among drinkers were stable for all sex, age, marital status, and education subgroups.

### 1998–2013

Between 1998 and 2013 hazardous/harmful drinking remained generally stable among Ontario adults. It was lowest in 2005 (10.4%) and highest in 2007 (15.6%), but has subsequently declined and stabilized.

**Year did not interact** significantly with any of the demographic factors analysed, suggesting that subgroup trends moved similarly. Significant non-linear subgroup changes were evident during this period for **sex, age**, and **region**.

There was a significant non-linear trend among women, increasing from 4.8% in 1998 to 7.9% in 2011, declining to 6.1% in 2013. Significant subgroup changes were also found for respondents aged 30 to 39, and respondents living in the East.

**Past year drinkers** displayed similar patterns. Hazardous/harmful drinking among drinkers did not vary significantly between 1998 and 2013. Year did not interact significantly with any of the demographic categories analysed between 1998 and 2013, but significant non-linear subgroup changes were found for women, for those aged 18 to 29, those aged 30 to 39, and respondents living in the East.

Table 3.6.1: Percentage Reporting ***Hazardous and Harmful Drinking (AUDIT) Symptoms***, ***Ontarians*** and Ontarian ***Past Year Drinkers***, Aged 18+, 2013

| **AUDIT ITEMS** | | Total Sample (N=3,021) | Drinkers (N=2,330) |
|---|---|---|---|
| **Alcohol Intake** | | % | % |
| 1. How often did you drink alcoholic beverages during the past 12 months? | 0. Never | 21.8 | — |
| | 1. Monthly or less | 22.7 | 29.1 |
| | 2. 2-4 times/month | 26.0 | 33.2 |
| | 3. 2-3 times/week | 15.8 | 20.2 |
| | 4. 4+ times/week | 13.7 | 17.5 |
| | Mean (SE) | 1.77 (.03) | 2.26 (.03) |
| 2. On those days when you drink, how many drinks do you usually have? | 0. One or less (including none) | 53.9 | 41.0 |
| | 1. Two to Three | 33.1 | 42.3 |
| | 2. Four | 4.6 | 5.9 |
| | 3. Five to Seven | 5.9 | 7.6 |
| | 4. Eight or more | 2.5 | 3.2 |
| | Mean (SE) | 0.70 (.03) | 0.90 (.03) |
| 3. About how often during the past 12 months would you say that you had five or more drinks at the same sitting or occasion? | 0. Never | 64.3 | 54.3 |
| | 1. Less than monthly | 18.0 | 23.1 |
| | 2. Monthly | 10.9 | 14.0 |
| | 3. Weekly | 6.0 | 7.7 |
| | 4. Daily or almost daily | † | † |
| | Mean (SE) | 0.61 (.02) | 0.78 (.03) |
| **Dependence Indicators** | | | |
| 4. How often during the last year have you found that you were not able to stop drinking once you had started? | 0. Never | 96.5 | 95.6 |
| | 1. Less than monthly | 1.9 | 2.4 |
| | 2. Monthly | † | † |
| | 3. Weekly | † | † |
| | 4. Daily or almost daily | † | † |
| | Mean (SE) | 0.06 (.01) | 0.08 (.01) |
| 5. How often during the last year have you failed to do what was normally expected from you because of drinking? | 0. Never | 95.8 | 94.6 |
| | 1. Less than monthly | 3.3 | 4.2 |
| | 2. Monthly | † | † |
| | 3. Weekly | † | † |
| | 4. Daily or almost daily | † | † |
| | Mean (SE) | 0.06 (.01) | .07 (.01) |

| | | | |
|---|---|---|---|
| 6. How often during the last year have you needed a first alcoholic drink in the morning to get yourself going after a heavy drinking session? | 0. Never | 99.3 | 99.1 |
| | 1. Less than monthly | † | † |
| | 2. Monthly | † | † |
| | 3. Weekly | † | † |
| | 4. Daily or almost daily | † | † |
| | Mean (SE) | 0.01 (.003) | 0.01 (.003) |
| **Adverse Consequences** | | | |
| 7. How often during the last year have you had a feeling of guilt or remorse after drinking? | 0. Never | 89.8 | 87.0 |
| | 1. Less than monthly | 7.6 | 9.8 |
| | 2. Monthly | 1.7 | 2.2 |
| | 3. Weekly | † | † |
| | 4. Daily or almost daily | † | † |
| | Mean (SE) | 0.14 (.01) | 0.18 (.02) |
| 8. How often during the last year have you been unable to remember what happened the night before because you had been drinking? | 0. Never | 91.1 | 88.6 |
| | 1. Less than monthly | 7.7 | 9.8 |
| | 2. Monthly | † | 1.2 |
| | 3. Weekly | † | † |
| | 4. Daily or almost daily | † | † |
| | Mean (SE) | 0.11 (.01) | 0.14 (.01) |
| 9. Have you or someone else ever been injured as a result of your drinking? | 0. No | 94.8 | 93.4 |
| | 2. Yes, but not last year | 3.8 | 4.9 |
| | 4. Yes, during last year | 1.3 | 1.7 |
| | Mean (SE) | .13 (.02) | 0.17 (.02) |
| 10. Has a relative or friend or a doctor or other health worker ever been concerned about your drinking or suggested that you cut down? | 0. No | 94.7 | 93.2 |
| | 2. Yes, but not last year | 2.9 | 3.7 |
| | 4. Yes, during last year | 2.4 | 3.1 |
| | Mean (SE) | .16 (.02) | 0.20 (.02) |

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+)*** During the Past 12 Months and Adjusted Group Differences, ***Ontarians*** Aged 18+, 2013

| | N | % | 95% CI | Adjusted Odds Ratio (N=2827) |
|---|---|---|---|---|
| **Total** | 3021 | **13.7** | (12.0, 15.7) | — |
| **Sex** | | | | ******* |
| Men | 1232 | **22.1** | (18.9, 25.7) | **4.43**** |
| Women *(Comparison Group)* | 1789 | **6.1** | (4.7, 8.0) | — |
| **Age** | | | | |
| *(Comparison Group is previous age group)* | | | | ******* |
| 18-29 | 182 | **30.5** | (23.3, 38.7) | — |
| 30-39 | 303 | **17.2** | (12.8, 22.9) | 0.83 |
| 40-49 | 556 | **10.5** | (7.8, 13.9) | **0.53*** |
| 50-64 | 1015 | **10.2** | (8.1, 12.6) | 0.95 |
| 65+ | 909 | **†4.4** | (3.1, 6.2) | **0.45**** |
| **Public Health Region** | | | | NS |
| Toronto *(vs. Provincial Average)* | 503 | **†13.3** | (9.5, 18.4) | 1.01 |
| Central South | 238 | **†15.4** | (9.7, 23.4) | 0.98 |
| Central West | 403 | **†12.0** | (8.3, 17.0) | 0.77 |
| South West | 497 | **†10.7** | (7.4, 15.1) | 0.75 |
| Central East | 411 | **16.0** | (11.5, 22.0) | 1.16 |
| East | 502 | **14.3** | (10.7, 18.9) | 1.29 |
| North | 467 | **15.3** | (11.4, 20.2) | 1.38 |
| **Marital Status** | | | | ****** |
| Married/Partner *(Comparison Group)* | 1926 | **10.2** | (8.6, 12.0) | — |
| Previously Married | 653 | **†7.3** | (4.6, 11.4) | 1.12 |
| Never Married | 409 | **28.2** | (22.3, 35.0) | **2.35**** |
| **Education** | | | | NS |
| High school not completed *(Comparison Group)* | 355 | **†13.9** | (8.5, 21.9) | — |
| Completed high school | 638 | **15.5** | (11.4, 20.8) | 0.92 |
| Some college or university | 1053 | **15.9** | (12.9, 19.4) | 1.00 |
| University degree | 939 | **10.4** | (8.0, 13.5) | 0.58 |
| **Household Income** | | | | ****** |
| < $30,000 *(Comparison Group)* | 303 | **†11.8** | (7.3, 18.4) | — |
| $30,000-$49,999 | 370 | **†17.0** | (11.4, 24.7) | **2.33*** |
| $50,000-$79,999 | 526 | **†11.8** | (8.2, 16.7) | 1.42 |
| $80,000+ | 1089 | **16.8** | (13.9, 20.2) | 1.80 |
| Not stated | 733 | **†8.9** | (6.1, 12.9) | 0.74 |

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 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 (complete case sample size N=2827).

*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+)*** During the Past 12 Months and Adjusted Group Differences, Ontarian ***Past Year Drinkers*** Aged 18+, 2013

| | N | % | 95% CI | Adjusted Odds Ratio (N=2262) |
|---|---|---|---|---|
| **Total** | 2330 | **17.7** | (15.5, 20.2) | — |
| **Sex** | | | | *** |
| Men | 1027 | **26.9** | (23.1, 31.0) | **4.50**** |
| Women *(Comparison Group)* | 1303 | **8.3** | (6.4, 10.8) | — |
| **Age** | | | | *** |
| *(Comparison Group is previous age group)* | | | | |
| 18-29 | 151 | **38.2** | (29.7, 47.5) | — |
| 30-39 | 246 | **22.2** | (16.6, 29.0) | 0.94 |
| 40-49 | 469 | **12.6** | (9.5, 16.6) | **0.47**** |
| 50-64 | 801 | **12.9** | (10.4, 16.0) | 0.99 |
| 65+ | 629 | **†6.3** | (4.5, 8.9) | **0.45**** |
| **Public Health Region** | | | | NS |
| Toronto *(vs. Provincial Average)* | 369 | **18.6** | (13.4, 25.3) | 1.14 |
| Central South | 182 | **†19.3** | (12.3, 28.9) | 0.90 |
| Central West | 302 | **†15.7** | (10.9, 21.9) | 0.78 |
| South West | 375 | **†13.9** | (9.7, 19.4) | 0.73 |
| Central East | 325 | **20.3** | (14.6, 27.4) | 1.18 |
| East | 410 | **17.1** | (12.9, 22.5) | 1.18 |
| North | 367 | **18.7** | (14.0, 24.6) | 1.22 |
| **Marital Status** | | | | ** |
| Married/Partner *(Comparison Group)* | 1555 | **12.7** | (10.8, 14.9) | — |
| Previously Married | 448 | **†10.5** | (6.6, 16.1) | 1.11 |
| Never Married | 307 | **37.2** | (29.9, 45.1) | **2.75**** |
| **Education** | | | | * |
| High school not completed *(Comparison Group)* | 210 | **†23.3** | (14.6, 34.9) | — |
| Completed high school | 456 | **21.4** | (15.9, 28.2) | 0.78 |
| Some college or university | 846 | **19.7** | (16.1, 23.9) | 0.80 |
| University degree | 795 | **12.5** | (9.6, 16.1) | **0.43*** |
| **Household Income** | | | | * |
| < $30,000 *(Comparison Group)* | 184 | **†19.4** | (12.2, 29.3) | — |
| $30,000-$49,999 | 266 | **†25.1** | (17.2, 35.1) | 1.81 |
| $50,000-$79,999 | 424 | **†14.8** | (10.3, 20.6) | 0.88 |
| $80,000+ | 956 | **19.2** | (15.9, 23.0) | 1.15 |
| Not stated | 500 | **†13.3** | (9.1, 18.8) | 0.58 |

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 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 (complete case sample size N=2262).

*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+)*** During the Past 12 Months, by Demographic Characteristics, ***Ontarians***, Aged 18+, 1998–2013

| | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Change | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N=) | (2509) | (2436) | (2406) | (2627) | (2421) | (2411) | (2611) | (2445) | (2016) | (2005) | (2024) | (2037) | (3030) | (3039) | (3030) | (3021) | | |
| **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** | – | – |
| (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) | | |
| **Sex** | | | | | | | | | | | | | | | | | **NSI** | |
| 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** | – | – |
| | (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) | | |
| 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** | 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) | | |
| **Age** | | | | | | | | | | | | | | | | | **NSI** | |
| 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** | – | – |
| | (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) | | |
| 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** | T | – |
| | (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) | | |
| 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** | – | – |
| | (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) | | |
| 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** | – | – |
| | (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) | | |
| 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** | – | – |
| | (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) | | |
| **Region** | | | | | | | | | | | | | | | | | **NSI** | |
| 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** | – | – |
| | (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) | | |
| Central South | **15.0** | **13.0** | **13.5** | **11.7** | **11.1** | **12.6** | **11.7** | **†9.1** | **19.2** | **15.2** | **13.5** | **16.0** | **15.4** | **12.2** | **†7.3** | **15.4** | – | – |
| | (10.2, 21.7) | (8.5, 19.2) | (9.1, 19.4) | (7.7, 17.3) | (7.0, 17.3) | (8.4, 18.6) | (7.2, 18.5) | (5.4, 15.0) | (12.7, 28.2) | (10.1, 22.4) | (8.2,21.4) | (10.5,22.5) | (10.6, 21.9) | (7.5,19.4 | (4.0,12.9) | (9.7, 23.4) | | |
| Central West | **10.7** | **11.0** | **14.7** | **12.1** | **15.5** | **15.2** | **14.5** | **12.0** | **13.2** | **15.2** | **13.8** | **13.4** | **12.8** | **16.7** | **†10.7** | **12.0** | – | – |
| | (7.4, 15.1) | (7.7, 15.6) | (10.9, 19.4) | (8.8, 16.4) | (11.5, 20.7) | (11.2, 20.3) | (10.3, 20.0) | (8.3, 17.0) | (8.9, 19.1) | (10.2, 22.1) | (9.3,20.0) | (9.2,19.1) | (9.2,17.6) | (12.0,22.4) | (7.4,15.3) | (8.3, 17.0) | | |
| South 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** | – | – |
| | (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) | | |
| Central East | **10.5** | **15.8** | **13.0** | **11.1** | **13.9** | **14.0** | **16.1** | **†9.7** | **†9.2** | **13.2** | **16.7** | **15.3** | **13.5** | **12.2** | **13.1** | **16.0** | – | – |
| | (7.1, 15.1) | (11.5, 21.3) | (9.2, 18.0) | (7.8, 15.7) | (10.0, 19.2) | (9.9, 19.4) | (11.7, 21.7) | (6.3, 14.7) | (5.7, 14.4) | (8.9, 19.0) | (11.9,23.1) | (10.4,22.0) | (9.8,18.4) | (8.7,16.9) | (9.5, 17.8) | (11.5, 22.0) | | |
| 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** | T | – |
| | (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) | | |
| 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** | – | – |
| | (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) | | |

Cont'd

| | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Change | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N=) | (2509) | (2436) | (2406) | (2627) | (2421) | (2411) | (2611) | (2445) | (2016) | (2005) | (2024) | (2037) | (3030) | (3039) | (3030) | (3021) | | |
| **Marital Status** | | | | | | | | | | | | | | | | | **NSI** | |
| 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** | **–** | **–** |
| 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** | **–** | **–** |
| 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** | **–** | **–** |
| **Education** | | | | | | | | | | | | | | | | | **NSI** | |
| 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** | **–** | **–** |
| 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** | **–** | **–** |
| 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** | **–** | **–** |
| 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** | **–** | **–** |

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** statistically significant change (p<.05) between 1996-2013; **2Y** statistically significant change (p<.05) between last two estimates.
(3) **NSI**, non-significant YEAR × FACTOR interaction.

*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+)*** During the Past 12 Months, by Demographic Characteristics, Ontarian ***Past Year Drinkers***, Aged 18+, 1998–2013

| | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Change | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N=) | (1777) | (1938) | (1887) | (2088) | (1933) | (1933) | (2101) | (1906) | (1527) | (1618) | (1599) | (1602) | (2352) | (2401) | (2355) | (2330) | | |
| **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** | **–** | **–** |
| (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) | | |
| **Sex** | | | | | | | | | | | | | | | | | **NSI** | |
| 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** | **–** | **–** |
| | (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) | | |
| 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** | **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) | | |
| **Age** | | | | | | | | | | | | | | | | | **NSI** | |
| 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** | **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) | | |
| 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** | **T** | **–** |
| | (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) | | |
| 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** | **–** | **–** |
| | (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) | | |
| 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** | **–** | **–** |
| | (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) | | |
| 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** | **–** | **–** |
| | (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) | | |
| **Region** | | | | | | | | | | | | | | | | | **NSI** | |
| 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** | **–** | **–** |
| | (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) | | |
| Central South | **18.8** | **16.1** | **16.0** | **14.0** | **14.6** | **14.9** | **14.3** | **11.5** | **25.5** | **18.7** | **16.4** | **19.2** | **†19.0** | **15.1** | **8.9** | **19.3** | **–** | **–** |
| | (12.5, 27.1) | (10.6, 23.6) | (10.9,22.9) | (9.3,20.7) | (9.3, 22.3) | (9.9, 21.8) | (8.8, 22.3) | (6.8, 18.8) | (17.0, 36.4) | (12.4,27.1) | (10.0, 25.5) | (12.7,27.9) | (13.1, 26.7) | (9.3,23.6) | (4.9, 15.7) | (12.3, 28.9) | | |
| Central West | **13.1** | **13.3** | **17.1** | **14.6** | **19.1** | **19.7** | **17.5** | **15.7** | **16.8** | **19.3** | **18.8** | **18.7** | **17.0** | **20.0** | **13.5** | **15.7** | **–** | **–** |
| | (9.0, 18.7) | (9.3, 18.7) | (12.6,22.8) | (10.7,19.6) | (14.2, 25.2) | (14.6, 26.0) | (12.5, 23.9) | (10.9, 21.9) | (11.4,24.1) | (13.1,27.5) | (12.8,26.7) | (13.0,26.1) | (12.2, 23.0) | (14.6,26.8) | (9.3, 19.1) | (10.9, 21.9) | | |
| South 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** | **–** | **–** |
| | (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) | | |
| Central East | **13.7** | **19.7** | **16.6** | **14.5** | **17.9** | **16.5** | **19.5** | **11.9** | **11.7** | **15.5** | **20.4** | **18.8** | **17.0** | **14.8** | **16.8** | **20.3** | **–** | **–** |
| | (9.2, 19.8) | (14.4, 26.3) | (11.7,22.8) | (10.5,19.7) | (12.9, 24.3) | (11.7, 22.7) | (14.3, 26.1) | (7.8, 17.9) | (7.3, 18.4) | (10.5,22.2) | (14.5,27.9) | (12.8,26.7) | (12.4, 22.9 | (10.6,20.3) | (12.3,22.6) | (14.6, 27.4) | | |
| 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** | **T** | **–** |
| | (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) | | |
| 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** | **–** | **–** |
| | (17.2, 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) | | |

Cont'd

| | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Change | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N=) | (1777) | (1938) | (1887) | (2088) | (1933) | (1933) | (2101) | (1906) | (1527) | (1618) | (1599) | (1602) | (2352) | (2401) | (2355) | (2330) | | |
| **Marital Status** | | | | | | | | | | | | | | | | | **NSI** | |
| 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** | **–** | **–** |
| 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** | **–** | **–** |
| 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** | **–** | **–** |
| **Education** | | | | | | | | | | | | | | | | | **NSI** | |
| 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** | **–** | **–** |
| 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** | **–** | **–** |
| 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** | **–** | **–** |
| 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** | **–** | **–** |

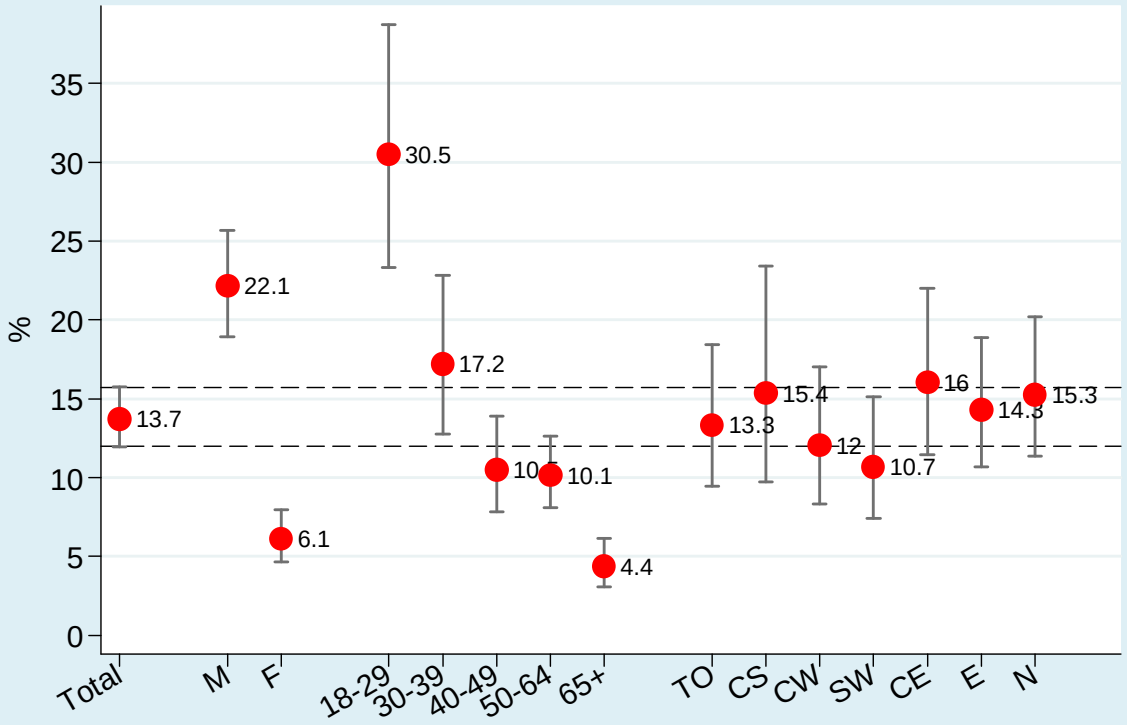
Notes: (1) All analyses are sample design adjusted; [a]95% confidence interval;
(2) Trend Analysis: **–** change not statistically significant (p<.05); **T** statistically significant change (p<.05) between 1996-2013; **2Y** statistically significant change (p<.05) between last two estimates.
(3) **NSI**, non-significant YEAR × FACTOR interaction.

*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

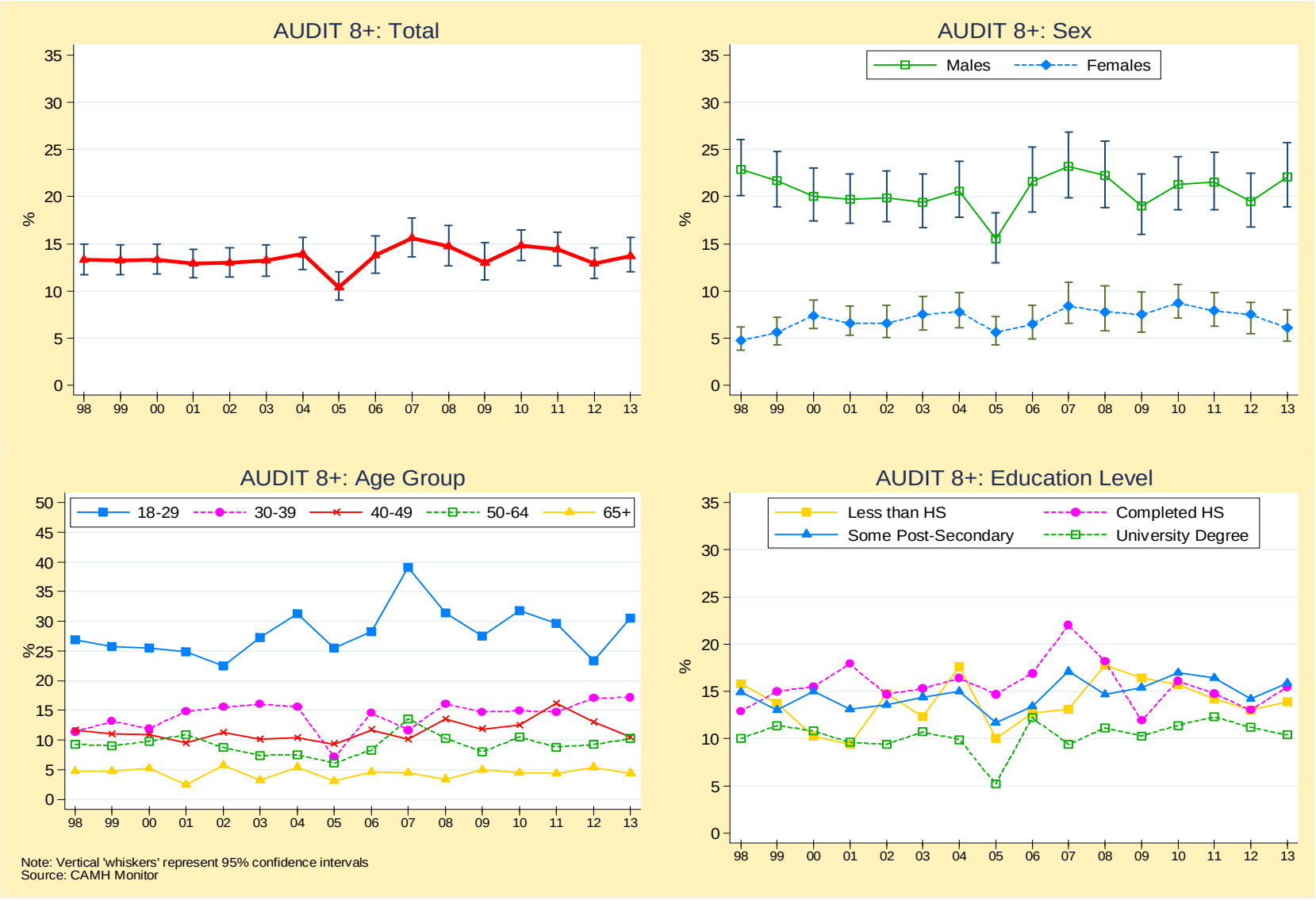
**Percentage Drinking Hazardously or Harmfully (AUDIT 8+) in the Past Year by Sex, Age and Region, Ontarians Aged 18+, 2013 (N=3021)**




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: 2013 CAMH Monitor

Figure 3.6.2

**Percentage Drinking Hazardously or Harmfully (AUDIT 8+) in the Past Year, Ontarians Aged 18+, 1998–2013**




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

**2013**……..Table 3.6.6, Fig 3.6.3

An estimated **6.6%** (95%CI: 5.4% to 8.0%) of Ontario adults experienced at least **one** dependence symptom during the past year. The corresponding population estimate is 664,700 Ontario adults (95% CI: 530,400 to 798,900).

**Sex, age,** and **income** 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 two times greater among men than women (9.1% vs. 4.3%, respectively).
- The prevalence of experiencing at least one dependence symptom declined significantly with age. Symptoms were highest among 18 to 29 year olds (13.4%) and lowest among those aged 65 and older (1.8%). Only one of the four sequential age group comparisons was statistically significant: the adjusted odds of reporting at least one dependence symptom was significantly lower among those aged 65 and older than 50 to 64 year olds (1.8% vs. 5.7%; OR=0.33).
- Household income also showed a significant association with experiencing at least one dependence symptom. The distinguishing feature was a higher rate among those with incomes of $80,000 or higher (8.6%).

## Trends

**1998–2013**……..Table 3.6.7, Fig 3.6.4

#### 2012–2013

The proportion of Ontario adults reporting at least one of the dependence indicators in **2013** (6.6%) did not change significantly from **2012** (5.9%). In addition, rates were stable between 2012 and 2013 for all subgroups.

#### 1998–2013

Between 1998 and 2013, there was a significant **non-linear change** 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 5.9% in 2003, then increased to 8.1% in 2011, but has subsequently declined to 6.6% in 2013.

**Year did not interact** significantly with any of the demographic categories analysed, suggesting that subgroup trends were not measurably dissimilar between factor categories. Significant non-linear subgroup variation was found during this period only for those aged 50 to 64**,** respondents who were married and those with completed high school education.

Table 3.6.6: Percentage ***Reporting One or More Alcohol Dependence Symptoms*** *(based on AUDIT)* During the Past 12 Months, Unadjusted and Adjusted Group Differences, ***Ontarians***, Aged 18+, 2013

| | N | % | 95% CI | Adjusted Odds Ratio (N=2899) |
|---|---|---|---|---|
| **Total** | 3021 | **6.6** | (5.4, 8.0) | — |
| **Sex** | | | | **** |
| Men | 1232 | **9.1** | (7.0, 11.7) | **2.00*** |
| Women *(Comparison Group)* | 1789 | **4.3** | (3.2, 5.7) | — |
| **Age** | | | | |
| *(Comparison Group is previous age group)* | | | | **** |
| 18-29 | 182 | **†13.4** | (8.7, 20.1) | — |
| 30-39 | 303 | **†7.8** | (5.0, 11.9) | 0.73 |
| 40-49 | 556 | **†5.6** | (3.8, 8.1) | 0.74 |
| 50-64 | 1015 | **5.7** | (4.2, 7.6) | 1.02 |
| 65+ | 909 | **†1.8** | (1.1, 3.0) | **0.33**** |
| **Public Health Region** | | | | NS |
| Toronto *(vs. Provincial Average)* | 503 | **†6.9** | (4.3, 10.6) | 1.14 |
| Central South | 238 | **†5.2** | (2.6, 10.0) | 0.74 |
| Central West | 403 | **†6.8** | (4.3, 10.4) | 0.99 |
| South West | 497 | **†6.5** | (4.0, 10.3) | 1.02 |
| Central East | 411 | **†7.5** | (4.5, 12.2) | 1.03 |
| East | 502 | **†5.4** | (3.4, 8.6) | 0.92 |
| North | 467 | **†6.9** | (4.4, 10.5) | 1.09 |
| **Marital Status** | | | | NS |
| Married/Partner *(Comparison Group)* | 1926 | **5.2** | (4.1, 6.4) | — |
| Previously Married | 653 | **†4.2** | (2.1, 8.2) | 1.06 |
| Never Married | 409 | **†12.3** | (8.5, 17.6) | 1.77 |
| **Education** | | | | NS |
| High school not completed *(Comparison Group)* | 355 | **†8.5** | (4.2, 16.8) | — |
| Completed high school | 638 | **†5.4** | (3.4, 8.4) | 0.43 |
| Some college or university | 1053 | **7.7** | (5.7, 10.3) | 0.64 |
| University degree | 939 | **†5.7** | (4.0, 7.9) | 0.45 |
| **Household Income** | | | | * |
| < $30,000 *(Comparison Group)* | 303 | **†6.6** | (3.3, 12.8) | — |
| $30,000-$49,000 | 370 | **†7.5** | (4.6, 12.0) | 1.66 |
| $50,000-$79,000 | 526 | **†5.8** | (3.8, 8.6) | 1.17 |
| $80,000+ | 1089 | **8.6** | (6.4, 11.4) | 1.54 |
| Not stated | 733 | **†3.4** | (2.1, 5.5) | 0.52 |

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 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 (complete case sample size N=2899).

*Def:* *Percent reporting at least one or more (of 3) AUDIT dependence indicators; based on the AUDIT score for alcohol dependence as indicated by a score of 1 or more out of 12 (see Table 3.6.1: summation of items 4, 5 and 6)*

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

Table 3.6.7: Percentage ***Reporting One or More Alcohol Dependence Symptoms*** During the Past 12 Months, by Demographic Characteristics, ***Ontarians***, Aged 18+, 1998–2013

| | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Change | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N=) | (2509) | (2436) | (2406) | (2627) | (2421) | (2411) | (2611) | (2445) | (2016) | (2005) | (2024) | (2037) | (3030) | (3039) | (3030) | (3021) | | |
| **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** | **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) | | |
| **Sex** | | | | | | | | | | | | | | | | | **NSI** | |
| 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** | **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) | | |
| 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** | **–** | **–** |
| | (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) | | |
| **Age** | | | | | | | | | | | | | | | | | **NSI** | |
| 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** | **–** | **–** |
| | (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) | | |
| 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** | **–** | **–** |
| | (7.9,13.6) | (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) | | |
| 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** | **–** | **–** |
| | (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) | | |
| 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** | **T** | **–** |
| | (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) | | |
| 65+ | **†** | **†** | **†2.3** | **†** | **†3.5** | **†** | **†** | **†2.3** | **†** | **†** | **†2.7** | **†** | **†2.3** | **†2.3** | **†2.6** | **†1.8** | **–** | **–** |
| | — | — | (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) | | |
| **Region** | | | | | | | | | | | | | | | | | **NSI** | |
| 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** | **–** | **–** |
| | (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) | | |
| Central South | **†10.7** | **†7.6** | **†10.3** | **†** | **†** | **†** | **†** | **†5.3** | **†9.2** | **†7.4** | **†8.2** | **†9.4** | **†7.1** | **†6.7** | **†** | **†5.2** | **–** | **–** |
| | (6.7,16.7) | (4.5,12.4) | (6.5,15.9) | — | — | — | — | (2.7,10.0) | (4.8,16.9) | (4.0,13.2) | (4.2,15.3) | (5.4,16.0) | (4.2,11.7) | (3.4,12.7) | — | (2.6,10.0) | | |
| Central West | **†8.2** | **†8.8** | **†8.5** | **†8.3** | **†8.7** | **†6.7** | **†6.8** | **†7.7** | **†6.2** | **†7.0** | **†8.8** | **†5.2** | **†5.3** | **†9.5** | **†7.8** | **†6.8** | **–** | **–** |
| | (5.5,12.2) | (6.0,12.8) | (5.7,12.5) | (5.7,12.0) | (5.7,13.1) | (4.2,10.7) | (3.9,11.7) | (5.0,11.8) | (3.4,11.1) | (3.6,13.4) | (5.3,14.1) | (2.8,9.6) | (3.1,8.8) | (6.2,14.4) | (4.7, 12.9) | (4.3, 10.4) | | |
| South 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** | **–** | **–** |
| | (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) | | |
| Central East | **†10.5** | **†9.8** | **†5.4** | **†9.1** | **†6.6** | **†7.1** | **†7.9** | **†7.6** | **†6.4** | **†5.9** | **†8.4** | **†6.8** | **†5.4** | **†8.3** | **†4.2** | **†7.5** | **–** | **–** |
| | (6.9,15.6) | (6.6,14.4) | (3.0,9.7) | (5.8,14.0) | (4.1,10.4) | (4.4,11.4) | (4.9,12.4) | (4.7,12.2) | (3.4,11.7) | (3.2,10.4) | (4.9,13.9) | (3.8,12.1) | (3.1,9.2) | (5.3,12.7) | (2.4, 7.2) | (4.5, 12.2) | | |
| 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** | **–** | **–** |
| | (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) | | |
| 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** | **–** | **–** |
| | (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) | | |

Cont'd

| | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Change | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N=) | (2509) | (2436) | (2406) | (2627) | (2421) | (2411) | (2611) | (2445) | (2016) | (2005) | (2024) | (2037) | (3030) | (3039) | (3030) | (3021) | | |
| **Marital Status** | | | | | | | | | | | | | | | | | **NSI** | |
| 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** | **T** | **–** |
| 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** | **–** | **–** |
| 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** | **–** | **–** |
| **Education** | | | | | | | | | | | | | | | | | **NSI** | |
| 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** | **–** | **–** |
| 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** | **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** | **–** | **–** |
| 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** | **–** | **–** |

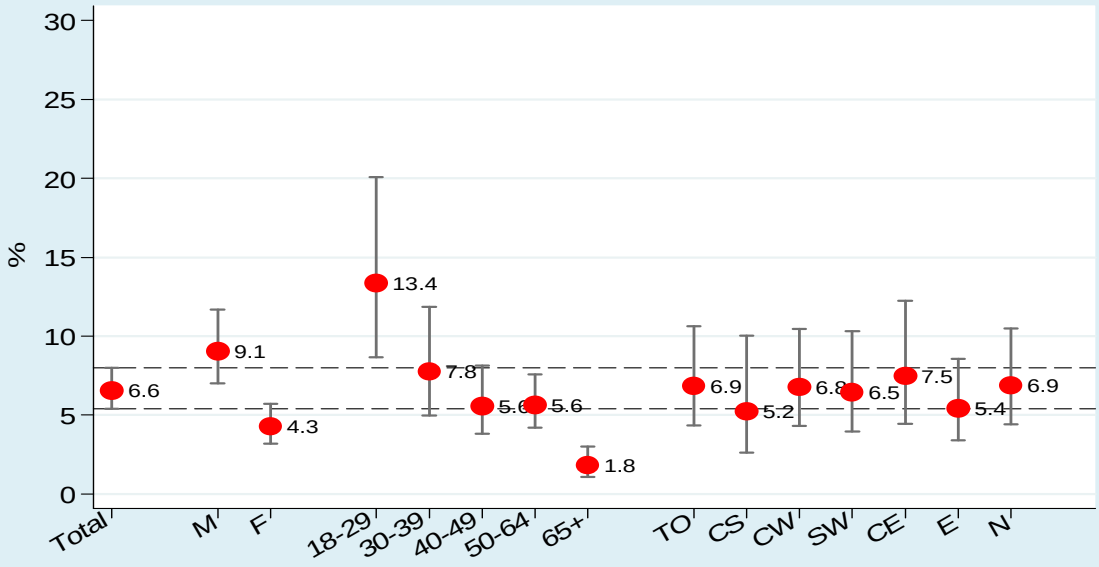
Notes: (1) All analyses are sample design adjusted; [a] 95% confidence interval; † Estimate suppressed or unstable.
(2) Trend Analysis: **–** change not statistically significant (p<.05); **T** statistically significant change (p<.05) between 1996-2013; **2Y** statistically significant change (p<.05) between last two estimates.
(3) **NSI**, non-significant YEAR × FACTOR interaction.

*Def'n: Percent reporting at least one or more (of 3) AUDIT dependence indicators; based on the AUDIT score for alcohol dependence (summation of: aud4t, aud5t, aud6t) as indicated by a score of 1 or more out of 12.*

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

Figure 3.6.3

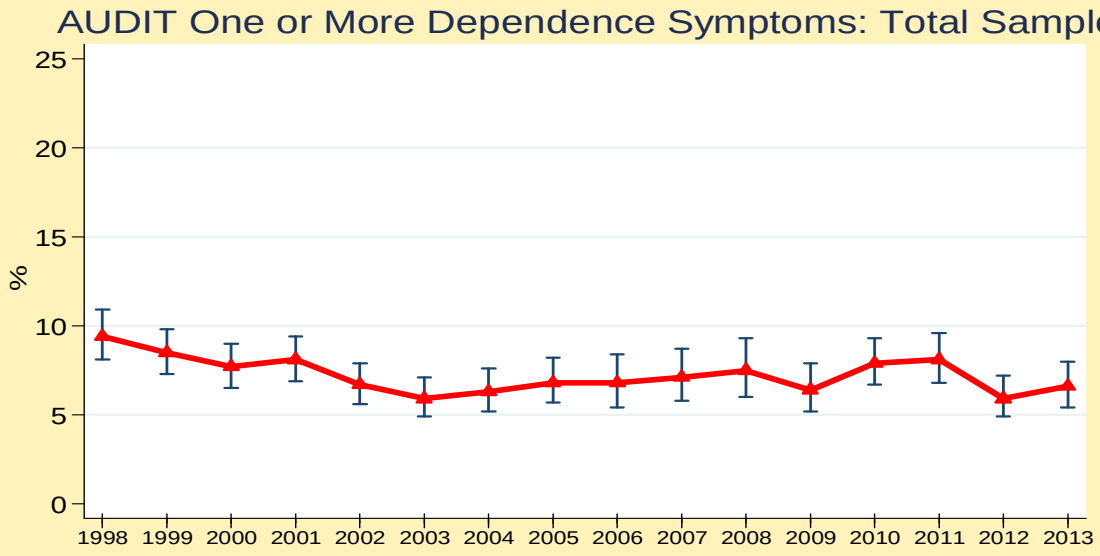
**Percentage Reporting One or More Alcohol Dependence Symptoms (based on AUDIT) in the Past Year by Sex, Age and Region, Ontarians Aged 18+, 2013 (N=3021)**




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: 2013 CAMH Monitor

Figure 3.6.4

**Percent Reporting One or More Alcohol Dependence Symptoms (based on AUDIT) in the Past Year, Ontarians Aged 18+, 1998–2013**




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

# 4. TOBACCO

## 4.1.1 Cigarette Smoking

**2013** …… Table 4.1; Fig. 4.1–4.3

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 **16.8%** (95% CI: 15.0% to 18.6%).[55] The corresponding population estimate is 1,698,300 current smokers (95% CI: 1,507,900 to 1,888,700).

More than half (55.4%) of Ontarians were classified as *non-smokers* (never smoked more than 100 cigarettes in their lifetime). One-third of the population are estimated to be former smokers comprising *former daily* (23.2%) or *former nondaily* (4.7%) smokers. Finally, *daily smokers* represent an estimated 13.2%, while a small group of *nondaily smokers* represent 3.6% of Ontario adults.

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

- The adjusted odds of current smoking were 1.5 times higher among men than women (19.3% vs. 14.4%, respectively; OR=1.48).

- Current smoking was significantly related to age. Compared to those aged 18 to 29, the adjusted odds of current smoking were 2.4 times higher among those aged 30 to 39 (19.0% vs. 21.6%; OR=2.35). Another significant difference was found for those aged 65 and older, whose estimate of 7.6% is significantly lower than that of 50 to 64 year olds (OR=0.27).

- Relative to married respondents, the adjusted odds of current smoking were 2.3 times higher among those previously married (22.4% vs. 14.2%; OR=2.25) and 1.8 times higher among those never married (21.9% vs. 14.2%; OR=1.78).

- Smoking decreased significantly with increasing education. It was highest among those not completing high school (29.1%), and lowest among those holding a university degree (7.2%). Relative to those not completing high school, the adjusted odds of smoking were significantly lower among respondents with some postsecondary education (OR=0.42) and among those with a university degree (OR=0.15).

- Household income showed a significant association with past year smoking. The distinguishing feature was a higher rate among those with the lowest income and a lower rate among those with higher incomes. Past year smoking decreased significantly from 32.3% among those with incomes of less than $30,000 to 14.8% among those with incomes of $80,000 and higher (OR=0.53) and 15.1% among those who did not declare their income (OR=0.49).

- On average, current smokers smoked 11.3 cigarettes per day. This number varied significantly by sex and age. Men smoked significantly more cigarettes daily compared to women (12.4 among men vs. 9.6 among women). The number of cigarettes smoked daily was highest among those aged 50 to 64 (15.6) and lowest among those aged 18 to 29 (7.1).

[55] Standard to Health Canada guidelines

### 4.1.2 Daily Smoking

**2013** …… Table 4.2; Fig. 4.1, 4.3

An estimated, **13.2%** (95% CI: 11.6% to 14.9%) of Ontario adults smoked cigarettes daily. The corresponding population estimate is 1,333,000 daily smokers (95% CI: 1,164,000 to 1,501,900).

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

There were no significant differences in daily smoking for region when adjusting for other risk factors.

### 4.1.3 Nicotine Dependence (HSI) …… Fig. 4.4

#### 2013

Since 1996, the *CAMH Monitor* has assessed nicotine dependence **among daily smokers**[56] using the *Heaviness of Smoking Index* (HSI).

The 2-item HSI, derived from the Fagerstrom 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 indicates classifications of low, moderate and high dependence on nicotine.

An estimated **9.9%** (95% CI: 6.9% to 14.0%) *of daily smokers* (*n*=390) met the HSI cut-off for **high nicotine dependence**. The corresponding population estimate is 130,600 Ontarian daily smokers (95% CI: 84,600 to 176,500). An additional 38.5% and 51.7% of daily smokers were classified as experiencing moderate or low nicotine dependence, respectively.

[56] 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.

## Trends

**1991–2013**…… Table 4.3-4.4; Fig. 4.5

#### 2012–2013

Prevalence of **current cigarette smoking** in 2013 (16.8%) was unchanged from 2012 (16.6%) and 2011 (15.4%). In addition, rates of smoking were stable for all subgroups.

#### 1991–2013

Since 1991, the prevalence of **current smoking** moved downward from 28.5% in 1991 to 23.5% in 1993, and then rebounded to 28.5% in 1995.

Since 1996, current smoking has steadily declined (from 26.7% in 1996 to 16.8% in 2013), most noticeably since 2007.

**Year did not interact** significantly with any of the demographic factors analysed, suggesting **similar trends** in each subgroup. Indeed, there were **significant declines** during this period for both men and women, and virtually all age groups, regions, marital status and education groups.

**Daily smoking** displayed similar patterns to current smoking. Prevalence of daily smoking in 2013 (13.2%) was unchanged from 2012 (12.7%) and 2011 (11.5%). In addition, rates of smoking were stable for most subgroups. There was however a significant increase in daily smoking among those with high school education, from 14.1% in 2012 to 20.6% in 2013.

Since 1996, **daily smoking** declined significantly from 23.0% to 13.2% in

2013. Significant subgroup declines were also evident for sex, age, region, marital status and education.

Year interacted significantly only with **age**, indicating that trends in daily smoking differed among age groups. Although daily smoking declined significantly for all age groups, declines were strongest among those aged 18 to 29 and those aged 30 to 39. In contrast, among those aged 50 to 64, daily smoking shows a weaker decline with a significant upturn between 2011 and 2013.

Table 4.1: Percentage Reporting ***Current Cigarette Smoking*** and Adjusted Group Differences, Ontarians Aged 18+, 2013

| | N | % | 95% CI | Adjusted Odds Ratio (N=2909) |
|---|---|---|---|---|
| **Total** | 3021 | **16.8** | (15.0, 18.6) | — |
| **Sex** | | | | ** |
| Men | 1232 | **19.3** | (16.5, 22.4) | **1.48**** |
| Women *(Comparison Group)* | 1789 | **14.4** | (12.4, 16.7) | — |
| **Age** | | | | |
| *(Comparison Group is previous age group)* | | | | *** |
| 18-29 | 182 | **19.0** | (13.5, 26.1) | — |
| 30-39 | 303 | **21.6** | (16.6, 27.6) | **2.35**** |
| 40-49 | 556 | **19.5** | (15.9, 23.7) | 0.83 |
| 50-64 | 1015 | **17.3** | (14.7, 20.2) | 0.74 |
| 65+ | 909 | **7.4** | (5.7, 9.5) | **0.27**** |
| **Public Health Region** | | | | NS |
| Toronto *(vs. Provincial Average)* | 503 | **14.5** | (11.0, 19.0) | 0.96 |
| Central South | 238 | **20.6** | (14.8, 27.8) | 1.25 |
| Central West | 403 | **12.7** | (9.2, 17.2) | 0.76 |
| South West | 497 | **16.9** | (13.3, 21.2) | 0.89 |
| Central East | 411 | **21.2** | (16.5, 26.9) | **1.36*** |
| East | 502 | **14.2** | (11.0, 18.2) | 0.86 |
| North | 467 | **21.0** | (17.0, 25.7) | 1.20 |
| **Marital Status** | | | | *** |
| Married/Partner *(Comparison Group)* | 1926 | **14.2** | (12.4, 16.3) | — |
| Previously Married | 653 | **22.4** | (18.4, 27.0) | **2.25**** |
| Never Married | 409 | **21.9** | (17.0, 27.8) | **1.78*** |
| **Education** | | | | *** |
| High school not completed *(Comparison Group)* | 355 | **29.1** | (22.6, 36.6) | — |
| Completed high school | 638 | **24.2** | (19.8, 29.1) | 0.64 |
| Some college or university | 1053 | **18.4** | (15.4, 21.7) | **0.42**** |
| University degree | 939 | **7.2** | (5.4, 9.4) | **0.15**** |
| **Household Income** | | | | ** |
| < $30,000 *(Comparison Group)* | 303 | **32.3** | (25.3, 40.1) | — |
| $30,000-$49,999 | 370 | **17.7** | (13.3, 23.2) | **0.57*** |
| $50,000-$79,999 | 526 | **17.2** | (13.2, 21.9) | **0.57*** |
| $80,000+ | 1089 | **14.8** | (12.3, 17.8) | **0.53*** |
| Not stated | 733 | **15.1** | (11.7, 19.3) | **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 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 (complete case sample N=2909).

*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 4.2: Percentage Reporting ***Daily Cigarette Smoking*** During the Past 12 Months and Adjusted Group Differences, Ontarians Aged 18+, 2013

| | N | % | 95% CI | Adjusted Odds Ratio (N=2909 ) |
|---|---|---|---|---|
| **Total** | 3021 | **13.2** | (11.6, 14.9) | — |
| **Sex** | | | | * |
| Men | 1232 | **15.3** | (12.8, 18.2) | **1.45*** |
| Women *(Comparison Group)* | 1789 | **11.2** | (9.5, 13.2) | — |
| **Age** | | | | |
| *(Comparison Group is previous age group)* | | | | *** |
| 18-29 | 182 | **13.7** | (9.1, 20.2) | — |
| 30-39 | 303 | **15.7** | (11.3, 21.3) | **2.41*** |
| 40-49 | 556 | **14.3** | (11.3, 17.9) | 0.87 |
| 50-64 | 1015 | **15.4** | (12.9, 18.2) | 0.93 |
| 65+ | 909 | **6.2** | (4.7, 8.1) | **0.24**** |
| **Public Health Region** | | | | NS |
| Toronto *(vs. Provincial Average)* | 503 | **11.6** | (8.4, 15.9) | 1.02 |
| Central South | 238 | **18.5** | (13.1, 25.6) | **1.52*** |
| Central West | 403 | **9.2** | (6.3, 13.2) | 0.73 |
| South West | 497 | **13.3** | (10.2, 17.2) | 0.88 |
| Central East | 411 | **15.9** | (11.8, 21.1) | 1.24 |
| East | 502 | **11.1** | (8.3, 14.7) | 0.86 |
| North | 467 | **16.8** | (13.1, 21.1) | 1.15 |
| **Marital Status** | | | | *** |
| Married/Partner *(Comparison Group)* | 1926 | **11.3** | (9.7, 13.1) | — |
| Previously Married | 653 | **17.9** | (14.3, 22.2) | **2.01**** |
| Never Married | 409 | **16.6** | (12.3, 22.0) | **1.76*** |
| **Education** | | | | *** |
| High school not completed *(Comparison Group)* | 355 | **27.0** | (20.5, 34.5) | — |
| Completed high school | 638 | **20.6** | (16.5, 25.4) | **0.58*** |
| Some college or university | 1053 | **13.2** | (10.8, 16.0) | **0.32**** |
| University degree | 939 | **4.6** | (3.3, 6.5) | **0.11**** |
| **Household Income** | | | | * |
| < $30,000 *(Comparison Group)* | 303 | **28.0** | (21.3, 35.8) | — |
| $30,000-$49,999 | 370 | **15.2** | (11.1, 20.4) | 0.58 |
| $50,000-$79,999 | 526 | **13.0** | (9.7, 17.2) | **0.52*** |
| $80,000+ | 1089 | **11.2** | (9.0, 13.8) | **0.52*** |
| Not stated | 733 | **11.7** | (8.7, 15.5) | **0.45**** |

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 (complete case sample N=2909).

*Defn:* *Daily smokers are those who (1) reported using 100 or more cigarettes in their lifetime, (2) smoked during the past 30 days; and (3) smoked cigarettes daily at the time of the survey;.*

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

Table 4.3: Percentage Reporting ***Current Cigarette Smoking***, by Demographic Characteristic, Ontarians Aged 18+, 1991–1995

| | 1991 | 1992 | 1993 | 1994 | 1995 |
|---|---|---|---|---|---|
| (N=) | (1047) | (1058) | (941) | (2022) | (994) |
| **Total** | **28.5** | **26.1** | **23.5** | **25.3** | **28.5** |
| (95%CI)[a] | (25.8,31.2) | (23.5,28.7) | (20.8,26.2) | (23.4,27.2) | (25.7,31.3) |
| **Sex** | **28.5** | **29.5** | **28.2** | **26.4** | **30.4** |
| Men | (24.5,32.5) | (25.5,33.5) | (24.2,32.2) | (23.8,29.0) | (26.3,34.5) |
| | **28.6** | **23.2** | **19.7** | **24.3** | **26.7** |
| Women | (24.8,32.4) | (19.7,26.7) | (16.4,23.0) | (21.5,27.1) | (22.9,30.5) |
| **Age** | **29.4** | **31.4** | **26.0** | **34.2** | **33.7** |
| 18 - 29 years | (23.9,34.9) | (25.9,36.9) | (20.5,31.5) | (29.9,38.5) | (27.7,39.7) |
| | **31.4** | **30.4** | **29.5** | **28.2** | **31.9** |
| 30 - 39 years | (25.8,37.0) | (25.0,35.8) | (24.1,34.9) | (24.4,32.0) | (26.0,37.8) |
| | **28.7** | **25.8** | **24.9** | **21.6** | **30.3** |
| 40 - 49 years | (22.6,34.8) | (19.8,31.8) | (19.0,30.8) | (17.7,25.5) | (24.1,36.5) |
| | **31.3** | **18.2** | **17.6** | **19.1** | **25.6** |
| 50 - 64 years | (23.9,38.7) | (12.1,24.3) | (11.7,23.5) | (14.8,23.4) | (19.0,32.2) |
| | **18.8** | **12.7** | **10.0** | **12.4** | **10.8** |
| 65+ years | (12.2,25.4) | (6.9,18.5) | (4.9,15.1) | (8.2,16.6) | (5.3,16.3) |
| **Marital Status** | | | | | |
| Married/Partner | **26.8** | **25.0** | **21.0** | **22.7** | **26.4** |
| Previously Married | **39.4** | **31.8** | **30.4** | **30.7** | **34.9** |
| Never Married | **28.2** | **27.0** | **27.2** | **29.5** | **31.0** |
| **Education** | | | | | |
| High school not completed | **40.5** | **37.5** | **35.5** | **33.8** | **26.4** |
| Completed high school | **29.8** | **27.8** | **25.4** | **29.8** | **35.8** |
| Some college or university | **26.0** | **23.9** | **22.9** | **23.3** | **30.0** |
| University degree | **16.9** | **14.9** | **10.1** | **14.2** | **19.4** |

Notes: (1) [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, 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 4.4: Percentage Reporting ***Current Cigarette Smoking***, by Demographic Characteristic, Ontarians Aged 18+, 1996–2013

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Change |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N= ) | (2721) | (2776) | (2509) | (2436) | (2406) | (2627) | (2421) | (2411) | (2611) | (2445) | (2016) | (2005) | (2024) | (2037) | (3030) | (3039) | (3030) | (3021) | |
| **Total** | **26.7** | **26.8** | **25.9** | **25.4** | **25.6** | **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** | **T –** |
| (95%CI)[a] | (25.0,28.4) | (25.2,28.4) | (24.0,27.9) | (23.5,27.4) | (23.7,27.6) | (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) | |
| **Sex** | | | | | | | | | | | | | | | | | | | **NSI** |
| Men | **27.8** | **29.3** | **28.2** | **28.2** | **31.1** | **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** | **T –** |
| | (25.3,30.3) | (26.8,31.8) | (25.2,31.4) | (25.2,31.3) | (28.0,34.4) | (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) | |
| Women | **25.7** | **24.5** | **23.8** | **22.9** | **20.6** | **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** | **T –** |
| | (23.5,27.9) | (22.3,26.7) | (21.4,26.3) | (20.4,25.5) | (18.3,23.1) | (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) | |
| **Age** | | | | | | | | | | | | | | | | | | | **NSI** |
| 18 - 29 | **29.1** | **34.2** | **31.6** | **31.8** | **32.7** | **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** | **T –** |
| | (25.2,33.0) | (30.3,38.1) | (26.9,36.7) | (27.1,36.8) | (28.0,37.8) | (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) | |
| 30 - 39 | **31.8** | **31.2** | **32.4** | **31.8** | **28.3** | **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** | **T –** |
| | (28.3,35.3) | (27.6,34.8) | (28.4,36.7) | (27.6,36.3) | (24.3,32.6) | (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) | |
| 40 - 49 | **29.0** | **28.1** | **27.1** | **26.7** | **29.6** | **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** | **T –** |
| | (25.2,32.8) | (24.4,31.8) | (23.2,31.4) | (22.7,31.1) | (25.4,34.2) | (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) | |
| 50 - 64 | **23.2** | **21.2** | **20.2** | **20.2** | **20.6** | **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** | **T –** |
| | (19.4,27.0) | (17.6,24.8) | (16.3,24.8) | (16.4,24.7) | (16.9,24.9) | (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) | |
| 65+ | **14.1** | **9.3** | **15.2** | **13.3** | **13.6** | **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** | **T –** |
| | (10.7,17.5) | (6.5,12.1) | (11.5,19.8) | (9.8,17.7) | (10.0,18.1) | (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) | |
| **Region** | | | | | | | | | | | | | | | | | | | **NSI** |
| Toronto | **24.1** | **27.2** | **23.6** | **21.0** | **21.5** | **24.9** | **17.2** | **22.3** | **20.1** | **15.4** | **13.5** | **20.7** | **16.8** | **17.9** | **17.4** | **11.7** | **16.8** | **14.5** | **T –** |
| | (22.1,30.5) | (22.8,32.1) | (19.3,28.5) | (16.9,25.8) | (17.4,26.3) | (20.5,29.9) | (13.5,21.8) | (18.0,27.3) | (16.1, 24.8) | (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) | |
| C-South | **31.5** | **29.6** | **26.4** | **27.9** | **31.0** | **19.8** | **20.3** | **19.8** | **21.8** | **19.6** | **21.7** | **21.9** | **21.8** | **22.8** | **18.4** | **21.8** | **18.1** | **20.6** | **T –** |
| | (25.6,38.0) | (24.1,35.7) | (20.6,33.3) | (21.9,34.9) | (24.7,38.1) | (14.4,26.5) | (15.1,26.7) | (14.8,25.9) | (16.4, 28.3) | (14.1, 26.7) | (15.1, 30.0) | (16.1, 29.2) | (15.4, 30.0) | (16.1,31.2) | (13.5, 24.7) | (16.5, 28.3) | (13.1, 24.5) | (14.8, 27.8) | |
| C- West | **21.8** | **27.1** | **23.2** | **23.4** | **21.6** | **23.7** | **27.7** | **19.7** | **20.1** | **22.3** | **20.8** | **15.0** | **15.7** | **19.3** | **18.7** | **13.9** | **12.1** | **12.7** | **T –** |
| | (17.3,27.0) | (21.3,33.9) | (18.6,28.5) | (18.7,28.8) | (17.2,26.6) | (19.2,28.9) | (22.5,33.6) | (15.3,25.0) | (15.5, 25.6) | (17.9, 27.4) | (15.7,27.1) | (10.4,21.2) | (11.3,21.3) | (14.6,25.1) | (14.5,23.7) | (10.3, 18.5) | (8.5, 16.9) | (9.2, 17.2) | |
| S- West | **26.1** | **29.4** | **27.3** | **31.6** | **28.1** | **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** | **T –** |
| | (19.8,29.0) | (25.2,34.0) | (22.9,32.1) | (26.9,36.7) | (23.5,33.2) | (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) | |
| C- East | **29.5** | **23.7** | **27.1** | **24.5** | **24.2** | **26.2** | **23.8** | **22.8** | **23.3** | **26.2** | **24.1** | **24.3** | **21.8** | **21.4** | **14.8** | **14.0** | **15.3** | **21.2** | **T –** |
| | (24.3,35.2) | (19.7,28.3) | (21.9,33.0) | (19.4,30.6) | (19.1,30.1) | (21.2,31.9) | (18.9,29.5) | (17.8,28.7) | (18.4, 29.1) | (20.8, 32.2) | (18.3,31.0) | (18.7,31.0) | (16.4,28.4) | (16.1,30.0) | (11.0,19.6) | (10.6, 18.2) | (11.6, 19.9) | (16.5, 26.9) | |
| East | **27.5** | **21.7** | **27.7** | **26.4** | **28.1** | **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** | **T –** |
| | (23.4,32.0) | (17.9,26.0) | (23.3,32.7) | (22.1,31.2) | (23.6,33.2) | (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) | |
| North | **31.5** | **32.9** | **29.5** | **28.8** | **32.2** | **29.9** | **29.6** | **31.0** | **24.5** | **27.6** | **20.9** | **27.3** | **26.8** | **24.5** | **18.7** | **23.2** | **25.0** | **21.0** | **T –** |
| | (27.1,36.3) | (28.3,37.8) | (25.1,34.4) | (24.3,33.8) | (27.5,37.3) | (26.0,34.1) | (25.3,34.5) | (26.3,36.2) | (21.0, 28.4) | (18.5, 22.2) | (16.5, 26.2) | (22.2,33.0) | (21.7,32.7) | (19.6,30.2) | (14.8, 23.3) | (19.0, 28.2) | (20.3, 30.4) | (17.0, 25.7) | |

Cont'd

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Change | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N= ) | (2721) | (2776) | (2509) | (2436) | (2406) | (2627) | (2421) | (2411) | (2611) | (2445) | (2016) | (2005) | (2024) | (2037) | (3030) | (3039) | (3030) | (3021) | | |
| **Marital Status** | | | | | | | | | | | | | | | | | | | **NSI** | |
| Married/ Partner | **24.3** | **21.8** | **23.6** | **23.4** | **22.7** | **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** | **T** | **–** |
| Previously Married | **32.9** | **35.4** | **29.4** | **25.6** | **26.2** | **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** | **T** | **–** |
| Never Married | **29.9** | **34.6** | **30.9** | **32.0** | **32.4** | **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** | **T** | **–** |
| **Education** | | | | | | | | | | | | | | | | | | | **NSI** | |
| HS not completed | **38.2** | **37.0** | **35.4** | **30.1** | **30.5** | **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** | **T** | **–** |
| Completed HS | **30.0** | **29.5** | **28.6** | **29.4** | **30.2** | **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** | **T** | **–** |
| Some College or Univ | **26.8** | **28.6** | **25.7** | **29.0** | **27.3** | **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** | **T** | **–** |
| University Degree | **14.6** | **14.7** | **15.8** | **13.1** | **15.9** | **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** | **T** | **–** |

Notes: (1) [a] 95% confidence interval; — data not available; all analyses are sample design adjusted.
(2) Trend Analysis: **–** change not statistically significant (p<.05); **T** statistically significant change (p<.05) between 1996-2013; **2Y** statistically significant change (p<.05) between last two estimates.
(3) **NSI**, non-significant YEAR × FACTOR interaction.

*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 4.5: Percentage Reporting ***Daily Cigarette Smoking*** in the Past 12 Months, by Demographic Characteristic, Ontarians Aged 18+, 1996–2013

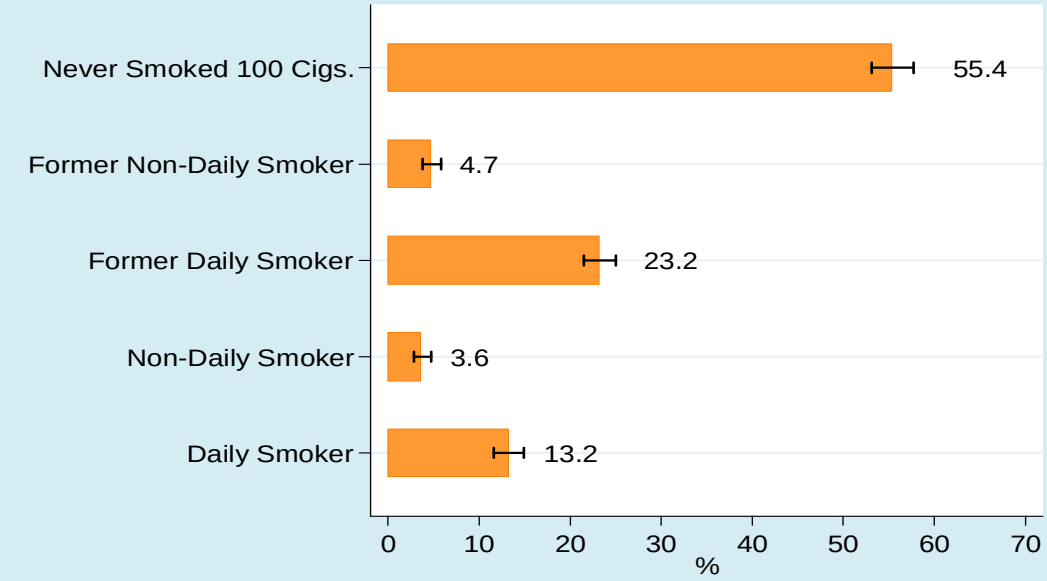
| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Change |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N= ) | (2721) | (2776) | (2509) | (2436) | (2406) | (2627) | (2421) | (2411) | (2611) | (2445) | (2016) | (2005) | (2024) | (2037) | (3030) | (3039) | (3030) | (3021) | |
| **Total** | **23.0** | **23.1** | **22.0** | **20.7** | **20.3** | **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** | **T –** |
| (95%CI)[a] | (21.3, 24.9) | (21.4, 25.0) | (20.2, 23.9) | (19.0, 22.6) | (18.5, 22.1) | (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) | |
| **Sex** | | | | | | | | | | | | | | | | | | | **NSI** |
| Men | **23.6** | **26.1** | **24.4** | **23.5** | **24.9** | **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** | **T –** |
| | (21.1, 26.4) | (23.4, 29.0) | (21.5, 27.5) | (20.8, 26.4) | (22.1, 28.0) | (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) | |
| Women | **22.5** | **20.4** | **19.8** | **18.2** | **16.1** | **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** | **T –** |
| | (20.2,25.0) | (18.2, 22.8) | (17.6, 22.2) | (16.1, 20.6) | (14.1, 18.4) | (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) | |
| **Age** | | | | | | | | | | | | | | | | | | | ***** |
| 18-29 | **23.0** | **28.3** | **26.5** | **24.2** | **25.7** | **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** | **T –** |
| | (19.2,27.3) | (24.2, 32.8) | (22.0, 31.4) | (20.0, 28.9) | (21.4, 30.6) | (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) | |
| 30-39 | **27.8** | **26.1** | **26.7** | **24.4** | **20.6** | **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** | **T –** |
| | (24.2,31.5) | (22.7, 30.0) | (22.9, 30.8) | (20.8, 28.3) | (17.2, 24.5) | (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) | |
| 40-49 | **26.3** | **25.6** | **23.7** | **24.0** | **23.6** | **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** | **T –** |
| | (22.4,30.6) | (21.7, 29.8) | (20.0, 27.9) | (20.2, 28.3) | (19.7, 27.9) | (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) | |
| 50-64 | **20.6** | **19.4** | **18.3** | **17.9** | **17.9** | **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** | **T –** |
| | (17.0,24.8) | (16.0, 23.3) | (14.6, 22.7) | (14.2, 22.2) | (14.4, 21.9) | (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) | |
| 65+ | **13.4** | **8.5** | **12.8** | **11.5** | **11.8** | **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** | **T –** |
| | (9.8,18.1) | (5.8, 12.3) | (9.5, 17.2) | (8.4, 15.6) | (8.4, 16.2) | (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) | |
| **Region** | | | | | | | | | | | | | | | | | | | **NSI** |
| Toronto | **19.3** | **22.1** | **19.5** | **15.3** | **16.4** | **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** | **T –** |
| | (15.5,23.8) | (18.0, 26.8) | (15.5, 24.3) | (12.0, 19.4) | (12.8, 20.9) | (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) | |
| C-South | **26.8** | **24.2** | **22.8** | **26.6** | **26.7** | **16.6** | **17.0** | **16.6** | **15.7** | **16.3** | **18.4** | **13.4** | **19.6** | **20.1** | **14.5** | **17.9** | **15.4** | **18.6** | **T –** |
| | (21.3, 33.1) | (19.2, 30.0) | (17.4, 29.4) | (20.7, 33.5) | (20.7, 33.5) | (11.6, 23.1) | (12.2, 23.2) | (12.0, 22.5) | (11.3, 21.4) | (11.2, 23.1) | (12.3, 26.6) | (9.1,19.3) | (13.5,27.5) | (13.7,28.4) | (10.4, 20.1) | (13.1, 23.9) | (10.8, 21.3) | (13.1, 25.7) | |
| C- West | **19.0** | **24.1** | **20.3** | **19.9** | **17.7** | **16.5** | **20.3** | **14.8** | **14.2** | **16.5** | **16.1** | **13.5** | **9.2** | **13.1** | **16.3** | **11.2** | **8.9** | **9.2** | **T –** |
| | (14.8, 24.0) | (18.5, 30.7) | (15.9, 25.5) | (15.6, 25.0) | (13.7, 22.5) | (12.8, 21.0) | (15.8, 25.7) | (11.0, 19.7) | (10.4, 19.2) | (12.6, 21.3) | (11.6, 22.0) | (9.1,19.5) | (6.0,13.8) | (9.5,18.0) | (12.4, 21.2) | (7.9, 15.5) | (5.9, 13.3) | (6.3, 13.3) | |
| S- West | **23.8** | **25.6** | **21.5** | **26.8** | **23.5** | **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** | **T –** |
| | (19.9,28.3) | (21.6, 30.0) | (17.5, 26.0) | (22.4, 31.7) | (19.2, 28.4) | (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) | |
| C- East | **26.0** | **20.8** | **25.5** | **17.9** | **17.4** | **21.1** | **20.1** | **17.8** | **18.8** | **22.1** | **16.3** | **17.4** | **18.0** | **16.0** | **10.8** | **10.8** | **11.2** | **15.9** | **T –** |
| | (21.1, 31.6) | (16.9, 25.2) | (20.4, 31.3) | (13.5, 23.4) | (13.1, 22.8) | (16.6, 26.5) | (15.6, 25.6) | (13.4, 23.4) | (14.3, 24.3) | (17.1, 27.9) | (11.8,22.0) | (12.7,23.4) | (13.0,24.4) | (11.4,22.0) | (7.5, 15.3) | (7.9, 14.7) | (8.3, 15.0) | (11.8, 21.1) | |
| East | **24.3** | **20.0** | **21.6** | **21.3** | **22.7** | **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** | **T –** |
| | (20.5, 28.6) | (16.3, 24.2) | (17.7, 26.2) | (17.3, 25.8) | (18.5, 27.6) | (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) | |
| North | **28.1** | **30.0** | **26.3** | **25.2** | **23.9** | **24.9** | **23.0** | **26.5** | **21.0** | **24.3** | **18.4** | **23.8** | **23.9** | **17.9** | **16.4** | **18.5** | **18.6** | **16.8** | **T –** |
| | (23.8, 32.1) | (25.6, 34.8) | (22.0, 31.0) | (20.9, 30.0) | (19.7, 28.7) | (21.2, 28.9) | (18.9, 27.7) | (22.1, 31.4) | (17.7, 24.6) | (20.0, 29.3) | (14.2, 23.6) | (19.1,29.4) | (18.9,29.7) | (13.8,22.9) | (12.7, 20.9) | (14.6, 23.1) | (14.6, 23.4) | (13.1, 21.1) | |

Cont'd

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Change |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N= ) | (2721) | (2776) | (2509) | (2436) | (2406) | (2627) | (2421) | (2411) | (2611) | (2445) | (2016) | (2005) | (2024) | (2037) | (3030) | (3039) | (3030) | (3021) | |
| **Marital Status** | | | | | | | | | | | | | | | | | | | **NSI** |
| Married/Part. | **21.9** | **19.0** | **19.9** | **19.8** | **18.1** | **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** | **T –** |
| Previously Married | **29.4** | **30.8** | **27.2** | **22.2** | **22.2** | **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** | **T –** |
| Never Married | **22.7** | **29.2** | **25.4** | **23.1** | **24.8** | **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** | **T –** |
| **Education** | | | | | | | | | | | | | | | | | | | **NSI** |
| HS not completed | **35.0** | **35.0** | **32.6** | **28.7** | **26.2** | **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** | **T –** |
| Completed HS | **27.0** | **26.6** | **24.5** | **25.7** | **23.9** | **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** | **T 2Y** |
| Some College or Univ | **22.9** | **24.0** | **20.9** | **22.5** | **21.8** | **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** | **T –** |
| University Degree | **9.9** | **10.2** | **12.4** | **7.6** | **11.3** | **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** | **T –** |

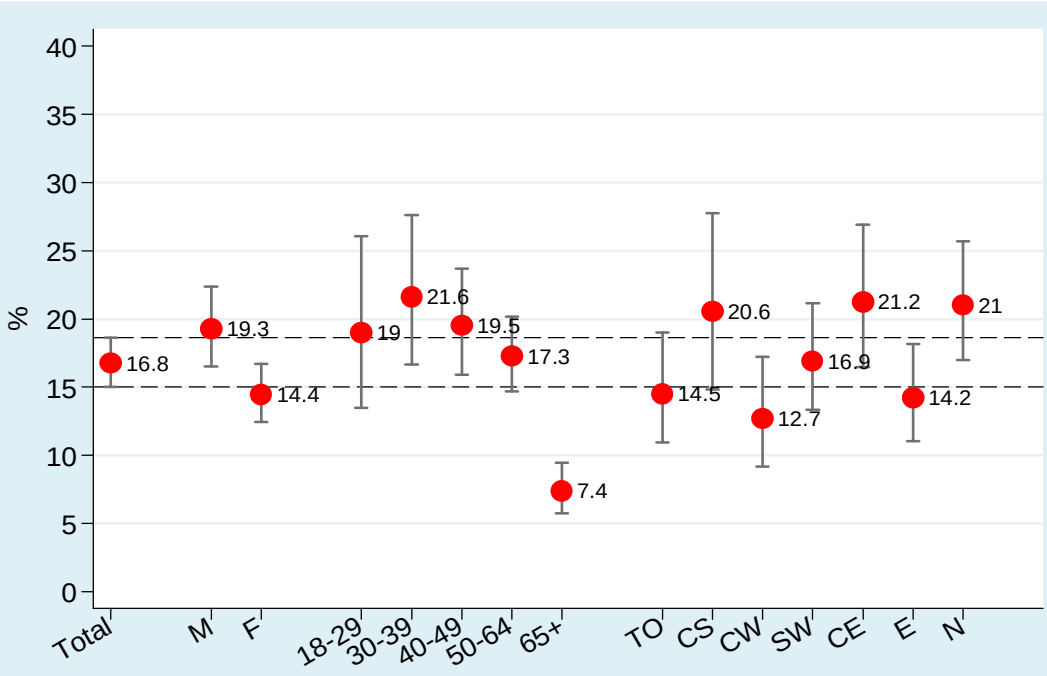
Notes: (1) [a] 95% confidence interval; all analyses are sample design adjusted.
(2) Trend Analysis: **–** change not statistically significant (p<.05); **T** statistically significant change (p<.05) between 1996-2013; **2Y** statistically significant change (p<.05) between last two estimates.
(3) **NSI**, non-significant YEAR × FACTOR interaction; *p<.05**;** **p<.01; ***p<.001.
*Q:* *At the present time, do you smoke cigarettes daily, occasionally or not at all?*
Source: The *CAMH Monitor*, Centre for Addiction and Mental Health

## Figure 4.1
**Cigarette Smoking Status, Ontarians Aged 18+, 2013 (N=3021)**




Note: horizontal 'whiskers' represent 95% confidence intervals
Source: 2013 CAMH Monitor

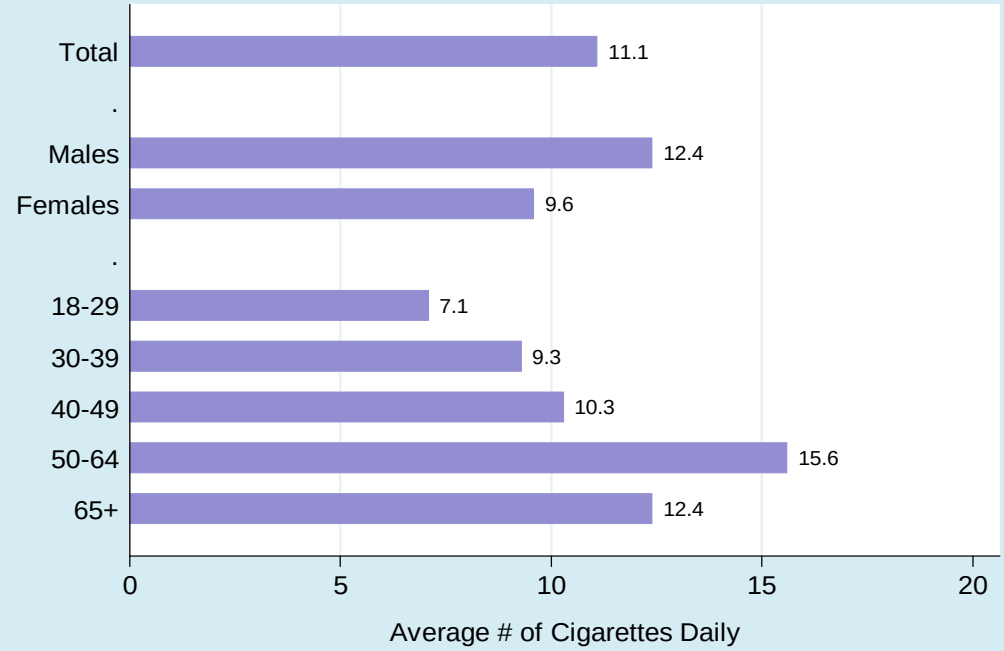
## Figure 4.2
**Current Cigarette Use by Sex, Age and Region, Ontarians Aged 18+, 2013 (N=3021)**




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: 2013 CAMH Monitor

Figure 4.3

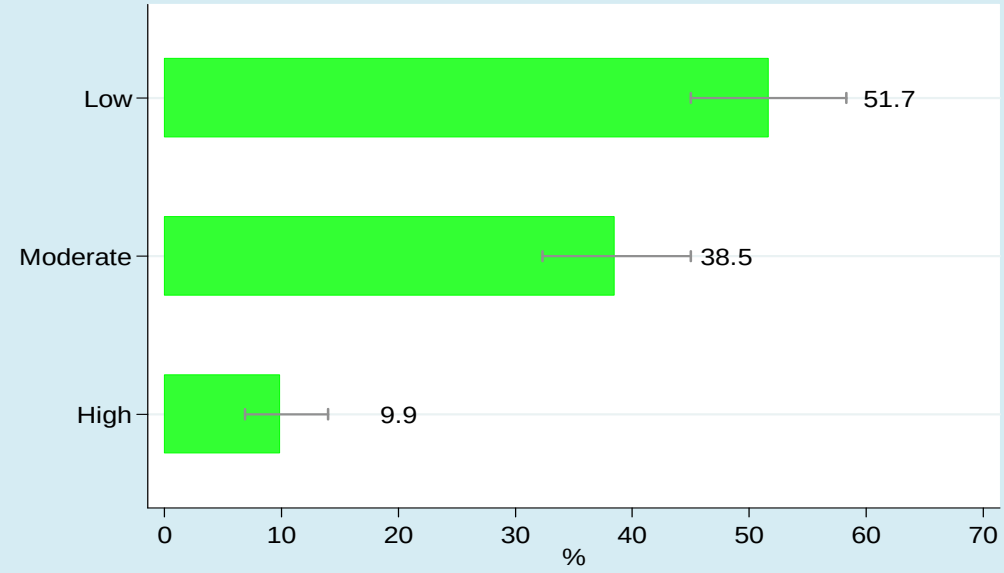
**Average Number of Cigarettes Smoked Daily, Current Smokers Aged 18+, 2013 (*n*=482)**




Source: 2013 CAMH Monitor

Figure 4.4

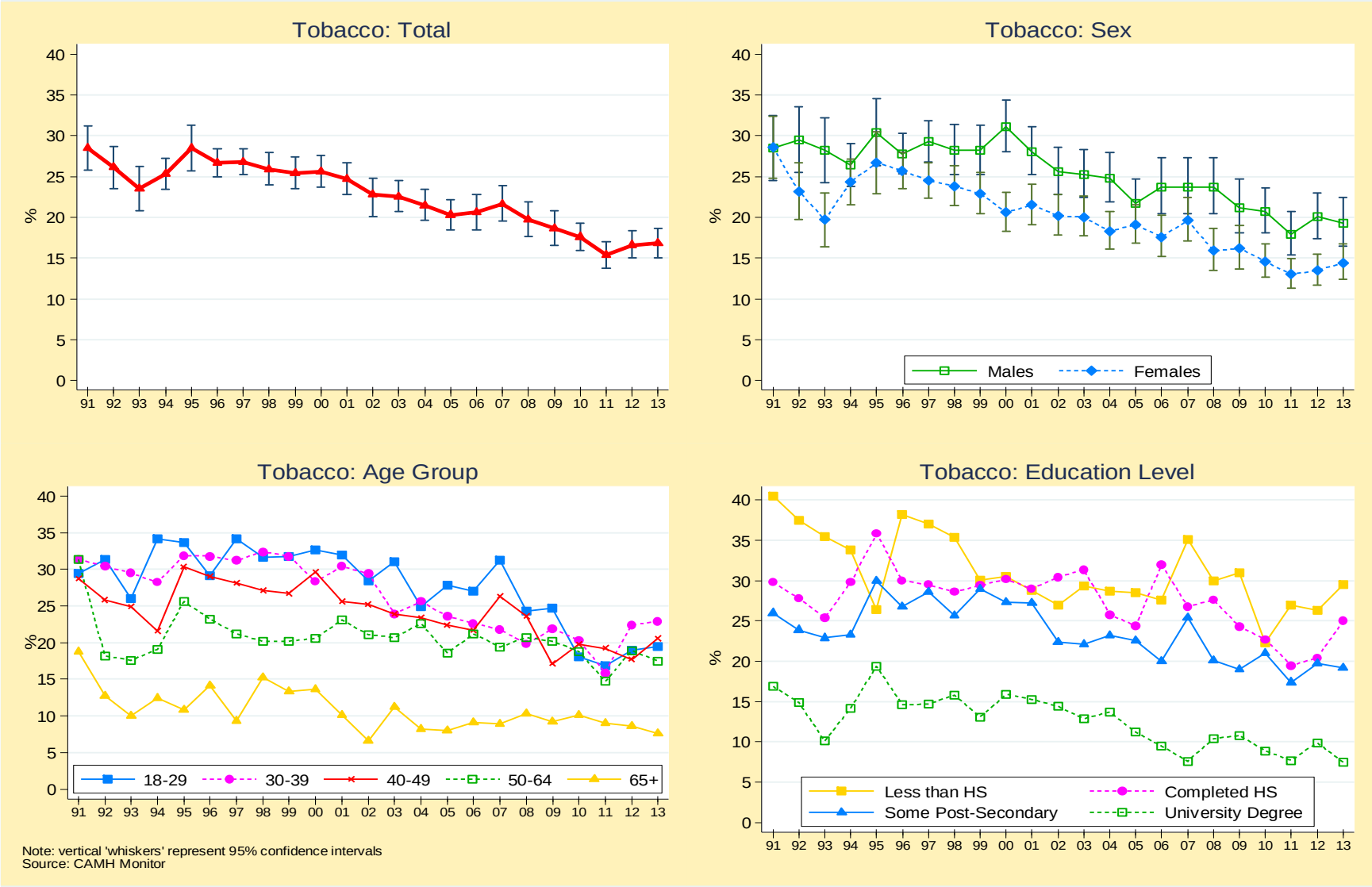
**Nicotine Dependence (HSI), Daily Smokers Aged 18+, 2011 (*n*=390)**




Note: horizontal 'whiskers' represent 95% confidence intervals
Source: 2013 CAMH Monitor

Figure 4.5

**Current Cigarette Use Among Ontarians Aged 18+, 1991–2013**




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

# 5. CANNABIS and OTHER DRUGS

## 5.1 Cannabis Use

**2013**……..Tables 5.1.1 - 5.1.3;
Fig. 5.1.1 - 5.1.2

Overall, an estimated **42.6%** (95% CI: 40.2 to 44.9) of Ontario adults used cannabis at least once in their lifetime, while **14.1%** (95% CI: 12.2% to 16.1%) used it in the 12 months before the survey. Population estimates for lifetime and past year use are 4,298,800 (95% CI: 4,020,200 to 4,577,400) and 1,417,500 (95% CI: 1,210,000 to 1,624,900) Ontario adults, respectively.

Use of cannabis is generally infrequent. Among lifetime users, 67.0% did not use cannabis during the 12 months before the survey, 13.3% used less than once a month, and 19.7% used once a month or more frequently. Among past year cannabis users, 40.4% used less than once a month and 59.6% used more frequently.

**Sex, age, marital status** and **household income** were 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 (17.6% vs. 10.8%; OR=1.8).
- Past year cannabis use showed almost a seven-fold decline with age, dropping from 40.4% among 18 to 29 year olds to 5.9% among those 50 years and older. Two of the three sequential age group comparisons were statistically significant: the adjusted odds of past year cannabis use were almost half as frequent among 30 to 39 year olds than 18 to 29 year olds (OR = 0.47), and among 40 to 49 years olds than 30 to 39 year olds (OR=0.46). The odds of use were also lower among those 50 and older than those aged 40 to 49 years (OR=0.72), but the difference was not statistically significant.
- Relative to married respondents, the adjusted odds of cannabis use were 2.1 times higher among those never married (34.5% vs. 8.4%; OR=2.13).
- Household income showed a weak, but significant, association with past year cannabis use. The distinguishing feature was a higher rate among those with the lowest incomes while those who did not declare their income reported significantly lower rates of cannabis use.

There were no significant differences according to region and education after adjusting for other risk factors.

## Trends

**1977–2013**…….. … Table 5.1.5; Fig. 5.1.2 – 5.1.3

### 2012–2013

Prevalence of past year cannabis use in 2013 (14.1%) was unchanged from 2012 (13.5%) and 2011 (13.4%). In addition, rates of use were stable since 2008 for all subgroups.

### 1996–2013

Since 1996, cannabis use among the total sample has **trended upward**, from 8.7% to 14.1% in 2013, although the trend has been especially flat since 2005.

Year interacted significantly with age, indicating that trends in cannabis use differed among the age groups**.** Year did not interact with sex, region, marital status and education level, suggesting similar trends in each subgroup.

**Differential age-group trends** suggest that increases are strongest among the youngest respondents and weaken with increasing age. Between 1996 and 2013, cannabis use increased among 18 to 29 year olds from 18.3% to 40.4%, whereas use among 30 to 39 year olds only increased from 11.3% to 17.3%, and among 40 to 49 year olds from 6.1% to 8.4%.

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

### 1977–2013

Since 1977, past year use of cannabis has increased appreciably. The current rate of 14.1% is significantly higher than the 8.1% found in 1977. There were also significant increases over the longer term among **men** (from 9.1% in 1992 to 19.9% in 2010), **women** (from 4.5% in 1977 to 10.8% in 2013) and **all age groups**, especially 18 to 29 year olds (from 22.6% in 1977 to 40.4% in 2013) and those 50 years and older (from 1.2% in 1977 to 5.9% in 2013).

Perhaps the most salient change is the aging of cannabis users (Figure 5.1.2). In 1977, 82% of past year cannabis users were aged 18 to 29 versus only 49% in 2013. In contrast, the proportion aged 30 to 49 increased two-fold from 15% to 32%, and the proportion aged 50 and older increased six-fold from 3% to 19% during the same period.

Table 5.1.1: Estimates of the Percentage Reporting ***Cannabis Use*** During their ***Lifetime,*** Ontarians Aged 18+, 2013

| Total sample (N=3021) | Lower Limit % | Estimate % | Upper Limit % |
|---|---|---|---|
| **Cannabis Use** | 40.2 | **42.6** | 44.9 |

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+, 2013

| | **Cannabis** | |
|---|---|---|
| Frequency of Cannabis Use | % (95% CI) Lifetime Users (N=1143) | % (95% CI) Past year Users (N=270) |
| Used in lifetime, but not past 12 months | **67.0** (63.0, 70.7) | — |
| Used less than once a month during past 12 months | **13.3** (10.8, 16.3) | **40.4** (33.3, 47.8) |
| Used once a month or more often during past 12 months | **19.7** (16.5, 23.4) | **59.6** (52.2, 66.7) |

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

Table 5.1.3: Percentage ***Using Cannabis*** During the Past 12 Months and Adjusted Group Differences, Ontarians Aged 18+, 2013

| | N | % | 95% CI | Adjusted Odds Ratio (N=2896) |
|---|---|---|---|---|
| **Total** | 3021 | **14.1** | (12.2, 16.1) | — |
| **Sex** | | | | **** |
| Men | 1232 | **17.6** | (14.7, 20.9) | **1.75**** |
| Women *(Comparison Group)* | 1789 | **10.8** | (8.7, 13.3) | — |
| **Age** *(Comparison Group is previous age group)* | | | | **** |
| 18-29 | 182 | **40.4** | (32.8, 48.6) | — |
| 30-39 | 303 | **17.3** | (13.0, 22.8) | **0.47*** |
| 40-49 | 556 | **8.4** | (6.1, 11.4) | **0.46**** |
| 50+ | 1924 | **5.9** | (4.7, 7.5) | 0.72 |
| **Region** | | | | NS |
| Toronto *(vs. Provincial Average)* | 503 | **15.0** | (10.9, 20.3) | 1.16 |
| Central South | 238 | **†16.9** | (11.0, 25.0) | 1.05 |
| Central West | 403 | **15.4** | (11.2, 20.8) | 1.04 |
| South West | 497 | **†10.3** | (7.1, 14.8) | 0.73 |
| Central East | 411 | **16.7** | (12.2, 22.5) | 1.12 |
| East | 502 | **†10.6** | (7.5, 14.8) | 0.95 |
| North | 467 | **†9.1** | (6.2, 13.1) | 0.77 |
| **Marital Status** | | | | * |
| Married/Partner *(Comparison Group)* | 1926 | **8.4** | (6.9, 10.1) | — |
| Previously Married | 653 | **9.1** | (6.5, 12.5) | 1.44 |
| Never Married | 409 | **34.5** | (28.3, 41.2) | **2.13**** |
| **Education** | | | | NS |
| High school not completed *(Comparison Group)* | 355 | **11.1** | (6.8, 17.7) | — |
| Completed high school | 638 | **18.5** | (14.0, 24.1) | 1.57 |
| Some college or university | 1053 | **15.3** | (12.3, 19.0) | 1.21 |
| University degree | 939 | **11.0** | (8.6, 14.0) | 0.85 |
| **Household Income** | | | | ** |
| < $30,000 *(Comparison Group)* | 303 | **20.4** | (13.6, 29.5) | — |
| $30,000-$49,999 | 370 | **13.1** | (8.0, 20.8) | 0.74 |
| $50,000-$79,999 | 526 | **14.3** | (10.3, 19.3) | 0.81 |
| $80,000+ | 1089 | **15.7** | (12.9, 19.0) | 0.84 |
| Not stated | 733 | **9.7** | (6.6, 14.0) | **0.32**** |

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 (complete case sample size N=2,896).

*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+, 1977–1994

| | 1977 | 1982 | 1984 | 1987 | 1989 | 1991 | 1992 | 1994 |
|---|---|---|---|---|---|---|---|---|
| (N= ) | (1059) | (1026) | (1043) | (1075) | (1098) | (1047) | (1058) | (2022) |
| **Total** | **8.1** | **8.2** | **11.2** | **9.5** | **10.5** | **8.7** | **6.2** | **9.0** |
| (95% CI)[a] | (6.5,9.7) | (5.9,0.5) | (9.3,13.1) | (7.7,11.3) | (8.7,12.3) | 7.0,10.4) | (4.7,7.7) | (7.8,10.2) |
| **Sex** | | | | | | | | |
| Men | **11.2** | **12.3** | **15.6** | **12.3** | **13.0** | **11.5** | **9.1** | **11.4** |
| | (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) |
| Women | **4.5** | **4.1** | **7.1** | **6.8** | **8.2** | **6.0** | **3.6** | **7.0** |
| | (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) |
| **Age** | | | | | | | | |
| 18 - 29 | **22.6** | **22.7** | **28.5** | **20** | **24.6** | **19.9** | **13.3** | **19.6** |
| | (17.8,27.4) | (17.7,27.7) | (23.1,33.9) | (0.2,3.8) | (19.2,30.0) | (15.1,24.7) | (9.3,17.3) | (16.0,23.2) |
| 30 - 39 | **3.9** | **4.2** | **9.5** | **11.6** | **11.8** | **9.1** | **6.6** | **10.2** |
| | (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) |
| 40 - 49 | **†2.3** | **†** | **†2.2** | **5.4** | **†3.9** | **†3.0** | **†2.4** | **4.3** |
| | (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) |
| 50 + | **†1.2** | **†1.3** | **†1.8** | **†** | **†1.4** | **†** | **†1.3** | **†** |
| | (0.3,2.7) | (0.2,2.8) | (0.2,3.6) | — | (0.1,3.0) | — | (0.5,3.1) | — |
| **Marital Status** | | | | | | | | |
| Married | **—** | **—** | **—** | **—** | **—** | **4.0** | **3.5** | **4.1** |
| Previously Married | **—** | **—** | **—** | **—** | **—** | **6.5** | **6.3** | **8.6** |
| Never Married | **—** | **—** | **—** | **—** | **—** | **20.2** | **13.7** | **20.9** |
| **Education** | | | | | | | | |
| High school not completed | **—** | **—** | **—** | **—** | **—** | **6.3** | **6.3** | **8.5** |
| Completed high school | **—** | **—** | **—** | **—** | **—** | **9.8** | **5.2** | **9.6** |
| Some college or university | **—** | **—** | **—** | **—** | **—** | **10.7** | **6.7** | **10.3** |
| University degree | **—** | **—** | **—** | **—** | **—** | **7.6** | **7.2** | **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+, 1996–2013

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Change |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N= ) | (2721) | (2776) | (2509) | (2436) | (2406) | (2627) | (2421) | (2411) | (2611) | (2445) | (2016) | (2005) | (2024) | (2037) | (3030) | (3039) | (3030) | (3021) | |
| **Total** | **8.7** | **9.1** | **8.6** | **10.4** | **10.8** | **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** | **T –** |
| (95% CI) [a] | (7.6,9.8) | (7.8,10.3) | (7.3,10.0) | (9.1,11.9) | (9.4,12.4) | (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) | |
| **Sex** | | | | | | | | | | | | | | | | | | | **NSI** |
| Men | **12.6** | **11.4** | **12.1** | **13.2** | **14.3** | **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** | **T –** |
| | (10.7,14.5) | (9.3,13.5) | (9.9,14.7) | (11.1,15.8) | (12.0,16.9) | (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) | |
| Women | **5.3** | **7.0** | **5.4** | **7.8** | **7.7** | **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** | **T –** |
| | (4.2,6.4) | (5.4,8.5) | (4.2,6.9) | (6.3,9.7) | (6.2,9.6) | (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) | |
| **Age** | | | | | | | | | | | | | | | | | | | *** |
| 18 - 29 | **18.3** | **21.4** | **25.2** | **27.1** | **28.2** | **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** | **T –** |
| | (15.0,21.6) | (17.4,25.3) | (20.8,30.1) | (22.6,32.0) | (23.7,33.2) | (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) | |
| 30 - 39 | **11.3** | **9.8** | **8.2** | **10.3** | **12.3** | **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** | **T –** |
| | (8.9,13.7) | (7.3,12.3) | (6.1,11.1) | (7.9,13.4) | (9.4,15.9) | (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) | |
| 40 - 49 | **6.1** | **4.3** | **4.6** | **6.8** | **6.4** | **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** | **T –** |
| | (4.1,8.1) | (2.6,6.1) | (3.1,6.7) | (4.8,9.5) | (4.5,9.1) | (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) | |
| 50 + | **†** | **†1.7** | **†1.4** | **4.1** | **†2.9** | **†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** | **T –** |
| | — | (0.6,2.8) | (0.3,2.5) | (2.3,5.9) | (1.4,4.4) | (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) | |
| **Region** | | | | | | | | | | | | | | | | | | | **NSI** |
| Toronto | **10.2** | **10.9** | **13.0** | **10.1** | **14.2** | **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** | **T –** |
| | (7.5,13.8) | (8.1,14.7) | (9.7,17.3) | (7.3,13.6) | (10.9,18.4) | (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) | |
| Central South | **8.8** | **8.1** | **5.1** | **8.9** | **11.0** | **10.8** | **12.6** | **10.8** | **9.2** | **16.0** | **15.8** | **12.3** | **10.3** | **11.6** | **13.1** | **16.5** | **†14.6** | **†16.9** | **T –** |
| | (5.8,13.3) | (5.2,12.4) | (2.8,9.2) | (5.4,14.0) | (7.0,16.7) | (7.0,16.4) | (8.4,18.6) | (7.2,16.0) | (5.2, 15.9) | (10.7, 23.3) | (9.7, 24.6) | (7.5,19.5) | (5.7, 18.1) | (7.3,18.0) | (8.7, 19.3) | (11.2,23.7) | (9.4, 21.9) | (11.0, 25.0) | |
| Central West | **7.5** | **7.2** | **8.6** | **12.2** | **10.0** | **9.5** | **11.4** | **10.1** | **14.0** | **13.4** | **12.6** | **6.5** | **10.5** | **11.5** | **11.5** | **†14.9** | **†14.9** | **15.4** | **T –** |
| | (5.0,11.0) | (4.0,12.6) | (5.7,12.9) | (8.7,16.7) | (7.0,14.2) | (6.8,13.2) | (8.0,16.2) | (7.0,14.5) | (10.0, 19.3) | (9.7, 18.1) | (8.4,18.6) | (3.7,11.1) | (6.6,16.1) | (7.7,16.7) | (8.0, 16.5) | (10.6, 20.6) | (10.3, 21.0) | (11.2, 20.8) | |
| South West | **7.6** | **8.0** | **4.6** | **10.6** | **11.0** | **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** | **T –** |
| | (5.2,10.8) | (5.6,11.3) | (2.8,7.4) | (7.7,14.4) | (7.8,15.2) | (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) | |
| Central East | **10.3** | **8.7** | **10.0** | **11.4** | **9.0** | **11.3** | **13.0** | **14.5** | **13.1** | **14.8** | **13.7** | **9.1** | **18.3** | **14.4** | **16.3** | **†11.0** | **†12.0** | **16.7** | **T –** |
| | (7.0,15.0) | (6.2,12.2) | (6.8,14.4) | (7.7,16.6) | (5.9,13.7) | (8.0,15.7) | (9.2,18.2) | (10.4,19.9) | (9.2, 18.3) | (10.4, 20.5) | (8.8,20.7) | (5.7,14.3) | (12.8,25.5) | (9.7,20.9) | (12.0, 21.6) | (9.7, 20.9) | (8.6, 16.6) | (12.1, 22.5) | |
| East | **8.0** | **11.0** | **7.4** | **9.7** | **9.0** | **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** | **T –** |
| | (5.6,11.3) | (8.1,14.7) | (5.0,11.0) | (7.0,13.3) | (6.2,12.7) | (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) | |
| North | **6.6** | **5.5** | **7.2** | **9.0** | **8.5** | **8.8** | **11.8** | **11.5** | **11.1** | **10.9** | **11.5** | **13.0** | **12.9** | **12.5** | **17.2** | **13.1** | **†12.4** | **†9.1** | **T –** |
| | (4.4,9.7) | (3.7,8.2) | (4.8,10.7) | (6.3,12.9) | (5.9,12.3) | (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) | (8.9,18.3) | (8.5,18.1) | (13.1, 22.3) | (9.3,18.0) | (8.7,17.5) | (6.2,13.1) | |

Cont'd

| (N= ) | 1996 (2721) | 1997 (2776) | 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) | Change | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Marital Status** | | | | | | | | | | | | | | | | | | | **NSI** | |
| Married/ Partner | **4.9** | **5.1** | **4.3** | **6.4** | **6.2** | **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** | **T** | **–** |
| Previously Married | **6.7** | **6.0** | **3.9** | **6.2** | **†6.0** | **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** | **T** | **–** |
| Never Married | **19.5** | **20.1** | **22.9** | **25.3** | **26.4** | **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** | **T** | **–** |
| **Education** | | | | | | | | | | | | | | | | | | | **NSI** | |
| High school not completed | **6.1** | **9.8** | **6.8** | **7.7** | **10.4** | **†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** | **T** | **–** |
| Completed high school | **9.5** | **10.4** | **10.7** | **10.6** | **9.5** | **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** | **T** | **–** |
| Some college or university | **11.3** | **9.0** | **10.2** | **13.5** | **15.7** | **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** | **T** | **–** |
| University degree | **7.0** | **7.4** | **5.6** | **8.5** | **7.0** | **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** | **T** | **–** |

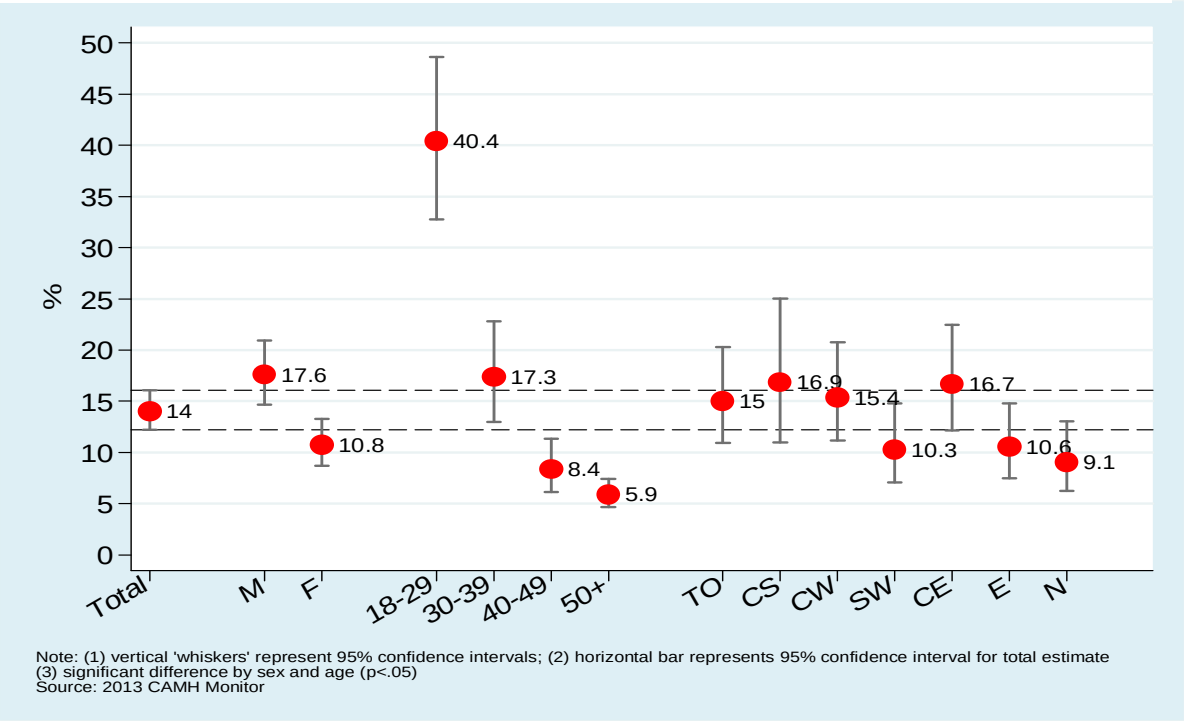
Notes: (1) All estimates and analyses are sample design adjusted; [a] 95% confidence interval; **†** Estimate unstable or suppressed.
(2) Trend Analysis: **–** change not statistically significant (p<.05); **T** statistically significant change (p<.05) between 1996-2013; **2Y** statistically significant change (p<.05) between last two estimates;
(3) **NSI**, non-significant YEAR × FACTOR interaction; *p<.05; **p<.01; ***p<.001;

*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

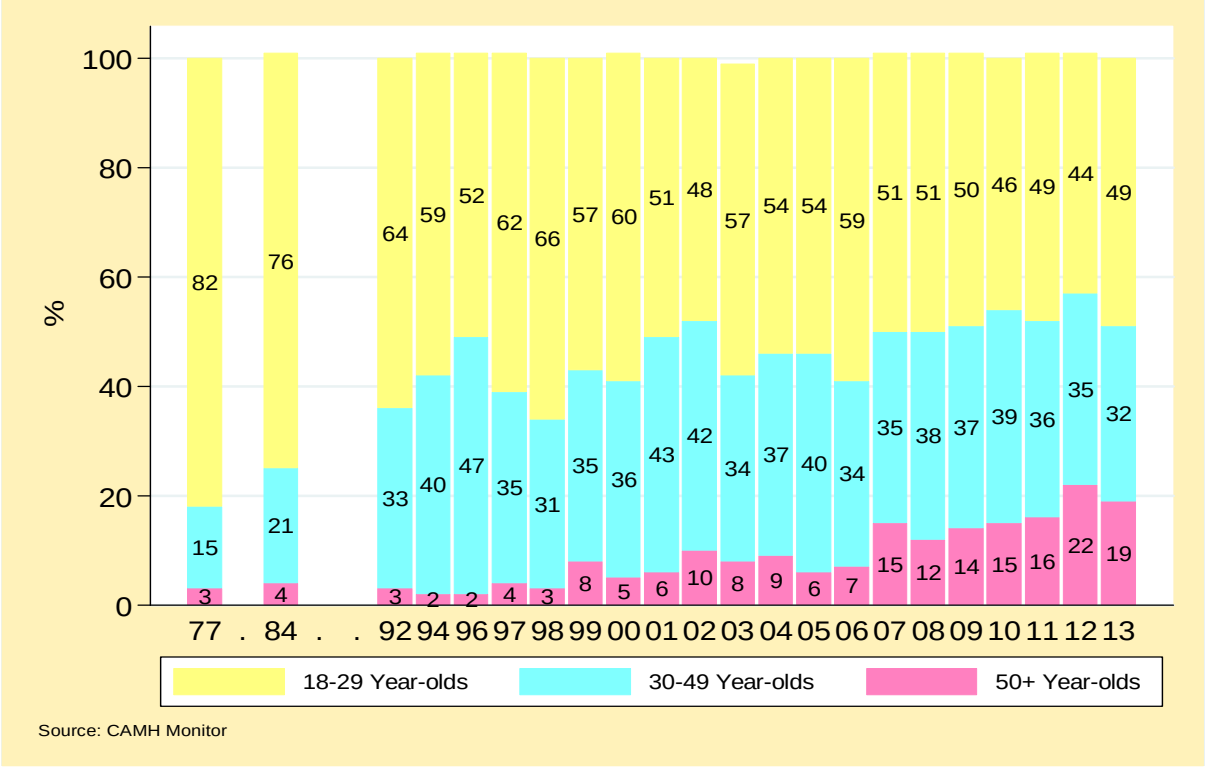
**Past Year Cannabis Use by Gender, Age and Region, Ontarians Aged 18+, 2013 (N=3021)**




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: 2013 CAMH Monitor

Figure 5.1.2

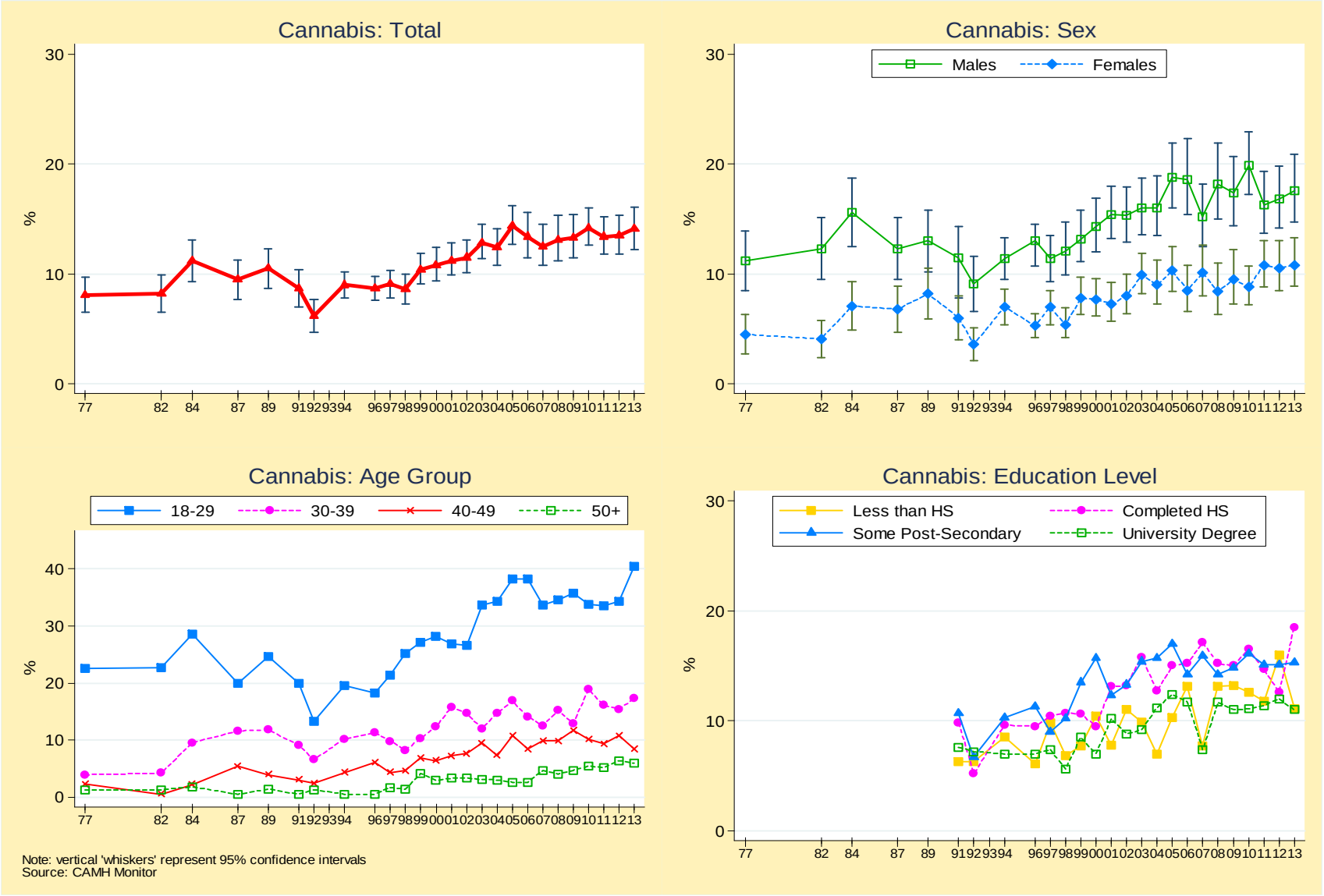
**Age Distribution of Past Year Cannabis Users, Ontarians Aged 18+, 1977–2013**




Source: CAMH Monitor

Figure 5.1.3

**Past Year Cannabis Use, Ontarians Aged 18+, 1977–2013**




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

## 5.1.1. Cannabis Use Problems (ASSIST–CIS)

To provide estimates of moderate- or high-risk cannabis use, 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 3 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 values 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 who presents a moderate or high risk of experiencing cannabis use problems. In 2013, ASSIST-CIS items were asked of a random subsample of respondents (Panel B, N=2,060).

**2013** …….. Tables 5.1.7 - 5.1.8
Fig. 5.1.4

Overall, an estimated **7.5%** (95% CI: 5.9% to 9.5%) of Ontario adults and **55.4%** (95% CI: 46.3% to 64.1%) of past year cannabis users met the criteria for **moderate or high risk** of cannabis problems. The population estimate is 788,200 adults (95% CI: 596,700 to 979,700).

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

- The odds of experiencing cannabis problems were about two times higher among men than women (9.6% vs. 5.4%; OR=1.85).
- The odds of experiencing cannabis problems were 6.6 times higher among those aged 18 to 29 (22.9%), than those aged 30 and older (4.3%).

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

### Trends

**2004–2013**……..…Tables 5.1.9 - 5.1.10
Fig. 5.1.5

#### 2012–2013

Prevalence of past year cannabis use problems was significantly higher in 2013 compared to 2012 (7.5% vs. 4.7%), and rates increased slightly among men and among those aged 18 to 29 for the same period.

Past year users displayed similar patterns. The estimate of past year cannabis problems among past year cannabis users was significantly higher in 2013 compared to 2012 (55.4% vs. 38.5%) and rates increased significantly among men (62.4% vs. 43.3%) and among those aged 30 and older (59.0% in 2013 vs. 34.9% in 2012).

**2004–2013**

Estimates between 2004 and 2013 were generally stable among the total sample, varying between 5.2% and 7.5%, and between 47.2% and 55.4% among users.

Year interacted significantly with sex for the total sample. Estimates for women were stable, but there was a significant non-linear change for men, showing that problem use was lower (6.3%) in 2007 and higher in 2010 (11.8%) versus other years. Year did not interact with age, suggesting that subgroup trends were similar.

There were no significant year interactions among past year users, suggesting that subgroup trends were similar.

Table 5.1.6: Percentage Reporting ***Cannabis Involvement Indicators (ASSIST-CIS)***, Ontarians *Overall* and Ontarian *Past Year Cannabis Users*, Aged 18+, 2013

| **ASSIST ITEMS** | Response Weight and Response Category | Total[1] (N=2,060) | Cannabis Users[2] (N=181) |
|---|---|---|---|
| **ASSIST Q1**. How often have you used cannabis, marijuana or hash during the past 3 months? | 0. Never | 89.4 | 23.2 |
| | 2. Once or twice | †2.9 | †21.4 |
| Abuse indicator | 3. Monthly | †2.2 | †15.7 |
| | 4. Weekly | †2.8 | †20.7 |
| | 6. Daily or almost daily | †2.6 | †19.1 |
| | Mean (SE) | .39 (.04) | 2.87 (.19) |
| **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 | 94.9 | 62.7 |
| | 3. Once or twice | †1.7 | †12.9 |
| | 4. Monthly | † | † |
| Dependence indicator | 5. Weekly | †1.3 | †9.5 |
| | 6. Daily or almost daily | †1.9 | †14.0 |
| | Mean (SE) | .24 (.04) | 1.74 (.24) |
| **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 | 99.5 | 96.2 |
| | 4. Less than monthly | † | †2.0 |
| | 5. Monthly | † | † |
| Abuse and harmful use indicator | 6. Weekly | † | † |
| | 7. Daily or almost daily | † | † |
| | Mean (SE) | .03 (.02) | .21 (.12) |
| **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 | 98.9 | 92.0 |
| | 5. Less than monthly | † | †5.3 |
| | 6. Monthly | † | † |
| Abuse indicator | 7. Weekly | † | † |
| | 8. Daily or almost daily | † | † |
| | Mean (SE) | .06 (.03) | .45 (.17) |
| **ASSIST Q5**. Has a friend, relative, a doctor or anyone else ever expressed concern about your use of cannabis, marijuana or hash? | 0. Never | 97.6 | 82.2 |
| | 3. Yes, not past 3 months | †1.4 | †10.4 |
| | 6. Yes, past 3 months | †1.1 | †7.4 |
| Abuse and dependence indicator | Mean (SE) | .10 (.03) | .76 (.17) |
| **ASSIST Q6**. Have you ever tried and failed to control, cut down or stop using cannabis, marijuana or hash? | 0. Never | 97.1 | 78.6 |
| | 3. Yes, not past 3 months | †2.4 | †17.7 |
| Dependence indicator | 6. Yes, past 3 months | † | †3.7 |
| | Mean (SE) | .10 (.02) | .75 (.13) |

Notes: [1]ASSIST-CIS items were asked only of a random subsample of respondents (N=2,060); [2]Analysis based on unconditional subclass of past year cannabis users (N=181); 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 Problems (ASSIST–CIS/4+)*** During the Past Three Months and Adjusted Group Differences, Ontarians Aged 18+, 2013

| | | N | % | 95% CI | Adjusted Odds Ratio (N=2016) |
|---|---|---|---|---|---|
| **Total** | | 2060 | **7.5** | (5.9, 9.5) | — |
| **Sex** | | | | | * |
| Men | | 878 | **9.6** | (7.1, 12.9) | **1.85*** |
| Women | *(Comparison Group)* | 1182 | **†5.4** | (3.7, 7.9) | — |
| **Age** | | | | | *** |
| 18-29 | | 130 | **†22.9** | (16.0, 31.8) | **6.59***** |
| 30+ | *(Comparison Group)* | 1890 | **4.3** | (3.3, 5.7) | — |

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 (N=2060).
(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 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 (complete case sample size N = 2,016).

*Def'n:* *The ASSIST–CIS (WHO) screener measures risk of experiencing cannabis 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 Problems (ASSIST–CIS/4+)*** During the Past Three Months and Adjusted Group Differences, Ontarian ***Cannabis Users***[1], Aged 18+, 2013

| | | N | % | 95% CI | Adjusted Odds Ratio (N=177) |
|---|---|---|---|---|---|
| **Total** [1] | | 181 | **55.4** | (46.3, 64.1) | — |
| **Sex** | | | | | NS |
| Men | | 100 | **62.4** | (50.7, 72.9) | 1.97 |
| Women | *(Comparison Group)* | 81 | **46.3** | (33.3, 59.9) | — |
| **Age** | | | | | NS |
| 18-29 | | 49 | **59.0** | (43.8, 72.6) | 1.40 |
| 30+ | *(Comparison Group)* | 131 | **51.8** | (41.7, 61.7) | — |

Notes: [1]Analysis based on unconditional subclass of past year cannabis users; 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 cannabis 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 (complete case sample size N=177).

*Def'n:* *The ASSIST (WHO) screener measures risk of experiencing cannabis 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 Problems (ASSIST–CIS 4+)*** During the Past Three Months, by Demographic Characteristics, Ontarians Aged 18+, 2004–2013

| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Change | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N=) | (2611) | (1255) | (2016) | (2005) | (2024) | (2037) | (2024) | (1999) | (2015) | (2060) | | |
| **Total** | **5.8** | **6.3** | **6.0** | **5.2** | **5.6** | **6.9** | **7.1** | **5.6** | **4.7** | **7.5** | **–** | **2Y** |
| (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) | | |
| **Sex** | | | | | | | | | | | | * |
| Men | **8.6** | **8.2** | **10.1** | **6.3** | **8.3** | **9.4** | **11.8** | **7.7** | **†6.6** | **9.6** | **–** | **–** |
| | (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) | | |
| Women | **†3.1** | **†4.6** | **†2.1** | **†4.0** | **†3.2** | **4.5** | **†2.4** | **†3.7** | **†3.1** | **†5.4** | **–** | **–** |
| | (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) | | |
| **Age** | | | | | | | | | | | | **NSI** |
| 18-29 | **18.4** | **16.5** | **19.2** | **14.9** | **16.3** | **22.2** | **17.6** | **15.8** | **†13.2** | **†22.9** | **–** | **–** |
| | (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) | | |
| 30 + | **2.8** | **3.9** | **2.6** | **3.0** | **3.2** | **3.5** | **4.4** | **3.1** | **3.0** | **4.3** | **–** | **–** |
| | (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) | | |

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 2004-2013; **2Y** significant change (p<.05) between last two estimates.
(3) **NSI**, non-significant YEAR × FACTOR interaction; *****p<.05;

*Def'n:* *The WHO ASSIST screener measures the risk of experiencing cannabis 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 Problems (ASSIST–CIS 4+)*** During the Past Three Months, by Demographic Characteristics, Ontarian ***Cannabis Users***[1] Aged 18+, 2004–2013

| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Change | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N=) | (279) | (145) | (209) | (222) | (209) | (211) | (249) | (196) | (192) | (181) | | |
| **Total** [1] | **47.2** | **47.1** | **44.9** | **41.4** | **43.4** | **51.9** | **43.6** | **41.7** | **38.5** | **55.4** | **–** | **2Y** |
| (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) | | |
| **Sex** | | | | | | | | | | | | **NSI** |
| Men | **54.4** | **47.5** | **54.8** | **40.0** | **38.3** | **54.2** | **52.3** | **49.6** | **43.3** | **62.4** | **–** | **2Y** |
| | (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) | | |
| Women | **35.0** | **46.6** | **†24.4** | **42.3** | **46.0** | **47.9** | **†24.0** | **32.1** | **†31.6** | **46.3** | **–** | **–** |
| | (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) | | |
| **Age** | | | | | | | | | | | | **NSI** |
| 18-29 | **54.0** | **46.1** | **50.6** | **44.3** | **47.4** | **62.0** | **47.3** | **46.2** | **†43.0** | **59.0** | **–** | **–** |
| | (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) | | |
| 30 + | **39.0** | **48.3** | **36.7** | **39.0** | **39.4** | **41.6** | **39.7** | **36.1** | **34.9** | **51.8** | **–** | **2Y** |
| | (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) | | |

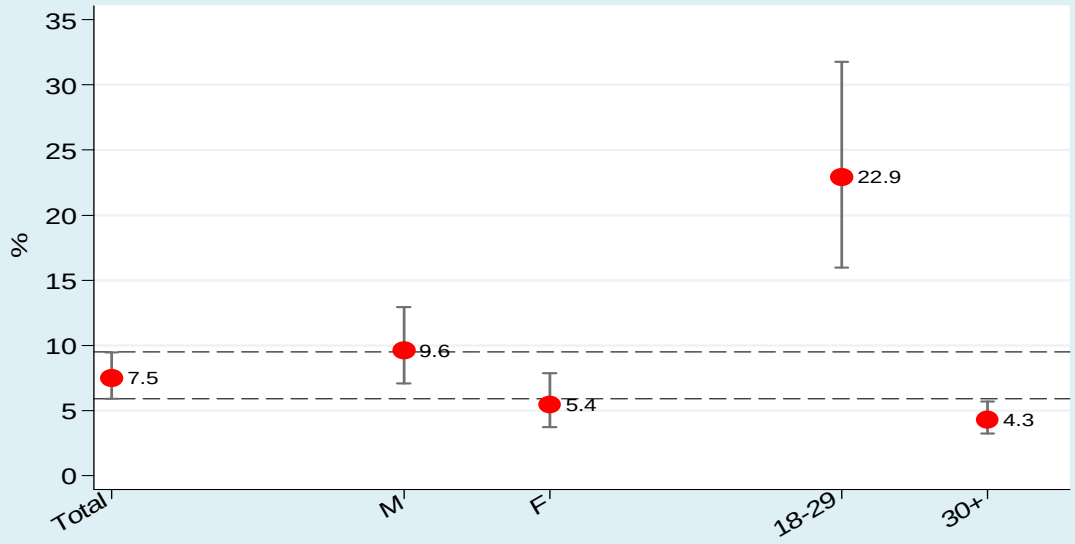
Notes: [1]Analysis based on unconditional subclass of past year cannabis users.
(1) [a] 95% confidence interval; † Estimate suppressed or unstable; all analyses are sample design adjusted.
(2) Trend Analysis: **–** change not statistically significant (p<.05); **T** significant change (p<.05) between 2004-2013; **2Y** significant change (p<.05) between last two estimates.
(3) **NSI**, non-significant YEAR × FACTOR interaction

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

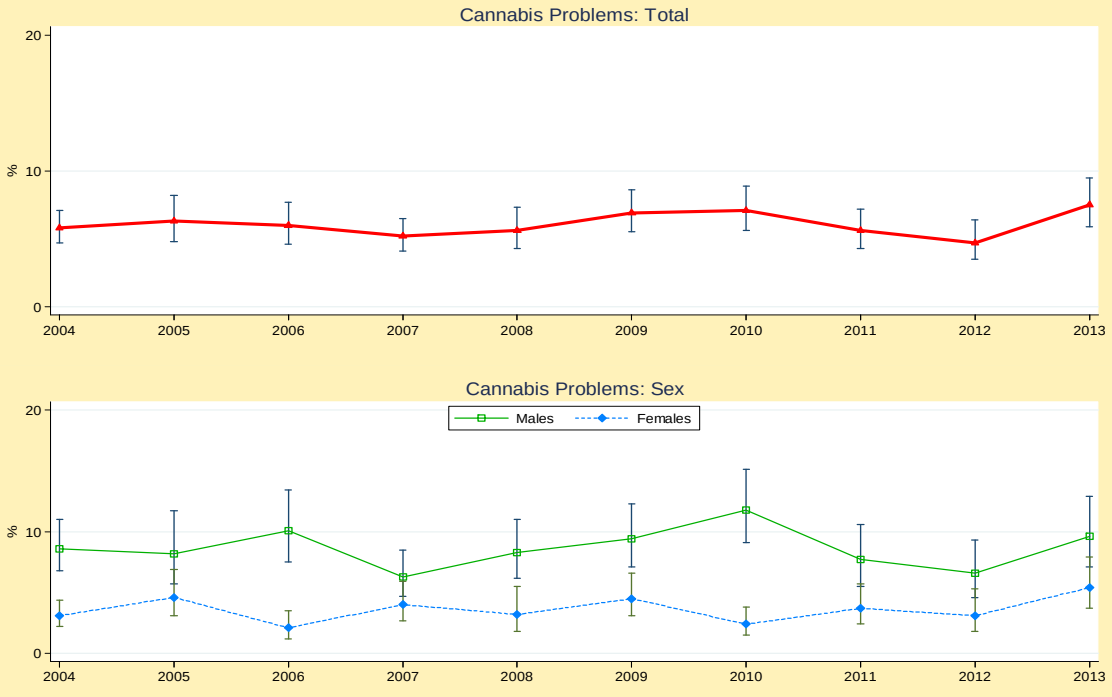
**Percentage Reporting Cannabis Problems in the Past 3 Months by Sex and Age, Ontarians Aged 18+, 2013 (N=2060)**




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: 2013 CAMH Monitor

Figure 5.1.5

**Percentage Reporting Cannabis Problems in the Past 3 Months, Ontarians Aged 18+, 2004–2013**




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

## 5.2 Cocaine Use

**2013 …….** Tables 5.2.1, 5.2.2
Fig. 5.2.1

*In this section we emphasize lifetime cocaine use given that estimates of past year use are statistically unstable and therefore only estimates by sex and age are reported.*

Overall, an estimated **7.7%** (95% CI: 6.5% to 9.1%) of Ontario adults used cocaine in their lifetime, and **1.5%** (95% CI: 1.0% to 2.4%) used it in the 12 months before the survey. The respective population estimates for lifetime and past year use are 783,700 (95% CI: 648,200 to 919,200) and 153,700 adults (95% CI: 84,200 to 223,200). Among those reporting lifetime use, the majority (80.4%) did not use in the past 12 months.

**Sex, age, marital status, education and income** were 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 2.3 times higher among men than women (10.8% vs. 4.9%).
- Although lifetime use showed substantial age variation, from 5.3% to 10.3%, there was no dominant age-related pattern. The adjusted odds comparisons showed that lifetime use was significantly lower among those aged 50 and older than among 40 to 49 year olds (5.3% vs. 9.8%; OR = 0.50).
- Marital status was also significantly related to lifetime cocaine use. The adjusted odds of lifetime cocaine use were two times higher among those previously married compared to married respondents (9.2% vs. 6.8%; OR=2.1)
- The adjusted odds of lifetime cocaine use were significantly lower among those with a university degree than among those with high school not completed (5.4% vs. 10.6%; OR=0.30).
- Household income showed a weak, but significant association with lifetime cocaine use. The distinguishing feature was a higher rate among those with incomes of $30,000 or lower (12.1%), and a significantly lower rate among those who did not declare their income (OR=0.33).

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

### Trends

**1984–2013……** Table 5.2.2;
Fig. 5.2.2

#### 2012–2013

Lifetime use of cocaine was stable between the two most recent surveys (7.7% in 2013 vs. 7.9% in 2012). Although past year cocaine use was numerically higher in 2013 (1.5%) than 2012 (1.2%), this difference failed to reach a statistically significant difference.

#### 1984–2013

Lifetime cocaine use **increased significantly** between 1984 and 2013, from 3.3% to 7.7%, but seems to have stabilized in the past 3 years. This increase was also evident among both men and women and among both age groups analysed. There were no significant year by sex or year by age interactions.

**Past year cocaine use** remained low and stable (under 2.2%) during the same period. There were no significant year by sex or year by age interactions. We found, however, a **significant increase** in past year cocaine use among 18 to 29 year olds, from 1.1% in 1996 to 5.0% in 2013.

Table 5.2.1: Percentage ***Using Cocaine*** During Lifetime and Adjusted Group Differences, Ontarians Aged 18+, 2013

| | N | % | 95% CI | Adjusted Odds Ratio (N=2912) |
|---|---|---|---|---|
| **Total** | 3021 | **7.7** | (6.5, 9.1) | — |
| **Sex** | | | | *** |
| Men | 1232 | **10.8** | (8.7, 13.3) | **2.30*** ** |
| Women *(Comparison Group)* | 1789 | **4.9** | (3.8, 6.4) | — |
| **Age** | | | | ** |
| *(Comparison Group is previous age group)* | | | | |
| 18-29 | 182 | **†9.8** | (6.0, 15.8) | — |
| 30-39 | 303 | **†10.3** | (7.1, 14.8) | 1.48 |
| 40-49 | 556 | **9.8** | (7.3, 13.2) | 0.91 |
| 50+ | 1924 | **5.3** | (4.2, 6.6) | **0.50**** |
| **Public Health Region** | | | | NS |
| Toronto *(vs. Provincial Average)* | 503 | **†9.4** | (6.7, 12.9) | 1.48 |
| Central South | 238 | **†6.4** | (3.5, 11.4) | 0.81 |
| Central West | 403 | **†6.8** | (4.4, 10.3) | 0.83 |
| South West | 497 | **†5.7** | (3.6, 9.1) | 0.71 |
| Central East | 411 | **†9.2** | (6.0, 14.0) | 1.18 |
| East | 502 | **†7.2** | (4.9, 10.5) | 0.95 |
| North | 467 | **†7.7** | (5.2, 11.4) | 0.90 |
| **Marital Status** | | | | * |
| Married/Partner *(Comparison Group)* | 1926 | **6.8** | (5.5, 8.3) | — |
| Previously Married | 653 | **†9.2** | (6.4, 13.0) | **2.08**** |
| Never Married | 409 | **†10.0** | (6.7, 14.7) | 1.48 |
| **Education** | | | | * |
| High school not completed *(Comparison Group)* | 355 | **†10.6** | (5.7, 18.9) | — |
| Completed high school | 638 | **†8.8** | (6.2, 12.4) | 0.73 |
| Some college or university | 1053 | **8.7** | (6.7, 12.4) | 0.63 |
| University degree | 939 | **5.4** | (4.0, 7.3) | **0.30**** |
| **Household Income** | | | | * |
| < $30,000 *(Comparison Group)* | 303 | **†12.1** | (7.8, 18.3) | — |
| $30,000-$49,999 | 370 | **†6.3** | (3.6, 11.0) | 0.67 |
| $50,000-$79,999 | 526 | **†6.3** | (4.0, 9.6) | 0.71 |
| $80,000+ | 1089 | **10.5** | (8.3, 13.2) | 1.32 |
| Not stated | 733 | **†3.3** | (1.9, 5.6) | **0.33**** |

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.
(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 (complete case sample size N=2912).

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*** During the Past 12 Months and Adjusted Group Differences, Ontarians Aged 18+, 2013

| | N | % | 95% CI | Adjusted Odds Ratio (N=2958) |
|---|---|---|---|---|
| **Total** | 3021 | **†1.5** | (1.0, 2.4) | — |
| **Sex** | | | | NS |
| Men | 1232 | **†2.2** | (1.2, 3.8) | 2.18 |
| Women *(Comparison Group)* | 1789 | **†1.0** | (0.5, 1.8) | — |
| **Age** | | | | ******* |
| 18-29 | 182 | **†5.0** | (2.5, 9.7) | **6.14***** |
| 30+ *(Comparison Group)* | 2783 | **†0.9** | (0.5, 1.4) | — |

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.
(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 (complete case sample size N = 2958).
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*** During ***Lifetime***, by Demographic Characteristics, Ontarians Aged 18+, 1984–2013

| (N= ) | 1984 (1050) | 1987 (1081) | 1989 (1101) | 1991 (1047) | 1994 (2022) | 1996 (2721) | 1998 (2509) | 2000 (2406) | 2002 (2421) | 2003 (2411) | 2004 (2611) | 2006 (2016) | 2008 (2024) | 2010 (2024) | 2011 (1999) | 2012 (2015) | 2013 (3021) | Change | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | | | | | | | | | | | | | | | | | | | |
| **Lifetime Use** | **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** | **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) | | |
| **Sex** | | | | | | | | | | | | | | | | | | **NSI** | |
| 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** | **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) | | |
| 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** | **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) | | |
| **Age** | | | | | | | | | | | | | | | | | | **NSI** | |
| 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** | **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) | | |
| 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** | **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] | | |

Notes: (1) [a] 95% confidence interval; †Estimate suppressed or unstable; all estimates and analyses are sample design adjusted; — data not available;
(2) Trend Analysis: **–** change not statistically significant at p<.05; **T** significant change (p<.05) between 1996 and 2013; (3) **NSI**, non-significant YEAR × FACTOR interaction;
*Q:* *Have you ever in your lifetime used cocaine?*
Source: The *CAMH Monitor*, Centre for Addiction and Mental Health

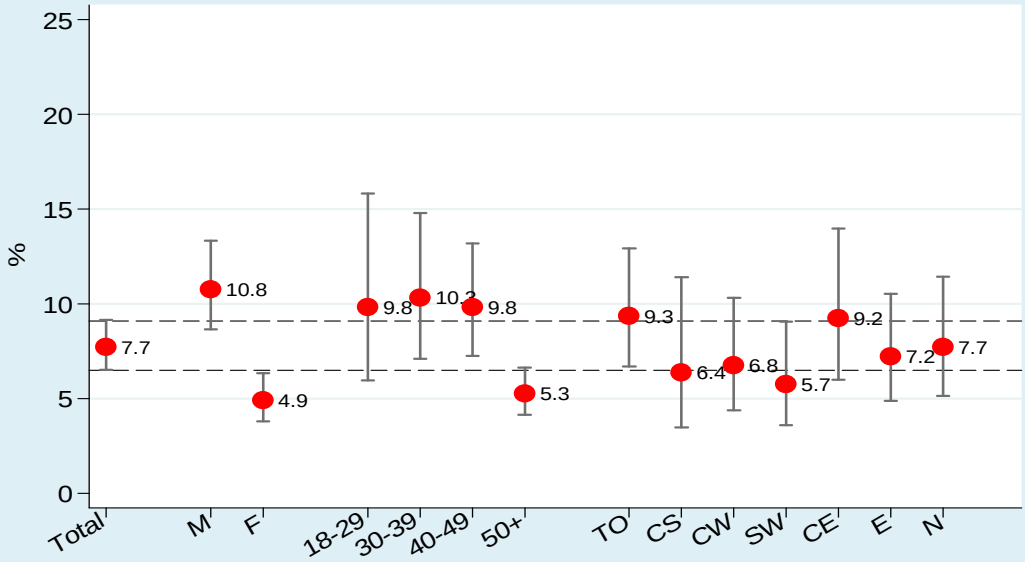
Table 5.2.4: Percentage ***Using Cocaine*** During the ***Past 12 Months***, by Demographic Characteristics, Ontarians Aged 18+, 1984–2013

| (N= ) | 1984 (1050) | 1987 (1081) | 1989 (1101) | 1991 (1047) | 1994 (2022) | 1996 (2721) | 1998 (2509) | 2000 (2406) | 2002 (2421) | 2003 (2411) | 2004 (2611) | 2006 (2016) | 2008 (2024) | 2010 (2024) | 2011 (1999) | 2012 (2015) | 2013 (3021) | Change | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | | | | | | | | | | | | | | | | | | | |
| **Past year Use** | **†1.7** | **†1.8** | **†2.1** | **†1.6** | **†1.0** | **†1.0** | **†1.0** | **†1.4** | **†1.5** | **†1.6** | **†1.4** | **†1.7** | **†1.0** | **†1.8** | **†1.1** | **†1.2** | **†1.5** | **–** | **–** |
| (95% CI) [a] | (0.9, 2.5) | (1.0, 2.6) | (1.3, 2.9) | (0.8, 2.4) | (0.3, 1.3) | (0.4, 1.4) | (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) | | |
| **Sex** | | | | | | | | | | | | | | | | | | **NSI** | |
| Men | **†2.9** | **†2.5** | **†2.4** | **†3.1** | **†** | **†1.1** | **†1.6** | **†2.1** | **†2.3** | **†1.9** | **†2.6** | **†3.0** | **†** | **†2.6** | **†2.0** | **†1.6** | **†2.2** | **–** | **–** |
| | (1.5, 4.3) | (1.2, 3.8) | (1.1, 3.7) | (1.6, 4.6) | — | (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) | | |
| Women | **†** | **†1.1** | **†1.8** | **†** | **†** | **†** | **†** | **†** | **†** | **†1.2** | **†** | **†** | **†** | **†** | **†** | **†** | **†1.0** | **–** | **–** |
| | — | (0.2, 2.0) | (0.7, 2.9) | — | — | — | — | — | — | (0.7, 2.1) | — | — | — | — | — | — | (0.5, 1.8) | | |
| **Age** | | | | | | | | | | | | | | | | | | **NSI** | |
| 18-29 | **†4.1** | **†4.7** | **6.1** | **†2.0** | **†1.6** | **†1.1** | **†2.9** | **†5.1** | **†4.3** | **†4.3** | **†4.9** | **†4.9** | **†1.5** | **†3.5** | **†3.5** | **†4.9** | **†5.0** | **T** | **–** |
| | (1.7, 6.5) | (2.0, 7.4) | (3.1, 9.1) | (0.3, 3.7) | (0.5, 2.7) | (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) | | |
| 30+ | **†** | **†** | **†** | **†1.1** | **†** | **†** | **†** | **†** | **†0.8** | **†0.8** | **†** | **†** | **†** | **†1.4** | **†** | **†** | **†0.9** | **–** | **–** |
| | — | — | — | (0.1, 2.3) | — | — | — | — | (0.4, 1.4) | (0.5, 1.3) | — | — | — | (0.8, 2.4) | — | — | (0.5, 1.4) | | |

Notes: (1) [a] 95% confidence interval; †Estimate suppressed or unstable; all estimates and analyses are sample design adjusted;
(2) Trend Analysis (total only): **–** change not statistically significant at p<.05; **T** significant change (p<.05) between 1996 and 2013; (3) **NSI**, non-significant YEAR × FACTOR interaction;
*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

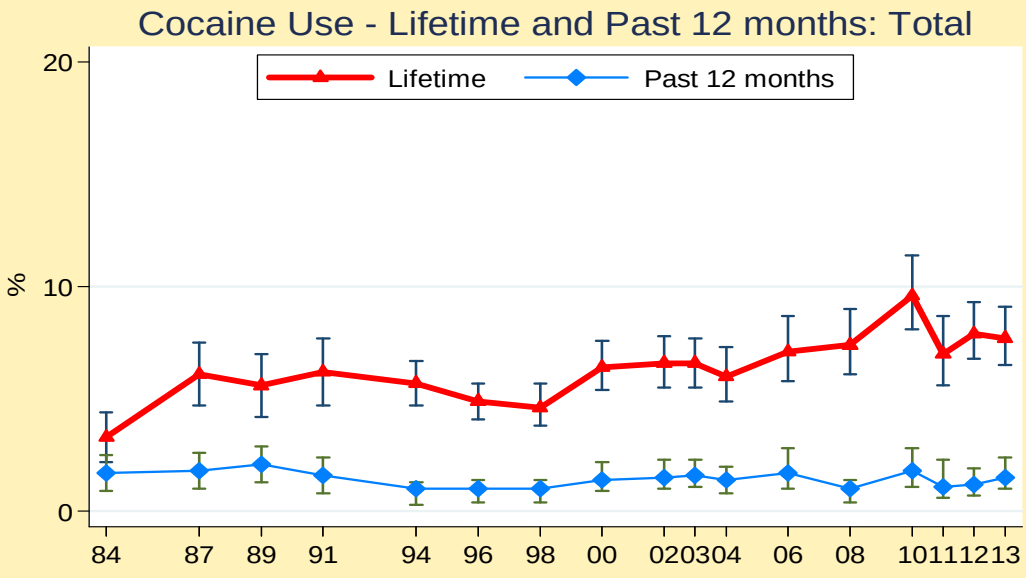
**Lifetime Cocaine Use by Sex, Age and Region, Ontarians Aged 18+, 2013 (N=3021)**




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: 2013 CAMH Monitor

Figure 5.2.2

**Cocaine Use, Ontarians Aged 18+, 1984–2013**




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

## 5.3 Use of Prescription Opioid Pain Relievers

In response to relatively recent American increases in the use of pain relievers (Fischer, 2008), a new 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 Percodan™, 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 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, Percodan, Demerol, Oxycontin, Tylenol #3 or other products)?"* Responses were coded as *any past year use* (coded 1) versus *no use* (coded 0).

**Any past year nonmedical use** of 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 coded as *any nonmedical past year use* (coded 1) versus *no use* (coded 0). The pain reliever module was asked only of Panel B respondents (N=2,060 respondents).

**2013** ..... Table 5.3.1
Fig. 5.3.1; 5.3.2

Overall, an estimated **22.2%** (95% CI: 20.0% to 24.6%) of Ontario adults reported **any past year use** of pain relievers, and **2.8%** (95% CI: 1.9% to 4.1%) reported **any past year nonmedical use** of pain relievers. The respective population estimates for any past year use and any past year nonmedical use are, respectively, 2,324,800 (95% CI: 2,080,100 to 2,569,500) and 294,500 Ontario adults (95% CI: 180,200 to 408,900).

Only **education** was significantly related to any past year use of pain relievers.

- The distinguishing feature was a significantly lower rate 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 respondents who completed high school (OR=0.48), and among those with a university degree (OR=0.53).

There were no other significant differences by subgroups after adjusting for other demographic characteristics.

**Age** and **education** were significantly related to any past year **nonmedical use** of pain relievers after controlling for other predictors.

- Past year nonmedical use of pain relievers varied from a high of 7.4% among 18 to 29 year olds, to a low of 1.1% among those 50 and older. Only one of the four sequential age group comparisons was statistically significant: The adjusted odds of past year nonmedical use of pain

relievers were significantly lower (by 62%) among those 50 and older than those aged 40 to 49 (OR = 0.38).

- Relative to those not completing high school, the adjusted odds of past year nonmedical use of pain relievers were lower among respondents with higher education.

## Trends

**2010–2013** ..... Tables 5.3.2; 5.3.3
Fig. 5.3.3

Past year **use of any prescription opioid** declined significantly from 26.6% in 2010 to 22.2% in 2013.

Year did not interact significantly with any of the demographic factors analysed, suggesting trends in each subgroup are not significantly different. There were significant declines during this period for both men and women, for those aged 50 years or older, for some regions, for those married, and for those with completed high school and those with some postsecondary education.

Past year **nonmedical use** of prescription opioid pain relievers displayed similar declining trends. The proportion of Ontario adults who reported past year **nonmedical use** of prescription opioid pain relievers **dropped** significantly from 7.7% in 2010 to 2.8% in 2013.

Year interacted significantly only with age, indicating that trends in **nonmedical use** of prescription opioids differed among the age groups.

**Differential age group trends** suggest that estimates for the younger group (18 to 29 year olds) were stable (around 7%) during this period, whereas among the other age groups, past year **nonmedical use** of prescription opioids declined significantly. Year did not interact with sex, region, marital status and education level, suggesting similar declining trends in each subgroup.

Table 5.3.1: Percentage ***Reporting Any Use and Any Nonmedical Use of Prescription Opioid (PO) Pain Relievers*** During the Past 12 Months, Ontarians, Aged 18+, 2013

| | | Any use of PO | | | Any nonmedical use of PO | | |
|---|---|---|---|---|---|---|---|
| | N | % | 95% CI | Adjusted Odds Ratio (N=1982) | % | 95% CI | Adjusted Odds Ratio (N=1982) |
| **Total** | 2060 | **22.2** | (20.0, 24.6) | — | **†2.8** | (1.9, 4.1) | — |
| **Sex** | | | | NS | | | NS |
| Men | 878 | **21.5** | (18.3, 25.0) | 0.91 | **†3.6** | (2.1, 5.9) | 1.25 |
| Women *(Comparison Group)* | 1182 | **22.9** | (20.0, 26.2) | — | **†2.1** | (1.2, 3.6) | — |
| **Age** | | | | NS | | | * |
| *(Comparison Group is previous age group)* | | | | | | | |
| 18-29 | 130 | **†19.3** | (13.0, 27.7) | — | **†7.4** | (3.6, 13.2) | — |
| 30-39 | 207 | **23.0** | (17.3, 29.9) | 1.03 | **†3.6** | (1.6, 7.9) | 0.47 |
| 40-49 | 378 | **21.6** | (17.2, 26.7) | 0.91 | **†2.3** | (1.1, 4.7) | 0.65 |
| 50+ | 1305 | **23.5** | (22.9, 26.4) | 1.13 | **†1.1** | (0.6, 1.9) | **0.38*** |
| **Public Health Region** | | | | NS | | | NS |
| Toronto *(vs. Provincial Average)* | 335 | **25.4** | (20.0, 31.6) | 1.28 | **†2.6** | (1.1, 6.4) | 1.55 |
| Central South | 164 | **22.4** | (15.9, 30.7) | 1.06 | **†** | — | — |
| Central West | 287 | **21.1** | (15.9, 27.5) | 0.94 | **†2.7** | (1.1, 6.5) | 0.99 |
| South West | 342 | **24.9** | (19.9, 30.7) | 1.15 | **†2.7** | (1.3, 5.8) | 0.95 |
| Central East | 290 | **18.3** | (13.6, 24.1) | 0.76 | **†4.3** | (1.9, 9.4) | 1.40 |
| East | 329 | **20.8** | (16.4, 26.0) | 0.91 | **†** | — | — |
| North | 313 | **26.4** | (20.9, 32.9) | 1.18 | **†** | — | — |
| **Marital Status** | | | | NS | | | NS |
| Married/Partner *(Comparison Group)* | 1323 | **22.4** | (19.9, 25.1) | — | **†2.1** | (1.3, 3.3) | — |
| Previously Married | 432 | **26.6** | (21.8, 32.1) | 1.08 | **†1.3** | (0.5, 2.9) | 0.69 |
| Never Married | 279 | **19.4** | (14.0, 26.2) | 0.85 | **†6.0** | (3.1, 11.4) | 0.92 |
| **Education** | | | | * | | | ** |
| High school not completed *(Comparison)* | 256 | **31.0** | (23.4, 39.7) | — | **†8.2** | (3.9, 16.4) | — |
| Completed high school | 426 | **17.8** | (13.6, 22.9) | **0.48**** | **†3.7** | (1.9, 7.2) | 0.32 |
| Some college or university | 737 | **23.9** | (20.3, 28.0) | 0.68 | **†1.9** | (0.9, 4.0) | **0.14**** |
| University degree | 618 | **20.6** | (17.0, 24.7) | **0.53*** | **†** | — | — |
| **Household Income** | | | | NS | | | NS |
| < $30,000 *(Comparison Group)* | 213 | **32.1** | (23.7, 41.7) | — | **†** | — | — |
| $30,000-$49,999 | 246 | **22.8** | (16.9, 30.1) | 0.65 | **†** | — | — |
| $50,000-$79,999 | 374 | **22.8** | (18.1, 28.2) | 0.70 | **†1.9** | (0.8, 4.3) | 0.65 |
| $80,000+ | 742 | **23.0** | (19.5, 26.9) | 0.77 | **†3.7** | (2.2, 6.2) | 1.20 |
| Not stated | 485 | **17.5** | (13.5, 22.3) | 0.49* | **†** | — | — |

Notes: Opioid pain reliever items were asked of a random sub-sample (N= 2060); 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 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 (complete case sample size N= 1982 for both any use and any nonmedical use).

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*** During the Past 12 Months, Ontarians, Aged 18+, 2010–2013

| (N=) | 2010 (2024) | 2011 (1999) | 2012 (2015) | 2013 (2060) | Change |
|---|---|---|---|---|---|
| **Total Sample** | **26.6** | **23.9** | **21.1** | **22.2** | **T –** |
| (95%CI)[a] | (23.3, 29.1) | (21.7, 26.3) | (18.9, 23.4) | (20.0, 24.6) | |
| **Sex** | | | | | **NSI** |
| Men | **25.3** | **24.1** | **19.3** | **21.5** | **T –** |
| | (21.9, 29.0) | (20.6, 28.0) | (16.2, 22.9) | (18.3, 25.0) | |
| Women | **27.9** | **23.8** | **22.7** | **22.9** | **T –** |
| | (24.9, 31.2) | (21.0, 26.8) | (19.9, 25.9) | (20.0, 26.2) | |
| **Age** | | | | | **NSI** |
| 18-29 | **22.4** | **26.0** | **†21.8** | **†19.3** | **– –** |
| | (16.5, 29.7) | (19.4, 33.8) | (15.3, 30.2) | (13.0, 27.7) | |
| 30-39 | **21.4** | **22.3** | **16.7** | **23.0** | **– –** |
| | (16.3, 26.6) | (17.0, 28.6) | (12.1, 22.5) | (17.3, 29.9) | |
| 40-49 | **27.1** | **22.9** | **20.4** | **21.6** | **– –** |
| | (22.3, 32.6) | (18.4, 28.2) | (15.9, 25.7) | (17.2, 26.7) | |
| 50+ | **30.4** | **24.8** | **23.4** | **23.5** | **T –** |
| | (27.3, 33.6) | (22.0, 27.8) | (20.8, 26.3) | (20.9, 26.4) | |
| **Region** | | | | | **NSI** |
| Toronto | **24.2** | **22.3** | **23.9** | **25.4** | **– –** |
| | (19.1, 30.1) | (17.3, 28.1) | (18.4, 30.3) | (20.0, 31.6) | |
| Central South | **30.9** | **26.0** | **32.5** | **†22.4** | **– –** |
| | (23.4, 39.5) | (19.3, 34.0) | (25.1, 40.9) | (15.9, 30.7) | |
| Central West | **21.3** | **27.2** | **17.9** | **21.1** | **– –** |
| | (16.0, 27.8) | (21.2, 34.1) | (13.0, 24.2) | (15.9, 27.5) | |
| South West | **27.9** | **22.6** | **15.5** | **24.9** | **T 2Y** |
| | (22.8, 33.7) | (18.1, 27.9) | (11.7, 20.1) | (19.9, 30.7) | |
| Central East | **30.9** | **20.5** | **18.8** | **18.3** | **T –** |
| | (24.9, 37.5) | (15.4, 26.6) | (14.2, 24.5) | (13.6, 24.1) | |
| East | **27.3** | **24.1** | **20.6** | **20.8** | **T –** |
| | (22.2, 33.1) | (19.2, 29.7) | (16.2, 25.8) | (16.4, 26.0) | |
| North | **26.7** | **29.6** | **23.1** | **26.4** | **– –** |
| | (21.4, 32.8) | (23.6, 36.3) | (17.9, 29.2) | (20.8, 32.9) | |
| **Marital Status** | | | | | **NSI** |
| Married/Partner | **26.2** | **23.3** | **20.3** | **22.4** | **T –** |
| Previously Married | **31.2** | **29.2** | **24.3** | **26.6** | **– –** |
| Never Married | **25.5** | **23.4** | **22.2** | **19.4** | **– –** |
| **Education** | | | | | **NSI** |
| High school not completed | **29.5** | **28.9** | **27.0** | **31.0** | **– –** |
| Completed high school | **29.9** | **26.2** | **23.5** | **17.8** | **T –** |
| Some college or university | **27.6** | **24.3** | **19.5** | **23.9** | **T –** |
| University degree | **22.9** | **20.8** | **19.5** | **20.6** | **– –** |

Notes: (1) All analyses are sample design adjusted; [a] 95% confidence interval; † Estimate suppressed or unstable;
(2) Trend Analysis: **–** change not statistically discernible at p<.05; **T** discernible change (p<.05) between 2010–2013; **2Y** discernible change (p<.05) between last two estimates;
(3) **NSI**, non-discernible YEAR × FACTOR interaction.
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 Opioid Pain Relievers*** During the Past 12 Months, Ontarians, Aged 18+, 2010-2013

| (N=) | 2010 (2024) | 2011 (1999) | 2012 (2015) | 2013 (2060) | Change |
|---|---|---|---|---|---|
| **Total Sample** | **7.7** | **3.9** | **†1.9** | **†2.8** | **T –** |
| (95%CI)[a] | (6.4, 9.3) | (2.9, 5.3) | (1.2, 2.9) | (1.9, 4.1) | |
| **Sex** | | | | | **NSI** |
| Men | **8.1** | **†5.5** | **†2.1** | **†3.6** | **T –** |
| | (6.2, 10.6) | (3.6, 8.1) | (1.1, 4.1) | (2.1, 5.9) | |
| Women | **7.4** | **†2.6** | **†1.7** | **†2.0** | **T –** |
| | (5.7, 9.5) | (1.8, 3.8) | (1.0, 2.8) | (1.2, 3.6) | |
| **Age** | | | | | **** |
| 18-29 | **†7.0** | **†7.0** | **†** | **†7.4** | **– –** |
| | (4.1, 11.6) | (3.6,13.2) | – | (3.8, 14.1) | |
| 30-39 | **†6.6** | **†** | **†** | **†3.6** | **T –** |
| | (3.8, 11.2) | – | – | (1.6, 7.9) | |
| 40-49 | **†8.9** | **†5.7** | **†** | **†2.3** | **T –** |
| | (5.9, 13.4) | (3.5,9.1) | – | (1.1, 4.7) | |
| 50+ | **7.9** | **†2.1** | **†1.5** | **†1.1** | **T –** |
| | (6.2, 10.0) | (1.4, 3.1) | (0.8, 2.6) | (0.6, 1.9) | |
| **Region** | | | | | **NSI** |
| Toronto | **†8.5** | **†4.3** | **†** | **†2.6** | **T –** |
| | (5.4, 12.9) | (2.4, 7.5) | – | (1.0, 6.4) | |
| Central South | **†6.8** | **†** | **†6.1** | **†** | **– –** |
| | (3.6, 12.3) | – | (3.2, 11.2) | – | |
| Central West | **†6.9** | **†6.1** | **†** | **†2.7** | **T –** |
| | (4.1, 11.3) | (3.0,11.7) | – | (1.1, 6.5) | |
| South West | **†8.6** | **†3.4** | **†** | **†2.7** | **T –** |
| | (5.7, 12.8) | (1.8,6.3) | – | (1.3, 5.8) | |
| Central East | **†9.5** | **†** | **†** | **†4.3** | **T –** |
| | (6.1, 14.5) | – | – | (1.9, 9.4) | |
| East | **†5.5** | **†2.7** | **†** | **†** | **T –** |
| | (3.4, 8.9) | (1.3, 5.3) | – | – | |
| North | **†6.8** | **†5.1** | **†** | **†** | **T –** |
| | (4.1, 10.9) | (3.0, 8.4) | – | – | |
| **Marital Status** | | | | | **NSI** |
| Married/Partner | **6.9** | **†3.2** | **†1.5** | **†2.1** | **T –** |
| Previously Married | **†9.8** | **†** | **†** | **†1.3** | **T –** |
| Never Married | **†9.0** | **†6.3** | **†** | **†6.0** | **– –** |
| **Education** | | | | | **NSI** |
| High school not completed | **†6.9** | **†** | **†** | **†8.2** | **– –** |
| Completed high school | **†10.5** | **†4.2** | **†** | **†3.7** | **T –** |
| Some college or university | **†6.1** | **†4.8** | **†1.4** | **†1.9** | **T –** |
| University degree | **†7.9** | **†3.1** | **†** | **†** | **T –** |

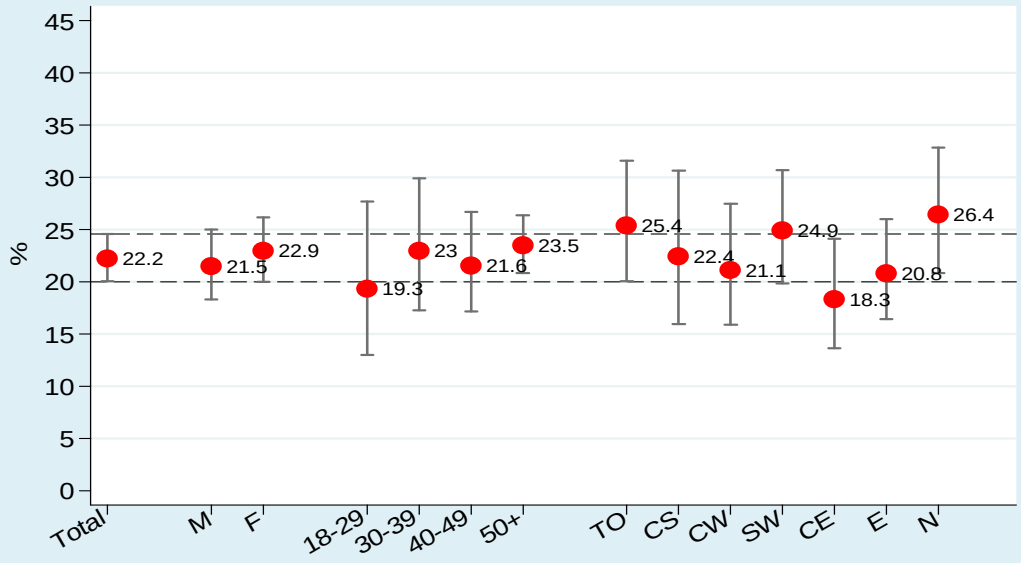
Notes: (1) All analyses are sample design adjusted; [a] 95% confidence interval; † Estimate suppressed or unstable;
(2) Trend Analysis: **–** change not statistically discernible at p<.05; **T** discernible change (p<.05) between 2010–2013; **2Y** discernible change (p<.05) between last two estimates;
(3) **NSI**, non-discernible YEAR × FACTOR interaction.

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

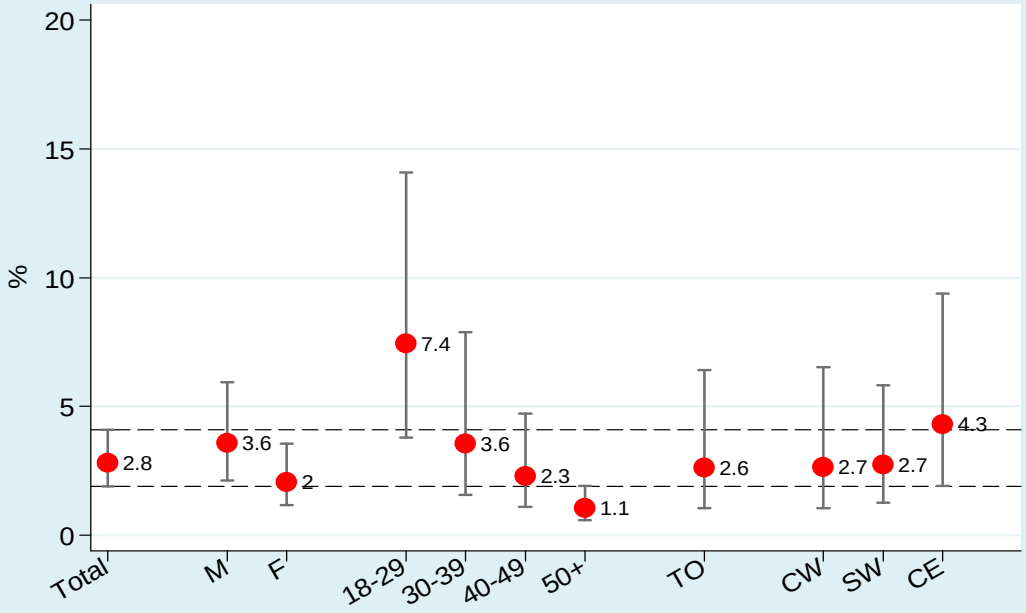
**Any Use of Prescription Opioid Pain Relievers by Gender, Age or Region, Ontarians Aged 18+, 2013 (N=2060)**




Note: (1) Vertical 'whiskers' represent 95% confidence intervals; (2) horizontal bar represents 95% confidence interval for total estimate
(3) no significant difference by sex, by age or by region
Source: 2013 CAMH Monitor

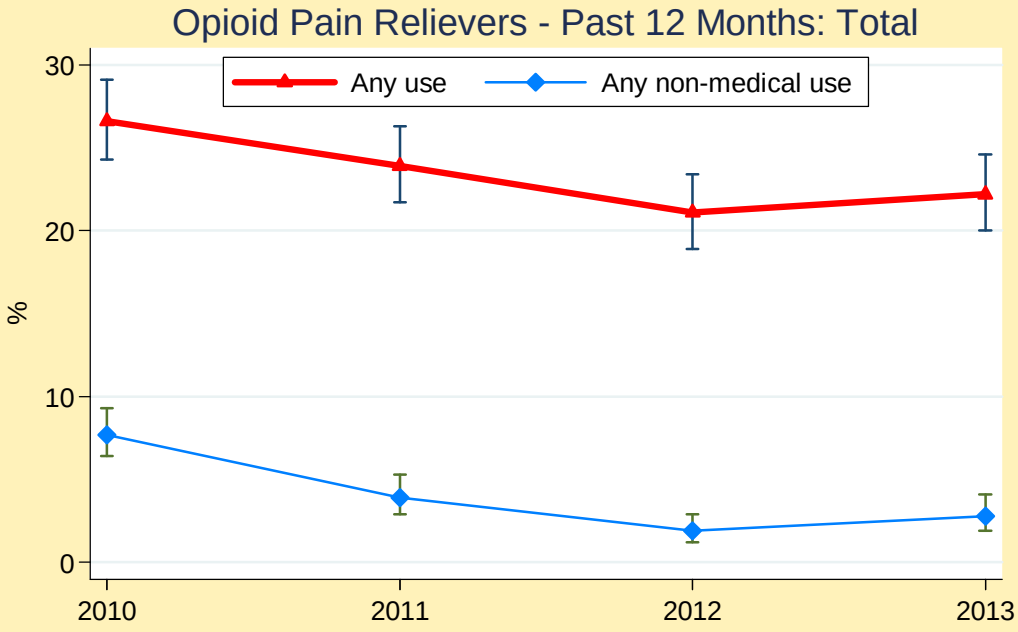
Figure 5.3.2

**Any Nonmedical Use of Prescription Opioid Pain Relievers by Gender, Age or Region, Ontarians Aged 18+, 2013 (N=2060)**




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 regions were suppressed
Source: 2013 CAMH Monitor

Figure 5.3.3
**Opioid Pain Reliever Use, Ontarians Aged 18+, 2010–2013**




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

# 6. DRIVING AND DRUG USE

## 6.1 Past Year Driving after Drinking

**2013**……..Table 6.1.1, Fig. 6.1.1

Provincially, an estimated **5.1%** (95% CI: 3.9% to 6.6%) of Ontario adults with a valid driver's licence reported driving after drinking – **driving after consuming two or more drinks in the previous hour** – at least once during the past 12 months. This prevalence corresponds to a population estimate of 483,100 Ontario licensed drivers (95% CI: 358,400 to 607,800).

After adjusting for demographic risk factors, **sex, marital status** and **income** were significantly related to driving after drinking.

- The adjusted odds of driving after drinking among male drivers were 4.7 times higher than female drivers (8.2% vs. 2.0%; OR=4.68).
- Relative to married drivers, the adjusted odds of driving after drinking were 3.7 times higher among previously married drivers (7.4% vs. 4.0%) and 2 times higher among never married drivers (8.0% vs. 4.0%).
- The rate of driving after drinking increased with income. Compared to those with incomes of less than $30,000, the odds of driving after drinking were higher among drivers with higher incomes.

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

**Trends**……Table 6.1.2, Fig. 6.1.2
**1996–2013**

**2012–2013**
Prevalence of driving after drinking in 2013 (5.1%) did not change significantly from 2012 (4.7%) and 2011 (5.8%). In addition, rates were stable for all demographic subgroups.

**1996–2013**
Since 1996, driving after drinking has displayed a significant **linear decline** from 13.1% to 5.1% in 2013.

Year did not interact significantly with any of the demographic factors analysed, suggesting similar trends in each subgroup. There were significant declines since 1996 for all demographic subgroups.

Significant declines were evident for both men and women and most age categories. The most **striking decline** was seen among **male drivers**, from 21.2% in 1996 to 8.2% in 2013 and among young adult drivers **aged 18 to 29**, from 20.1% in 1996 to 8.9% in 2013.

A significant declining linear trend between 1996 and 2013 was found for **all regions**, but especially for drivers living in **Toronto** (from 14.1% to 4.1%). Moreover, significant declines between 1996 and 2013 also occurred 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*** During the Past 12 Months and Adjusted Group Differences, Ontario Licensed Drivers, Aged 18+, 2013

| | N | % | 95% CI | Adjusted Odds Ratio (N=1802) |
|---|---|---|---|---|
| **Total Drivers**[1] | 1856 | **5.1** | (3.9, 6.6) | — |
| **Sex** | | | | *** |
| Men | 815 | **8.2** | (6.2, 10.8) | **4.68*** ** |
| Women *(Comparison Group)* | 1041 | **†2.0** | (1.1, 3.6) | — |
| **Age** | | | | |
| *(Comparison Group is previous age group)* | | | | NS |
| 18-29 | 107 | **†8.9** | (4.7, 16.4) | — |
| 30-39 | 190 | **†5.1** | (2.5, 9.9) | 1.02 |
| 40-49 | 363 | **†4.0** | (2.3, 6.9) | 0.47 |
| 50-64 | 618 | **†4.7** | (3.1, 6.9) | 1.28 |
| 65+ | 549 | **†4.1** | (2.6, 6.4) | 0.98 |
| **Public Health Region** | | | | NS |
| Toronto *(vs. Provincial Average)* | 265 | **†4.1** | (2.0, 8.4) | 1.42 |
| Central South | 142 | † | — | — |
| Central West | 260 | **†4.2** | (2.1, 8.3) | 0.63 |
| South West | 315 | † | — | — |
| Central East | 269 | **†5.2** | (2.8, 9.6) | 0.96 |
| East | 307 | **†7.4** | (4.4, 12.1) | 1.63 |
| North | 298 | **†8.3** | (5.1, 13.2) | 1.67 |
| **Marital Status** | | | | ** |
| Married/Partner *(Comparison Group)* | 1257 | **4.0** | (3.0, 5.4) | — |
| Previously Married | 361 | **†7.4** | (4.2, 12.9) | **3.71**** |
| Never Married | 221 | **†8.0** | (4.3, 14.2) | 2.03 |
| **Education** | | | | NS |
| High school not completed *(Comparison Group)* | 198 | **†5.1** | (2.2, 11.5) | — |
| Completed high school | 368 | **†4.8** | (2.6, 8.6) | 0.92 |
| Some college or university | 681 | **†6.2** | (4.2, 9.2) | 1.02 |
| University degree | 592 | **†3.9** | (2.4, 6.1) | 0.57 |
| **Household Income** | | | | * |
| < $30,000 *(Comparison Group)* | 158 | † | — | — |
| $30,000-$49,999 | 212 | † | — | — |
| $50,000-$79,999 | 355 | **†5.0** | (2.7, 9.3) | 1.17 |
| $80,000+ | 717 | **7.5** | (5.5, 10.2) | 2.37 |
| Not stated | 414 | † | — | — |

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 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 (complete case sample size N = 1802).

*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 6.1.2: Percentage ***Driving within One Hour after Consuming 2 or More Drinks*** During the Past 12 Months, by Demographic Characteristics, Ontario Licensed Drivers, Aged 18+, 1996–2013

| | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Change | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N= ) | (2360) | (2432) | (2183) | (2101) | (2066) | (2308) | (2132) | (2124) | (2283) | (2126) | (1730) | (1745) | (1809) | (1833) | (2711) | (1812) | (1830) | (1856) | | |
| **Total Drivers**[1] | **13.1** | **10.6** | **10.1** | **10.5** | **8.6** | **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** | **T** | **–** |
| (95% CI) [a] | (11.6,14.7) | (9.3,12.1) | (8.8,11.7) | (9.1,12.1) | (7.3,10.1) | (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) | | |
| **Sex** | | | | | | | | | | | | | | | | | | | **NSI** | |
| Men | **21.2** | **18.6** | **16.0** | **16.5** | **13.6** | **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** | **T** | **–** |
| | (18.5,24.1) | (16.1,21.3) | (13.7,18.7) | (14.1,19.2) | (11.3,16.2) | (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) | | |
| Women | **4.9** | **†2.9** | **4.1** | **4.1** | **3.4** | **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** | **T** | **–** |
| | (3.8,6.4) | (2.1,4.1) | (3.0,5.6) | (3.0,5.5) | (2.4,4.9) | (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) | | |
| **Age** | | | | | | | | | | | | | | | | | | | **NSI** | |
| 18-29 | **20.1** | **13.0** | **14.0** | **13.9** | **11.2** | **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** | **T** | **–** |
| | (16.7,24.7) | (10.0,16.8) | (10.4,18.4) | (10.4,18.4) | (8.2,15.1) | (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) | | |
| 30-39 | **15.4** | **11.4** | **10.3** | **12.6** | **10.2** | **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** | **T** | **–** |
| | (12.4,19.0) | (8.8,16.5) | (7.5,13.3) | (10.0,15.8) | (7.5,13.8) | (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) | | |
| 40-49 | **11.8** | **10.1** | **11.3** | **10.3** | **8.3** | **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** | **T** | **–** |
| | (9.1,15.1) | (7.3,13.8) | (8.6,14.9) | (7.5,13.9) | (6.0,11.4) | (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) | | |
| 50-64 | **7.0** | **9.4** | **8.1** | **8.0** | **† 5.9** | **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** | **T** | **–** |
| | (4.7,10.2) | (6.9,12.6) | (5.8,11.4) | (5.5,11.6) | (3.7,9.3) | (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) | | |
| 65+ | **5.8** | **7.8** | **6.4** | **6.8** | **† 6.0** | **† 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** | **T** | **–** |
| | (3.3,9.9) | (5.2,10.4) | (4.0,10.2) | (4.1,11.0) | (3.3,10.7) | (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) | | |
| **Region** | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | **NSI** | |
| Toronto | **14.1** | **7.8** | **9.9** | **8.5** | **9.0** | **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** | **T** | **–** |
| | (10.3,19.1) | (5.0,14.8) | (6.9,14.1) | (5.7,12.7) | (5.9,13.4) | (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) | | |
| Central South | **17.4** | **12.1** | **9.1** | **11.1** | **† 6.6** | **11.6** | **11.4** | **†6.0** | **†5.7** | **†7.4** | **†4.4** | **10.1** | **†5.2** | **†7.5** | **†6.4** | **†4.2** | **†** | **†** | **T** | **–** |
| | (12.4,23.8) | (8.4,17.2) | (5.6,14.5) | (6.9,17.4) | (3.9,10.9) | (7.4,17.6) | (7.1,17.8) | (3.2,11.0) | (2.7, 11.7) | (4.0, 13.3) | (2.1,8.9) | (5.9,17.0) | (2.5,10.4) | (4.0,13.6) | (3.5,11.4) | (1.5,10.1) | **–** | **–** | | |
| Central West | **12.5** | **9.4** | **10.8** | **8.6** | **8.5** | **8.9** | **†4.6** | **9.3** | **†6.8** | **†8.1** | **†5.6** | **†3.7** | **†7.0** | **†6.8** | **†3.7** | **†10.5** | **†3.9** | **†4.2** | **T** | **–** |
| | (9.2,16.7) | (5.8,14.8) | (7.5,15.4) | (5.7,12.7) | (5.7,12.5) | (6.2,12.7) | (2.5,8.2) | (6.2,13.9) | (4.3, 10.8) | (5.2, 12.4) | (3.1,10.6 | (1.8,7.3) | (4.0,12.1) | (4.0,11.5) | (2.1, 6.5) | (6.5,16.5) | (1.8, 8.1) | (2.1, 8.3) | | |
| South West | **13.1** | **11.4** | **10.4** | **12.4** | **9.3** | **15.6** | **13.2** | **8.5** | **13.1** | **†9.2** | **†7.2** | **10.8** | **†5.2** | **†5.2** | **†6.6** | **†5.9** | **†6.6** | **†** | **T** | **–** |
| | (9.9,17.1) | (8.5,15.1) | (7.5,14.2) | (9.3,16.3) | (6.2,13.7) | (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) | **–** | | |
| Central East | **12.0** | **11.5** | **8.8** | **10.7** | **† 7.0** | **10.1** | **9.5** | **9.2** | **†7.8** | **†6.1** | **†6.5** | **†3.2** | **†8.7** | **†6.0** | **†4.5** | **†3.7** | **†4.5** | **†5.2** | **T** | **–** |
| | (8.5,16.5) | (8.5,15.4) | (5.6,13.4) | (7.2,15.7) | (4.4,11.1) | (6.5,15.6) | (6.2,14.3) | (5.9,14.0) | (4.7, 12.8) | (3.6, 10.1) | (3.4,12.3) | (1.5,7.0) | (5.1, 14.5) | (3.2,11.0) | (2.6, 7.7) | (1.8,7.7) | (2.3, 8.5) | (2.8, 9.6) | | |
| East | **9.5** | **12.2** | **10.0** | **11.7** | **7.6** | **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** | **T** | **–** |
| | (6.8,13.2) | (9.2,16.1) | (7.1,13.8) | (8.5,15.8) | (5.0,11.5) | (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) | | |
| North | **13.9** | **11.5** | **12.8** | **12.8** | **13.2** | **9.9** | **8.1** | **9.0** | **6.8** | **†6.3** | **†7.3** | **†5.0** | **10.7** | **†9.3** | **†5.3** | **†5.2** | **†7.3** | **†8.3** | **T** | **–** |
| | (10.4,18.3) | (8.5,15.3) | (9.4,17.0) | (9.3,17.3) | (9.7,10.1) | (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) | (3.3, 8.4) | (2.5,10.3) | (4.1, 12.6) | (5.1, 13.2) | | |

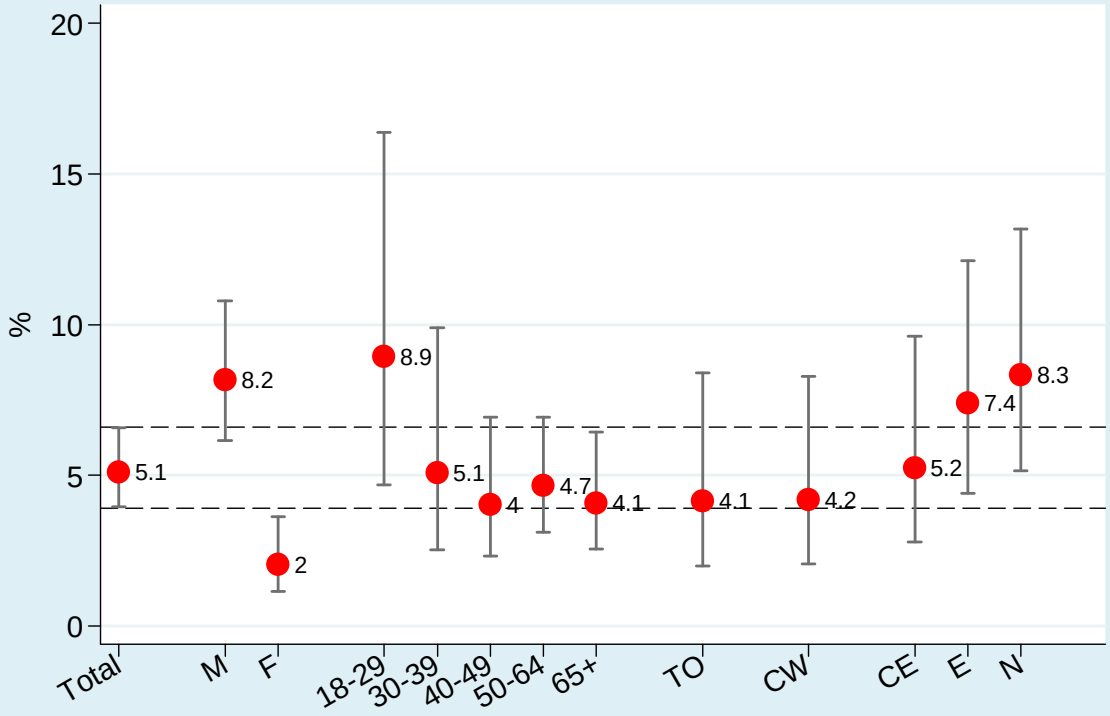
Cont'd

| (N= ) | 1996 (2360) | 1997 (2432) | 1998 (2183) | 1999 (2101) | 2000 (2066) | 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) | Change | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Marital Status** | | | | | | | | | | | | | | | | | | | **NSI** | |
| Married/Partner | **10.5** | **9.0** | **9.1** | **9.7** | **7.4** | **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** | **T** | **–** |
| Previously Married | **13.1** | **14.8** | **12.4** | **9.4** | **10.5** | **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** | **T** | **–** |
| Never Married | **20.7** | **13.4** | **12.5** | **14.1** | **11.3** | **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** | **T** | **–** |
| **Education** | | | | | | | | | | | | | | | | | | | **NSI** | |
| High school not completed | **10.6** | **12.7** | **11.3** | **5.9** | **† 6.2** | **11.4** | **9.3** | **†7.8** | **†6.1** | **†6.1** | **†4.5** | **†5.8** | **10.7** | **†4.3** | **†5.2** | **†3.9** | **†** | **†5.1** | **T** | **–** |
| Completed high school | **14.0** | **9.9** | **9.1** | **11.5** | **11.3** | **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** | **T** | **–** |
| Some college or university | **15.9** | **12.5** | **13.0** | **12.4** | **9.5** | **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** | **T** | **–** |
| University degree | **10.8** | **8.1** | **6.9** | **9.6** | **† 5.9** | **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** | **T** | **–** |

Notes: [1]Driving items were asked only of a random subsample of respondents (Panel B only).
(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 1996-2013; **2Y** statistically significant change (p<.05) between last two estimates.
(3) **NSI**, non-significant YEAR × FACTOR interaction.
*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

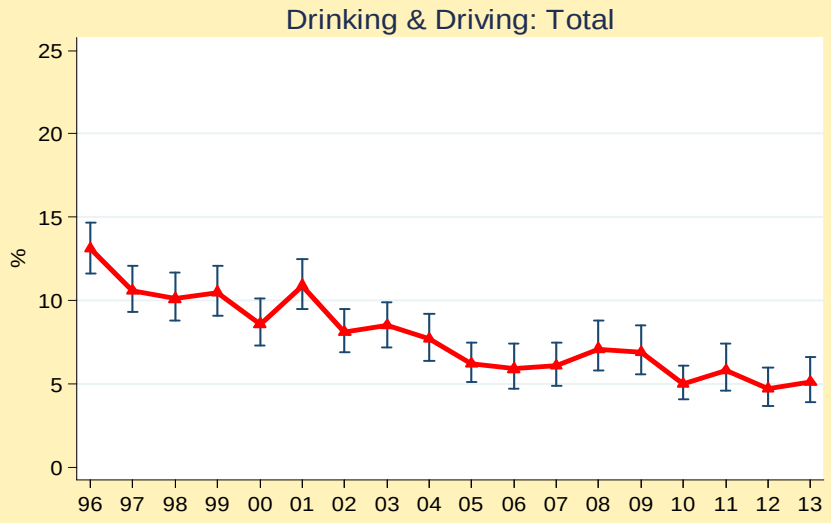
**Percentage Reporting Driving after Drinking in the Past Year by Sex, Age and Region, Ontario Licensed Drivers Aged 18+, 2013 (N=1856)**

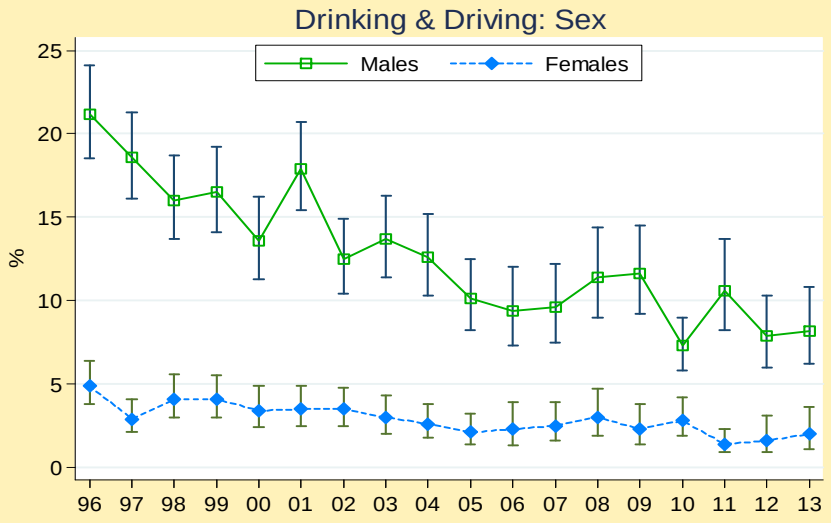


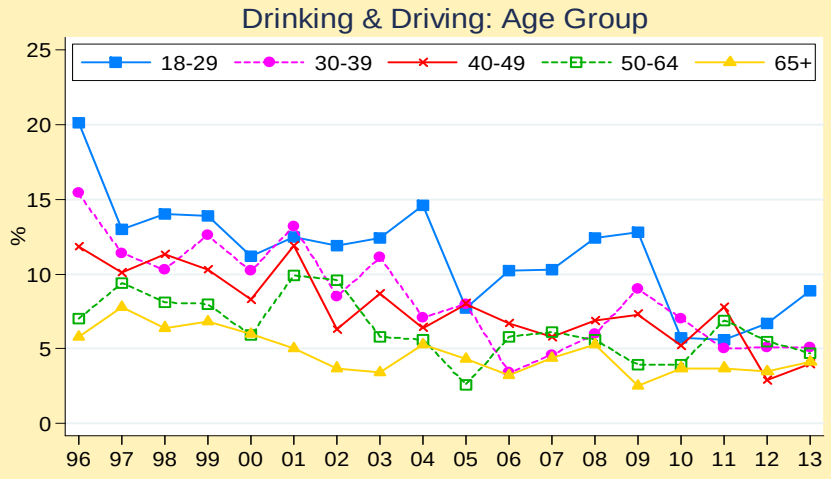

Note: (1) Vertical bars represent 95% confidence intervals; (2) horizontal bar represents 95% confidence interval for total estimate
(3) significant difference by sex (p<.05); (4) estimates for certain regions were suppressed
Source: 2013 CAMH Monitor

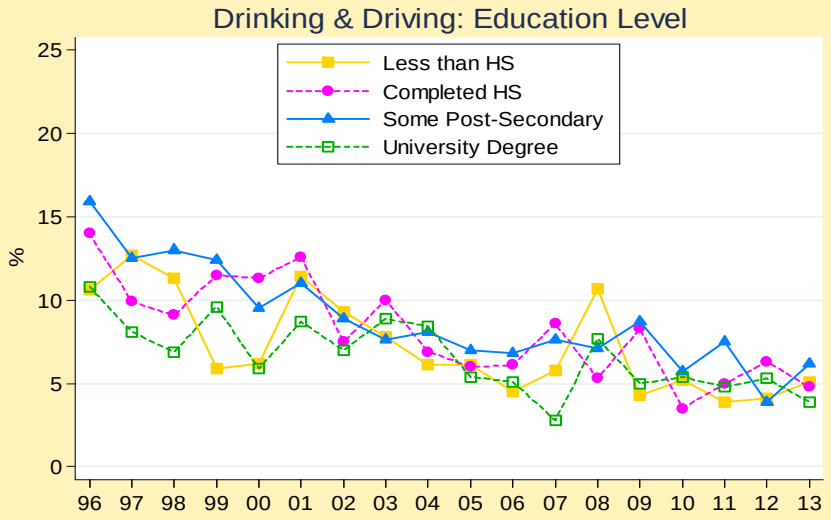
Figure 6.1.2

**Past Year Driving after Drinking, Ontario Licensed Drivers Aged 18+, 1996–2013**




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

## 6.2 Past Year Driving after Cannabis Use

**2013**……..Table 6.2.1, Fig. 6.2.1

*Readers should note that given the moderate sample sizes and low estimated prevalence, most of the cannabis-driving estimates are statistically unstable and therefore only estimates by sex and age are reported.*

Provincially, an estimated **2.3%** (95% CI: 1.5% to 3.5%) 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 215,000 licensed drivers (95% CI: 121,200 to 308,900).

Assessing the effects of sex and age showed the following:

- The adjusted odds of driving after cannabis use were 3.2 times higher among **men** than women (3.4% vs. 1.2%).
- Driving after cannabis use was reported almost exclusively among **young drivers aged 18 to 29** (8.3%), with other age groups reporting very low estimates (estimates that were statistically unstable were suppressed).

### Trends

**2002–2013**……Table 6.2.2, Fig. 6.2.2

#### 2012–2013

The percentage of Ontario adult drivers reporting driving within one hour of consuming cannabis at least one time during the past 12 months in 2013 (2.3%) was not significantly different from 2012 (1.3%) and 2011 (2%). In addition, rates were stable for all demographic subgroups.

#### 2002–2013

Between 2002 and 2013, driving after cannabis use remained virtually unchanged (from 2.9% to 2.3%). Year did not interact significantly with any of the demographic categories analysed, suggesting **similar stable trends**[57] in each subgroup. Significant non-linear trends were found only among young drivers **aged 18 to 29**. Driving after consuming cannabis **increased among young drivers** from 7.2% in 2002 to 11.9% in 2006, then declined to 2.8% in 2009 and then increased almost three-fold in 2013 to 8.3%. No other subgroup changes were evident.

[57] 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*** During the Past 12 Months and Adjusted Group Differences, Ontario Licensed Drivers, Aged 18+, 2013

| | N | % | 95% CI | Adjusted Odds Ratio (N=1826) |
|---|---|---|---|---|
| **Total Drivers**[1] | 1856 | **†2.3** | (1.5, 3.7) | — |
| **Sex** | | | | * |
| Men | 815 | **†3.4** | (2.1, 5.5) | **3.2*** |
| Women *(Comparison Group)* | 1041 | **†1.2** | (0.5, 2.9) | — |
| **Age** | | | | |
| *(Comparison Group is previous age group)* | | | | * |
| 18-29 | 107 | **†8.3** | (4.3, 15.4) | — |
| 30-39 | 190 | † | — | **0.18*** |
| 40-49 | 363 | † | — | 0.92 |
| 50+ | 1167 | **†1.1** | (0.6, 2.3) | 0.74 |

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 (complete case sample size N=1,826).

*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*** During the Past 12 Months, by Demographic Characteristics, Ontario Licensed Drivers, Aged 18+, 2002–2013

| | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Change | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N= ) | (2132) | (2124) | (2283) | (2126) | (1730) | (1745) | (1809) | (1833) | (2711) | (1812) | (1830) | (1856) | | |
| **Total Drivers**[1] | **2.9** | **3.0** | **2.5** | **2.9** | **2.9** | **1.8** | **2.2** | **†1.8** | **†1.5** | **†2.4** | **†1.3** | **†2.3** | **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) | | |
| **Sex** | | | | | | | | | | | | | **NSI** | |
| 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** | **–** | **–** |
| | (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) | | |
| Women | **†1.0** | **1.3** | **†1.0** | **†1.3** | **†1.0** | **†1.3** | **†1.6** | **†** | **†** | **†1.9** | **†** | **†1.2** | **–** | **–** |
| | (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) | | |
| **Age** | | | | | | | | | | | | | **NSI** | |
| 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** | **T** | **–** |
| | (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) | | |
| 30 - 39 | **†4.2** | **†2.1** | **†1.0** | **†3.1** | **†1.5** | **†** | **†2.1** | **†3.4** | **†2.3** | **†** | **†** | **†** | **–** | **–** |
| | (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) | — | — | — | | |
| 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** | **–** | **–** |
| | — | — | — | — | — | — | — | — | — | (0.6, 2.2) | — | (0.6, 2.3) | | |

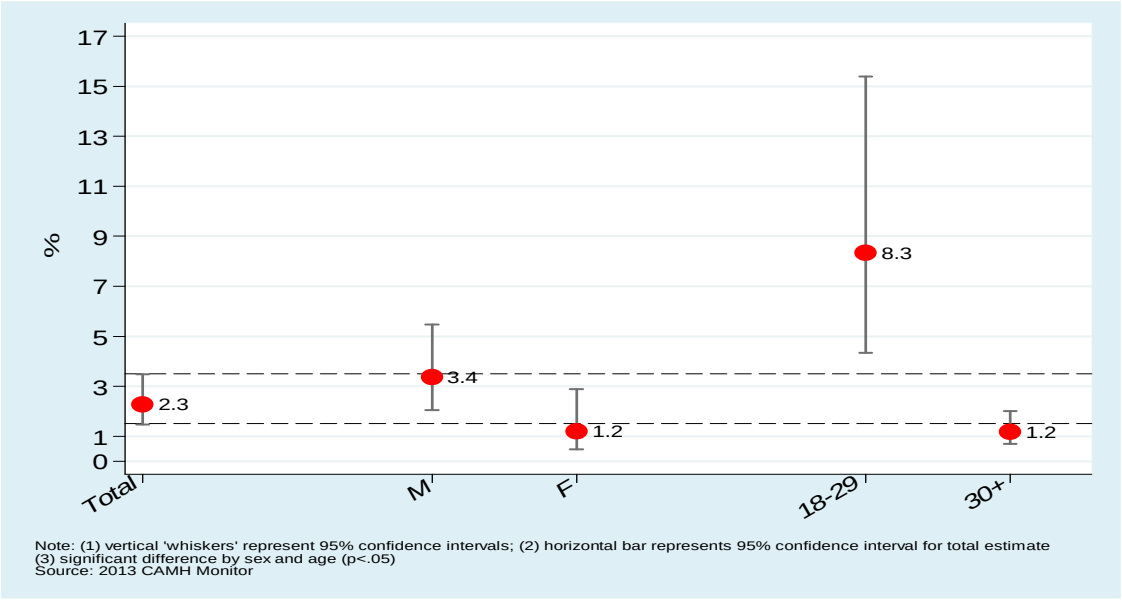
Notes: [1]Driving items were asked only of a random subsample of respondents (Panel B only).
(1) All analyses are sample design adjusted; [a] 95% confidence interval; † Estimate suppressed or unstable;
(2) Trend Analysis: **–** change not statistically significant (p<.05); **T** statistically significant change (p<.05) between 1996-2013; **2Y** statistically significant change (p<.05) between last two estimates;
(3) **NSI**, non-significant YEAR × FACTOR interaction.

*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

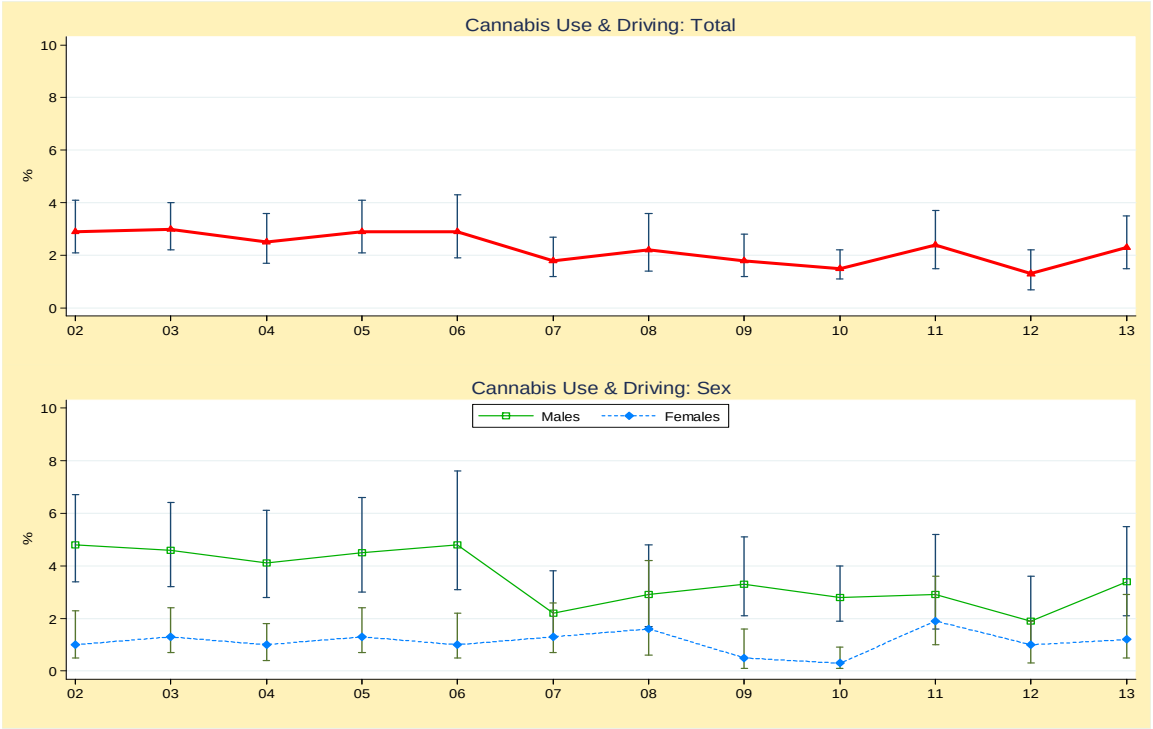
**Percentage Reporting Driving after Cannabis Use in the Past Year by Sex and Age, Ontario Licensed Drivers Aged 18+, 2013 (N=1856)**




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: 2013 CAMH Monitor

Figure 6.2.2

**Past Year Driving after Cannabis Use, Ontario Licensed Drivers Aged 18+, 2002–2013**



# 7. MENTAL HEALTH

## 7.1 Elevated Psychological Distress

To measure global mental wellness, we used the 12-item *General Health Questionnaire (GHQ12)* (Goldberg & Hillier, 1979), a screening instrument that evaluates two domains: depression/anxiety and social functioning. Like all screeners, the GHQ12 does not provide a clinical determination of psychiatric disorder. It does, however, provide an indication of an individual's risk of current or future impairment.

The *CAMH Monitor* introduced the GHQ12 in 1999. The item wording in 1999 took the form: "*Over the past month, have you....*" versus the standard GHQ wording, "*Over the past few weeks, have you…"* In 2000, an experiment involving an investigation of the impact of question wording on the GHQ12 was introduced (Adlaf et al., 2001). A random-half sample of respondents received the items beginning with "*Over the past few weeks*…" whereas the remaining half received the items prefixed with "*Over the past month*…" An analysis found that the past month wording resulted in higher estimates than those beginning with the past few weeks.

Therefore, starting in 2001, the standard GHQ12 wording returned: *"Over the past few weeks, have you...."* Response categories are on a 4-point scale ranging from "*better [more so] than usual*" to "*much less than usual*"; or "*not at all*" to "*much more than usual*."

The item wording and the percentage of respondents reporting symptoms of psychological distress are presented in **Table 7.1.1.** In addition to the 12 symptoms, we present the percentage of Ontario adults classed as experiencing **elevated psychological distress**, defined here as reporting **at least 3** of the 12 symptoms (GHQ12/3+).[58]

In 2013 these items were asked of a random subsample of 2,060 Panel B respondents.

**2013** ……Tables 7.1.1–7.1.2; Fig. 7.1.1–7.1.3

The most common symptom experienced by respondents was the feeling of being constantly under stress (16.9%), followed by losing sleep because of worrying (14.3%). The least reported symptom was thinking of oneself as a worthless person (2.9%).

An estimated **13.1%** (95% CI: 11.3% to 15.1%) of Ontario adults experienced **elevated psychological distress** (3 or more symptoms) during the past few weeks. The corresponding population estimate is 1,380,500 Ontario adults (95% CI: 1,174,300 to 1,586,600).

**Age** and **income** were significantly related to elevated distress when holding values of the set of risk factors fixed.

- Elevated distress declined with age, dropping from 16.8% among 18 to 29 year olds to 7.9% among those 65

[58] Based on a binary coding of responses.

and older. Only one of the four sequential age group comparisons was statistically significant: the adjusted odds of elevated distress were lower among those aged 65 and older compared to those aged 50 to 64 (OR=0.45).

- Household income showed a significant association with elevated distress. The distinguishing feature was a higher rate among those with the lowest income and a lower rate among those with higher incomes. Elevated distress decreased significantly from 24.6% among those with incomes of less than $30,000 to 12.9% among those with incomes of $80,000 and higher (OR=0.50) and 9.3% among those who did not declare their income (OR=0.35).

There were no other significant differences for sex, region, marital status and education when holding values of risk factors fixed.

## Trends

**2000–2013**……..Table 7.1.3; Fig. 7.1.4

### 2012–2013

Between 2012 and 2013, elevated distress remained virtually unchanged in the total population (13.7% vs. 13.1%). In addition, rates of distress were stable for all sex, age, region, marital status, and education subgroups.

### 2000–2013

Between 2000 and 2013, elevated distress did not vary significantly and there is no evidence of dominant differential trends between subgroups. Indeed, **year did not interact** significantly with any of the demographic factors analysed, suggesting that subgroup trends were not considerably dissimilar.

Table 7.1.1: Percentage Reporting ***Psychological Distress Symptoms (GHQ12)*** During the Past Few Weeks, Ontarians Aged 18+, 2013

| **Over the past few weeks, …** | Item Score and Response | **Total (N=2,060)** |
|---|---|---|
| 1. …have you been able to concentrate on whatever you're doing? | 0. Better than usual | 5.1 |
| | 1. Same as usual | 85.5 |
| | 2. Less than usual | 8.1 |
| | 3. Much less than usual | †1.3 |
| | Mean (SE) | 1.06 (.01) |
| 2. … have you felt that you are playing a useful part in things? | 0. More so than usual | 12.2 |
| | 1. Same as usual | 79.8 |
| | 2. Less useful than usual | 6.2 |
| | 3. Much less useful | †1.7 |
| | Mean (SE) | 0.97 (.02) |
| 3. … have you felt capable of making decisions about things? | 0. More so than usual | 9.1 |
| | 1. Same as usual | 86.6 |
| | 2. Less so than usual | †3.4 |
| | 3. Much less capable | †0.8 |
| | Mean (SE) | 0.96 (.01) |
| 4. … have you been able to enjoy your day-to-day activities? | 0. More so than usual | 9.0 |
| | 1. Same as usual | 81.0 |
| | 2. Less so than usual | 7.6 |
| | 3. Much less than usual | †2.3 |
| | Mean (SE) | 1.03 (.02) |
| 5. … have you been able to face up to your problems? | 0. More so than usual | 12.8 |
| | 1. Same as usual | 82.6 |
| | 2. Less so than usual | †3.4 |
| | 3. Much less than usual | †1.2 |
| | Mean (SE) | 0.93 (.01) |
| 6. … have you been feeling reasonably happy? | 0. More so than usual | 12.1 |
| | 1. Same as usual | 78.1 |
| | 2. Less so than usual | 7.7 |
| | 3. Much less than usual | †2.1 |
| | Mean (SE) | 1.00 (.02) |
| 7. … have you lost much sleep because of worry? | 0. Not at all | 45.2 |
| | 1. No more than usual | 40.5 |
| | 2. Rather more than usual | 11.3 |
| | 3. Much more than usual | †3.0 |
| | Mean (SE) | 0.72 (.02) |

| | | |
|---|---|---|
| 8. … have you felt constantly under stress? | 0. Not at all | 40.9 |
| | 1. No more than usual | 42.1 |
| | 2. Rather more than usual | 13.7 |
| | 3. Much more than usual | †3.3 |
| | Mean (SE) | 0.79 (.02) |
| 9. … have you felt you could not overcome your difficulties? | 0. Not at all | 69.9 |
| | 1. No more than usual | 24.1 |
| | 2. Rather more than usual | †4.3 |
| | 3. Much more than usual | †1.7 |
| | Mean (SE) | 0.38 (.02) |
| 10. … have you been feeling unhappy and depressed? | 0. Not at all | 72.5 |
| | 1. No more than usual | 18.2 |
| | 2. Rather more than usual | 7.2 |
| | 3. Much more than usual | †2.1 |
| | Mean (SE) | 0.39 (.02) |
| 11. … have you been losing confidence in yourself? | 0. Not at all | 80.2 |
| | 1. No more than usual | 13.2 |
| | 2. Rather more than usual | †4.8 |
| | 3. Much more than usual | †1.8 |
| | Mean (SE) | 0.28 (.02) |
| 12. … have you been thinking of yourself as a worthless person? | 0. Not at all | 90.3 |
| | 1. No more than usual | 6.8 |
| | 2. Rather more than usual | †1.9 |
| | 3. Much more than usual | †1.0 |
| | Mean (SE) | 0.14 (.01) |

Note: GHQ12 items were asked only of a random subsample (Panel B, N= 2,060); † Estimate unstable.
Source: The *CAMH Monitor*, Centre for Addiction and Mental Health

Table 7.1.2: Percentage Reporting ***Elevated Psychological Distress (GHQ12/ 3+)*** During the Past Few Weeks and Logistic Regression Adjusted Group Differences, Ontarians Aged 18+, 2013

| | N | % | 95% CI | Adjusted Odds Ratio (N=1988) |
|---|---|---|---|---|
| **Total** [1] | 2060 | **13.1** | (11.3, 15.1) | — |
| **Sex** | | | | NS |
| Men | 878 | **12.4** | (9.7, 15.6) | 0.85 |
| Women *(Comparison Group)* | 1182 | **13.8** | (11.5, 16.4) | — |
| **Age** | | | | |
| *(Comparison Group is previous age group)* | | | | ** |
| 18-29 | 130 | †**16.8** | (10.9, 25.0) | — |
| 30-39 | 207 | †**14.4** | (10.0, 20.3) | 0.84 |
| 40-49 | 378 | **13.0** | (9.6, 17.4) | 0.87 |
| 50-64 | 667 | **13.7** | (10.9, 17.1) | 1.00 |
| 65+ | 638 | **7.9** | (6.0, 10.4) | **0.45**** |
| **Public Health Region** | | | | NS |
| Toronto *(vs. Provincial Average)* | 335 | **15.2** | (11.0, 20.7) | 1.20 |
| Central South | 164 | †**14.8** | (9.5, 22.4) | 1.12 |
| Central West | 287 | †**10.8** | (7.5, 15.4) | 0.84 |
| South West | 342 | †**10.2** | (7.1, 14.4) | 0.74 |
| Central East | 290 | †**13.4** | (9.0, 19.7) | 1.05 |
| East | 329 | **14.6** | (10.7, 19.7) | 1.16 |
| North | 313 | †**13.1** | (9.1, 18.5) | 0.99 |
| **Marital Status** | | | | NS |
| Married/Partner *(Comparison Group)* | 1323 | **11.6** | (9.7, 13.8) | — |
| Previously Married | 432 | **17.8** | (13.1, 23.6) | **1.63*** |
| Never Married | 279 | †**16.0** | (11.2, 22.3) | 1.06 |
| **Education** | | | | NS |
| High school not completed *(Comp. Group)* | 256 | †**15.5** | (9.8, 23.6) | — |
| Completed high school | 426 | **15.2** | (11.3, 20.0) | 0.91 |
| Some college or university | 737 | **12.2** | (9.5, 15.5) | 0.68 |
| University degree | 618 | **12.2** | (9.2, 16.0) | 0.71 |
| **Household Income** | | | | * |
| < $30,000 *(Comparison Group)* | 213 | †**24.6** | (16.6, 34.7) | — |
| $30,000-$49,999 | 246 | †**17.7** | (12.3, 24.7) | 0.78 |
| $50,000-$79,999 | 374 | †**11.9** | (8.5, 16.4) | **0.46*** |
| $80,000+ | 742 | **12.9** | (10.1, 16.3) | **0.50*** |
| Not stated | 485 | **9.3** | (6.5, 13.3) | **0.35**** |

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 (complete case sample N=1988).

Q: *Elevated Psychological Distress is defined as reporting at least 3 of the 12 symptoms on the GHQ12 scale (see Table 7.1.1).*

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

Table 7.1.3: Percentage Reporting ***Elevated Psychological Distress (GHQ12/ 3+)*** During the Past Few Weeks by Demographic Characteristics, Ontarians Aged 18+, 2000–2013

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Change | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N=) | (1202) | (2627) | (2421) | (2411) | (2611) | (2445) | (2016) | (2005) | (2024) | (2037) | (2024) | (1999) | (2015) | (2060) | | |
| **Total** | **12.7** | **12.7** | **12.8** | **13.2** | **12.9** | **12.9** | **13.2** | **12.7** | **13.1** | **14.7** | **14.6** | **14.7** | **13.7** | **13.1** | – | – |
| (95% CI)[a] | (10.7, 15.0) | (11.3, 14.3) | (11.4, 14.4) | (11.7, 14.8) | (11.4,14.5) | (11.4, 14.6) | (11.5, 15.1) | (11.1, 14.6) | (11.3, 15.2) | (12.9, 16.8) | (12.7, 16.7) | (12.8,16.8) | (11.8, 15.9) | (11.3, 15.1) | | |
| **Sex** | | | | | | | | | | | | | | | **NSI** | |
| Men | **11.4** | **10.3** | **10.9** | **11.4** | **11.1** | **10.3** | **10.6** | **10.0** | **10.8** | **12.0** | **12.4** | **13.3** | **10.9** | **12.4** | – | – |
| | (8.7, 14.8) | (8.5, 12.5) | (9.0, 13.2) | (9.4, 13.8) | (9.0, 13.5) | (8.4, 12.7) | (8.3, 13.3) | (7.9, 12.6) | (8.4,13.7) | (9.7,14.7) | (9.8,15.6) | (10.6,16.7) | (8.5,13.9) | (9.7,15.6) | | |
| Women | **13.9** | **15.0** | **14.6** | **14.8** | **14.6** | **15.3** | **15.7** | **15.3** | **15.3** | **17.3** | **16.8** | **15.9** | **16.3** | **13.8** | – | – |
| | (11.2, 17.1) | (12.9, 17.3) | (12.5, 17.0) | (12.8, 17.2) | (12.6, 16.9) | (13.2, 17.7) | (13.4, 18.4) | (13.2, 18.0) | (12.8, 18.3) | (14.6, 20.4) | (14.2, 19.7) | (13.5,18.6) | (13.5, 19.5) | (11.5, 16.4) | | |
| **Age** | | | | | | | | | | | | | | | **NSI** | |
| 18-29 | **17.7** | **13.4** | **16.7** | **16.9** | **17.1** | **13.0** | **†11.1** | **†16.5** | **†14.1** | **†17.6** | **†17.3** | **20.4** | **†18.1** | **†16.8** | – | – |
| | (12.8, 23.9) | (10.2, 17.6) | (12.9, 21.2) | (13.1, 21.5) | (13.1, 21.9) | (9.4, 17.6) | (7.1, 16.8) | (11.9, 22.5) | (9.0,21.4) | (12.1,25.0) | (12.0,24.2) | (14.4,28.1) | (11.7, 26.9) | (10.9, 25.0) | | |
| 30-39 | **13.0** | **14.6** | **13.2** | **13.1** | **13.9** | **15.7** | **15.7** | **†11.6** | **†12.8** | **†14.6** | **†14.3** | **15.0** | **16.7** | **†14.4** | – | – |
| | (9.2, 18.0) | (11.6, 18.4) | (10.2, 17.0) | (10.0, 16.9) | (10.6, 18.0) | (12.0, 20.1) | (11.9, 20.5) | (8.3, 16.0) | (9.1,17.7) | (10.7, 19.7) | (10.0, 20.0) | (11.0, 20.2) | (12.0, 22.4) | (10.0, 20.3) | | |
| 40-49 | **16.4** | **13.3** | **13.2** | **15.1** | **13.0** | **13.5** | **17.2** | **14.3** | **14.5** | **16.0** | **15.3** | **16.8** | **14.2** | **13.0** | – | – |
| | (11.9, 22.3) | (10.5, 16.7) | (10.3, 16.8) | (12.2, 18.7) | (10.0, 16.6) | (10.7, 16.9) | (13.5, 21.8) | (11.0, 18.5) | (10.9,19.2) | (12.4, 20.4) | (11.5, 20.2) | (12.9,21.6) | (10.7, 18.6) | (9.6, 17.4) | | |
| 50-64 | **8.8** | **12.0** | **13.1** | **10.8** | **11.2** | **12.4** | **11.5** | **13.3** | **12.7** | **14.6** | **16.5** | **12.5** | **12.9** | **13.7** | – | – |
| | (5.5, 13.9) | (9.0, 15.8) | (10.2, 16.7) | (8.1, 14.3) | (8.8, 14.2) | (9.7, 15.8) | (8.7, 15.0) | (10.4, 16.9) | (9.9,16.2) | (11.6, 18.2) | (13.3, 20.3) | (9.8,15.9) | (10.3, 16.1) | (10.9, 17.1) | | |
| 65+ | **6.7** | **9.7** | **6.3** | **7.9** | **7.8** | **10.1** | **10.8** | **†7.2** | **12.1** | **11.1** | **9.0** | **9.7** | **†7.8** | **7.9** | – | – |
| | (3.9, 11.4) | (7.0, 13.3) | (4.2, 9.4) | (5.4, 11.4) | (5.6, 10.9) | (7.1, 14.2) | (7.9, 14.5) | (4.8, 10.6) | (8.9,16.3) | (8.3, 14.8) | (6.5, 12.2) | (7.2,13.1) | (5.5, 11.1) | (6.0, 10.4) | | |
| **Region** | | | | | | | | | | | | | | | **NSI** | |
| Toronto | **12.2** | **15.5** | **14.8** | **15.6** | **14.4** | **14.0** | **12.6** | **†11.0** | **16.5** | **15.5** | **20.4** | **15.8** | **†13.7** | **15.2** | – | – |
| | (8.0, 18.3) | (11.9, 19.9) | (11.4, 19.0) | (12.1, 20.0) | (11.0, 18.6) | (10.5, 18.3) | (9.2, 17.0) | (7.7, 15.5) | (12.3,21.9) | (11.5,20.6) | (15.5,26.3) | (11.7,20.9) | (9.7,19.1) | (11.0, 20.7) | | |
| Central South | **11.9** | **12.0** | **17.0** | **10.5** | **12.3** | **9.5** | **†13.8** | **†14.1** | **†7.5** | **†10.5** | **†15.5** | **†16.5** | **†13.5** | **†14.8** | – | – |
| | (7.1, 19.3) | (8.0, 17.6) | (12.1, 23.4) | (6.9, 15.6) | (8.2, 18.1) | (6.0, 14.5) | (8.5, 21.6) | (9.4, 20.6) | (4.1,13.3) | (6.8,16.0) | (9.9,23.5) | (11.2,23.7) | (8.5, 20.9) | (9.5, 22.4) | | |
| Central West | **10.5** | **11.2** | **14.8** | **13.9** | **16.7** | **13.2** | **14.3** | **15.2** | **†11.8** | **†11.9** | **†13.1** | **16.7** | **†20.0** | **†10.8** | – | – |
| | (6.3, 16.9) | (8.1, 15.3) | (11.0, 19.6) | (10.3, 18.4) | (12.4, 22.0) | (9.4, 18.2) | (10.1, 19.9) | (10.7, 21.0) | (8.2,16.8) | (8.4, 16.7) | (9.2, 18.4) | (11.6,23.5) | (13.7, 28.2) | (7.5, 15.4) | | |
| South West | **7.2** | **12.1** | **9.5** | **11.7** | **10.2** | **10.9** | **†11.5** | **†10.9** | **†10.2** | **14.7** | **†11.8** | **12.9** | **†10.6** | **†10.2** | – | – |
| | (4.4, 11.4) | (9.1, 15.9) | (6.9, 12.9) | (8.7, 15.6) | (7.5, 13.8) | (8.1, 14.4) | (8.5, 15.5) | (7.2, 14.1) | (6.9,14.6) | (10.9,19.7) | (8.3, 16.4) | (9.3,17.7) | (7.4,14.9) | (7.1,14.4) | | |
| Central East | **17.6** | **10.6** | **9.8** | **13.7** | **11.3** | **14.2** | **†13.5** | **†13.0** | **16.7** | **20.9** | **†14.1** | **†11.1** | **†10.7** | **†13.4** | – | – |
| | (11.8, 25.4) | (7.6, 14.7) | (6.5, 14.5) | (9.7, 19.0) | (7.8, 16.0) | (10.6, 18.9) | (9.2, 19.5) | (9.0, 18.4) | (11.7,23.3) | (15.3,27.8) | (9.6, 20.3) | (7.5,16.0) | (7.2, 15.6) | (9.0, 19.7) | | |
| East | **16.6** | **14.8** | **11.0** | **11.8** | **11.5** | **15.1** | **13.6** | **13.6** | **11.3** | **12.3** | **11.8** | **16.5** | **14.6** | **14.6** | – | – |
| | (11.8, 23.0) | (11.6, 18.7) | (8.3, 14.5) | (8.9, 15.6) | (8.6, 15.2) | (11.6, 19.4) | (10.1, 18.1) | (10.2, 18.0) | (8.1,15.6) | (9.0,16.8) | (8.6, 15.8) | (12.1,22.1) | (10.9, 19.2) | (10.7, 19.7) | | |
| North | **12.9** | **9.9** | **12.3** | **11.5** | **11.9** | **11.3** | **13.4** | **12.8** | **†11.6** | **14.0** | **†10.9** | **†12.1** | **12.2** | **†13.1** | – | – |
| | (8.7, 18.7) | (7.5, 12.9) | (9.2, 16.2) | (8.4, 15.4) | (9.4, 14.9) | (8.3, 15.2) | (9.9, 17.8) | (9.3, 17.3) | (8.1,16.4) | (10.2, 18.9) | (7.4,15.7) | (8.1,17.8) | (8.9,16.6) | (9.1,18.5) | | |

Cont'd

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Change | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N=) | (1202) | (2627) | (2421) | (2411) | (2611) | (2445) | (2016) | (2005) | (2024) | (2037) | (2024) | (1999) | (2015) | (2060) | | |
| **Marital Status** | | | | | | | | | | | | | | | **NSI** | |
| Married/Partner | **10.0** | **12.0** | **10.5** | **10.2** | **10.0** | **10.9** | **12.4** | **10.7** | **11.2** | **12.8** | **13.2** | **12.1** | **10.9** | **11.6** | **–** | **–** |
| Previously Married | **19.2** | **15.8** | **16.2** | **19.7** | **18.4** | **19.4** | **17.4** | **17.5** | **20.6** | **23.3** | **18.2** | **21.8** | **18.2** | **17.8** | **–** | **–** |
| Never Married | **15.2** | **13.0** | **17.0** | **18.4** | **18.1** | **15.4** | **13.5** | **15.5** | **15.2** | **17.2** | **17.4** | **19.7** | **19.2** | **†16.0** | **–** | **–** |
| **Education** | | | | | | | | | | | | | | | **NSI** | |
| HS not completed | **12.7** | **13.5** | **15.2** | **13.8** | **11.0** | **15.6** | **17.6** | **13.5** | **15.9** | **19.6** | **19.4** | **14.2** | **†13.3** | **†15.5** | **–** | **–** |
| Completed high school | **12.0** | **11.6** | **13.4** | **13.0** | **14.9** | **13.6** | **14.3** | **16.2** | **12.5** | **14.0** | **15.4** | **11.7** | **†11.9** | **15.2** | – | – |
| Some college or university | **15.1** | **13.7** | **13.8** | **13.6** | **12.0** | **12.9** | **11.8** | **12.5** | **13.9** | **14.8** | **15.2** | **15.5** | **15.3** | **12.2** | **–** | **–** |
| University degree | **10.5** | **12.4** | **10.0** | **12.8** | **12.9** | **11.3** | **12.0** | **9.8** | **12.1** | **13.7** | **12.1** | **15.7** | **13.1** | **12.2** | **–** | **–** |

Notes: (1) [a] 95% confidence interval; all analyses are sample design adjusted; † Estimate unstable.
(2) Trend Analysis: **–** change not statistically significant at p<.05; **T** significant change (p<.05) between 2000-2013; **2Y** significant change (p<.05) between last two estimates.
(3) YEAR × FACTOR interaction**: NSI**, non-significant.

*Defn: Elevated Psychological Distress is defined as reporting at least 3 of the 12 symptoms on the GHQ12 scale.*

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

Figure 7.1.1

**Percentage Reporting Psychological Distress Symptoms (GHQ12) Over the Past Few Weeks, Ontarians Aged 18+, 2013 (N=2060)**

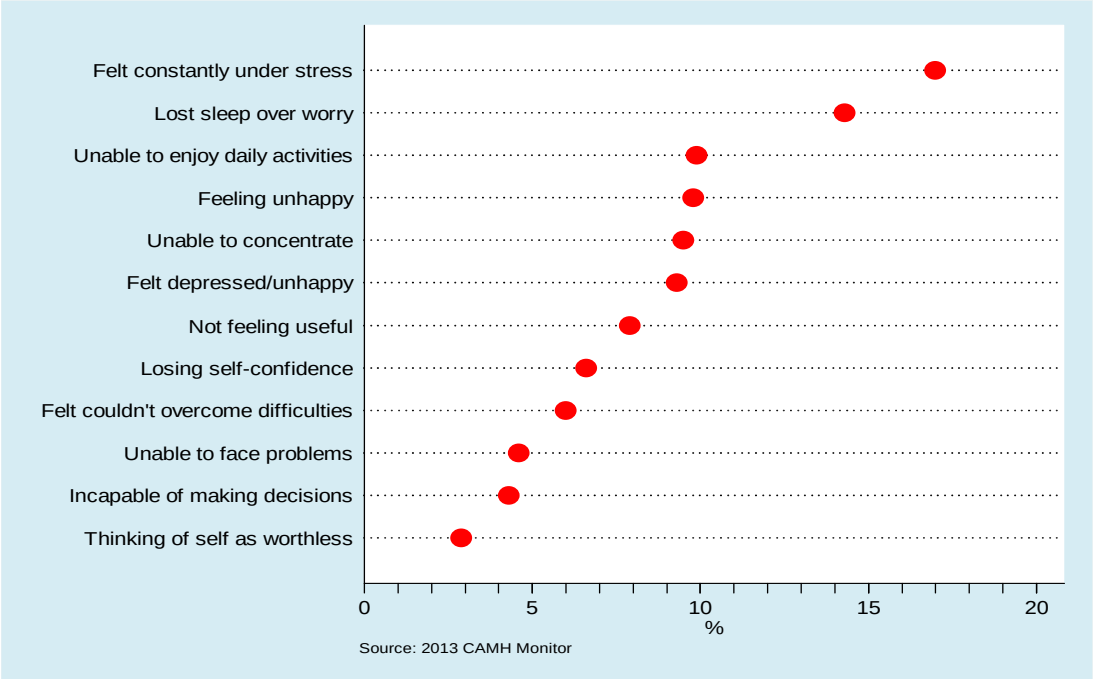



Figure 7.1.2

**Percentage Reporting Psychological Distress Symptoms (GHQ12) Over the Past Few Weeks by Sex, Ontarians Aged 18+, 2013 (N=2060)**

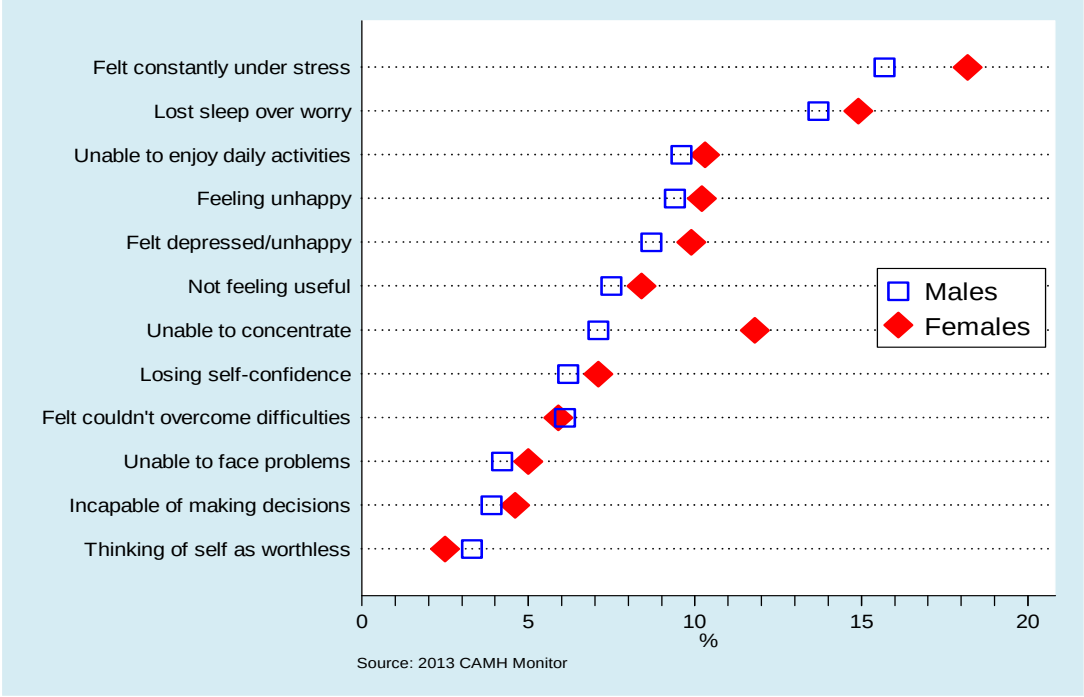
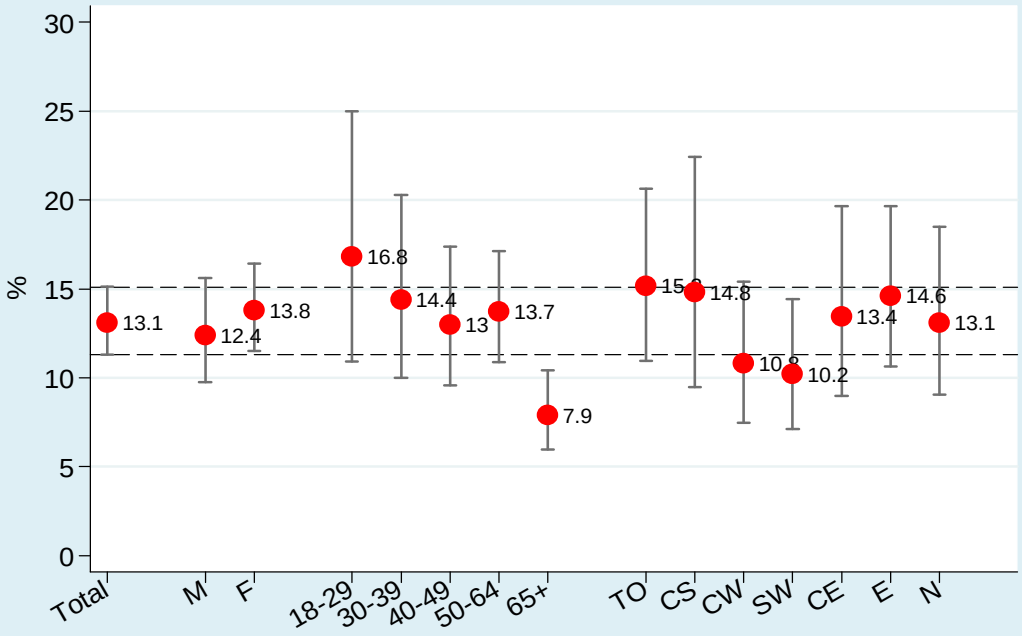


Figure 7.1.3

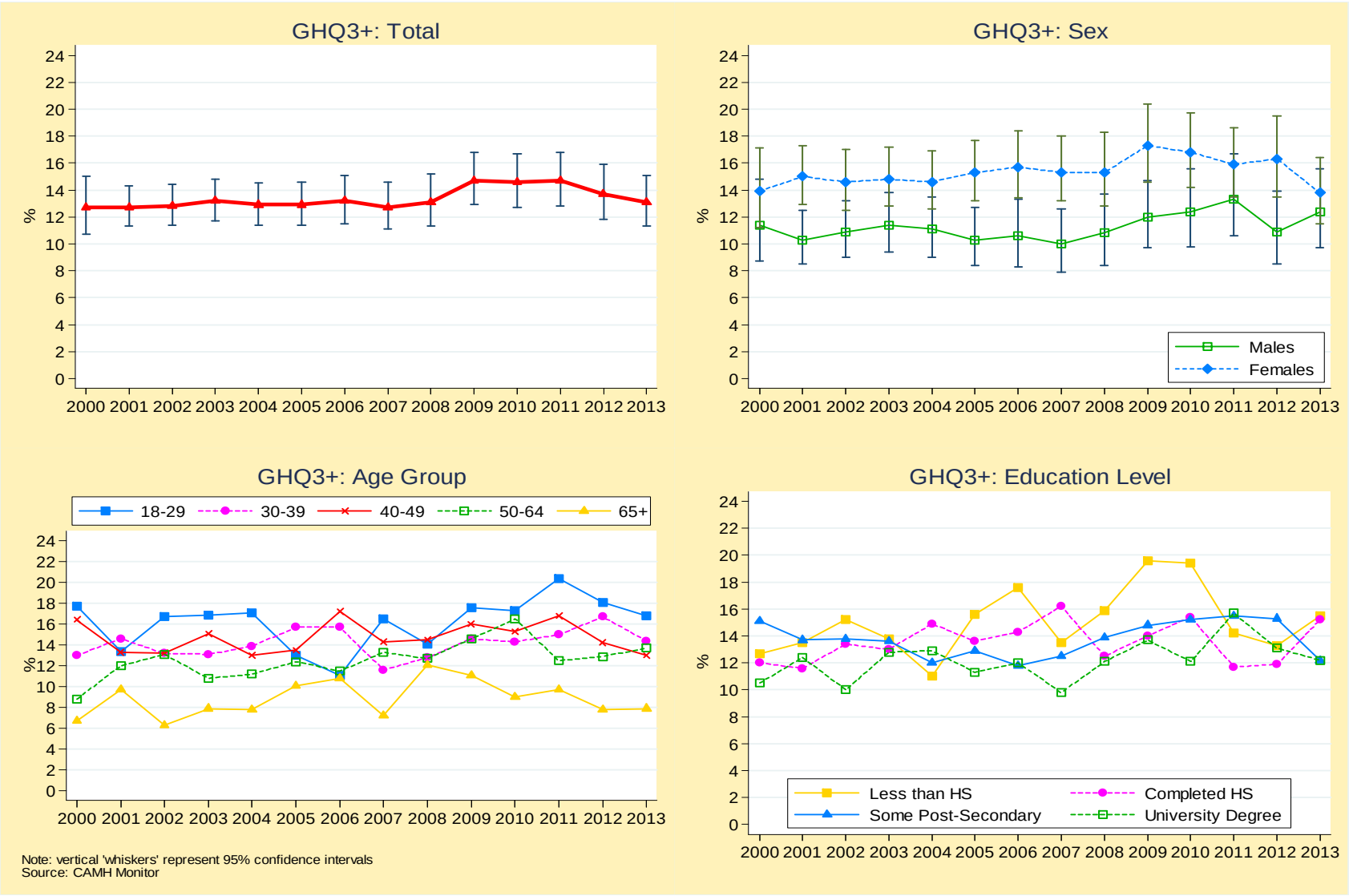
**Percentage Reporting Elevated Psychological Distress (GHQ12/3+) Over the Past Few Weeks by Sex, Age and Region, Ontarians Aged 18+, 2013 (N=2060)**




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: 2013 CAMH Monitor

Figure 7.1.4

**Elevated Psychological Distress (GHQ12/3+) Over the Past Few Weeks, Ontarians Aged 18+, 2000–2013**




Note: vertical 'whiskers' represent 95% confidence intervals
Source: 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 antidepression medications are available beginning 1997. In 2013 these items were asked of a random subsample of respondents (Panel B, N = 2,060).

### 7.2.1 Antianxiety Medication

**2013** ……Table 7.2.1; Fig. 7.2.1

Overall, an estimated **8.9%** (95% CI: 7.4% to 10.7%) of Ontario adults used a prescribed medication to treat anxiety – anxiolytics – during the 12 months before the survey. The corresponding population estimate is 939,300 adults (95% CI: 767,700 to 1,110,900).

Only **sex** was significantly related to past year use of antianxiety medication. Holding values of risk factors constant, adjusted group differences showed the following:

- The adjusted odds of use were significantly lower among men than among women (OR=0.59; 7.1% vs. 10.7%, respectively)

There were no significant differences according to age, region, marital status, education and income when holding fixed values of the set of risk factors.

#### Trends

**1997–2013**……Table 7.2.3; Fig. 7.2.3

**2012–2013**

Use of antianxiety medication in 2013 (8.9%) was virtually unchanged from 2012 (8.8%) and rates of past year use of anxiolytics were stable between these two years for all subgroups.

**1997–2013**

Since 1997, use of anxiolytics among the total sample has displayed a significant **linear uptrend**, increasing from 4.5% in 1999 to 8.9% in 2013.

**Year interacted significantly** only with age, indicating that trends in the use of anxiolytics differed among age categories. Year did not interact with sex, region, marital status, or education suggesting similar increasing trends in most subgroups.

**Differential age group trends** suggest that the changes in use of anxiolytics show a different pattern depending on age group. Between 1997 and 2013, the use of anxiolytics showed a linear increase among 18 to 29 year olds from 1.7% to 10.8%, whereas among 40 to 49 year olds use increased from 6.3% in 2001 to 9.2% in 2009, but then declined to 6.9% in 2013.

## 7.2.2. Antidepressant Medication

**2013** ……Table 7.2.2; Fig. 7.2.2

An estimated **7.5%** (95% CI: 6.1% to 9.1%) of Ontario adults used a prescribed medication for depression – antidepressants – during the 12 months before the survey. The corresponding population estimate is 786,400 adults (95% CI: 628,100 to 944,600).

While holding values of risk factors constant, adjusted group differences showed that use of antidepressants was significantly related to **sex,** and **income.**

- The adjusted odds of use were significantly lower among men than women (OR=0.46; 5.2% vs. 9.7%, respectively).

- Household income was significantly associated with past year antidepressant use. The distinguishing feature was a higher rate among those with the lowest income and a lower rate among those with higher incomes. Past year antidepressant use decreased significantly from 15.2% among those with incomes of less than $30,000 to 7.9% among those with incomes of $80,000 and higher. The odds of use were significantly lower among those who did not declare their income than among those with incomes of less than $30,000 (OR=0.24; 3.6% vs. 15.2%, respectively).

There were no significant differences for age, region, marital status or education when holding fixed our set of risk factors.

### Trends

**1997–2013** …… Table 7.2.4; Fig. 7.2.4

#### 2012–2013

Prevalence of past year use of antidepressants in 2013 (7.5%) was not significantly different from 2012 (6.7%). In addition, rates of use were stable between these two years for most subgroups. We found only two significant differences during this period: an **increase** among those aged 18 to 29 (from 2.4% to 8.0%) and among residents of the Central East region, whose past year use of antidepressants **increased** from 3.3% in 2012 to 7.3% in 2013.

#### 1997–2013

Since 1997, use of antidepressants among the total population has significantly **trended upward**, from 3.6% in 1999 to 7.5% in 2013. Significant subgroup increases were also evident for sex, region, marital status and education.

**Year interacted** significantly with **age**, indicating that trends in past year use of antidepressants differed among age groups. Between 1997 and 2013, use of antidepressants increased among 18 to 29 year olds from 2.0% to 8.0%, whereas among respondents aged 40 to 49, use increased from 4.6% in 1999 to 9.4% in 2006 but then declined to 6.6% in 2013.

Table 7.2.1 Percentage ***Reporting Using Prescription Medication to Treat Anxiety or Panic Attacks*** During the Past 12 Months and Logistic Regression Adjusted Group Differences, Ontarians Aged 18+, 2013

| | N | % | 95% CI | Adjusted Odds Ratio (N=1985) |
|---|---|---|---|---|
| **Total** [1] | 2060 | **8.9** | (7.4, 10.7) | — |
| **Sex** | | | | * |
| Men | 878 | †**7.1** | (5.1, 9.8) | **0.59*** |
| Women *(Comparison Group)* | 1182 | **10.7** | (8.7, 13.1) | — |
| **Age** | | | | |
| *(Comparison Group is previous age group)* | | | | NS |
| 18-29 | 130 | †**10.8** | (6.1, 18.5) | — |
| 30-39 | 207 | †**8.9** | (5.5, 14.2) | 0.77 |
| 40-49 | 378 | †**6.9** | (4.6, 10.4) | 0.74 |
| 50-64 | 667 | **9.5** | (7.3, 12.3) | 1.42 |
| 65+ | 638 | **8.9** | (6.7, 11.9) | 0.80 |
| **Public Health Region** | | | | NS |
| Toronto *(vs. Provincial Average)* | 335 | †**9.9** | (6.5, 14.6) | 1.18 |
| Central South | 164 | †**8.0** | (4.9, 13.0) | 0.90 |
| Central West | 287 | †**6.3** | (3.6, 10.7) | 0.71 |
| South West | 342 | †**9.3** | (6.3, 13.7) | 1.05 |
| Central East | 290 | †**10.2** | (6.3, 16.0) | 1.12 |
| East | 329 | †**9.7** | (7.0, 13.4) | 1.17 |
| North | 313 | †**8.7** | (5.9, 12.7) | 0.95 |
| **Marital Status** | | | | NS |
| Married/Partner *(Comparison Group)* | 1323 | **8.1** | (6.5, 10.0) | — |
| Previously Married | 432 | **12.2** | (9.2, 16.1) | 1.25 |
| Never Married | 279 | †**10.3** | (6.3, 16.2) | 1.05 |
| **Education** | | | | NS |
| High school not completed *(Comparison Group)* | 256 | †**12.2** | (7.3, 19.6) | — |
| Completed high school | 426 | †**9.2** | (6.1, 13.4) | 0.71 |
| Some college or university | 737 | **8.8** | (6.7, 11.5) | 0.67 |
| University degree | 618 | †**7.7** | (5.2, 11.2) | 0.57 |
| **Household Income** | | | | NS |
| < $30,000 *(Comparison Group)* | 213 | †**16.7** | (11.2, 24.4) | — |
| $30,000-$49,999 | 246 | †**11.8** | (7.2, 18.6) | 0.70 |
| $50,000-$79,999 | 374 | †**8.5** | (5.9, 12.2) | 0.56 |
| $80,000+ | 742 | **8.9** | (6.5, 12.1) | 0.66 |
| Not stated | 485 | †**5.9** | (3.8, 9.1) | **0.35**** |

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 anxiolitycs use are higher relative to the comparison group; ORs less than 1.0 indicate that the odds of anxiolitycs use 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= 1985).
*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*** During the Past 12 Months and Logistic Regression Adjusted Group Differences, Ontarians Aged 18+, 2013

| | N | % | 95% CI | Adjusted Odds Ratio (N=1984) |
|---|---|---|---|---|
| **Total** [1] | 2060 | **7.5** | (6.1, 9.1) | — |
| **Sex** | | | | * |
| Men | 878 | **†5.2** | (3.4, 7.7) | **0.46**** |
| Women *(Comparison Group)* | 1182 | **9.7** | (7.8, 12.0) | — |
| **Age** | | | | |
| *(Comparison Group is previous age group)* | | | | NS |
| 18-29 | 130 | **†8.0** | (4.1, 14.9) | — |
| 30-39 | 207 | **†9.5** | (5.7, 15.4) | 1.20 |
| 40-49 | 378 | **†6.6** | (4.3, 10.1) | 0.67 |
| 50-64 | 667 | **7.7** | (5.8, 10.1) | 1.17 |
| 65+ | 638 | **†6.3** | (4.4, 8.8) | 0.64 |
| **Public Health Region** | | | | NS |
| Toronto *(vs. Provincial Average)* | 335 | **†9.7** | (6.1, 14.9) | 1.37 |
| Central South | 164 | **†6.6** | (3.7, 11.6) | 0.92 |
| Central West | 287 | **†6.0** | (3.5, 10.1) | 0.83 |
| South West | 342 | **†5.9** | (3.5, 9.6) | 0.79 |
| Central East | 290 | **†7.3** | (4.2, 12.5) | 0.94 |
| East | 329 | **†8.6** | (6.0, 12.1) | 1.24 |
| North | 313 | **†8.0** | (5.3, 11.9) | 1.02 |
| **Marital Status** | | | | NS |
| Married/Partner *(Comparison Group)* | 1323 | **6.6** | (5.2, 8.4) | — |
| Previously Married | 432 | **11.3** | (8.4, 15.2) | 1.59 |
| Never Married | 279 | **†8.5** | (5.0, 14.2) | 1.25 |
| **Education** | | | | NS |
| High school not completed *(Comparison Group)* | 256 | **†9.5** | (5.1, 17.1) | — |
| Completed high school | 426 | **†7.7** | (5.0, 11.8) | 0.70 |
| Some college or university | 737 | **7.1** | (5.2, 9.6) | 0.60 |
| University degree | 618 | **†7.0** | (4.7,10.1) | 0.56 |
| **Household Income** | | | | * |
| < $30,000 *(Comparison Group)* | 213 | **†15.2** | (10.0, 22.6) | — |
| $30,000-$49,999 | 246 | **†9.6** | (5.4, 16.4) | 0.59 |
| $50,000-$79,999 | 374 | **†7.8** | (5.2, 11.5) | 0.56 |
| $80,000+ | 742 | **7.9** | (5.7, 10.9) | 0.62 |
| Not stated | 485 | **†3.6** | (1.9, 6.5) | **0.24**** |

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 (complete case sample N= 1984).

*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*** During the Past 12 Months, Ontarians Aged 18+, 1997–2013

| | 1997 | 1999 | 2001 | 2002 | 2003 | 2004 | 2006 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Change | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N=) | (2568) | (2436) | (2627) | (2421) | (2411) | (2611) | (2016) | (2024) | (2037) | (2024) | (1999) | (2015) | (2060) | | |
| **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** | **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) | | |
| **Sex** | | | | | | | | | | | | | | **NSI** | |
| 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** | **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) | | |
| 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** | **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) | | |
| **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** | **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) | | |
| 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** | **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) | | |
| 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** | **–** | **–** |
| | (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) | | |
| 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** | **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) | | |
| 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** | **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) | | |
| **Region** | | | | | | | | | | | | | | **NSI** | |
| 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** | **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) | | |
| Central South | **†6.2** | **†6.0** | **†6.4** | **†6.2** | **†6.5** | **†2.2** | **†4.7** | **†6.3** | **†10.5** | **†12.5** | **†9.4** | **†10.6** | **†8.0** | **T** | **–** |
| | (3.6, 10.2) | (3.4, 10.3) | (3.7, 10.9) | (3.5, 10.8) | (5.9, 10.5) | (1.0, 5.0) | (2.2, 9.4) | (3.2,12.1) | (6.5, 16.8) | (7.8, 19.4) | (5.4,16.0) | (6.6, 16.6) | (4.9, 13.0) | | |
| Central West | **†5.4** | **†5.5** | †2.7 | **†5.1** | **†3.9** | **†4.3** | **†4.2** | **†3.9** | **†5.4** | **†6.8** | **†4.3** | **†5.5** | **†6.3** | **–** | **–** |
| | (3.0, 9.6) | (3.4, 8.8) | (1.4, 5.2) | (3.0, 8.6) | (2.2, 6.8) | (2.4, 7.6) | (2.4, 7.3) | (2.2, 6.7) | (3.1,9.1) | (4.2, 10.9) | (2.1,8.5) | (3.2,9.4) | (3.6, 10.7) | | |
| South 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** | **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) | | |
| Central East | **†5.0** | **†3.7** | **†5.8** | **†3.8** | **†4.2** | **†3.0** | **†6.2** | **†7.3** | **†6.9** | **†9.4** | **†6.6** | **†8.3** | **†10.2** | **T** | – |
| | (3.1, 7.9) | (2.1, 6.7) | (3.6, 9.1) | (2.1, 6.7) | (2.3, 7.3) | (1.6, 5.7) | (3.7, 10.3) | (4.4,11.8) | (4.0,11.7) | (6.4, 13.7) | (3.9,10.9) | (5.3, 12.9) | (6.3, 16.0) | | |
| 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** | **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) | | |
| North | **†4.8** | **†5.6** | **†5.5** | **†4.8** | **†6.7** | **†5.9** | **†7.5** | **†6.2** | **†9.2** | **†7.0** | **†9.6** | **†10.1** | **†8.7** | **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) | (4.5, 10.6) | (6.2,14.6) | (6.7, 15.0) | (5.9, 12.7) | | |

Cont'd

| | 1997 | 1999 | 2001 | 2002 | 2003 | 2004 | 2006 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Change |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N=) | (2568) | (2436) | (2627) | (2421) | (2411) | (2611) | (2016) | (2024) | (2037) | (2024) | (1999) | (2015) | (2060) | |
| **Marital Status** | | | | | | | | | | | | | | **NSI** |
| 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** | **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** | **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** | **T –** |
| **Education** | | | | | | | | | | | | | | **NSI** |
| 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** | **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** | **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** | **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** | **T –** |

Notes: (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 between 1997-2013; **T** significant change (p<.05) between 1997-2013; **2Y** significant change (p<.05) between last two estimates.
(3) YEAR × FACTOR interaction: **NSI**, non-significant; *p<.05**;** **p<.01; ***p<.001.

*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*** During the Past 12 Months, Ontarians Aged 18+, 1997–2013

| | 1997 | 1999 | 2001 | 2002 | 2003 | 2004 | 2006 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Change | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N\=) | (2568) | (2436) | (2627) | (2421) | (2411) | (2611) | (2016) | (2024) | (2037) | (2024) | (1999) | (2015) | (2060) | | |
| **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** | **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) | | |
| **Sex** | | | | | | | | | | | | | | **NSI** | |
| 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** | **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) | | |
| 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** | **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) | | |
| **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** | **T** | **2Y** |
| | (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) | | |
| 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** | **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) | | |
| 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** | **T** | **–** |
| | (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) | | |
| 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** | **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) | | |
| 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** | **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) | | |
| **Region** | | | | | | | | | | | | | | **NSI** | |
| 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** | **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) | | |
| Central South | **†4.9** | **†4.8** | **†6.9** | **†4.9** | **7.6** | **†3.5** | **†2.1** | **†4.6** | **†7.2** | **†10.2** | **†12.8** | **†5.6** | **†6.6** | **–** | **–** |
| | (2.8, 8.4) | (2.7, 8.3) | (3.9, 11.7) | (2.7, 8.8) | (4.6, 12.1) | (1.8, 6.6) | (1.0, 5.5) | (2.2,9.5) | (4.2,12.0) | (6.0, 16.7) | (8.1,19.8) | (3.2, 9.7) | (3.7, 11.6) | | |
| Central West | **†3.5** | **†3.9** | **†** | **†3.4** | **†3.9** | **†4.2** | **†8.1** | **†4.5** | **†5.7** | **†4.4** | **†4.5** | **†7.1** | **†6.0** | **T** | **–** |
| | (1.7, 7.0) | (2.2, 6.7) | — | (2.0, 6.0) | (2.3, 6.5) | (2.4, 7.2) | (5.3, 12.3) | (2.7,7.4) | (3.4,9.5) | (2.5, 7.7) | (2.3,8.8) | (4.5, 10.9) | (3.5, 10.1) | | |
| South 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** | **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) | | |
| Central East | **†3.6** | **†2.6** | **†4.4** | **†4.9** | **†4.7** | **†4.7** | **†7.3** | **†8.5** | **†7.1** | **†6.1** | **†4.4** | **†3.3** | **†7.3** | **T** | **2Y** |
| | (2.2, 6.0) | (1.4, 4.7) | (2.6, 7.4) | (2.9, 8.3) | (2.7, 7.9) | (2.6, 8.4) | (4.5, 11.6) | (5.4,13.2) | (4.1,12.0) | (4.0,9.3) | (2.4,8.0) | (1.9,5.8) | (4.2,12.5) | | |
| 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** | **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) | | |
| 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** | **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) | | |

Cont'd

| | 1997 | 1999 | 2001 | 2002 | 2003 | 2004 | 2006 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Change | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N\=) | (2568) | (2436) | (2627) | (2421) | (2411) | (2611) | (2016) | (2024) | (2037) | (2024) | (1999) | (2015) | (2060) | | |
| **Marital Status** | | | | | | | | | | | | | | **NSI** | |
| 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** | **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** | **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** | **T** | **2Y** |
| **Education** | | | | | | | | | | | | | | **NSI** | |
| 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** | **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** | **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** | **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** | **T** | **–** |

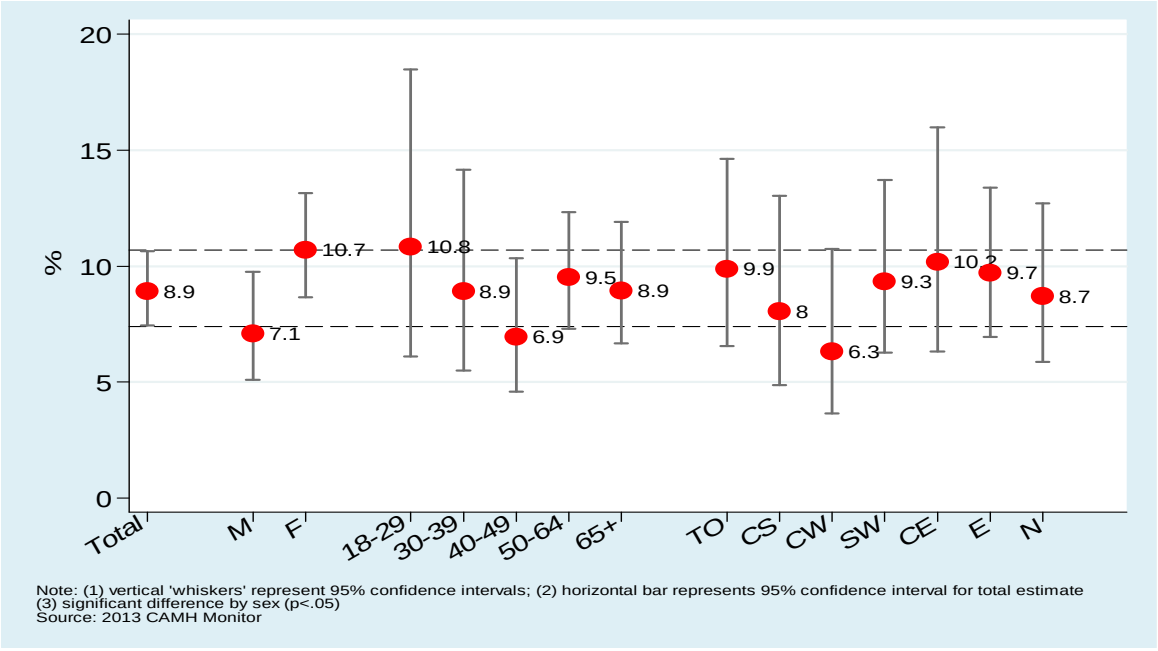
Notes: (1) † Estimate suppressed or unstable; [a] 95% confidence interval; all analyses are sample design adjusted.
(2) Trend Analysis: **–** change not statistically significant at p<.05 between 1997-2013; **T** significant change (p<.05) between 1997-2013; **2Y** significant change (p<.05) between last two estimates.
(3) YEAR × FACTOR interaction: **NSI**, non-significant; *p<.05**;** **p<.01; ***p<.001.

*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

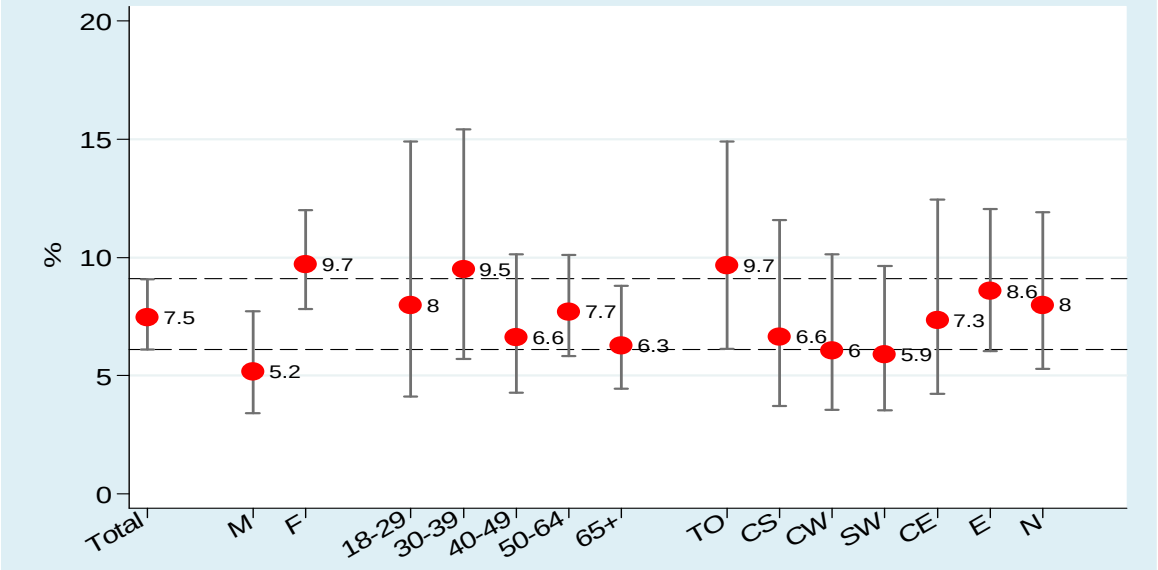
**Percentage Reporting Using Prescription Medication to Treat Anxiety or Panic Attacks in the Past Year by Gender, Age and Region, Ontarians Aged 18+, 2013 (N=2060)**




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: 2013 CAMH Monitor

Figure 7.2.2

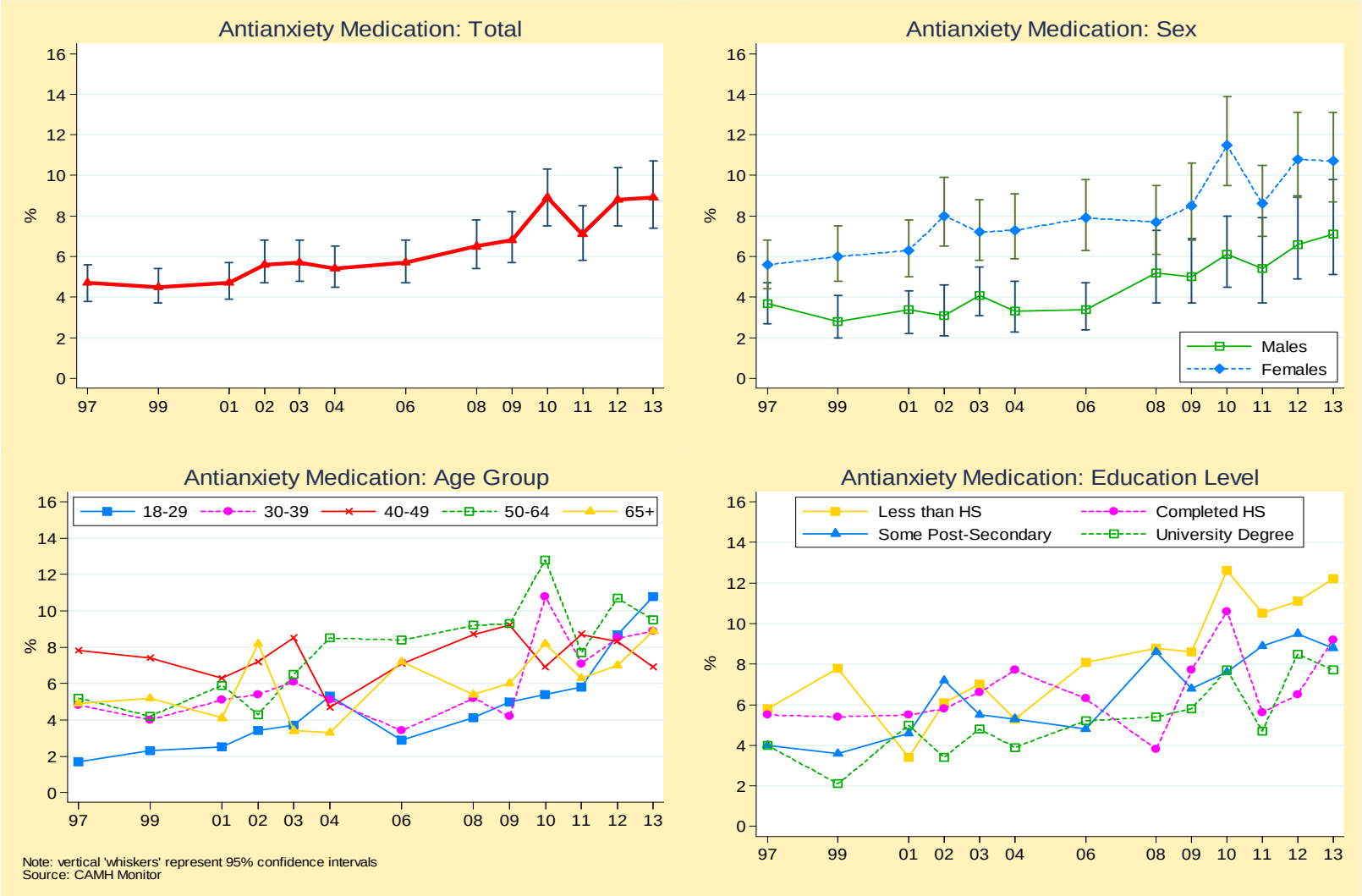
**Percentage Reporting Using Prescription Medication to Treat Depression in the Past Year by Gender, Age and Region, Ontarians Aged 18+, 2013 (N=2060)**




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: 2013 CAMH Monitor

Figure 7.2.3

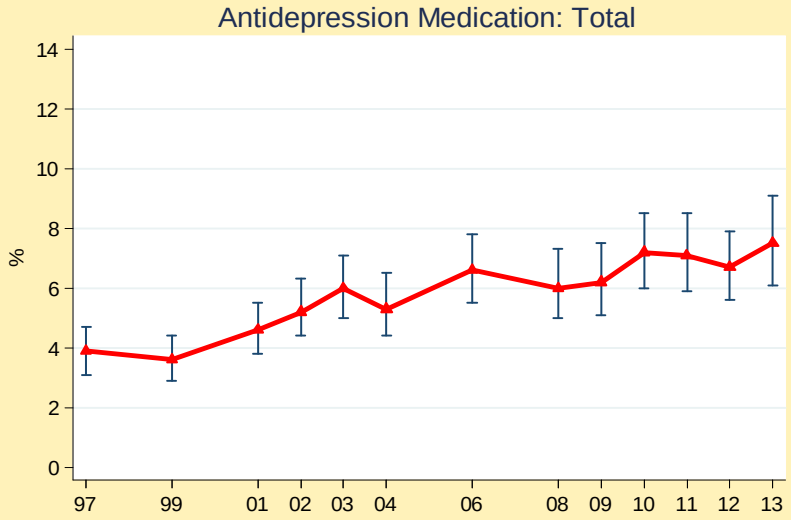
**Percentage Reporting Using Prescription Medication to Treat Anxiety or Panic Attacks in the Past Year, Ontarians Aged 18+, 1997–2013**

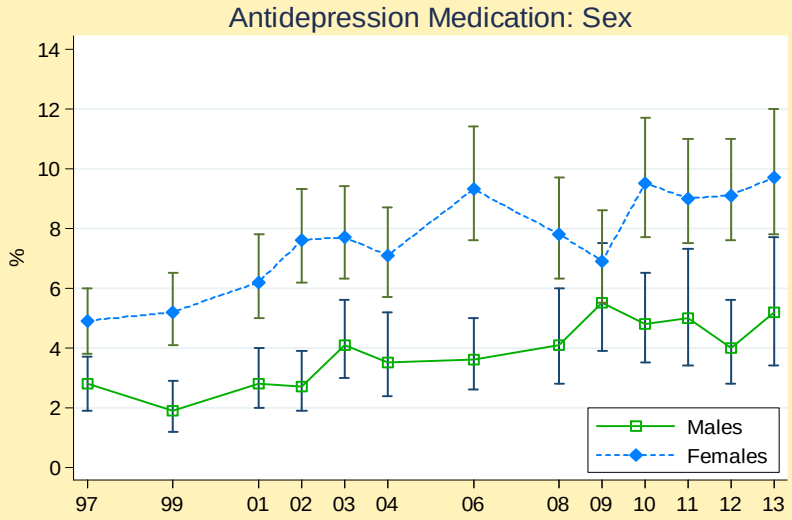


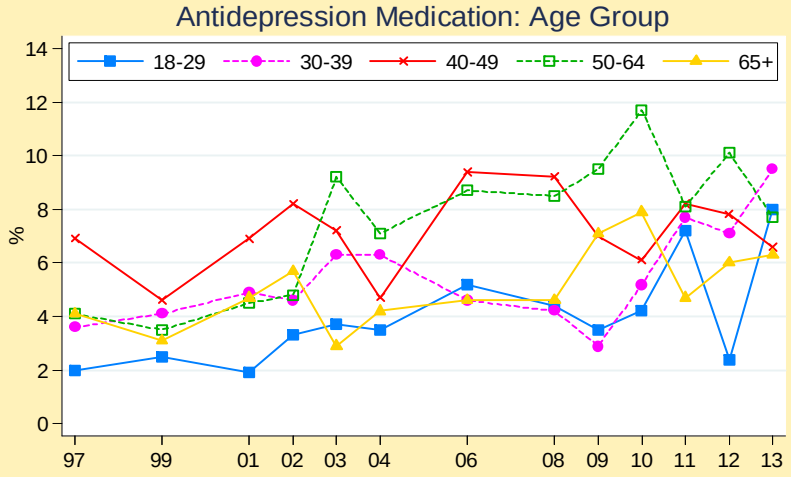

Note: vertical 'whiskers' represent 95% confidence intervals
Source: CAMH Monitor

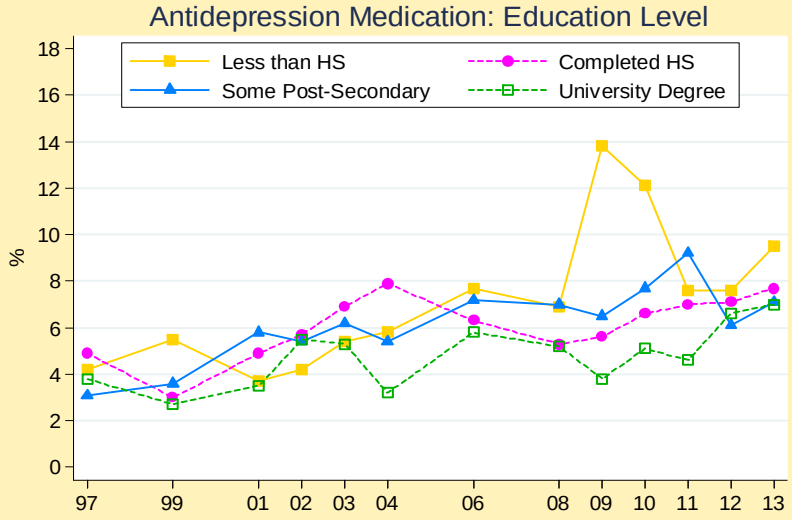
Figure 7.2.4

**Percentage Reporting Using Prescription Medication to Treat Depression in the Past Year, Ontarians Aged 18+, 1997–2013**




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 have 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 the 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 in general, 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

**2013** ……Table 7.3.1; Fig 7.3.1

An estimated **7.1%** (95% CI: 5.8% to 8.6%) of Ontario adults self-rate their mental health as fair or poor. The corresponding population estimate is 716,200 Ontario adults (95% CI: 575,800 to 856,600).

**Marital status** and **education** were significantly related to reporting fair or poor mental health, when holding fixed our set of risk factors.

- The adjusted odds of fair/poor mental health ratings of those previously married were significantly higher than those of married respondents (OR=1.75; 9.4% vs. 5.2%, respectively).

- Relative to those who did not graduate high school, the adjusted odds of fair/poor mental health ratings were significantly lower (by 72%) among respondents with a university degree (OR=0.28; 4.7% vs. 15.1%, respectively).

There were no other significant risk factor effects, after adjusting for other factors.

#### Trends

**2003–2013** ……Table 7.3.3; Fig. 7.3.3

**2012–2013**

Prevalence of fair or poor self-rated mental health in 2013 (7.1%) did not change significantly from 2012 (5.9%). In addition, ratings of fair/poor mental health were stable for all demographic subgroups.

### 2003–2013

Between 2003 and 2013, there was a significant **increase** in ratings of fair/poor mental health, from 4.7% in 2003 to 7.1% in 2013.

Year **did not interact** significantly with any of the demographic risk factors analysed, suggesting that subgroup trends were similar. Separate subgroup trends showed significant increases for those aged 18 to 29, those aged 50 to 64 and those 65 and older, for respondents living in the Central South (from 3.3% in 2005 to 7.0% in 2013), for those never married and for those with some post-secondary education.

## 7.3.2 Frequent Mental Distress Days

**2013** ……Table 7.3.2; Fig. 7.3.2

Overall, an estimated **7.3%** (95% CI: 5.8% to 9.0%) of Ontario adults experienced **frequent mental distress days** (14+ days) in the past 30 days. The corresponding population estimate is 756,700 Ontario adults (95% CI: 588,300 to 925,000).

**Age, marital status** and **education** 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 with age, dropping from 9.9% of 18 to 29 year olds to 3.8% of those 65 and older. Only one of the four sequential age group comparisons was statistically significant: the adjusted odds of experiencing frequent mental distress days were lower among those aged 65 and older compared to those aged 50 to 64 (OR=0.34).

- The rates and adjusted odds of experiencing frequent mental distress days were almost 3 times higher among those previously married than among married individuals (12.7% vs. 5.4%; OR=2.80).

- Relative to those not completing high school, the adjusted odds of frequent mental distress days were significantly lower among those with some post-secondary education and among those holding a university degree (OR=0.29 and OR=0.32, respectively).

There were no other significant effects, when adjusting for our set of risk factors.

### Trends

**2003–2013**……Table 7.3.4; Fig. 7.3.4

#### 2012–2013

Overall, the percent reporting frequent mental distress days in the past 30 days in 2013 (7.3%) was not significantly different from 2012 (6.4%) and rates of frequent mental distress days were stable for all demographic subgroups.

#### 2003–2013

Between 2003 and 2013, there was a significant **increase** in reporting frequent mental distress days in the past 30 days, from 5.4% in 2003 to 7.3% in 2013.

Year **interacted** significantly only with **education**, indicating that trends differed only among education subgroups. Although reporting frequent mental distress days in the past 30 days increased significantly for those not completing high school from 5.7% in 2003 to 14.5% in 2013, among those with some post-secondary education it showed an increase from 5.7% in 2003 to 10.8% in 2010 and then a significant decline to 5.4% in 2013.

Table 7.3.1 Percentage Reporting ***Fair or Poor Mental Health*** and Logistic Regression Adjusted Group Differences, Ontarians Aged 18+, 2013

| | N | % | 95% CI | Adjusted Odds Ratio (N=2908) |
|---|---|---|---|---|
| **Total** | 3021 | **7.1** | (5.8, 8.6) | — |
| **Sex** | | | | NS |
| Men | 1232 | **8.3** | (6.2, 11.0) | 1.39 |
| Women *(Comparison Group)* | 1789 | **5.9** | (4.7, 7.5) | — |
| **Age** | | | | |
| *(Comparison Group is previous age group)* | | | | NS |
| 18-29 | 182 | **†12.1** | (7.3, 19.3) | — |
| 30-39 | 303 | **†7.8** | (4.9, 12.0) | 0.99 |
| 40-49 | 556 | **†5.0** | (3.3, 7.3) | 0.64 |
| 50-64 | 1015 | **5.9** | (4.5, 7.7) | 1.08 |
| 65+ | 909 | **6.2** | (4.4, 8.5) | 0.84 |
| **Public Health Region** | | | | NS |
| Toronto *(vs. Provincial Average)* | 503 | **†8.6** | (5.5, 13.3) | 1.33 |
| Central South | 238 | **†7.0** | (4.1, 11.8) | 0.92 |
| Central West | 403 | **†5.9** | (3.7, 9.3) | 0.89 |
| South West | 497 | **†4.2** | (2.7, 6.4) | **0.54*** |
| Central East | 411 | **†8.3** | (5.1, 13.2) | 1.17 |
| East | 502 | **†7.9** | (5.5, 11.3) | 1.24 |
| North | 467 | **†6.5** | (4.5, 9.2) | 0.90 |
| **Marital Status** | | | | * |
| Married/Partner *(Comparison Group)* | 1926 | **5.2** | (4.1, 6.4) | — |
| Previously Married | 653 | **9.4** | (6.9, 12.8) | **1.75*** |
| Never Married | 409 | **†12.0** | (7.9, 17.7) | 1.86 |
| **Education** | | | | * |
| High school not completed *(Comparison Group)* | 355 | **†15.1** | (9.5, 23.0) | — |
| Completed high school | 638 | **†7.5** | (4.9, 11.4) | **0.44*** |
| Some college or university | 1053 | **6.9** | (5.1, 9.3) | **0.42*** |
| University degree | 939 | **†4.7** | (3.2, 7.0) | **0.28**** |
| **Household Income** | | | | NS |
| < $30,000 *(Comparison Group)* | 303 | **†16.8** | (11.4, 23.9) | — |
| $30,000-$49,999 | 370 | **†8.6** | (4.4, 16.2) | 0.67 |
| $50,000-$79,999 | 526 | **†6.9** | (4.6, 10.2) | 0.58 |
| $80,000+ | 1089 | **†6.2** | (4.4, 8.8) | 0.54 |
| Not stated | 733 | **†5.4** | (3.6, 8.1) | **0.36**** |

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 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 (complete case sample N = 2908).

*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+) During the Past 30 Days and Logistic Regression Adjusted Group Differences, Ontarians Aged 18+, 2013

| | N | % | 95% CI | Adjusted Odds Ratio (N=1954) |
|---|---|---|---|---|
| **Total** [1] | 2060 | **7.3** | (5.8, 9.0) | — |
| **Sex** | | | | NS |
| Men | 878 | **†7.1** | (5.0, 10.1) | 0.89 |
| Women *(Comparison Group)* | 1182 | **7.4** | (5.7, 9.6) | — |
| **Age** | | | | |
| *(Comparison Group is previous age group)* | | | | ** |
| 18-29 | 130 | **†9.9** | (5.4, 17.6) | — |
| 30-39 | 207 | **†9.9** | (5.8, 16.2) | 1.52 |
| 40-49 | 378 | **†6.7** | (4.4, 10.3) | 0.69 |
| 50-64 | 667 | **7.0** | (5.1, 9.4) | 0.87 |
| 65+ | 638 | **†3.8** | (2.4, 5.8) | **0.34**** |
| **Public Health Region** | | | | NS |
| Toronto *(vs. Provincial Average)* | 335 | **†9.2** | (5.7, 14.6) | 1.33 |
| Central South | 164 | **†4.6** | (2.2, 9.4) | 0.65 |
| Central West | 287 | **†6.7** | (3.9, 11.1) | 0.99 |
| South West | 342 | **†6.2** | (4.0, 9.5) | 0.78 |
| Central East | 290 | **†8.7** | (5.0, 14.5) | 1.26 |
| East | 329 | **†7.3** | (4.5, 11.5) | 1.06 |
| North | 313 | **†4.7** | (2.8, 7.8) | 0.59 |
| **Marital Status** | | | | ** |
| Married/Partner *(Comparison Group)* | 1323 | **5.4** | (4.1, 7.0) | — |
| Previously Married | 432 | **†12.7** | (8.3, 18.9) | **2.80**** |
| Never Married | 279 | **†10.8** | (6.6, 17.3) | 1.78 |
| **Education** | | | | ** |
| High school not completed *(Comparison Group)* | 256 | **†14.5** | (8.8, 23.2) | — |
| Completed high school | 426 | **†9.7** | (6.6, 14.2) | 0.60 |
| Some college or university | 737 | **†5.4** | (3.6, 7.9) | **0.29**** |
| University degree | 618 | **†5.7** | (3.6, 9.2) | **0.32**** |
| **Household Income** | | | | NS |
| < $30,000 *(Comparison Group)* | 213 | **†16.8** | (10.5, 25.9) | — |
| $30,000-$49,999 | 246 | **†8.3** | (4.4, 15.1) | 0.61 |
| $50,000-$79,999 | 374 | **†7.0** | (4.2, 11.5) | 0.53 |
| $80,000+ | 742 | **†6.4** | (4.3, 9.3) | 0.51 |
| Not stated | 485 | **†6.0** | (3.6, 9.8) | **0.43*** |

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 (complete case sample N = 1954).

*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 Characteristic, Ontarians Aged 18+, 2003–2013

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Change | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N=) | (2411) | (2611) | (2445) | (2016) | (2005) | (2024) | (2037) | (2024) | (1999) | (3030) | (3021) | | |
| **Total** | **4.7** | **6.1** | **5.2** | **5.8** | **6.2** | **6.1** | **5.7** | **6.1** | **6.0** | **5.9** | **7.1** | **T** | – |
| (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) | | |
| **Sex** | | | | | | | | | | | | **NSI** | |
| Men | **5.0** | **6.4** | **4.3** | **5.6** | **5.1** | **6.1** | **6.1** | **5.4** | **5.3** | **6.0** | **8.3** | **–** | **–** |
| | (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) | | |
| Women | **4.5** | **5.8** | **6.1** | **5.9** | **7.3** | **6.1** | **5.4** | **6.9** | **6.6** | **5.8** | **5.9** | **–** | **–** |
| | (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) | | |
| **Age** | | | | | | | | | | | | **NSI** | |
| 18-29 | **6.2** | **5.1** | **5.4** | **4.7** | **†7.1** | **†6.4** | **†2.9** | **†5.3** | **†6.1** | **†6.5** | **†12.1** | **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) | | |
| 30-39 | **†4.8** | **8.0** | **6.1** | **5.9** | **†3.9** | **†5.9** | **†7.8** | **†4.2** | **†5.6** | **†5.2** | **†7.8** | **–** | **–** |
| | (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) | | |
| 40-49 | **†4.3** | **5.3** | **5.6** | **7.3** | **8.0** | **†6.1** | **†6.5** | **†8.0** | **†6.7** | **†4.3** | **†5.0** | **–** | **–** |
| | (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) | | |
| 50-64 | **†4.3** | **6.4** | **5.2** | **5.4** | **†6.5** | **7.9** | **†7.2** | **7.4** | **6.6** | **8.0** | **5.9** | **T** | – |
| | (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) | | |
| 65+ | **†3.5** | **†4.2** | **†3.3** | **†5.7** | **†5.7** | **†4.0** | **†4.3** | **†5.2** | **†5.8** | **†5.1** | **6.2** | **T** | – |
| | (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) | | |
| **Region** | | | | | | | | | | | | **NSI** | |
| Toronto | **†4.6** | **†7.1** | **†4.9** | **†5.4** | **†6.5** | **†9.2** | **†6.7** | **†6.9** | **†5.9** | **†7.2** | **†8.6** | **–** | **–** |
| | (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) | | |
| Central South | **†6.8** | **†5.1** | **†3.3** | **†6.0** | **†6.9** | **†2.8** | **†6.3** | **†8.0** | **†12.2** | **†5.2** | **†7.0** | **T** | – |
| | (3.9, 11.6) | (2.9, 10.0) | (1.7, 6.3) | (3.1,11.3) | (3.9,11.8) | (1.3, 5.9) | (3.5,11.1) | (4.3, 14.4) | (7.3,19.6) | (2.9, 9.2) | (4.1, 11.8) | | |
| Central West | **†2.5** | **†5.3** | **†6.0** | **†6.8** | **†7.5** | **†2.7** | **†5.5** | **†4.2** | **†3.8** | **†4.3** | **†5.9** | **–** | **–** |
| | (1.3, 4.8) | (3.0, 9.2) | (3.7, 9.7) | (3.9, 11.6) | (4.5,12.2) | (1.4, 5.3) | (3.2, 9.4) | (2.4, 7.2) | (2.1,7.0) | (2.4, 7.8) | (3.7, 9.3) | | |
| South West | **†4.2** | **†5.2** | **†6.4** | **†5.2** | **†5.9** | **†5.3** | **†5.4** | **†6.0** | **†6.8** | **†6.6** | **†4.2** | **–** | **–** |
| | (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) | | |
| Central East | **†4.6** | **†6.7** | **†2.8** | **†4.8** | **†4.6** | **†8.1** | **†5.4** | **†5.9** | **†4.3** | **†5.4** | **†8.3** | **–** | **–** |
| | (2.3, 8.9) | (4.2, 10.7) | (1.4, 5.4) | (2.7,8.5) | (2.7,7.8) | (4.5, 14.0) | (3.1,9.2) | (3.6,9.5) | (2.4,7.4) | (3.4, 8.5) | (5.1, 13.2) | | |
| East | **†5.4** | **†6.7** | **†6.9** | **†4.2** | **†5.2** | **†5.5** | **†5.8** | **†7.5** | **†5.0** | **†6.3** | **†7.9** | **–** | **–** |
| | (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) | | |
| North | **†6.9** | **†6.3** | **†6.7** | **†9.3** | **†7.5** | **†5.1** | **†3.8** | **†4.1** | **†8.3** | **†6.4** | **†6.5** | **–** | **–** |
| | (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) | | |

Cont'd

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Change | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N=) | (2411) | (2611) | (2445) | (2016) | (2005) | (2024) | (2037) | (2024) | (1999) | (3030) | (3021) | | |
| **Marital Status** | | | | | | | | | | | | **NSI** | |
| Married/Partner | **†3.6** | **4.6** | **4.0** | **5.4** | **5.2** | **4.3** | **5.2** | **5.1** | **5.0** | **4.1** | **5.2** | **–** | **–** |
| Previously Married | **7.8** | **11.9** | **8.6** | **10.3** | **9.2** | **11.8** | **†8.5** | **†10.9** | **†8.9** | **9.4** | **9.4** | **–** | **–** |
| Never Married | **†6.4** | **†7.2** | **†6.7** | **†4.4** | **†7.1** | **†8.3** | **†6.3** | **†6.7** | **†8.0** | **†9.5** | **†12.0** | **T** | **–** |
| **Education** | | | | | | | | | | | | **NSI** | |
| 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** | **–** | **–** |
| 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** | **–** | **–** |
| 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** | **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** | **–** | **–** |

Notes: (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 2003-2013; **2Y** significant change (p<.05) between last two estimates.
(3) YEAR × FACTOR interaction**: NSI**, non-significant;
(4) Poor Mental Health – reporting fair or poor mental health in general.

*Q:* *In general, would you say your overall mental health is excellent, very good, good, fair, or poor?*

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

Table 7.3.4: Percentage ***Reporting Frequent Mental Distress Days*** (14+) During the Past 30 Days, by Demographic Characteristic, Ontarians Aged 18+, 2003–2013

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Change | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N=) | (2411) | (2611) | (2445) | (2016) | (2005) | (2024) | (2037) | (2024) | (1999) | (2015) | (2060) | | |
| **Total** | **5.4** | **6.6** | **5.4** | **5.8** | **6.6** | **6.0** | **6.4** | **7.9** | **7.1** | **6.4** | **7.3** | **T** | **–** |
| (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) | | |
| **Sex** | | | | | | | | | | | | **NSI** | |
| Men | **4.2** | **5.7** | **4.4** | **†4.9** | **†4.7** | **†5.6** | **†4.7** | **5.8** | **†5.8** | **†5.8** | **†7.1** | **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) | | |
| Women | **6.5** | **7.4** | **6.3** | **6.7** | **8.4** | **6.4** | **8.1** | **10.1** | **8.2** | **7.0** | **7.4** | **–** | **–** |
| | (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) | | |
| **Age** | | | | | | | | | | | | **NSI** | |
| 18-29 | **7.0** | **8.2** | **†5.7** | **†5.4** | **†7.9** | **10.2** | **†5.0** | **†9.0** | **†11.6** | **†6.8** | **†9.9** | **–** | **–** |
| | (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) | | |
| 30-39 | **†3.4** | **6.3** | **7.6** | **†7.6** | **†8.5** | **†5.9** | **†7.2** | **†7.5** | **†6.9** | **†8.5** | **†9.9** | **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) | | |
| 40-49 | **6.8** | **7.8** | **†4.8** | **†7.1** | **†7.2** | **8.1** | **†6.5** | **†7.5** | **†6.7** | **†7.5** | **†6.7** | **–** | **–** |
| | (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) | | |
| 50-64 | **6.9** | **6.6** | **†5.1** | **†5.4** | **†6.2** | **†4.3** | **†8.3** | **†9.7** | **†5.6** | **†6.8** | **7.0** | **–** | **–** |
| | (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) | | |
| 65+ | **†1.9** | **†3.8** | **†3.6** | **†3.2** | **†3.1** | **†1.9** | **†3.5** | **†5.5** | **†4.6** | **†2.5** | **†3.8** | **–** | **–** |
| | (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) | | |
| **Region** | | | | | | | | | | | | **NSI** | |
| Toronto | **†4.7** | **†7.3** | **†4.8** | **†3.8** | **†5.1** | **†6.6** | **†6.9** | **†8.4** | **†7.7** | **†6.4** | **†9.2** | **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) | | |
| Central South | **†7.3** | **†4.5** | **†4.6** | **†7.1** | **†8.0** | **†4.9** | **†6.5** | **†11.5** | **†14.5** | **†4.0** | **†4.6** | **T** | **–** |
| | (4.4, 11.7) | (2.5, 7.9) | (2.5, 8.4) | (3.6, 13.6) | (4.6,13.6) | (1.9, 11.8) | (2.7, 14.8) | (6.8, 18.8) | (9.1, 22.4) | (1.9, 8.2) | (2.2, 9.4) | | |
| Central West | **†4.7** | **†7.9** | **†6.5** | **†7.3** | **†8.2** | **†4.0** | **†9.3** | **†10.0** | **†8.1** | **†6.5** | **†6.7** | **–** | **–** |
| | (2.9, 7.6) | (5.0, 12.5) | (4.0, 10.6) | (4.6, 11.5) | (5.2,12.8) | (2.0, 7.7) | (5.3, 15.8) | (6.6, 14.8) | (4.4,14.4) | (3.7, 11.0) | (3.9,11.1) | | |
| South West | **†6.0** | **†8.6** | **†5.1** | **†6.0** | **†4.3** | **†5.4** | **†4.5** | **†5.8** | **†6.8** | **†6.3** | **†6.2** | **–** | **–** |
| | (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) | | |
| Central East | **†6.1** | **†5.0** | **†6.5** | **†5.5** | **†5.5** | **†9.7** | **†3.3** | **†5.8** | **†2.2** | **†8.0** | **†8.7** | **–** | **–** |
| | (3.4, 10.6) | (2.9, 8.6) | (4.1, 10.1) | (3.2, 9.4) | (3.3,8.9) | (5.8, 15.7) | (1.3, 8.4) | (3.5, 9.6) | (1.1, 4.2) | (4.9, 12.7) | (5.2, 14.5) | | |
| East | **†4.5** | **†6.0** | **†5.1** | **†5.4** | **†8.3** | **†3.3** | **†7.4** | **†8.5** | **†6.4** | **†6.0** | **†7.3** | **–** | **–** |
| | (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) | | |
| North | **†5.4** | **†5.1** | **†4.6** | **†6.3** | **†8.4** | **†6.4** | **†4.4** | **†4.9** | **†6.7** | **†5.3** | **†4.7** | **–** | **–** |
| | (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) | | |

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Change | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N=) | (2411) | (2611) | (2445) | (2016) | (2005) | (2024) | (2037) | (2024) | (1999) | (2015) | (2060) | | |
| **Marital Status** | | | | | | | | | | | | **NSI** | |
| Married/Partner | **4.4** | **5.0** | **4.0** | **5.5** | **5.8** | **4.4** | **6.1** | **6.9** | **5.0** | **5.3** | **5.4** | **–** | **–** |
| Previously Married | **†7.4** | **10.6** | **9.2** | **†8.5** | **†8.8** | **†6.8** | **†7.7** | **†14.1** | **†12.1** | **10.0** | **†12.7** | **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** | **–** | **–** |
| **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** | **T** | **–** |
| Completed high school | **7.6** | **9.2** | **7.2** | **†6.3** | **8.9** | **†4.8** | **†7.4** | **†8.5** | **†5.2** | **†5.1** | **†9.7** | – | – |
| 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** | **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** | **–** | **–** |

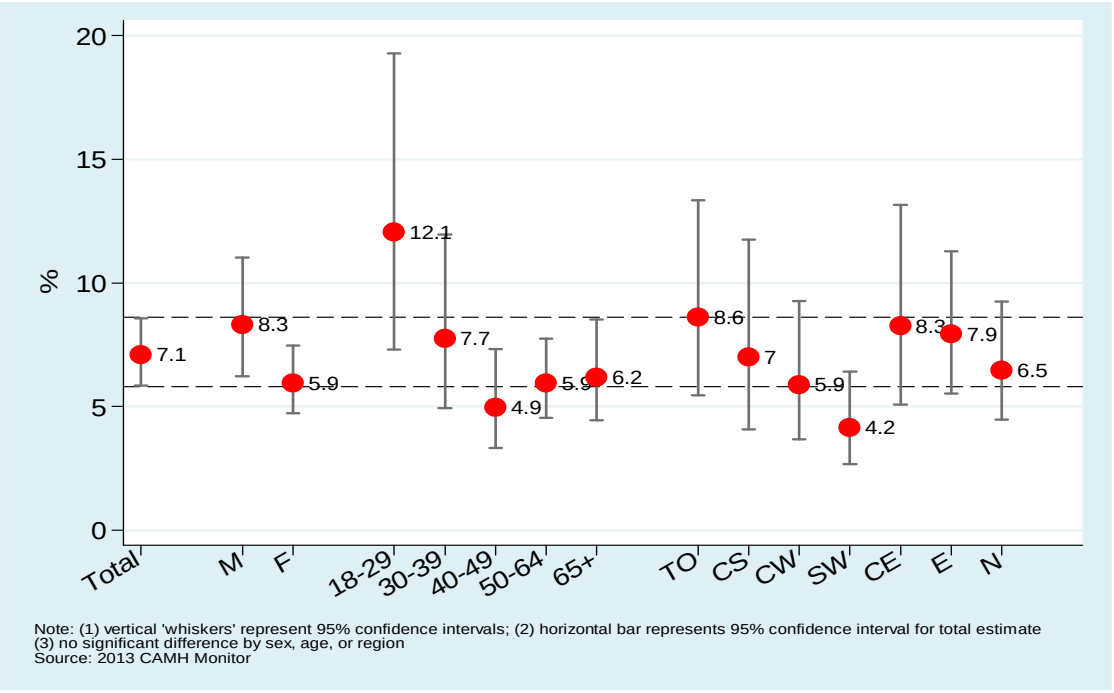
Notes: (1) † Estimate suppressed or unstable; [a] 95% confidence interval; all analyses are sample design adjusted.
(2) Trend Analysis: **–** change not statistically significant at p<.05; **T** significant change (p<.05) between 2003-2013; 2Y significant change (p<.05) between last two estimates.
(3) YEAR × FACTOR interaction**: NSI**, non-significant; * p<.05.
(4) Frequent Mental Distress Days –reporting 14 or more mental distress days during the past 30 days.

*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?*

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

Figure 7.3.1

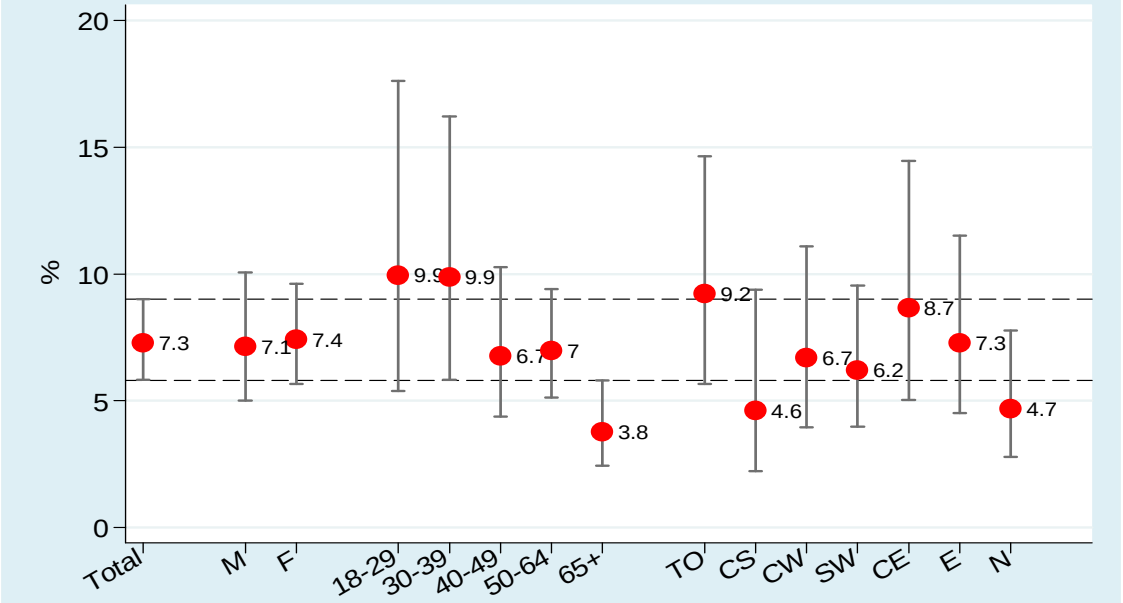
**Percentage Reporting Fair or Poor Mental Health by Gender, Age and Region, Ontarians Aged 18+, 2013 (N=3021)**




Note: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal bar represents 95% confidence interval for total estimate
(3) no significant difference by sex, age, or region
Source: 2013 CAMH Monitor

Figure 7.3.2

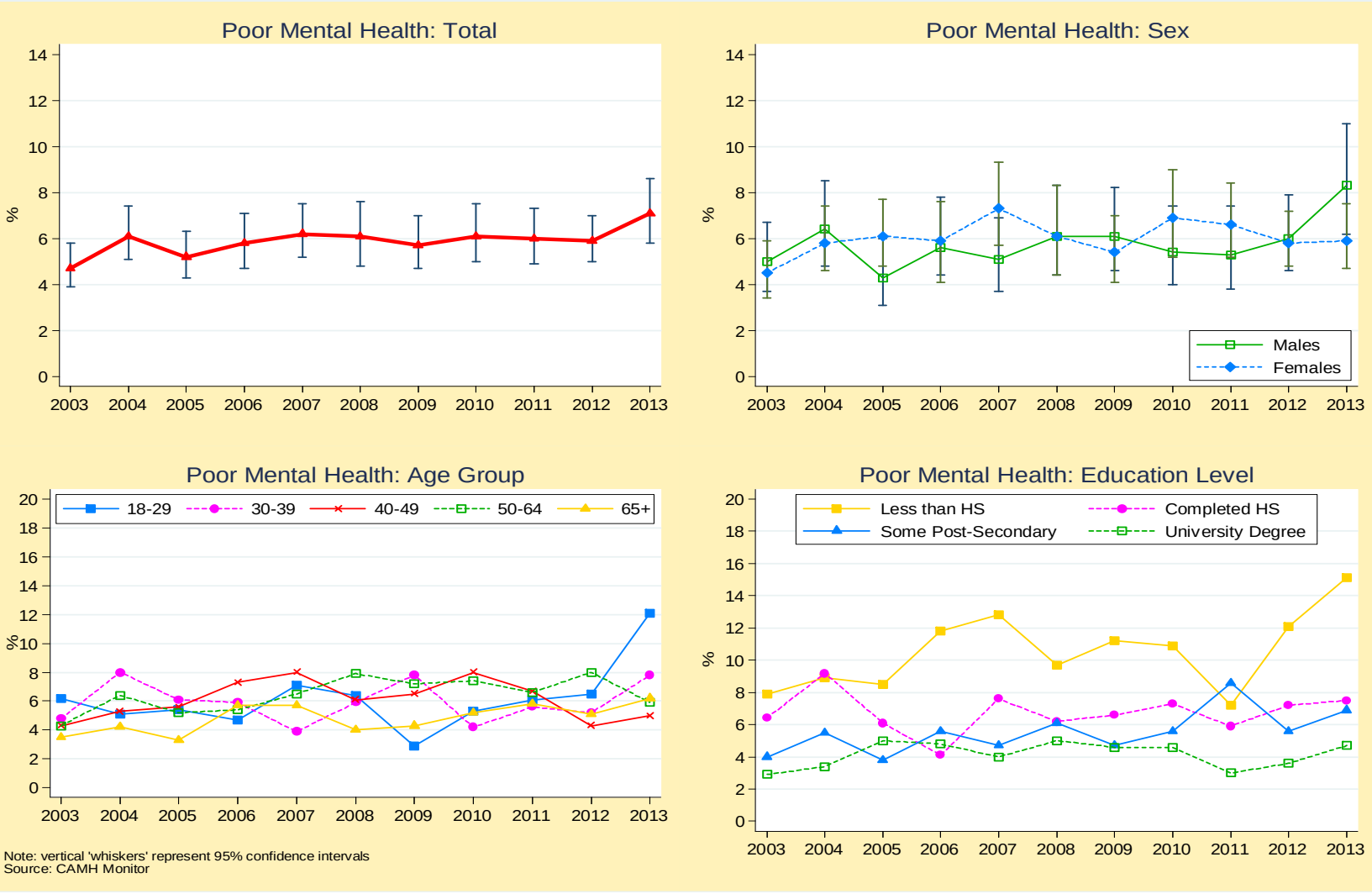
**Percentage Reporting Frequent Mental Distress Days (14+) in the Past 30 Days by Gender, Age and Region, Ontarians Aged 18+, 2013 (N=2060)**




Note: (1) vertical 'whiskers' represent 95% confidence intervals; (2) horizontal bar represents 95% confidence interval for total estimate
(3) significant difference by age (p<.01)
Source: 2013 CAMH Monitor

Figure 7.3.3

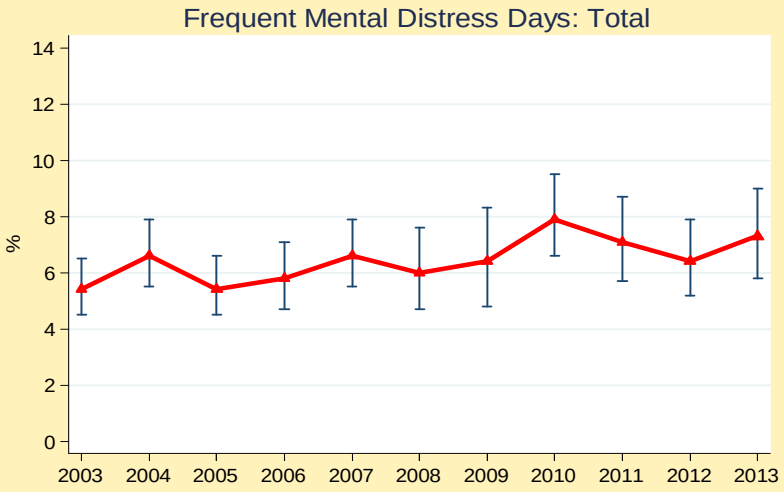
**Percentage Reporting Fair or Poor Mental Health, Ontarians Aged 18+, 2003–2013**

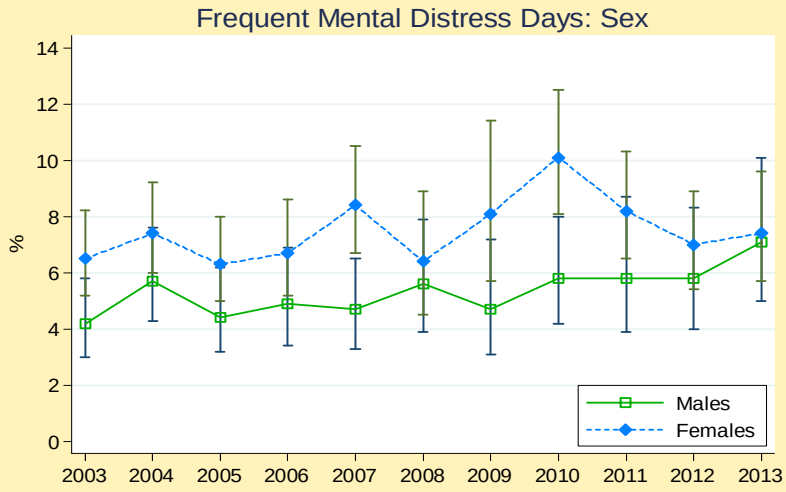


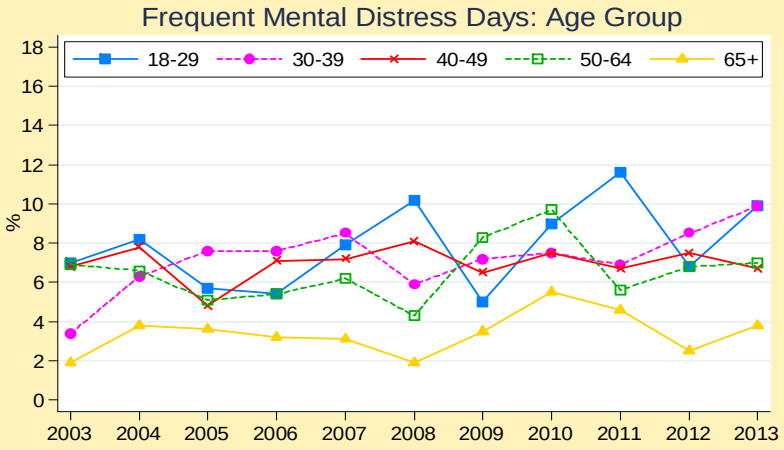

Note: vertical 'whiskers' represent 95% confidence intervals
Source: CAMH Monitor

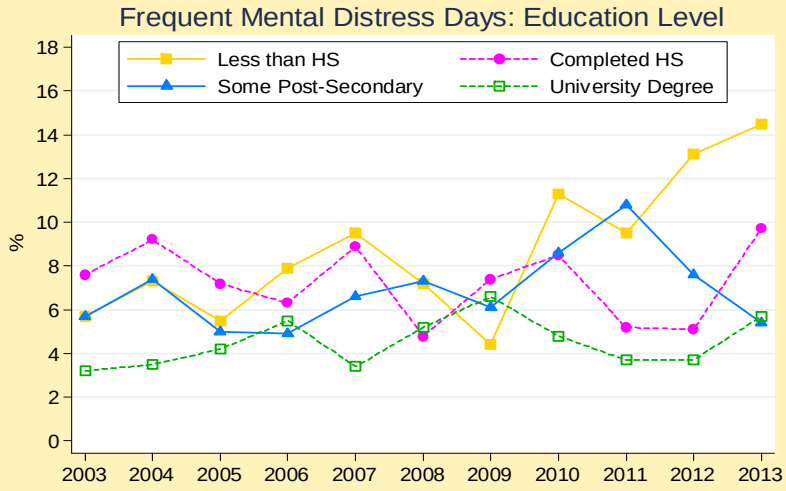
Figure 7.3.4

**Percentage Reporting Frequent Mental Distress Days (14+) in the Past 30 Days, Ontarians Aged 18+, 2003–2013**




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

## 7.4 Suicidal Ideation and Suicide Attempt

For the first time in 2013, the *CM* included a question about suicidal ideation and attempts. Specifically, a random subsample of respondents (N = 2,060) were asked: *"In the past 12 months, did you ever seriously consider attempting suicide?"* and also asked about attempts: *"In the past 12 months, did you actually attempt suicide?"* Response options to both questions were *yes* or *no*.

**2013** ……Table 7.4.1 Fig. 7.4.1

Overall, an estimated **2.2%** (95% CI: 5.8% to 8.5%) of Ontario adults reported that they seriously **contemplated suicide** during the 12 months before the survey. The corresponding population estimate is 231,500 adults (95% CI: 133,300 to 329,800). Less than **0.5%** of Ontario adults report **attempting suicide** in the past year. Estimates for suicide attempts were suppressed due to unreliability.

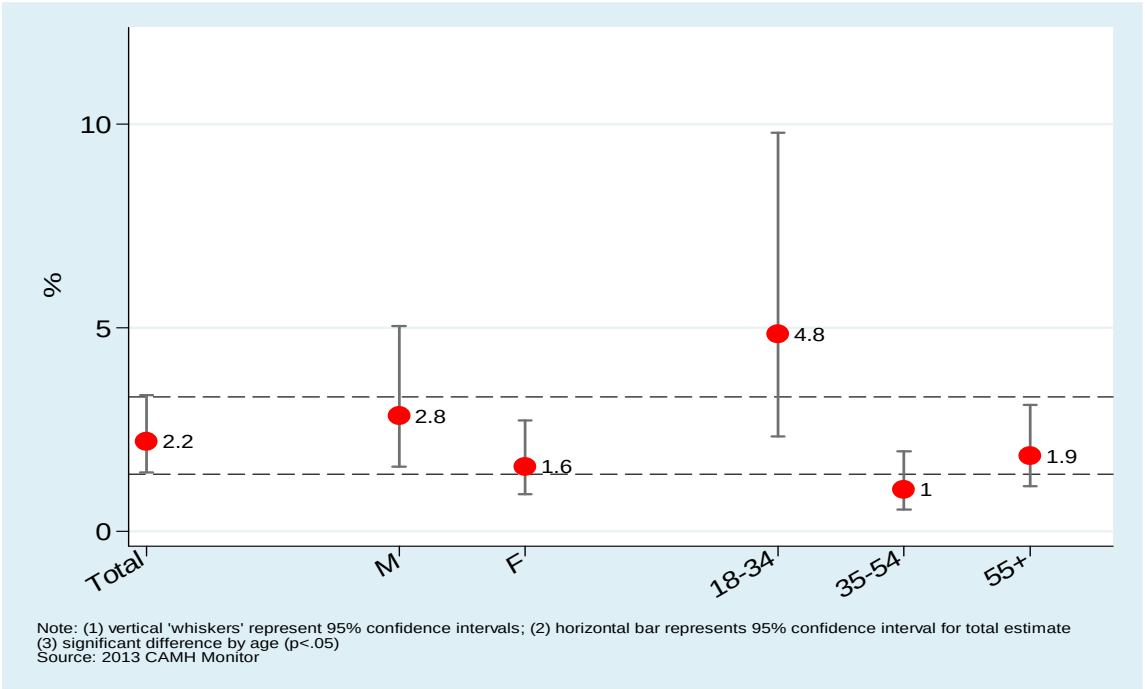
- Suicidal ideation did not significantly differ by sex, after controlling for age.
- Compared to those aged 55 and older, the adjusted odds of reporting suicidal ideation were 2.7 times higher among those aged 18 to 34 (4.8% vs. 1.9%).
- Estimates by region, marital status education and income were supressed due to unreliability.

Table 7.4.1 Percentage Reporting ***Suicidal Ideation*** During the Past 12 Months and Logistic Regression Adjusted Group Differences, Ontarians Aged 18+, 2013

| | N | % | 95% CI | Adjusted Odds Ratio (N=2017) |
|---|---|---|---|---|
| **Total** [1] | 2060 | **†2.2** | (1.4, 3.3) | — |
| **Sex** | | | | NS |
| Men | 878 | **†2.8** | (1.6, 5.0) | 1.82 |
| Women *(Comparison Group)* | 1182 | **†1.6** | (1.0, 2.7) | — |
| **Age** | | | | |
| *(Comparison Group is previous age group)* | | | | * |
| 18-34 | 297 | **†4.8** | (2.3, 9.8) | **2.67*** |
| 35-54 | 1071 | **†1.0** | (0.6, 2.0) | 0.54 |
| 55 and older | 1597 | **†1.9** | (1.1, 3.1) | — |

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 (complete case sample N= 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 12 Months by Sex and Age, Ontarians Aged 18+, 2013 (N=2060)**



# 8. PHYSICAL AND OVERALL HEALTH

## 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 (Mc.Dowell, 2006), as well as future morbidity and mortality (Idler & Benyamini, 1997)

Since 2003, the following items have been asked in the CM:

3) *In general, would you say your overall health is excellent, very good, good, fair or poor?*

4) *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 Self- Rated Fair/Poor Health

**2013**……Table 8.1; Fig. 8.1

An estimated **9.4%** (95% CI: 8.3% to 10.7%) of Ontario adults self-rate their overall health as fair or poor. The corresponding population estimate is 955,300 Ontario adults (95% CI: 832,800 to 1,077,700).

**Age, marital status, education** and **income** were significantly related to reporting fair or poor overall health, when holding fixed risk factors.

- The rates of experiencing fair or poor overall health increased with age, from 4.5% of 18 to 29 year olds to 15.4% of those 65 and older. Only one of the four sequential age group comparisons was statistically significant: the adjusted odds of experiencing fair or poor overall health were significantly higher among those aged 30 to 39 compared to those aged 18 to 29 (OR=2.58).

- The percentage and adjusted odds of fair/poor health ratings were significantly higher among those previously married than among married respondents (17.7% vs. 8.7%; OR=1.55).

- Relative to those who did not graduate high school, the adjusted odds of fair/poor health ratings were significantly lower among respondents with a university degree (19.9% vs. 6.0%; OR=0.42).

- 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 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=0.46 and OR=0.27, respectively) .

There were no other significant risk factor effects, after adjusting for other factors.

### Trends

**2003–2013** ……Table 8.3; Fig. 8.3

#### 2012–2013

Prevalence of fair or poor self-rated overall health in 2013 (9.4%) was not significantly different from 2012 (10.8%). In addition, rates were stable for all sex, age, region, marital status, and education subgroups.

#### 2003–2013

Overall, between 2003 and 2011, there were no significant changes in ratings of fair/poor health and there is no evidence of dominant differential trends between subgroups. **Year did not interact** significantly with any of the demographic risk factors analysed, suggesting that subgroup trends were not dissimilar.

## 8.2 Frequent Physically Unhealthy Days

**2013** ……Table 8.2; Fig. 8.2

Overall, an estimated **6.7%** (95% CI: 5.6% to 8.0%) of Ontario adults experienced frequent physically unhealthy days (14+ days) in the past 30 days. The corresponding population estimate is 703,200 Ontario adults (95% CI: 580,200 to 826,200).

**Age** and **income** were significantly related to experiencing frequent unhealthy days, after adjusting for our set of risk factors.

- Compared to those aged 18 to 29, the adjusted odds of experiencing frequent unhealthy days were 12.3 times higher among those aged 30 to 39.

- 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. Rates of frequent unhealthy days declined from 19.0% among those with incomes of less than $30,000 to 4.1% among those with incomes of $80,000 and higher. Relative to those with incomes of less than $30,000, the adjusted odds of experiencing frequent unhealthy days were significantly lower among respondents with incomes of $50,000 to $79,999 and among those with incomes of $80,000 and higher (OR=0.24 and OR=0.23, respectively) .

There were no other significant effects, when adjusting for other factors.

### Trends

**2003–2013**…… Table 8.4; Fig. 8.4

#### 2012–2013

Overall, the percent reporting frequent unhealthy days in the past 30 days in 2013 (6.7%) was not significantly different from 2012 (7.4%) and rates of frequent mental distress days were stable for all demographic subgroups.

#### 2003–2013

Between 2003 and 2013, there were no significant changes overall in experiencing frequent unhealthy days in the past 30 days.

**Year interacted** significantly with **age**, indicating that trends in experiencing frequent unhealthy days differed among age groups. Between 2003 and 2013, rates of frequent unhealthy days **increased** significantly among 30 to 39 year olds from 3.4% to 8.2%, whereas among respondents aged 40 to 49, rates declined from 9.7% in 2003 to 5.7% in 2013.

Although the year-by-region interaction was not statistically significant, separate subgroup trends showed significant increases between 2003 and 2013 for respondents living in Toronto and in the South-West (from 3.6% to 7.4%, and from 5.6% to 9.7%, respectively).

Table 8.1 Percentage Reporting ***Fair or Poor Health*** and Logistic Regression Adjusted Group Differences, Ontarians Aged 18+, 2013

| | N | % | 95% CI | Adjusted Odds Ratio (N=2908) |
|---|---|---|---|---|
| **Total** | 3021 | **9.4** | (8.3, 10.7) | — |
| **Sex** | | | | NS |
| Men | 1232 | **9.4** | (7.6, 11.4) | 1.14 |
| Women *(Comparison Group)* | 1789 | **9.5** | (8.0, 11.2) | — |
| **Age** | | | | |
| *(Comparison Group is previous age group)* | | | | ***** |
| 18-29 | 182 | **†4.5** | (2.1, 9.3) | — |
| 30-39 | 303 | **†7.4** | (4.8, 11.2) | **2.58*** |
| 40-49 | 556 | **8.4** | (6.2, 11.3) | 1.22 |
| 50-64 | 1015 | **10.5** | (8.4, 13.0) | 1.08 |
| 65+ | 909 | **15.4** | (13.0, 18.2) | 1.13 |
| **Public Health Region** | | | | NS |
| Toronto *(vs. Provincial Average)* | 503 | **†9.1** | (6.6, 12.6) | 0.97 |
| Central South | 238 | **†8.1** | (5.4, 12.1) | 0.80 |
| Central West | 403 | **†9.0** | (6.4, 12.7) | 1.13 |
| South West | 497 | **9.2** | (6.9, 12.0) | 0.86 |
| Central East | 411 | **†9.1** | (6.4, 12.8) | 1.01 |
| East | 502 | **10.0** | (7.5, 13.3) | 1.02 |
| North | 467 | **13.8** | (10.8, 17.4) | **1.35*** |
| **Marital Status** | | | | ***** |
| Married/Partner *(Comparison Group)* | 1926 | **8.7** | (7.4, 10.2) | — |
| Previously Married | 653 | **17.7** | (14.3, 21.7) | **1.55*** |
| Never Married | 409 | **†7.4** | (4.9, 11.0) | 1.43 |
| **Education** | | | | ****** |
| High school not completed *(Comparison Group)* | 355 | **19.9** | (15.6, 25.0) | — |
| Completed high school | 638 | **11.9** | (9.1, 15.5) | 0.73 |
| Some college or university | 1053 | **8.3** | (6.6, 10.4) | **0.53**** |
| University degree | 939 | **6.0** | (4.4, 8.2) | **0.42**** |
| **Household Income** | | | | ******* |
| < $30,000 *(Comparison Group)* | 303 | **23.0** | (17.4, 29.9) | — |
| $30,000-$49,999 | 370 | **13.8** | (10.0, 18.6) | 0.59 |
| $50,000-$79,999 | 526 | **9.9** | (7.4, 13.1) | **0.46**** |
| $80,000+ | 1089 | **5.0** | (3.8, 6.7) | **0.27**** |
| Not stated | 733 | **11.1** | (8.6, 14.3) | **0.53**** |

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 physical health are higher relative to the comparison group; ORs less than1.0 indicate that the odds of poor physical health 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 = 2908).

*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 8.2 Percentage Reporting ***Frequent Physically Unhealthy Days*** (14+) During the Past 30 Days and Logistic Regression Adjusted Group Differences, Ontarians Aged 18+, 2013

| | N | % | 95% CI | Adjusted Odds Ratio (N=1954) |
|---|---|---|---|---|
| **Total** [1] | 2060 | **6.7** | (5.6, 8.0) | — |
| **Sex** | | | | NS |
| Men | 878 | **6.5** | (4.9, 8.6) | 1.07 |
| Women *(Comparison Group)* | 1182 | **7.0** | (5.6, 8.7) | — |
| **Age** | | | | |
| *(Comparison Group is previous age group)* | | | | * |
| 18-29 | 130 | † | — | — |
| 30-39 | 207 | **†8.2** | (5.1, 12.9) | **12.31**** |
| 40-49 | 378 | **†5.7** | (3.6, 9.0) | 0.78 |
| 50-64 | 667 | **7.2** | (5.3, 9.8) | 1.09 |
| 65+ | 638 | **11.3** | (8.7, 14.4) | 1.31 |
| **Public Health Region** | | | | NS |
| Toronto *(vs. Provincial Average)* | 335 | **†7.4** | (4.7, 11.6) | 1.09 |
| Central South | 164 | **†7.0** | (4.0, 12.1) | 1.23 |
| Central West | 287 | **†6.6** | (4.3, 9.9) | 1.12 |
| South West | 342 | **†9.7** | (6.7, 13.8) | 1.43 |
| Central East | 290 | **†4.4** | (2.6, 7.6) | 0.67 |
| East | 329 | **†6.3** | (4.1, 9.5) | 0.86 |
| North | 313 | **†7.2** | (4.9, 10.4) | 0.95 |
| **Marital Status** | | | | NS |
| Married/Partner *(Comparison Group)* | 1323 | **6.4** | (5.1, 8.0) | — |
| Previously Married | 432 | **11.4** | (8.2, 15.7) | 1.23 |
| Never Married | 279 | **†5.1** | (3.0, 8.5) | 1.82 |
| **Education** | | | | NS |
| High school not completed *(Comparison Group)* | 256 | **†13.3** | (9.1, 19.0) | — |
| Completed high school | 426 | **†6.9** | (4.7, 10.0) | 0.70 |
| Some college or university | 737 | **6.3** | (4.6, 8.5) | 0.64 |
| University degree | 618 | **†5.0** | (3.4, 7.4) | 0.55 |
| **Household Income** | | | | *** |
| < $30,000 *(Comparison Group)* | 213 | **†19.0** | (12.9, 27.1) | — |
| $30,000-$49,999 | 246 | **†11.9** | (7.3, 18.8) | 0.49 |
| $50,000-$79,999 | 374 | **†5.1** | (3.2, 7.9) | **0.24**** |
| $80,000+ | 742 | **†4.1** | (2.9, 5.9) | **0.23**** |
| Not stated | 485 | **†7.2** | (5.1, 9.9) | **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 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 (complete case sample N = 1954).

*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 8.3: Percentage ***Reporting Fair or Poor Health***, by Demographic Characteristic, Ontarians Aged 18+, 2003–2013

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Change | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N=) | (2411) | (2611) | (2445) | (2016) | (2005) | (2024) | (2037) | (2024) | (1999) | (3030) | (3021) | | |
| **Total** | **10.2** | **11.1** | **11.4** | **9.7** | **11.9** | **10.4** | **10.5** | **11.2** | **11.9** | **10.8** | **9.4** | – | – |
| (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) | | |
| **Sex** | | | | | | | | | | | | | **NSI** |
| Men | **9.2** | **11.4** | **10.2** | **9.6** | **11.3** | **10.0** | **11.5** | **10.4** | **13.1** | **11.3** | **9.4** | – | – |
| | (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) | | |
| Women | **11.2** | **10.8** | **12.6** | **9.9** | **12.6** | **10.8** | **9.6** | **12.0** | **10.9** | **10.4** | **9.5** | – | – |
| | (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) | | |
| **Age** | | | | | | | | | | | | | **NSI** |
| 18-29 | **†7.1** | **†8.3** | **†8.8** | **†3.4** | **†11.5** | **†6.2** | **†7.8** | **†5.2** | **†8.3** | **†5.9** | **†4.5** | – | – |
| | (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) | | |
| 30-39 | **†4.7** | **†4.8** | **†6.8** | **†7.5** | **†8.3** | **†5.5** | **†8.5** | **†5.9** | **†6.8** | **†8.8** | **†7.4** | – | – |
| | (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) | | |
| 40-49 | **8.7** | **9.6** | **8.3** | **†9.9** | **†9.5** | **†10.9** | **†7.0** | **†8.7** | **†8.0** | **7.7** | **8.4** | – | – |
| | (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) | | |
| 50-64 | **14.0** | **11.6** | **14.3** | **11.8** | **14.1** | **14.0** | **12.5** | **14.5** | **14.6** | **12.4** | **10.5** | – | – |
| | (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) | | |
| 65+ | **17.8** | **22.4** | **21.9** | **16.7** | **16.3** | **17.4** | **18.4** | **21.4** | **22.3** | **18.2** | **15.4** | – | – |
| | (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) | | |
| **Region** | | | | | | | | | | | | | **NSI** |
| Toronto | **10.0** | **†10.3** | **11.0** | **†10.5** | **†11.0** | **12.5** | **12.9** | **†9.0** | **11.2** | **11.5** | **†9.1** | – | – |
| | (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) | | |
| Central South | **†9.4** | **†11.7** | **†13.9** | **†11.6** | **†15.5** | **†9.1** | **†7.3** | **†15.3** | **†15.8** | **†9.7** | **†8.1** | – | – |
| | (6.0, 14.5) | (8.1, 16.6) | (9.2, 20.3) | (7.2, 18.2) | (10.7, 21.8) | (5.5, 14.7) | (4.4, 11.8) | (10.1, 22.6) | (10.9, 22.3) | (6.5, 14.2) | (5.4, 12.1) | | |
| Central West | **†10.1** | **†9.3** | **11.7** | **†7.3** | **†11.6** | **†7.3** | **†10.9** | **†11.3** | **†13.0** | **†5.8** | **†9.0** | – | – |
| | (7.0, 14.4) | (6.4, 13.4) | (8.5, 16.0) | (4.6, 11.6) | (8.0, 16.7) | (4.5, 11.6) | (7.5, 15.4) | (7.7, 16.3) | (8.9, 18.6) | (3.8, 8.6) | (6.4, 12.7) | | |
| South West | **9.1** | **10.3** | **11.7** | **10.1** | **†10.7** | **†10.6** | **†6.6** | **13.6** | **†11.1** | **11.8** | **9.2** | – | – |
| | (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) | | |
| Central East | **†9.9** | **†11.7** | **†10.8** | **†9.5** | **†8.2** | **†11.4** | **†10.6** | **†10.0** | **†8.1** | **12.6** | **†9.1** | – | – |
| | (6.6, 14.6) | (8.3, 16.3) | (7.4, 15.6) | (6.3, 14.1) | (6.3, 12.6) | (7.5, 16.8) | (6.9, 15.9) | (7.0, 14.1) | (5.4, 12.0) | (9.4, 16.7) | (6.4, 12.8) | | |
| East | **10.5** | **11.9** | **9.3** | **†6.6** | **15.1** | **†8.7** | **†8.6** | **10.3** | **12.8** | **11.0** | **10.0** | – | – |
| | (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) | | |
| North | **14.4** | **14.8** | **13.2** | **15.8** | **13.9** | **13.2** | **18.0** | **13.8** | **15.9** | **15.8** | **13.8** | – | – |
| | (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) | | |

Cont'd

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Change | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N=) | (2411) | (2611) | (2445) | (2016) | (2005) | (2024) | (2037) | (2024) | (1999) | (3030) | (3021) | | |
| **Marital Status** | | | | | | | | | | | | **NSI** | |
| Married/Partner | **9.1** | **9.5** | **10.0** | **9.2** | **10.4** | **8.9** | **8.9** | **10.8** | **11.6** | **10.1** | **8.7** | **–** | **–** |
| Previously Married | **21.7** | **20.5** | **19.6** | **17.4** | **18.3** | **22.8** | **21.5** | **22.3** | **20.9** | **17.3** | **17.7** | **–** | **–** |
| Never Married | **†7.2** | **10.6** | **10.4** | **†6.7** | **†12.1** | **†7.9** | **†9.7** | **†6.6** | **†8.2** | **9.7** | **†7.4** | **–** | **–** |
| **Education** | | | | | | | | | | | | **NSI** | |
| 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** | **–** | **–** |
| 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** | – | – |
| 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** | **–** | **–** |
| University degree | **†4.9** | **5.4** | **†6.9** | **†7.5** | **†5.9** | **†5.5** | **6.4** | **†7.2** | **7.7** | **6.5** | **6.0** | **–** | **–** |

Notes: (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 2003-2013; **2Y** significant change (p<.05) between last two estimates.
(3) **NSI**, non-significant YEAR × FACTOR interaction.
(4) 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 8.4: Percentage ***Reporting Frequent Physically Unhealthy Days*** (14+) During the Past 30 Days, by Demographic Characteristic, Ontarians Aged 18+, 2003–2013

| (N=) | 2003 (2411) | 2004 (2611) | 2005 (2445) | 2006 (2016) | 2007 (2005) | 2008 (2024) | 2009 (2037) | 2010 (2024) | 2011 (1999) | 2012 (2015) | 2013 (2060) | Change | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total**[1] | **6.7** | **5.9** | **6.5** | **6.9** | **7.4** | **6.6** | **8.3** | **7.1** | **7.2** | **7.4** | **6.7** | **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) | | |
| **Sex** | | | | | | | | | | | | **NSI** | |
| Men | **4.9** | **5.0** | **5.5** | **†6.0** | **6.5** | **5.9** | **†6.9** | **5.7** | **6.9** | **5.9** | **6.5** | **–** | **–** |
| | (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) | | |
| Women | **8.4** | **6.8** | **7.5** | **7.7** | **8.3** | **7.3** | **9.8** | **8.6** | **7.5** | **8.7** | **7.0** | **–** | **–** |
| | (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) | | |
| **Age** | | | | | | | | | | | | ***** | |
| 18-29 | **†2.8** | **2.9** | **†5.3** | **†4.7** | **†4.6** | **†3.8** | **†** | **†6.3** | **†** | **†** | **†** | **–** | **–** |
| | (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) | - | - | - | | |
| 30-39 | **†3.4** | **†4.1** | **†3.7** | **†7.2** | **†3.9** | **†2.9** | **†6.1** | **†3.4** | **†4.3** | **†5.5** | **†8.2** | **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) | | |
| 40-49 | **9.5** | **†5.5** | **†4.9** | **†5.8** | **†7.4** | **†5.8** | **†5.1** | **†3.9** | **†4.9** | **†6.3** | **†5.7** | **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) | | |
| 50-64 | **9.7** | **7.4** | **7.8** | **7.9** | **9.9** | **9.3** | **10.2** | **9.9** | **10.2** | **9.4** | **7.2** | **–** | **–** |
| | (7.3, 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) | | |
| 65+ | **†7.7** | **10.9** | **13.5** | **†9.8** | **11.2** | **12.6** | **18.3** | **11.6** | **12.1** | **13.1** | **11.3** | **–** | **–** |
| | (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) | | |
| **Region** | | | | | | | | | | | | **NSI** | |
| Toronto | **†3.6** | **†4.0** | **†6.4** | **†5.8** | **†5.0** | **†4.8** | **†6.3** | **†6.8** | **†6.7** | **†8.1** | **†7.4** | **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) | | |
| Central South | **†8.1** | **†9.2** | **†8.1** | **†8.4** | **†8.7** | **†4.3** | **†6.4** | **†13.9** | **†10.1** | **†7.5** | **†7.0** | **–** | **–** |
| | (5.0, 13.0) | (6.3, 13.9) | (4.6, 13.7) | (5.0, 13.9) | (5.4, 13.7) | (2.0, 9.0) | (2.9, 13.8) | (8.8, 21.2) | (6.1, 16.2) | (4.4, 12.5) | (4.0, 12.1) | | |
| Central West | **†8.8** | **†3.7** | **†6.5** | **†5.2** | **†6.6** | **†5.9** | **†7.0** | **†5.9** | **†5.8** | **†3.2** | **†6.6** | **–** | **–** |
| | (5.9, 13.0) | (2.1, 6.7) | (4.2, 9.9) | (2.8, 9.6) | (3.9, 10.9) | (3.4, 10.2) | (3.8, 12.5) | (3.4, 10.1) | (3.1, 10.5) | (1.7, 6.0) | (4.3, 9.9) | | |
| South West | **†5.6** | **†5.8** | **†6.0** | **†7.5** | **†8.3** | **†8.2** | **†8.2** | **†5.9** | **†8.8** | **†7.5** | **†9.7** | **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) | | |
| Central East | **†7.5** | **†5.6** | **†4.4** | **†8.1** | **†7.8** | **†9.0** | **†10.1** | **†5.0** | **†5.8** | **†8.3** | **†4.4** | **–** | **–** |
| | (4.9, 11.4) | (3.3, 9.2) | (2.6, 7.3) | (4.7, 13.6) | (5.1, 11.9) | (6.1, 13.0) | (5.3, 18.4) | (2.9, 8.3) | (3.4, 9.7) | (5.7, 12.0) | (2.6, 7.6) | | |
| East | **†8.6** | **†8.6** | **†6.6** | **†4.4** | **†8.5** | **†6.2** | **†10.2** | **†8.0** | **†8.0** | **†9.2** | **†6.3** | **–** | **–** |
| | (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) | | |
| North | **†7.4** | **8.7** | **10.2** | **†12.5** | **†9.5** | **†8.6** | **†14.0** | **†8.8** | **†7.8** | **†8.3** | **†7.2** | **–** | **–** |
| | (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, 13.3) | (5.3, 11.3) | (5.6, 12.0) | (4.9, 10.4) | | |

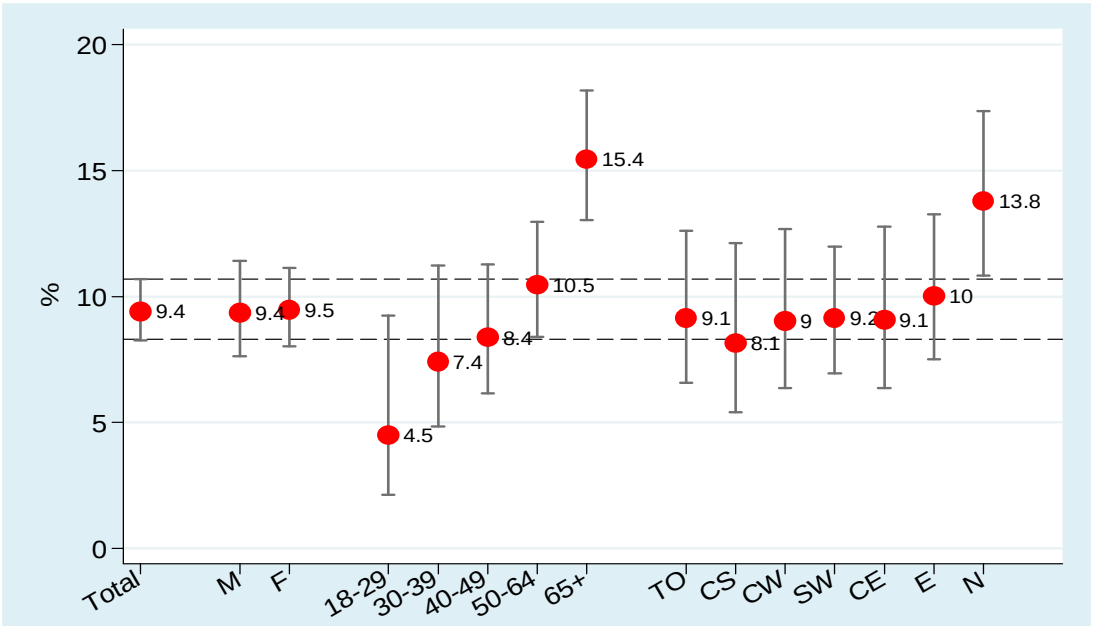
Cont'd

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Change | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N=) | (2411) | (2611) | (2445) | (2016) | (2005) | (2024) | (2037) | (2024) | (1999) | (2015) | (2060) | | |
| **Marital Status** | | | | | | | | | | | | **NSI** | |
| Married/Partner | **6.5** | **5.5** | **5.5** | **6.9** | **6.4** | **5.9** | **7.1** | **5.8** | **6.6** | **7.2** | **6.4** | – | – |
| Previously Married | **13.8** | **12.1** | **13.2** | **10.9** | **14.5** | **12.6** | **†17.8** | **16.1** | **†15.4** | **14.5** | **11.4** | – | – |
| Never Married | **†3.5** | **†4.0** | **†5.8** | **†4.9** | **†5.8** | **†5.6** | **†7.7** | **†6.5** | **†4.6** | **†4.7** | **†5.1** | – | – |
| **Education** | | | | | | | | | | | | **NSI** | |
| 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** | – | – |
| 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** | – | – |
| 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** | – | – |
| University degree | **†3.0** | **†3.1** | **†5.1** | **†4.1** | **†5.2** | **†4.1** | **†6.1** | **†4.8** | **†4.3** | **†5.6** | **†5.0** | – | – |

Notes: [1]Estimates based on a random subsample from 2010 to 2013.
(1) † Estimate suppressed or unstable; [a] 95% confidence interval; all analyses are sample design adjusted; *p<.05**;** **p<.01; ***p<.001;
(2) Trend Analysis: **–** change not statistically discernible at p<.05; **T** discernible change (p<.05) between 2003-2013; 2Y discernible change (p<.05) between last two estimates.
(3) **NSI**, non-discernible YEAR × FACTOR interaction.
(4) 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

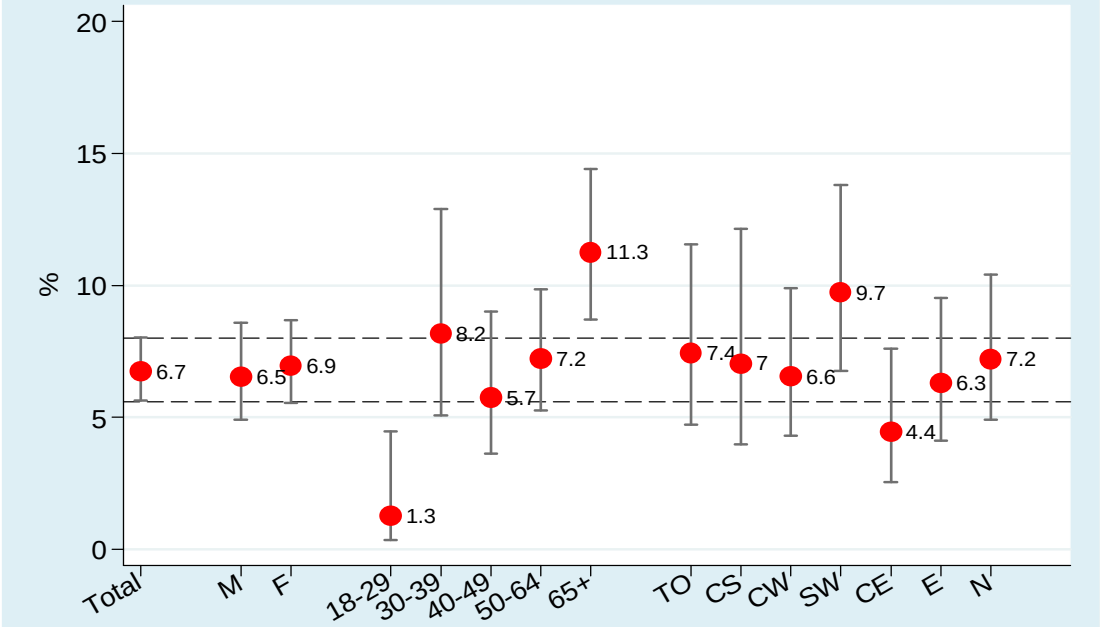
**Percentage Reporting Fair or Poor Health by Gender, Age and Region, Ontarians Aged 18+, 2013 (N=3021)**




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: 2013 CAMH Monitor

Figure 8.2

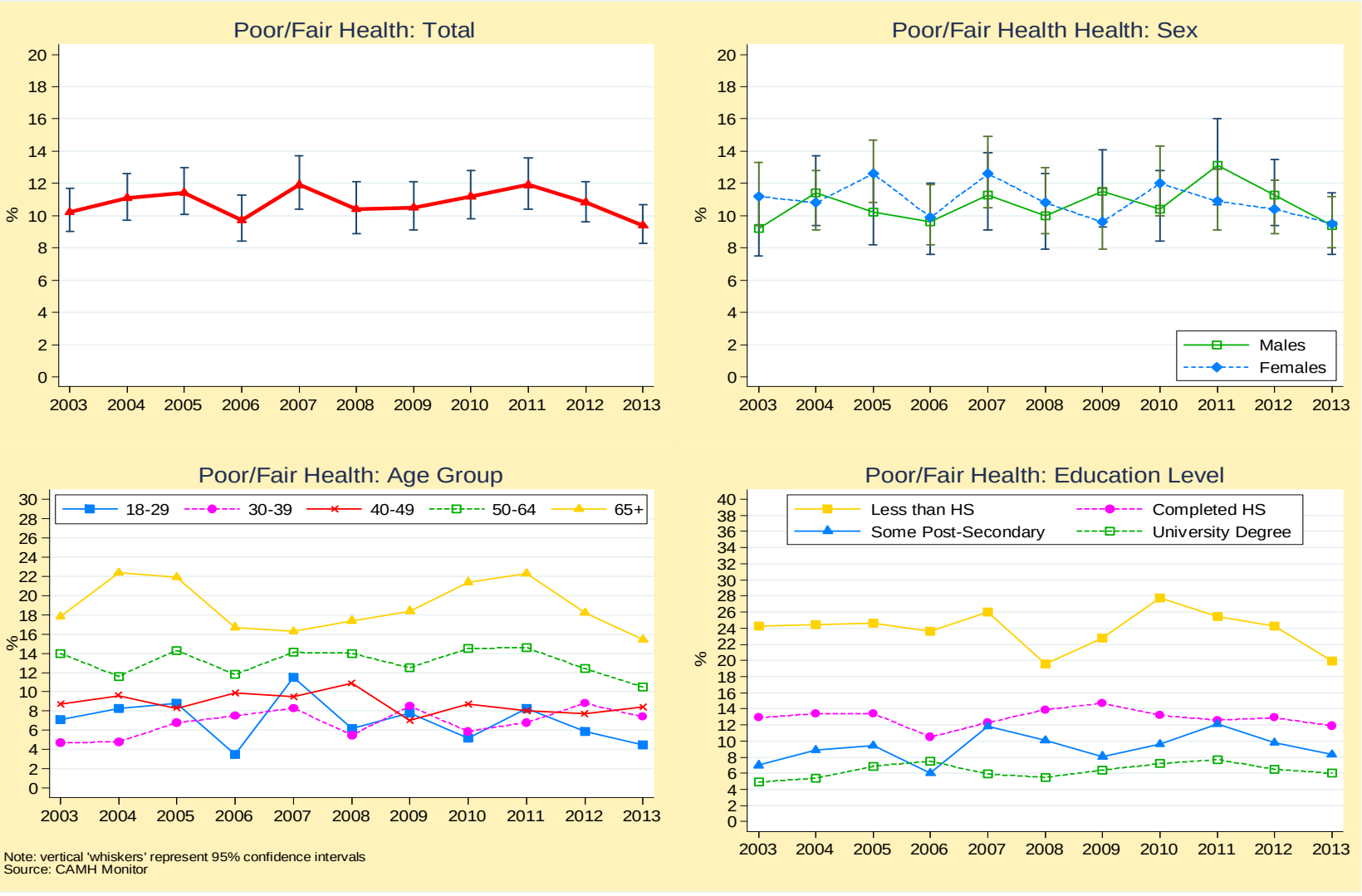
**Percentage Reporting Frequent Physically Unhealthy Days (14+) in the Past 30 Days by Gender, Age and Region, Ontarians Aged 18+, 2013 (N=2060)**




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: 2013 CAMH Monitor

Figure 8.3

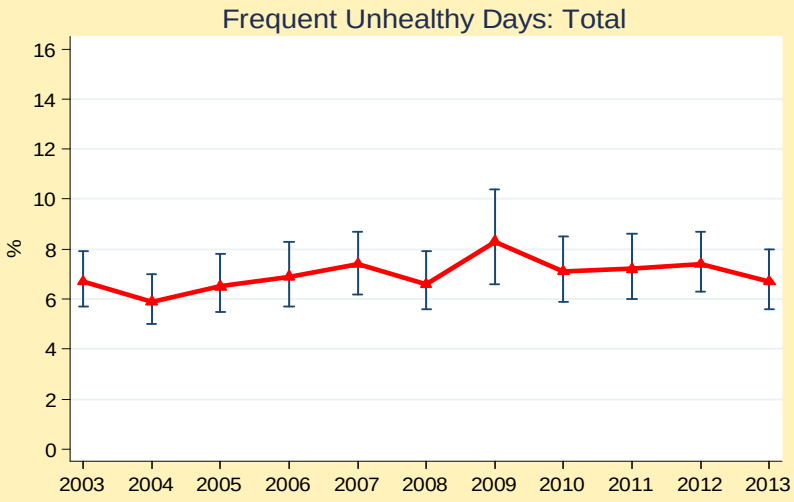
**Percentage Reporting Fair or Poor Health, Ontarians Aged 18+, 2003–2013**

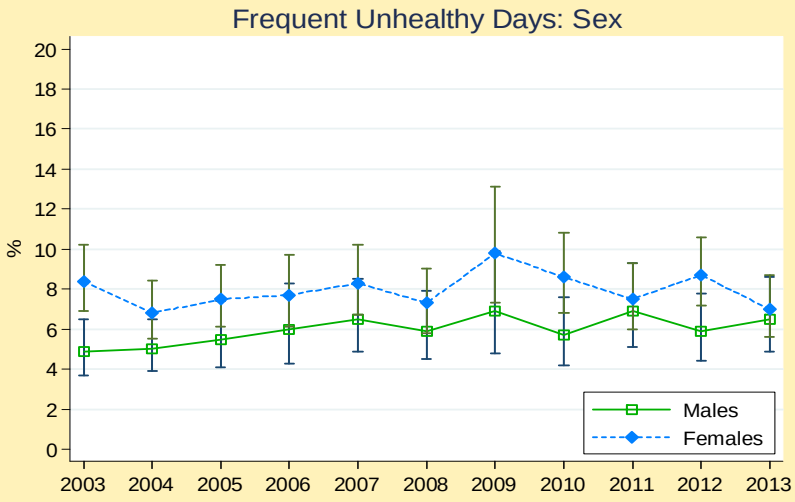


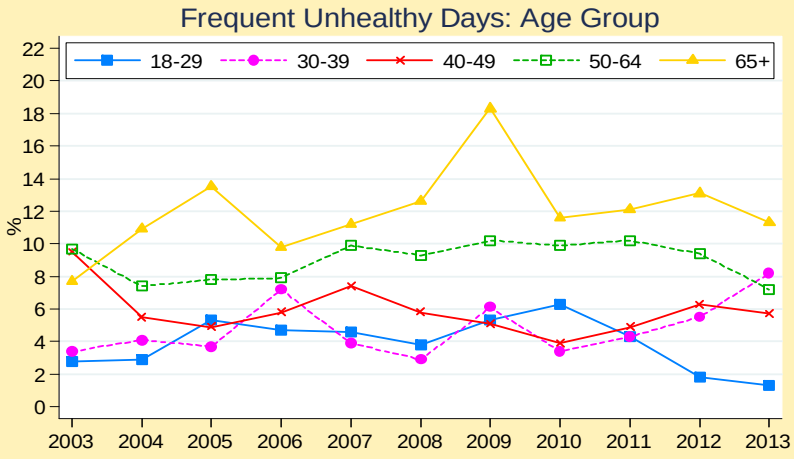

Note: vertical 'whiskers' represent 95% confidence intervals
Source: CAMH Monitor

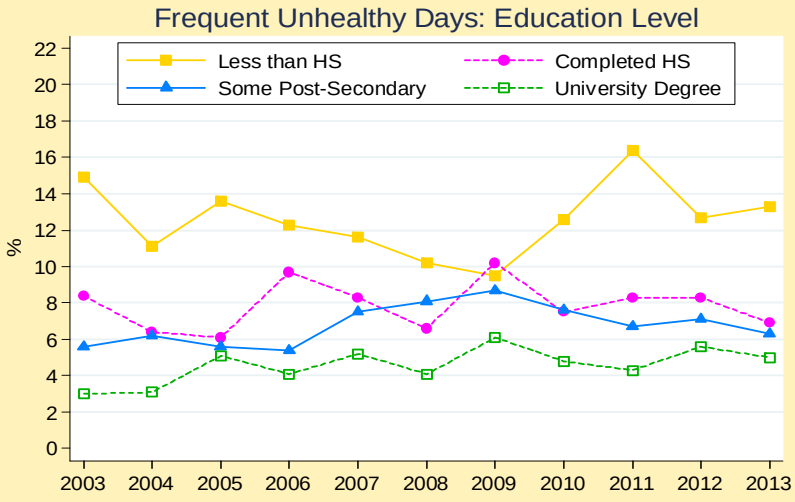
Figure 8.4

**Percentage Reporting Frequent Physically Unhealthy Days (14+) in the Past 30 Days, Ontarians Aged 18+, 2003–2013**




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

# 9. 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
(see map in this chapter).

The respondents were assigned to LHINs according to the first three digits of their postal code (forward sortation area). Data from the **2010, 2011, 2012** and **2013** surveys were merged in order to obtain sufficient sample sizes per LHIN. The present analyses are based on a total sample size of 11,218 (2,797 in 2010, 2,672 in 2011, 2,822 in 2012, and 2,837 in 2013). About 9% 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.[59]

### Combined 2010–2013 Data

…….. Tables 9.1- 9.3

Almost all LHINs (13 of 14) differ from the province on at least one measure. Still, LHIN estimates relative to provincial estimates are not dramatic.

Three LHINs display **below average** estimates for multiple measures. Respondents from the **Central West** reported the lowest estimates for four measures: past year drinking, weekly binge drinking, daily smoking, and lifetime cannabis use. Respondents from the **Central LHIN** reported the lowest estimates for hazardous or harmful drinking, and below average estimates for past year drinking, weekly binge drinking, and lifetime cannabis use. Respondents from **Mississauga Halton** reported lower than average estimates for daily smoking and lifetime cannabis use.

Three LHINs displayed **above average** estimates for multiple measures. **Toronto Central** had the highest estimates of lifetime

[59] For each outcome in Table 9.1, 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).

and past year cannabis use, lifetime cocaine use and past year nonmedical use of prescription opioids. **North East** had the highest estimates for daily smoking and self-rated fair or poor overall health. **North West** had the highest estimates for exceeding drinking guidelines, binge drinking, and driving after drinking and higher than average estimates for lifetime cannabis use and self-rated fair or poor overall health.

Table 9.1 presents estimates for substance use and health indicators for each LHIN.

Compared to the **provincial estimate**:

- Past year drinking was significantly higher in South West and Champlain, and significantly lower in the Central West, Central and Central East LHINs (82.9%, 83.7%, 72.7%, 73.6% and 77.3% vs. 79.9%, respectively).
- The percentage exceeding the low-risk drinking guidelines in the past 12 months was significantly higher in the North West LHIN (28.6% vs. 18.2%).
- The percentage reporting drinking 5 or more drinks on one occasion (binge drinking) at least once a week was significantly higher in Erie St.Clair and in the North West and significantly lower in the Central West and the Central LHIN (10.5%, 11.0%, 3.5% and 4.7% vs. 7.2%, respectively).
- The percentage reporting hazardous or harmful drinking was significantly lower in the Central LHIN (10.0% vs. 14.0%).
- Past year daily cigarette smoking was significantly higher in the North East and significantly lower in the Central West and in Mississauga Halton (17.8%, 8.8% and 9.7% vs. 12.8%, respectively).
- Lifetime cannabis use was significantly higher in Toronto Central, North Simcoe Muskoka and North West, and significantly lower in the Central West, Mississauga Halton, and the Central LHINs (54.4%, 50.0%, 48.1%, 30.3%, 35.2%, and 37.9% vs. 42.7 %, respectively).
- Past year cannabis use was significantly higher in the Toronto Central LHIN (18.3% vs. 13.9%).
- Lifetime cocaine use was significantly higher in the Toronto Central LHIN (15.2% vs. 8.3%).
- Past year nonmedical use of prescription opioids was significantly higher in the Toronto Central LHIN and significantly lower in Champlain (6.1% and 2.0% vs. 4.1%, respectively).
- Past year driving after drinking was significantly higher in Waterloo Wellington and the North West LHIN (7.9% and 9.1% vs. 5.4%, respectively).
- The percentage reporting self-rated fair or poor health in general was significantly higher in the North East and the North West LHINs (15.5% and 14.3% vs. 10.6%, respectively).
- The percentage reporting elevated psychological distress (GHQ12/3+) during the past few weeks was significantly higher in Mississauga Halton and significantly lower in the South East LHIN (17.7% and 9.7% vs. 14.3%, respectively).

Tables 9.2 and 9.3 summarize which LHINs are significantly different from the provincial estimate on various substance use and health related indicators.

Table 9.1: Percentage of Ontario Adults (18+) Reporting ***Substance Use and Health*** Indicators by Ontario LHINs, CAMH Monitor, Combined 4-Year Data, 2010–2013

| | Erie St.Clair 1 | South West 2 | Waterloo Wellington 3 | Hamilton Niagara Haldimand Brant 4 | Central West 5 | Mississauga Halton 6 | Toronto Central 7 | Central 8 | Central East 9 | South East 10 | Champlain 11 | North Simcoe Muskoka 12 | North East 13 | North West 14 | ONT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total N =** | 658 | 1195 | 627 | 1043 | 327 | 548 | 900 | 809 | 1024 | 599 | 1324 | 453 | 1173 | 538 | 11218 |
| **Alcohol** | | | | | | | | | | | | | | | |
| Alcohol use (past 12m) | **80.1** (76.4, 83.3) | **82.9↑** (80.3, 85.2) | **82.3** (78.4, 85.6) | **82.3** (79.7, 84.7) | **72.7↓** (66.7, 77.9) | **81.5** (77.4, 85.0) | **79.8** (76.4, 82.8) | **73.6↓** (69.6, 77.3) | **77.3↓** (74.2, 80.1) | **79.3** (75.4, 83.7) | **83.7↑** (81.2, 85.8) | **82.8** (77.7, 86.9) | **81.2** (78.6, 83.5) | **82.0** (78.1, 85.3) | **79.9** (78.9, 80.8) |
| Exceeding low-risk drinking guidelines (past 12m) | **16.3** (11.3, 23.0) | **16.7** (12.8, 21.5) | **15.6** (10.3, 22.9) | **17.2** (12.8, 22.7) | **†13.0** (6.8, 23.3) | **20.7** (13.6 30.2) | **23.3** (17.7, 30.0) | **15.6** (11.4, 20.9) | **16.8** (12.1, 22.8) | **18.7** (13.1, 25.8) | **19.8** (15.6, 24.8) | **23.6** (15.5, 34.2) | **17.5** (13.6, 22.2) | **28.6↑** (21.5, 37.1) | **18.2** (16.6, 20.0) |
| Binge drinking weekly (past 12m) | **10.5↑** (7.8, 14.0) | **7.2** (5.5, 9.3) | **†6.0** (4.1, 8.8) | **7.8** (5.8, 10.4) | **†3.5↓** (1.8, 6.8) | **8.2** (5.4, 12.1) | **7.9** (5.6, 11.0) | **4.7↓** (3.1, 7.0) | **7.3** (5.5, 9.7) | **8.9** (6.3, 12.6) | **7.9** (6.1, 10.1) | **†6.3** (3.8, 10.2) | **6.3** (4.8, 8.3) | **11.0↑** (7.9, 15.2) | **7.2** (6.5,7.9) |
| Hazardous/Harmful Drinking (AUDIT 8+) (past 12m) | **16.7** (13.3, 20.7) | **14.1** (11.8, 16.9) | **12.6** (9.6, 16.2) | **14.2** (11.5,17.4) | **†10.8** (6.9, 16.6) | **12.8** (9.4, 17.1) | **16.5** (13.5, 20.1) | **10.0↓** (7.4, 13.2) | **13.5** (11.0 16.5) | **15.3** (11.8, 19.5) | **16.0** (13.6, 18.7) | **15.8** (11.6, 21.1) | **16.3** (13.7, 19.2) | **17.8** (13.9, 22.5) | **14.0** (13.2, 15.0) |
| **Tobacco** | | | | | | | | | | | | | | | |
| Daily Smoking | **17.3** (14.3, 20.8) | **12.6** (10.5, 14.9) | **12.3** (9.5, 15.7) | **15.0** (12.7, 17.8) | **†8.8↓** (5.8, 13.0) | **9.7↓** (7.1, 13.3) | **10.8** (8.7, 13.5) | **10.5** (8.2, 13.3) | **13.4** (11.1, 16.1) | **15.2** (12.1, 18.8) | **11.4** (9.5, 13.5) | **17.0** (12.8, 22.2) | **17.8↑** (15.4, 20.6) | **16.6** (13.0, 20.8) | **12.8** (12.1, 13.6) |
| **Other Drugs** | | | | | | | | | | | | | | | |
| Cannabis use (lifetime) | **39.2** (34.9, 43.6) | **45.0** (41.7, 48.4) | **41.8** (37.3, 46.4) | **44.7** (41.1, 48.3) | **30.3↓** (24.5, 36.8) | **35.2↓** (30.5, 40.3) | **54.4↑** (50.5, 58.3) | **37.9↓** (33.8, 42.1) | **39.7** (36.2, 43.4) | **43.4** (38.8, 48.1) | **45.1** (41.9, 48.2) | **50.0↑** (44.3, 55.8) | **44.4** (41.1, 47.7) | **48.1↑** (43.2, 53.1) | **42.7** (41.5, 43.8) |
| Cannabis use (past 12m) | **11.4** (8.6, 14.9) | **14.1** (11.6, 17.0) | **14.0** (10.7, 18.1) | **15.4** (12.6, 18.6) | **†12.0** (7.9,17.8) | **14.3** (10.6, 18.9) | **18.3↑** (15.2, 21.8) | **12.3** (9.5, 15.7) | **13.1** (10.6, 16.1) | **11.6** (8.7, 15.3) | **12.9** (10.7, 15.6) | **17.4** (13.0, 22.8) | **12.7** (10.3,15.5) | **13.4** (10.1, 17.6) | **13.9** (13.0, 14.9) |
| Cocaine (lifetime) | **†7.3** (5.1, 10.5) | **6.5** (4.9, 8.7) | **9.5** (6.8, 13.1) | **6.9** (5.2, 9.2) | **†5.6** (2.9, 10.5) | **†7.0** (4.6, 10.4) | **15.2↑** (12.4, 18.4) | **8.5** (6.1, 11.8) | **8.5** (6.5, 11.1) | **8.1** (5.7, 11.4) | **7.0** (5.4, 9.0) | **†6.5** (3.9, 10.8) | **7.9** (6.1, 10.3) | **†8.1** (5.3, 12.0) | **8.3** (7.6, 9.1) |

| | 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 =** | 658 | 1195 | 627 | 1043 | 327 | 548 | 900 | 809 | 1024 | 599 | 1324 | 453 | 1173 | 538 | 11218 |
| Prescription Opioids (nonmedical use; past 12m) | **†3.6** | **†3.6** | † | **†4.5** | **†4.6** | † | **†6.1↑** | **†4.9** | **†3.8** | **†3.4** | **2.0↓** | † | **†2.9** | **†5.9** | **4.1** |
| | (2.0, 6.5) | (2.4, 5.3) | † | (3.1, 6.5) | (2.4, 8.5) | † | (4.0, 9.3) | (3.1, 7.6) | (2.4, 6.0) | (1.8, 6.5) | (1.2, 3.2) | † | (1.9, 4.4) | (3.4, 10.0) | (3.5, 4.7) |
| **Driving** | | | | | | | | | | | | | | | |
| Drinking & driving | **†7.6** | **†4.3** | **†7.9↑** | **†5.1** | † | **†6.0** | **†5.1** | **†6.2** | **†3.6** | **†4.5** | **6.7** | **†5.8** | **†5.1** | **†9.1↑** | **5.4** |
| (past 12m) | (5.0, 10.6) | (3.0, 6.2) | (6.5, 12.5) | (4.2, 8.4) | † | (3.6, 9.7) | (3.4, 7.6) | (4.2, 9.1) | (2.3, 5.6) | (2.6, 7.6) | (5.0, 8.9) | (3.1, 10.5) | (3.5, 7.4) | (6.0, 13.4) | (4.8, 6.1) |
| Cannabis & driving | † | † | **†2.8** | **†2.2** | † | † | **†2.1** | † | † | † | **†1.8** | † | **†3.1** | † | **2.0** |
| (past 12m) | † | † | (1.3, 5.9) | (1.2, 4.3) | † | † | (1.1, 4.0) | † | † | † | (1.0, 3.4) | † | (1.8, 5.2) | † | (1.6, 2.4) |
| **Overall Health** | | | | | | | | | | | | | | | |
| Fair/poor overall health | **12.0** | **11.1** | **8.2** | **11.2** | **†8.7** | **9.6** | **9.9** | **9.2** | **10.4** | **12.4** | **10.4** | **11.8** | **15.5↑** | **14.3↑** | **10.6** |
| (in general) | (9.3, 15.5) | (9.2, 13.5) | (6.0, 11.1) | (9.2, 13.5) | (5.7, 13.1) | (6.9, 13.2) | (7.8, 12.6) | (7.1, 11.7) | (8.3, 12.9) | (9.6, 15.9) | (8.6, 12.4) | (8.6, 16.1) | (13.2, 18.1) | (11.0, 18.4) | (9.9, 11.3) |
| **Mental Health** | | | | | | | | | | | | | | | |
| Elevated psychological distress (GHQ12/ 3+) | **12.3** | **11.5** | **11.6** | **15.2** | **†13.9** | **17.7↑** | **16.1** | **16.2** | **14.0** | **9.7↓** | **15.5** | **14.4** | **13.9** | **†9.9** | **14.3** |
| (past 12m) | (9.2, 16.3) | (9.1, 14.5) | (8.6, 15.4) | (12.4, 18.5) | (9.2, 20.5) | (13.9, 23.5) | (12.9, 20.0) | (12.7, 20.4) | (11.1, 17.4) | (7.2, 13.1) | (12.9, 18.5) | (9.7, 20.8) | (11.1, 17.1) | (6.9, 14.1) | (13.3, 15.3) |

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 those with a valid driver's licence (N=7,655); (4) † Estimate suppressed or unstable.

Legend: **Alcohol Use** (percentage consuming alcohol in past 12 m); **Exceeding Low-Risk Drinking Guidelines** (percentage consuming 16 or more drinks per week or 4 or more drinks/day for men; percentage consuming 11 or more drinks per week or 3 or more drinks/day for women ); **Binge drinking weekly** (percentage consuming five or more drinks on a single occasion weekly); **Hazardous/Harmful Drinking** (percentage reporting hazardous or harmful drinking based on the AUDIT 8+); **Daily Smoking** (percentage smoking cigarettes daily); **Cannabis** (percentage using in lifetime and in past year); **Cocaine** (percentage using in lifetime); **Nonmedical use of prescription opioids** (percentage using in past year 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); **Elevated Psychological Distress** (percentage scoring 3+ on GHQ12).

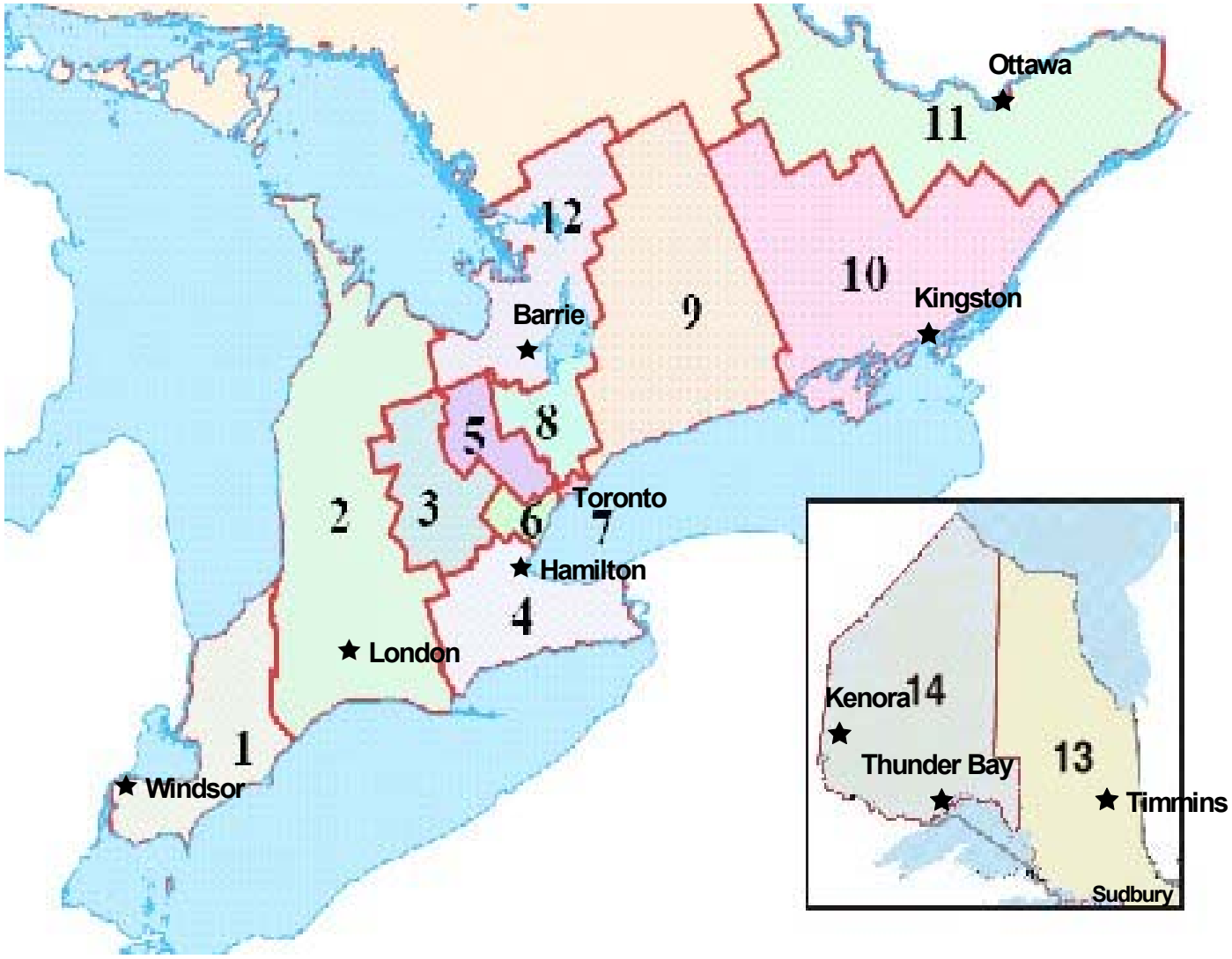
Table 9.2: Summary of LHIN Substance Use and Health Indicators Significantly ***Lower*** than the Province, Ontario Adults (18+), 2010–2013 CAMH Monitor

| LHIN | Significantly Lower than Province |
|---|---|
| Central West | • Past Year Alcohol Use (72.7% vs. 79.9%)<br>• Binge Drinking Weekly (3.5% vs. 7.2%)<br>• Daily Smoking (8.8% vs. 12.8%)<br>• Cannabis Use Lifetime (30.3% vs. 42.7%) |
| Mississauga Halton | • Daily Smoking (9.7% vs. 12.8%)<br>• Cannabis Use Lifetime (35.2 % vs. 42.7%) |
| Central | • Past Year Alcohol Use (73.6% vs. 79.9%)<br>• Binge Drinking Weekly (4.7% vs. 7.2%)<br>• Hazardous/Harmful Drinking (10.0% vs. 14.0%)<br>• Cannabis Use Lifetime (37.9% vs. 42.7%) |
| Central East | • Past Year Alcohol Use (77.3% vs. 79.9%) |
| South East | • Elevated Psychological Distress (9.7% vs. 14.3%) |
| Champlain | • Nonmedical Use of Prescription Opioids (2.0% vs. 4.1%) |

Table 9.3: Summary of LHIN Substance Use and Health Indicators Significantly ***Higher*** than the Province, Ontario Adults (18+), 2010–2013 CAMH Monitor

| LHIN | Significantly Higher than Province |
|---|---|
| Erie St.Clair | • Binge Drinking Weekly (10.5% vs. 7.2%) |
| South West | • Past Year Alcohol Use (82.9% vs. 79.9%) |
| Waterloo Wellington | • Drinking and Driving (7.9% vs. 5.4%) |
| Mississauga Halton | • Elevated Psychological Distress (17.7% vs. 14.3%) |
| Toronto Central | • Cannabis Use Lifetime (54.4% vs. 42.7%)<br>• Cannabis Use Past Year (18.3% vs. 13.9%)<br>• Cocaine Use Lifetime (15.2% vs. 8.3%)<br>• Nonmedical Use of Prescription Opioids (6.1% vs. 4.1%) |
| Champlain | • Past Year Drinking (83.7% vs. 79.9%) |
| North Simcoe Muskoka | • Cannabis Use Lifetime (50.0% vs. 42.7%) |
| North East | • Daily Smoking (17.8 % vs. 12.8%)<br>• Fair/Poor Overall Health (15.5 % vs. 10.6%) |
| North West | • Exceeding Drinking Guidelines (28.6% vs. 18.2%)<br>• Binge Drinking Weekly (11.0% vs. 7.2%)<br>• Cannabis Use Lifetime (48.1% vs. 42.7%)<br>• Drinking and Driving (9.1% vs. 5.4%)<br>• Fair/Poor Overall Health (14.3 % vs. 10.6%) |

# 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

# 10. SUMMARY AND DISCUSSION

## The Public Health Approach Toward Substance Use and Mental Health

Timely and relevant data on 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 population, those interpreting *CAMH Monitor* (CM) data should consider the following.

**Telephone Households**. The *CAMH Monitor* is based on a target population of telephone numbers whose subscribers reside in Ontario households. However, based on the most recent *Residential Telephone Service Survey* (RTSS), Statistics Canada estimated that in 2013, 21% of households had a cell-phone only and 3% used cable telephone only (Statistics Canada, 2014).[60] As well, by design, the target sample of the *CAMH Monitor* excludes several high risk groups (see exclusions page 3). 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.

[60] This concern regarding coverage and potential bias was reduced in 2000 when the selection was revised to a list-assisted RDD 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. If the latter holds true, estimates of change should remain unbiased and valid (Cochran, 1977).

**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).

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.

## 2013 Subgroup Findings

In Tables 10.1.1-10.1.2, 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 health indicators.

**Sex** was significantly associated with *16 of the 24* measures presented in **Tables 10.1.1-10.1.2**. Men were more likely than women to report alcohol and other drug use, whereas women were more likely to report use of anti-anxiety and anti-depression medication.

**Age** of respondent was significantly associated with *18 of the 24* measures. In most cases, substance use or mental health concerns declined with age or were highest among 18 to 29 year olds. With the exception of **daily drinking** and **poor health** (which increased with age), substance use indicators tended to decline with age. The most common pattern occurred for 10 indicators (exceeding the low-risk drinking guidelines, weekly binge drinking, drinking hazardously or harmfully, symptoms of alcohol dependence, past year cannabis use, cannabis use problems, past year cocaine use, cannabis use and driving, elevated psychological distress, and suicidal ideation) and showed the **highest levels** among young adults **aged 18 to 29**.

**Marital status** was associated with *11* measures. In all cases, substance use or mental health concerns were higher

among never married or previously married (divorced or widowed) respondents. Those previously married reported the highest estimates of daily smoking, self-rated poor health and impaired mental health measures. Those never married reported higher estimates of weekly binge drinking, hazardous drinking, and past year cannabis use.

**Education** level was significantly associated with *10 of the 24* measures. With the exception of past year drinking (which increased with education), the most common education-related pattern noted was that substance use or mental health concerns declined with increasing education. Cigarette smoking (current and daily) and any use of prescription opioids were highest among those who did not graduate from high school. Three indicators (nonmedical use of prescription opioids, frequent mental distress days and self-rated poor health) decreased with education, and lifetime cocaine use and self-rated poor mental health were lowest among those who graduated university.

**Public Health Region** was significantly associated with only *1 of the 24* measures. Compared to the provincial estimate, past year drinking was lowest in Toronto and highest in the East and in the North. There was no dominant pattern in regional differences. Although the overall association between several substance use and health indicators and region did not reach our criteria of statistical significance, there are some regional contrasts that are worthy of mention. Compared to the provincial estimate, current cigarette smoking and daily smoking were above the provincial estimate in the Central East and in the Central South, respectively. In addition, self-rated poor mental health was highest in Toronto and lowest in the South-West, and self-rated poor health was significantly higher in the North.

**Household income** was associated with *13 of 24* measures. The general pattern showed that the rates of past year drinking, exceeding the drinking guidelines, symptoms of alcohol dependence, and drinking and driving tended to increase with increasing income or were highest among those with higher incomes. However, rates of smoking and past year cannabis use were highest among those with the lowest incomes. In addition, elevated psychological distress, use of antidepressant medication, poor self-rated health and frequent physically unhealthy days decreased with increasing incomes.

## Trends, 1996–2013

As seen in Table 10.2, there were no significant changes between 2012 and 2013 for any of the 21 measures presented.

There are, however, several findings that suggest the emergence of change. First, some important changes are seen in **alcohol use**. These changes involve primarily binge drinking, daily drinking, the average number of drinks consumed per week and to a lesser extent, hazardous/harmful drinking.

Between 2006 and 2013, **binge drinking declined** from 12.3% in 2006 to 6.8% in 2013 for the total sample and from 15.9% to 8.7% among drinkers. This decline was evident for all demographic factors 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).

Short-term changes point to the complexity of trends in alcohol consumption. A significant **increase** occurred for daily drinking and the average number of drinks consumed per week. In the past decade, there was a significant **increase** in **daily drinking** among drinkers, from 5.3% in 2002 to 8.5% in 2013. Significant increases were found among both **male** drinkers (from 7.1% in 2005 to 11.4% in 2013), and **female** drinkers (from a low of 2.6% in 2001 to 5.6% in 2013).

Although the **average number of standard drinks** consumed per **week** among past year drinkers did not change significantly between 2012 and 2013, there was a **significant increase** in the average number of drinks consumed weekly between 1996 and 2013 (from 3.3 in 1996 to 5.1 in 2013). 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 7.4 drinks in 2013, and among **female** drinkers**,** from 1.9 drinks in 1996 to 2.8 drinks in 2013.

Another measure where important changes may be emerging is **hazardous or harmful drinking** (based on the AUDIT screener). Although this type of drinking remained stable between 2012 and 2013 among the total sample (12.9% vs. 13.7%), and for all demographic subgroups, there were significant **nonlinear changes** among subgroups between 1998 and 2013. There was a significant **increase** in hazardous/harmful drinking among **women,** from 4.8% in 1998 to 7.9% in 2011, but prevalence declined to 6.1% in 2013. There was also a significant non-linear **increase** among **30 to 39** year olds (from 7.1% in 2005 to 17.2% in 2013).

Another potential change of note is the **decline in current smoking**. Although prevalence of current cigarette smoking in 2013 (16.8%) did not change significantly from 2012 (16.6%), there was a significant decline in current smoking between 1996 and 2013**.**

Current **cigarette smoking** has significantly **declined** from 26.8% in 1996 to 16.8% in 2013. There were also significant declines since 1996 for all sex, age, region, marital status and education subgroups. Further, **daily smoking** declined by almost half, from 23.0% in 1996 to 13.2% in 2013.

A short-term change is evident for past year **cannabis use**. Past year cannabis use has been **steadily increasing** from 8.7% in 1996 to 14.1% in 2013. This increase is evident among both **men** (from 11.4% in 1997 to 17.6 in 2013), and **women** (from 5.3% in 1996 to 10.8% in 2013). Increases in cannabis use were evident 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 40.4% in 2013). This increase in cannabis use among young adults corresponds to earlier increases evident in cannabis use among Ontario 12$^{th}$-graders in the past decade (Boak, Hamilton, Adlaf, & Mann, 2013).

Another important change related to cannabis use has been the **aging of cannabis users**. Between 1996 and 2013, the percentage of cannabis users aged 50 years and older increased from 2% to 19%.

Another measure worthy of attention is past year use of **prescription opioid** pain relievers. Overall, there was a **significant decline** in past year use of any prescription opioids between 2010 and 2013 (from 26.6% to 22.2%) and these declines were evident for both

men and women and most demographic subgroups.

Past year **nonmedical use** of prescription opioids displayed a similar significant decline, from 7.7% in 2010 to 2.8% in 2013. However, these trends differed among age groups. Although past year nonmedical use of prescription opioids declined significantly among older age groups, the estimates for the younger age group (18 to 29 year olds) were stable (around 7%) during the same period.

Between 1996 and 2013, the prevalence of **driving after drinking** among drivers has displayed a steady **linear decline** from 13.1% to 5.1%. The most striking decline was seen among male drivers (from 21.2% in 1996 to 8.2% in 2013) and among young adult drivers aged 18 to 29 (from 20.1% in 1996 to 8.9% in 2013).

Although **driving after cannabis use** remained **stable** between 2002 and 2013 (2.9% vs. 2.3%), a significant non-linear trend was found among those **aged 18 to 29**. Driving after consuming cannabis among this age group increased from 7.2% in 2002 to 11.9% in 2006, then declined to 2.8% in 2009 and then increased almost three-fold to 8.3% in 2013.

Some significant short-term changes were seen in **mental health indicators**. Between 2003 and 2011, there was a significant overall **increase** in **self-rated poor mental health** (from 4.7% to 7.1%) and significant increases were especially evident for 18 to 29 year olds (from 2.9% in 2009 to 12.1% in 2013).

There was also a significant **increase** overall in **reporting frequent mental distress days** in the past 30 days. Between 2003 and 2013, it increased from 5.4% to 7.3%.

Since 1997, use of **antianxiety medication** among the total sample has displayed a significant **linear increase** from 4.5% in 1999 to 8.9% in 2013, especially among **women** (from 5.6% to 10.7%) and among **18 to 29 year olds** (from 1.7% to 10.8%).

**Use of antidepressants** also **increased** significantly, from 3.6% in 1999 to 7.5% in 2013. Significant subgroup increases were also evident for all sex, region, marital status, and education groups. Increases were strongest among the **youngest respondents**. Between 1997 and 2013, use of antidepressants increased four-fold among **18 to 29 year olds** from 2.0% to 8.0%.

## Long-Term, 37-Year Trends, 1977–2013

In two areas, long-term changes in substance use are particularly noteworthy.

The first area is notable long-term trends 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 14.1% in 2013.

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 2013 were older** than their counterparts in 1977 (average age of 33.9 years vs. 25.6 years, respectively). In 1977, 82% of cannabis users were aged 18-29 compared to only 49% in 2013. In contrast, the proportion of past year cannabis users aged 30 to 49 years **more than doubled** from 15% in 1977 to 32% in 2013, and the proportion of past year cannabis users aged 50 and older **increased six-fold**, from 3% to 19% during the same period.

The second area with notable long-term trends is **daily drinking** since 1977. Although the percentage drinking alcohol has varied between 77% and 87%, **fewer drinkers are drinking daily** compared to decades ago.

The percentage of past year drinkers who reported drinking daily decreased steadily from 13.4% in 1977 to 5.9% in 1995, and remained around 6% until 2006. During the past seven years, however, this trend has reversed, and daily drinking increased significantly from 5.9% in 2006 to 8.5% in 2013. 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 11.4% in 2013.

## Some Encouraging Findings

The following findings should be considered as encouraging.

**Cigarettes:** The majority of Ontario adults (83.2%) do not smoke cigarettes. Current cigarette smoking has significantly declined since 1996, as has daily smoking (from 23.0% in 1977 to 13.2% in 2013).

**Alcohol:** Although the majority of Ontario adults (78.4%) are past year drinkers, most do not drink excessively. Indeed, the survey noted that 93% of drinkers do not binge drink weekly, 81% of drinkers do not exceed recommended drinking guidelines and 86% do not exceed the AUDIT threshold for hazardous or harmful drinking. There were also significant declines in binge drinking (defined as consuming five or more drinks on a single occasion weekly) between 2006 (12.3%) and 2013 (6.8%). This decline was generally robust, occurring among several subgroups, but was especially evident among men (from 20.7% in 2001 to 12.5% in 2013). To better compare our binge drinking estimate to existing targets such as those set in the United States in "Healthy People 2020" (U.S. Department of Health and Human Services, 2010), we need to employ a question that directly measures past month binge drinking.[61] This variant question provides a monthly binge drinking estimate of **17.6%** (95% CI: 15.8% to 19.7%), an estimate very close to the 17% "Healthy People 2020" target.

**Cannabis:** Although the percentage that used cannabis in the past year has increased over the long-term, use is generally infrequent. For example, among lifetime users, only 19.7% reported using cannabis once a month or more frequently.

**Driving After Drinking**: Between 1996 and 2013, driving after drinking among drivers declined by more than half (from 13.1% to 5.1%). Moreover, this decline occurred among several subgroups, including men (whose estimate fell from 21.2% to 8.2%). These declines occurred over a period when the province introduced several measures designed to reduce impaired driving rates, including increased sanctions for 'warn-range' drivers and measures to increase the use of ignition interlock devices by convicted offenders.

**Prescription Opioid Pain Relievers**: The proportion of the Ontario adult population who report nonmedical use of prescription opioid pain relievers dropped significantly from 7.7% in 2010 to 2.8% in 2013. This decline occurred during a period when provincial programs and policies to reduce nonmedical use of these substances

[61] The past month question read as follows: "*Now what about the past 30 days, on about how many of these days did you have five or more drinks on the same occasion*?"

were introduced (Fischer, Ialomiteanu, Kurdyak, Mann & Rehm, 2013).

## Some Public Health Concerns

There are several public health concerns – findings that point to potential public health problems that require scrutiny and monitoring – raised by these *CAMH Monitor* findings.

**Cigarettes:** As one of the health targets set by Cancer Care Ontario (CCO) (Cancer 2020 Steering Committee, 2003), *adult smoking should be reduced to 5% by 2020*. Despite the fact that the rate of cigarette smoking among Ontario adults has declined substantially, the current rate of 16.8% is more than 3 times higher than the CCO target of 5% and it seems unlikely that this target will be met. The health target developed by American health professionals, "Healthy People 2020" (U.S. Department of Health and Human Services, 2010) set a target of 12% of adults who are current smokers in the year 2010, a target which was retained for the year 2020.

**Cannabis:** Past year use of cannabis **increased** significantly from 8.7% in 1996 to 14.1% in 2013, 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 40.4% in 2013.

Although "Healthy People 2020" does not provide a specific target for cannabis use, it does provide a target of 7.1% for any past month illicit drug use, for which past month cannabis use would still serve as a good approximation because virtually all illicit drug users also use cannabis. The *CAMH Monitor* estimate for **past month cannabis use** was **7.7%** (95% CI: 6.2% to 9.6%), an estimate within the confidence interval of the "Healthy People 2020" target.

Although cannabis use is generally infrequent (40% of past year users report using less than once a month), the percentage of users reporting **daily use** is **19%**. Such daily use may increase the likelihood of respiratory illnesses (Calabria et al., 2010). In addition, 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. Indeed, some research in the U.S. suggests that the aging cohort of cannabis users will place increasing demands on substance use treatment (Gfroerer, Wright, & Kopstein, 1997).

**Alcohol:** A sizeable percentage of drinkers consume alcohol at levels exceeding recommended **low-risk drinking guidelines**. Nearly one-in-five drinkers (18.8%) reported exceeding these guidelines. There was also a significant increase in the **average number of** drinks consumed weekly, from 3.3 in 1996 to 5.1 in 2013, and increases were also found in **daily drinking** among past year drinkers, from 5.3% in 2002 to 8.5% in 2013. This increase was especially prominent among **women** (from 2.6 % in 2001 to 5.6% in 2013). Such an increase in use among women is of concern given the harmful effects of heavy alcohol use.

**Prescription Opioid Pain Relievers**: In spite of a decline in use, 3% of the Ontario adult population (about 295,000) report **nonmedical use** of prescription opioid pain relievers in 2013. These are powerful and addictive drugs that have been linked to increased use of illicit opiates.

**Mental Health:** About 13.1% (1.3 million Ontario adults) experienced **elevated psychological distress** in 2013 and we found a significant **increase** in self-reports of **poor mental health** from

4.7% in 2003 to 7.1% in 2013. Nearly one in eleven adults (8.9%) used prescribed medication to treat **anxiety** (938,300) and one in thirteen (7.5%) used prescribed medication to treat **depression** (786,400). The percentage of Ontario adults reporting past year use of **prescribed depression and anxiety medication** increased significantly between 1999 and 2013 (from 3.6% to 7.5%, and from 4.5% to 8.9%, respectively). In addition, in 2013, an estimated 2.2% of Ontario adults (about 231,500) reported that they seriously **contemplated suicide** during the 12 months before the survey.

Another important public health issue relates to the measurement of alcohol harms and problems versus disorders for prevention. It is evident that **indicators of alcohol harms should not be restricted to alcohol disorders such as alcohol dependence**. Indeed, an array of alcohol harms is experienced by those who *do not* meet the more stringent psychiatric criteria for alcohol disorder. For example, the 2012 *Canadian Community Health Survey* found that 3.2% of Canadians (3.1% of Ontarians) aged 15 or older met the criteria for past year alcohol abuse or dependence (Statistics Canada, 2013). However, the 2013 *CAMH Monitor* data reveal that 19% were drinking at risky levels, and 7% reported weekly binge drinking. From a prevention standpoint, these latter behaviours are of great concern if our goal is to *prevent* and *reduce* alcohol-related harms in the population.

It is also clear that **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.

The *CAMH Monitor* shows that, among some ten million adult Ontarians, 13.7% (1.4 million) are consuming alcohol at hazardous or harmful levels, 18.8% (1.8 million) are drinking at risky levels and 16.8% (1.7 million) are current smokers. In contrast, only 7.5% (about 788,200) report moderate or high risk of harms due to cannabis use.

The dominance of alcohol and tobacco use is also evident in **economic cost studies** (Rehm et al., 2006; Rehm et al., 2007; Single et al., 2000). The most recent study by the *Canadian Centre on Substance Abuse* and *CAMH* found that alcohol, tobacco and illicit drug use represent a major source of death and illness in Canada (Rehm et al., 2006). In 2002, these substances together accounted for 21% of total deaths, 25% of total potential years of life lost and 19.4% of total admissions to hospital for any cause. Although the deaths related to illicit drug use increased significantly between 1992 and 2002, **illicit drugs** represented only 0.8% of all **deaths** and only 2.0% of **total years of life lost** through any cause in 2002. Thus, we must recognize that although illegal drugs cause significant harms, in both relative and absolute terms, tobacco and alcohol cause much more.

Finally, our findings also speak to the issue of **mental well-being** among Ontario adults. A sizeable percentage experience symptoms that, although may not qualify for a clinical psychiatric disorder, would nonetheless reduce their ability to function productively in their emotional, social, and occupational worlds. Indeed, we found that about one-in-eight (13%) report **elevated psychological distress**. As well, one-in-fourteen (7%) rated their **mental health** as **poor,** 2.2% reported **contemplating suicide** in the past year, and the

percentage of Ontario adults reporting past year use of **prescribed depression and anxiety medication** doubled between 1999 and 2013. These findings are particularly important given that **depression is one of the leading contributors to total burden of disease**, (Murray & Lopez, 1996; Üstün, 1999) and to economic burden in Canada (Stephens & Joubert, 2001). 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).

Mental illness and addiction together exert an enormous toll on society. Recently, Ratnasingham, Cairney, Rehm, Manson, and Kurdyak (2012) estimated that the overall burden of mental illness and addiction in Ontario is 1.5 times higher than all cancers and seven times higher than all infectious diseases. 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.

The *CAMH Monitor* is an exceptional vehicle to monitor matters of addiction and mental health in Ontario. Its flexible design allows for a wealth of analytic investigation, such as the study of rare groups (e.g., single-parents; unemployed; drinking drivers; daily cannabis users); the statistical analysis of trends (including secular or period and cohort trends); and data in naturally existing nested structures (i.e., respondents nested in households; households nested in communities; and communities nested in counties). Such investigations are well within the scope of the *CAMH Monitor* given its ability to cumulate periodic surveys across time or space (Kish, 1999; Korn & Graubard, 1999). The multi-purpose scope of the *CAMH Monitor* has demonstrated its utility, not only for addressing public health aspects of addiction and mental health, but also for informing local, provincial, national, and international programs and policies (e.g., Mann, Smart, Stoduto, Adlaf, Vingilis, Beirness & Lamble, 2003; Fischer et al, 2013).

Table 10.1.1 Summary Findings: Statistically Significant Associations for ***Past Year Substance Use Indicators*** by Demographic Characteristics, Ontarians Aged 18+, **CAMH Monitor, 2013**

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Alcohol | | | | | | | Tobacco (cigarettes) | | Other drugs | | | |
| | Past Year Drinking | Daily Drinking | Avg No. Drinks Weekly† | Exceeding Drinking Guidelines | Weekly Binge Drinking | Hazardous Drinking (AUDIT 8+) | Alcohol Dependence (AUDIT) | Current Smoking | Daily Smoking | Cannabis 12m | Cannabis Problems (ASSIST-CIS) | Cocaine Life | Cocaine 12m |
| **Sex** | Men higher | 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+ highest | — | Decrease 65+ lowest | 18-29 highest | Decrease 18-29 highest | Decrease 18-29 highest | 65+ lowest | 65+ lowest | Decrease 18-29 highest | 18-29 highest | 50+ lowest | 18-29 highest |
| **Marital Status** | — | — | — | Prev. & never married higher | Never married higher | Never married higher | — | Prev. & never married higher | Prev. married highest | Never married higher | — | Prev. & never married higher | — |
| **Public Health Region** | Toronto lower East and North higher | — | — | — | — | — | — | — | — | — | — | — | — |
| **Education** | Univ degree highest | — | Univ degree lowest | — | — | — | — | < HS highest Univ degree lowest | < HS highest Univ degree lowest | — | — | Univ degree lowest | — |
| **Household Income** | $80,000 highest | — | — | $80,000 highest | — | $30-$49,000 highest | $80,000 higher | <$30,000 highest $80,000 lowest | <$30,000 highest $80,000 lowest | <$30,000 highest | — | Income not stated lowest | — |

Notes: — 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 in past year); **Daily Drinking** (percentage drinking daily**)**; **Avg. Nr. 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 12m** (percentage reporting using cannabis past year); **Cannabis problems** (percentage scoring 4+ on the WHO-ASSIST-CIS)**; Cocaine Life** (percentage reporting using cocaine in lifetime); **Cocaine 12m** (percentage reporting using cocaine past year).

Table 10.1.2 Summary Findings: Statistically Significant Associations for ***Past Year Substance Use and Health Indicators*** by Demographic Characteristics, Ontarians Aged 18+, **CAMH Monitor, 2013**

| | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Other Drugs | | Drugs and Driving | | Mental Health | | | | | | Overall Health | |
| | Any Opioid Pain Relievers | Non-med Opioid Pain Relievers | Drinking & Driving | Cannabis & Driving | GHQ3+ | Poor Mental Health | Frequent mental distress days | Anx 12M | Dep 12M | Suicidal Ideation | Poor Health | Frequent Physically Unhealthy Days |
| **Sex** | — | — | Men higher | Men higher | — | — | — | Women higher | Women higher | — | — | — |
| **Age** | — | Decrease | — | 18-29 highest | 18-29 highest | — | 65+ lowest | — | — | 18-34 highest | Increase | 30-39 higher |
| **Marital Status** | — | — | Prev. & never married higher | — | — | Prev. & never married higher | Prev. married highest | — | — | — | Prev. married highest | — |
| **Public Health Region** | — | — | — | — | — | — | — | — | — | — | — | — |
| **Education** | < HS highest | Decrease | — | — | — | Univ degree lowest | Decrease | — | — | — | Decrease | — |
| **Household Income** | — | | $80,000 highest | — | Decrease | — | — | — | Decrease | — | Decrease | Decrease |

Notes: — No significant difference; † Unadjusted associations; all other associations are adjusted for sex, age, region, marital status, education, and income.
Legend:
**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 and driving among drivers); **Cannabis & Driving** (percentage driving after using cannabis among drivers); **GHQ3+** (Psychological Distress - percent scoring 3+ on GHQ12); **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); **Anx 12M** (percentage using antianxiety medication past year); **Dep 12M** (percentage using antidepressant medication past year); **Suicidal Ideation (**percentage reporting seriously contemplating suicide in the past year)**; 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).

Table 10.2 Summary of ***Changes in Substance Use and Health Indicators***, CAMH Monitor, **1977–2013**

| Indicator | 2012 vs. 2013 | Trends: 1996–2013 | Trends: 1977–2013 |
|---|---|---|---|
| | | **ALCOHOL** | |
| **Past year drinking** | • **Stable** among total sample (78.9% vs. 78.4%).<br>• Stable for all subgroups. | • Overall **stable**, with a low in 1998 at 77.1% and a high of 81.5% in 2007.<br><br>• Significant **non-linear decline** among **18 to 29 year olds** (from 89.5% in 2007 to 80.1% in 2013) and among those aged **30 to 39** (from 86.5% in 2001 to 78.4% in 2013), and a **significant increase** among those aged **65 years** and older (from 58.8% in 1997 to 70.5% in 2013).<br>• Significant **non-linear variations** in past year drinking among respondents living in the East, among married and never married respondents, and those who completed high school. | • Significant linear and non-linear trends; peaks in the mid-1980s and again in the early 1990s. |
| **Daily drinking** (among past year drinkers) | • **Stable** among total sample (7.9% vs. 8.5%).<br>• Stable for all subgroups. | • Overall significant **increase** in daily drinking among drinkers, from 5.3% in 2002 to 8.5% in 2013.<br><br>• Significant **increase** in daily drinking among **drinking men** (from 7.1% in 2005 to 11.4% in 2013), **drinking women** (from a low of 2.6% in 2001 to 5.6% in 2013), and a non-linear uptrend among **40 to 49 year olds** (from 3.0% in 2002 to 7.1% in 2011) and among those **aged 65** and older (from 13.2% in 2003 to 22.8% in 2011).<br>• Significant **increases** for most regions, for married and previously married respondents, and for all education sub-groups. | • Significant linear and non-linear trends<br>• Overall **decline** from 13.4% in 1977 to 7.3% in 2005;<br>• Trend has reversed in the past seven years **increasing** significantly from **5.9%** in **2006** to **8.5%** in **2013**.<br><br>• This non-linear trending was especially prominent among **drinking men**, whose daily drinking dropped from 19.5% in 1977 to 7.1% in 2005 and then increased to 11.4% in 2013. |
| **Average number of drinks per week** (among past year drinkers) | • **Stable** among total sample (4.4 vs. 5.1)<br>• No significant subgroup changes. | • Overall significant **increase** (from 3.3 in 1996 to 5.1 in 2013).<br><br>• Significant **increases** among **drinking men** (from 4.8 in 1996 to 7.4 in 2013), among **drinking women** (from 1.9 in 1996 to 2.8 in 2013), 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)** | • **Stable** among total sample (17.6% vs. 18.8%).<br>• Stable for all subgroups. | • Overall **stable (** from 17.6% in 2003 and 18.8% in 2013).<br>• Significant non-linear variation among residents of the South West (from 17.8% in 2003 to 27.2% in 2006 and to 13.6% in 2013). | • Not available. |

| Indicator | 2012 vs. 2013 | Trends: 1996–2013 | Trends: 1977–2013 |
|---|---|---|---|
| **Weekly binge drinking (5+ drinks/ occasion weekly)** | • **Stable** among total sample (7.0% vs. 6.8%).<br><br>• Rates were **stable** for most subgroups. There was only one significant subgroup decrease among **women**, from 3.3% in 2012 to 1.5% in 2013. | • Overall **stable** between 1996 and 2005, varying between 10.5% and 12.7% among the total sample, and between 13.1% and 16.5% among past year drinkers<br><br>• Significant **decline** between 2006 and 2013, from 12.3% in 2006 to 6.8% in 2013 for the total sample and from 15.9% to 8.7% among drinkers.<br>• Significant subgroup **declines** for **all demographic factors** examined (sex, age, region, marital status and education). | • Significant linear and non-linear trends.<br>• **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).<br>• Binge drinking started **declining** again in 2008 and significant **declines** were evident for sex, age, region, marital status and education. |
| **Hazardous/Harmful drinking (AUDIT 8+)** | • **Stable** among total sample (12.9% vs. 13.7%).<br>• Stable for all subgroups. | • Available 1998–2013.<br>• Overall **stable:** lowest in 2005 (10.4%) and highest in 2007 (15.6%), but has subsequently declined and stabilized (13.7%).<br><br>• Significant **non-linear trend** evident among **women,** increasing from 4.8% in 1998 to 7.9% in 2011, but declined to 6.1% in 2013.<br>• Significant **changes** were found among **30 to 39** year olds and for respondents living in the **East**. | • Not available. |
| **Symptoms of alcohol dependence (AUDIT)** | • **Stable** among total sample (5.9% vs. 6.6%).<br>• Stable for all subgroups. | • Available 1998–2013.<br>• Overall significant **non-linear change:** declined from 9.4% in 1998 to 5.9% in 2003, then increased to 8.1% in 2011, and declined to 6.6% in 2013.<br>• Significant **non-linear subgroup trends** for those **aged 50 to 64**, respondents who were married and those with completed high school education. | • Not available. |
| **TOBACCO – CIGARETTES** | | | |
| **Current smoking** | • **Stable** among total sample (16.6% vs. 16.8%).<br>• Stable for all subgroups. | • Overall significant steady linear **decline** from 26.7% in 1996 to 16.8% in 2013.<br><br>• Significant **declines** for **men** and **women**, and all **age**, **regions**, **marital status** and **education** subgroups. | • Not available. |

| Indicator | 2012 vs. 2013 | Trends: 1996–2013 | Trends: 1977–2013 |
|---|---|---|---|
| | | **OTHER DRUGS** | |
| **CANNABIS**<br>**Past year use** | • **Stable** among total sample (13.5% vs. 14.1%).<br>• No subgroup changes. | • Overall significant **increase** in cannabis use, from 8.7% in 1996 to 14.1% in 2013.<br><br>• Significant **increases** also occurred among: **men** and **women**, and virtually all **age groups**, **regions**, **marital status** and **education** subgroups. | • Overall significant **increase** from 8.1% in 1977 to 14.1% in 2013.<br>• Significant **increases** over the long-term among **men** (from 9.1% in 1992 to 19.9% in 2010); **women** (from 4.5% in 1977 to 10.8% in 2013) and **all age groups**, especially 18 to 29 year olds (from 22.6% in 1977 to 40.4% in 2013) and those 50 years and older (from 1.2% in 1977 to 5.9% in 2013).<br>• **More older users**: in 1977, 82% of past year cannabis users were aged 18 to 29 compared to only 49% in 2013. In contrast, the proportion aged 30 to 49 increased two-fold from 15.4% to 32%, and the proportion aged 50 and older increased six-fold from 3% to 19% during the same period. |
| **COCAINE**<br>**Past year use** | • **Stable** among total sample (1.5% vs. 1.2%).<br>• No subgroup changes. | • Overall remained **low and stable** (under 2.2%).<br>• Significant **increase** among **18 to 29** year olds, from 1.1% in 1996 to 5.0% in 2013. | • Not available. |
| **PRESCRIPTION OPIOIDS**<br>**Any past year use** | • **Stable** among total sample (21.1% vs. 22.2%). | • Available 2010–2013.<br>• Overall **significant decline** from 26.6% in 2010 to 22.2% in 2013.<br>• Significant **declines** for both men and women, those aged 50 years or older, for some regions, for those married, and for those with completed high school and those with some postsecondary education. | • Not available. |
| **Any nonmedical past year use** | • Overall **stable** (1.9% vs. 2.8%). | • Available 2010–2013.<br>• Overall **significant decline** from 7.7% in 2010 to 2.8% in 2013.<br>• **Stable** for 18-29 year olds (7.0% vs. 7.4%)<br>• Significant **declines** for other age groups and most region, marital status and education subgroups. | • Not available. |
| | | **DRUGS AND DRIVING** | |
| **Past year driving after drinking** (among drivers) | • **Stable** among total sample (4.7% vs. 5.1%).<br>• Stable for all subgroups. | • Overall significant linear **decline** from 13.1% in 1996 to 5.1% in 2013.<br>• Significant **decline** between 1996 and 2013 among both | • Not available. |

| Indicator | 2012 vs. 2013 | Trends: 1996–2013 | Trends: 1977–2013 |
|---|---|---|---|
| | | **men** and **women** and most age categories. The most **striking decline** was seen among **male drivers**, from 21.2% in 1996 to 8.2% in 2013 and among young adult drivers **aged 18 to 29**, from 20.1% in 1996 to 8.9% in 2013.<br>• Significant **declines** between 1996 and 2013 for all regions, but especially for drivers living in **Toronto** (from 14.1% to 4.1%).<br>• Significant **declines** occurred among all three **marital status** and among **all four education** subgroups. | |
| **Past year driving after using cannabis** (among drivers) | • **Stable** among total sample (1.3% vs. 2.3%).<br>• Stable for all subgroups. | • Available 2002 to 2013.<br>• Overall **stable** (2.9% vs. 2.3%).<br>• **Stable** for most demographic subgroups. Only one significant non-linear **increase** occurred among drivers **aged 18 to 29.** It **increased** from 7.2% in 2002 to 11.9% in 2006, then declined to 2.8% in 2009 and then increased almost three-fold in 2013 to 8.3%. | • Not available. |
| **MENTAL HEALTH** | | | |
| **Psychological distress** (GHQ3+) | • **Stable** among total sample (13.7% vs. 13.1%).<br>• No subgroup changes. | • Available 2000 to 2013.<br>• Overall **stable**.<br>• **Stable** for all demographic subgroups. | • Not available. |
| **Poor self-rated mental health** | • **Stable** among total sample (5.9% vs 7.1%).<br>• Stable for all subgroups. | • Available 2003 to 2013.<br>• Significant **increase** overall, from 4.7% in 2003 to 7.1% in 2013.<br>• Significant **increases** for those aged **18 to 29**, those aged 50 to 64 and those 65 and older, for respondents living in the Central South (from 3.3% in 2005 to 7.0% in 2013), for those never married and for those with some post-secondary education. | • Not available. |
| **Frequent mental distress days** | • **Stable** among total sample (6.4% vs. 7.3%).<br>• Stable for all subgroups. | • Available 2003 to 2013.<br>• Significant **increase** overall, from 5.4% in 2003 to 7.3% in 2013.<br>• Rates stable for most demographic subgroups. Significant **increases** among men, among those aged 30 to 39, among residents of Toronto, among those previously married and among those not completing high school. | • Not available. |
| **Antianxiety medication** | • **Stable** among total sample (8.8% vs. 8.9%).<br>• Stable for all subgroups. | • Available 1997-2013.<br>• Significant linear **increase**, from 4.5% in 1999 to 8.9% in 2013. | • Not available. |

| Indicator | 2012 vs. 2013 | Trends: 1996–2013 | Trends: 1977–2013 |
|---|---|---|---|
| | | • Significant **non-linear increases** for most subgroups. Especially evident were increases among **women** (from 5.6% in 1997 to 10.7% in 2013) and among **18 to 29 year** olds (from 1.7% in 1997 to 10.8% in 2013). | |
| **Antidepressant medication** | • **Stable** among total sample (6.7% vs. 7.5%).<br>• Stable for most subgroups. Significant **increase** among those aged **18 to 29** (from 2.4% to 8.0%) and among residents of the **Central East** region (from 3.3% to 7.3%). | • Available 1997-2013.<br>• Significant linear **upward trend**, increasing from 3.6% in 1999 to 7.5% in 2013.<br>• Significant subgroup **increases** were also evident for all sex, age, region, marital status, and education subgroups. Especially evident were increases among **18 to 29 year** olds, from 2.0% in 1997 to 8.0% in 2013. | • Not available. |
| | | **PHYSICAL AND OVERALL HEALTH** | |
| **Fair or poor self-rated health** | • **Stable** among total sample (10.8% vs. 9.4%).<br>• Stable for all subgroups. | • Available 2003 to 2013.<br>• Overall **stable** (varying from 10.2% in 2003 to 9.4% in 2013).<br>• Stable for all demographic subgroups. | • Not available. |
| **Frequent physically unhealthy days** | • **Stable** among total sample (7.4% vs. 6.7%).<br>• Stable for all subgroups. | • Available 2003 to 2013.<br>• Overall **stable**.<br>• **Stable** for most demographic subgroups. Significant subgroup **increases** among 30 to 39 year olds from 3.4% to 8.2%, for respondents living in Toronto and in the South-West. | • Not available. |

# Appendix A

## Sample Design

**Table A-1:** Regional Stratification of the CM 2013 Sample

| Region | County | Area Code |
|---|---|---|
| Toronto | Toronto | 416, 647 |
| Central West | Halton; Hamilton-Wentworth; Waterloo; Wellington; Peel; Dufferin; Niagara; Brant; Haldiman-Norfolk | 519, 905, 289 |
| Central East | Simcoe; York; Haliburton; Peterborough; Victoria; Northumberland; Durham | 705, 905, 613 |
| West | Kent; 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 |

**Table A-2:** Ontario Health Survey (OHS) Planning Regions (Ontario Ministry of Health)

| OHS Planning Region | Counties (23 Local Areas) |
|---|---|
| South West | Essex<br>Kent, Lambton<br>Elgin, Oxford, Middlesex<br>Bruce, Grey, Perth, Huron |
| Central South | Niagara<br>Hamilton-Wentworth<br>Brant, Haldimand-Norfolk |
| Central West | Halton<br>Peel<br>Wellington, Dufferin<br>Waterloo |
| Toronto | |
| Central East | Northumberland, Victoria, Haliburton, Peterborough<br>Durham<br>York<br>Simcoe |
| East | Ottawa-Carleton<br>Renfrew, Prescott & Russell, Stormont, Dundas & Glengarry<br>Lanark/Leeds/Grenville, Hastings, Prince Edward, Frontenac, Lennox & Addington |
| North | Algoma, Cochrane<br>Manitoulin, Sudbury (R.M.), Sudbury (T.D.)<br>Muskoka, Parry Sound, Nipissing, Timiskaming<br>Thunder Bay, Kenora, Rainy River |

# Ontario Ministry of Health – Planning Regions

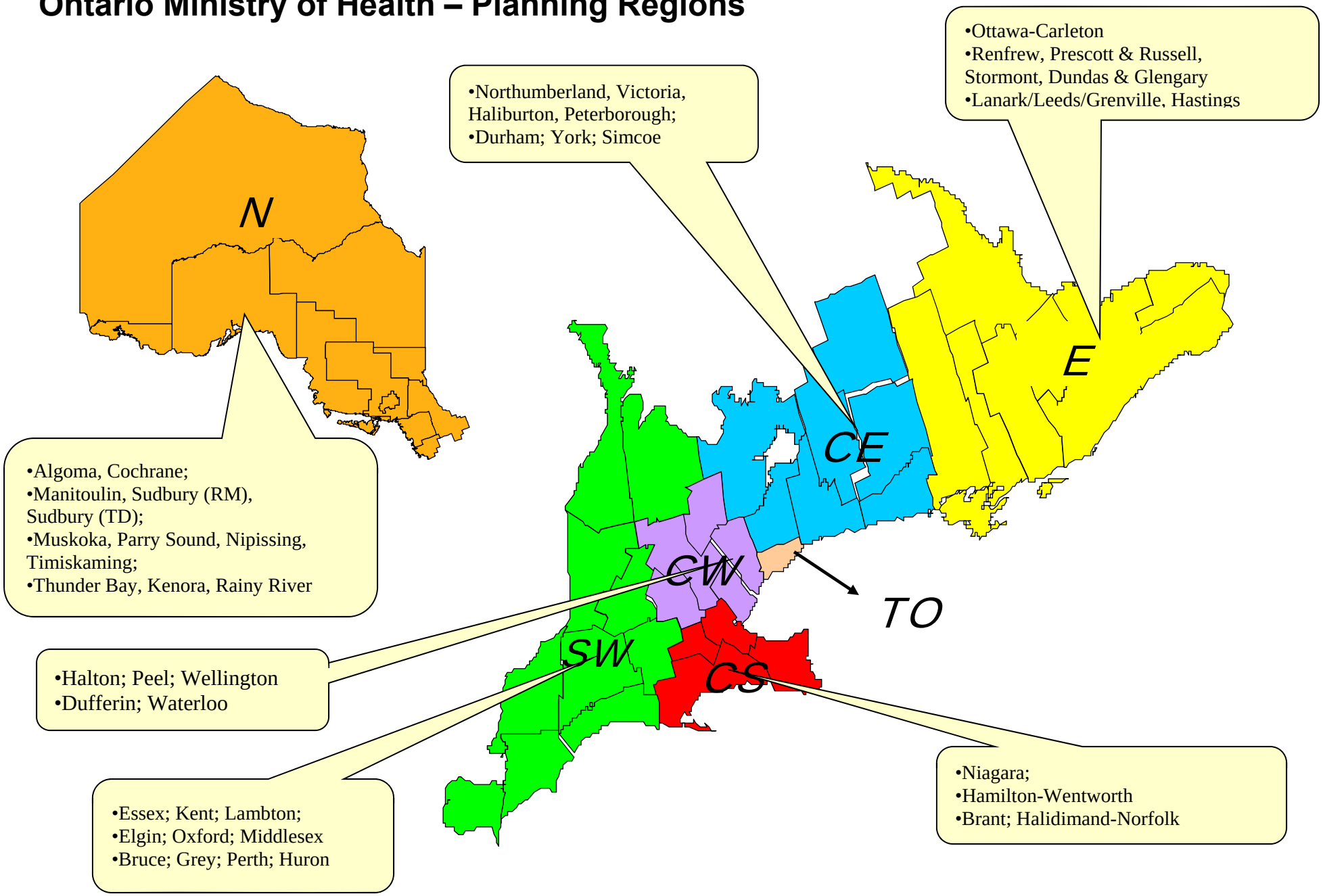


**Table A-3:** Number of Interviews by Demographic Characteristic, 1991- 2013

| | **1991** | **1992** | **1993** | **1994** | **1995** | **1996** | **1997** | **1998** | **1999** | **2000** | **2001** | **2002** | **2003** | **2004** | **2005** | **2006** | **2007** | **2008** | **2009** | **2010** | **2011** | **2012** | **2013** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Sample | 1047 | 1058 | 1034 | 2022 | 994 | 2721 | 2776 | 2509 | 2436 | 2406 | 2627 | 2421 | 2411 | 2611 | 2445 | 2016 | 2005 | 2024 | 2037 | 3030 | 3039 | 3030 | 3021 |
| Sex | | | | | | | | | | | | | | | | | | | | | | | |
| Male | 495 | 490 | 481 | 930 | 477 | 1206 | 1260 | 1088 | 1061 | 1052 | 1216 | 1100 | 1062 | 1122 | 1037 | 884 | 840 | 842 | 877 | 1303 | 1212 | 1232 | 1232 |
| Female | 552 | 568 | 553 | 1092 | 517 | 1515 | 1516 | 1421 | 1375 | 1354 | 1411 | 1321 | 1349 | 1489 | 1408 | 1132 | 1165 | 1182 | 1160 | 1727 | 1827 | 1798 | 1789 |
| Age | | | | | | | | | | | | | | | | | | | | | | | |
| 18-29 | 267 | 272 | 241 | 472 | 240 | 533 | 560 | 457 | 427 | 458 | 473 | 426 | 427 | 391 | 354 | 264 | 258 | 200 | 198 | 311 | 267 | 234 | 182 |
| 30-39 | 264 | 283 | 280 | 541 | 240 | 685 | 654 | 580 | 567 | 538 | 547 | 523 | 438 | 463 | 453 | 338 | 315 | 279 | 289 | 372 | 396 | 394 | 303 |
| 40-49 | 215 | 207 | 208 | 434 | 212 | 562 | 571 | 567 | 505 | 507 | 597 | 513 | 575 | 552 | 569 | 421 | 402 | 415 | 426 | 600 | 551 | 533 | 556 |
| 50-64 | 150 | 153 | 162 | 320 | 168 | 483 | 508 | 448 | 470 | 466 | 531 | 518 | 521 | 651 | 570 | 561 | 551 | 595 | 608 | 976 | 923 | 956 | 1015 |
| 65+ | 134 | 129 | 132 | 236 | 123 | 406 | 407 | 376 | 420 | 378 | 412 | 384 | 396 | 494 | 436 | 397 | 417 | 462 | 461 | 709 | 814 | 853 | 909 |
| Marital Status | | | | | | | | | | | | | | | | | | | | | | | |
| Married | 597 | 579 | 554 | 1028 | 471 | 1450 | 1449 | 1336 | 1234 | 1252 | 1360 | 1217 | 1257 | 1354 | 1274 | 1095 | 1034 | 1097 | 1144 | 1660 | 1692 | 1688 | 1733 |
| Living with Partner | – | 65 | 54 | 118 | 61 | 146 | 176 | 151 | 193 | 161 | 190 | 146 | 190 | 190 | 183 | 146 | 143 | 141 | 166 | 224 | 204 | 199 | 193 |
| Previously Married | 173 | 171 | 187 | 347 | 192 | 508 | 510 | 467 | 490 | 456 | 500 | 503 | 449 | 531 | 503 | 396 | 463 | 443 | 390 | 641 | 656 | 682 | 653 |
| Never Married | 269 | 239 | 238 | 523 | 262 | 601 | 601 | 517 | 491 | 508 | 556 | 539 | 498 | 504 | 457 | 360 | 337 | 317 | 307 | 477 | 451 | 438 | 409 |
| Public Health Region | | | | | | | | | | | | | | | | | | | | | | | |
| Toronto | – | – | – | – | – | 430 | 431 | 421 | 410 | 404 | 406 | 407 | 411 | 390 | 396 | 347 | 317 | 352 | 327 | 510 | 503 | 501 | 503 |
| Central South | – | – | – | – | – | 245 | 265 | 220 | 212 | 220 | 202 | 210 | 211 | 215 | 193 | 154 | 177 | 155 | 164 | 255 | 253 | 229 | 238 |
| Central West | – | – | – | – | – | 355 | 241 | 327 | 316 | 312 | 332 | 329 | 313 | 299 | 343 | 261 | 244 | 247 | 281 | 403 | 391 | 369 | 403 |
| South West | – | – | – | – | – | 461 | 465 | 414 | 403 | 404 | 408 | 403 | 397 | 412 | 427 | 361 | 339 | 340 | 354 | 506 | 500 | 510 | 497 |
| Central East | – | – | – | – | – | 307 | 441 | 284 | 285 | 276 | 313 | 272 | 262 | 286 | 284 | 234 | 268 | 282 | 266 | 392 | 416 | 468 | 411 |
| East | – | – | – | – | – | 481 | 470 | 424 | 409 | 394 | 420 | 402 | 416 | 407 | 404 | 323 | 351 | 328 | 343 | 503 | 517 | 512 | 502 |
| North | – | – | – | – | – | 442 | 463 | 419 | 401 | 396 | 545 | 398 | 401 | 602 | 398 | 336 | 309 | 320 | 302 | 461 | 459 | 451 | 467 |
| Education | | | | | | | | | | | | | | | | | | | | | | | |
| Less Than High School | 244 | 223 | 225 | 403 | 180 | 600 | 554 | 480 | 438 | 362 | 418 | 417 | 375 | 421 | 322 | 280 | 284 | 259 | 266 | 363 | 369 | 359 | 355 |
| Completed High School | 302 | 295 | 276 | 552 | 281 | 713 | 710 | 649 | 655 | 701 | 672 | 609 | 572 | 639 | 612 | 487 | 480 | 467 | 437 | 692 | 670 | 660 | 638 |
| Some College or University | 255 | 329 | 315 | 614 | 304 | 775 | 839 | 779 | 758 | 715 | 874 | 740 | 814 | 840 | 842 | 660 | 679 | 677 | 698 | 1041 | 1018 | 1074 | 1053 |
| University Degree | 241 | 207 | 216 | 446 | 225 | 610 | 641 | 564 | 555 | 609 | 632 | 620 | 624 | 675 | 639 | 556 | 525 | 604 | 611 | 913 | 945 | 885 | 939 |

| | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Sample | 1047 | 1058 | 1034 | 2022 | 994 | 2721 | 2776 | 2509 | 2436 | 2406 | 2627 | 2421 | 2411 | 2611 | 2445 | 2016 | 2005 | 2024 | 2037 | 3030 | 3039 | 3030 | 3021 |
| Income | | | | | | | | | | | | | | | | | | | | | | | |
| <$30,000 | 325 | 239 | 273 | 520 | 261 | 579 | 547 | 453 | 500 | 427 | 496 | 468 | 404 | 458 | 368 | 298 | 282 | 253 | 237 | 356 | 351 | 333 | 303 |
| $30,000 - $49,999 | 212 | 224 | 227 | 435 | 226 | 534 | 510 | 455 | 450 | 403 | 501 | 422 | 446 | 454 | 390 | 312 | 311 | 260 | 265 | 395 | 411 | 379 | 370 |
| $50,000 - $79,999 | 234 | 248 | 229 | 458 | 217 | 625 | 551 | 523 | 521 | 525 | 538 | 544 | 543 | 541 | 504 | 415 | 373 | 387 | 370 | 546 | 558 | 516 | 526 |
| $80,000+ | 106 | 178 | 179 | 294 | 158 | 439 | 471 | 442 | 475 | 496 | 557 | 568 | 618 | 643 | 737 | 613 | 549 | 614 | 596 | 994 | 980 | 1046 | 1089 |
| Missing Responses | 170 | 169 | 126 | 275 | 132 | 544 | 697 | 636 | 490 | 555 | 535 | 418 | 400 | 515 | 446 | 378 | 490 | 510 | 569 | 739 | 739 | 756 | 733 |
| Employment Status | | | | | | | | | | | | | | | | | | | | | | | |
| Full-Time | 552 | 558 | 543 | 1010 | 500 | 1279 | 1363 | 1198 | 1255 | 1220 | 1343 | 1183 | 1150 | 1263 | 1186 | 990 | 937 | 894 | 879 | 1339 | 1304 | 1271 | 1277 |
| Part-Time | 111 | 111 | 100 | 203 | 114 | 303 | 311 | 296 | 240 | 249 | 260 | 215 | 219 | 213 | 225 | 179 | 164 | 182 | 172 | 248 | 272 | 308 | 267 |
| Unemployed | 64 | 63 | 52 | 132 | 39 | 142 | 102 | 82 | 63 | 60 | 91 | 87 | 83 | 71 | 67 | 55 | 65 | 44 | 94 | 126 | 77 | 82 | 77 |
| Retired | 139 | 137 | 148 | 269 | 139 | 465 | 484 | 491 | 483 | 456 | 500 | 465 | 460 | 589 | 514 | 452 | 472 | 552 | 561 | 829 | 900 | 913 | 992 |
| Homemaker | 68 | 77 | 72 | 141 | 61 | 203 | 154 | 133 | 118 | 111 | 139 | 116 | 122 | 122 | 118 | 90 | 69 | 78 | 73 | 98 | 120 | 109 | 97 |
| Student | 81 | 71 | 94 | 175 | 94 | 143 | 172 | 146 | 113 | 131 | 138 | 143 | 135 | 128 | 114 | 80 | 95 | 64 | 61 | 100 | 100 | 87 | 65 |
| Self Employed | – | – | – | – | – | – | – | – | – | – | – | 110 | 134 | 113 | 117 | 100 | 88 | 112 | 108 | 131 | 138 | 122 | 135 |
| Other | 30 | 37 | 44 | 92 | 43 | 171 | 167 | 146 | 147 | 162 | 140 | 90 | 81 | 83 | 72 | 53 | 98 | 81 | 65 | 142 | 105 | 124 | 97 |

Notes: – Data not available
Source: The CAMH Monitor, Centre for Addiction and Mental Health

**Table A-4a:** 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-4b:** Number of Interviews by Sex, Age, and Region of Respondent, 2001–2013

| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (N=) | (2627) | (2421) | (2411) | (2611) | (2445) | (2016) | (2005) | (2024) | (2037) | (3030) | (3039) | (3030) | (3021) |
| | % | % | % | % | % | % | % | % | % | % | % | % | % |
| | (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 |
| | (1216) | (1100) | (1062) | (1122) | (1037) | (884) | (840) | (842) | (877) | (1303) | (1212) | (1232) | (1232) |
| 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 |
| | (1411) | (1321) | (1349) | (1489) | (1408) | (1132) | (1165) | (1182) | (1160) | (1727) | (1827) | (1798) | (1789) |
| 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 |
| | (473) | (426) | (427) | (391) | (354) | (264) | (258) | (200) | (198) | (311) | (267) | (234) | (182) |
| 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 |
| | (547) | (523) | (438) | (463) | (453) | (338) | (315) | (279) | (289) | (372) | (396) | (394) | (303) |
| 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 |
| | (597) | (513) | (575) | (552) | (569) | (421) | (402) | (415) | (426) | (600) | (551) | (533) | (556) |
| 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 |
| | (531) | (518) | (521) | (651) | (570) | (561) | (551) | (595) | (608) | (976) | (923) | (956) | (1015) |
| 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 |
| | (412) | (384) | (396) | (494) | (436) | (397) | (417) | (462) | (461) | (709) | (814) | (853) | (909) |
| 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 |
| | (417) | (407) | (411) | (390) | (396) | (347) | (317) | (352) | (327) | (510) | (503) | (501) | (503) |
| 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 |
| | (2210) | (2014) | (2000) | (2221) | (2049) | (1669) | (1688) | (1672) | (1710) | (2520) | (2536) | (2529) | (2518) |

Notes: % based on weighted data; (N) based on number of interviews (unweighted)
Source: The CAMH Monitor, Centre for Addiction and Mental Health

# Appendix B

## Weighting

## Data Weighting

Because most sample surveys do not select respondents at a probability indicative of their representation in the population, data typically require weighting to ensure a proper representation of interviews.

**1977-1989 Samples**

Weights for the 1977 through 1989 surveys employed post stratification adjustments according to the sex by age distribution (based on the most relevant census data).

**1991-1995 Samples**

Weights for the 1991-1995 surveys were weighted to adjust for the number of individuals per household (i.e., 1 / number of adults), and then normed so that the weighted sample size represented the actual number of respondents.

**1996-1997 Sample**s

Because the 1996 to 1997 samples were allocated equally within each of the six regions weights are required to restore population representation. Calculation of the overall weight variable consisted of three elements: household, region, and survey wave (month of sampling). Within each wave and region, relative household weight is directly proportional to the number of household residents aged 18 and older. Within each cycle, relative region weight is directly proportional to the percentage of all Ontario households located in the region. Finally, cycles are weighted so that each monthly wave makes an equal contribution to the weighted N. At each stage, average weight is equal to 1.

The overall 12-month aggregated sampling weight variable is a function of the following quantity:

$$\frac{N\ adults\ in\ HH}{Mean\ N\ adults} X \frac{P\ of\ HH\ in\ region}{Sample\ P\ of\ HH\ in\ region} X \frac{Total\ N}{12\ (monthly\ N)}$$

**1998 -2013 Samples**
For the 1998 - 2013 cycles of the CM survey, the final weight factor is a function of the aggregated sampling weight (above) and a post-stratification adjustment.

Telephone and other probability surveys typically apply post-strata population adjustments based on census information. Although this procedure does not remove all biases, it does provide a simultaneous adjustment for non-response and non-coverage of households without telephones (Casady & Lepkowski, 1999). Using the 2011 Census (Ontarians aged 18 and over), the post-stratification adjustment was based on eight post strata representing four age groups (18-24; 25-44; 45-64; 65+) by sex (male; female) configuration. Previous surveys did not employ post-stratification adjustments.

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