

# **CAMH Monitor *e*Report: Addiction & Mental Health Indicators Among Ontario Adults in 2001, and Changes Since 1977**

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No. 12**

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toxicomanie et  
de santé mentale

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A World Health Organization Centre of Excellence

**CAMH Monitor eReport:  
Addiction and Mental Health Indicators Among  
Ontario Adults in 2001, and Changes Since 1977**

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## EXECUTIVE SUMMARY - CAMH MONITOR eREPORT 2001

This report describes the extent of addiction and mental health indicators among Ontario adults aged 18 years and older. Estimates are derived from the Centre for Addiction and Mental Health's 2001 *CAMH Monitor*, a survey based on telephone interviews with 2,627 adults (61% of eligible respondents; the amount of sampling

error for the total sample in 2001 should not exceed  $\pm 2.0\%$ ). This report also describes trends in alcohol, tobacco, and cannabis use, based on 16 surveys conducted between 1977 and 2001. The resulting compilation of these surveys represents the longest ongoing study of adult drug use in Canada.

### Addiction and Mental Health Indicators

	Measure	Percent Estimate	Population Estimate <sup>1</sup>
Alcohol	Percentage drinking alcohol in past 12 months	79.5%	7,248,900
	Percentage drinking daily	4.6% of total sample 5.8% of drinkers	419,400
	Average number of drinks consumed weekly among drinkers	3.4 drinks	
	Percentage consuming 15 or more drinks weekly	3.4% of total sample 4.3% of drinkers	310,000
	Percentage consuming 5 or more drinks on a single occasion weekly (heavy drinking)	12.3% of total sample 15.5% of drinkers	1,121,500
	Percentage reporting hazardous or harmful drinking	5.5% of total sample 6.9% of drinkers	501,500
	Percentage of drivers who drank and drove in the past 12 months	10.9% of drivers	884,500
Tobacco	Percentage smoking cigarettes in past 12 months	24.7%	2,252,100
	Percentage of smokers consuming more than 20 cigarettes daily	19.1% smoking daily 21.9%	1,741,600 493,200
	Percentage of daily smokers reporting high smoking dependence	13.6%	236,900
Cannabis	Percentage using cannabis in lifetime	34.4%	3,136,600
	Percentage using cannabis in past 12 months	11.2%	1,021,200
Mental Health	Percentage reporting elevated psychological distress during the past few weeks	12.7%	1,158,000
	Percentage using prescribed anxiety medication	4.7% past year 3.2% past 7 days	428,600 291,800
	Percentage using prescribed depression medication	4.6% past year 3.0% past 7 days	419,400 273,500
Gambling	Percentage reporting problem gambling in past 12 months	2.8%	255,300

Note: <sup>1</sup> Population estimates, based on a population of 9,118,084, are rounded to the nearest thousand.

## Substance Use and Related Factors

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Substance use was strongly associated with the following demographic factors:

- Gender was significantly associated with all 10 substance use measures described in this report.

Men were more likely than women to:

- drink alcohol during the past year
  - drink alcohol daily
  - consume more drinks weekly
  - drink 15 or more drinks on average weekly
  - drink 5 or more drinks on a single occasion weekly
  - drink hazardously or harmfully
  - report drinking and driving
  - smoke cigarettes
  - report high smoking dependence
  - use cannabis during the past year
- Age of respondent was significantly associated with 9 of the 10 substance use measures. In most cases, use decreases with age. One exception was daily drinking, which increased with age.

- Marital status was significantly associated with 3 of the 10 substance use measures. After adjusting for age differences, never married respondents were the most likely to report cannabis use, while married respondents were the least likely to smoke and to drink 15 or more drinks on average weekly.

- Education level was associated with 5 of the 10 outcomes. The most dominant pattern showed that substance use declined with education or was lowest among those with highest education.

- Region was associated only with 2 outcomes: average number of drinks weekly and drinking and driving. Those from Northern Ontario reported the highest number of drinks per week, and those from South Western Ontario were the most likely to drink and drive.

- Income was also associated only with 2 outcomes: past year drinking and drinking and driving. In both cases, substance use outcomes tend to increase with increasing income.

## Mental Health Status and Related Factors

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Overall, one in eight (12.7%) adults reported symptoms indicative of elevated psychological distress.

- Psychological distress was associated only with gender. Women were significantly more likely than men to report 3 or more symptoms of distress over the past few weeks.
- Psychological distress did not vary significantly by age group, marital status, region, education or income.

Anxiety About one in twenty (4.7%) adults used a prescribed medication for anxiety during the 12 months before the survey, and 3.2% used such medication during the past seven days.

- Only gender was significantly related to both past year and past seven-day use. Women were significantly more likely than men to report use (6.3% vs. 3.4% and 4.3% vs. 2.0%, respectively).

Depression. About 4.6% reported use of a prescribed medication for depression during the 12 months before the survey, and 3.0% (2.3% to 3.7%) reported use during the past seven days. For both past year and past seven day period, use was significantly related to gender and age.

- Women were two times more likely than men to report use of depression medications.
- Those aged 18 to 29 years reported lower use than older respondents.

## **Gambling and Related Factors**

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Overall, 3 in 4 adults (75%) have participated in at least one gambling activity in the past 12 months. The most common form of gambling was lottery (66%), followed by casino gambling (27.3%). About one in 30 (3.3%) gambled over the internet.

Gambling varied by gender. Men were significantly more likely than women to gamble on any activity (80.3% vs. 70.4%, respectively), to buy lottery tickets (70.4% vs. 62.4%), to bet in sports pools (17.2% vs. 7.2%), to play cards (14.4% vs. 6.8%), and to buy sports lottery tickets (14.2% vs. 7.4%).

Approximately 2.8% of Ontario adults reported two or more gambling problems during the past 12 months.

- Problem gambling did not vary significantly by gender, age, marital status, region, or income.
- Only education was significantly related to reporting two or more gambling problems. Those with only a high school diploma were significantly more likely to experience gambling problems compared to other groups (6.4% vs. 2.0%).

## **Trends in Substance Use**

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### Alcohol

- Most alcohol consumption indicators remained stable between 2000 and 2001.
- Earlier increases seen between 1995 and 1996 in the rate of consuming five or more drinks on a single occasion weekly remained at an elevated rate, especially among men.
- The most dominant long-term change was one of greater moderation in drinking. Although the percentage drinking has varied between 77% and 87%, fewer drinkers reported daily drinking. The percentage of drinkers who drink daily dropped from 13% in 1977 to 6% in 2001. This decline was especially prominent among men aged

30 to 49 years, whose rate of daily drinking dropped from 21% in 1977 to 5% in 2001.

### Cigarettes

- The percentage reporting cigarette smoking remained stable between 2000 and 2001 (26% and 25%, respectively).
- Since 1995, rates of current smoking have been slowly moving downward—weakly among the total sample (from 28.5% in 1995 to 24.5% in 2001), but more noticeably among women (from 26.7% to 21.5%).

## Cannabis

- Rates of past year cannabis use remained stable between 2000 and 2001 (10.8% and 11.2% , respectively), and no dominant long term trends were evident. However, past year use of cannabis shows e.g., upward trends for: men (from 11.4% in 1992 to 15.4% in 2001), 18 to 29 year olds (from 18.3% in 1996 to 26.8% in 2001), and 30 to 49 year olds (from 11.3% in 1996 to 15.8% in 2001).
- The most salient change showed an aging of cannabis users. On average, cannabis users in 2001 were older than their counterparts in 1977 (31.1 years vs. 25.6 years). Also, 49% of cannabis users in 2001 were 30 years or older compared to only 18% in 1977. Since the mid-90s, the age distribution of cannabis users has varied nominally.

## Short-Term Changes in Mental Health Indicators

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### Elevated Distress

- Overall, indicators of elevated distress remained stable between 2000 and 2001 at 13%.

### Prescribed Anxiety Medication

- The percentage reporting use of medication for anxiety remained stable between 1997 and 2001, varying from 4.5% to 4.7%.

### Prescribed Depression Medication

- The percentage reporting use of medication for depression remained stable between 1997 and 2001, varying from 3.6% to 4.6%.

## Flagging Public Health Issues

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- Despite a decline in cigarette smoking among women, reductions in smoking have been nominal and current rates of smoking (25%) significantly exceed the 12% health objective set for the year 2010.
- Although the percentage of the population who drink alcohol has not changed dramatically, a sizeable proportion of drinkers (about one in 15) continues to drink at hazardous levels. Moreover, current rates of heavy drinking on a monthly basis (28%) significantly exceed the 6% health objectives set for the year 2010.
- A substantial percentage of individuals experience alcohol problems, but do not meet the clinical criteria for more severe alcohol disorders, such as dependence.
- A sizeable proportion (about one in 8) experiences elevated psychological distress, which can reduce the ability to effectively function socially and emotionally.

## SOMMAIRE – INDICATEUR DU CTSM (RAPPORT *électronique* 2001)

Ce rapport décrit les indicateurs de toxicomanie et de santé mentale parmi les adultes ontariens âgés de 18 ans et plus. Les estimations sont tirées de l'*Indicateur du CTSM*, un sondage téléphonique mené en 2001 par le Centre de toxicomanie et de santé mentale auprès de 2 627 adultes (61 % des répondants admissibles ; erreur d'échantillonnage ne

dépassant probablement pas  $\pm 2$  % en 2001). Le rapport décrit également l'évolution de la consommation d'alcool, de tabac et de cannabis selon les tendances relevées lors de 16 sondages effectués entre 1977 et 2001. La compilation des résultats de l'ensemble de ces sondages représente l'étude continue la plus longue sur l'usage de drogues parmi les adultes au Canada.

### Indicateurs de toxicomanie et de santé mentale

	Mesure	Estimation	Population estimative <sup>1</sup>
Alcool	Pourcentage ayant bu de l'alcool au cours des 12 mois écoulés	79,5 %	7 248 900
	Pourcentage ayant bu tous les jours	4,6 % de l'échantillon 5,8 % des buveurs	419 400
	Nombre moyen de verres par semaine chez les buveurs	3,4 verres	
	Pourcentage ayant bu 15 verres ou plus par semaine	3,4 % de l'échantillon 4,3 % des buveurs	310 000
	Pourcentage ayant bu cinq verres ou plus en une seule occasion, par semaine (consommation excessive d'alcool)	12,3 % de l'échantillon 15,5 % des buveurs	1 121 500
	Pourcentage ayant bu de façon dangereuse ou néfaste	5,5 % de l'échantillon 6,9 % des buveurs	501 500
	Pourcentage de conducteurs ayant pris le volant en état d'ébriété au cours des 12 mois écoulés	10,9 % des conducteurs	884 500
Tabac	Pourcentage de fumeurs au cours des 12 mois écoulés	24,7 % 19,1 % ayant fumé tous les jours	2 252 100 1 741 600
	Pourcentage de fumeurs ayant fumé plus de 20 cigarettes par jour	21,9 %	493 200
	Pourcentage de fumeurs quotidiens ayant signalé une grande dépendance au tabac	13,6 %	236 900
Cannabis	Pourcentage ayant pris du cannabis au moins une fois	34,4 %	3 136 600
	Pourcentage ayant pris du cannabis au cours des 12 mois écoulés	11,2 %	1 021 200
Santé mentale	Pourcentage ayant signalé un niveau élevé de détresse psychologique au cours des quelques semaines écoulées	12,7 %	1 158 000
	Pourcentage ayant pris des anxiolytiques	4,7 % l'année dernière 3,2 % la dernière semaine	428 600 291 800
	Pourcentage ayant pris des antidépresseurs	4,6 % l'année dernière 3,0 % la semaine dernière	419 400 273 500
Jeux de hasard et d'argent	Pourcentage ayant signalé un problème lié au jeu, au cours des 12 mois écoulés	2,8 %	255 300

Nota : <sup>1</sup> Population estimative, d'après une population de 9 118 084, arrondie au millier près.

## Consommation d'alcool et d'autres drogues et facteurs connexes

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La consommation d'alcool et d'autres drogues était intimement liée aux facteurs démographiques suivants :

- Le sexe des participants avait une influence significative sur les 10 mesures suivantes de la consommation.

Les hommes avaient plus tendance que les femmes à :

- avoir bu de l'alcool au cours de l'année écoulée
  - boire de l'alcool tous les jours
  - boire davantage de verres d'alcool par semaine
  - boire en moyenne 15 verres ou plus par semaine
  - boire cinq verres ou plus en une seule occasion, par semaine
  - boire de l'alcool de façon dangereuse ou néfaste
  - signaler des incidences de conduite en état d'ébriété
  - fumer la cigarette
  - signaler une grande dépendance au tabac
  - avoir pris du cannabis au cours de l'année écoulée
- L'âge des répondants avait une influence significative sur neuf des dix mesures de la consommation d'alcool ou d'autres drogues. Dans la plupart des cas, l'usage diminuait avec l'âge, à l'exception de la consommation quotidienne d'alcool, qui augmentait avec l'âge.

- L'état civil avait une influence significative sur trois des dix mesures de la consommation d'alcool ou d'autres drogues. Après avoir tenu compte des différences d'âge, les répondants qui n'avaient jamais été mariés étaient les plus susceptibles d'avoir fumé du cannabis, pendant que les répondants mariés étaient les moins susceptibles d'avoir recours au tabac et d'avoir bu en moyenne 15 verres ou plus par semaine.

- Le niveau de scolarité était associé à cinq des dix mesures. Selon la tendance dominante, la consommation d'alcool ou d'autres drogues atteignait son niveau le plus bas chez les répondants les plus instruits.

- La région était associée à seulement deux mesures : consommation d'alcool moyenne par semaine et conduite en état d'ébriété. Les répondants du Nord de l'Ontario ont signalé la consommation hebdomadaire d'alcool la plus élevée, et les répondants du Sud-Ouest de la province étaient les plus susceptibles de conduire en état d'ébriété.

- Le revenu était associé à seulement deux mesures : consommation d'alcool au cours de l'année écoulée et conduite en état d'ébriété. Dans les deux cas, la consommation d'alcool et d'autres drogues a tendance à augmenter avec le revenu.

## État de santé mentale et facteurs connexes

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Dans l'ensemble, un adulte sur huit (12,7 %) a signalé des symptômes d'un niveau élevé de détresse psychologique.

- La détresse psychologique était associée seulement au sexe. Les femmes étaient

beaucoup plus susceptibles que les hommes de signaler au moins trois symptômes de détresse au cours des quelques semaines écoulées.

L'âge, l'état civil, la région, le niveau de scolarité ou le revenu n'avaient pas d'influence significative sur la détresse psychologique.

Anxiété Environ un adulte sur vingt (4,7 %) avait pris des anxiolytiques au cours des douze mois précédant le sondage et 3,2 % d'entre eux en avaient pris au cours des sept jours écoulés.

- Seul le sexe avait une influence significative sur l'usage d'anxiolytiques au cours de l'année écoulée ou de la semaine écoulée. Les femmes étaient beaucoup plus susceptibles que les hommes d'en signaler l'usage (6,3 % comparé à 3,4 % et 4,3 % comparé à 2,0 %, respectivement).

Dépression Environ 4,6 % des répondants ont signalé l'usage d'antidépresseurs sur ordonnance au cours des 12 mois précédant le sondage et 3,0 % (de 2,3 % à 3,7 %) au cours de la semaine écoulée. Dans les deux cas, la consommation était associée de façon significative au sexe et à l'âge.

- Les femmes étaient deux fois plus susceptibles de signaler l'usage d'antidépresseurs que les hommes.
- Les répondants de 18 à 29 ans prenaient moins d'antidépresseurs que les répondants plus âgés.

## **Jeux de hasard et d'argent et facteurs connexes**

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Dans l'ensemble de l'échantillon, trois adultes sur quatre (75 %) se sont adonnés à au moins une forme de jeu au cours des douze mois écoulés et environ un adulte sur trente (3,3 %) l'a fait sur Internet. Les formes les plus courantes de jeu étaient la loterie (66 %) et les jeux de casino (27,3 %).

Les tendances du jeu sont influencées par le sexe. Les hommes étaient beaucoup plus susceptibles que les femmes de s'adonner à une forme quelconque de jeu (80,3 % comparé à 70,4 %), d'acheter des billets de loterie (70,4 % comparé à 62,4 %), d'effectuer des paris sportifs (17,2 % comparé à 7,2 %), de jouer aux cartes (14,4 % comparé à 6,8 %), et d'acheter des billets de loterie sportive (14,2 % comparé à 7,4 %).

Environ 2,8 % des adultes ontariens ont signalé au moins deux problèmes de jeu au cours des 12 mois écoulés.

- Le sexe, l'âge, la région, le niveau de scolarité et le revenu n'avaient pas d'influence significative sur le jeu problématique.
- Seul le niveau de scolarité avait une influence significative sur la présence d'au moins deux problèmes de jeu. Les répondants qui avaient un diplôme d'études secondaires étaient beaucoup plus susceptibles d'avoir des problèmes de jeu que les autres répondants (6,4 % comparé à 2,0 %).

## Tendances observées

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### Alcool

- La plupart des indicateurs de la consommation d'alcool sont demeurés stables entre 2000 et 2001.
- Le taux de consommation hebdomadaire de cinq verres ou plus en une seule occasion, qui avait augmenté entre 1995 et 1996, demeure élevé, surtout chez les hommes.
- Le principal changement constaté à long terme est une augmentation de la consommation modérée d'alcool. Bien que le pourcentage de buveurs ait varié entre 77 % et 87 %, un moins grand nombre d'entre eux ont signalé avoir bu tous les jours. Le pourcentage de répondants qui boivent tous les jours est passé de 13 % en 1977 à 6 % en 2001. Cette diminution est particulièrement prononcée parmi les hommes de 30 à 49 ans (de 21 % en 1977 à 5 % en 2001).

### Tabac

- Le pourcentage de fumeurs est demeuré stable entre 2000 et 2001 (26 % et 25 % respectivement).

- Depuis 1995, le taux de tabagisme affiche un léger fléchissement dans l'ensemble de l'échantillon (allant de 28,5 % en 1995 à 24,5 % en 2001) et une chute plus notable chez les femmes (de 26,7 % à 21,5 %).

### Cannabis

- L'usage de cannabis au cours de l'année écoulée est demeuré stable entre 2000 et 2001 (10,8 % et 11,2 %, respectivement) sans montrer de tendance dominante à long terme. Cependant on note une tendance à la hausse par rapport aux années antérieures, chez les hommes (de 11,4 % en 1992 à 15,4 % en 2001), chez les 18 à 29 ans (de 18,3 % en 1996 à 26,8 % en 2001) et chez les 30 à 49 ans (de 11,3 % en 1996 à 15,8 % en 2001).
- L'âge des usagers de cannabis est le facteur qui a le plus changé. Les usagers en 2001 étaient en moyenne plus âgés que leurs semblables en 1977 (31,1 ans comparé à 25,6 ans). De plus, 49 % des usagers de cannabis avaient 30 ans ou plus en 2001, comparativement à 18 % en 1977. Depuis le milieu des années 1990, la répartition des usagers de cannabis selon l'âge a très peu changé.

## Changements à court terme des indicateurs de santé mentale

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### Niveau élevé de détresse psychologique

- Dans l'ensemble, les indicateurs de niveau élevé de détresse sont demeurés stables, à 13 % entre 2000 et 2001.

### Usage d'anxiolytiques sur ordonnance

- Entre 1997 et 2001, le pourcentage d'usagers d'anxiolytiques est demeuré stable, se situant entre 4,5 % et 4,7 %.

### Usage d'antidépresseurs sur ordonnance

- Entre 1997 et 2001, le pourcentage d'usagers d'antidépresseurs est demeuré stable, se situant entre 3,6 % et 4,6 %.

## Enjeux de la santé publique

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- Malgré une légère tendance à la baisse chez les femmes, le taux de tabagisme n'a guère diminué, s'élevant actuellement à 25 %, ce qui dépasse considérablement les objectifs santé, établis à 12 % pour 2010.
- Bien que le pourcentage de buveurs n'ait pas beaucoup changé dans l'ensemble de la population, une importante proportion d'entre eux, environ un sur quinze, continue à boire de façon dangereuse. En outre, les taux actuels de consommation excessive d'alcool par mois (28 %) dépassent considérablement les objectifs santé de 6 %, établis pour 2010.
- Un pourcentage important de personnes ont des problèmes d'alcool, bien qu'elles ne répondent pas aux critères de problèmes d'alcool graves, tels que la dépendance.
- Un pourcentage considérable de personnes, environ une sur huit, ont un niveau élevé de détresse psychologique, ce qui peut entraver leur fonctionnement sur le plan social et affectif.

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# 1. INTRODUCTION

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Knowledge about the changing pattern and character of substance use and mental health in the population is essential to informed health policy. For example, whether a given drug causes problems for individuals and society depends on at least three primary 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 effects. Thus, we should not equate prevalence of use with the extent of abuse. Indeed, drugs with a high prevalence can have relatively low rates of abuse (e.g., alcohol), while drugs with a low prevalence can have high rates of abuse (e.g., heroin). The important point is that drug use in the population is but one factor in determining the abuse potential of a given substance. Population information on mental health indicators are likewise critical to informed social policy. Screening instruments assessing mental health can assist in identifying not only the prevalence of poor mental health, but also the related determinants and risk factors.

The purpose of this descriptive report is three-fold. First, we describe the extent of substance use (i.e., alcohol, tobacco and cannabis use) and mental health among Ontario adults in 2001. Second, we examine correlates and risk factors related to use of these outcomes; and third, based on 16 surveys conducted between 1977 and 2001, we examine aggregate trends in substance use.

**Why is it important to monitor addiction and mental health indicators?** Because addiction and mental health indicators are influenced by on-going societal changes in values, attitudes, lifestyles and larger demographic and economic changes, their character is rarely a static phenomenon.

Thus, monitoring these indicators serves several important purposes.

- First, monitoring builds knowledge and increases understanding of the processes that bring about population changes in addiction and mental health indicators.
- Second, monitoring informs social policy. Indeed, to be effective, social policies intended to reduce the harm caused by drugs and poor mental health must be informed by the most current information.
- Third, monitoring serves as a tool for the evaluation of health programs and objectives set by governmental and advisory bodies. One recommendation was to "increase research and database development to provide baseline information and facilitate measurement of progress" towards the objective of reducing the hazardous use of alcohol by the year 2000 (Premier's Council on Health Strategy, 1991; U.S. Department of Health and Human Services, 2000).

There are several means, including surveys and institutional aggregate data, to estimate and monitor addiction and mental health indicators in the population. Examples of aggregate data include per capita alcohol consumption, the number of drug arrests, convictions and seizures, and the number of hospitalizations. Indicators also include treatment and fatality data. Although aggregate data are useful in describing aggregate or social patterns of addiction and mental health indicators, because they are typically based on the summation of counts of cases, and not necessarily individuals, they are somewhat remote from individual use. For example, per capita alcohol consumption, based on sales data, is an aggregate measure averaged across both drinkers and nondrinkers; thus, rates of use

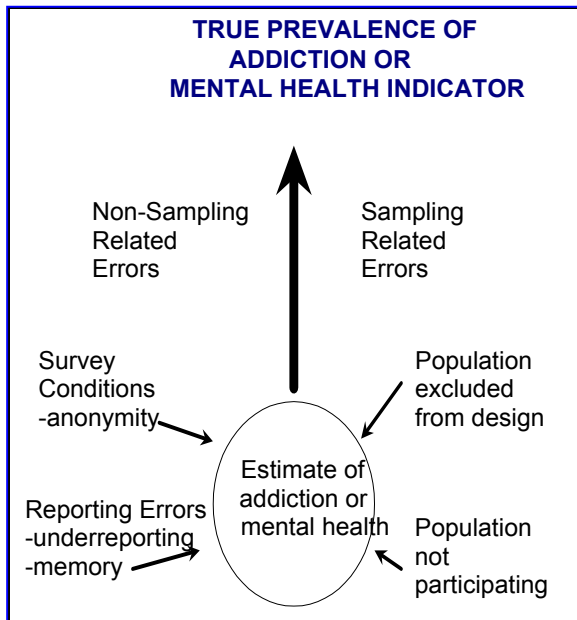
among subgroups such as gender and age cannot be derived. Arrest and conviction data can reflect factors other than rate of use, such as the degree of enforcement and drug availability. In addition, such data apply to atypical cases, namely individuals who are both detected and apprehended for their use of drugs. Thus, there is no direct and necessary relationship between drug arrests and seizures and the size of the drug using population. Indeed, changes in such data must be carefully interpreted. For example, an increase in drug arrests and seizures may reflect many things other than

increasing drug use in the population. It may reflect more funds or a higher priority given to enforcement; it may reflect the same number of users using greater quantities; or it may reflect increases in use among restricted and typically small populations whose behaviour easily comes to the attention of authorities. Thus, although official aggregate indicators are important to help define the particular contours of the drug problem, they should not be confused with the extent of use in the population.

### 1.1 The Strengths and Weaknesses of Surveys

The most direct means of estimating and monitoring addiction and mental health indicators in the population is based on sample surveys. Although the sample survey method is not without limitations, it still remains the most feasible technique to monitor health behaviours and outcomes in the general

population. The strength of the survey method is the requirement of the random selection of respondents. Thus, assuming no bias in the selection process, drug users drawn from the sample should be more or less representative of drug users in the population at large.



Like other indicators of addiction and mental health, the survey method also has its weaknesses. First, as depicted graphically, estimates can be biased if the survey is used to project beyond the target population. For example, the 2001 cycle of this survey is based on a target population of households with telephones. Whether estimates would be significantly biased by projecting to all households depends on the size of non-telephone households and their demographic composition (in 1991, 98.6% of Ontario households had at least one telephone (Statistics Canada, 1992). As well, conventional household surveys are limited to those residing

in conventional households and are not intended as a sample of all possible adults.

Thus, those in prisons, hospitals, military establishments, and, as well, transient populations such as the homeless are not included. These excluded groups often contain an especially large number of drug users and heavy drinkers (Rossi, 1989). However, the bias caused by such non-coverage depends upon firstly, the difference in drug use between those surveyed and those not surveyed, and secondly, the size of the group missed. Thus, even if indicators of addiction and mental health are substantially higher in the excluded group than those in the sampled group, if the size of the excluded group is small relative to the total population the bias is not necessarily substantial (Kandel, 1991).

One limitation of the sample survey is its reliance on self-reported behaviour. 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 behaviours (Harrison, Haaga, & Richards, 1993; Turner, Lessler, & Gfroerer, 1992). Moreover, although these biases influence drug estimates at a single point in time, they should have minimal impact on estimating trends as long as underreporting remains constant. It is also important to note that 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 whether drinking problems causes unemployment). However, repeated cross-sectional surveys are especially efficient at *identifying* and *measuring* aggregate period trends (e.g., changes in the percentage of the population engaged in alcohol and other drug

use behaviours). Indeed, in comparison to longitudinal follow-up designs, the advantages of repeated cross-sectional designs is firstly, that each survey takes into account population changes, and secondly, that estimates combine effects of changing values and changing populations, and therefore provide an efficient estimate of net (i.e., population) change.

## 2. METHOD

### 2.1 Sampling Designs

The series of data described in this report are based on 16 repeated cross-sectional surveys conducted with Ontarians aged 18 and older by the Addiction Research Foundation in 1977, 1982, 1984, 1987, 1989, and 1991 through 1998, and the Centre for Addiction and Mental Health (CAMH) in 1999, 2000, and 2001. These data, which amalgamate previous monitoring studies, including the Ontario Adult Drug Use series and the Ontario Alcohol and Other Drug Opinion Survey series (Ialomiteanu & Bondy, 1997), represent the longest and most comprehensive ongoing study of adult drug use in Canada.

#### 2.1.1 Sampling Designs, 1977-1995

As seen in Table 2.1.1, the five surveys conducted between 1977 and 1989 were based on face-to-face interviews administered by Gallup Canada. In contrast, the 11 surveys conducted between 1991 and 2001 were based on Computer Assisted Telephone Interviewing. Using random-digit-dialling methods, these surveys employed two-stage probability selection and were conducted by the Institute for Social Research, York University (Adlaf & Ivis, 1991 (unpublished)).<sup>1</sup>

**Table 2.1.1. ARF/ CAMH - Ontario Adult Population Surveys, 1977-2000**

Year	Mode of Interview	Survey Organization	Sample Design	N Date	RR Deff	Source
1977	Face-to-face	Gallup	Modified-probability design: The sample design incorporated stratification by six community size groups, based on the most recent census data: cities of 500,000 population 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 nonfarm areas. The population was arrayed in geographic order by community size within those classifications, by census enumeration areas. Enumeration areas, on the average, contain about 500 to 1,000 people. 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. 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. 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 completed, 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. Interviews were conducted Wednesday to Friday evenings and Saturdays during the day. Weights for the 1977 through 1989 surveys employed poststratification adjustments according to the gender and age distribution according to the most relevant census data.	N=1,059 June 16-18	NA	(Smart & Goodstadt, 1977)
1982	Face-to-face	Gallup		N=1,040 Feb. 22-28	NA	(Smart & Adlaf, 1982)
1984	Face-to-face	Gallup		N=1,050 Feb. 27-March 3	NA	(Smart & Adlaf, 1984)
1987	Face-to-face	Gallup		N=1,084 Jan. 8-23	NA	(Smart & Adlaf, 1987)
1989	Face-to-face	Gallup		N=1,101 Feb. 8-11, March 1-4	NA	(Adlaf & Smart, 1989)
1991	Face-to-face	Gallup		N=1,041 Feb 5-15	NA	(Adlaf, Smart, & Canale, 1991)
1991	Telephone	ISR	Full-probability RDD: The survey used random-digit-dialling (RDD) techniques through Computer Assisted Telephone Interviewing (CATI) methods. The design employed a two-stage probability random-digit-dialling (RDD) survey. From a sampling frame of all active area codes and exchanges in Ontario provided by the ATT Long Lines Tape, a random sample of telephone numbers was selected with equal probability in the first stage of selection (i.e., households). Within selected households, one respondent was selected according to the most recent birthday of household members. A minimum of 12 call-backs 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 Feb 20-March 18	RR=67% Deff=1.14	(Adlaf et al., 1991)
1992	Telephone	ISR		N=1,058 June 14-August 20	RR=63% Deff=1.19	(Ferris, Templeton, & Wong, 1994)
1993	Telephone	ISR		N=1,034 April 19-May 24	RR=65% Deff=1.10	(Bondy, 1994)
1994	Telephone	ISR		N=2,022 March 1-May 5	RR=63% Deff=1.16	(Adlaf, Ivis, & Smart, 1994; Paglia, 1995)
1995	Telephone	ISR		N=994 March 28-May 9	RR=62% Deff=1.16	(Anglin, 1995)

Year	Mode of Interview	Survey Organization	Sample Design	N Date	RR Deff	Source
1996	Telephone	ISR	<p><b>CAMH Monitor (CM)</b></p> <p>Full-probability monthly RDD: The survey used RDD techniques through CATI methods. The design employed a two-stage probability RDD survey stratified by six geographical regions with sample sizes allocated equally. From a sampling frame of all active area codes and exchanges in Ontario provided by the ATT Long Lines Tape, a random sample of telephone numbers was selected with equal probability in the first stage of selection (i.e., households). Within selected households, one respondent was selected according to the most recent birthday of household members. A minimum of 12 call-backs were made to each nonresponding household, and all households who refused to participate were re-contacted in order to secure participation. Twelve monthly samples were cumulated to provide overall estimates. Sampling weights were a function of the number of household members, regional probabilities and wave.</p>	N=2,721 April 8- Jan 8	RR=64%	(Edward. M. Adlaf et al., 1997; Adlaf, Ivis, Ialomiteanu, Walsh, & Bondy, 1997)
1997	Telephone	ISR		N=2,776 Jan 14- Dec 21	RR=67%	(Adlaf, Ivis, & Ialomiteanu, 1998; Adlaf, Ivis, Ialomiteanu et al., 1998)
1998	Telephone	ISR		N=2,509 Jan 21- Dec 20	RR=69%	(Adlaf, Paglia, & Ialomiteanu, 1999; Adlaf, Paglia, Ivis, & Ialomiteanu, 1999)
1999	Telephone	ISR		N=2,436 Jan 20- Dec 21	RR=69%	(Adlaf & Ialomiteanu, 2001a; Adlaf, Ialomiteanu, & Paglia, 2000)
2000	Telephone	ISR		N=2,406 Jan 20- Dec 21	RR=61%	(Adlaf & Ialomiteanu, 2001b; Adlaf, Ialomiteanu, & Paglia, 2001)

Notes: ISR, Institute for Social Research, York University, RR = effective response rate; Deff = average design effect

## 2.1.2 The CM Sample Design

In 1996, general population survey research activities of the Addiction Research Foundation were amalgamated into the Ontario Drug Monitor (ODM).

To enhance comparability to earlier surveys, the ODM was designed to maintain many of the features of previous surveys. In 1999, this development continued, and the expanded survey now includes indicators of health and mental health. To more formally recognize this wider focus, we have renamed this project the CAMH Monitor (CM).

There are three major differences between the CM and earlier surveys:

1. The CM is based on the aggregation of independent monthly surveys (versus the time-limited fieldwork period in earlier surveys). Such repeated or “rolling” surveys have several advantages over single time surveys including the following:

- greater capacity to detect seasonal and secular trends;
- greater capacity to provide up-to-date information needs;
- the sum of the repeated samples lead to better statistical estimation.

2. The CM is regionally stratified (versus non-stratified, proportional allocation employed in earlier surveys). Thus, the precision of estimates from areas such as Northern Ontario are improved compared to earlier surveys. As well, the potential for regionally pooling cases across surveys is greatly enhanced.

3. The CM sample size is increased from earlier surveys - exceeding 2,400 per year.

The 1996 to 2001 cycles of the CM survey were administered by the Institute for Social Research (ISR), York University. The survey used random-digit-dialling (RDD) methods via Computer Assisted Telephone Interviewing (CATI).

CM2001 consists of 12 independent monthly surveys (January - December) with 200 completions expected each month. The design employed a two-stage probability selection procedure. Each month a sampling frame of all active area codes and exchanges in Ontario provided by the ATT Long Lines Tape, within each regional strata, a random sample of telephone numbers was selected with equal probability in the first stage of selection (i.e., households). Within selected households, one respondent age 18 or older who could complete the interview in English or French was selected according to the most recent birthday of household members. A minimum of 12 call-backs were placed to unanswered numbers and all households who refused to participate on the first contact were re-contacted in order to secure participation. To increase the precision of estimates within different areas of the Province, the sample was equally allocated among six strata according to area code and the resulting counties (see Appendix A, Table A-1).

## 2.2 Interviews

In 2001, the CATI schedule consisted of a maximum of 162 questions. On average, interviews lasted 23 minutes (89% of interviews were completed within 30 minutes). Interviews were conducted by 26 ISR interviewers, many of which had considerable CATI experience and between one-half to two-thirds had prior experience on ARF surveys. In addition, all respondents who refused to participate on the first call, were recontacted by an experienced interviewer in order to gain participation (6.6% of initial refusers agreed to participate).

## 2.3 Participation, Representativeness and Sample Characteristics

Across all 12 months of data collection, 5,573 telephone numbers were selected (of which 4,295 were estimated to be eligible), 2,627 respondents participated, representing an effective response rate of 61%<sup>2,3</sup> (monthly response rates varied from 56% to 64%). This participation rate is similar to recent Ontario surveys conducted by Statistics Canada (Statistics Canada, 1994; Stephens & Fowler Graham, 1993).

The CM2001 sample represents Ontarians aged 18 and older (approx. 9,118,084 people). To evaluate the representativeness of the sample we compared characteristics of CM2001 respondents aged 18 and older with comparable 2001 Census data (Statistics Canada, 2002). There were no significant differences between the two samples for gender and age. Additional demographic comparisons (for marital status, education and region ) were available only for respondents aged 20 and older with a comparable comparison to the 1996 Census (Statistics Canada). For the three available comparisons, there were

significant differences between the two samples for marital status and education. Compared to the 1996 Census, our sample underrepresented those widowed, separated or divorced (13.0% vs. 15.1%, respectively), those with education levels of high school or less (39.3% vs. 46.9%), and those with some post secondary education (32.9% vs. 35.7%). This over-representation of high education is common to telephone surveys (Trewin & Lee, 1988). (Information regarding selected sample characteristics is presented in Appendix A, and data weighting information is presented in Appendix C. Detailed information regarding the CM2001 survey is available in a companion technical document (Adlaf & Ialomiteanu, 2002).

## 2.4 Measures Used in this Report

Measuring the spectrum of alcohol and other drug use requires several related, but independent pieces of information. Some of the basic data required to estimate consumption are prevalence, (what percentage of the population uses a given drug), frequency, (how often the drug is used), quantity, (how much is consumed), and concentration, (how potent is the substance). In this report we limit our attention to only a few of these factors. For alcohol consumption we present information on prevalence, frequency and quantity; for other drug use we present information on prevalence only. Although several questions have been added or deleted over the course of this study, drug use questions have remained similar across each of the 16 surveys. The specific questions used in this report are provided in Appendix B and the drug use measures are briefly outlined in Tables 2.1.2 through 2.1.6.

**Table 2.1.2: Addiction & Mental Health Indicators**

<b>Measure</b>	<b>Definition</b>
Prevalence (Past Year Drinking)	Percentage reporting drinking at least once during the 12 months before the survey (Available 1977-2001; Q#AC1 or AC5)
Daily Drinking	Percentage reporting daily drinking during the 12 months before the survey (Available 1977-2001; Q#AC5)
Five or More Drinks	Percentage reporting drinking five or more drinks on a single occasion on a weekly basis during the 12 months before the survey (Available 1977-2001, excl. 1992, 1993; Q# FIVE)
Number of Drinks Consumed in Past Year	Estimated number of 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. (Available 1991-2001; Q# AC5*AC6A)
Prevalence of Drinking 15 or More Drinks	Percentage reporting 15 or more drinks weekly (derived from above calculation). (Available 1994; 1997; 2000; 2001)
Drinking and Driving	Percentage of past year drinkers with a valid driver's licence reporting driving within one hour of consuming two or more drinks of alcohol (Available 1996-2001; Q#DD1)
Hazardous or Harmful Drinking (AUDIT)	Percentage scoring 8+ or 11+ on the AUDIT screen. Based on 10 items assessing alcohol consumption and past year alcohol-related problems.(Saunders, Aasland, Babor, De la Fuente, & Grant, 1993) (Available 1998-2001; Q#s AUD1-AUD10).
Current Smoking	Current smoking is defined as someone who: 1) is a daily or occasional smoker (tc1), 2) has smoked over 100 cigarettes in his or her lifetime (tc2) and 3) has smoked within the past 30 days (tc5). (Available 1996-2001; Q# SSTATUS)(Bondy & Ialomiteanu, 1997)
Cannabis Use (Lifetime)	Percentage reporting the use of marijuana or hashish at least once in their lifetime. (Available 1977-2001, excl. 1993, 1995; Q# CN1)
Cannabis Use (Past Year)	Percentage reporting the use of marijuana or hashish at least once during the 12 months before the survey. (Available 1977-2001, excl. 1993; Q# CN2)
Indications of Cannabis Dependence	Percentage reporting at least three of the six dependence categories during the 12 months before the survey (Available 2000, 2001; Q# CN3-CN11)
Elevated Psychological Distress (GHQ 3+)	Percentage reporting at least 3 of the 12 symptoms of the GHQ screen. Based on 12 items assessing symptoms over the past few weeks. (Available 2000, 2001; Q#s GHQ1-GHQ12)
Prescribed Anxiety Medication	Percentage reporting the use of prescribed anxiety medication at least once during the 12 months before the survey, and percentage reporting using at east once during the past 7 days (Available 1997,1999,2001; Q#s ANX12;ANX7)
Prescribed Depression Medication	Percentage reporting the use of prescribed depression medication at least once during the 12 months before the survey, and percentage reporting using at east once during the past 7 days (Available 1997,1999,2001; Q#s DEP12;DEP7)
Problem Gambling (SOGS 5)	Percentage scoring 2+ on the Short SOGS5 screen. Based on 5 items assessing gambling problems during the past 12 months. (Available 2000, 2001; Q#s NTS1-NTS5)

In addition to age and gender, we also examine the relationship between substance use and other respondent characteristics.

**Table 2.1.3 : Socio-Demographic Measures**

<b>Measure</b>	<b>Categories</b>
Gender	Men; Women
Age (in years)	<ol style="list-style-type: none"> <li>1) 18-29; 30-39; 40-49; 50-64; 65 +</li> <li>2) 18-29; 30-39; 40-49; 50 +</li> <li>3) 18-29; 30-49; 50 +</li> </ol>
Marital Status	<ol style="list-style-type: none"> <li>1) Never married; married; living with partner; previously married (i.e. widowed, divorced or separated).</li> <li>2) Never married; married (including living as married); previously married (i.e. widowed, divorced or separated).</li> </ol>
Region	<ol style="list-style-type: none"> <li>1) <u>Region Strata</u> – Toronto (416); Central West (705, 905); Central East (519, 905); West (519); East (613); North (705, 807) (Also see Appendix A, Table A-1)</li> <li>2) <u>Region Postal Area</u> – Toronto (postal codes beginning with ‘M’); Toronto Outskirts (‘L’ postal codes); Western Ontario (‘N’ postal codes); Eastern Ontario (‘K’ postal codes) and Northern Ontario (‘P’ postal codes)</li> <li>3) <u>Public Health Regions</u> – based on OMH 7 planning regions – Toronto; Central South; Central West; South West; Central East; East; North (Also see Appendix A, Table A-2)</li> </ol>
Education	Less than high school; completed high school; some college or university; completed university degree
Gross Family Income (in thousands)	Less than \$30k; \$30-\$49k; \$50-\$790k; \$80k+; not stated

## 2.5 Data Weighting, Suppression & Analysis

Because most sample surveys do not select respondents at a probability indicative of their representation in the population, data require weighting to ensure a proper representation of each interview (see Appendix C).

There are two aspects to the statistical quality of survey data: *precision*, typically measured by the 95% confidence interval; and *stability*, typically measured by the ratio of the standard error to its estimate.

Confidence intervals indicate the probable error of a given survey estimate; thus, a  $\pm 1.9\%$ , 95% CI (based on the total CM sample of 2400 with a percentage estimate of 50%) indicates that with repeated sampling, 95% of the samples would contain the true population estimate. Confidence intervals, however, do not reflect total errors or accuracy, but reflect errors due to the fact that we are surveying only a 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, sensitivity of questions, underreporting of drug use, and the like. Thus, the reader should always bear in mind that the “precision” of an estimate, as indicated by the confidence interval, is not synonymous with “total accuracy” of an estimate.

The ratio of the standard error to its estimate is a measure especially useful when comparing the precision of different estimates based on different sample sizes and different measures. The criteria for the suppression for CM data is based on the coefficient of variation (CV).

- In this report estimates are considered unstable and thus are suppressed if the coefficient of variation exceeded .33 or if the percentage was less than 1%. Estimates adjacent to a † should be interpreted with caution due to moderate sampling variability (CV<17).

Sample designs employing complex sampling procedures, such as stratification, weighting and multistage selection, tend to underestimate the variance (or error) of estimates when simple random sampling (SRS) formulas are used. The implication of using SRS formulas on estimates from complex sampling designs is that we are likely to compute too narrow a confidence interval than truly exists. We will, therefore, be more likely to find a greater number of statistically significant differences that ought to exist. The design effect (DEFF) is essentially the ratio of the variance of an estimate derived from the particular sampling design over the variance of the same estimate of an SRS of the same size. A DEFF of 1.0 indicates that the variance of a given sample design is equivalent to a SRS. Most complex designs, however, tend to have DEFFs larger than 1.0, and consequently, tend to underestimate sampling error.

- All 2001 estimates of variance are based on Taylor series methods implemented in Stata (StataCorp, 1997). Estimates of sampling error for surveys conducted between 1982 and 1995 are based on effective sample sizes derived from an average design effect (see Table 2.1.1).

## 2.6 Outline of the Report

Our analysis is descriptive. In reporting the 2001 findings we present population estimates and estimates of probable error. As well, we examine associations between substance use and six demographic characteristics -- gender, age, marital status, region, education, and income. Our analysis is descriptive, but we do employ statistical controls for these six characteristics. Although such multivariate analysis complicates the reporting of results, we feel that this approach will reduce problems of misinterpretation of data that are common to simple descriptive reports, and will provide a more useful and accurate interpretation of the data. For example, it is commonly reported that alcohol and other drug use varies by marital status. However, those who have never been married are, on average, younger in age. Thus, we cannot know whether the variation in drug use by marital status is due to the unique aspects of marital status or whether they are due to age differences. Controlling for age (and other demographic factors) reduces the problem of misinterpretation of the data. All statistical analyses in this section are based on logistic regression models.

## 2.7 Presentation of Data

Readers should note the following:

- Sample sizes reported in tables refer to the actual number of people surveyed.
- We use the word “significant” (e.g., significant increase, non-significant decline) to indicate relationships or differences that are statistically

We also describe short-term and long-term changes in drug use. We compare changes in drug use between 2001 and the most recent survey with available data for the total sample and for five demographic factors: gender, age, marital status, region and education. To determine whether percentages differ significantly, we used statistical tests (see below) to help provide an objective indication of whether such differences might be due to chance. However, when many statistical comparisons are made, the probability that some significant comparisons are due to chance increases. For example, in comparing 20 differences between two surveys, even if there were no real differences, the likelihood is that one significant difference would be found purely by chance.

The analyses of short-term changes are followed by descriptions of long-term trends between 1977 and 2001. For these results, we restrict attention to overall trends in the total sample. For this section we constructed logit models to test for linear or nonlinear trends in drug use between 1977 and 2001 for the total sample.

significant at the  $p < .05$  level. To compare the statistical significance of two percentages, we constructed 95% confidence intervals around the difference (Fleiss, 1981).

- Tables and figures frequently provide a 95% confidence interval, which gives an indication of probable sampling error.

## Table Description

Below is a brief discussion of the tabular material.

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

		%	95%CI	Unadjusted Odds Ratios	Adjusted Odds Ratios for Factors 1-6
Total Sample		77.2	(75.1, 79.1)		
1) Gender				***	***
Women	(Comparison Group)	73.0	(70.1, 75.7)	---	---
Men		81.7	(78.8, 84.3)	1.65	1.49
2) Age		①	②	③***	④ NS
18-29	(Comparison Group)	85.7	(81.5, 89.1)	---	---
30-39		80.3	(75.8, 84.1)	0.68	0.76
40-49		79.2	(74.8, 83.0)	0.63	0.70
50-64		76.5	(71.7, 80.7)	0.54**	0.68
65+		61.9	(56.2, 67.3)	0.27***	0.50*

① Percentage estimate: Displays the estimated percentage by group (e.g., gender, age group, etc.)

② Confidence interval: Displays the probable accuracy of the estimate. The true population value would be expected within this range (in 95 of 100 samples) 95% of the time. Confidence intervals account for characteristics of the sample design (e.g., design effects). For example, we see that 77.2% reported past year drinking. Thus, ignoring nonsampling errors, we can be reasonably confident that with repeated sampling the true percentage of people drinking in the population would fall within the interval 75.1% and 79.1%.

③ Unadjusted Odds Ratios: Displays the odds ratio of the outcome compared to the comparison group. Odds ratios indicate the size of group comparisons when ignoring other factors. For example, the odds of respondents aged 65 and older to drink is 0.27 times smaller than 18-29 year olds. Alternatively, the odds of those aged 65 and older to drink are 73% (1-0.27) lower than 18-29 year olds.

④ Adjusted Odds Ratio: Displays odds ratios after controlling for the other six factors in the table, including gender, age, marital status, region, education and income. For example, adjusting for other factors, the rate of drinking among men is 1.5 times higher than among women.

## 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.*

**2001**.....Table 3.1.1; Fig.3.1.1-3.1.4

The estimated percentage of Ontarians who have used alcohol in the 12 months before the survey is 79.5%, with probable estimates ranging from 77.6% to 81.3%. In addition, 13.5% did not drink alcohol during the past 12 months and 7% report not drinking in their lifetime.

Gender, age, education, and income are significantly related to past year use of alcohol, after adjusting for other demographic characteristics.

- The odds of drinking among men are 1.4 times higher than women (83.6% vs. 75.7%).
- Prevalence of drinking is highest among those aged 30-39 (86.5%) and lowest among those aged 65 and older (67%).
- While those never married show the highest drinking prevalence rate (82.4%), they do not significantly differ from other marital status, after other factors are controlled.
- The use of alcohol increases with education. Use is lowest among those who have not completed high school (65.7%) and highest among those with post-secondary education (83.6%).

- The rate of drinking also increases with income. Most notably, the odds of drinking are 2.5 times higher among those with incomes of \$50,000 to \$79,000, and almost 4 times higher among those with an income of more than \$80,000, compared to those earning less than \$30,000.

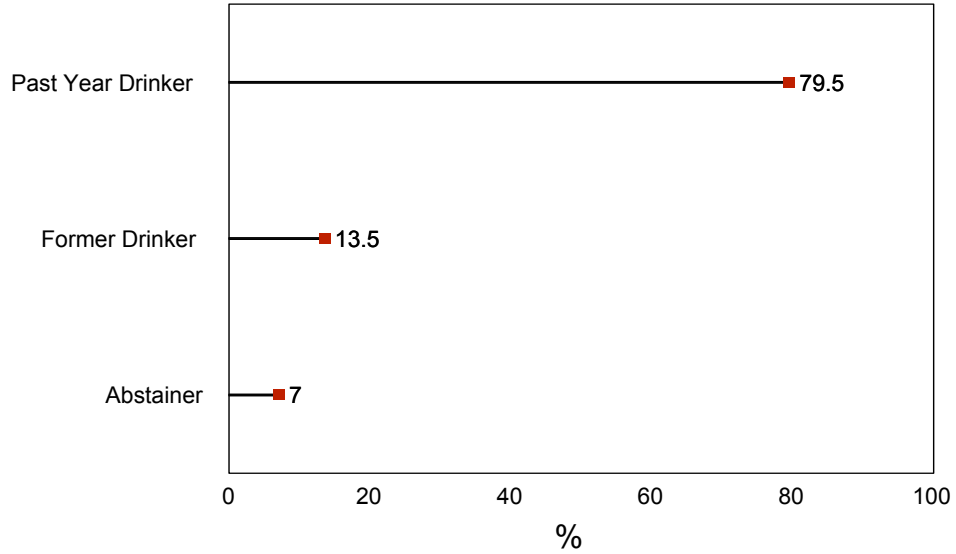
#### Frequency of Drinking

Among drinkers, the most common frequency of drinking is less than once a month (25.6%).

**Trends**.....Table 3.1.2; Fig. 3.1.5

The prevalence of past year drinking in 2001 is higher than that found in 2000 (79.5% vs.77.2%), but the increase is not significant, and it is close to the estimates for 1999 (79.1%). There was, however, a significant increase in alcohol use among those living in Toronto (78.8% vs. 70.2%). No other subgroup changes are evident. Trend analysis between 1977 and 2001 reveals both a significant linear and non-linear trend in alcohol use.

**Figure 3.1.1**  
**Percentage of Ontario Adults who are Past Year Drinkers, Former Drinkers and Abstainers, 2001**



**Figure 3.1.2**  
**Frequency of Drinking Alcohol Among Total Sample (N=2627) and Past Year Drinkers (N=2088), 2001**

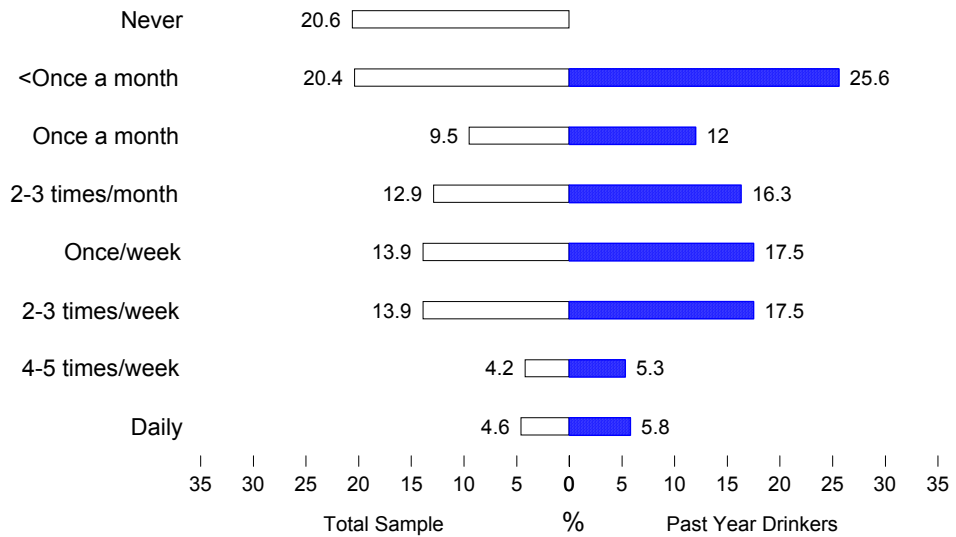


Table 3.1.1: Percentage *Drinking Alcohol* During the Past 12 Months, Unadjusted and Adjusted Group Differences, Ontarians Aged 18+, 2001

		%	95%CI	Unadjusted Odds Ratio	Adjusted Odds Ratio for Factors 1-6
Total Sample (N=2627)		<b>79.5</b>	(77.6, 81.3)		
1) Gender				***	**
Women	(Comparison Group)	<b>75.7</b>	(73.0, 78.3)	—	—
Men		<b>83.6</b>	(80.8, 86.0)	1.63	1.43
2) Age				***	***
18-29	(Comparison Group)	<b>84.9</b>	(80.4, 88.6)	—	—
30-39		<b>86.5</b>	(82.8, 89.5)	1.13	1.09
40-49		<b>79.1</b>	(74.7, 82.9)	0.67	0.56*
50-64		<b>78.0</b>	(73.7, 81.9)	0.63*	0.60*
65+		<b>67.0</b>	(61.6, 72.0)	0.36***	0.49**
3) Marital Status				*	NS
Married/Living with Partner	(Comparison Group)	<b>80.0</b>	(77.6, 82.2)	—	—
Previously Married		<b>73.7</b>	(69.0, 78.0)	0.70*	1.24
Never Married		<b>82.4</b>	(77.9, 86.2)	1.18	0.92
4) Public Health Region				NS	NS
Toronto	(vs. Provincial Average)	<b>78.8</b>	(74.1, 82.9)	0.95	0.91
Central South		<b>78.2</b>	(71.3, 83.9)	0.92	0.46
Central West		<b>77.5</b>	(72.0, 82.2)	0.88	0.78
South West		<b>77.9</b>	(73.4, 81.8)	0.90	0.95
Central East		<b>82.3</b>	(77.8, 87.7)	1.27	1.16
East		<b>81.4</b>	(77.1, 85.1)	1.12	1.05
North		<b>80.0</b>	(76.1, 83.5)	1.02	1.26
5) Education				***	*
Less than high school	(Comparison Group)	<b>65.7</b>	(60.0, 70.9)	—	—
Completed high school		<b>80.8</b>	(77.1, 84.0)	2.20***	1.57*
Some college or university		<b>83.6</b>	(80.4, 86.3)	2.66***	1.66**
University degree		<b>81.4</b>	(77.3, 84.9)	2.29***	1.31
6) Income				***	***
> \$30,000	(Comparison Group)	<b>65.4</b>	(60.1, 70.3)	—	—
\$30,000-\$49,000		<b>75.3</b>	(70.5, 79.6)	1.62**	1.39
\$50,000-\$79,000		<b>85.7</b>	(81.9, 88.8)	3.17***	2.52***
\$80,000+		<b>89.5</b>	(85.6, 92.4)	4.50***	3.72***
Not stated		<b>75.2</b>	(70.7, 79.2)	1.61**	1.65**

Note: \*p<.05; \*\*p<.01; \*\*\*p<.001

Asterisks in shaded rows indicate the significance of the group effect, based on Wald test.

Odds greater than 1.0 indicate that drug use is more likely to occur in the group being compared to the comparison group.

Odds less than 1.0 indicate that drug use is less likely to occur in the group being compared to the comparison group.

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+, 1977-2001

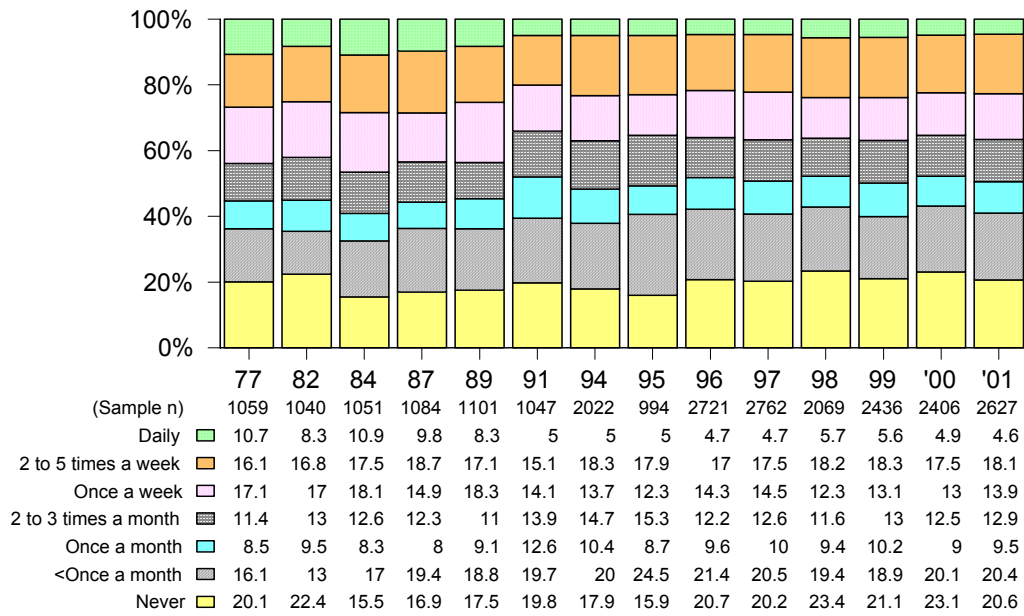
	1977	1962	1984	1987	1989	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
(N=)	(1059)	(1040)	(1051)	(1084)	(1101)	(1047)	(1058)	(941)	(2022)	(994)	(2721)	(2776)	(2312)	(2436)	(2406)	(2627)
Total Sample	79.9	77.6	84.5	83.1	82.6	80.3	86.6	83.3	82.1	84.4	79.3	79.9	77.1	79.1	77.2	79.5
±% <sup>a</sup>	(±2.1)	(±2.9)	(±2.5)	(±2.5)	(±2.5)	(±2.6)	(±2.1)	(±2.4)	(±1.8)	(±2.3)	(±1.8)	(±1.8)	(±2.0)	(±1.9)	(±2.0)	(±1.9)
<b>Gender</b>																
Men	85.9	81.6	86.8	87.6	85.8	81.8	89.7	91.6	84.7	86.8	82.7	83.2	82.0	85.1	81.7	83.6
Women	73.4	73.6	82.3	78.8	79.6	78.7	83.9	75.4	79.8	82.0	76.4	76.9	72.5	73.6	73.0	75.7
<b>Age</b>																
18 - 29 years	85.8	82.5	89.8	92.1	88.1	87.2	90.9	89.2	86.0	86.7	83.5	83.6	82.5	86.5	85.7	84.9
30 - 39 years	86.0	82.5	91.1	87.7	90.8	84.2	86.7	81.7	85.1	85.2	83.6	84.4	81.5	81.4	80.3	86.5
40 - 49 years	88.6	80.6	88.6	87.7	87.3	81.2	90.4	85.7	84.1	86.0	81.6	85.2	78.0	81.5	79.2	79.1
50 - 64 years	76.2	76.2	80.0	80.9	74.2	73.8	83.1	81.0	78.2	86.4	76.0	77.4	77.2	78.0	76.5	78.0
65+ years	53.5	58.5	64.8	58.2	66.8	63.8	73.6	72.0	67.0	71.6	66.2	58.8	65.4	66.6	61.9	67.0
<b>Marital Status</b>																
Never Married	—	—	—	—	—	85.8	87.5	89.5	85.8	84.8	82.5	82.8	81.4	85.7	83.4	82.4
Married	—	—	—	—	—	79.3	87.4	82.0	81.5	85.1	79.8	79.9	77.7	78.9	76.5	80.0
Previously Married	—	—	—	—	—	73.6	81.1	76.5	76.8	80.5	72.5	74.3	65.3	69.5	68.9	73.7
<b>Region (Postal Code)</b>																
Toronto	—	—	—	—	—	82.7	85.0	82.1	79.1	84.4	75.9	74.9	74.9	72.8	70.2	78.8**
Toronto Outskirts	—	—	—	—	—	81.8	87.5	86.6	84.4	83.0	82.8	82.2	79.9	82.0	78.2	78.8
West	—	—	—	—	—	77.9	88.6	86.2	82.0	84.7	77.4	81.7	79.1	81.0	79.7	82.2
East	—	—	—	—	—	83.1	87.5	75.5	84.1	86.3	81.4	83.3	79.6	79.4	80.1	79.4
North	—	—	—	—	—	74.6	89.9	85.4	80.4	86.7	82.7	82.7	79.7	81.1	80.2	79.4
<b>Education</b>																
Less Than High School	—	—	—	—	—	64.3	84.0	78.2	72.1	79.1	69.4	68.7	68.4	66.7	61.1	65.7
Completed High School	—	—	—	—	—	81.4	84.4	81.7	83.1	83.0	79.8	77.0	73.0	78.7	76.6	80.8
Some College or University	—	—	—	—	—	87.2	90.2	81.8	85.9	84.2	82.4	86.1	81.7	83.0	84.6	83.6
University Degree	—	—	—	—	—	87.4	88.2	92.4	85.3	91.4	84.0	83.4	83.4	83.9	79.2	81.4

Notes: <sup>a</sup> 95% confidence interval; — data not available; \*\*p<.01; based on a confidence interval around the difference between 2000 and 2001 proportions.

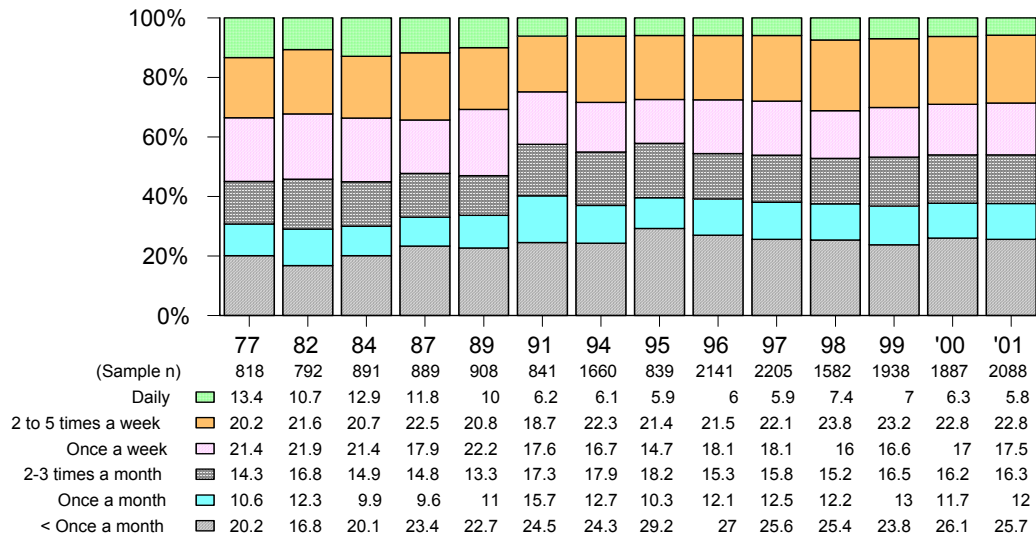
Trend Analysis 1977-2001 for total sample: linear p < .001; non-linear p < .01.

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

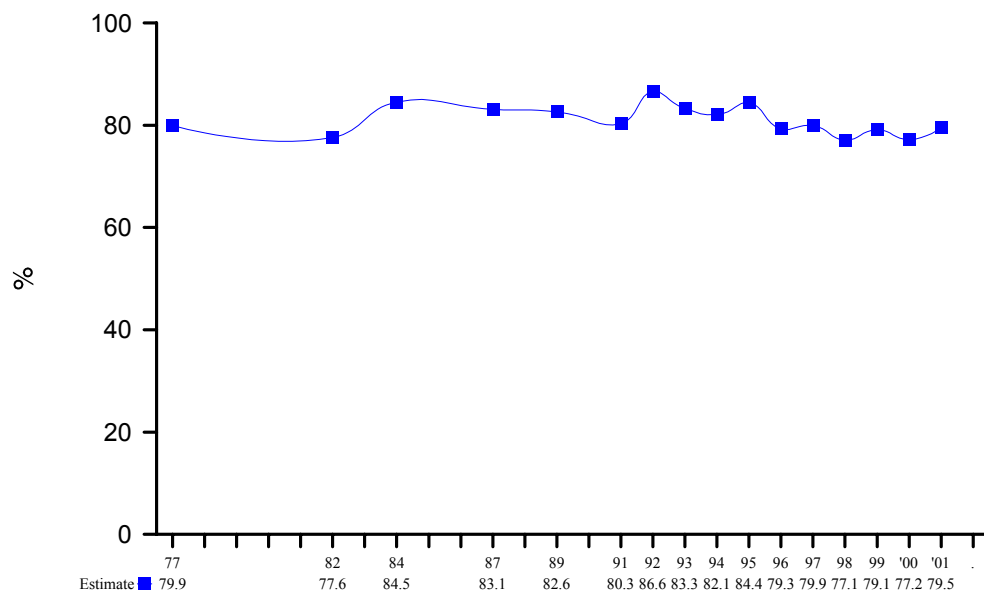
**Figure 3.1.3**  
**Frequency of Drinking Among Ontario Adults, 1977- 2001**



**Figure 3.1.4**  
**Frequency of Drinking Among Past Year Drinkers, 1977- 2001**



**Figure 3.1.5**  
**Past Year Drinking Ontarians Aged 18+, 1977- 2001**



## 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 problematic drinking patterns.*

**2001**.....Table 3.2.1, 3.2.2

Approximately 4.6% (3.7% to 5.6%) of Ontarians report drinking daily in the past 12 months. Among past year drinkers, the prevalence is 5.8% (4.7% to 7.1%).

Among the demographic characteristics examined for the total sample, gender and age are significantly related to daily alcohol consumption after controlling for other variables.

- The odds of daily drinking are 4 times higher among men than women (7.3% vs. 2.0%).
- Daily drinking tends to increase significantly with age, from a low of 1.6% for 18 to 29 year-olds, to a high of 10.9% for those 65 and older.
- Although daily drinking is highest among those with less than high school education (7.8%) and lowest among those with post-secondary education (3.2%), the effect did not hold after adjusting for other characteristics.

Marital status, public health region, and income are not significantly related to the prevalence of daily drinking after controlling for other demographics.

Past year drinkers display similar characteristics related to daily drinking: men, those aged 65 and older, and those with lower education report the highest rates of daily drinking among their respective demographic subgroups.

**Trends**....Table 3.2.3; Fig. 3.2.1-3.2.5

Between 2001 and 2000, the prevalence of daily drinking among drinkers did not change significantly (5.8% vs. 6.3%). No subgroup changes are evident.

Trend analysis indicates significant linear and non-linear trends between 1977 and 2001. Overall, daily drinking among drinkers has decreased considerably since 1977, when it was at a high of 13.4%. It decreased to a low of 4.1% in 1992 and has varied between 6% and 7% since 1993. This greater moderation is especially prominent in men aged 30-49, whose daily drinking dropped from 21% in 1977 to 5% in 2001.

Although daily drinking has been decreasing since 1977, there have been some increases between 1982 and 1984, between 1992 and 1993, and between 1997 and 1998.

Table 3.2.1: Percentage *Drinking Alcohol Daily* During the Past 12 Months, Unadjusted and Adjusted Group Differences, Ontarians Aged 18+, 2001

		%	95%CI	Unadjusted Odds Ratio	Adjusted Odds Ratio for Factors 1-6
Total Sample (N=2627)		<b>4.6</b>	(3.7, 5.6)		
<b>1) Gender</b>				<b>***</b>	<b>***</b>
Women	(Comparison Group)	† <b>2.0</b>	(1.3, 3.0)	—	—
Men		<b>7.3</b>	(5.8, 9.3)	3.95	4.11
<b>2) Age</b>				<b>***</b>	<b>***</b>
18-29	(Comparison Group)	† <b>1.6</b>	(0.7, 3.5)	—	—
30-39		† <b>3.4</b>	(2.0, 5.7)	2.17	2.10
40-49		† <b>3.2</b>	(2.0, 5.0)	2.03	1.86
50-64		† <b>5.6</b>	(3.8, 8.2)	3.70***	3.25*
65+		<b>10.9</b>	(7.5, 15.4)	7.54***	8.30***
<b>3) Marital Status</b>				NS	NS
Married/Living with Partner	(Comparison Group)	<b>5.3</b>	(4.1, 6.8)	—	—
Previous Married		† <b>4.7</b>	(3.0, 7.3)	0.88	0.99
Never Married		† <b>2.4</b>	(1.3, 4.5)	0.45*	0.87
<b>4) Public Health Region</b>				NS	NS
Toronto	(vs. Provincial Average)	† <b>4.5</b>	(2.7, 7.5)	1.07	1.23
Central South		†	(0.7, 5.5)	0.46	0.48
Central West		† <b>3.3</b>	(1.8, 6.0)	0.77	0.80
South West		† <b>5.5</b>	(3.6, 8.5)	1.32	1.09
Central East		† <b>6.6</b>	(4.1, 10.5)	1.59	1.65*
East		† <b>4.2</b>	(2.6, 6.8)	0.99	0.98
North		† <b>5.5</b>	(3.7, 8.0)	1.30	1.19
<b>5) Education</b>				*	N.S
Less than high school	(Comparison Group)	<b>7.8</b>	(5.2, 11.6)	—	—
Completed high school		† <b>4.6</b>	(3.0, 7.0)	0.57	0.69
Some college or university		† <b>3.2</b>	(2.2, 4.7)	0.39**	0.64
University degree		† <b>4.5</b>	(3.0, 6.9)	0.56	0.69
<b>6) Income</b>				NS	NS
> \$30,000	(Comparison Group)	† <b>3.9</b>	(2.4, 6.2)	—	—
\$30,000-\$49,000		† <b>4.6</b>	(2.7, 7.6)	1.18	1.74
\$50,000-\$79,000		† <b>4.3</b>	(2.6, 6.9)	1.11	2.07
\$80,000+		† <b>4.9</b>	(3.3, 7.2)	1.29	2.31
Not stated		† <b>4.9</b>	(3.2, 7.6)	1.29	1.94

Note: † Estimate suppressed or unstable; \* p<.05; \*\*p<.01; \*\*\*p<.001;  
Asterisks in shaded rows indicate the significance of the group effect, based on Wald test.  
Odds greater than 1.0 indicate that drug use is more likely to occur in the group being compared to the comparison group.  
Odds less than 1.0 indicate that drug use is less likely to occur in the group being compared to the comparison group.

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

Table 3.2.2: Percentage *Drinking Alcohol Daily* During the Past 12 Months, Unadjusted and Adjusted Group Differences, Ontario Drinkers Aged 18+, 2001

		%	95%CI	Unadjusted Odds Ratio	Adjusted Odds Ratio for Factors 1-6
Current Drinkers (N=2088)		<b>5.8</b>	(4.7, 7.1)		
1) Gender				***	***
Women	(Comparison Group)	<b>2.6</b>	(1.7, 3.9)	—	—
Men		<b>8.8</b>	(7.0, 11.1)	3.61	3.71
2) Age				***	***
18-29	(Comparison Group)	† <b>1.9</b>	(0.8, 4.1)	—	—
30-39		† <b>3.9</b>	(2.3, 6.5)	2.15	2.03
40-49		† <b>4.0</b>	(2.5, 6.3)	2.20	1.99
50-64		<b>7.2</b>	(4.9, 10.5)	4.10**	3.55*
65+		<b>16.2</b>	(11.3, 22.6)	10.15***	9.58***
3) Marital Status				NS	NS
Married/Living with Partner	(Comparison Group)	<b>6.6</b>	(5.2, 8.5)	—	—
Previously Married		<b>6.4</b>	(4.1, 9.9)	0.96	0.97
Never Married		† <b>3.0</b>	(1.6, 5.5)	0.43*	0.94
4) Public Health Region				NS	NS
Toronto	(vs. Provincial Average)	† <b>5.8</b>	(3.5, 9.5)	1.08	1.17
Central South		† <b>2.6</b>	(0.9, 7.0)	0.46	0.50
Central West		† <b>4.3</b>	(2.3, 7.8)	0.79	0.79
South West		<b>7.1</b>	(4.6, 10.9)	1.35	1.10
Central East		<b>8.0</b>	(4.9, 12.6)	1.52	1.68*
East		† <b>5.2</b>	(3.2, 8.3)	0.96	0.94
North		<b>6.9</b>	(4.7, 7.1)	1.30	1.23
5) Education				***	NS
Less than high school	(Comparison Group)	<b>12.0</b>	(8.0, 17.6)	—	—
Completed high school		<b>5.7</b>	(3.7, 8.7)	0.44*	0.62
Some college or university		† <b>3.8</b>	(2.6, 5.6)	0.29***	0.59
University degree		<b>5.6</b>	(3.6, 8.4)	0.43**	0.69
6) Income				NS	NS
< \$30,000	(Comparison Group)	<b>5.9</b>	(3.7, 9.4)	—	—
\$30,000-\$49,000		<b>6.1</b>	(3.6, 10.1)	1.02	1.76
\$50,000-\$79,000		<b>5.0</b>	(3.1, 8.0)	0.83	1.64
\$80,000+		<b>5.5</b>	(3.7, 8.1)	0.92	1.82
Not stated		<b>6.6</b>	(4.2, 10.1)	1.11	1.78

Note: † Estimate suppressed or unstable; \*p<.05; \*\*p<.01; \*\*\*p<.001  
Asterisks in shaded rows indicate the significance of the group effect, based on Wald test.  
Odds greater than 1.0 indicate that drug use is more likely to occur in the group being compared to the comparison group.  
Odds less than 1.0 indicate that drug use is less likely to occur in the group being compared to the comparison group.

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 Drinkers Aged 18+, 1977-2001

	1977	1982	1984	1987	1989	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
(N=)	(818)	(795)	885)	(893)	(906)	(841)	(916)	(783)	(1660)	(839)	(2141)	(2219)	(1582)	(1938)	(1887)	(2088)
Total Drinkers	13.4	10.7	12.9	11.8	10.0	6.2	4.1	6.9	6.1	5.9	6.0	5.9	7.4	7.0	6.3	5.8
±% <sup>a</sup>	(±2.3)	(±2.7)	(±2.8)	(±2.7)	(±2.1)	(±1.7)	(±1.3)	(±1.8)	(±1.2)	(±1.6)	(±1.1)	(±1.2)	(±1.6)	(±1.3)	(±1.3)	(±1.2)
<b>Gender</b>																
Men	19.5	15.6	17.3	16.6	13.3	8.3	5.2	10.0	8.5	8.6	8.2	8.4	9.8	10.0	8.6	8.8
Women	5.7	5.2	8.6	6.7	6.7	4.1	3.0	3.6	3.8	2.9	3.9	3.4	5.0	3.9	4.1	2.6
<b>Age</b>																
18 - 29 years	7.8	4.1	5.0	6.0	3.7	3.0	1.8	2.7	2.0	1.3	1.4	1.8	3.5	† 2.1	† 1.3	† 1.9
30 - 39 years	10.9	7.8	10.0	11.6	5.5	4.5	1.8	6.1	4.2	3.6	3.6	3.3	3.9	† 3.4	† 3.8	† 3.9
40 - 49 years	18.2	19.1	15.6	12.9	11.8	8.8	5.8	6.1	9.0	5.8	6.5	6.3	5.0	† 5.1	† 5.0	† 4.0
50 - 64 years	22.1	15.7	22.2	15.7	17.6	7.9	7.8	9.7	8.0	8.2	9.8	9.6	12.0	13.7	10.9	7.2
65+ years	13.2	19.9	21.8	19.6	23.0	11.8	8.5	20.0	15.0	23.6	16.9	17.1	19.2	16.4	16.9	16.2
<b>Marital Status</b>																
Never Married	—	—	—	—	—	4.5	1.8	4.5	2.2	2.3	3.1	2.7	4.4	† 3.2	† 1.8	† 3.0
Married	—	—	—	—	—	4.7	4.5	7.8	6.0	6.6	6.6	6.6	8.1	8.1	7.4	6.6
Previously Married	—	—	—	—	—	8.1	6.7	7.8	5.5	9.7	9.2	9.3	9.7	8.8	10.8	6.4
<b>Region (Postal Code)</b>																
Toronto	—	—	—	—	—	5.6	2.7	5.5	3.7	7.6	8.6	7.8	10.6	8.8	† 6.1	† 6.3
Toronto Outskirts	—	—	—	—	—	4.1	4.8	10.4	4.9	3.5	5.0	6.8	5.6	† 6.3	† 6.7	† 5.0
West	—	—	—	—	—	3.6	2.3	6.8	5.1	5.4	4.3	3.8	7.8	† 6.9	† 5.5	† 6.4
East	—	—	—	—	—	5.3	3.1	4.4	5.8	9.8	5.7	4.2	6.1	† 6.8	† 6.2	† 4.9
North	—	—	—	—	—	1.5	4.9	4.9	5.6	5.1	5.0	3.7	6.2	† 6.1	8.0	7.9
<b>Education</b>																
Less Than High School	—	—	—	—	—	6.4	7.2	9.1	6.3	6.3	7.5	9.8	5.6	12.2	9.8	12.0
Completed High School	—	—	—	—	—	4.6	2.7	5.9	5.1	6.7	5.3	6.0	8.7	7.7	6.6	5.7
Some College or	—	—	—	—	—	4.1	2.7	4.2	2.3	6.0	5.1	4.5	6.2	4.5	4.5	† 3.8
University Degree	—	—	—	—	—	5.2	5.2	9.9	7.6	4.4	6.7	4.9	8.0	6.8	6.7	5.6

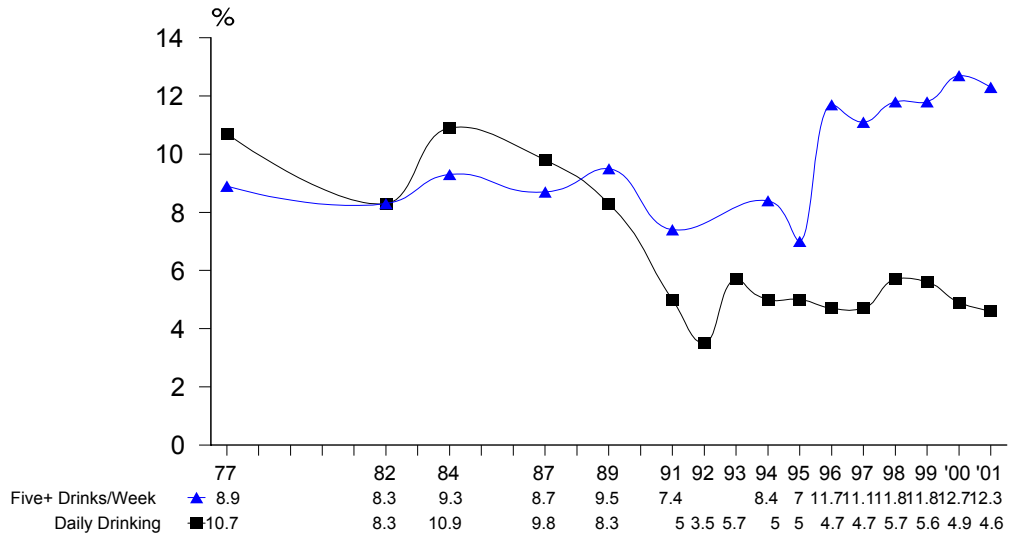
Notes: <sup>a</sup> 95% confidence interval; — data not available; there are no statistically significant (p<.05) differences among the total sample or subgroups between 2000 and 2001.

Trend analysis 1977-2001 for total drinkers: linear p < .001, non-linear p < .001; † Estimate suppressed or unstable.

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

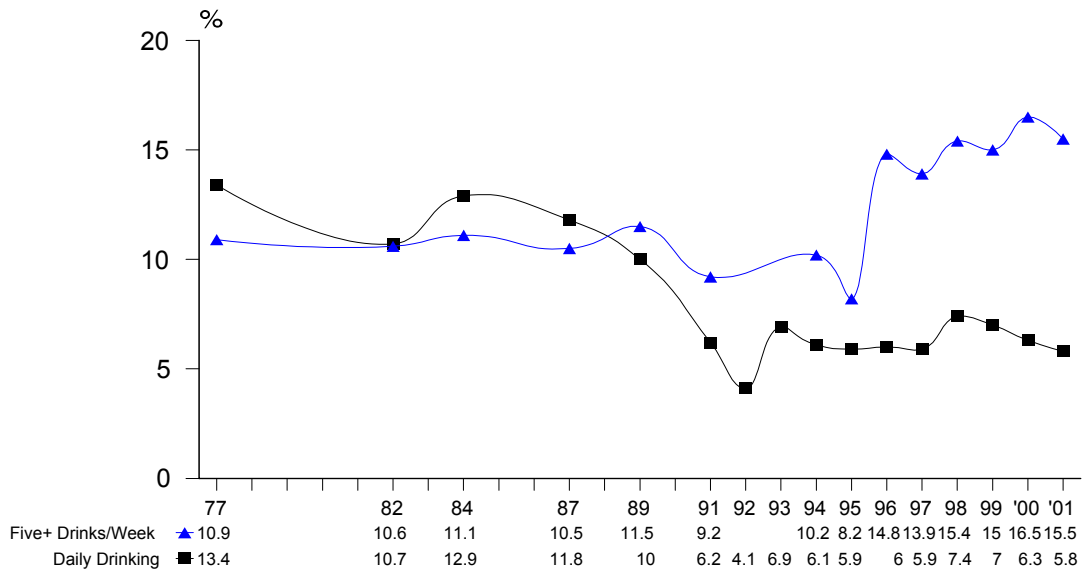
**Figure 3.2.1**

**Daily Drinking and Five or More Drinks in a Single Sitting Weekly - Total Sample, 1977 - 2001**

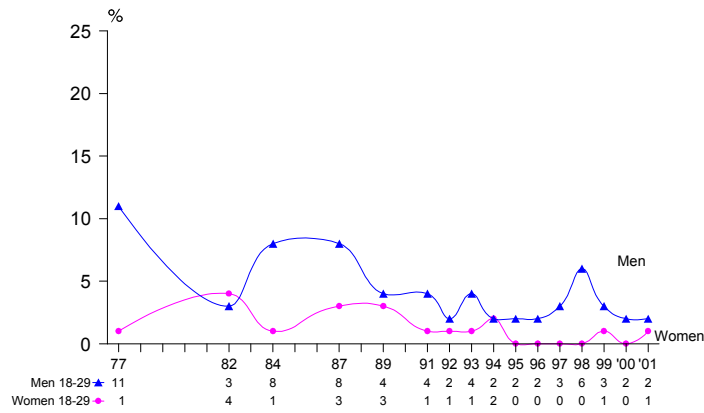


**Figure 3.2.2**

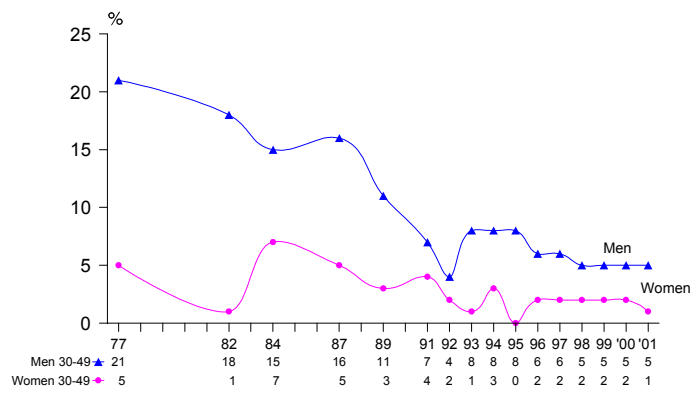
**Daily Drinking and Five or More Drinks in a Single Sitting Weekly - Among Past Year Drinkers, 1977 - 2001**



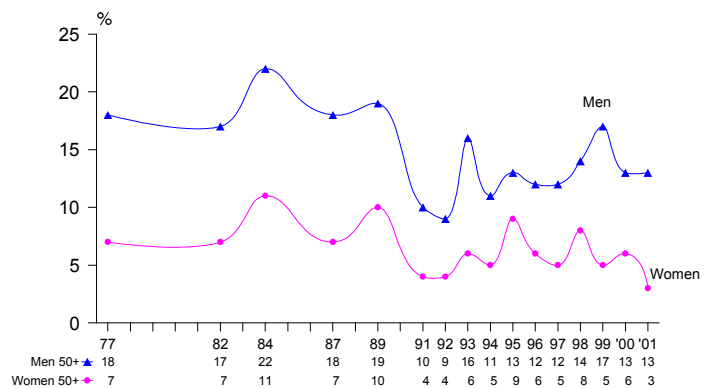
**Figure 3.2.3**  
**Percentage Drinking Daily by Gender, Ontarians**  
**Aged 18-29, 1977- 2001**



**Figure 3.2.4**  
**Percentage Drinking Daily by Gender, Ontarians**  
**Aged 30 - 49, 1977- 2001**



**Figure 3.2.5**  
**Percentage Drinking Daily by Gender, Ontarians**  
**Aged 50+, 1977- 2001**



### 3.3 Estimated Number of Drinks Consumed Among Past Year Drinkers

*The estimated number of drinks consumed is based on the respondents 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 consumed.*

**2001**.....Table 3.3.1; Fig.3.3.1-3.3.2

On average, Ontarian past year drinkers report consuming about 3.4 (3.1 to 3.8) drinks weekly.

There are significant univariate effects for three of the five demographic factors examined: gender, region and education.

- Men consume an average of 5 drinks weekly, compared to only 2 drinks for women.
- The average number of weekly drinks is highest among those living in the North, compared to those living in other regions of Ontario.
- The average number of weekly drinks tends to decrease with education. It is highest among those with less than high school education (4.62%) and lowest among those with post-secondary education (2.96%).

Age, and marital status are not significantly related to the average number of drinks consumed weekly.

**Trends**.....Table 3.3.1

Among past year drinkers, the average number of drinks consumed per week remained stable between 2000 and 2001 (from 3.5 to 3.4). No subgroups changes are evident.

Between 1992 and 1996 there was a significant decline in the number of drinks consumed, from 4.7 to 3.3 drinks weekly, but that decline seems to have levelled off in 1998.

Table 3.3.1: Estimated *Average Number of Drinks Consumed Per Week* During the Past 12 Months, Ontarian Drinkers, Aged 18+, 1992-2001

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001		
(N=)	(916)	(783)	(1660)	(839)	(2141)	(2219)	(1582)	(1938)	(1887)	95% CI	(2088)	95% CI
Total Drinkers	4.66	4.26	3.75	3.55	3.32	3.38	3.90	3.58	3.53	(3.19, 3.88)	<b>3.44</b>	(3.14, 3.75)
95% CI	(4.00, 5.32)	(3.77, 4.75)	(3.40, 4.05)	(3.07, 4.03)	(2.99, 3.65)	(3.09, 3.66)	(3.50, 4.30)	(3.25, 3.91)				
Gender											***	
Men	6.92	6.24	5.32	5.08	4.84	4.82	5.62	5.12	5.01	(4.40, 5.61)	<b>5.00</b>	(4.44, 5.53)
Women	2.54	2.01	2.28	1.97	1.87	1.97	2.19	1.94	2.06	(1.77, 2.34)	<b>1.85</b>	(1.64, 2.06)
Age											NS	
18-29	5.76	5.21	4.23	4.27	4.16	3.74	5.14	3.84	3.29	(2.72, 3.86)	<b>3.85</b>	(3.11, 4.60)
30-39	4.03	3.75	3.53	3.25	2.64	2.98	3.33	3.55	2.88	(2.37, 3.38)	<b>3.49</b>	(2.80, 4.17)
40-49	4.88	3.72	3.50	2.76	3.11	2.99	3.18	3.11	3.67	(2.82, 4.54)	<b>2.96</b>	(2.39, 3.52)
50-64	3.91	4.17	3.57	3.33	3.44	3.42	3.95	3.87	4.53	(3.42, 5.64)	<b>3.43</b>	(2.88, 3.99)
65+	3.50	4.19	3.88	4.85	3.39	4.17	4.14	3.58	3.50	(2.73, 4.27)	<b>3.73</b>	(2.78, 4.67)
Marital Status											NS	
Never Married	5.88	5.10	4.38	4.67	4.63	3.75	5.41	4.57	4.91	(3.38, 6.43)	<b>4.23</b>	(3.45, 5.01)
Married	4.19	3.98	3.42	3.07	2.70	3.04	3.42	3.26	3.30	(2.77, 3.83)	<b>3.21</b>	(2.87, 3.56)
Previously Married	4.80	3.89	3.92	3.58	3.94	4.05	3.36	3.45	3.39	(2.97, 3.80)	<b>3.09</b>	(2.41, 3.76)
Region (Postal Code)											*	
Toronto	3.76	4.13	3.50	3.75	3.58	3.13	4.24	3.65	3.15	(2.53, 3.78)	<b>3.30</b>	(2.75, 3.85)
Toronto Outskirts	5.07	4.40	3.68	3.19	2.99	3.65	3.26	3.20	3.60	(2.93, 4.27)	<b>2.55</b>	(2.03, 3.07)
East	4.87	3.66	3.52	4.22	3.08	3.91	4.17	3.73	3.53	(2.67, 4.40)	<b>3.76</b>	(3.00, 4.52)
West	4.22	4.07	3.98	3.09	3.34	2.79	4.41	3.82	3.56	(2.88, 4.24)	<b>4.09</b>	(3.45, 4.74)
North	3.15	5.53	4.07	4.71	3.70	2.96	3.42	3.94	4.22	(2.95, 3.85)	<b>4.65</b>	(3.21, 6.08)
Education											***	
Less Than High School	7.18	5.01	4.59	3.86	3.41	4.13	4.39	4.86	3.67	(2.48, 4.85)	<b>4.62</b>	(3.36, 5.87)
Completed High School	4.10	4.79	3.92	4.55	3.31	3.57	4.26	3.82	3.81	(3.00, 4.60)	<b>3.97</b>	(3.31, 4.63)
Some College or University	4.17	3.57	3.48	3.23	3.65	3.19	3.82	3.27	3.40	(2.87, 3.92)	<b>2.96</b>	(2.54, 3.37)
University Degree	3.58	3.93	3.26	2.56	2.93	2.84	3.32	3.08	3.36	(2.87, 3.85)	<b>3.08</b>	(2.57, 3.58)

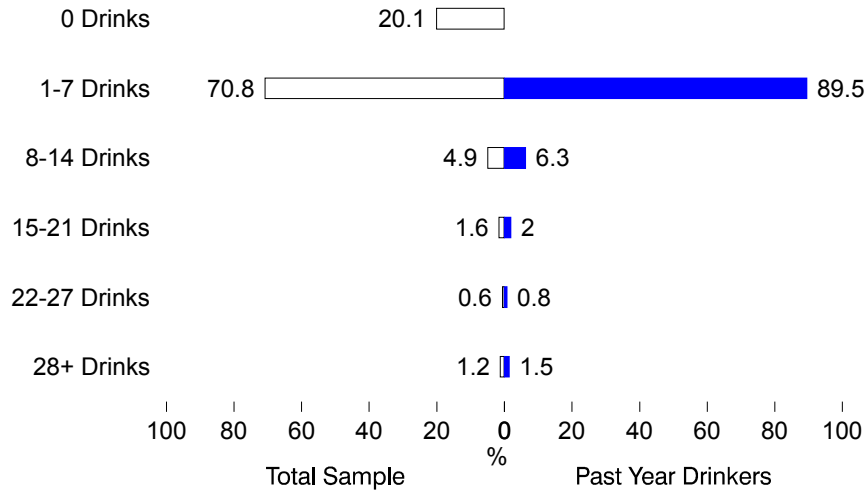
Notes : \*p<.05; \*\*p<.01; \*\*\*p<.001; based on F-tests.

There are no statistically significant (p<.05) differences among the total sample or subgroups between 2000 and 2001.

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

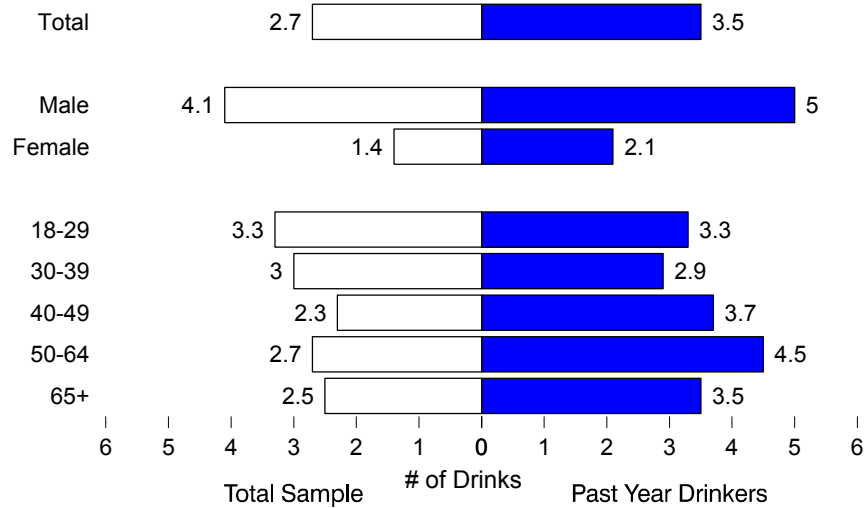
**Figure 3.3.1**

**Percentage Drinking by Average Number of Drinks Per Week, Among Total Sample (N=2627) and Past Year Drinkers (N=2088), 2001**



**Figure 3.3.2**

**Average Number of Drinks Consumed Weekly Among Total Sample (N=2627) and Past Year Drinkers (N=2088), 2001**



### 3.4 Fifteen or More Drinks Per Week

*The percentage reporting 15 or more drinks on a weekly basis is used here as an indicator of the percentage of the population who drink at a level that may potentially compromise their health and well-being.*

#### **2001**..... Tables 3.4.1, 3.4.2

An estimated 3.4% (2.7% to 4.3%) of Ontarians report drinking 15 or more drinks weekly in the past 12 months. Among past year drinkers, the prevalence is 4.3% (3.4% to 5.4%).

After controlling for other demographic factors, only gender and marital status remain significantly related to drinking 15 or more drinks weekly during the past year, among Ontarians.

- The odds of men drinking at this rate are almost 10 times greater than women (6.3% vs. 1%).
- Those who were never married and those who were previously married are significantly more likely to drink 15 or more drinks weekly (6.3% and 3.4%, respectively) than those who are currently married (2.3%).

Age, public health region, education, and income are not significantly related to consuming 15 or more drinks weekly.

Similarly, among past year drinkers, only gender and marital status are significant predictors of consuming 15+ drinks weekly, after controlling for other demographic factors. Men are 9 times more likely to drink at this rate than women (7.5% vs. 1.0%) and those never married display the highest rate of drinking at this rate among their respective demographic subgroup (7.7%).

#### **Trends** ..... Table 3.4.3

The percentage drinking 15+ drinks weekly among the total sample did not vary significantly between 2000 and 2001 (2.8% vs. 3.4%). There was, however, a significant increase in drinking 15+ among those who never married (2.8% vs. 6.3%), but the estimate is close to the estimate for 1999 (6.7%). No other subgroup changes are evident.

Drinking 15+ decreased significantly between 1994 and 1996 (from 4.4% to 2.2%), but the decline seems to have levelled off in 1997.

Table 3.4.1: Percentage *Drinking 15 or More Drinks Per Week* During the Past 12 Months, Unadjusted and Adjusted Group Differences, Ontarian's Aged 18+, 2001

		%	95%CI	Unadjusted Odds Ratio	Adjusted Odds Ratio for Factors 1-6
Total Sample (N=2627)		<b>3.4</b>	(2.7, 4.3)		
1) Gender				***	***
Women	(Comparison Group)	† <b>1.0</b>	(0.3, 1.5)	—	—
Men		<b>6.3</b>	(4.9, 8.0)	9.66	9.50
2) Age				**	NS
18-29	(Comparison Group)	† <b>5.8</b>	(3.8, 8.7)	—	—
30-39		† <b>4.7</b>	(3.0, 7.1)	0.80	1.31
40-49		† <b>1.9</b>	(1.0, 3.7)	0.32**	0.54
50-64		† <b>2.1</b>	(1.2, 3.6)	0.35**	0.47
65+		† <b>2.6</b>	(1.3, 5.0)	0.43*	0.55
3) Marital Status				***	*
Married/Living with Partner	(Comparison Group)	† <b>2.3</b>	(1.7, 3.2)	—	—
Previously Married		† <b>3.4</b>	(1.8, 6.2)	1.49	2.52*
Never Married		† <b>6.3</b>	(4.3, 9.2)	2.85***	2.04*
4) Public Health Region				NS	NS
Toronto	(vs. Provincial Average)	† <b>2.3</b>	(1.2, 4.5)	0.67	0.57
Central South		† <b>4.0</b>	(2.0, 7.9)	1.17	1.24
Central West		† <b>2.9</b>	(1.5, 5.5)	0.82	0.69
South West		† <b>3.5</b>	(2.0, 6.2)	1.02	1.03
Central East		† <b>5.0</b>	(2.9, 8.6)	1.48	1.61
East		† <b>3.0</b>	(1.7, 5.3)	0.87	0.86
North		† <b>4.1</b>	(2.6, 6.4)	1.19	1.43
5) Education				*	NS
Less than high school	(Comparison Group)	† <b>4.6</b>	(2.8, 7.3)	—	—
Completed high school		† <b>5.2</b>	(3.5, 7.7)	1.15	0.96
Some college or university		† <b>2.7</b>	(1.8, 4.2)	0.59	0.54
University degree		† <b>2.0</b>	(1.1, 3.5)	0.42	0.42
6) Income				NS	NS
< \$30,000	(Comparison Group)	† <b>2.3</b>	(1.1, 4.7)	—	—
\$30,000-\$49,000		† <b>4.3</b>	(2.7, 7.0)	1.91	2.09
\$50,000-\$79,000		† <b>3.5</b>	(2.2, 5.5)	1.53	1.54
\$80,000+		† <b>3.3</b>	(2.0, 5.4)	1.43	1.56
Not stated		† <b>3.3</b>	(2.0, 5.5)	1.44	2.15

Note: † Estimate suppressed or unstable; \*p<.05; \*\*p<.01; \*\*\*p<.001  
Asterisks in shaded rows indicate the significance of the group effect, based on Wald test.  
Odds greater than 1.0 indicate that drug use is more likely to occur in the group being compared to the comparison group.  
Odds less than 1.0 indicate that drug use is less likely to occur in the group being compared to the comparison group.

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

Table 3.4.2: Percentage *Drinking 15 or More Drinks per Week* During the Past 12 Months, Unadjusted and Adjusted Group Differences, Ontarian Drinkers Aged 18+, 2001

		%	95%CI	Unadjusted Odds Ratio	Adjusted Odds Ratio for Factors 1-6
Current Drinkers (N=2088)		<b>4.3</b>	(3.4, 5.4)		
<b>1) Gender</b>					
Women	(Comparison Group)	† <b>1.0</b>	(0.4, 1.9)	—	—
Men		<b>7.5</b>	(5.9, 9.6)	8.85	9.26
<b>2) Age</b>					
18-29	(Comparison Group)	† <b>6.8</b>	(4.5, 10.3)	—	—
30-39		† <b>5.4</b>	(3.5, 8.3)	0.78	1.25
40-49		† <b>2.5</b>	(1.3, 4.6)	0.35**	0.57
50-64		† <b>2.7</b>	(1.5, 4.6)	0.37**	0.53
65+		† <b>3.9</b>	(2.0, 5.5)	0.56	0.64
<b>3) Marital Status</b>					
Married/Living with Partner	(Comparison Group)	† <b>2.9</b>	(2.1, 4.0)	—	—
Previously Married		† <b>4.6</b>	(2.5, 8.4)	1.63	2.65*
Never Married		<b>7.7</b>	(5.2, 11.2)	2.79***	2.21*
<b>4) Public Health Region</b>					
Toronto	(vs. Provincial Average)	† <b>3.0</b>	(1.6, 5.7)	0.67	0.54
Central South		† <b>5.2</b>	(2.6, 10.0)	1.19	1.25
Central West		† <b>3.7</b>	(1.9, 7.1)	0.84	0.72
South West		† <b>4.6</b>	(2.6, 7.9)	1.05	1.03
Central East		† <b>6.1</b>	(3.5, 10.3)	1.41	1.63
East		† <b>3.7</b>	(2.1, 6.6)	0.85	0.86
North		† <b>5.2</b>	(3.3, 8.0)	1.19	1.41
<b>5) Education</b>					
Less than high school	(Comparison Group)	<b>7.0</b>	(4.3, 11.2)	—	—
Completed high school		† <b>6.5</b>	(4.3, 9.5)	0.91	0.80
Some college or university		† <b>3.3</b>	(2.1, 5.0)	0.45*	0.49
University degree		† <b>2.4</b>	(1.3, 4.3)	0.33**	0.40*
<b>6) Income</b>					
< \$30,000	(Comparison Group)	† <b>3.6</b>	(1.8, 7.2)	—	—
\$30,000-\$49,000		† <b>5.8</b>	(3.6, 9.3)	1.65	2.06
\$50,000-\$79,000		† <b>4.1</b>	(2.6, 6.5)	1.14	1.41
\$80,000+		† <b>3.7</b>	(2.2, 6.0)	1.03	1.35
Not stated		† <b>4.4</b>	(2.6, 7.4)	1.25	1.97

Note: † Estimate suppressed or unstable; p<.05;\*p<.01;\*\*\*p<.001  
Asterisks in shaded rows indicate the significance of the group effect, based on Wald test.  
Odds greater than 1.0 indicate that drug use is more likely to occur in the group being compared to the comparison group.  
Odds less than 1.0 indicate that drug use is less likely to occur in the group being compared to the comparison group.

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

Table 3.4.3: Percentage *Drinking 15 or More Drinks Per Week* During the Past 12 Months, by Demographic Characteristics, Ontarians Aged 18+, 1994, 1996-2001

	1994	1996	1997	1998	1999	2000	2001
(N=)	(2022)	(2721)	(2776)	(2509)	(2436)	(2406)	(2627)
Total Sample	4.4	2.2	3.4	3.4	3.2	2.8	3.4
±% <sup>a</sup>	(±1.0)	(±0.6)	(±0.8)	(±0.8)	(±0.8)	(±0.7)	(±0.8)
<b>Gender</b>							
Men	7.5	4.1	5.9	6.1	6.0	4.9	6.3
Women	1.7	†	1.1	†	†	† 1.0	† 1.0
<b>Age</b>							
18-29	7.8	4.3	5.9	6.0	†4.8	†3.2	† 5.8
30-39	4.1	1.2	3.4	2.7	†3.5	†2.0	† 4.7
40-49	2.9	1.3	2.0	2.4	†1.9	†3.0	† 1.9
50-64	1.7	2.5	1.7	3.9	†2.7	†4.2	† 2.1
65+	4.0	1.3	3.0	1.9	†2.5	†1.7	† 2.6
<b>Marital Status</b>							
Married/Living with Partner	2.9	†	2.2	2.8	† 2.0	† 2.7	† 2.3
Never Married	8.5	5.3	5.5	5.5	† 6.7	† 2.8	† 6.3*
Previously Married	3.7	3.2	4.5	2.6	†3.3	†3.7	† 3.4
<b>Region (Postal Code)</b>							
Toronto	4.1	2.2	3.6	4.2	†2.3	†1.8	† 2.6
Toronto Outskirts	3.6	2.1	3.7	1.5	†2.6	†3.1	† 2.6
West	5.9	1.7	2.5	4.9	†4.5	†3.6	† 4.0
East	4.4	1.9	3.8	4.4	†3.7	†2.4	† 4.1
North	4.0	4.1	3.0	2.4	†3.0	†3.9	† 5.1
<b>Education</b>							
Less Than High School	4.8	2.4	3.5	3.8	†4.6	†3.3	† 4.6
Completed High School	6.4	3.4	3.9	2.7	†3.5	†2.6	† 5.2
Some College or University	4.2	2.5	4.6	4.0	†2.9	†3.4	† 2.7
University Degree	1.7	†	1.0	3.1	†2.0	†2.1	† 2.0

Notes: <sup>a</sup> 95% confidence interval; † Estimate suppressed or unstable.

\*p<.05; based on a confidence interval around the difference between 2000 and 2001 proportions.

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

### 3.5 Five or More Drinks in a Single Sitting Weekly

*The percentage reporting the consumption of five or more drinks on a single occasion on a weekly basis during the 12 months before the survey is used as an indicator of regular heavy intake of alcohol.*

#### **2001**..... Tables 3.5.1, 3.5.2

The estimated percentage of Ontarians who drank five or more drinks in a single sitting on a weekly basis in the 12 months before the survey is 12.3% (10.9% to 13.9%). Among past year drinkers the prevalence is 15.5% (13.7% to 17.5%).

Gender, age, and education are significant demographic factors related to five plus drinking, among Ontarians, after controlling for other demographics:

- The odds of men drinking at this rate are 5 times greater than women (20.7% vs. 4.4%).
- Rates of five plus drinking tend to decline significantly with age. Those aged 18 to 29 report the highest rate of consuming five or more drinks weekly (18.4%), compared to the older age groups, with those aged 65 and older reporting the lowest rate (5.5%).
- The rate of drinking five plus is significantly higher among those who completed high school (18.0%) compared to those with less than high school education (12.7%). Those with a university degree have the lowest rate (7.0%).

Past year drinkers display similar characteristics related to drinking five plus: men, those aged 18 to 29, and those with high school education report the highest rates of five plus drinking.

Marital status, public health region, and income are not significantly related to five plus drinking.

#### **Trends**..... Tables 3.5.3, 3.5.4; Fig. 3.5.1-3.5.3, 3.2.1, 3.2.2

Between 2000 and 2001, rates of five plus drinking remained virtually unchanged among the total sample (12.7% vs. 12.3%) and decreased non-significantly among past year drinkers (16.5% vs. 15.5). However, there was a significant decrease in five plus drinking among women for both the total sample (7.1% vs. 4.4%) and among past year drinkers (9.8% vs. 5.8%). There was also a significant decline among past year drinkers living in the Toronto Outskirts area (17.3% vs. 10.1%).

Earlier increases were evident between 1995 and 1996, wherein rates increased significantly among the total sample (from 7.0% to 11.7%); men (from 10.7% to 18.7%); 18 to 29 year-olds (from 10.6% to 21%); never married persons (from 11.3% to 22.7%); and those with some (from 6.1% to 13.1%) or a completed post-secondary education (1.8% to 8.1%).

Since 1977, rates of five plus drinking have ranged from a low of 7% (8.2% among drinkers) in 1995 to a high of 12.7% (16.5% among drinkers) in 2000. There is both a significant linear and non-linear trend in five plus drinking for the total sample (especially since 1995), as well as for past year drinkers.

Table 3.5.1: Percentage *Drinking Five or More Drinks in a Single Sitting Weekly* During the Past 12 Months, Unadjusted and Adjusted Group Differences, Ontarians Aged 18+, 2001

		%	95%CI	Unadjusted Odds Ratio	Adjusted Odds Ratio for Factors 1-6
Total Sample		<b>12.3</b>	(10.9, 13.9)		
1) Gender				***	***
Women	(Comparison Group)	<b>4.4</b>	(3.3, 5.9)	—	—
Men		<b>20.7</b>	(18.1, 23.6)	5.66	5.19
2) Age				***	***
18-29	(Comparison Group)	<b>18.4</b>	(14.7, 22.9)	—	—
30-39		<b>13.8</b>	(10.8, 17.4)	0.71	0.91
40-49		<b>9.1</b>	(6.6, 12.4)	0.44***	0.59
50-64		<b>12.3</b>	(9.4, 16.0)	0.62*	0.67
65+		† <b>5.5</b>	(3.4, 8.9)	0.26***	0.25***
3) Marital Status				***	NS
Married/Living with Partner	(Comparison Group)	<b>10.5</b>	(8.8, 12.4)	—	—
Previously Married		<b>9.6</b>	(6.8, 13.5)	0.91	1.28
Never Married		<b>18.8</b>	(15.3, 23.1)	1.99***	1.17
4) Public Health Region				NS	NS
Toronto	(vs. Provincial Average)	<b>14.8</b>	(11.3, 19.2)	1.29	1.17
Central South		<b>10.4</b>	(6.8, 15.5)	0.86	0.92
Central West		<b>9.6</b>	(6.9, 13.2)	0.79	0.74
South West		<b>14.5</b>	(11.1, 18.7)	1.26	1.20
Central East		<b>12.8</b>	(9.0, 17.8)	1.09	1.12
East		<b>10.5</b>	(7.6, 14.3)	0.87	0.91
North		<b>11.2</b>	(8.7, 14.3)	0.94	1.01
5) Education				***	***
Less than high school	(Comparison Group)	<b>12.7</b>	(9.1, 17.5)	—	—
Completed high school		<b>18.0</b>	(14.8, 21.7)	1.51*	1.13
Some college or university		<b>11.8</b>	(9.5, 14.7)	0.92	0.67
University degree		<b>7.0</b>	(5.1, 9.6)	0.52**	0.34***
6) Income				NS	NS
< \$30,000	(Comparison Group)	<b>11.2</b>	(8.1, 15.3)	—	—
\$30,000-\$49,000		<b>12.0</b>	(8.8, 16.2)	1.08	0.78
\$50,000-\$79,000		<b>11.8</b>	(9.1, 15.2)	1.06	0.79
\$80,000+		<b>14.4</b>	(11.2, 18.2)	1.33	1.02
Not stated		<b>11.5</b>	(8.7, 15.0)	1.02	0.90

Note: † Estimate suppressed or unstable; \*p<.05; \*\*p<.01; \*\*\*p<.001  
Asterisks in shaded rows indicate the significance of the group effect, based on Wald test.  
Odds greater than 1.0 indicate that drug use is more likely to occur in the group being compared to the comparison group.  
Odds less than 1.0 indicate that drug use is less likely to occur in the group being compared to the comparison group.

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

Table 3.5.2: Percentage *Drinking Five or More Drinks in a Single Sitting Weekly* During the Past 12 Months, Unadjusted and Adjusted Group Differences, Ontarian Drinkers Aged 18+, 2001

		%	95%CI	Unadjusted Odds Ratio	Adjusted Odds Ratio for Factors 1-6
Total Drinkers		<b>15.5</b>	(13.7, 17.5)		
<b>1) Gender</b>					
Women	(Comparison Group)	<b>5.8</b>	(4.4, 7.8)	—	—
Men		<b>24.8</b>	(21.8, (28.1)	5.32	5.14
<b>2) Age</b>					
18-29	(Comparison Group)	<b>21.7</b>	(17.4, 26.8)	—	—
30-39		<b>16.0</b>	(12.5, 20.1)	0.68	0.85
40-49		<b>11.5</b>	(8.4, 15.6)	0.47**	0.61
50-64		<b>15.8</b>	(12.1, 20.4)	0.68	0.74
65+		<b>8.3</b>	(5.1, 13.2)	0.33***	0.25***
<b>3) Marital Status</b>					
Married/Living with Partner	(Comparison Group)	<b>13.1</b>	(11.1, 15.5)	—	—
Previously Married		<b>13.2</b>	(9.3, 18.2)	1.00	1.31
Never Married		<b>22.9</b>	(18.6, 27.8)	1.96***	1.19
<b>4) Public Health Region</b>					
Toronto	(vs. Provincial Average)	<b>18.9</b>	(14.4, 24.3)	1.33	1.22
Central South		<b>13.3</b>	(8.8, 19.6)	0.87	0.94
Central West		<b>12.4</b>	(9.0, 17.0)	0.81	0.77
South West		<b>18.6</b>	(14.3, 23.9)	1.30	1.23
Central East		<b>15.4</b>	(10.9, 21.3)	1.04	1.11
East		<b>12.9</b>	(9.4, 17.5)	0.84	0.89
North		<b>14.1</b>	(11.0, 17.9)	0.93	0.94
<b>5) Education</b>					
Less than high school	(Comparison Group)	<b>19.6</b>	(14.2, 26.5)	—	—
Completed high school		<b>22.3</b>	(18.4, 26.8)	1.18	0.97
Some college or university		<b>14.2</b>	(11.4, 17.6)	0.68	0.59
University degree		<b>8.7</b>	(6.3, 11.8)	0.39***	0.30***
<b>6) Income</b>					
< \$30,000	(Comparison Group)	<b>17.3</b>	(12.7, 23.2)	—	—
\$30,000-\$49,000		<b>16.0</b>	(11.8, 21.3)	0.91	0.68
\$50,000-\$79,000		<b>13.8</b>	(10.3, 17.7)	0.76	0.63
\$80,000+		<b>16.1</b>	(12.6, 20.3)	0.91	0.76
Not stated		<b>15.4</b>	(11.7, 19.9)	0.87	0.74

Note: \*p<.05; \*\*p<.01; \*\*\*p<.001  
Asterisks in shaded rows indicate the significance of the group effect, based on Wald test.  
Odds greater than 1.0 indicate that drug use is more likely to occur in the group being compared to the comparison group.  
Odds less than 1.0 indicate that drug use is less likely to occur in the group being compared to the comparison group.

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

Table 3.5.3: Percentage *Drinking Five or More Drinks in a Single Sitting Weekly* During the Past 12 Months, by Demographic Characteristic, Ontarians Aged 18+, 1977-2001

	1977	1982	1984	1987	1989	1991	1994	1995	1996	1997	1998	1999	2000	2001
(N=)	(1059)	(1027)	(1047)	(1069)	(1096)	(1047)	(2022)	(994)	(2721)	(2776)	(2069)	(2436)	(2406)	(2627)
Total Sample	8.9	8.3	9.3	8.7	9.5	7.4	8.4	7.0	11.7	11.1	11.8	11.8	12.7	12.3
±% <sup>a</sup>	(±1.7)	(±1.7)	(±1.8)	(±1.7)	(±1.7)	(±1.6)	(±1.3)	(±1.6)	(±1.5)	(±1.3)	(±1.6)	(±1.6)	(±1.5)	(±1.5)
<b>Gender</b>														
Men	14.2	13.3	15.5	13.9	16.0	10.4	13.0	10.7	18.7	17.8	20.0	19.8	18.8	20.7
Women	3.1	3.3	3.6	3.8	3.4	4.5	4.3	3.2	5.5	5.1	4.6	4.4	7.1	4.4**
<b>Age</b>														
18 - 29 years	13.6	13.7	12.2	14.2	15.8	10.0	12.7	10.6	21.0	19.7	18.7	20.2	21.3	18.4
30 - 39 years	4.3	9.0	11.6	8.7	6.9	8.3	9.2	9.2	11.7	10.7	11.2	11.0	13.1	13.4
40 - 49 years	13.0	6.5	9.9	8.5	8.8	6.4	6.5	5.0	9.6	7.7	10.8	11.8	11.9	9.1
50 - 64 years	6.6	5.8	6.0	5.6	7.9	7.3	4.9	4.2	8.2	7.2	11.3	8.5	9.4	12.3
65+ years	4.0	0.6	4.5	2.1	4.1	1.4	4.5	3.0	2.6	5.8	5.6	† 6.2	† 4.6	† 5.5
<b>Marital Status</b>														
Never Married	—	—	—	—	—	11.9	12.7	11.3	22.7	17.8	18.8	22.5	19.4	18.8
Married	—	—	—	—	—	4.5	6.7	5.3	8.0	8.6	7.3	8.9	10.4	10.5
Previously Married	—	—	—	—	—	12.3	7.3	5.5	9.4	9.6	10.3	9.0	10.4	9.6
<b>Region (Postal Code)</b>														
Toronto	—	—	—	—	—	7.7	5.6	6.9	13.5	9.4	11.2	10.9	11.6	14.9
Toronto Outskirts	—	—	—	—	—	7.5	7.8	6.8	10.3	12.1	10.7	12.0	13.5	8.0
West	—	—	—	—	—	7.5	11.2	7.1	12.6	10.8	13.7	12.9	12.6	16.0
East	—	—	—	—	—	5.3	6.7	5.9	16.5	13.0	12.6	12.3	12.3	11.2
North	—	—	—	—	—	6.9	10.4	9.9	14.1	12.7	12.4	9.6	14.1	12.3
<b>Education</b>														
Less than High School	—	—	—	—	—	8.8	8.9	9.9	10.9	11.0	15.2	14.9	10.1	12.7
Completed High School	—	—	—	—	—	10.6	10.6	10.4	14.6	13.0	13.8	12.2	15.0	18.0
Some College or University	—	—	—	—	—	6.2	8.9	6.1	13.1	12.3	10.0	12.0	15.0	11.8
University Degree	—	—	—	—	—	3.0	4.0	1.8	8.1	7.4	9.1	9.0	8.9	7.0

Notes: <sup>a</sup>95% confidence interval. — data not available; † Estimate suppressed or unstable.  
 \*\*p<.01; based on a confidence interval around the difference between 2000 and 2001 proportions.  
 Trend analysis 1977-2001 for total sample: linear p < .001; non-linear p < .05

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

Table 3.5.4: Percentage *Drinking Five or More Drinks in a Single Sitting Weekly* during the Past 12 Months, by Demographic Characteristics, Ontarian Drinkers, Aged 18+, 1977-2001

	1977	1982	1984	1987	1989	1991	1994	1995	1996	1997	1998	1999	2000	2001
(N=)	(818)	(792)	(891)	(889)	(908)	(841)	(1660)	(839)	(2141)	(2219)	(1582)	(1938)	(1887)	(2088)
Total Drinkers	10.9	10.6	11.1	10.5	11.5	9.2	10.2	8.2	14.8	13.9	15.4	15.0	16.5	15.5
±% <sup>a</sup>	(±2.1)	(±2.1)	(±2.1)	(±2.0)	(±2.1)	(±2.1)	(±1.4)	(±1.9)	(±1.8)	(±1.6)	(±2.1)	(±1.9)	(±2.0)	(±1.9)
<b>Gender</b>														
Men	16.3	16.1	18.0	15.9	18.6	12.7	15.4	12.4	22.7	21.4	24.6	23.4	23.1	24.8
Women	4.1	4.5	4.4	4.9	4.3	5.7	5.4	3.9	7.3	6.7	6.3	6.0	9.8	5.8**
<b>Age</b>														
18 - 29 years	16.0	16.8	13.6	15.4	18.0	11.5	14.8	12.2	25.1	23.6	22.9	23.5	24.8	21.7
30 - 39 years	5.0	10.5	12.8	10.0	7.6	9.8	10.8	10.8	14.0	12.6	13.7	13.6	16.4	16.0
40 - 49 years	14.4	8.1	11.2	9.7	10.2	7.9	7.8	5.8	11.8	9.1	13.9	14.5	15.1	11.5
50 - 64 years	7.9	7.1	7.6	7.0	10.6	9.9	6.3	4.8	10.8	9.3	14.6	11.0	12.4	15.8
65+ years	6.6	1.1	7.0	3.7	6.2	2.2	6.8	4.1	4.0	9.9	8.8	9.5	7.5	8.3
<b>Marital Status</b>														
Never Married	—	—	—	—	—	13.9	14.8	13.4	27.5	21.5	23.2	26.5	23.3	22.9
Married	—	—	—	—	—	5.7	8.3	6.2	10.0	10.8	11.2	11.3	13.7	13.1
Previously Married	—	—	—	—	—	16.7	9.5	6.8	13.1	13.0	13.3	13.2	15.2	13.2
<b>Region (Postal Code)</b>														
Toronto	—	—	—	—	—	9.3	7.1	8.2	17.8	12.6	15.0	15.1	16.6	19.0
Toronto Outskirts	—	—	—	—	—	9.1	9.3	8.1	12.5	14.8	13.4	14.7	17.3	10.1**
West	—	—	—	—	—	9.6	13.7	8.4	16.3	13.2	17.5	16.0	15.5	20.2
East	—	—	—	—	—	6.3	8.0	6.9	12.9	15.7	15.9	15.6	15.5	13.6
North	—	—	—	—	—	9.3	13.0	11.5	16.9	15.4	15.7	12.0	17.6	15.6
<b>Education</b>														
Less Than High School	—	—	—	—	—	13.7	12.4	12.5	15.8	16.1	22.3	22.8	16.7	19.6
Completed High School	—	—	—	—	—	13.1	12.8	12.5	18.3	16.9	18.8	15.7	19.6	22.3
Some College or University	—	—	—	—	—	7.1	10.4	7.2	15.9	14.3	12.4	14.5	17.7	14.2
University Degree	—	—	—	—	—	3.4	4.7	2.0	9.6	8.9	11.0	10.8	11.2	8.7

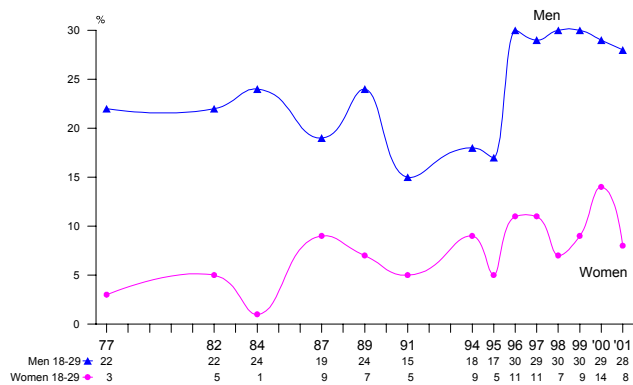
Notes: <sup>a</sup>95% confidence interval. — data not available.

\*\*p<.01; based on a confidence interval around the difference between 2000 and 2001 proportions.

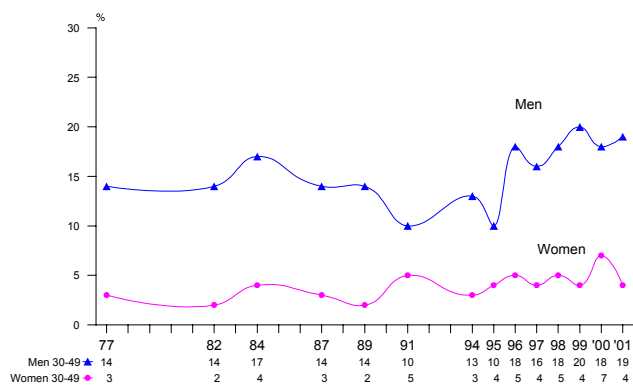
Trend analysis 1977-2001 for Past Year Drinkers: linear p < .001; non-linear p < .01.

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

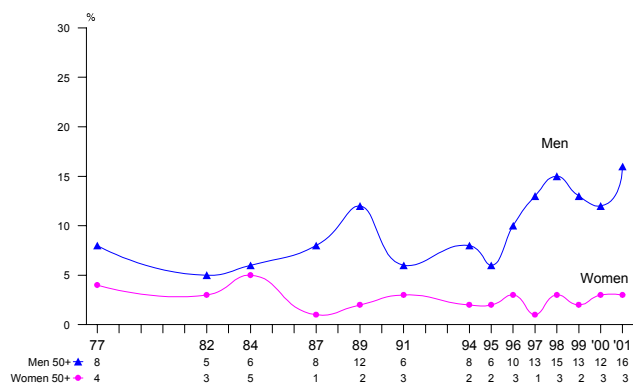
**Figure 3.5.1**  
**5+ Drinks Weekly by Gender, Ontarians Aged 18 - 29, 1977- 2001**



**Figure 3.5.2**  
**5+ Drinks Weekly by Gender, Ontarians Aged 30 - 49, 1977- 2001**



**Figure 3.5.3**  
**5+ Drinks Weekly by Gender, Ontarians Aged 50+, 1977- 2001**



### 3.6 Hazardous or Harmful Drinking (AUDIT)

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

*The World Health Organization has developed a screening instrument – the Alcohol Use Disorders Identification Test (AUDIT)(Saunders et al., 1993) – designed to detect problem drinkers at the less severe end of the spectrum of alcohol problems. The AUDIT assesses hazardous drinking - an established pattern of drinking that increases the likelihood of future physical and mental health problems (e.g., liver disease) – and harmful drinking - a pattern of drinking that is already causing damage to health (e.g., alcohol-related injuries; depression). Conventionally, for potential international comparisons, a score of 11 or more out of 40 on the AUDIT scale is used as a cut-off point to estimate the percentage who drink at hazardous or harmful levels. In Appendix D, we also present estimates based on a score of 8+, a cut-off which some studies also use. Because the AUDIT is new to the CAMH Monitor, trend data are available only from 1998.*

**2001**.....Tables 3.6.1 - 3.6.5; Fig.3.6.1

Overall, 5.5% (4.6% to 6.6%) of Ontario adults and 6.9% (5.7% to 8.3%) of drinkers report hazardous drinking (11+ cut-off) during the past 12 months.

Gender, age, and education, are significant demographic characteristics related to hazardous and harmful drinking after controlling for other characteristics.

- Men are 5 times more likely than women to report hazardous drinking (9.4% vs. 1.8%).
- Hazardous drinking declines significantly with age: it is highest among 18 to 29 year olds (11.1%) and lowest among those aged 65 and older (1.0%).
- Those with a university degree report the lowest rate of harmful drinking (3.1%), while those who completed high school report the highest rate (8.4%).

- The odds of harmful drinking are 3.5 times higher among those never married compared to their married counterparts (12.1% vs. 3.7%), but the effect does not hold after adjusting for other characteristics.

Similarly, among past year drinkers, gender, age, and education are all significantly related to hazardous and harmful drinking. Men, those aged 18 to 29, and those with completed high school education display the highest rates of harmful drinking.

**Trends**.....Table 3.6.6 -3.6.7

Rates of hazardous and harmful drinking remained stable between 2001 and 2000 among both the total sample (5.5% vs. 5.9%) and among past year drinkers (6.9% vs. 7.6 %). There was, however, a significant increase in hazardous drinking among those aged 30-39 for the total sample (7.4% vs. 4.0%) and a significant decrease among those previously married for past year drinkers (3.5% vs. 7.7%). No other subgroup changes are evident.

Table 3.6.1: Percentage *Reporting Hazardous & Harmful Drinking Indicators*, Ontarians and Ontarian Drinkers, Aged 18+, 2001

AUDIT ITEM		Total Sample (N=2627)	Drinkers (N=2088)
Alcohol Intake			
1. How often did you drink alcoholic beverages during the past 12 months?	0. Never	20.6	—
	1. Monthly or less	29.8	37.7
	2. 2-4 times/month	26.7	33.8
	3. 2-3 times/week	13.8	17.5
	4. 4+ times/week	8.8	11.1
	Mean (SE)	1.6 (.03)	2.0 (.03)
2. On those days when you drink, how many drinks do you usually have?	0. None	22.2	—
	0. One	32.6	41.9
	1. Two to Three	34.3	44.1
	2. Four	3.4	4.4
	3. Five to Seven	5.6	7.2
	4. Eight or more	1.8	2.4
	Mean (SE)	.65 (.02)	.84 (.02)
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	52.3	39.4
	1. Less than monthly	19.7	25.0
	2. Monthly	15.8	20.0
	3. Weekly	11.3	14.4
	4. Daily or almost daily	1.0	1.1
	Mean (SE)	.89 (.03)	1.13 (.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	95.7	94.5
	1. Less than monthly	1.8	2.4
	2. Monthly	1.5	2.0
	3. Weekly	†	1.0
	4. Daily or almost daily	†	†
	Mean (SE)	.08 (.01)	.10 (.01)
5. How often during the last year have you failed to do what was normally expected from you because of drinking?	0. Never	94.2	92.6
	1. Less than monthly	4.2	5.4
	2. Monthly	1.3	1.6
	3. Weekly	†	†
	4. Daily or almost daily	†	†
	Mean (SE)	.08 (.01)	.10 (.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	99.1	98.9
	1. Less than monthly	†	†
	2. Monthly	†	†
	3. Weekly	†	†
	4. Daily or almost daily	†	†
	Mean (SE)	.02 (.01)	.02 (.01)
<b>Adverse Consequences</b>			
7. How often during the last year have you had a feeling of guilt or remorse after drinking?	0. Never	90.9	88.5
	1. Less than monthly	7.5	9.4
	2. Monthly	1.2	1.5
	3. Weekly	†	†
	4. Daily or almost daily	†	†
	Mean (SE)	.11 (.01)	.14 (.01)
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	92.1	90.1
	1. Less than monthly	6.7	8.4
	2. Monthly	1.0	1.0
	3. Weekly	†	†
	4. Daily or almost daily	†	†
	Mean (SE)	.10 (.01)	.12 (.01)
9. Have you or someone else ever been injured as a result of your drinking?	0. No	94.2	92.7
	2. Yes, but not last year	4.0	5.1
	4. Yes, during last year	1.7	2.2
	Mean (SE)	.15 (.02)	.19 (.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	95.9	94.8
	2. Yes, but not last year	2.4	3.0
	4. Yes, during last year	1.7	2.2
	Mean (SE)	.12 (.01)	.15 (.02)

Notes: † Estimate less than 1%.

Source: CAMH Monitor, Centre for Addiction and Mental Health

Table 3.6.2: Percentage *Drinking Hazardously or Harmfully (AUDIT 11+)* During the Past 12 Months, by Demographic Characteristics, Ontarians Aged 18+, 2001

		%	95%CI	Unadjusted Odds Ratio	Adjusted Odds Ratio for Factors 1-6
Total Sample		<b>5.5</b>	(4.6, 6.6)		
1) Gender				***	***
Women	(Comparison Group)	† <b>1.8</b>	(1.1, 2.9)	—	—
Men		<b>9.4</b>	(7.7, 11.5)	5.63	5.22
2) Age				***	***
18-29	(Comparison Group)	<b>11.1</b>	(8.3, 14.8)	—	—
30-39		<b>7.4</b>	(5.2, 10.5)	0.64	1.01
40-49		† <b>4.5</b>	(3.0, 6.6)	0.37***	0.69
50-64		† <b>2.5</b>	(1.4, 4.4)	0.20***	0.30**
65+		†	(0.2, 1.9)	0.05***	0.08***
3) Marital Status				***	NS
Married/Living with Partner	(Comparison Group)	† <b>3.7</b>	(2.8, 4.9)	—	—
Previously Married		† <b>2.5</b>	(1.5, 4.3)	0.68	1.01
Never Married		<b>12.1</b>	(9.2, 15.9)	3.58***	1.72*
4) Public Health Region				NS	NS
Toronto	(vs. Provincial Average)	† <b>6.6</b>	(4.4, 9.9)	1.26	0.99
Central South		† <b>5.3</b>	(2.9, 9.7)	1.00	1.14
Central West		† <b>4.3</b>	(2.5, 7.2)	0.80	0.69
South West		† <b>6.8</b>	(4.6, 10.0)	1.31	1.46
Central East		† <b>5.2</b>	(3.0, 8.7)	0.97	0.96
East		† <b>4.0</b>	(2.5, 6.4)	0.74	0.71
North		† <b>5.5</b>	(4.0, 8.0)	1.06	1.31
5) Education				**	**
Less than high school	(Comparison Group)	† <b>3.7</b>	(2.2, 6.2)	—	—
Completed high school		<b>8.4</b>	(6.2, 11.3)	2.38**	1.71
Some college or university		† <b>5.8</b>	(4.2, 8.1)	1.60	0.95
University degree		† <b>3.1</b>	(1.9, 5.0)	0.84	0.57
6) Income				NS	NS
> \$30,000	(Comparison Group)	† <b>5.4</b>	(3.4, 8.5)	—	—
\$30,000-\$49,000		<b>6.0</b>	(3.8, 9.4)	1.12	0.63
\$50,000-\$79,000		<b>6.8</b>	(4.8, 9.6)	1.27	0.78
\$80,000+		<b>6.3</b>	(4.4, 9.0)	1.17	0.66
Not stated		† <b>3.0</b>	(1.8, 5.2)	0.54	0.48

Note: † Estimate suppressed or unstable; \*p<.05; \*\*p<.01; \*\*\*p<.001

Asterisks in shaded rows indicate the significance of the group effect, based on Wald test.

Odds greater than 1.0 indicate that drug use is more likely to occur in the group being compared to the comparison group.

Odds less than 1.0 indicate that drug use is less likely to occur in the group being compared to the comparison group.

Source: CAMH Monitor, Centre for Addiction and Mental Health

Table 3.6.3: Percentage *Drinking Hazardously or Harmfully (AUDIT 11+)* During the Past 12 Months, by Demographic Characteristics, Ontarian Drinkers, Aged 18+, 2001

		%	95%CI	Unadjusted Odds Ratio	Adjusted Odds Ratio for Factors 1-6
Total Drinkers		<b>6.9</b>	(5.7, 8.3)		
1) Gender				***	***
Women	(Comparison Group)	<b>2.4</b>	(1.5, 3.8)	—	—
Men		<b>11.3</b>	(9.2, 13.7)	5.18	5.16
2) Age				***	***
18-29	(Comparison Group)	<b>13.1</b>	(9.8, 17.3)	—	—
30-39		<b>8.6</b>	(6.0, 12.1)	0.62	0.93
40-49		<b>5.6</b>	(3.8, 8.4)	0.40**	0.72
50-64		† <b>3.1</b>	(1.8, 5.6)	0.22***	0.31**
65+		†	(0.3, 2.9)	0.06***	0.07***
3) Marital Status				***	NS
Married/Living with Partner	(Comparison Group)	<b>4.6</b>	(3.5, 6.1)	—	—
Previously Married		† <b>3.5</b>	(2.0, 5.8)	0.73	1.00
Never Married		<b>14.7</b>	(11.2, 19.2)	3.55***	1.72*
4) Public Health Region				NS	NS
Toronto	(vs. Provincial Average)	<b>8.4</b>	(5.6, 12.5)	1.28	1.02
Central South		† <b>6.8</b>	(3.7, 12.3)	1.00	1.17
Central West		† <b>5.5</b>	(3.3, 9.3)	0.82	0.74
South West		<b>8.8</b>	(5.9, 12.8)	1.34	1.46
Central East		† <b>6.2</b>	(3.6, 10.4)	0.92	0.93
East		† <b>4.9</b>	(3.0, 7.8)	0.72	0.70
North		† <b>7.0</b>	(5.0, 9.9)	1.06	1.19
5) Education				**	*
Less than high school	(Comparison Group)	† <b>5.7</b>	(3.4, 9.3)	—	—
Completed high school		<b>10.4</b>	(7.7, 13.9)	1.94*	1.41
Some college or university		<b>7.0</b>	(5.0, 9.6)	1.25	0.82
University degree		† <b>3.8</b>	(2.4, 6.1)	0.67	0.51
6) Income				NS	NS
> \$30,000	(Comparison Group)	<b>8.3</b>	(5.3, 12.9)	—	—
\$30,000-\$49,000		<b>8.0</b>	(5.1, 12.4)	0.96	0.56
\$50,000-\$79,000		<b>7.9</b>	(5.6, 11.1)	0.95	0.65
\$80,000+		<b>7.1</b>	(4.9, 10.0)	0.84	0.51
Not stated		† <b>4.0</b>	(2.3, 6.9)	0.46*	0.39*

Note: † Estimate suppressed or unstable; \*p<.05; \*\*p<.01; \*\*\*p<.001

Asterisks in shaded rows indicate the significance of the group effect, based on Wald test.

Odds greater than 1.0 indicate that drug use is more likely to occur in the group being compared to the comparison group.

Odds less than 1.0 indicate that drug use is less likely to occur in the group being compared to the comparison group.

Source: CAMH Monitor, Centre for Addiction and Mental Health

Table 3.6.4: Percentage *Drinking Hazardously or Harmfully (AUDIT 11+)* During the Past 12 Months, by Demographic Characteristics, Ontarians, Aged 18+, 1998-2001

	1998	1999	2000	2001
(N=)	(2509)	(2436)	(2406)	(2627)
Total Sample	5.9	5.7	5.9	5.5
± %	(± 1.2)	(± 1.1)	(± 1.0)	(± 1.0)
<b>Gender</b>				
Men	10.5	10.3	9.6	9.4
Women	1.8	† 1.4	2.6	† 1.8
<b>Age</b>				
18-29	12.6	10.5	13.5	11.1
30-39	5.2	6.4	† 4.0	7.4*
40-49	4.8	† 4.8	† 4.3	† 4.5
50-64	4.1	† 4.2	† 4.2	† 2.5
65+	2.1	†	† 2.0	†
<b>Marital Status</b>				
Married/Living with Partner	4.3	4.1	3.7	3.7
Never Married	12.3	11.9	12.3	12.1
Previously Married	3.4	† 3.1	† 5.3	† 2.5
<b>Public Health Region</b>				
Toronto	6.4	† 4.9	† 5.7	† 6.6
Central South	6.6	7.4	† 4.4	† 5.3
Central West	5.3	† 5.7	† 6.3	† 4.3
South West	6.6	7.2	† 7.0	† 6.8
Central East	3.6	† 5.3	† 5.2	† 5.2
East	7.3	† 4.5	† 4.6	† 4.0
North	6.0	† 5.8	9.4	† 5.5
<b>Education</b>				
Less Than High School	6.8	6.4	6.4	† 3.7
Completed High School	6.1	6.6	6.4	8.4
Some College or University	6.9	6.7	7.5	5.8
University Degree	3.9	† 3.0	† 3.3	† 3.1

Notes: † Estimate suppressed or unstable.

\*p<.05; based on a confidence interval around the difference between 2000 and 2001 proportions.

Source: CAMH Monitor, Centre for Addiction and Mental Health

Table 3.6.5: Percentage *Drinking Hazardously or Harmfully (AUDIT 11+)* During the Past 12 Months, by Demographic Characteristics, Ontarian Drinkers, Aged 18+, 1998-2001

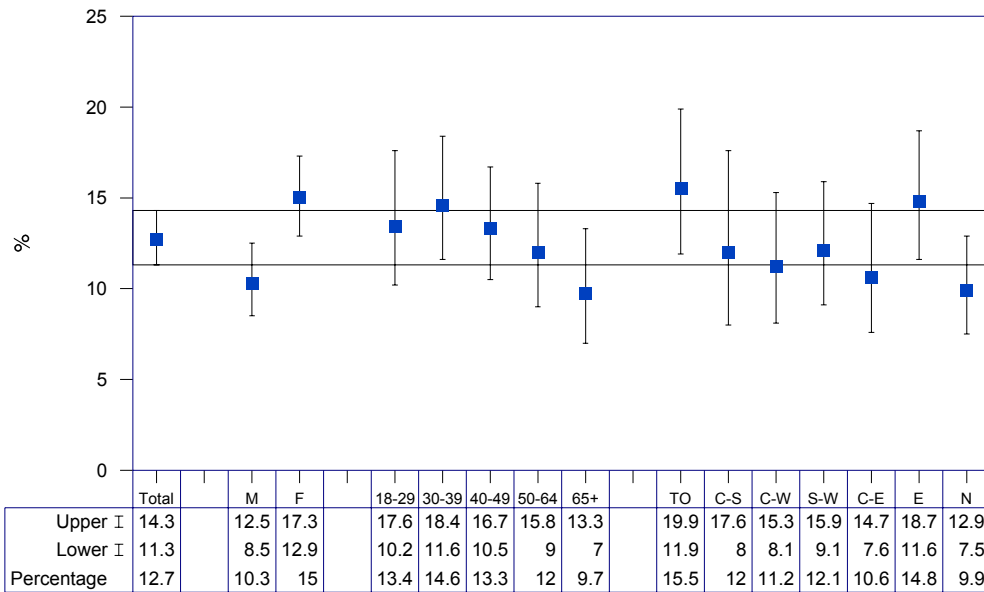
	1998	1999	2000	2001
(N=)	(1777)	(1938)	(1877)	(2088)
Total Drinkers	8.5	7.2	7.6	6.9
± %	(± 1.7)	(± 1.4)	(± 1.3)	(± 1.3)
<b>Gender</b>				
Men	14.0	12.1	11.7	11.3
Women	3.0	† 1.9	3.5	2.4
<b>Age</b>				
18-29	16.5	12.1	15.6	13.1
30-39	7.2	7.8	† 5.0	8.6
40-49	6.6	† 5.8	† 5.4	5.6
50-64	5.7	† 5.3	† 5.4	† 3.1
65+	4.1	†	† 3.3	†
<b>Marital Status</b>				
Married/Living with Partner	6.1	5.3	4.8	4.6
Never Married	16.7	13.9	14.8	14.7
Previously Married	4.2	† 4.5	7.7	† 3.5*
<b>Public Health Region</b>				
Toronto	8.8	† 6.8	8.1	8.4
Central South	8.2	9.1	† 5.6	† 6.8
Central West	6.5	† 6.8	8.1	† 5.5
South West	7.9	9.1	8.6	8.8
Central East	5.0	† 6.6	† 6.8	† 6.2
East	9.4	† 5.5	† 5.7	† 4.9
North	8.5	7.2	11.0	† 7.0
<b>Education</b>				
Less Than High School	11.4	9.6	10.4	† 5.7
Completed High School	10.2	8.3	8.3	10.4
Some College or University	8.6	8.1	8.8	7.0
University Degree	4.9	† 3.6	† 4.2	3.8

Notes: † Estimate suppressed or unstable

\*p<.05; based on a confidence interval around the difference between 2000 and 2001 proportions.

Source: CAMH Monitor, Centre for Addiction and Mental Health

**Figure 3.6.1**  
**Percentage Drinking Hazardously or Harmfully (AUDIT 11+), Ontarian**  
**Drinkers Aged 18+, 2001**



Vertical bars represent 95% confidence intervals; horizontal bar represents 95% confidence interval for total estimate

### 3.7 Drinking and Driving

**2001**.....Tables 3.7.1, 3.7.2

An estimated 10.9% (from 9.5% to 12.5%) of Ontario adults with a valid driver's licence report driving within one hour of consuming two or more drinks during the past 12 months.

After controlling for other demographic factors, gender, age, public health region, and income are significantly related to drinking and driving.

- Men drink and drive at a rate almost 6 times greater than women (17.9% vs. 3.5%).
- Drinking and driving tends to decline with age. Those 30-39 years olds (13.2%) report the highest rate and those aged 65 and older report the lowest rate (5.0%).
- After controlling for other factors, drinking and driving is significantly higher among those living in the South - West compared to the provincial average (15.6% vs. 10.9%).
- The odds of drinking and driving are 2.5 times higher among those with an income of more than \$80,000, compared to those earning less than \$30,000 (15.9% vs. 7.0%).

Marital status and education are not significantly related to drinking and driving.

**Trends**.....Table 3.7.2

Although rates of drinking and driving increased significantly between 2000 and 2001 (from 8.6% to 10.9%), the later rate did not differ much from 1999 (10.5%). The rate increased significantly also among men (from 13.6% to 17.9%) and among those living in the South -Western region of Ontario (from 9.3% to 15.6%). No other subgroup changes were evident.

There was, however, a significant declining trend in drinking and driving between 1996 and 2000 (from 13.1% to 8.6%;  $p < .001$ ), but it seems to have leveled off in 2001. That significant decline occurred between 1996 and 1997 (from 13.1% to 10.6%;  $p = .050$ ) and between 1999 and 2000 (from 10.5% to 8.5%;  $p = .028$ ).

A declining trend in drinking and driving between 1996 and 2001 was noticeable among those aged 18 to 29 years (from 20.1% in 1996 to 12.5% in 2001;  $p < .05$ ).

Table 3.7.1: Percentage *Driving Within One Hour After Consuming 2+ Drinks* During the Past 12 Months, Unadjusted and Adjusted Group Differences, Ontario Adults with a Valid Driver's Licence, Aged 18+, 2001

		%	95%CI	Unadjusted Odds Ratio	Adjusted Odds Ratio for Factors 1-6
Total Drivers		<b>10.9</b>	(9.5, 12.5)		
1) Gender				***	***
Women	(Comparison Group)	<b>3.5</b>	(2.5, 4.9)	—	—
Men		<b>17.9</b>	(15.4, 20.7)	5.97	5.61
2) Age				*	*
18-29	(Comparison Group)	<b>12.5</b>	(9.3, 16.6)	—	—
30-39		<b>13.2</b>	(10.1, 17.0)	1.05	1.44
40-49		<b>11.9</b>	(9.0, 15.5)	0.95	1.40
50-64		<b>9.9</b>	(7.1, 13.5)	0.77	0.96
65+		† <b>5.0</b>	(2.7, 9.4)	0.37**	0.46*
3) Marital Status				*	NS
Married/Living with Partner	(Comparison Group)	<b>9.8</b>	(8.2, 11.7)	—	—
Previously Married		<b>9.0</b>	(6.0, 13.3)	0.91	1.55
Never Married		<b>15.6</b>	(12.0, 20.0)	1.69**	1.52
4) Public Health Region				NS	*
Toronto	(vs. Provincial Average)	<b>10.4</b>	(7.2, 14.8)	0.95	0.78
Central South		<b>11.6</b>	(7.4, 17.6)	1.07	1.18
Central West		<b>8.9</b>	(6.2, 12.7)	0.80	0.73
South West		<b>15.6</b>	(12.0, 20.0)	1.51	1.77***
Central East		<b>10.1</b>	(6.5, 15.6)	0.92	0.89
East		<b>10.5</b>	(7.7, 14.3)	0.96	0.97
North		<b>9.9</b>	(7.3, 13.4)	0.90	0.97
5) Education				NS	NS
Less than high school	(Comparison Group)	<b>11.4</b>	(7.6, 16.7)	—	—
Completed high school		<b>12.6</b>	(9.7, 16.2)	1.12	0.86
Some college or university		<b>11.0</b>	(8.6, 13.9)	0.97	0.70
University degree		<b>8.7</b>	(6.6, 11.6)	0.75	0.52*
6) Income				**	*
< \$30,000	(Comparison Group)	† <b>7.0</b>	(4.2, 11.5)	—	—
\$30,000-\$49,000		<b>10.2</b>	(7.2, 14.3)	1.50	1.38
\$50,000-\$79,000		<b>10.5</b>	(8.1, 13.7)	1.55	1.58
\$80,000+		<b>15.9</b>	(12.5, 20.0)	2.50**	2.53**
Not stated		<b>7.9</b>	(5.6, 11.0)	1.13	1.41

Note: † Estimate suppressed or unstable; \*p<.05; \*\*p<.01; \*\*\*p<.001

Asterisks in shaded rows indicate the significance of the group effect, based on Wald test.

Odds greater than 1.0 indicate that drug use is more likely to occur in the group being compared to the comparison group.

Odds less than 1.0 indicate that drug use is less likely to occur in the group being compared to the comparison group.

Source: CAMH Monitor, Centre for Addiction and Mental Health

Table 3.7.2: Percentage *Driving Within One Hour After Consuming 2 or More Drinks During the Past 12 Months*, by Demographic Characteristics, Ontario Adults with a Valid Driver's Licence, aged 18+, 1996-2001

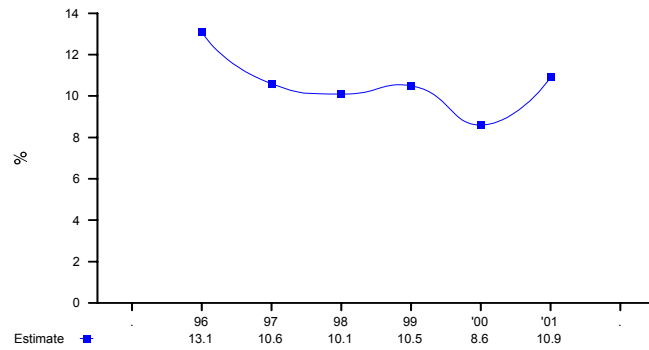
(N= )	1996 (2360)	1997 (2432)	1998 (2183)	1999 (2101)	2000 (2066)	2001 (2308)
Total sample (%)	13.1	10.6	10.1	10.5	8.6	10.9**
<b>Gender</b>						
Men	21.2	18.6	16.0	16.5	13.6	17.9**
Women	4.9	2.9	4.1	4.1	3.4	3.5
<b>Age</b>						
18-29	20.1	13.0	14.0	13.9	11.2	12.5
30-39	15.4	11.4	10.3	12.6	10.2	13.2
40-49	11.8	10.1	11.3	10.3	8.3	11.9
50-64	7.0	9.4	8.1	8.0	† 5.9	9.9
65+	5.8	7.8	6.4	6.8	† 6.0	† 5.0
<b>Marital Status</b>						
Married/Living with Partner	10.5	9.0	9.1	9.7	7.4	9.8
Never Married	20.7	13.4	12.5	14.1	11.3	15.6
Previously Married	13.1	14.8	12.4	9.4	10.5	9.0
<b>Region</b>						
Toronto	14.1	7.8	9.9	8.5	8.9	10.4
Central South	17.4	12.1	9.1	11.1	† 6.6	11.6
Central West	12.5	9.4	10.8	8.6	8.5	8.9
South West	13.1	11.4	10.4	12.4	9.3	15.6**
Central East	12.0	11.5	8.8	10.7	† 7.0	10.1
East	9.5	12.2	10.0	11.7	7.6	10.5
North	13.9	11.5	12.8	12.8	13.2	9.9
<b>Education</b>						
Less Than High School	10.6	12.7	11.3	5.9	† 6.2	11.4
Completed High School	14.0	9.9	9.1	11.5	11.3	12.6
Some College or University	15.9	12.5	13.0	12.4	9.5	11.0
University Degree	10.8	8.1	6.9	9.6	† 5.9	8.7

Notes: † Estimate suppressed or unstable

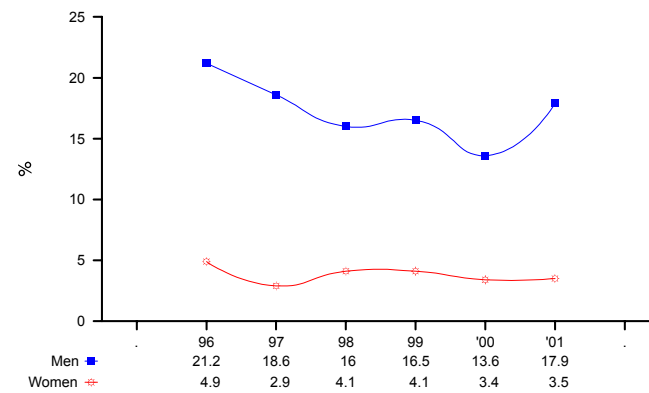
\*\*p<.01; based on a confidence interval around the difference between 2000 and 2001 proportions.

Source: CAMH Monitor, Centre for Addiction and Mental Health

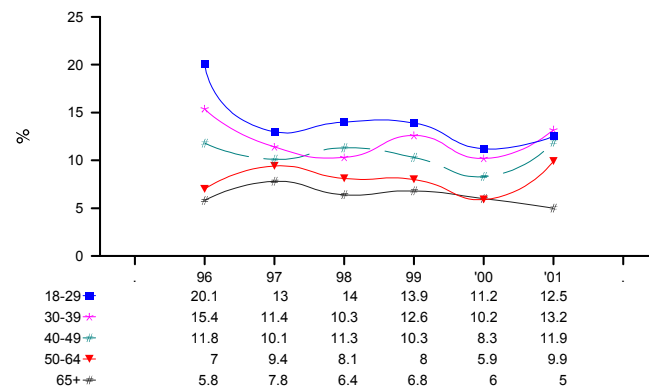
**Figure 3.7.1**  
**Past Year Drinking and Driving, Ontarians Aged 18+ with a Valid Driving Licence, 1996- 2001**



**Figure 3.7.2**  
**Past Year Drinking and Driving by Gender, Ontarians Aged 18+ with a Valid Driving Licence, 1996- 2001**



**Figure 3.7.3**  
**Past Year Drinking and Driving by Age Groups, Ontarians Aged 18+ with a Valid Driving Licence, 1996- 2001**



## 4. SMOKING

**2001** ..... Table 4.1; Fig. 4.1, 4.9 - 4.10

The estimated percentage of current smokers in Ontario is 24.7% (22.8% to 26.7%). About half of Ontarians (49.6%) can be classified as non-smokers (never smoked more than 100 cigarettes). The next largest group is former daily smokers (22.1%), followed by daily smokers (19.1%), non-daily smokers (5.6%) and former non-daily smokers (3.7%).

Gender, age, marital status, and education are significantly related to current smoking after adjusting for other demographic factors.

- The odds of smoking among men are 1.4 times higher than among women (28% vs. 21.5%).
- Smoking tends to decrease with age, from a high of 32% among 18 to 29 year-olds, to a low of 10.1% among those 65 and older.
- Those previously married are significantly more likely to smoke compared to those who are married (27.8% vs. 22.0%). Those never married also have a relatively greater likelihood of smoking (30.7%), but this difference does not hold after other demographics are controlled.
- Smoking rates tend to decrease with education. Use is highest among those with high school education (29.0%), and lowest among those with a university degree (15.3%).
- On average, current smokers consume 12.7 cigarettes per day. This number varies by sex (13.6 among men vs. 11.5 among women), and by age (ranging from 9.2 among 18 to 29 year-olds to 15.3 among those aged 50 to 64 years).

There were no dominant income and public health region differences after adjusting for other factors.

### Smoking Dependence (HIS) ...

Table 4.2; Fig. 4.8

Smoking dependence was measured among daily smokers using the Heaviness of Smoking Index (HIS).

The HIS is based on points given for the time to the first cigarette each morning (TAC) and number of cigarettes smoked per day (CPD) (Heatherton, Kozlowski, Frecker, Rickert, & Robinson, 1989). Low scores (0-2) indicate low dependence on nicotine; scores ranging from 3-4 indicate moderate dependence, while scores ranging from 5-6 indicate high dependence.

Overall, among daily smokers, 13.6% (10.4%, 17.4%) met the criteria for high smoking dependence.

Among the demographic characteristics examined, only gender and age were significantly related to high smoking dependence after controlling for other variables.

- Male daily smokers are 2 times more likely to be highly dependent than female smokers (15.5% vs. 11.1%).
- Daily smokers aged 40-49 report the highest rate of high dependence (23.1%) compared to those aged 18-29 (7.3%).

**Trends** ..... Table 4.3; Fig. 4.2 - 4.7

Between 2000 and 2001, current smoking declined non-significantly from 25.6% to 24.7%. Subgroup changes during this period were not significant.

Historically, 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 then, current smoking has displayed a weak downward movement, declining to 24.7% in 2001.

This downward trend appears to be stronger for women than men (from 26.7% to 21.5% vs. 30.4% to 28.0%).

Table 4.1: Percentage *Currently Smoking Cigarettes* During the Past 12 Months, Unadjusted and Adjusted Group Differences, Ontarians Aged 18+, 2001

		%	95%CI	Unadjusted Odds Ratio	Adjusted Odds Ratio for Factors 1-6
Total Sample		<b>24.7</b>	(22.8, 26.7)		
1) Gender				***	***
Women	(Comparison Group)	<b>21.5</b>	(19.1, 24.1)	—	—
Men		<b>28.0</b>	(25.2, 31.1)	1.42	1.47
2) Age				***	***
18-29	(Comparison Group)	<b>32.0</b>	(27.2, 37.1)	—	—
30-39		<b>30.4</b>	(26.2, 35.0)	0.93	1.04
40-49		<b>25.6</b>	(21.8, 29.8)	0.73*	0.74
50-64		<b>23.1</b>	(19.1, 27.6)	0.64**	0.56**
65+		<b>10.1</b>	(7.3, 13.8)	0.24***	0.15***
3) Marital Status				***	***
Married/Living with Partner	(Comparison Group)	<b>22.0</b>	(19.7, 24.4)	—	—
Previously Married		<b>27.8</b>	(23.2, 32.9)	1.37*	1.88***
Never Married		<b>30.7</b>	(26.2, 35.6)	1.56***	1.02
4) Public Health Regions				NS	NS
Toronto	(vs. Provincial Average)	<b>24.9</b>	(20.5, 29.9)	1.02	1.05
Central South		<b>19.8</b>	(14.4, 26.5)	0.75	0.74
Central West		<b>23.7</b>	(19.2, 28.9)	0.95	0.94
South West		<b>23.3</b>	(19.2, 28.0)	0.93	0.93
Central East		<b>26.2</b>	(21.2, 31.9)	1.09	1.13
East		<b>25.3</b>	(21.2, 30.0)	1.04	1.04
North		<b>29.9</b>	(26.0, 34.1)	1.30	1.28*
5) Education				***	***
Less than high school	(Comparison Group)	<b>28.8</b>	(24.0, 34.3)	—	—
Completed high school		<b>29.0</b>	(25.1, 33.1)	1.00	0.70*
Some college or university		<b>27.2</b>	(23.8, 30.9)	0.92	0.56**
University degree		<b>15.3</b>	(12.4, 18.8)	0.45***	0.28***
6) Income				NS	NS
< \$30,000	(Comparison Group)	<b>27.0</b>	(22.6, 31.8)	—	—
\$30,000-\$49,000		<b>24.0</b>	(19.9, 28.7)	0.86	0.72
\$50,000-\$79,000		<b>25.0</b>	(21.0, 29.5)	0.90	0.76
\$80,000+		<b>24.7</b>	(20.7, 29.1)	0.89	0.83
Not stated		<b>23.4</b>	(19.6, 27.8)	0.83	0.88

Note: † Estimate suppressed or unstable; \*p<.05; \*\*p<.01; \*\*\*p<.001

Asterisks in shaded rows indicate the significance of the group effect, based on Wald test.

Odds greater than 1.0 indicate that drug use is more likely to occur in the group being compared to the comparison group.

Odds less than 1.0 indicate that drug use is less likely to occur in the group being compared to the comparison group.

Source: CAMH Monitor, Centre for Addiction and Mental Health

Table 4.2. Percentage Reporting *High Smoking Dependence*<sup>1</sup> During the Past 12 Months, Unadjusted and Adjusted Group Differences, Ontario Daily Smokers Aged 18+, 2001

		%	95%CI	Unadjusted Odds Ratio	Adjusted Odds Ratio for Factors 1-6
Total Daily Smokers (N= 534)		<b>13.6</b>	(10.4, 17.4)		
1) Gender				NS	*
Women	(Comparison Group)	<b>11.1</b>	(7.3, 16.6)	—	—
Men		<b>15.5</b>	(11.1, 21.2)	1.47	2.04
2) Age				*	*
18-29	(Comparison Group)	<b>7.3</b>	(3.6, 14.2)	—	—
30-39		<b>11.9</b>	(6.9, 19.9)	1.72	2.07
40-49		<b>23.1</b>	(15.2, 33.5)	3.82**	4.37**
50-64		<b>13.2</b>	(7.7, 21.7)	1.94	2.03
65+		<b>11.8</b>	(3.5, 33.2)	1.70	1.83
3) Marital Status				NS	NS
Married/Living with Partner	(Comparison Group)	<b>13.7</b>	(9.6, 19.3)	—	—
Previously Married		<b>18.2</b>	(11.3, 28.1)	1.40	1.60
Never Married		<b>8.1</b>	(4.3, 14.6)	0.55	0.93
4) Public Health Regions				NS	NS
Toronto	(vs. Provincial Average)	<b>8.2</b>	(3.2, 19.3)	0.58	0.67
Central South		<b>8.3</b>	(2.3, 25.4)	0.57	0.69
Central West		<b>19.2</b>	(10.4, 32.7)	1.57	1.52
South West		<b>14.1</b>	(7.9, 24.0)	1.09	1.19
Central East		<b>19.1</b>	(10.6, 31.8)	1.56	1.29
East		<b>11.3</b>	(6.0, 20.2)	0.84	0.77
North		<b>16.2</b>	(10.3, 24.6)	1.28	1.20
5) Education				NS	NS
Less than high school	(Comparison Group)	<b>15.0</b>	(9.0, 23.9)	—	—
Completed high school		<b>15.8</b>	(9.7, 24.7)	1.07	1.62
Some college or university		<b>11.0</b>	(6.9, 17.0)	0.70	0.88
University degree		<b>13.2</b>	(6.5, 25.1)	0.86	1.03
6) Income				NS	NS
< \$30,000	(Comparison Group)	<b>18.9</b>	(11.7, 29.1)	—	—
\$30,000-\$49,000		<b>8.1</b>	(4.3, 14.7)	0.38*	0.45
\$50,000-\$79,000		<b>17.1</b>	(10.7, 26.0)	0.88	0.95
\$80,000+		<b>10.0</b>	(4.4, 21.1)	0.48	0.51
Not stated		<b>14.3</b>	(7.7, 25.2)	0.72	0.72

Note: <sup>1</sup> Those scoring 5 or 6 on the Heaviness of Smoking Index (HIS) scale.

† Estimate suppressed or unstable; \*p<.05; \*\*p<.01; \*\*\*p<.001

Asterisks in shaded rows indicate the significance of the group effect, based on Wald test.

Odds greater than 1.0 indicate that drug use is more likely to occur in the group being compared to the comparison group.

Odds less than 1.0 indicate that drug use is less likely to occur in the group being compared to the comparison group.

Source: CAMH Monitor, Centre for Addiction and Mental Health

Table 4.3: Percentage *Currently Smoking Cigarettes*, by Demographic Characteristic, Ontarians Aged 18+, 1991-2001

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
(N=)	(1047)	(1058)	(941)	(2022)	(994)	(2721)	(2776)	(2509)	(2436)	(2406)	(2627)
Total Sample	28.5	26.1	23.5	25.3	28.5	26.7	26.8	25.9	25.4	25.6	24.7
±% <sup>a</sup>	(±2.7)	(±2.6)	(±2.7)	(±1.9)	(±2.9)	(±1.9)	(±1.9)	(±2.0)	(±2.0)	(±2.0)	(±2.0)
<b>Gender</b>											
Men	28.5	29.5	28.2	26.4	30.4	27.8	29.3	28.2	28.2	31.1	28.0
Women	28.6	23.2	19.7	24.3	26.7	25.7	24.5	23.8	22.9	20.6	21.5
<b>Age</b>											
18 - 29	29.4	31.4	26	34.2	33.7	29.1	34.2	31.6	31.8	32.7	32.0
30 - 39	31.4	30.4	29.5	28.2	31.9	31.8	31.2	32.4	31.8	28.3	30.4
40 - 49	28.7	25.8	24.9	21.6	30.3	29.0	28.1	27.1	26.7	29.6	28.6
50 - 64	31.3	18.2	17.6	19.1	25.6	23.2	21.2	20.2	20.2	20.6	23.1
65+	18.8	12.7	10.0	12.4	10.8	14.1	9.3	15.2	13.3	13.6	10.1
<b>Marital Status</b>											
Never Married	28.2	27.0	27.2	29.5	31.0	29.9	34.6	30.9	32.0	32.4	30.7
Married	26.8	25.0	21.0	22.7	26.4	24.3	21.8	23.6	23.4	22.7	22.0
Previously Married	39.4	31.8	30.4	30.7	34.9	32.9	35.4	29.4	25.6	26.2	27.8
<b>Region (Postal Code)</b>											
Toronto	27.2	25.7	25.0	25.1	30.7	25.4	27.5	23.1	21.2	21.8	24.9
Toronto Outskirts	28.5	26.6	24.2	24.4	28.1	28.4	28.3	24.6	24.3	24.8	21.6
West	30.4	21.1	18.1	25.5	28.6	24.0	27.3	28.8	29.6	25.5	25.2
East	24.9	28.3	20.5	26.0	28.1	27.0	21.8	26.3	26.1	29.7	27.0
North	35.4	32.2	32.3	25.9	28.6	32.7	32.9	29.8	29.7	31.5	28.7
<b>Education</b>											
Less Than High School	40.5	37.5	35.5	33.8	26.4	38.2	37.0	35.4	30.1	30.5	28.8
Completed High School	29.8	27.8	25.4	29.8	35.8	30.0	29.5	28.6	29.4	30.2	29.0
Some College or University	26	23.9	22.9	23.3	30.0	26.8	28.6	25.7	29.0	27.3	27.2
University Degree	16.9	14.9	10.1	14.2	19.4	14.6	14.7	15.8	13.1	15.9	15.3

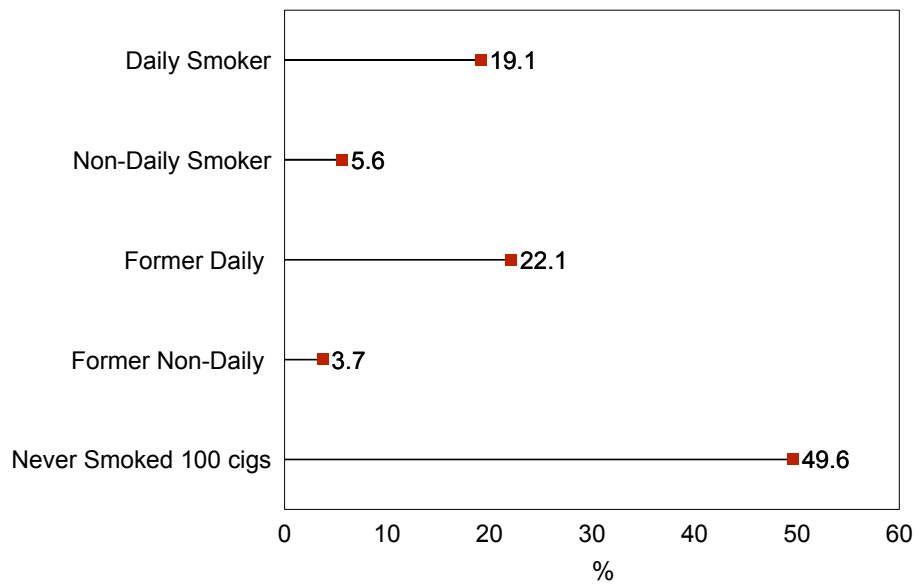
Notes: <sup>a</sup> 95% confidence interval.

There are no statistically significant ( $p < .05$ ) differences among the total sample or subgroups between 2000 and 2001.

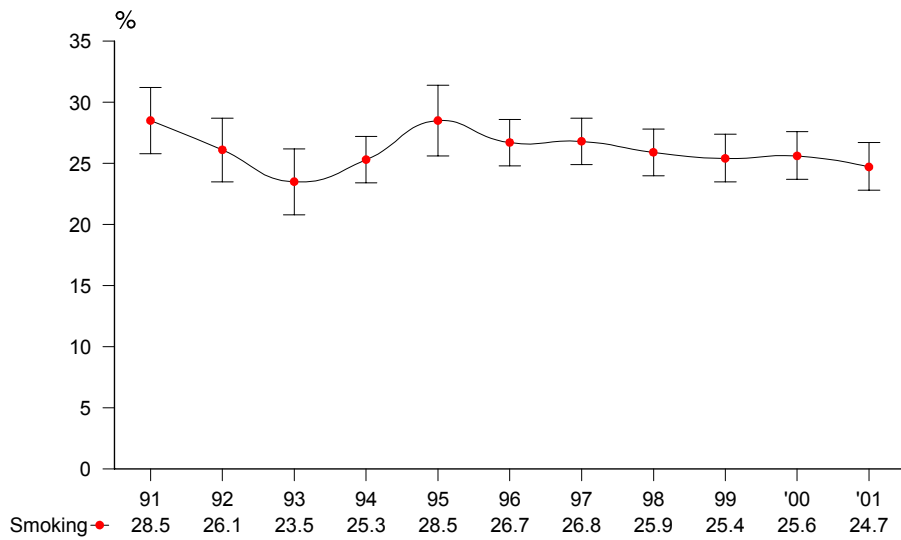
Trend analysis 1991-2000 for total sample: linear  $p = .769$ ; non-linear  $p = .800$

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

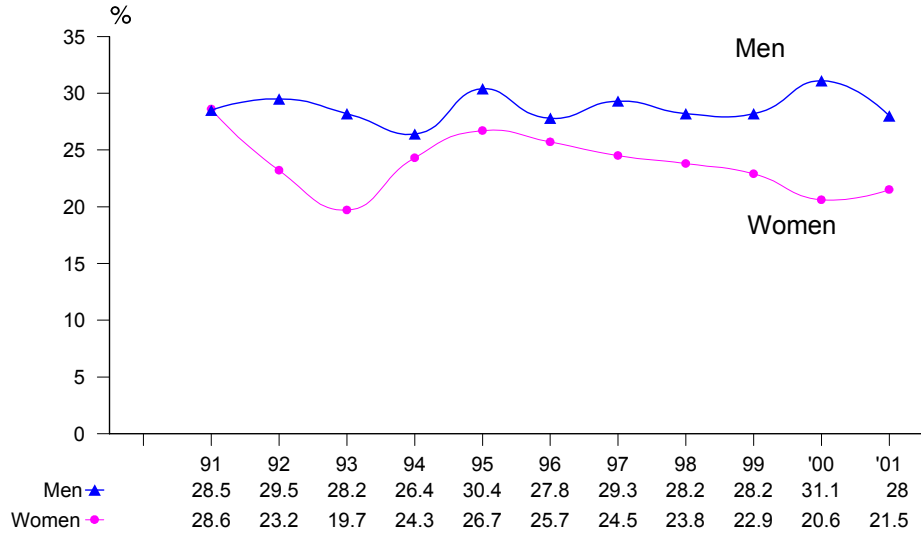
**Figure 4.1**  
**Smoking Status - Past 12 Months, Ontarians Aged 18+, 2001**



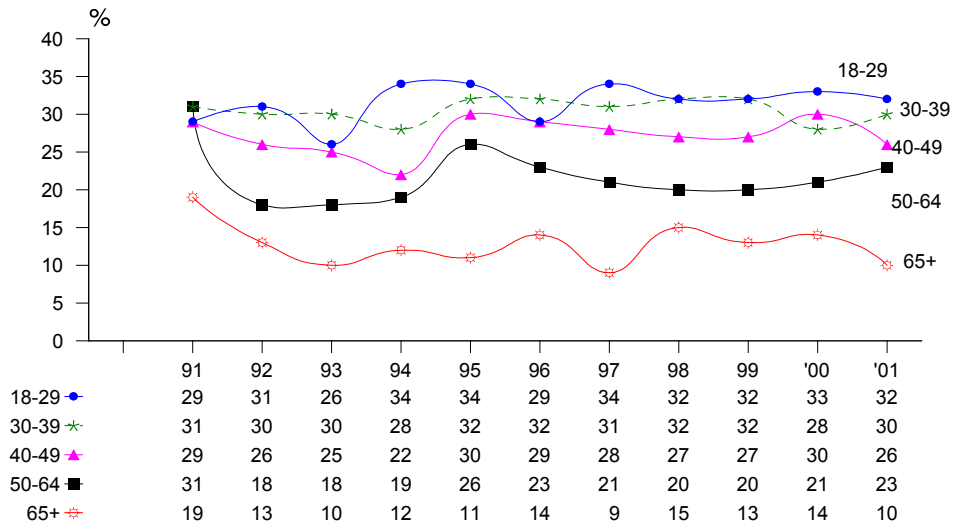
**Figure 4.2**  
**Percentage Smoking Cigarettes, Ontarians Aged 18+, 1991-2001**



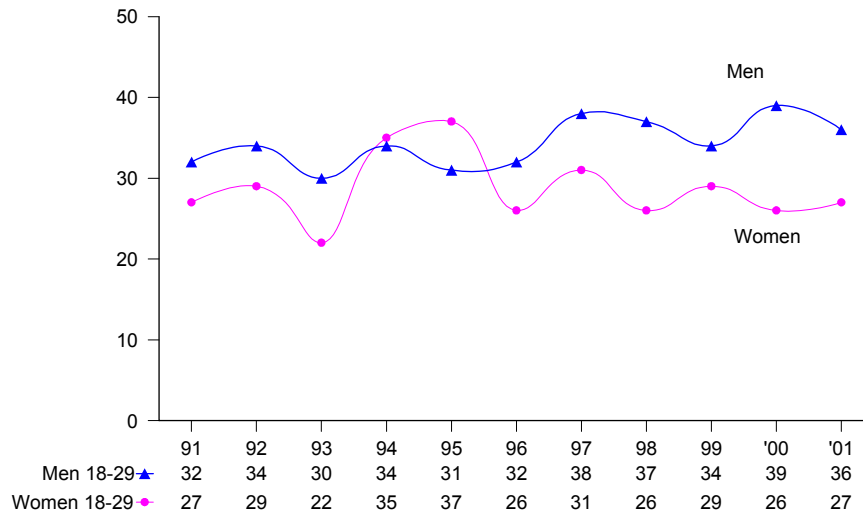
**Figure 4.3**  
**Percentage Smoking Cigarettes by Gender, Ontarians Aged 18+, 1991-2001**



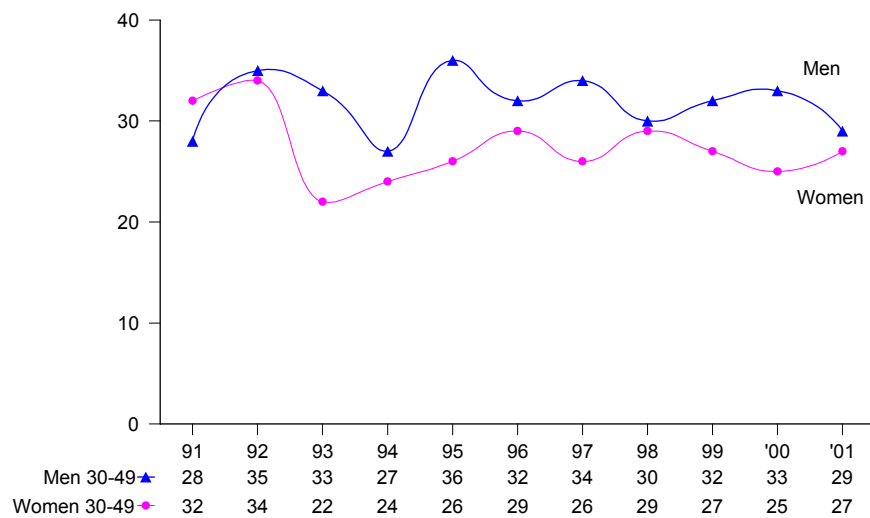
**Figure 4.4**  
**Percentage Smoking Cigarettes by Age, Ontarians Aged 18+, 1991-2001**



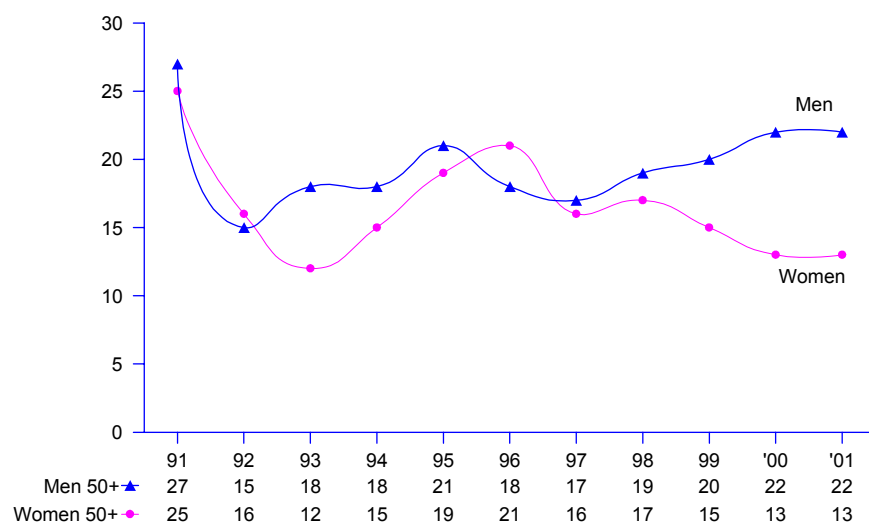
**Figure 4.5**  
**Cigarette Use by Gender, Ontarians Aged 18 - 29, 1991- 2001**



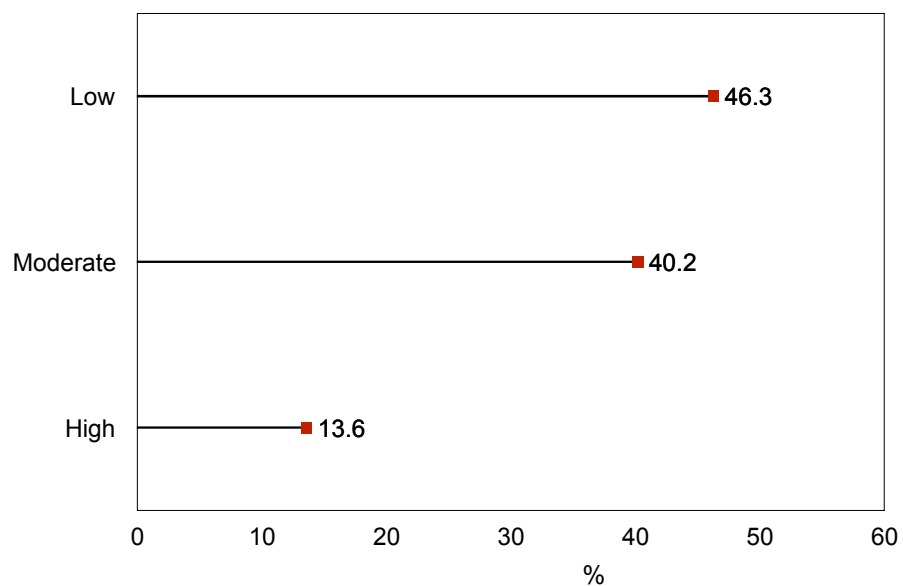
**Figure 4.6**  
**Cigarette Use by Gender, Ontarians Aged 30 - 49, 1991- 2001**



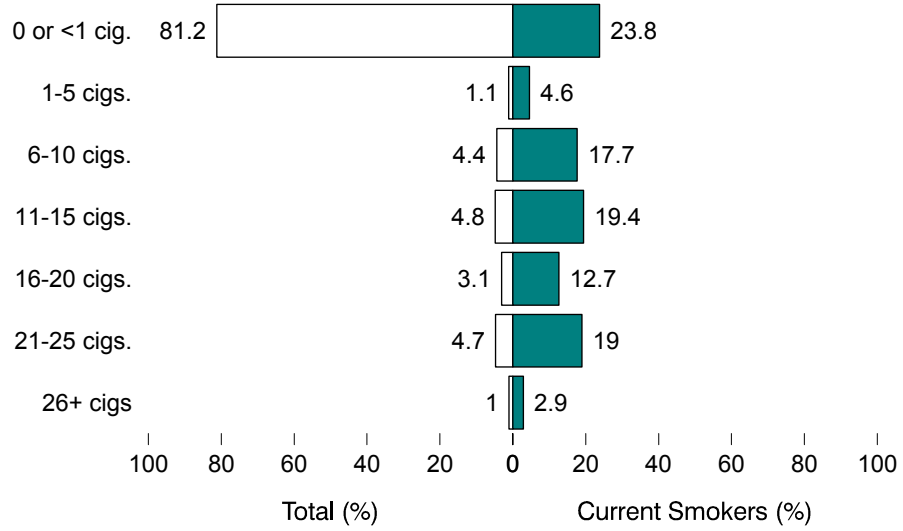
**Figure 4.7**  
**Cigarette Use by Gender, Ontarians Aged 50+, 1991- 2001**



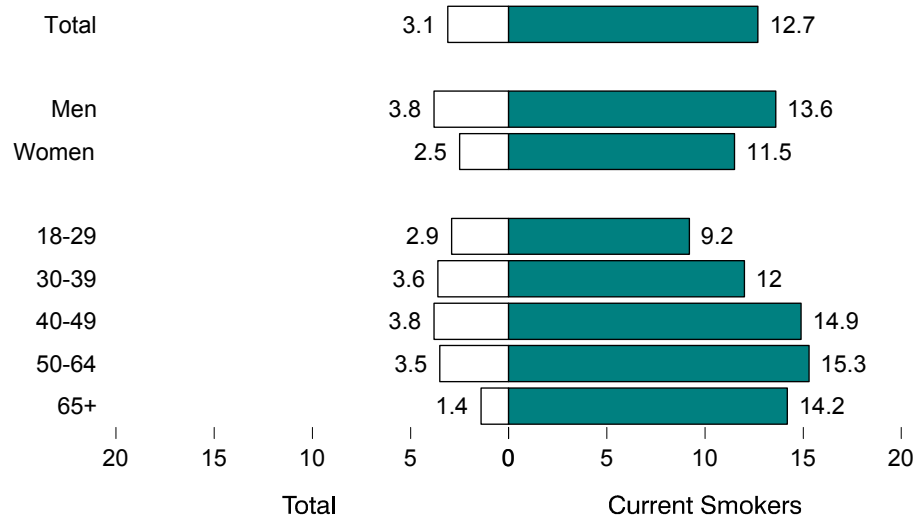
**Figure 4.8**  
**Smoking Dependence, Daily Smokers Aged 18+, 2001**



**Figure 4.9**  
**Percentage Smoking by Number of Cigarettes Daily Among Total Sample (N=2627) and Current Smokers (N=686), 2001**



**Figure 4.10**  
**Average Number of Cigarettes Smoked Daily Among Total Sample (N=2627) and Current Smokers (N=686), 2001**



## 5. ILLICIT DRUGS

### 5.1 Cannabis

**2001** ..... Tables 5.1.1 - 5.1.3

About one-third (34.4%) of Ontarians report using cannabis at least once in their lifetime, while 11.2% (9.9% to 12.8%) report using in the past 12 months. Use of cannabis is generally infrequent. Among lifetime users, 67% did not use cannabis during the 12 months before the survey, 17% used less than once a month during the past year and 16% used once a month or more frequently. Among past year cannabis users, 51% used less than once a month and the 49% used more frequently.

Gender, age, and marital status are all significantly related to past year use of cannabis. Adjusted group differences show that:

- The odds of use among men are 2 times higher than women (15.4% vs. 7.3%).
- Use is highest among 18-29 year-olds (26.8%), followed by 30-39 year-olds (15.8%). Compared to 18-29 year-olds, the odds of cannabis use are 34% lower for those aged 30-39, 72% lower among 40-49 year-olds and 94% lower among those aged 50 and older.
- The odds of past year use among those who are not married and those previously married are 2.7 and 1.8 times higher, relative to married respondents.

Public health region, education, and income are not significantly related to past year cannabis use.

#### **Cannabis Dependence**. Table 5.1.4

One indicator of problematic substance use is dependence, defined as a “cluster of physiological, behavioural, and cognitive phenomena in which the use of a substance takes on a much higher priority for a given individual than other behaviours that once had greater value” (World Health Organization, 1992). To provide estimates of cannabis dependence we used the criteria established by the World Health Organization in its International Classification of Diseases, 10th edition (ICD-10) (World Health Organization, 1992). According to the ICD-10 classification, a diagnosis of dependence is met if three or more of the following six criteria are experienced during the previous year:

1. strong desire to use;
2. difficulties in controlling use;
3. physiological withdrawal or use to relieve withdrawal;
4. tolerance;
5. progressive neglect of other activities in favour of drug use;
6. persistent use despite adverse physical or mental effects.

Overall, less than 1% (0.5%) of Ontarians met the criteria for cannabis dependence and 4.9% (2.8%, 8.3%) met the dependence criteria among past year users.

**Trends** ..... Table 5.1.5; Fig. 5.1-5.4

Past year use of cannabis remained virtually unchanged between the two most recent surveys, with 11.2% reporting use in 2001, compared to 10.8% in 2000. There are no evident changes in use between 2001 and 2000 within other demographic subgroups.

The most salient short-term trend shows a steady increase in cannabis use among the total sample, increasing from 8.6% in 1998 to 11.2% in 2001. As well, past year use of cannabis shows upward trends for: men (from 11.4% in 1992 to 15.4% in 2001), 18 to 29 year olds (from 18.3% in 1996 to 26.8% in 2001), and 30 to 49 year olds (from 11.3% in 1996 to 15.8% in 2001).

Over the long term, although the rates of use have varied from 6.2% to 11.2%, there is no dominant long-term trend evident and most estimates range

between 8% and 10%. It is important to note here that the lowest estimate found in 1992 (6.2%) may be artificially deflated due to questionnaire differences. (Unlike other estimates in which prevalence was derived from a frequency of use format, the 1992 estimate was derived from a dichotomous [yes/no] question, which tends to deflate drug use estimates.)

Perhaps the most noticeable change concerns the age distribution of cannabis users. Between 1977 and 1996, the proportion of past year cannabis users aged 30 to 49 years steadily increased from 15.4% to 46.5%. This increase was especially evident between 1994 and 1996 (from 39.6% to 46.5%). There was also an increase between 2000 and 2001 (from 35.5% to 42.8%).

Table 5.1.1: Percentage *Ever Used Cannabis* During Their Lifetime, Ontarians Aged 18+, 2001, N=2627

	Lower Bound %	Estimate %	Upper Bound %
Cannabis	32.3	<b>34.4</b>	36.5

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

Table 5.1.2: Frequency of *Cannabis Use* Among Users Aged 18+, 2001

Frequency	<b>Cannabis</b>	
	% Lifetime Users (N=933)	% Past Year Users (N=284)
Used in lifetime, but not past 12 months	66.8	--
Used less than once a month during past 12 months	16.9	51.1
Used once a month or more during past 12 months	16.2	48.9

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

Table 5.1.3: Percentage *Using Cannabis* During the Past 12 Months, Unadjusted and Adjusted Group Differences, Ontarians Aged 18+, 2001

		%	95% CI	Unadjusted Odds Ratio	Adjusted Odds Ratio for Factors 1-6
Total Sample		<b>11.2</b>	(9.9, 12.8)		
1) Gender				***	***
Women	(Comparison Group)	<b>7.3</b>	(5.7, 9.2)	—	—
Men		<b>15.4</b>	(13.2, 18.0)	2.32	2.09
2) Age				***	***
18-29	(Comparison Group)	<b>26.8</b>	(22.5, 31.7)	—	—
30-39		<b>15.8</b>	(12.5, 19.8)	0.54***	0.66
40-49		<b>7.2</b>	(5.3, 9.7)	0.24***	0.28**
50+		† <b>1.9</b>	(1.1, 3.3)	0.05***	0.06**
3) Marital Status				***	***
Married/Living with Partner	(Comparison Group)	<b>6.7</b>	(5.5, 8.3)	—	—
Never Married		<b>9.0</b>	(6.0, 13.3)	1.37	2.70**
Previously Married		<b>25.4</b>	(21.3, 30.0)	4.71***	1.80**
4) Public Health Region				NS	NS
Toronto	(vs. Provincial Average)	<b>14.3</b>	(10.9, 18.7)	1.40	1.07
Central South		<b>10.8</b>	(7.0, 16.4)	1.02	1.13
Central West		<b>9.5</b>	(6.8, 13.2)	0.88	0.71
South West		<b>9.6</b>	(7.0, 13.2)	0.89	0.93
Central East		<b>11.3</b>	(8.0, 15.7)	1.07	1.13
East		<b>10.9</b>	(8.0, 14.8)	1.03	1.04
North		<b>8.8</b>	(6.6, 11.7)	0.81	1.07
5) Education				NS	NS
Less Than High School	(Comparison Group)	<b>7.8</b>	(5.1, 11.9)	—	—
Completed High School		<b>13.1</b>	(10.3, 16.4)	1.76*	0.88
Some College or University		<b>12.3</b>	(9.9, 15.2)	1.65	0.70
University Degree		<b>10.2</b>	(7.8, 13.2)	1.33	0.69
6) Income				*	NS
< \$30,000	(Comparison Group)	<b>10.4</b>	(7.6, 14.0)	—	—
\$30,000 - \$49,000		<b>9.8</b>	(6.9, 13.6)	0.94	0.67
\$50,000 - \$79,000		<b>13.3</b>	(10.3, 17.1)	1.33	0.96
\$80,000+		<b>14.5</b>	(11.4, 18.2)	1.46	1.11
Not Stated		<b>7.4</b>	(5.1, 10.6)	0.69	0.68

Notes: † Estimate suppressed or unstable; \*p<.05; \*\*p<.01; \*\*\*p<.001.

Asterisks in shaded rows indicate the significance of the group effect, based on Wald test.

Odds greater than 1.0 indicate that drug use is more likely to occur in the group being compared to the comparison group; odds less than 1.0 indicate that drug use is less likely to occur in the group being compared to the comparison group.

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

Table 5.1.4 Percentage Reporting *Dependence on Cannabis* in the Past 12 Months, Ontarians Aged 18 +, 2001

Cannabis Dependence Criteria	Total Sample N= 2627	Past year users N=284
1. Strong urge or desire to use cannabis	2.3	20.5
2. Tried to stop or cut down, but found you could not	†0.5	†4.4
3. Felt sick or found yourself shaking when you cut down or stopped using cannabis	†0.3	†2.2
4. Found that your usual amount of cannabis had much less effect on you than it once did	1.6	14.7
5. Gave up or neglected pleasures or interests in favour of cannabis	†0.9	8.0
6. Kept on using cannabis although you had a health problem caused or made worse by cannabis	†0.6	†5.1
Percentage meeting dependency criteria (i.e. three or more of the six criteria)	†0.5	†4.9
95% confidence interval	(0.3, 1.0)	(2.8, 8.3)

Notes: † Estimate unstable.

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

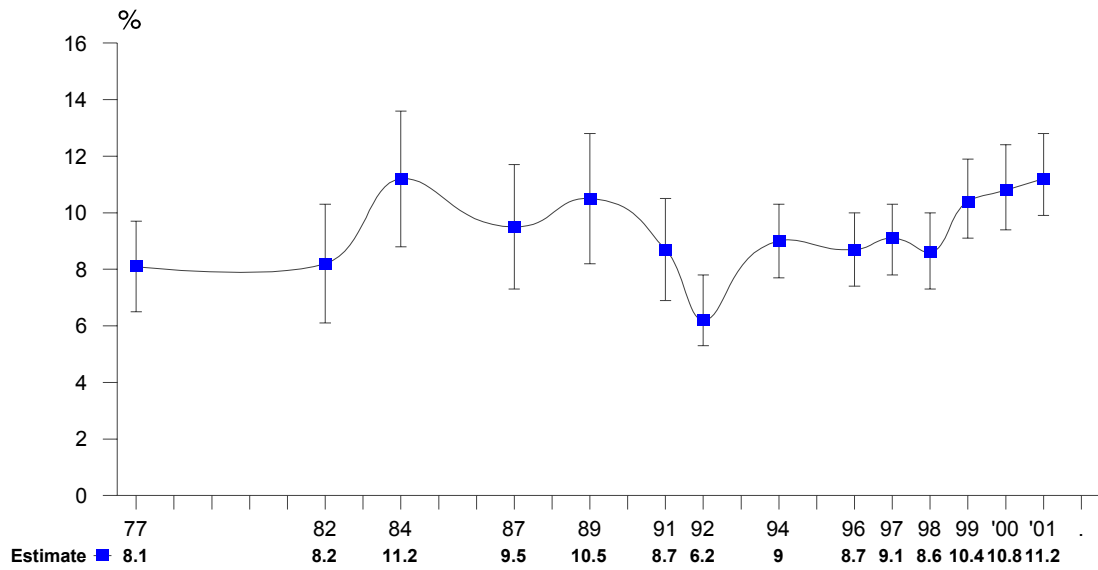
Table 5.1.5: Percentage *Using Cannabis* in the Past 12 Months by Demographic Characteristic, Ontarians Aged 18+, 1977-2001

	1977	1982	1984	1987	1989	1991	1992	1994	1996	1997	1998	1999	2000	2001
(N=)	(1059)	(1026)	(1043)	(1075)	(1098)	(1047)	(1058)	(2022)	(2721)	(2776)	(2509)	(2436)	(2406)	(2627)
Total Sample	8.1	8.2	11.2	9.5	10.5	8.7	6.2	9.0	8.7	9.1	8.6	10.4	10.8	11.2
±% <sup>a</sup>	(±1.6)	(±2.1)	(±2.4)	(±2.2)	(±2.3)	(±1.8)	(±1.7)	(±1.3)	(±1.3)	(±1.3)	(±1.4)	(±1.4)	(±1.4)	(±1.4)
<b>Gender</b>														
Men	11.2	12.3	15.6	12.3	13.0	11.5	9.1	11.4	12.6	11.4	12.1	13.2	14.3	15.4
Women	4.5	4.1	7.1	6.8	8.2	6.0	3.6	7.0	5.3	7.0	5.4	7.8	7.7	7.3
<b>Age</b>														
18 - 29 years	22.6	22.7	28.5	20	24.6	19.9	13.3	19.6	18.3	21.4	25.2	27.1	28.2	26.8
30 - 39 years	3.9	4.2	9.5	11.6	11.8	9.1	6.6	10.2	11.3	9.8	8.2	10.3	12.3	15.8
40 - 49 years	2.3	†	2.2	5.4	3.9	3.0	2.4	4.3	6.1	4.3	4.6	6.8	6.4	7.2
50 - 64 years	1.2	1.3	1.8	†	1.4	†	1.3	†	†	1.7	1.4	4.1	†2.9	†3.3
65+ years	†	†	†	†	†	†	†	†	†	†	†	†	†	†
<b>Marital Status</b>														
Never Married	—	—	—	—	—	20.2	13.7	20.9	19.5	20.1	22.9	25.3	26.4	25.4
Married	—	—	—	—	—	4.0	3.5	4.1	4.9	5.1	4.3	6.4	6.2	6.7
Previously Married	—	—	—	—	—	6.5	6.3	8.6	6.7	6.0	3.9	6.2	†6.0	9.0
<b>Region (Postal Code)</b>														
Toronto	—	—	—	—	—	12.3	6.7	9.9	10.9	11.8	13.3	10.3	14.0	14.5
Toronto Outskirts	—	—	—	—	—	7.3	6.5	8.0	9.6	9.1	8.4	11.0	10.5	9.0
West	—	—	—	—	—	10.3	4.2	9.5	7.3	8.0	7.6	11.3	10.0	11.8
East	—	—	—	—	—	5.1	7.1	8.2	7.9	11.0	6.9	9.2	9.1	10.3
North	—	—	—	—	—	3.8	5.6	7.8	6.3	5.3	7.1	8.9	8.4	9.5
<b>Education</b>														
Less Than High School	—	—	—	—	—	6.3	6.3	8.5	6.1	9.8	6.8	7.7	10.4	†7.8
Completed High School	—	—	—	—	—	9.8	5.2	9.6	9.5	10.4	10.7	10.6	9.5	13.1
Some College or University	—	—	—	—	—	10.7	6.7	10.3	11.3	9.0	10.2	13.5	15.7	12.3
University Degree	—	—	—	—	—	7.6	7.2	7.0	7.0	7.4	5.6	8.5	7.0	10.2

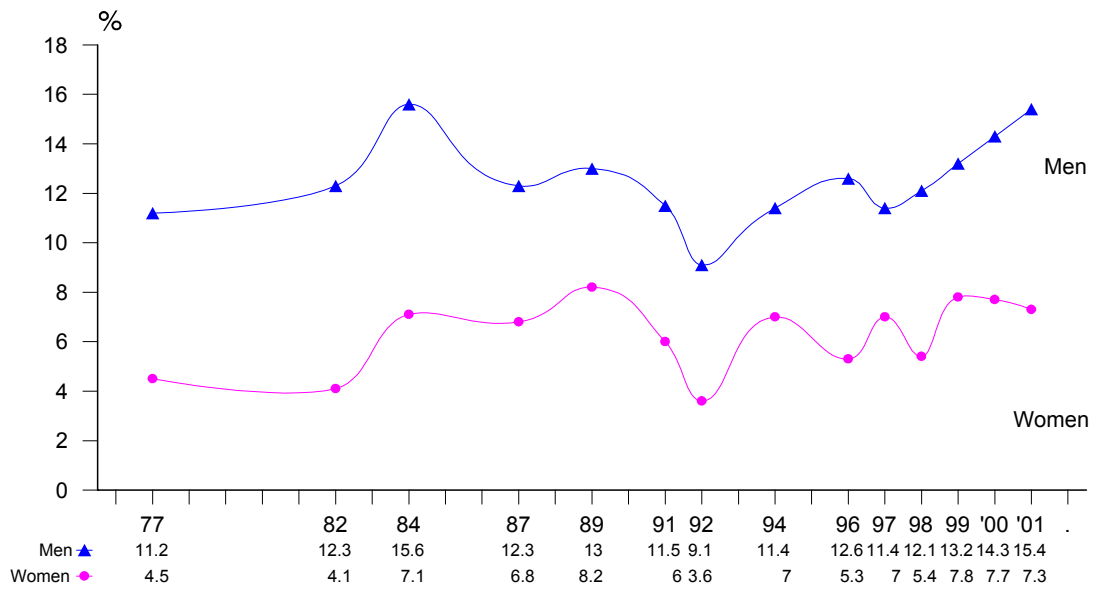
Notes: <sup>a</sup> 95% confidence interval; † Estimate suppressed or unstable.; — data not available.  
 There are no significant differences (p<.05) among the total sample or subgroups between 2000 and 2001.  
 Trend Analysis 1977-2001 for total sample: linear p <.05; non-linear p <.05

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

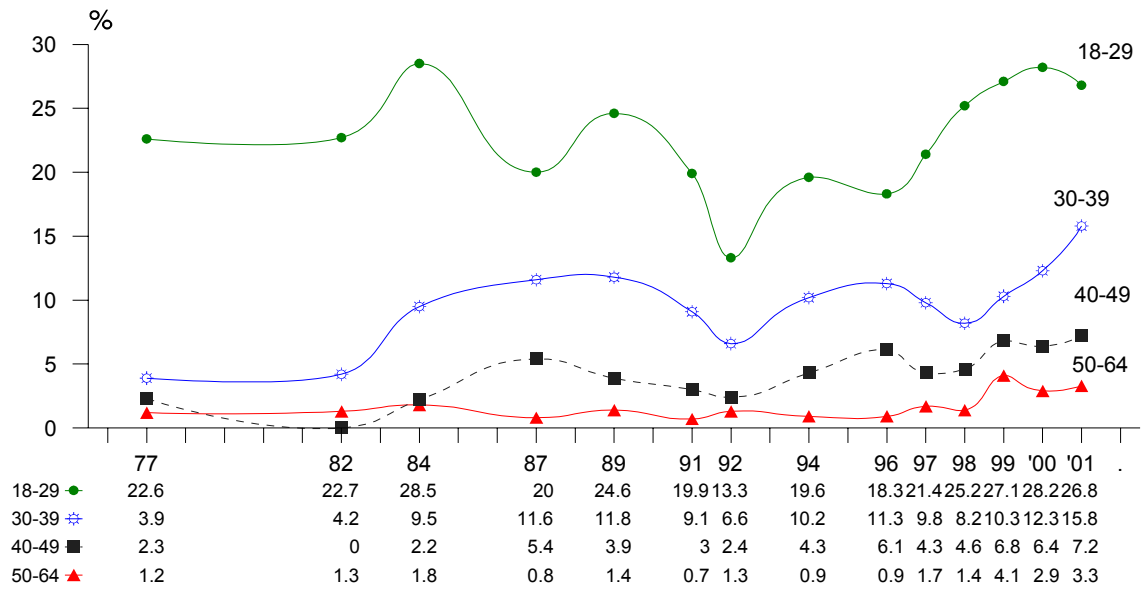
**Figure 5.1**  
**Percentage Using Cannabis Past 12 Months, Ontarians Aged 18+, 1977- 2001**



**Figure 5.2**  
**Percentage Using Cannabis Past 12 Months by Gender, Ontarians Aged 18+, 1977- 2001**

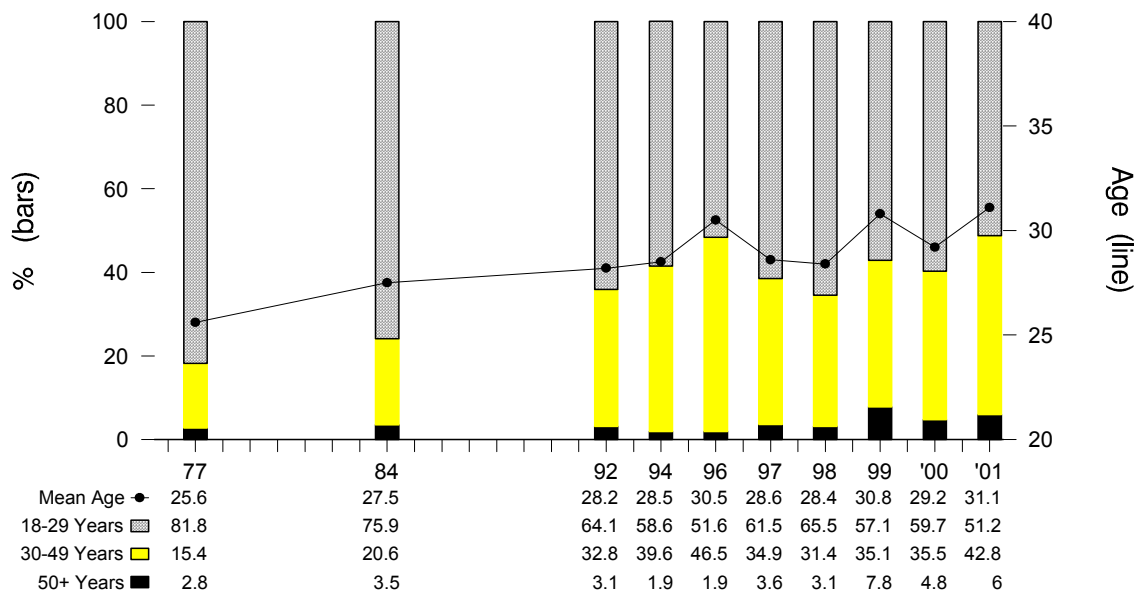


**Figure 5.3**  
**Percentage Using Cannabis by Age, Ontarians Aged 18+, 1977- 2001**



Note: 65+ not displayed due to zero prevalence

**Figure 5.4**  
**Age Distribution of Past Year Cannabis Users, Ontarians Aged 18+, 1977-2001**



## 6. MENTAL HEALTH

### 6.1 Elevated Psychological Distress

To measure overall mental wellness we used the 12-item General Health Questionnaire (GHQ 12) (Goldberg & Hillier, 1979) a screening instrument that evaluates two overarching domains: depression/ anxiety and social functioning. Although the GHQ does not provide a clinical determination of psychiatric disorder, it does provide an indication of an individual's risk of future problems.

The CAMH Monitor first incorporated the GHQ into the 1999 survey. The item wording in 1999 took the form: "Over the past month, have you...." versus the standard GHQ wording which is "Over the past weeks, have you...". In 2000, an experiment involving an investigation of the impact of question wording on the GHQ was introduced (see Adlaf et al., 2001b). Respondents were randomly assigned so that for half of the sample the item wording took the form "Over the past few weeks, have you ..." and for the other half the item wording was "Over the past month, have you ...". An analysis regarding wording differences (past few weeks vs. past month) revealed that "past month" items resulted in higher estimates than those based on "past few weeks". Therefore the standard GHQ wording was used in the 2001 survey, and trends are available only for 2000 and 2001.

In addition to an overall score, the GHQ also yields a summary statistic to estimate the percentage experiencing elevated psychological distress (defined as reporting at least 3 of the 12 symptoms).

**2001** ..... Tables 6.1- 6.2; Fig 6.1-6.3

Approximately 12.7% (from 11.3% to 14.3%) of Ontario adults report elevated psychological distress during the past few weeks.

- Only gender was significantly related to elevated psychological distress. Women were more likely to report psychological distress compared to men (15% vs. 10.3%).
- Although elevated psychological distress is higher in Toronto compared to the provincial average, the difference was not statistically significant after controlling for other factors.

There were no dominant differences for age, marital status, education or income, after adjusting for other factors.

**Short Term Trends** ..... Table 6.3

Between 2000 and 2001, elevated psychological distress remained unchanged at 12.7%. However, a significant decline was evident among respondents in the Central East region (17.6% in 2000 vs. 10.6% in 2001). No other significant subgroup changes are evident.

Table 6.1: Percentage Reporting *Psychological Distress Symptoms* During the Past Few Weeks, Ontarians, Aged 18+, 2001

Over the past few weeks, ...		Total Sample (N=2627)
1. ... have you been able to concentrate on whatever you're doing?	0. Better than usual	65
	1. Same as usual	85.9
	2. Less than usual	6.5
	3. Much less than usual	1.1
	Mean (SE)	1.02 (.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	81.5
	2. Less useful than usual	5.6
	3. Much less useful	0.8
	Mean (SE)	0.95 (.01)
3. ... have you felt capable of making decisions about things?	0. More so than usual	10.1
	1. Same as usual	86.5
	2. Less so than usual	2.8
	3. Much less capable	0.7
	Mean (SE)	0.94 (.01)
4. ... have you been able to enjoy your day-to-day activities ?	0. More so than usual	7.7
	1. Same as usual	79.7
	2. Less so than usual	10.8
	3. Much less than usual	1.8
	Mean (SE)	1.07 (.01)
5. ... have you been able to face up to your problems?	0. More so than usual	11.6
	1. Same as usual	84.1
	2. Less so than usual	3.6
	3. Much less than usual	0.7
	Mean (SE)	0.93 (.01)
6. ... have you been feeling reasonably happy?	0. More so than usual	13.3
	1. Same as usual	77.3
	2. Less so than usual	8.2
	3. Much less than usual	1.2
	Mean (SE)	0.97 (.01)
7. ... have you lost much sleep because of worry?	0. Not at all	50.1
	1. No more than usual	38.4
	2. Rather more than usual	8.8
	3. Much more than usual	2.7
	Mean (SE)	0.64 (.02)

8. ... have you felt constantly under strain?	0. Not at all	37.3
	1. No more than usual	44.6
	2. Rather more than usual	14.5
	3. Much more than usual	3.6
	Mean (SE)	0.84 (.02)
9. ... have you felt you could not overcome your difficulties?	0. Not at all	59.1
	1. No more than usual	36.5
	2. Rather more than usual	2.8
	3. Much more than usual	1.6
	Mean (SE)	0.45 (.01)
10. ... have you been feeling unhappy and depressed?	0. Not at all	65.6
	1. No more than usual	26.2
	2. Rather more than usual	6.6
	3. Much more than usual	1.6
	Mean (SE)	0.44 (.02)
11. ... have you been losing confidence in yourself?	0. Not at all	73.7
	1. No more than usual	21.2
	2. Rather more than usual	4.1
	3. Much more than usual	0.1
	Mean (SE)	0.32 (.01)
12. ... have you been thinking of yourself as a worthless person?	0. Not at all	85.4
	1. No more than usual	12.4
	2. Rather more than usual	1.4
	3. Much more than usual	1.0
	Mean (SE)	0.17 (.01)

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

Table 6.2: Percentage Reporting *Psychological Distress (GHQ 3+)* During the Past Few Weeks, by Demographic Characteristics, Ontarians, Aged 18+, 2001

		%	95%CI	Unadjusted Odds Ratio	Adjusted Odds Ratio for Factors 1-6
Total Sample		<b>12.7</b>	(11.3, 14.3)		
1) Gender				**	**
Women	(Comparison Group)	<b>15.0</b>	(12.9, 17.3)	—	—
Men		<b>10.3</b>	(8.5, 12.5)	0.65	0.65
2) Age				NS	NS
18-29	(Comparison Group)	<b>13.4</b>	(10.2, 17.6)	—	—
30-39		<b>14.6</b>	(11.6, 18.4)	1.10	1.07
40-49		<b>13.3</b>	(10.5, 16.7)	0.98	1.00
50-64		<b>12.0</b>	(9.0, 15.8)	0.88	0.86
65+		<b>9.7</b>	(7.0, 13.3)	0.69	0.53*
3) Marital Status				NS	NS
Married/Living with Partner	(Comparison Group)	<b>12.0</b>	(10.3, 14.0)	—	—
Previously Married		<b>15.8</b>	(12.4, 20.1)	1.37	1.30
Never Married		<b>13.0</b>	(10.0, 16.7)	1.09	0.98
4) Public Health Regions				NS	NS
Toronto	(vs. Provincial Average)	<b>15.5</b>	(11.9, 19.9)	1.32*	1.31
Central South		<b>12.0</b>	(8.0, 17.6)	0.98	0.97
Central West		<b>11.2</b>	(8.1, 15.3)	0.91	0.93
South West		<b>12.1</b>	(9.1, 15.9)	0.99	0.97
Central East		<b>10.6</b>	(7.6, 14.7)	0.86	0.91
East		<b>14.8</b>	(11.6, 18.7)	1.25	1.22
North		<b>9.9</b>	(7.5, 12.9)	0.79	0.76
5) Education				NS	NS
Less than high school	(Comparison Group)	<b>13.5</b>	(9.9, 18.3)	—	—
Completed high school		<b>11.6</b>	(9.1, 14.8)	0.84	0.76
Some college or university		<b>13.7</b>	(11.2, 16.6)	1.01	0.92
University degree		<b>12.4</b>	(9.8, 15.5)	0.90	0.84
6) Income				NS	NS
< \$30,000	(Comparison Group)	<b>16.9</b>	(13.4, 21.2)	—	—
\$30,000-\$49,000		<b>14.2</b>	(10.8, 18.4)	0.81	0.83
\$50,000-\$79,000		<b>11.4</b>	(8.6, 15.0)	0.63	0.64
\$80,000+		<b>11.4</b>	(8.8, 14.7)	0.63	0.64
Not stated		<b>11.7</b>	(8.9, 15.3)	0.65	0.63

Note: \*p<.05; \*\*p<.01; \*\*\*p<.001

Asterisks in shaded rows indicate the significance of the group effect, based on Wald test.

Odds greater than 1.0 indicate that drug use is more likely to occur in the group being compared to the comparison group.

Odds less than 1.0 indicate that drug use is less likely to occur in the group being compared to the comparison group.

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

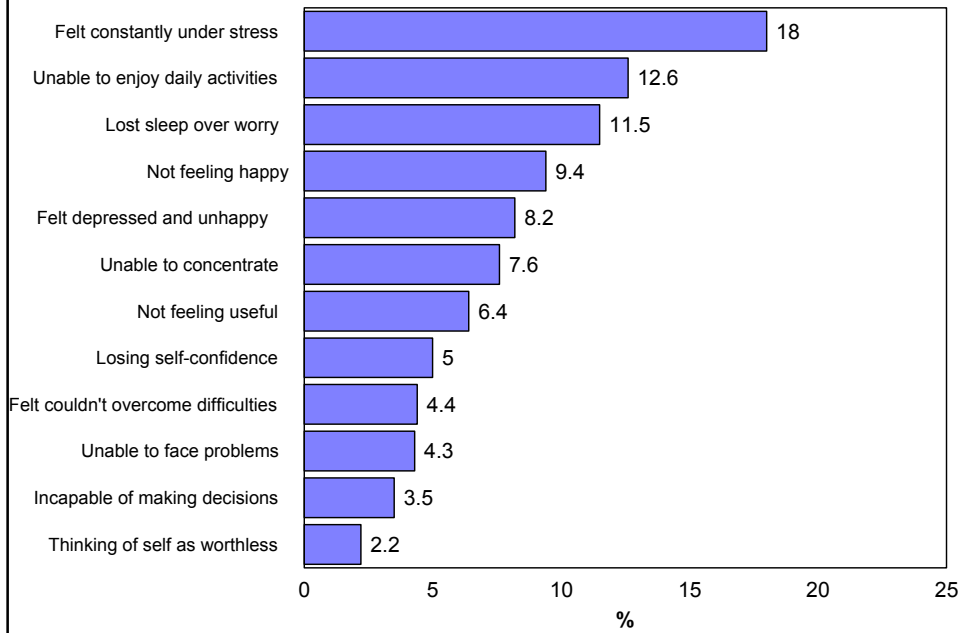
Table 6.3: Percentage Reporting *Psychological Distress (GHQ 3+)* During the Past 12 Months, by Demographic Characteristics, Ontarians, Aged 18+, 2000-2001

	2000 <sup>1</sup>	2001
(N=)	(1202)	(2627)
Total Sample	12.7	12.7
± %	(± 2.1)	(± 1.5)
<b>Gender</b>		
Men	11.4	10.3
Women	13.9	15.0
<b>Age</b>		
18-29	17.7	13.4
30-39	13.0	14.6
40-49	16.4	13.3
50-64	8.8	12.0
65+	6.7	9.7
<b>Marital Status</b>		
Married/Living with Partner	10.0	12.0
Previously Married	19.2	15.8
Never Married	15.2	13.0
<b>Public Health Region</b>		
Toronto	12.2	15.5
Central South	11.9	12.0
Central West	<b>10.5</b>	11.2
South West	7.2	12.1
Central East	17.6	10.6*
East	16.6	14.8
North	12.9	9.9
<b>Education</b>		
Less Than High School	12.7	13.5
Completed High School	12.0	11.6
Some College or University	15.1	13.7
University Degree	10.5	12.4

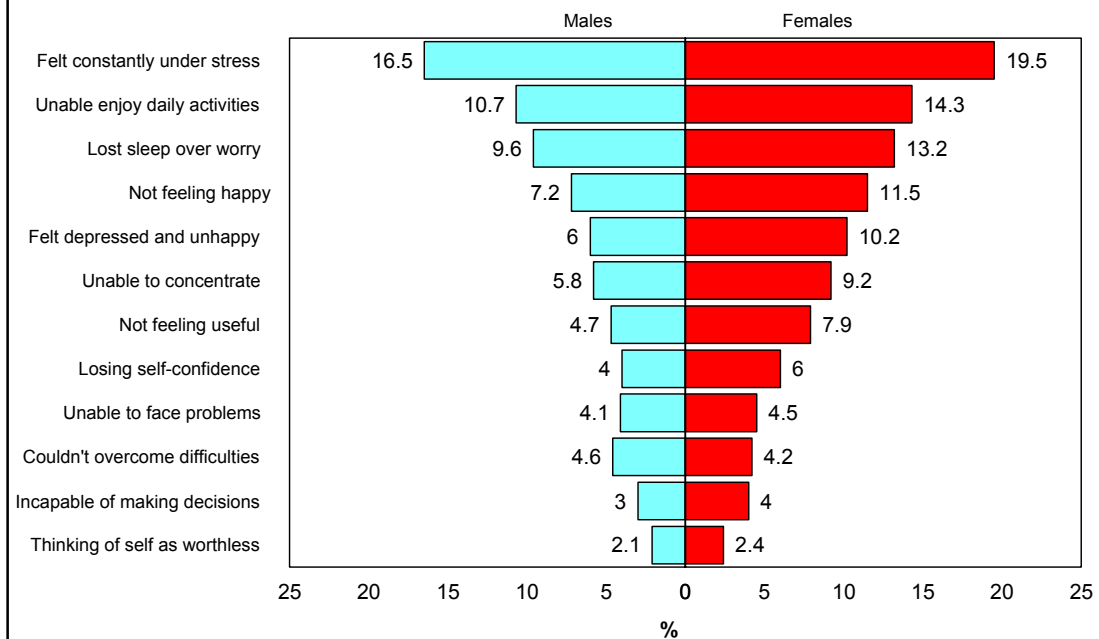
Notes: <sup>1</sup> based on random half sample; \*p<.01; based on a confidence interval around the difference between 2000 and 2001 proportions.

Source: CAMH Monitor, Centre for Addiction and Mental Health

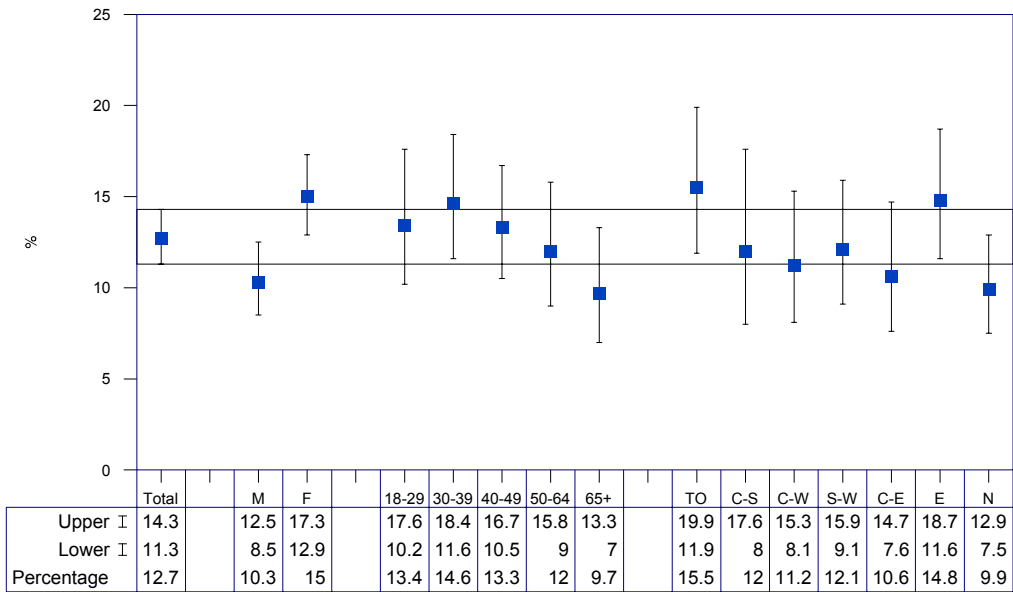
**Figure 6.1**  
**Percentage Reporting Psychological Distress Symptoms (GHQ12) over the Past Few Weeks, Ontarians Aged 18+, 2001**



**Figure 6.2**  
**Percentage Reporting Psychological Distress Symptoms (GHQ12) over the Past Few Weeks by Gender, Ontarians Aged 18+, 2001**



**Figure 6.3**  
**Percentage Reporting Psychological Distress (GHQ 3+) by Gender, Age, and Region, Ontarians Aged 18+, 2001**



Vertical bars represent 95% confidence intervals; horizontal bar represents 95% confidence interval for total estimate

## 6.2 Prescribed 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 received a prescribed medication to treat anxiety or depression. Thus, these estimates do not reflect the total prevalence of anxiety or depressive disorders.

**2001** .....Table 6.4–6.5

### Anxiety

About 4.7% (3.9% to 5.7%) report using a prescribed medication for anxiety during the 12 months before the survey and 3.2% (2.6% to 4.0%) used such medication during the past seven days.

Only gender is significantly related to both past year and past seven day use.

- Women are significantly more likely than men to report use (6.3% vs 3.4% and 4.3% vs 2.0%, respectively).

In addition, anti-anxiety medication use during the past 12 months is significantly related to age:

- Use is highest among those aged 40-49 and lowest among those aged 18-29.

Although past seven day use is not significantly different among the public health regions, anti-anxiety medication use is significantly lower in Toronto compared to the provincial average.

### Depression

About 4.6% (3.8% to 5.5%) report use of a prescribed medication for depression during the 12 months before the survey and 3.0% (2.3% to 3.7%) report use during the past seven days.

For both past year and past seven day period, use is significantly related to gender and age.

- Women are two times more likely than men to report use of depression medications.
- Those aged 18 to 29 years report lower use than older respondents.
- In addition, past 12 month use is significantly related to region. Use is lowest in the Central West (1.6%) and highest in the Eastern region (8.0%).

### Short Term Trends ..... Tables 6.6-6.7

Changes in use of prescribed medication for anxiety and depression are available for the years 1997, 1999 and 2001.

As seen in Tables 6.6 and 6.7, there have not been any dominant changes in use of these substances between 1999 and 2001. Anxiety medication remained virtually unchanged, varying from 4.5% to 4.7%. Depression medication use increased slightly between 3.6% in 1999 to 4.6% in 2001 but the difference was not significant.

Subgroup changes are also not evident in these data.

Table 6.4: Percentage **Reporting using Prescription Medication to Treat Anxiety or Panic Attacks** During the Past 12 Months and the Past 7 Days, Adjusted Group Differences, Ontarians Aged 18+, 2001

	Past 12 Months Use			Past 7 Days Use		
	%	95% CI	Adjusted Odds Ratio for factors 1-6	%	95% CI	Adjusted Odds Ratio for factors 1-6
Total Sample	4.7	(3.9, 5.7)		3.2	(2.6, 4.0)	
1) Gender			**			**
Women (Comparison Group)	6.3	(5.0, 7.8)	—	4.3	(3.3, 5.6)	—
Men	3.4	(2.2, 4.3)	0.48	†2.0	(1.3, 3.1)	0.49
2) Age			*			NS
18-29 (Comparison Group)	†2.5	(1.4, 4.5)	—	†1.9	(1.0, 3.6)	—
30-39	†5.1	(3.5, 7.4)	2.16*	†3.6	(2.2, 5.7)	1.92
40-49	6.3	(4.5, 8.7)	2.72**	†4.0	(2.7, 6.1)	2.17*
50-64	5.9	(4.0, 8.7)	2.64**	†3.6	(2.2, 5.7)	1.95
65+	†4.1	(2.5, 6.8)	1.54	†3.2	(1.8, 5.8)	1.38
3) Marital Status			NS			NS
Married/Living with Partner (Comparison Group)	4.4	(3.4, 5.7)	—	†3.0	(2.2, 4.1)	—
Previously Married	8.3	(5.9, 11.5)	1.86*	5.6	(3.7, 8.5)	1.75
Never Married	†3.6	(2.4, 5.5)	1.31	†2.4	(1.4, 3.9)	1.16
4) Public Health Regions			NS			NS
Toronto (vs. Provincial Average)	†3.1	(1.7, 5.4)	0.62	†1.4	(0.6, 3.0)	0.43*
Central South	6.4	(3.7, 10.9)	1.30	5.1	(2.7, 9.5)	1.82
Central West	†2.7	(1.4, 5.2)	0.54*	†2.0	(0.9, 4.4)	0.61
South West	5.3	(3.5, 8.1)	1.17	†3.7	(2.2, 6.1)	1.18
Central East	5.8	(3.6, 9.1)	1.27	†4.3	(2.5, 7.2)	1.42
East	6.6	(4.6, 9.5)	1.36	†4.6	(2.9, 7.1)	1.39
North	5.5	(3.8, 7.8)	1.08	†3.6	(2.3, 5.5)	1.01
5) Education			NS			NS
Less than high school (Comparison Group)	†3.4	(2.0, 5.6)	—	†2.7	(1.5, 4.6)	—
Completed high school	5.5	(3.9, 7.5)	1.82	†3.9	(2.7, 5.7)	1.67
Some college or university	4.6	(3.2, 6.3)	1.37	†3.2	(2.2, 4.7)	1.25
University degree	5.0	(3.5, 7.2)	1.78	†2.8	(1.7, 4.7)	1.35
6) Income			NS			NS
> \$30,000 (Comparison Group)	6.7	(4.7, 9.5)	—	5.0	(1.4, 7.2)	—
\$30,000-\$49,000	4.9	(3.2, 7.5)	0.78	†3.8	(2.3, 6.4)	0.84
\$50,000-\$79,000	5.5	(3.8, 8.0)	0.92	†3.8	(2.3, 6.0)	0.86
\$80,000+	†4.7	(3.2, 6.9)	0.75	†2.9	(1.8, 4.7)	0.68
Not stated	†2.5	(1.4, 4.5)	0.42*	†1.3	(0.7, 2.6)	0.30**

Note: † Estimate unstable or suppressed; \*p<.05; \*\*p<.01; \*\*\*p<.001  
Asterisks in shaded rows indicate the significance of the group effect, based on Wald test.  
Odds greater than 1.0 indicate that drug use is more likely to occur in the group being compared to the comparison group.  
Odds less than 1.0 indicate that drug use is less likely to occur in the group being compared to the comparison group.

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

Table 6.5: Percentage *Reporting using Prescription Medication to Treat Depression* During the Past 12 Months and During the Past 7 Days, Adjusted Group Differences, Ontarians Aged 18+, 2001

	Past 12 Months Use			Past 7 Days Use		
	%	95% CI	Adjusted Odds Ratio for factors 1-6	%	95% CI	Adjusted Odds Ratio for factors 1-6
Total Sample	4.6	(3.8, 5.5)		3.0	(2.3, 3.7)	
<b>1) Gender</b>			***			**
Women (Comparison Group)	6.2	(5.0, 7.8)	—	4.2	(3.2, 5.5)	—
Men	2.8	(2.0, 4.0)	0.46	†1.6	(1.0, 2.6)	0.41
<b>2) Age</b>			**			*
18-29 (Comparison Group)	†1.9	(1.0, 3.5)	—	†1.2	(0.6, 2.6)	—
30-39	†4.9	(3.3, 7.1)	2.73**	†3.6	(2.3, 5.6)	3.19**
40-49	6.9	(5.0, 9.4)	4.14***	†4.1	(2.7, 6.0)	3.72**
50-64	†4.5	(3.0, 6.8)	2.63*	†3.4	(2.1, 5.6)	3.20*
65+	†4.7	(2.8, 7.8)	2.21	†2.9	(1.4, 5.7)	2.18
<b>3) Marital Status</b>			NS			NS
Married/Living with Partner (Comparison Group)	4.3	(3.4, 5.5)	—	†2.8	(2.0, 3.8)	—
Previously Married	8.9	(6.2, 12.6)	1.68**	†5.7	(3.6, 9.1)	1.92*
Never Married	†3.0	(2.0, 4.6)	1.14	†2.0	(1.3, 3.4)	1.24
<b>4) Public Health Regions</b>			*			NS
Toronto (vs. Provincial Average)	†3.6	(2.1, 6.0)	0.80	†2.2	(1.1, 4.4)	0.84
Central South	†6.9	(3.9, 11.7)	1.45	†4.1	(2.1, 8.1)	1.56
Central West	†1.6	(0.7, 3.9)	0.36*	†1.2	(0.4, 3.4)	0.41
South West	†4.1	(2.6, 6.5)	0.92	†3.0	(1.7, 5.1)	1.04
Central East	†4.4	(2.6, 7.4)	1.05	†2.9	(1.6, 5.4)	1.06
East	8.0	(5.7, 11.2)	1.84***	†5.3	(3.5, 8.0)	1.83*
North	†6.0	(4.2, 8.5)	1.23	†3.3	(2.0, 5.3)	1.03
<b>5) Education</b>			NS			NS
Less than high school (Comparison Group)	†3.7	(2.3, 5.8)	—	†2.1	(1.2, 3.8)	—
Completed high school	†4.9	(3.5, 6.8)	1.55	†3.6	(2.4, 5.4)	1.88
Some college or university	5.8	(4.3, 7.9)	1.75	†3.7	(2.5, 5.3)	1.75
University degree	†3.5	(2.2, 5.4)	1.10	†2.0	(1.1, 3.8)	1.07
<b>6) Income</b>			NS			NS
> \$30,000 (Comparison Group)	6.5	(4.6, 9.2)	—	†4.3	(2.8, 6.5)	—
\$30,000-\$49,000	6.1	(4.0, 9.0)	0.96	†3.9	(2.3, 6.5)	1.02
\$50,000-\$79,000	†5.4	(3.6, 8.0)	0.94	†3.9	(2.4, 6.2)	1.14
\$80,000+	†3.2	(2.0, 5.0)	0.57	†2.4	(1.4, 6.0)	0.74
Not stated	†2.9	(1.8, 4.8)	0.44*	†1.2	(0.6, 2.3)	0.33*

Note: † Estimate unstable or suppressed; \*p<.05; \*\*p<.01; \*\*\*p<.001  
Asterisks in shaded rows indicate the significance of the group effect, based on Wald test.  
Odds greater than 1.0 indicate that drug use is more likely to occur in the group being compared to the comparison group.  
Odds less than 1.0 indicate that drug use is less likely to occur in the group being compared to the comparison group.

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

Table 6.6: Percentage *Reporting using Prescription Medication to Treat Anxiety or Panic Attacks* During the Past 12 Months, Ontarians Aged 18+, 1997-2001

(N=)		1997	1999		2001	
		(2568)	(2436)			
		%	%	95% CI	%	95% CI
Total Sample		4.7	4.5	(3.7, 5.4)	4.7	(3.9, 5.7)
1) Gender						
Women	(Comparison Group)	5.6	6.0	(4.8, 7.5)	6.3	(5.0, 7.8)
Men		3.7	2.8	(2.0, 4.1)	3.1	(2.2, 4.3)
2) Age						
18-29	(Comparison Group)	1.7	†2.3	(1.3, 3.9)	†2.5	(1.4, 4.5)
30-39		4.8	4.0	(2.6, 6.1)	†5.1	(3.5, 7.4)
40-49		7.8	7.4	(5.2, 10.4)	6.3	(4.5, 8.7)
50-64		5.2	†4.2	(2.7, 6.4)	5.9	(4.0, 8.7)
65+		4.9	†5.2	(3.4, 8.0)	†4.1	(2.5, 6.8)
3) Marital Status						
Married/Living with Partner	(Comparison Group)	4.4	4.5	(3.5, 5.8)	4.4	(3.4, 5.7)
Previously Married		10.4	6.9	(5.0, 9.6)	8.3	(5.9, 11.5)
Never Married		2.7	2.6	(1.6, 4.3)	†3.6	(2.4, 5.5)

Note: CI = 95% confidence interval; † estimate unstable or suppressed.

There are no statistically significant ( $p < .05$ ) differences among the total sample or subgroups between 1999 and 2001

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

Table 6.7: Percentage *Reporting using Prescription Medication to Treat Depression* During the Past 12 Months, Ontarians Aged 18+, 1997-2001

(N=)		1997	1999		2001	
		(2568)	%	95% CI	%	95% CI
Total Sample		3.9	3.6	(2.9, 4.4)	4.6	(3.8, 5.5)
<b>1) Gender</b>						
Women	(Comparison Group)	4.9	5.2	(4.1, 6.5)	6.2	(5.0, 7.8)
Men		2.8	†1.9	(1.2, 2.9)	2.8	(2.0, 4.0)
<b>2) Age</b>						
18-29	(Comparison Group)	2.0	†2.5	(1.4, 4.3)	†1.9	(1.0, 3.5)
30-39		3.6	†4.1	(2.8, 6.1)	†4.9	(3.3, 7.1)
40-49		6.9	†4.6	(3.1, 6.9)	6.9	(5.0, 9.4)
50-64		4.1	†3.5	(2.0, 5.8)	†4.5	(3.0, 6.8)
65+		4.1	†3.1	(1.8, 5.1)	†4.7	(2.8, 7.8)
<b>3) Marital Status</b>						
Married/Living with Partner	(Comparison Group)	3.2	3.2	(2.4, 4.3)	4.3	(3.4, 5.5)
Previously Married		8.7	6.1	(4.3, 8.6)	8.9	(6.2, 12.6)
Never Married		3.3	†3.0	(1.9, 4.8)	†3.0	(2.0, 4.6)

Note: CI = 95% confidence interval; † estimate unstable or suppressed.  
 There are no statistically significant ( $p < .05$ ) differences among the total sample or subgroups between 1999 and 2001  
 Source: The CAMH Monitor, Centre for Addiction and Mental Health

## 7. GAMBLING

### 7.1 Gambling Behaviour and Gambling Problems

Gambling behaviour was measured using several gambling activity frequency items. Respondents were asked questions about their involvement in 9 types of gambling: lottery, sports select, horse racing, bingo, casino, sports pool, slots at a race-track, cards playing, and internet gambling (Table 7.1, Figure 7.1-7.2).

To assess gambling problems, the CAMH Monitor used 5 items from the 28-item South Oaks Gambling Screen (SOGS) (Figure 7.3). The SOGS has been widely used in gambling problems research (Lesieur & Blume, 1993), but the 28-item scale is lengthy for use in a general population multi-purpose survey. Because our focus is on monitoring trends over time, the SOGS5 used in our survey assesses events over the past 12 months.

The SOGS5 consists of the following items:

In the past 12 months...:

1. Was there ever a time when you gambled more than you intended to?
2. Have people criticized your gambling?
3. Have money arguments centred on your gambling?
4. Have you claimed to be winning money gambling when you were not?

5. Have you felt guilty about the way you gamble or what happens when you gamble?

A score of 2+ on the SOGS5 is used to indicate problem or pathological gambling (no distinction can be made in our study between problem or pathological gamblers).

#### Technical Information

This short version of the SOGS was first used to measure gambling problems in a community impact study regarding the opening of a casino in Niagara Falls, Ontario (Room, Turner, & Ialomiteanu, 1999). From an item analysis of the full SOGS (28 items) used in a 1995 provincial survey (Ferris, Stirpe, & Ialomiteanu, 1996), five items were selected for the short scale.

Previous research (Room et al., 1999) showed that the SOGS5 correlated 0.87 with the SOGS28, and also maximized correlations with gambling behaviour, gambling expenditures and DSM-IV gambling symptoms. All respondents that scored in the pathological range (5+) on the SOGS28, scored 2 and above on the SOGS5 and nearly all the people that scored 2 and above on the SOGS5 were in the problem area (3+) on the SOGS28.

## Gambling Behaviour

**2001**.....Table 7.1; Fig. 7.1-7.2

Overall, 75% (from 72.2% to 77.6%) of Ontario adults have participated in at least one gambling activity in the past 12 months. The most popular forms of gambling among Ontario adults were lotteries (66% ), followed by casino gambling (27.3%).

Gambling varies by sex. Men are significantly more likely than women to gamble on any activity (80.3% vs. 70.4%, respectively), to buy lottery tickets (70.4% vs. 62.4%), to bet in sports pools (17.2% vs. 7.2%), to play cards (14.4% vs. 6.8%), and to buy sports lottery tickets (14.2% vs. 7.4%).

**Short Term Trends**..... Table 7.1

The percentage of Ontario adults reporting any gambling activity declined significantly between 2000 and 2001, from 80.1% to 75.0%. This decline occurred mostly among women (from 78.6% to 70.4%).

In terms of specific activities, there was a significant decline in participation rates for: lotteries (from 73% to 66.1%), casinos (from 33.7% to 27.3%), sports pools (from 18.1% to 11.7%), cards (from 15.3% to 10.3%), sports lottery (from 13.6 to 10.6%), and internet gambling (from 5.3% to 3.2%). This decline occurred mostly among women for lotteries, cards, and internet gambling and among both men and women for casinos and sports pools.

## Gambling Problems

**2001**.....Table 7.2 ; Fig. 7.3-7.4

Approximately 2.8% (from 2.0% to 4.1%) of Ontario adults report two or more gambling problems during the past 12 months.

- Although men were more likely to report gambling problems than women (3.3% vs. 2.4%), the difference was not statistically significant.
- Only education was significantly related to gambling problems. Gambling problems are highest among those with only a high school diploma and lowest among those with university degree.
- No other significant differences were evident.

**Short Term Trends**..... Table 7.3

Between 2001 and 2000, rates of pathological gambling remained virtually unchanged (2.8% vs. 2.6%). Further, no subgroup differences are evident.

**Table 7.1:** Percentage Reporting *Gambling Participation* During the Past 12 Months, by Gender and Specific Gambling Activities, Ontarians, Aged 18+, 2000-2001

(N=)	2000		2001	
	(1294)	95% CI	(1395)	95% CI
Gambling (any participation)	<b>80.1</b>	(77.4, 82.5)	<b>75.0**</b>	(72.2, 77.6)
Males	<b>81.7</b>	(77.8, 85.0)	<b>80.3</b>	(76.3, 83.8)
Females	<b>78.6</b>	(74.8, 81.9)	<b>70.4**</b>	(66.5, 74.1)
Lotteries	<b>73.0</b>	(70.1, 75.7)	<b>66.1**</b>	(63.1, 69.0)
Males	<b>73.6</b>	(69.2, 77.5)	<b>70.4</b>	(65.8, 74.6)
Females	<b>72.4</b>	(68.4, 76.1)	<b>62.4**</b>	(58.3, 66.4)
Casino	<b>33.7</b>	(30.8, 36.7)	<b>27.3**</b>	(24.6, 30.2)
Males	<b>35.0</b>	(30.7, 39.6)	<b>28.5*</b>	(24.4, 32.9)
Females	<b>32.5</b>	(28.7, 36.6)	<b>26.3*</b>	(22.9, 30.1)
Sports Pools	<b>18.1</b>	(15.9, 20.7)	<b>11.7**</b>	(9.9, 13.9)
Males	<b>22.9</b>	(19.2, 27.1)	<b>17.2*</b>	(14.1, 20.9)
Females	<b>13.7</b>	(11.1, 16.8)	<b>7.0**</b>	(5.2, 9.5)
Cards	<b>15.3</b>	(13.1, 17.7)	<b>10.3**</b>	(8.6, 12.4)
Males	<b>18.8</b>	(15.4, 22.8)	<b>14.4</b>	(11.5, 17.9)
Females	<b>12.0</b>	(9.6, 14.9)	<b>6.8**</b>	(5.0, 9.3)
Sports Select	<b>13.6</b>	(11.6, 16.0)	<b>10.6*</b>	(8.8, 12.7)
Males	<b>17.9</b>	(14.5, 21.9)	<b>14.2</b>	(11.2, 17.7)
Females	<b>9.6</b>	(7.4, 12.4)	<b>7.4</b>	(5.5, 10.1)
Slot machines (at race-tracks)	<b>12.2</b>	(10.4, 14.4)	<b>11.8</b>	(9.9, 14.0)
Males	<b>11.3</b>	(8.7, 14.6)	<b>13.7</b>	(10.7, 17.3)
Females	<b>13.1</b>	(10.5, 16.2)	<b>10.1</b>	(7.9, 13.0)
Horse racing	<b>10.7</b>	(8.9, 12.7)	<b>8.8</b>	(7.2, 10.7)
Males	<b>11.1</b>	(8.4, 14.4)	<b>9.7</b>	(7.4, 12.7)
Females	<b>10.3</b>	(8.0, 13.0)	<b>8.0</b>	(5.9, 10.6)
Bingo	<b>13.5</b>	(11.5, 15.8)	<b>11.2</b>	(9.3, 13.3)
Males	<b>9.6</b>	(7.2, 12.7)	<b>8.9</b>	(6.6, 11.9)
Females	<b>17.1</b>	(14.2, 20.5)	<b>13.1</b>	(10.4, 16.3)
Internet gambling	<b>5.3</b>	(4.1, 6.9)	<b>3.2*</b>	(2.3, 4.5)
Males	<b>4.3</b>	(2.7, 6.8)	<b>4.7</b>	(3.1, 7.0)
Females	<b>6.3</b>	(4.5, 8.6)	<b>1.9**</b>	(1.1, 3.5)

Notes: Gambling items were only asked of about half-sample.

\*p<.05; \*\*p<.01; based on a confidence interval around the difference between 2000 and 2001 proportions.

Source: CAMH Monitor, Centre for Addiction and Mental Health

**Table 7.2:** Percentage Reporting *Gambling Problems (SOGS5 2+)* During the Past 12 Months, by Demographic Characteristics, Ontarians, Aged 18+, 2001

		%	95%CI	Unadjusted Odds Ratio	Adjusted Odds Ratio for Factors 1-6
Total Sample (N=1395)		<b>2.8</b>	(2.0, 4.1)		
1) Gender				NS	NS
Women	(Comparison Group)	<b>2.4</b>	(1.4, 4.1)	--	--
Men		<b>3.3</b>	(2.0, 5.4)	1.40	1.27
2) Age				NS	NS
18-29	(Comparison Group)	<b>4.4</b>	(2.1, 8.9)	--	--
30-39		† <b>1.8</b>	(0.6, 4.8)	0.39	0.62
40-49		<b>3.8</b>	(1.9, 7.3)	0.86	1.32
50-64		<b>3.3</b>	(1.6, 6.5)	0.74	1.00
65+		† <b>1.0</b>	(0.2, 3.5)	0.20*	0.27
3) Marital Status				NS	NS
Married/Living with Partner	(Comparison Group)	<b>2.2</b>	(1.3, 3.7)	--	--
Previously Married		<b>3.3</b>	(1.4, 7.6)	1.48	2.01
Never		<b>4.5</b>	(2.3, 8.5)	2.07	1.65
4) Public Health Regions				NS	NS
Toronto	(vs. Provincial Average)	<b>4.8</b>	(2.4, 9.5)	2.38*	2.37
Central South		<b>3.3</b>	(1.2, 8.8)	1.45	1.40
Central West		†	(0.1, 2.0)	0.13*	0.13*
South West		<b>2.4</b>	(1.0, 5.8)	1.14	1.25
Central East		<b>4.1</b>	(1.8, 9.0)	2.00	2.14
East		† <b>1.7</b>	(0.6, 4.6)	0.80	0.74
North		<b>2.3</b>	(1.1, 4.6)	1.08	1.11
5) Education				*	**
Less than high school	(Comparison Group)	<b>2.0</b>	(0.7, 5.8)	--	--
Completed high school		<b>5.1</b>	(2.9, 8.8)	2.66	1.96
Some college or university		<b>2.9</b>	(1.5, 5.4)	1.45	0.91
University degree		† <b>1.0</b>	(0.4, 2.3)	0.47	0.28
6) Income				NS	NS
< \$30,000	(Comparison Group)	† <b>1.5</b>	(0.6, 3.4)	--	--
\$30,000-\$49,000		<b>3.9</b>	(2.0, 7.6)	2.80	2.78
\$50,000-\$79,000		<b>2.2</b>	(0.9, 5.0)	1.50	1.43
\$80,000+		<b>4.3</b>	(2.1, 8.3)	3.00*	3.07*
Not stated		† <b>1.7</b>	(0.6, 4.4)	1.15	1.26

Note: † Estimate suppressed or unstable; \*p<.05; \*\*p<.01; \*\*\*p<.001  
 Gambling items were only asked of about half-sample.  
 Asterisks in shaded rows indicate the significance of the group effect, based on Wald test.  
 Odds greater than 1.0 indicate that drug use is more likely to occur in the group being compared to the comparison group.  
 Odds less than 1.0 indicate that drug use is less likely to occur in the group being compared to the comparison group.

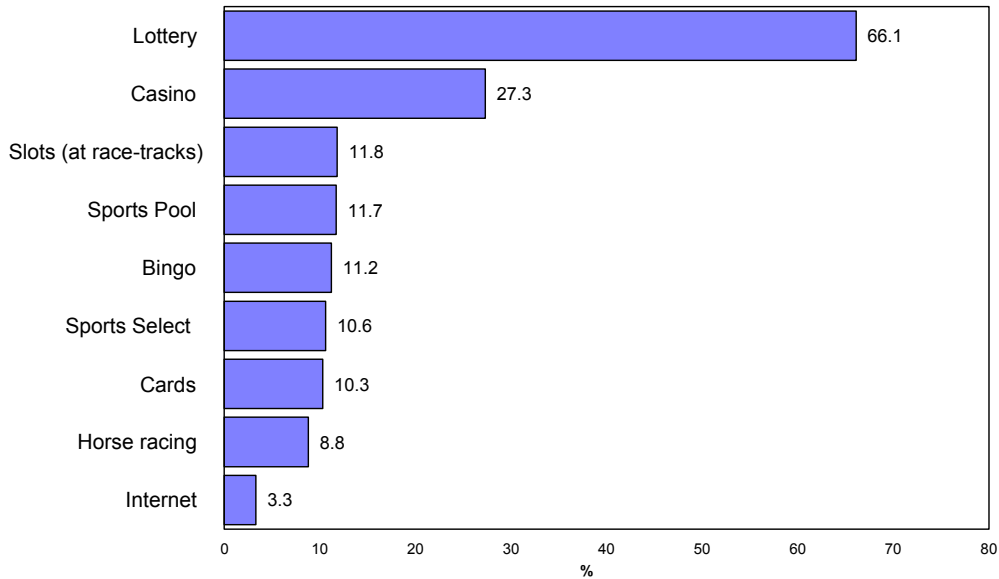
Source: The CAMH Monitor, Centre for Addiction and Mental Health

**Table 7.3:** Percentage Reporting *Gambling Problems (SOGS5 2+)* During the Past 12 Months, by Demographic Characteristics, Ontarians, Aged 18+, 2000-2001

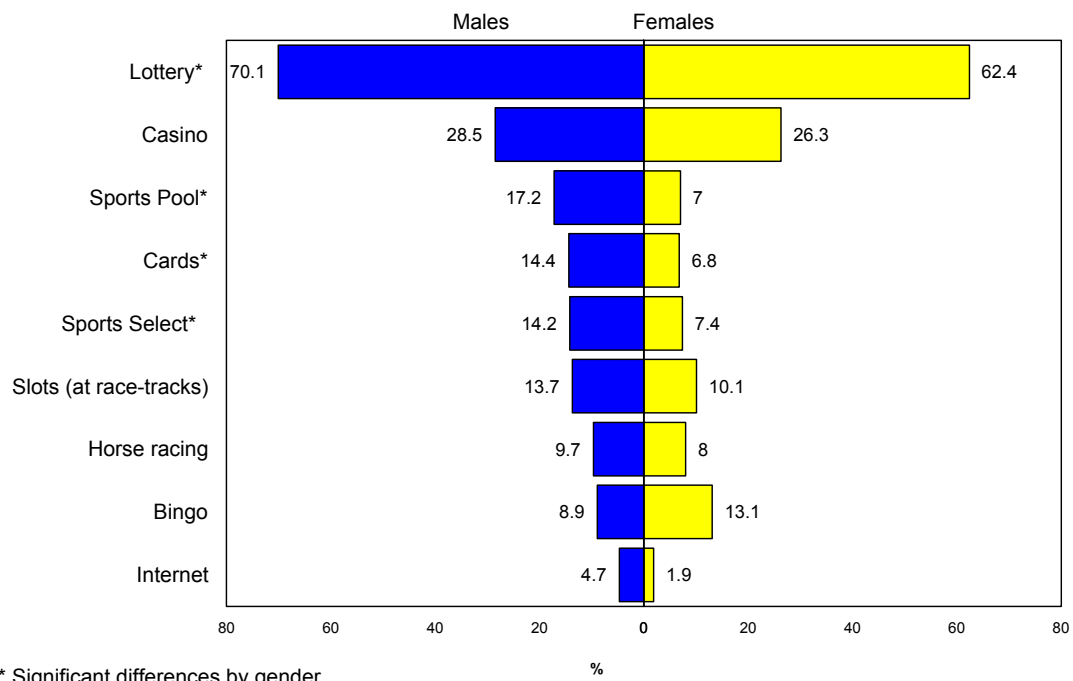
	2000	2001
(N=)	(1294)	(1395)
Total Sample	2.6	2.8
± %	(± 1.0)	(± 1.0)
<b>Gender</b>		
Men	3.2	3.3
Women	†1.9	2.4
<b>Age</b>		
18-29	2.1	4.4
30-39	2.7	†1.8
40-49	2.7	3.8
50-64	2.0	3.3
65+	2.7	†1.0
<b>Marital Status</b>		
Married/Living with Partner	2.0	2.2
Never Married	2.2	3.3
Previously Married	6.4	4.5
<b>Public Health Region</b>		
Toronto	3.2	4.8
Central South	2.3	3.3
Central West	†	†
South West	2.1	2.4
Central East	4.0	4.1
East	2.7	†1.7
North	2.9	2.3
<b>Education</b>		
Less Than High School	3.1	2.0
Completed High School	2.9	5.1
Some College or University	3.1	2.9
University Degree	†1.2	†1.0

Notes: † Estimate suppressed or unstable.  
 There are no significant differences among the total sample and subgroups between 2000 and 2001 proportions.  
 Source: CAMH Monitor, Centre for Addiction and Mental Health

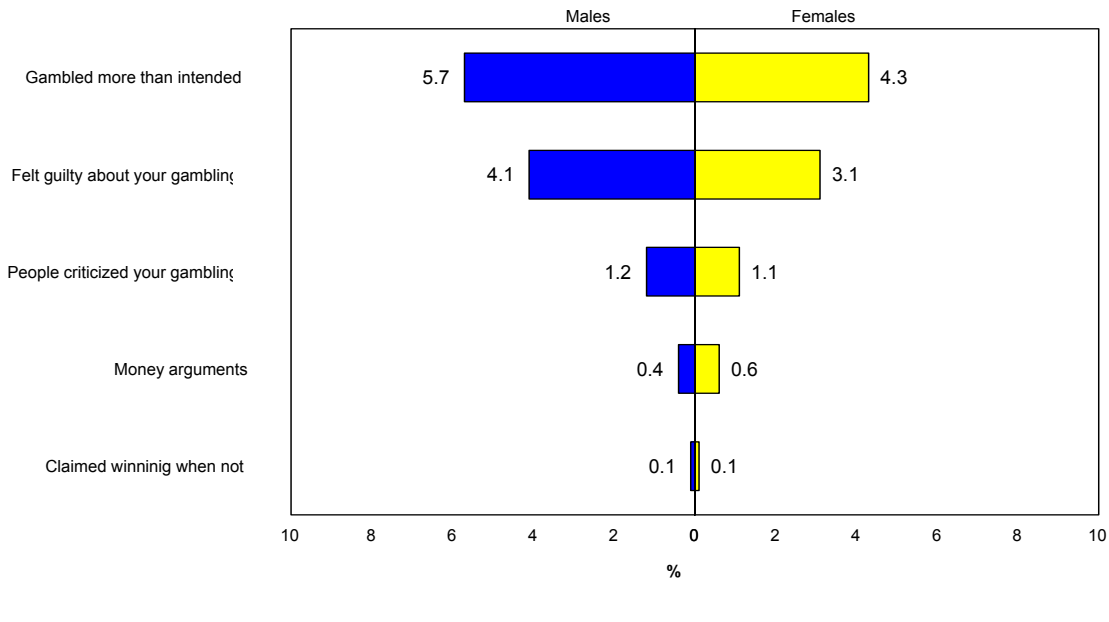
**Figure 7.1.**  
**Types of Gambling Activities in the Past 12 Months, Ontarians Aged 18+, 2001**



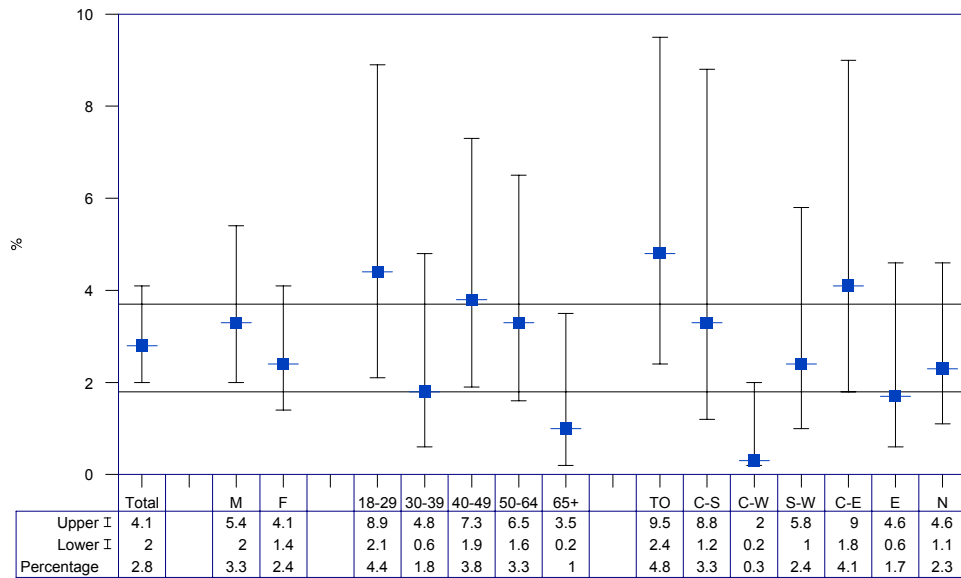
**Figure 7.2**  
**Types of Gambling Activities in the Past 12 Months by Gender, Ontarians Aged 18+, 2001**



**Figure 7.3**  
**Percentage Reporting Problem Gambling Symptoms in the Past 12 Months by Gender, Ontarians Aged 18+, 2001**



**Figure 7.4**  
**Percentage Reporting Problem Gambling in the Past 12 Months (SOGS5 2+) by Gender, Age, and Region, Ontarians Aged 18+, 2001**



Vertical bars represent 95% confidence intervals; horizontal bar represents 95% confidence interval for total estimate

## 8. SUMMARY AND DISCUSSION

In Table 8.1, we summarize significant associations among various respondent characteristics and addiction and mental health outcomes. Given substantial age, gender 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 seen below, gender, age, marital status, and education are important influences on rates of addiction and mental health outcomes.

**Gender** is significantly associated with 15 of the 16 outcomes. Men are more likely than women to report alcohol and other drug use, whereas women are more likely to report poorer mental health.

**Age** of respondent is significantly associated with 12 of the 16 outcomes. With the exception of daily drinking (which increases with age), substance use outcomes tend to decline with increasing age. However, use of prescription medication for anxiety and depression tend to peak during mid-age.

**Marital status** is associated with 3 outcomes. Even after adjusting for age differences, the general pattern shows that rates of substance use are lowest among those who are married.

**Education** level is related to 6 outcomes. The most dominant pattern shows that substance use declines with education or is lowest among those with the highest education.

**Region** is associated with 3 outcomes. The average number of drinks consumed weekly is above the provincial average

in the North, drinking and driving is above average in the South-West, and use of prescription medication for depression is highest in the East.

**Income** was associated with only 2 outcomes, past year drinking and drinking and driving. In both cases, the outcomes tend to increase with increasing income.

### Short Term Changes

As seen in Table 8.2, we did not find dramatic changes in substance use or mental health between 2000 and 2001. Two indicators are worthy of attention. Some indicators of drinking and driving increased, while some indicators of gambling behaviours declined between 2000 and 2001. However we cannot interpret changes between two annual surveys as indicative of a dominant trend.

Short-term changes point to the complexity of trends in alcohol consumption. Most notably, in the mid-1990s some drinking indicators declined, including number of drinks per week and consumption of 15 or more drinks weekly. However, heavy drinking (i.e., consuming five or more drinks per occasion weekly) increased during the same period, especially among women. Thus, *pattern* of drinking is an important measure, and when monitoring trends in drinking behaviour we should not limit measures to volume only.

Another short-term change is seen for cannabis use. Among 18-29 year olds, the percentage reporting cannabis use increased from 18% in 1996 to 27% in 2001. This increase in cannabis use among young adults corresponds to

earlier increases seen in cannabis use among Ontario students (Adlaf, Paglia, & Ivis, 1999; Adlaf, Paglia, Ivis, & Ialomiteanu, 2000).

## Long Term Changes

Long-term changes in substance use are by far the most striking. Two trends are particularly noteworthy. The first is the moderation of drinking that has occurred since 1977. Although the prevalence of drinking has not changed dramatically, the frequency of drinking among drinkers declined substantially. This trend in moderation has also been documented in Canadian and American national surveys (Clark & Hilton, 1997; MacNeil & Webster, 1997) (Substance Abuse and Mental Health Services Administration, 1999).

The second long-term trend regards the shifting age distribution of cannabis users. 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 more than one in three cannabis users are aged 30 to 49 years. This aging of cannabis users has also been documented in American surveys (Substance Abuse and Mental Health Services Administration, 1999).

## Public Health Implications

There are several public health issues raised by these CAMH Monitor findings.

First, despite knowledge regarding the health effects of smoking, **the rate of cigarette smoking among Ontario adults has not declined** substantially during the 1990s. Indeed, the public health goal earlier established to reduce the proportion of adult smokers to 15% by the year 2000 was not achieved (Premier's Council on Health Strategy, 1991). The more recent health

objectives developed by American health professionals (U.S. Department of Health and Human Services, 2000) set an objective of 12% of adults who smoke in the year 2010. Smoking here is defined as consuming 100 or more cigarettes in the lifetime and smoking during the past month. In Ontario, the current prevalence according to this definition is 25%. (For more details on this issue see (Ontario Tobacco Research Unit, 2000)).

Second, although the percentage of the population who drink alcohol has not changed dramatically, **a sizeable percentage of drinkers continue to drink at hazardous levels.** Indeed, the CAMH Monitor found that one in six drinkers (16%) report heavy drinking (defined by consuming five or more drinks on a single occasion weekly). Moreover, the CAMH Monitor found that the rate of heavy drinking increased in 1996, and has since remained at this elevated level. The *Healthy People 2010 Objectives* set a goal of 6% of adults consuming five or more drinks on a single occasion during the past month. In the US this percentage is about 16%, while in Ontario it is about 28%.

Other data also point to similar findings. The 1996 National Population Health Survey found that 23% of Canadian drinkers (21% of Ontarian drinkers) consume alcohol at levels exceeding recommended guidelines (Single, Truong, Adlaf, & Ialomiteanu, 1999).<sup>4</sup>

Other data also suggest some changes in alcohol consumption. Between 1995/96 and 1996/97 the average litres of absolute alcohol consumed per person increased from 7.4 to 7.6 litres after a declining trend in alcohol sales observed through the 1980s and 1990s (Single et al., 1999). Thus, to reduce alcohol-related problems there is a need to increase the percentage of drinkers who do not exceed recommended guidelines.

Another important public health issue regards our conception of alcohol problems. It is evident that **indicators of alcohol problems should not be restricted to alcohol disorders such as alcohol dependence**. Indeed, an array of alcohol problems is experienced by those who do not meet the more severe forms of alcohol disorder. For example, the 1996 National Population Health Survey found that 2% of Ontario drinkers aged 15 or older met the criteria for alcohol dependence (Single et al., 1999), whereas the CAMH Monitor found 7% were drinking at risky levels, and 16% report heavy drinking on a weekly basis. From a prevention standpoint, these latter groups are of greater concern if our goal is to prevent and reduce alcohol disorders in the population.

We must recognize that **alcohol and tobacco cause far greater problems to individuals and society than do illicit drugs**. We can never ignore the tragedy of human suffering brought about by illegal drug use; but, at the same time, we must put these numbers into a broader context. If public concern and social policy are to be based on the harm caused to the greatest number of individuals, then clearly, alcohol and tobacco far outweigh the problems caused by illegal drugs. Indeed, the *2010 Healthy People Objectives* set a goal of 3% of adults having used an illicit drug during the past month. The current percentage is about 5% in the US and in Ontario.

The numbers are also revealing. Among some nine million adult Ontarians, about 12% (1.1 million) drink heavily every week, 5.5% (500,000) are consuming alcohol at hazardous or harmful levels, and 25% (2.2 million) are current smokers. In contrast, cannabis is used by 11% (1 million) of which only about half (480,000) use more than once a month. The dominance of alcohol and

tobacco use is also evident in economic cost studies (Xie, Rehm, Single, & Robson, 1996). A study conducted 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 (Single, Rehm, Robson, & Van Truong, 2000). In 1995 substance abuse accounted for 20.0% of total deaths, 22.2% of total potential years of life lost and 9.4% of total admissions to hospital for any cause. The deaths related to illicit drug use represented only 0.4% of all deaths and only 1.1% of total years of life lost through any cause in 1995. Perhaps our attention to illicit drug use is partly attributable to their over representation in media accounts of drug-related deaths (Frost, Frank, & Mailbach, 1997). However, we must recognise that although illegal drugs cause significant socio-medical morbidity, in both relative and absolute terms, tobacco and alcohol causes much more.

Finally, our findings also speak to the issue of mental well being among Ontario adults. A sizeable percentage experience symptoms that, although would not qualify for a more severe mental disorder, would nonetheless reduce their ability to function productively in their emotional and social worlds. Indeed, we found that about one in six report mental health problems, of which stress is a dominant symptom. These findings are particularly important given recent research showing that depression is one of the leading sources of total burden of disease, followed only by cardiovascular disease (Murray & Lopez, 1996; Üstün, 1999). Moreover, recent research also shows that mental health problems pose a considerable economic burden for Canadians (Stephens & Joubert, 2001).

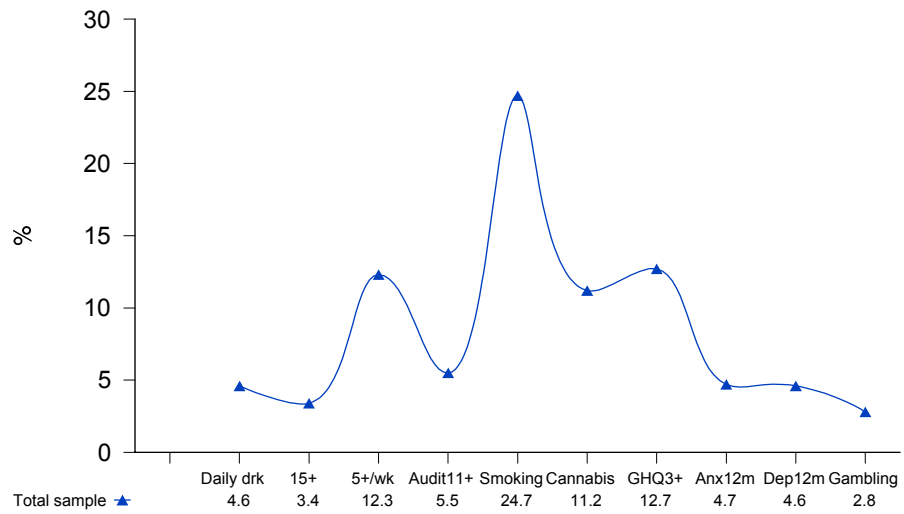
Table 8.1 Summary Findings: Dominant Associations by Demographic Characteristic and Substance Use Outcomes, CM 2001

2001 Outcomes																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	Past-Yr Drink	Daily Drink	No. Drinks Weekly †	15+	5+	Hazard Drink	Drink & Drive	Smoking	Smoking Depend.	Cannabis	GHQ3+	Anx 12M	Anx 7d	Dep 12M	Dep 7d	Gambling Problems
Gender	Men higher	Men higher	Men higher	Men higher	Men higher	Men higher	Men higher	Men higher	Men higher	Men higher	Women higher	Women higher	Women higher	Women higher	Women higher	—
Age	Declines	Increases	—	18-29 highest	18-29 highest	Declines	65+ lowest	Declines	40-49 highest	Declines	—	18-29 lowest	—	40-49 highest	18-29 lowest	—
Marital Status	—	—	—	Married lowest	—	—	—	Married lowest	—	Never married highest	—	—	—	—	—	—
Public Health Region	—	—	NORTH highest	—	—	—	S-W highest	—	—	—	—	—	—	EAST highest	—	—
Education	< HS lowest	—	Declines	—	Univ. Grad. Lowest	Declines	—	Univ. Grad. Lowest	—	—	—	—	—	—	—	Compleat. HS highest
Income	Increases	—	—	—	—	—	Increases	—	—	—	—	—	—	—	—	—

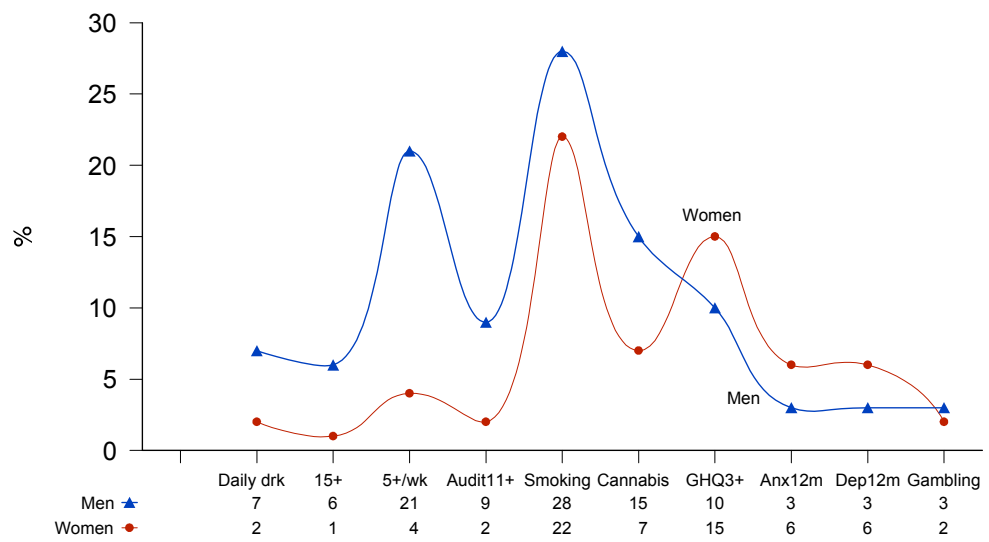
Notes: ---Not significant; † Unadjusted associations; other associations are adjusted for sex, age, region, marital status, education, and income.

Legend: **Past -Yr Drink** (past year drinking rate); **Daily Drink** (percentage drinking daily); **No. Drinks Weekly** (average number of drinks consumed weekly among drinkers); **15+** (percentage consuming 15 or more drinks per week); **5+** (percentage consuming five or more drinks on a single occasion weekly); **Hazard Drink** (percentage reporting hazardous or harmful drinking based on the AUDIT 11+); **Drink & Drive** (percentage drinking and driving among drinkers); **Smoking** (percentage smoking cigarettes); **Smoking Dependence** (percentage ranging from 5-6 on HIS); **Cannabis** (percentage using past year); **GHQ3+** (Psychological Distress - percent scoring 3+ on GHQ12); **Anx 12M** (percentage using anxiety medication past 12 mths); **Anx 7d** (percentage using anxiety medication past 7 days); **Dep 12M** (percentage using depression medication past 12 mths); **Dep 7d** (percentage using depression medication past 7 days); **Gambling problems** (percentage scoring 3+ on SOGS5).

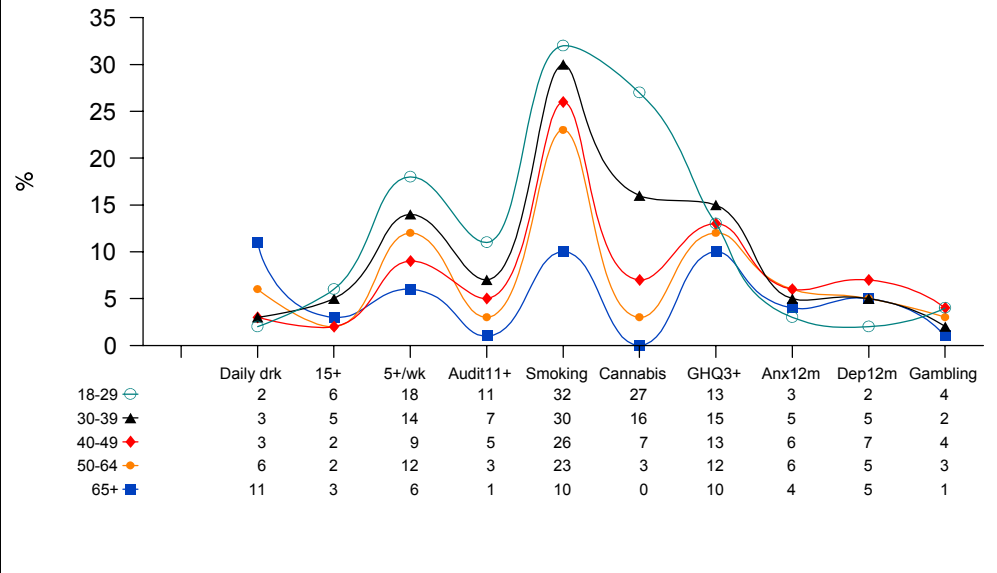
**Figure 8.1**  
**Substance Use and Mental Health Indicators, Ontarians Aged 18+, 2001**



**Figure 8.2**  
**Substance Use and Mental Health Indicators by Gender, Ontarians Aged 18+, 2001**



**Figure 8.3**  
**Substance Use and Mental Health Indicators by Age, Ontarians**  
**Aged 18+, 2001**



**Figure 8.4**  
**Substance Use and Mental Health Indicators by Region, Ontarians**  
**Aged 18+, 2001**

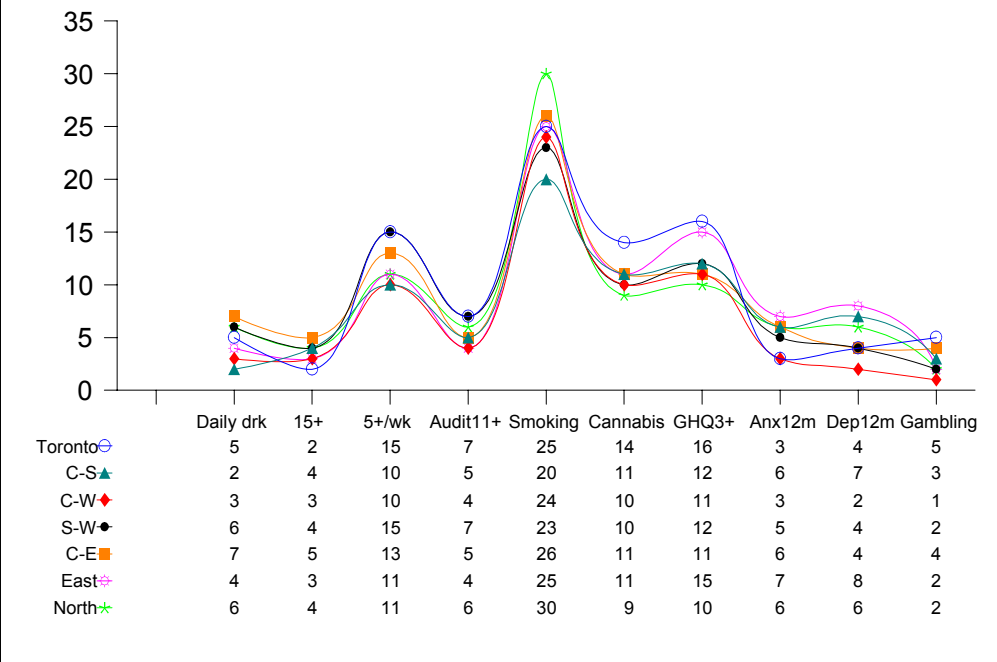


Table 8.2 Summary of Short-Term and Long-Term Changes in Substance Use, CM 2001

	2000 vs 2001	Short-Term : 1990-2001	Long-Term: 1977-2001
<b>ALCOHOL:</b>			
Prevalence, past year use	<ul style="list-style-type: none"> <li>Overall stable (77.2% vs. 79.5%).</li> <li>Increase among Toronto residents from 70.2% to 78.8%.</li> </ul>	<ul style="list-style-type: none"> <li>1995-1996: decrease from 84.4% to 79.3%.</li> <li>Steady decrease since 1992 when it was at a high of 87%.</li> </ul>	<ul style="list-style-type: none"> <li>Significant linear and non-linear trends; peaks in the mid-1980s and again in the early 1990s.</li> </ul>
Daily drinking (among drinkers)	<ul style="list-style-type: none"> <li>Overall stable (6.3% vs. 5.8%).</li> <li>No subgroup changes.</li> </ul>	<ul style="list-style-type: none"> <li>Stable.</li> <li>Some increases between 1992 and 1993 and between 1997 and 1998.</li> </ul>	<ul style="list-style-type: none"> <li>Significant linear and non-linear trends; overall decline from 13.4% in 1977 to 5.8% in 2001.</li> </ul>
Number of drinks per week (among drinkers)	<ul style="list-style-type: none"> <li>Overall stable (3.5 vs. 3.4)</li> <li>No subgroup changes.</li> </ul>	<ul style="list-style-type: none"> <li>1992-2001: decrease from 4.7 drinks to 3.4 drinks.</li> </ul>	<ul style="list-style-type: none"> <li>Not available.</li> </ul>
15+ drinks weekly	<ul style="list-style-type: none"> <li>Overall stable (2.8% vs. 3.4%).</li> <li>Increase among those never married from 2.8% to 6.3%.</li> </ul>	<ul style="list-style-type: none"> <li>1994-1996: decrease from 4.4% to 2.2%.</li> </ul>	<ul style="list-style-type: none"> <li>Not available.</li> </ul>
Heavy drinking occasions (5+ drinks) weekly	<ul style="list-style-type: none"> <li>Overall stable (12.7% vs. 12.3%).</li> <li>Decrease among women, from 7.1% to 4.4%.</li> </ul>	<ul style="list-style-type: none"> <li>1995-2000: increase from 7.0% to 12.7%.</li> <li>Steady increase among men since 1996; 2001 estimate for men (20.7%) highest in study period.</li> </ul>	<ul style="list-style-type: none"> <li>Significant linear and non-linear trends; increases seen in the late 1990s.</li> </ul>
Hazardous drinking (AUDIT_11)	<ul style="list-style-type: none"> <li>Overall stable (5.9% vs. 5.5%).</li> <li>Increase among those aged 30-39, from 4.0% to 7.4%.</li> </ul>	<ul style="list-style-type: none"> <li>Not available.</li> </ul>	<ul style="list-style-type: none"> <li>Not available.</li> </ul>
Drinking & driving (among drivers)	<ul style="list-style-type: none"> <li>Overall increase from 8.6% to 10.9%, but similar to 1999 data (10.5%).</li> <li>Increase among men (from 13.6% to 17.9%) and among those living in the S-W region (from 9.3% to 15.6%).</li> </ul>	<ul style="list-style-type: none"> <li>Declining trend since 1996.</li> <li>Significant declines between 1996 and 1997 and 1999 and 2000.</li> <li>Decrease among those aged 18-29 between 1996 and 2001 ( from 20.1% to 12.5%), especially between 1996 and 1997.</li> </ul>	<ul style="list-style-type: none"> <li>Not available.</li> </ul>
<b>CURRENT SMOKING</b>	<ul style="list-style-type: none"> <li>Overall stable; no subgroup changes.</li> </ul>	<ul style="list-style-type: none"> <li>1995-2001: overall decrease from 28.5% to 24.7% and among women from 26.7% to 21.5).</li> </ul>	<ul style="list-style-type: none"> <li>Not available.</li> </ul>
<b>CANNABIS</b>	<ul style="list-style-type: none"> <li>Overall stable (10.8% vs. 11.2%).</li> <li>No subgroup changes.</li> </ul>	<ul style="list-style-type: none"> <li>Stable; 2001 overall estimate highest in study period.</li> <li>1997-2001: increase among men from 11.4% to 15.4% (estimate highest in study period) and among those aged 18-29 (from 18.3% to 26.8%).</li> <li>1996-2001: among users, the percentage aged 50 years and over increased (from 1.9% to 6.0%).</li> </ul>	<ul style="list-style-type: none"> <li>No dominant trend; variation between 6.2% (1992) and 11.2% (1984 and 2001).</li> <li>More older users since 1977– higher percentage of users aged 30-39 years.</li> </ul>
<b>PSYCHOLOGICAL DISTRESS (GHQ3+)</b>	<ul style="list-style-type: none"> <li>Overall unchanged (12.7%).</li> <li>Decrease among residents in the C-E region (17.6% vs. 10.6%)</li> </ul>	<ul style="list-style-type: none"> <li>Not available.</li> </ul>	<ul style="list-style-type: none"> <li>Not available.</li> </ul>
<b>GAMBLING PROBLEMS</b>	<ul style="list-style-type: none"> <li>Overall stable 2.6% vs. 2.8%).</li> <li>No subgroup changes.</li> </ul>	<ul style="list-style-type: none"> <li>Not available.</li> </ul>	<ul style="list-style-type: none"> <li>Not available.</li> </ul>

**Appendix A**  
**Sample Design**

**Table A-1: Regional Stratification of the CM 2001 Sample**

<b>Region</b>	<b>County</b>	<b>Area Code</b>
Toronto	Toronto	416
Central West	Halton; Hamilton-Wentworth; Waterloo; Wellington; Dufferin; Niagara; Brant; Haldiman-Norfolk	705, 905
Central East	Peel; Simcoe; York; Haliburton; Peterborough; Victoria; Northumberland; Durham	519, 905
West	Kent; Huron; Perth; Elgin; Oxford; Middlesex; Grey; Bruce; Lambton; Essex	519
East	Stormont, Dundas and Glengarry; Prescott-Russell; Ottawa-Carleton; Renfrew; Lanark; Leeds-Grenville; Hastings; Prince Edward; Frontenac; Lennox and Addington	613
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, 1999)**

<b>OHS Planning Region</b>	<b>Counties (23 Local Areas)</b>
South West	Essex Kent, Lambton Elgin, Oxford, Middlesex Bruce, Grey, Perth, Huron
Central South	Niagara Hamilton-Wentworth Brant, Haldimand-Norfolk
Central West	Halton Peel Wellington, Dufferin Waterloo
Toronto	
Central East	Northumberland, Victoria, Haliburton, Peterborough Durham York Simcoe
East	Ottawa-Carleton Renfrew, Prescott & Russell, Stormont, Dundas & Glengarry Lanark/Leeds/Grenville, Hastings, Prince Edward, Frontenac, Lennox & Addington
North	Algoma, Cochrane Manitoulin, Sudbury (R.M.), Sudbury (T.D.) Muskoka, Parry Sound, Nipissing, Timiskaming Thunder Bay, Kenora, Rainy River

# Ontario Ministry of Health – Planning Regions

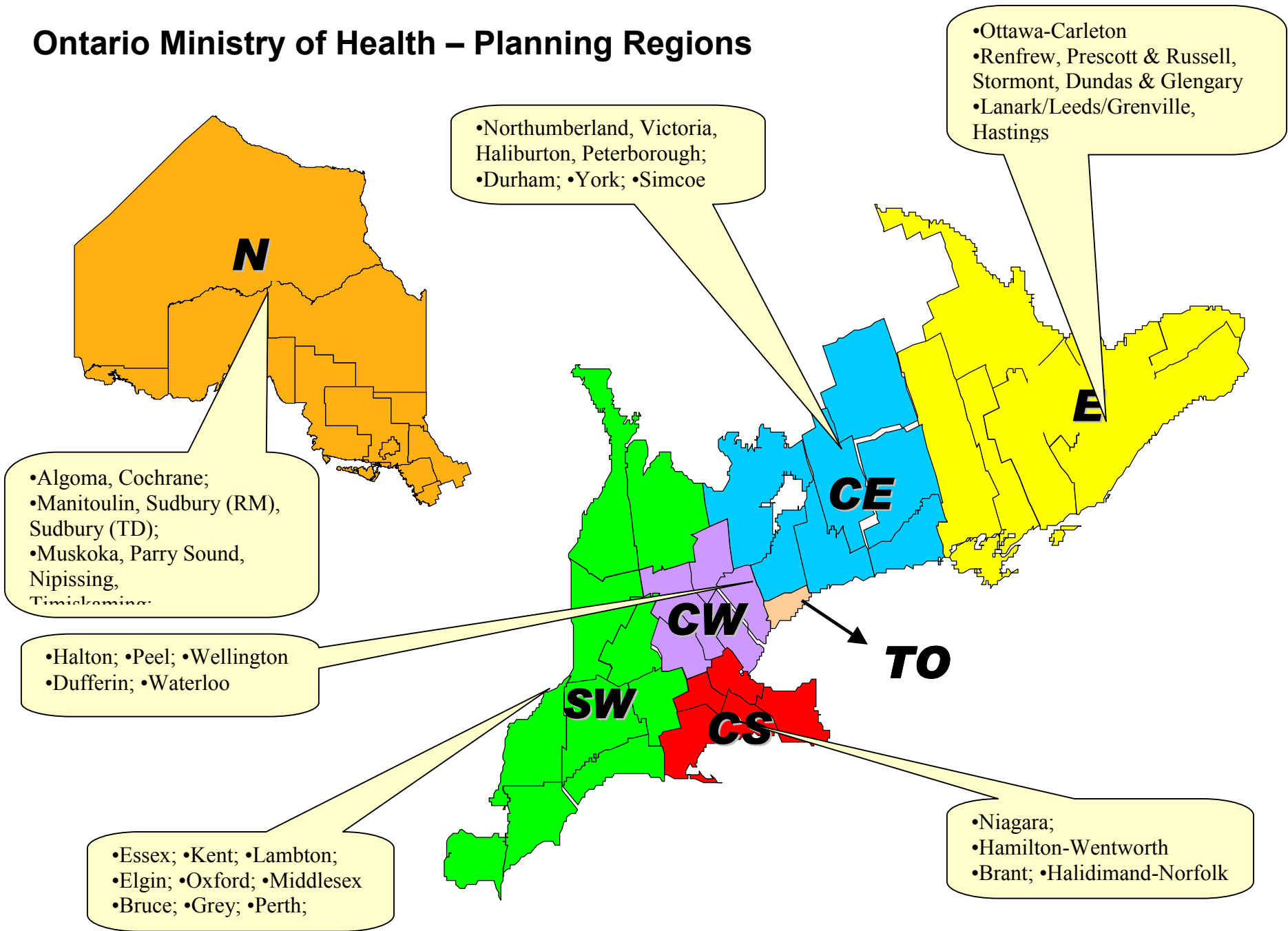


Table A-3: Number of Interviews by Demographic Characteristic, 1991-2001

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Total Sample	1047	1058	1034	2022	994	2721	2776	2509	2436	2406	2627
<b>Gender</b>											
Male	495	490	481	930	477	1206	1260	1088	1061	1052	1216
Female	552	568	553	1092	517	1515	1516	1421	1375	1354	1411
<b>Age</b>											
18-29	267	272	241	472	240	533	560	457	427	458	473
30-39	264	283	280	541	240	685	654	580	567	538	547
40-49	215	207	208	434	212	562	571	567	505	507	597
50-64	150	153	162	320	168	483	508	448	470	466	531
65+	134	129	132	236	123	406	407	376	420	378	412
<b>Marital Status</b>											
Never Married	269	239	238	523	262	601	601	517	491	508	556
Married	597	579	554	1028	471	1450	1449	1336	1234	1252	1360
Living with Partner	-	65	54	118	61	146	176	151	193	161	190
Previously Married	173	171	187	347	192	508	510	467	490	456	500
<b>Region (Postal Code)</b>											
Toronto	237	239	214	435	230	427	390	390	414	424	417
Toronto Outskirts	273	306	306	584	293	651	631	564	598	598	600
Western Ontario	210	195	213	465	197	612	588	534	560	548	592
Eastern Ontario	153	178	166	309	158	516	474	444	463	442	471
Northern Ontario	69	93	100	161	92	421	417	357	401	394	547
<b>Education</b>											
Less Than High School	244	223	225	403	180	600	554	480	438	362	418
Completed High School	302	295	276	552	281	713	710	649	655	701	672
Some College or University	255	329	315	614	304	775	839	779	758	715	874
University Degree	241	207	216	446	225	610	641	564	555	609	632
<b>Income</b>											
<\$30,000	325	239	273	520	261	579	547	453	500	427	496
\$30,000 - \$49,000	212	224	227	435	226	534	510	455	450	403	501
\$50,000 - \$79,000	234	248	229	458	217	625	551	523	521	525	538
\$80,000+	106	178	179	294	158	439	471	442	475	496	557
Missing Responses	170	169	126	275	132	544	697	636	490	555	535
<b>Employment Status</b>											
Full-Time	552	558	543	1010	500	1279	1363	1198	1255	1220	1343
Part-Time	111	111	100	203	114	303	311	296	240	249	260
Unemployed	64	63	52	132	39	142	102	82	63	60	91
Retired	139	137	148	269	139	465	484	491	483	456	500
Homemaker	68	77	72	141	61	203	154	133	118	111	139
Student	81	71	94	175	94	143	172	146	113	131	138
Other	30	37	44	92	43	171	167	146	147	162	140

Notes: \* Includes living with partner.

Source: The Ontario Drug Monitor, Centre for Addiction and Mental Health

Table A-4: Number of Interviews by Gender, Age, and Region of Respondent, 1977-2001

(N=)	1977 (1059)	1982 (1040)	1984 (1051)	1987 (1084)	1989 (1101)	1991 (1047)	1992 (1058)	1993 (1034)	1994 (2022)	1995 (994)	1996 (2721)	1997 (2776)	1998 (2509)	1999 (2436)	2000 (2406)	2001 (2627)
	% (N)	% (N)	% (N)	% (N)	% (N)	% (N)	% (N)	% (N)	% (N)	% (N)	% (N)	% (N)	% (N)	% (N)	% (N)	% (N)
<b>Gender</b>																
Male	52.2 (529)	50 (517)	48.5 (524)	48.5 (539)	48.4 (551)	49.0 (495)	46.7 (490)	48.2 (481)	46.8 (1092)	49.7 (477)	47.0 (1206)	47.4 (1260)	47.5 (1088)	48.0 (1061)	47.5 (1052)	48.5 (1216)
Female	47.8 (529)	50 (523)	51.5 (527)	51.5 (545)	51.6 (550)	51.0 (552)	53.3 (568)	51.8 (553)	53.2 (930)	50.3 (517)	53.0 (1515)	52.6 (1516)	52.5 (1421)	52.0 (1375)	52.5 (1354)	51.5 (1411)
<b>Age</b>																
18-29	30.0 (296)	31.9 (270)	29.6 (274)	29.6 (238)	28.0 (245)	29.5 (267)	29.6 (272)	26.8 (241)	26.7 (472)	26.9 (240)	24.3 (533)	26.1 (560)	23.1 (457)	21.7 (427)	23.3 (458)	20.9 (473)
30-39	21.7 (222)	23.2 (253)	20.4 (248)	22.5 (283)	23.2 (290)	24.4 (264)	25.1 (283)	25.8 (280)	26.1 (541)	23.3 (240)	24.0 (685)	23.2 (654)	21.7 (580)	22.1 (567)	21.4 (538)	19.8 (547)
40-49	17.1 (181)	13.2 (143)	15.7 (190)	13.6 (171)	14.5 (181)	20.7 (215)	20.0 (207)	20.3 (208)	21.2 (434)	22.5 (212)	20.7 (562)	20.5 (571)	21.9 (567)	19.4 (505)	20.5 (507)	21.7 (597)
50-64	18.3 (197)	20.1 (213)	21.5 (205)	19.2 (213)	19.3 (211)	14.5 (150)	14.7 (153)	16.4 (162)	15.6 (320)	17.1 (168)	17.1 (483)	18.4 (508)	16.8 (448)	18.7 (470)	18.3 (466)	19.1 (531)
65+	12.9 (155)	11.7 (125)	12.8 (122)	15.1 (168)	14.9 (163)	11.0 (134)	10.5 (129)	10.7 (132)	10.4 (237)	10.3 (123)	11.9 (406)	11.8 (407)	16.4 (376)	16.1 (420)	16.5 (378)	15.9 (412)
<b>Region</b>																
Toronto	30.6 (314)	32.3 (329)	31.9 (331)	32.8 (351)	35.1 (383)	24.9 (237)	22.5 (239)	22.0 (214)	21.3 (435)	22.5 (230)	23.2 (427)	20.7 (390)	22.9 (421)	23.5 (410)	23.8 (424)	24.5 (417)
Non-Toronto	69.4 (745)	67.7 (711)	68.1 (720)	67.2 (733)	64.9 (718)	75.1 (705)	77.5 (772)	78.0 (785)	78.7 (1519)	77.5 (740)	76.8 (2294)	79.3 (2386)	77.1 (2088)	76.5 (2026)	76.2 (1982)	75.5 (2210)

Notes: % based on weighted data; (N) based on number of interviews (unweighted)  
 Source: The CAMH Monitor, Centre for Addiction and Mental Health

## **Appendix B**

### **CAMH Monitor 2001**

#### **Questionnaire Items: Addiction and Mental Health Indicators**

=====

**THE CAMH MONITOR (PANEL A+B)**

January - December 2001

Centre for Addiction and Mental Health

=====

>gend< [return][open cb][allow 1][loc 30/1]

[define <d><8>][define <r><9>]

[bold][yellow] INTERVIEWER: Enter respondent's gender please [n][white]

1 Male  
5 Female

d Don't know

**TOBACCO CONSUMPTION**

=====

>tc1<

[r] First, I'd like to begin with some questions about cigarette smoking. [n]

[r] At the present time do you smoke cigarettes daily, occasionally, or not at [n]

[r] all? [n]

1 Daily  
3 Occasionally  
5 Not at all

d Don't Know r Refused

<1> [goto tc4]  
<3,5> [goto tc2]  
<d,r> [goto tc2]

>tc2<

[r] Have you smoked at least 100 cigarettes in your life? [n]

[bold][yellow] INTERVIEWER, IF NECESSARY: "100 cigarettes is about 5 packs." [n][white]

1 Yes  
5 No

d Don't Know r Refused

<1> [goto tc3]  
<5> [goto INTRO\_TQ]

<d,r> [goto INTRO\_TQ]

>tc3<

[r] Have you ever smoked cigarettes daily? [n]

1 Yes  
5 No

d Don't Know r Refused

<1> [goto tc4]  
<5> [goto tc5]  
<d,r> [goto tc5]

>tc4< [# ask daily smokers only  
[define <d><98>][define <r><99>]

[r] How old were you when you first started smoking daily? [n]

5-70 Enter age

71 71 or older

d Don't Know r Refused

>tc5< [if tc1 eq <1>][goto tc6][endif]  
[define <d><8>][define <r><9>]

[r] How long ago was it that you last smoked: was it less than one week ago, [n]  
[r] less than one month, 1 to 6 months, 7 to 11 months, 1 to 5 years, or more [n]  
[r] than 5 years ago? [n]

[bold][yellow] INTERVIEWER: If respondent gives AGE, ask how many YEARS AGO that was.) [n][white]

0 Less than one week  
1 more than one week but less than a month  
2 1 to 6 months  
3 7 to 11 months  
4 1 to 5 years  
5 More than 5 years

d Don't Know r Refused

<0,1> [goto tc6]  
<2-5> [goto INTRO\_TQ]  
<d,r> [goto INTRO\_TQ]

>tc6< [if tc1 ge <5>][goto INTRO\_TQ]  
[if tc1 ge <3>][goto tc7][endif]  
[define <d><98>][define <r><99>]

[r] How many cigarettes do you usually smoke each day? [n]

[bold][yellow] INTERVIEWER: 1 large pack = 25 cigarettes; 1 small pack = 20 cigarettes [n][white]

0 Less than one a day

1-97 Enter number of cigarettes

d Don't Know r Refused

>tc7< [if tc1 eq <3>][goto tc8][endif]  
 [define <d><8>] [define <r><9>]

[r] How soon after you wake up do you usually smoke your first cigarette: within [n]  
 [r] 5 minutes, from 6 to 30 minutes, from 31 to 60 minutes, or after 60 minutes? [n]

1 Within 5 minutes  
 3 6 to 30 minutes  
 5 31 to 60 minutes  
 7 After 60 minutes

d Don't Know r Refused

>tc8< [# 96/sosic] [# definition changed]  
 [define <d><98>][define <r><99>]

[r] In the past 12 months, how many times have you made a serious attempt to [n]  
 [r] quit smoking cigarettes?

[bold][yellow] IF NECESSARY: A serious attempt would mean you quit smoking for at least 24 hours. [n][white]

0 No attempts

1-96 Enter exact number

97 97 or more

d Don't Know r Refused

>tc9< [define <d><8>] [define <r><9>]

[r] Are you intending to quit smoking in the next SIX MONTHS? [n]

[bold][yellow] INTERVIEWER: "Yes we mean quitting altogether" [n][white]

1 yes  
 5 no  
 7 maybe

d Don't Know r Refused

<1,7> [goto tc10]  
 <5> [goto INTRO\_TQ]  
 <d,r> [goto INTRO\_TQ]

>tc10< [if tc9 eq <5>][goto INTRO\_TQ][endif]

[r] Are you intending to quit in the next THIRTY DAYS? [n]

1 yes  
 5 no  
 7 maybe

d Don't Know r Refused

**CIGARS**

>tc11< [define <d><98>][define <r><99>] [#ask all]  
 [#started in 98]

[r] On how many of the last 30 days did you smoke one or more cigars or [n]  
 [r] cigarillos? [n]

0 none

1-30 enter number

d don't know r refused

<0,d,r> [goto INTRO\_TQ]  
 <1-30> [goto tc15]

>tc15< [#started in 98]

[r] On those days that you smoked cigars or cigarillos, how many did you [n]  
 [r] typically smoke? [n]

0-30 enter number

d don't know r refused

<0-30,d,r> [goto INTRO\_TQ]

**SMOKING CESSATION & DOCTOR VISITS**

[# Asking total sample]

>INTRO\_TQ<

[r] Many communities offer help to smokers who want to quit. Please tell me if, [n]  
 [r] in the past 30 days, you have seen or heard of any of the following: [n]

Press "Enter" to continue

>ROUTE1< [if RANDOM1 eq <1> goto tq1]----+ randomise delivery of tq1 tq2 tq3  
 [if RANDOM1 eq <2> goto tq2] |  
 [if RANDOM1 eq <3> goto tq3]----+

>tq1< [define <d><8>] [define <r><9>]

[r] What about a "1-800 Quitline"?

[bold][yellow]

INTERVIEWER: 1 800 Quitline is a free telephone helpline available

province-wide, designed to help smokers who want to quit by providing information, support and referral. It is run by the Canadian Cancer Society, Ontario Division.

[n][white]

1 yes  
5 no

d don't know r refused

>ROUTE2< [if RANDOM1 eq <2> goto EXIT1]

>tq2<

[r] What about a "Quit Smoking 2001 contest"?

[cyan] In the past 30 days, have you seen or heard of this?  
[white]

[bold][yellow]

INTERVIEWER: Smoke Free Comes in Steps, a Quit Smoking 2001 contest, is a contest in which smokers who intend to quit register with their local smoke free council or health unit between the third week in January (National Non-Smoking Week) and the end of February. Smokers who remain smoke free from the time of registration until the end of March are eligible for prizes. Brochures and posters advertising the contest have been distributed province-wide by the Council for a Tobacco Free Ontario.  
[n][white]

1 yes  
5 no

d don't know r refused

>ROUTE3< [if RANDOM1 eq <3> goto EXIT1]

>tq3<

[r] What about a "local quit program"?

[cyan] In the past 30 days, have you seen or heard of this?  
[white]

INTERVIEWERS: QuitCare is an example of a local quit program. QuitCare is available to residents of the regions of Waterloo and Wellington/Dufferin through the Ontario Smoking Cessation Initiative and was developed by the Homewood Behavioural Health Corporation. The program offers help to smokers who want to quit through telephone counselling or printed materials.  
[n][white]

1 yes  
5 no

d don't know r refused

>EXIT1< Random experiment ends here.

>tc12<

[define <d><98>][define <r><99>]

[r] In the past 12 months, how many times have you seen a doctor? [n]

0 No visits

1-96 Enter exact number

97 97 or more

d Don't Know r Refused

<0> [goto int1] <1-97> [goto tc13]  
<d,r> [goto int1]

>tc13<

[if tc1 ge <5>][goto int1][endif]  
[if tc5 ge <3>][goto int1][endif]  
[define <d><8>] [define <r><9>]  
[# current smokers only]

[r] Has a doctor advised you to quit smoking in the past 12 months? [n]

1 yes  
5 no

d don't know r refused

<1> [goto tq4]  
<5> [goto int1]  
<d,r> [goto int1]

[#If tc13 =yes]

>tq4<

[r] To help you quit smoking, did the doctor recommend any of the following: [n]

[r] Nicotine replacement therapy, that is, nicotine patch or gum? [n]

1 yes  
5 no

7 "R" volunteers "Doctor did not recommend any method, just that I should quit"

d don't know r refused

<1,5,d,r> <7> [goto int1]

>tg5<

[r] A prescription for Zyban?

[cyan] Did a doctor recommend this to help you quit smoking? [white]

1 yes  
5 no

7 "R" volunteers "Doctor did not recommend any method, just that I should quit"

d Don't Know r Refused

<1,5,d,r> <7> [goto int1]

>tg6<

[r] Individual counselling by the doctor or some other specialist on how to quit?

[cyan] Did a doctor recommend this to help you quit smoking? [white]

1 yes  
5 no

7 "R" volunteers "Doctor did not recommend any method, just that I should quit"

d Don't Know r Refused

<1,5,d,r> <7> [goto int1]

>tg7<

[r] A group program?

[cyan] Did a doctor recommend this to help you quit smoking? [white]

1 yes  
5 no

7 "R" volunteers "Doctor did not recommend any method, just that I should quit"

d Don't Know r Refused

<1,5,d,r> <7> [goto int1]

>tg8<

[r] Did the doctor talk to you about setting a date for when you would quit smoking altogether?

1 yes  
5 no

d don't know r refused

<1,5,d,r>

=====

**ALCOHOL CONSUMPTION**

=====

>int1<

[r] Now I would like to ask you some questions about drinking alcohol.

[r] In these questions, when we use the word "drink" it means one twelve ounce [n]  
[r] bottle of beer or glass of draft, one five ounce glass of wine, or one [n]  
[r] straight or mixed drink with one ounce and a half of hard liquor. [n]

>ac1<

[r] During the past 12 months have you had a drink of any alcoholic beverage? [n]

[bold][yellow] INTERVIEWER: Include light beer, but do NOT include fully dealcoholized beer. [n][white]

1 Yes  
5 No

d Don't Know r Refused

<1> [goto five] <5,d,r> [goto ac2]

>ac2< #asking non-current drinkers]

[r] Did you EVER have a drink of any alcoholic beverage? [n]

1 Yes  
5 No

<1> [goto ac3] <5> [goto chek]

>five<

[#asking current drinkers]  
[define <d><98>][define <r><99>]

[r] About how often during the past twelve months would you say you had five or [n]  
[r] more drinks at the same sitting or occasion: would you say every day, about [n]  
[r] every day, 3 or 4 times a week, once or twice a week, 2 or 3 times a month, [n]  
[r] about once a month, 6 to 11 times a year, 1 to 5 times a year, or never in the past year?

1 Every day  
2 About every day  
3 3 or 4 times a week  
4 Once or twice a week  
5 2 or 3 times a month  
6 About once a month  
7 6 to 11 times a year  
8 1 to 5 times a year  
9 Never in the past year

d Don't Know r Refused

>ac3< [#asking former and current drinkers]  
[define <d><8>] [define <r><9>]

[r] Was there ever a time in your life when you drank five or more drinks [n]  
[r] on one occasion at LEAST ONCE A WEEK?  
[n]

1 yes  
5 no

d don't know r refused

>ac4< [#asking former and current drinkers]  
[define <d><98>][define <r><99>]

[r] What is the largest number of drinks you can recall EVER having on one occasion?

[bold][yellow] INTERVIEWER: "drink" means one twelve ounce bottle of beer or glass of draft, one five ounce glass of wine, or one straight or mixed drink with one ounce and a half of hard liquor.

INTERVIEWER: Include light beer, but do NOT include fully dealcoholized beer.  
[n][white]

1-97 Enter number of drinks

d Don't Know r Refused

>ac5<

[if ac1 eq <5>][goto INT\_RR][endif] [#asking current drinkers]  
[# formerly goto int2]

[r] How often, if ever, did you drink alcoholic beverages during the past twelve [n]  
[r] months: would you say MORE than once a day, about every day, four to five [n]  
[r] times a week, two to three times a week, once a week, two to three times a [n]  
[r] month, once a month, or less than once a month?  
[n]

[bold][yellow] INTERVIEWER: This means any type of alcohol. [n][white]

1 More than once a day  
2 About every day (includes SIX times a week)  
3 4 to 5 times a week  
4 2 to 3 times a week  
5 Once a week  
6 2 to 3 times a month  
7 Once a month  
8 Less than once a month

d Don't Know r Refused

>ac6a<

[r] On those days when you drank, how many drinks did you usually have? [n]

[bold][yellow] INTERVIEWER: "drink" means one twelve ounce bottle of beer or glass of draft, one five ounce glass of wine, or one straight or mixed drink with one ounce and a half of hard liquor.

INTERVIEWER: Include light beer, but do NOT include fully dealcoholized beer.  
[n][white]

1-96 Enter number of drinks

97 97 or more

d Don't Know r Refused

>ac6b<

[r] What is the largest number of drinks you can recall having on one occasion [n]  
[r] during the PAST TWELVE MONTHS?

INTERVIEWER: "drink" means one twelve ounce bottle of beer or glass of draft, one five ounce glass of wine, or one straight or mixed drink with one ounce and a half of hard liquor.

Include light beer, but do NOT include fully dealcoholized beer.

1-97 Enter number of drinks

d Don't Know r Refused

>aud4< [define <d><8>] [define <r><9>]

[r] How often during the last year have you found that you were not able to stop [n]  
[r] drinking once you had started?

[r] Never, Less than monthly, Monthly, Weekly, or Daily or almost daily? [n]

0 Never

1 Less than monthly  
2 Monthly  
3 Weekly  
4 Daily or almost daily

d Don't Know r Refused

>aud5<

[r] How often during the last year have you failed to do what was normally [n]  
[r] expected from you because of drinking?

[cyan] Never, Less than monthly, Monthly, Weekly, or Daily or almost daily? [n][white]

0 Never

1 Less than monthly  
2 Monthly  
3 Weekly  
4 Daily or almost daily

d Don't Know r Refused

>aud6<

[r] How often during the last year have you needed a first ALCOHOLIC drink [n]  
[r] in the morning to get yourself going after a heavy drinking session?

[cyan] Never, Less than monthly, Monthly, Weekly, or Daily or almost daily? [n][white]

0 Never

1 Less than monthly  
2 Monthly  
3 Weekly  
4 Daily or almost daily

d Don't Know r Refused

>aud7<

[r] How often during the last year have you had a feeling of guilt or remorse after drinking?

[cyan] Never, Less than monthly, Monthly, Weekly, or Daily or almost daily? [n][white]

0 Never

1 Less than monthly  
2 Monthly  
3 Weekly  
4 Daily or almost daily

d Don't Know r Refused

>aud8<

[r] How often during the last year have you been unable to remember what happened the night before because you had been drinking?

[cyan] Never, Less than monthly, Monthly, Weekly, or Daily or almost daily?

0 Never

1 Less than monthly  
2 Monthly  
3 Weekly  
4 Daily or almost daily

d Don't Know r Refused

>aud9<

[r] Have you or someone else EVER been injured as a result of your drinking?

[bold][yellow] INTERVIEWER: if r says "yes", ask "was this in the last year?"

1 Yes, but not in the last year  
2 Yes, during the last year

5 no

d Don't Know r Refused

>aud0<

[r] Has a relative or friend or a doctor or other health worker EVER been [n]  
[r] concerned about your drinking or suggested you cut down?

INTERVIEWER: if r says "yes", ask "was this in the last year?"

1 Yes, but not in the last year  
2 Yes, during the last year

5 no

d Don't Know r Refused

=====

**DRINKING & DRIVING**

=====

>dd1< [if chek eq <1>][goto INT\_RR][endif]

[r] During the past 12 months, have you driven a motor vehicle after having two [n]  
[r] or more drinks in the previous hour?  
[n]

1 Yes  
5 No

7 Don't drive

d Don't Know r Refused

<1> [goto dd2]  
<5,7> [goto INT\_RR]  
<d,r> [goto INT\_RR]

>dd2< [define <d><98>] [define <r><99>]

[r] How many times in THE PAST 30 DAYS?  
[n]

0 Never

1-96 Enter number of times

97 97 or more times

d Don't Know r Refused

=====

**ROAD RAGE ITEMS**

=====

[# New Items - Panel B 2001 ]

>INT\_RR<

[r] Now some questions about things that might have happened when you are driving [n]

[r] or are a passenger in a car, van, truck or motorcycle.  
[# ASK ALL]

>rr1<

[define <d><98>]  
[define <r><99>][define <n><97>]

[r] During the past 12 months, how many times has someone  
in another vehicle [n]  
[r] shouted, cursed, or made rude gestures at you or others  
with you? [n]

0 Never

1-95 Enter number of times

96 96 or more times

n I have not driven/I have not been a passenger in  
the last 12 months

d Don't Know r Refused

<0,1-96,d,r>  
<n> [goto END\_RR]

>rr2<

[r] During the past 12 months, how many times has someone  
in another vehicle [n]  
[r] THREATENED to hurt you or others with you, or  
THREATENED to damage the [n]  
[r] vehicle you were in?

0 Never

1-95 Enter number of times

96 96 or more times

n I have not driven/I have not been a passenger in  
the last 12 months

d Don't Know r Refused

<n>[goto END\_RR]

>rr3<

[r] During the past 12 months, how many times has someone  
in another vehicle [n]  
[r] INTENTIONALLY DAMAGED or ATTEMPTED to  
damage the vehicle you were in? [n]

0 Never

1-95 Enter number of times

96 96 or more times

n I have not driven/I have not been a passenger in  
the last 12 months

d Don't Know r Refused

<n>[goto END\_RR]

>rr4<

[r] During the past 12 months, how many times has someone  
in another vehicle INTENTIONALLY HURT or  
ATTEMPTED to hurt you or others with you?

0 Never

1-96 Enter number of times

n I have not driven/I have not been a passenger in  
the last 12 months

d Don't Know r Refused

<n>[goto END\_RR]

>rr5<

[r] During the past 12 months, how many times have you  
shouted, cursed, or made [n]  
[r] rude gestures at a driver or passenger in another vehicle?

0 Never

1-96 Enter number of times

n I have not driven/I have not been a passenger in  
the last 12 months

d Don't Know r Refused

<n>[goto END\_RR]

>rr6<

[r] During the past 12 months, how many times have you  
threatened to hurt a [n]  
[r] driver or passenger in another vehicle, or threatened to  
damage their vehicle? [n]

0 Never

1-95 Enter number of times

96 96 or more times

d Don't Know r Refused

>rr7<

[r] During the past 12 months, how many times have you  
intentionally damaged or [n]  
[r] attempted to damage another driver's vehicle?

0 Never

1-95 Enter number of times

96 96 or more times

d Don't Know r Refused

>rr8<

[r] During the past 12 months, how many times have you  
intentionally hurt or [n]  
[r] attempted to hurt a driver or passenger in another vehicle?

0 Never  
1-95 Enter number of times  
96 96 or more times  
d Don't Know r Refused

>END\_RR<

---

---

### CANNABIS CONSUMPTION

---

---

>cn1< [define <d><8>] [define <r><9>]  
[if cn2 ge <1> and cn2 le <8>] [# code added 2 May  
2000]  
[goto htw1]  
[endif]

[r] Some people use marijuana or hash in private, with  
friends, or in other [n]  
[r] situations. Have you EVER IN YOUR LIFETIME used  
MARIJUANA or HASH? [n]

1 Yes  
5 No

d don't know r refused

<1> [goto htw1]  
<5,d,r> [goto int3]

>htw1< [# keep always after lifetime question]

[r] Have you used MARIJUANA or HASH more than 25  
times IN YOUR LIFETIME ? [n]

1 yes  
5 no

d don't know r refused

>cn2<  
[#FOR MARIJUANA OR HASHISH USERS]  
[define <d><98>] [define <r><99>]

[r] How many times, if any, have you used marijuana or hash  
during the PAST [n]  
[r] twelve months: would you say more than once a day,  
about every day, four [n]  
[r] to five times a week, two to three times a week, once a  
week, two to three [n]  
[r] times a month, once a month, less than once a month or  
never? [n]

1 More than once a day  
2 About every day (includes SIX times a week)  
3 4 to 5 times a week  
4 2 to 3 times a week  
5 Once a week  
6 2 to 3 times a month  
7 Once a month  
8 Less than once a month  
9 Never

d Don't know r Refused

<1-9>  
<d,r> [goto int3]

---

---

### CANNABIS DEPENDENCE

---

---

>cn3< [#FOR MARIJUANA OR HASHISH USERS]  
[if cn2 eq <9>] [goto int3] [endif]  
[define <d><8>] [define <r><9>]

[r] Now for some experiences that may have happened to you  
in connection with [n]  
[r] your use of marijuana. As I read each item, please tell me  
if it has [n]  
[r] happened to you in the LAST 12 MONTHS:  
[n]

[r] Felt a very strong urge or desire to USE marijuana ?  
[n]

1 yes  
5 no

d don't know r refused

<1,5,d,r>

>cn5<

[r] Tried to stop or cut down on your USE of marijuana but  
found you couldn't? [n]

[bold][yellow]  
INTERVIEWER: If "R" says they never tried to cut down,  
code "5" for "no"  
[n][white]

1 yes  
5 no

d don't know r refused

<1,5,d,r>

>cn6<

[r] Felt sick or found yourself shaking when you cut down or  
stopped using [n]  
[r] marijuana? [n]

[bold][yellow]  
INTERVIEWER: If "R" says they never tried to cut down,  
code "5" for "no"  
[n][white]

1 yes  
5 no

d don't know r refused

<1,5,d,r>

>cn8<

[r] Found that your usual amount of marijuana had much less effect on you than [n] it once did? [n]

- 1 yes
- 5 no

d don't know r refused

<1,5,d,r>

>cn9<

[r] Gave up or neglected pleasures or interests in favour of using MARIJUANA ? [n]

- 1 yes
- 5 no

d don't know r refused

<1,5,d,r>

>cn11<

[r] Kept on using MARIJUANA even though you had a health problem caused or made [n] worse by it? [n]

- 1 yes
- 5 no

d don't know r refused

=====
GENERAL HEALTH QUESTIONS
=====

>int3<

[r] Next, we would like to ask you a few questions about your general health [n] and how you have been feeling lately. [n]

Press enter to continue

[no data]

>gh1< [#ASK ALL]

[r] In general, would you say your health is excellent, very good, good, fair [n] or poor? [n]

- 1 Excellent
- 2 Very good
- 3 Good
- 4 Fair
- 5 Poor

d Don't Know r Refused

>gh2<

[r] During the past 30 days, how much of the time has your health limited your social activities?

[r] Would you say all or most of the time, some of the time, or none of the time? [n]

INTERVIEWER: If asked about social activities, say "such as visiting with friends or relatives or going out" [n][white]

- 1 All or Most of the time
- 3 Some of the time
- 5 None of the time

d Don't Know r Refused

>gh3<

[r] During the past 30 days, has your health ever kept you from working at a job, [n]

[r] doing work around the house, going to school, or doing schoolwork? [n]

- 1 yes
- 5 no

d don't know r refused

<1,5,d,r>

=====
GENERAL HEALTH Questionnaire
(GHQ-12)
=====

>int4< [#ASK ALL]

[r] In the next few questions we would like to know if you have experienced any [n] medical complaints, and how your health has been in general, over the past [n] few weeks. [n]

Press "Enter" to continue

[nodata]

>gq1<

[r] Over the past few weeks, have you been able to concentrate on whatever you're [n] doing? [n]

[r] Would you say better than usual, the same as usual, less than usual, or much [n] less than usual? [n]

- 1 Better than usual
- 3 Same as usual
- 5 Less than usual
- 7 Much less than usual

d Don't Know r Refused

>gq2<

[r] Over the past few weeks, have you felt that you are playing a useful part in things?

[r] Would you say more so than usual, same as usual, less useful than usual, or much less useful?

[n]

- 1 More so than usual
- 3 Same as usual
- 5 Less so than usual
- 7 Much less than usual

d Don't Know    r Refused

>gq3<

[r] Over the past few weeks, have you felt capable of making decisions about things?

[cyan] Would you say more so than usual, same as usual, less so than usual, or much less capable? [white]

- 1 More so than usual
- 3 Same as usual
- 5 Less so than usual
- 7 Much less than usual

d Don't Know    r Refused

>gq4<

[r] Over the past few weeks, have you been able to enjoy your normal day-to-day [n] activities? [n]

[cyan] Would you say more so than usual, same as usual, less so than usual, or much less capable? [white]

- 1 More so than usual
- 3 Same as usual
- 5 Less so than usual
- 7 Much less than usual

d Don't Know    r Refused

>gq5<

[r] Over the past few weeks, have you been able to face up to your problems? [n]

[cyan] Would you say more so than usual, same as usual, less so than usual, or much less capable? [white]

- 1 More so than usual
- 3 Same as usual
- 5 Less so than usual
- 7 Much less than usual

0 R volunteers "I have no problems"

d Don't Know    r Refused

>gq6<

[r] Over the past few weeks, all things considered, have you been feeling reasonably happy?

[cyan] Would you say more so than usual, same as usual, less so than usual, or much less capable? [white]

- 1 More so than usual
- 3 Same as usual
- 5 Less so than usual
- 7 Much less than usual

d Don't Know    r Refused

>gq7<

[r] Over the past few weeks, have you lost much sleep because of worry? [n]

[r] Would you say not at all, no more than usual, rather more than usual, or much more than usual? [n]

- 1 Not at all
- 3 No more than usual
- 5 Rather more than usual
- 7 Much more than usual

d Don't Know    r Refused

>gq8<

[r] Over the past few weeks, have you felt constantly under strain? [n]

[r] Would you say not at all, no more than usual, rather more than usual, or much more than usual? [n]

- 1 Not at all
- 3 No more than usual
- 5 Rather more than usual
- 7 Much more than usual

d Don't Know    r Refused

>gq9<

[cyan] Over the past few weeks... [white]

[r] ...have you felt you could not overcome your difficulties? [n]

[cyan] Would you say not at all, no more than usual, rather more than usual, or much more than usual? [white]

- 1 Not at all
- 3 No more than usual
- 5 Rather more than usual
- 7 Much more than usual

d Don't Know    r Refused

>gq10<

[r] Over the past few weeks, have you been feeling unhappy and depressed? [n]

[cyan] Would you say not at all, no more than usual, rather more than usual, or much more than usual? [white]

- 1 Not at all
  - 3 No more than usual
  - 5 Rather more than usual
  - 7 Much more than usual
- d Don't Know r Refused

>gq11<

[cyan] Over the past few weeks, have you...[white]

[r] ...been losing confidence in yourself? [n]

[cyan] Would you say not at all, no more than usual, rather more than usual, or much more than usual? [white]

- 1 Not at all
  - 3 No more than usual
  - 5 Rather more than usual
  - 7 Much more than usual
- d Don't Know r Refused

>gq12<

[r] Over the past few weeks, have you been thinking of yourself as a worthless person? [n]

[cyan] Would you say not at all, no more than usual, rather more than usual, or much more than usual? [white]

- 1 Not at all
  - 3 No more than usual
  - 5 Rather more than usual
  - 7 Much more than usual
- d Don't Know r Refused

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## PSYCHOTHERAPEUTICS

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(6 items from ODM 1999 )

>int2<

[r] The next set of questions are about various types of prescription [n] medications -- medications that are prescribed by a doctor or psychiatrist. [n]

>hs3< [#ask all]

[r] Do you have insurance coverage for prescription medication? [n]

- 1 Yes
  - 5 No
- d Don't Know r Refused

>ROUTE\_PS1< [if RANDOM3 eq <1> goto ps1] [if RANDOM3 eq <2> goto ps2]

>ps1< [#ask all]

[r] In the last 12 months, have you taken any prescription medication to help you sleep?

- 1 yes
  - 5 no
- d don't know r refused

<1,d> [goto CHECK1] <5,r> [goto ROUTE\_PS11]

>CHECK1< [if RANDOM3 eq <1> goto ps2] [if RANDOM3 eq <2> goto EXIT9]

>ps2<

[r] How about in the last 7 days, have you taken any prescription medication to help you sleep? [n]

- 1 yes
  - 5 no
- d don't know r refused

<1> [goto EXIT9] <5,d,r> [goto CHECK2]

>CHECK2< [if RANDOM3 eq <1> goto EXIT9] [if RANDOM3 eq <2> goto ps1]

>EXIT9<

>pay1< [define <d><998>][define <r><999>]

[r] On average, when you filled a prescription for this medication, what dollar [n] amount did you have to pay yourself because it was not covered by an insurance company? [n]

[cyan] prescription medication to help you sleep. [white]

- 0 Nothing
  - 1-996 Enter amount
  - 997 997 or more times
- d don't know r refused

>ROUTE\_PS11< [if RANDOM3 eq <1> goto ps11]  
[if RANDOM3 eq <2> goto ps12]

>ps11< [#ask all]  
[define <d><8>] [define <r><9>]

[r] In the last 12 months, have you taken any prescription  
medication to reduce [n]  
[r] anxiety or panic attacks?  
[n]

1 yes  
5 no

d don't know r refused

<1,d> [goto CHECK4]  
<5,r> [goto ps16]

>CHECK4< [if RANDOM3 eq <1> goto ps12]  
[if RANDOM3 eq <2> goto EXIT3]

>ps12<

[r] How about in the last 7 days, have you taken any  
prescription medication to reduce anxiety or panic attacks?

1 yes  
5 no

d don't know r refused

<1> [goto EXIT3]  
<5,d,r>

>CHECK5< [if RANDOM3 eq <1> goto EXIT3]  
[if RANDOM3 eq <2> goto ps11]

>EXIT3<

>pay2< [define <d><998>][define <r><999>]

[r] On average, when you filled a prescription for this  
medication, what dollar [n]  
[r] amount did you have to pay yourself because it was not  
covered by an insurance company?

[cyan] prescription medication to reduce anxiety or panic  
attacks. [white]

0 Nothing

1-996 Enter amount

997 997 or more times

d don't know r refused

>ROUTE\_PS16< [if RANDOM3 eq <1> goto ps16 [if  
RANDOM3 eq <2> goto ps17]

>ps16<  
[# ask all] [define <d><8>] [define <r><9>]

[r] In the last 12 months, have you taken any prescription  
medication to treat depression?

1 yes  
5 no

d don't know r refused

<1,d> [goto CHECK6]  
<5,r> [goto g1]

>CHECK6< [if RANDOM3 eq <1> goto ps17]  
[if RANDOM3 eq <2> goto EXIT4]

>ps17<

[r] How about in the last 7 days, have you taken any  
prescription medication to treat depression?  
[n]

1 yes  
5 no

d don't know r refused

<1> [goto EXIT4]  
<5,d,r>

>CHECK7< [if RANDOM3 eq <1> goto EXIT4]  
[if RANDOM3 eq <2> goto ps16]

>EXIT4<

>pay3< [define <d><998>][define <r><999>]

[r] On average, when you filled a prescription for this  
medication, what dollar [n]

[r] amount did you have to pay yourself because it was not  
covered by an insurance company?

[cyan] prescription medication to treat depression. [white]

0 Nothing

1-996 Enter amount

997 997 or more times

d don't know r refused

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## GAMBLING (PANEL B only)

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### Types of gambling

[#ASK ALL]

>g1<

[r] In the past twelve months, how often, on average, did you  
buy LOTTERY [n]

[r] tickets, such as "6-49", Super 7, or INSTANT LOTTERY  
tickets like scratch [n]

[r] and win, pull-tabs, instant bingo ?  
[n]

[r] Would you say once a day, two to six times a week, about  
once a week, [n]

[r] two to three times a month, about once a month, or less than once a [n]  
[r] month? [n]

- 1 once a day (or more often)
- 2 2 to 6 times a week
- 3 about once a week
- 4 2 to 3 times a month
- 5 about once a month
- 6 Less than once a month
- 7 or never (don't read)

d don't know r refused

<1-7,d,r>

>g2<

[r] In the past twelve months, how often, on average, did you buy SPORTS SELECT [n]  
[r] OR PRO LINE tickets? [n]

[r] Would you say once a day, two to six times a week, about once a week, two to [n]  
[r] three times a month, about once a month, or less than once a month? [n]

- 1 once a day (or more often)
- 2 2 to 6 times a week
- 3 about once a week
- 4 2 to 3 times a month
- 5 about once a month
- 6 Less than once a month
- 7 or never (don't read)

d don't know r refused

<1-7,d,r>

>g3<

[r] In the past twelve months, how often, on average, did you SPEND MONEY [n]  
[r] PLAYING BINGO not including instant bingo? [n]

[r] Would you say once a day, two to six times a week, about once a week, two [n]  
[r] to three times a month, about once a month, or less than once a month? [n]

- 1 once a day (or more often)
- 2 2 to 6 times a week
- 3 about once a week
- 4 2 to 3 times a month
- 5 about once a month
- 6 Less than once a month
- 7 or never (don't read)

d don't know r refused

<1-7,d,r>

>g4<

[r] In the past 12 months, how often, on the average, did you BET MONEY ON [n]  
[r] HORSE RACING? [n]

[r] Would you say once a day, two to six times a week, about once a week, two [n]  
[r] to three times a month, about once a month, or less than once a month? [n]

- 1 once a day (or more often)
- 2 2 to 6 times a week
- 3 about once a week
- 4 2 to 3 times a month
- 5 about once a month
- 6 Less than once a month
- 7 or never (don't read)

d don't know r refused

<1-7,d,r>

>g5<

[r] In the past 12 months, how often, on the average, did you BET MONEY AT A [n]  
[r] CASINO? [n]

[r] Would you say once a day, two to six times a week, about once a week, two [n]  
[r] to three times a month, about once a month, or less than once a month? [n]

- 1 once a day (or more often)
- 2 2 to 6 times a week
- 3 about once a week
- 4 2 to 3 times a month
- 5 about once a month
- 6 Less than once a month
- 7 or never (don't read)

d don't know r refused

<1-6,d> [goto g5a]  
<7,r> [goto g6]

>g5a<

[define <d><98>][define <r><99>]  
[# ASK ONLY IF (g5 le 6) or (g5 eq 8) ]

[r] In the past twelve months how many times have you bet money at a CASINO [n]  
[r] in ONTARIO? [n]

0 Never  
1-97 Enter number of times

d Don't know r Refused

>g6< [define <d><8>][define <r><9>]

[r] In the past 12 months, how often did you BET MONEY ON SLOT MACHINES at a RACE-TRACK?

[r] Would you say once a day, two to six times a week, about once a week, two [n] [r] to three times a month, about once a month, or less than once a month? [n]

[bold][yellow] IF NEEDED: "Do not include slot machines in a Casino." [n][white]

- 1 once a day (or more often)
- 2 2 to 6 times a week
- 3 about once a week
- 4 2 to 3 times a month
- 5 about once a month
- 6 Less than once a month
- 7 or never (don't read)

d don't know r refused

<1-6,d> <7,r> [goto g7]

>g6a< [define <d><98>][define <r><99>]  
[# ASK ONLY IF (g6 le 6) or (g6 eq 8) ]

[r] In the past twelve months how many times have you bet money on SLOT MACHINES [n] [r] at a RACE-TRACK in ONTARIO? [n]

0 Never

1-97 Enter number of times

d Don't know r Refused

>g7< [define <d><8>][define <r><9>]

[r] In the past 12 months, not counting card games at Casinos, how often, on [n] [r] average, did you BET MONEY ON CARD GAMES you were playing in ? [n]

[r] Would you say once a day, two to six times a week, about once a week, two [n] [r] to three times a month, about once a month, or less than once a month? [n]

- 1 once a day (or more often)
- 2 2 to 6 times a week
- 3 about once a week
- 4 2 to 3 times a month
- 5 about once a month
- 6 Less than once a month
- 7 or never (don't read)

d don't know r refused

>g8<

[r] In the past 12 months, how often, on the average, did you BET MONEY on [n]

[r] SPORTS or in a SPORT POOL whether or not you were playing the sport yourself? [n]

[r] Would you say once a day, two to six times a week, about once a week, two [n] [r] to three times a month, about once a month, or less than once a month? [n]

- 1 once a day (or more often)
- 2 2 to 6 times a week
- 3 about once a week
- 4 2 to 3 times a month
- 5 about once a month
- 6 Less than once a month
- 7 or never (don't read)

d don't know r refused

>g9<

[r] In the past 12 months, how often did you BET MONEY over the INTERNET? [n]

[r] Would you say once a day, two to six times a week, about once a week, two to [n] [r] three times a month, about once a month, or less than once a month? [n]

[bold][yellow] IF NEEDED: "Do not include buying or selling stocks over the Internet." [n][white]

- 1 once a day (or more often)
- 2 2 to 6 times a week
- 3 about once a week
- 4 2 to 3 times a month
- 5 about once a month
- 6 Less than once a month
- 7 or never (don't read)

d don't know r refused

>g10<

[define <d><999998.00>][define <r><999999.00>]

[r] Including lotteries, bingo, horse racing, cardplaying, casino betting and [n] [r] all other games and betting, about how about how much money have you spent [n] [r] IN TOTAL ON games of chance during the PAST 30 DAYS? [n]

enter full amount (include thousands)

d don't know r refused

<0-999996.00> [input format dollar commas]  
<d,r>

>g11<

[# ask all R's this item] [define <d><8>][define <r><9>]

[r] In your LIFETIME, would you say you spent no money, between ONE and NINETY [n] [r] NINE dollars, between ONE HUNDRED dollars and NINE HUNDRED AND NINETY NINE [n] [r] dollars, or more than a thousand dollars on things like lotteries, bingo, [n]

[r] horse racing, cardplaying, casino betting and all other games and betting? [n]

- 0 no money
- 1 between 1-99 dollars
- 3 between 100 dollars and 999 dollars
- 5 more than \$1,000

d Don't Know r Refused

>PROBLEMS< [allow int 1][store <0> in PROBLEMS]

**Gambling problems - Past 12 months**

[Short NT-SOGS ]

FOR THIS SECTION ALLOW RESPONDENT TO VOLUNTEER THAT THEY DO NOT GAMBLE ASK ONLY IF G11 GE 3 -- THEY'VE SPENT MORE THAN \$100 IN THEIR LIFETIME ON GAMBLING AND DONE ANYTHING IN THE PAST 12 MONTHS (respondents who answered 1 to 6 in 1 or more of g1 to g9)

>nts1<

[r] In the past 12 months, was there ever a time when you gambled more than [n] [r] you intended to? [n]

- 1 yes
- 5 no

7 Do not read: R volunteers they do not gamble, do not have problem

d don't know r refused

>nts2<

[r] In the past 12 months, have people criticized your gambling? [n]

- 1 yes
- 5 no

7 Do not read: R volunteers they do not gamble, do not have problem

d don't know r refused

>nts3<

[r] In the past 12 months, have you ever felt guilty about the way you gamble [n] [r] or what happens when you gamble? [n]

- 1 yes
- 5 no

7 Do not read: R volunteers they do not gamble, do not have problem

d don't know r refused

>nts4<

[r] In the past 12 months, have money arguments ever centred on your gambling? [n]

- 1 yes
- 5 no

7 Do not read: R volunteers they do not gamble, do not have problem

d don't know r refused

>nts5<

[r] In the past 12 months, how often have you claimed to be winning money gambling [n] [r] when you were not: would you say never, some of the time, most of the time, [n] [r] or all of the time? [n]

- 1 never (no)
- 2 some of the time
- 3 most of the time
- 4 all of the time (every time)

7 Do not read: R volunteers they do not gamble, do not have problem

d don't know r refused

<1,2,3,4,7,d,r>

>END\_G<

**DEMOGRAPHICS**

>age1< [define <d><9998>][define <r><9999>][define <a><9997>]

[r] Finally, these last questions are for classification purposes only. [n]

[r] First, in what year were you born?

1890-1983 Enter year

a after 1983

d don't know r refused

<1890-1983> <a,d,r>

>sd2< [define <d><98>][define <r><99>]

[r] What is the highest level of education you have completed? [n]

- 1 No schooling
- 2 Some elementary school
- 3 Completed elementary school
- 4 Some high school/junior high
- 5 Completed high school
- 6 Some community college

- 7 Some technical school (College Classique, CEGEP)
- 8 Completed community college
- 9 Completed technical school (College Classique, CEGEP)
- 10 Some University
- 11 Completed Bachelor's Degree (Arts, Science, Engineering, etc.)
- 12 Post graduate Training: MA, MSc, MLS, MSW, etc.
- 13 Post graduate Training: PhD, "doctorate"
- 14 Professional Degree (Law, Medicine, Dentistry)

d Don't Know r Refused

<1-14>  
<d,r>

>sd3< [define <s><0>]

[r] What is your religion?

- 1 Anglican
- 2 Baptist
- 3 Born-again Christian
- 4 Buddhist
- 5 Catholic
- 6 Christian
- 7 Eastern Orthodox
- 1 Episcopal
- 7 Greek Orthodox
- 8 Hindu
- 9 Jehovah's Witness
- 10 Jewish
- 11 Latter Day Saints
- 12 Lutheran
- 13 Mennonite
- 14 Muslim
- 15 Non-denominational
- 16 Pentecostal
- 17 Presbyterian
- 18 Protestant
- 5 Roman Catholic
- 19 Salvation Army
- 20 Sikh
- 21 United Church

s Other religion (specify)

d No religion r Refused

<1-21> [goto sd4]  
<d,r> [goto sd5]  
<s> [specify]

>sd4< [define <d><998>] [define <r><999>]

[r] How often have you attended religious services in the last twelve months? [n]

0 Never

1-996 Enter number of times

997 times or more

d Don't Know r Refused

<1-997>  
<d,r>

>sd5< [define <d><8>] [define <r><9>]

[r] At present are you married, living with a partner, widowed, divorced, [n]

[r] separated, or have you never been married?

- 1 Married
- 2 Living with a partner
- 3 Widowed
- 4 Divorced

- 5 Separated
- 6 Never married

d Don't Know r Refused

<1-6>  
<d,r>

>sd5a< [define <d><98>] [define <r><99>]

[r] Including yourself, how many people are currently living in your household? [n]

1-97

d Don't Know r Refused

<1-97> <d,r>

>sd5b<

[r] In the last 12 months did you use the Internet? [n]

- 1 yes
- 5 no

d don't know r refused

<1> [goto sd5c]  
<5,d,r> [goto sd6]

>sd5c<

[r] Did you use it both at home and outside home, at home only, or outside your [n]  
[r] home only?

- 1 both at home and outside home
- 2 at home only
- 3 outside home only

d don't know r refused

<1-4,d,r>

>sd6<

[r] Are you presently working for pay in a full-time or in a part-time job, are [n]

[r] you unemployed, retired, a homemaker, a student, or something else? [n]

- 1 Full-time job, including during vacations from work
- 2 Part-time job
- 3 Sick leave, maternity leave, strike, etc.
- 4 Unemployed
- 5 Retired
- 6 Homemaker
- 7 Student (includes students working part-time)

0 Other

d Don't Know r Refused

<0> [goto sd7b]  
<1-5> [goto sd7]  
<6> [goto sd6b]  
<7> [goto sd7b]

<d,r> [goto sd7b]

>sd6b< [define <d><8>] [define <r><9>]

[r] Did you ever work for pay in a full-time or in a part-time job? [n]

1 yes  
5 no

d don't know r refused

<1> [goto sd7]  
<5,d,r> [goto sd7b]

>sd7< [define <d><9998>][define <r><9999>]  
[if sd6 eq <7>][store <9995> in sd7][goto sd7b][endif]

[if sd6 ge <1>][if sd6 le <3>]  
[r] What is your main occupation?  
[n]  
[endif][endif]  
[if sd6 is <4>]  
[r] When you were last employed, what was your occupation? [n]  
[endif]  
[if sd6 is <5>]  
[r] Before you retired, what was your occupation?  
[n]  
[endif]  
[if sd6 is <6>]  
[r] When you were last employed, what was your occupation? [n]  
[endif]

[bold][yellow]  
INTERVIEWER: Do not accept "co-ordinator", "clerk", "works at bank", "businessman" etc. ASK FOR job title, and job duties!  
[n][white]

1 Enter text, end with //

d don't know r refused

<1> [specify]  
<d,r>

>sd7b< [define <d><8>] [define <r><9>]

[r] Do you currently have a valid driver's licence?  
[n]

1 yes  
5 no

d don't know r refused

<1,5,d,r>

>sd8< [define <d><98>][define <r><99>] [define <s><0>]

[r] What language do you usually speak in your own home?  
[n]

1 Cantonese 11 Hindi 20 Russian  
1 Chinese 12 Hungarian 21 Serbian  
2 Croatian 13 Italian 22 Somali  
3 Czech 14 Japanese 23 Spanish  
4 Danish 15 Korean 4 Swedish  
5 Dutch 16 Macedonian 24 Tamil  
6 ENGLISH 1 Mandarin 25 Ukrainian  
7 French 4 Norwegian 26 Urdu  
8 Filipino 17 Polish 27 Vietnamese  
4 Finnish 18 Portuguese 28 Welsh  
9 German 19 Punjabi 29 Yugoslavian  
10 Greek

s Other (specify) r Refused

<1-29>  
<s> [specify]  
<d,r>

>sd9a< [define <s><0>] [define <d><98>] [define <r><99>]

[r] To what ethnic or cultural group did you, or your ancestors belong on first [n]  
[r] coming to this continent?  
[n]  
[bold][yellow] INTERVIEWER: If R is not clear, say "Are you Scottish, Chinese, Greek, or something else?"[n][white]

1 Australian 13 Ethiopian 24 Jamaican 33 Portuguese  
41 Vietnamese  
2 Austrian 14 French 25 Japanese 34 Russian 8 Yugoslavian  
3 Bahamian 10 Finnish 26 Jewish 6 SCOTTISH  
6 Welsh  
4 Bangladeshi 15 German 27 Korean 8 Serbian  
95 aboriginal  
5 BLACK/African 16 Greek 28 Lebanese 35 Sikh  
96 Canadian  
6 British 17 Guyanese 8 Macedonian 36 Somalia  
7 Chinese 18 Haitian 1 New Zealand 9 Slovakian  
8 Croatian 11 Holland 11 Netherlands 37 Spanish  
9 Czech 19 Hungarian 29 Nigerian 38 Sri Lanka  
10 Danish 20 Irish 10 Norwegian 10 Swedish  
11 Dutch 21 Italian 30 Pakistani 38 Tamil  
6 English 22 Indian 31 Philipino 39 Trinidadian  
12 El Salvador 23 Israeli 32 Polish 40 Ukrainian

s Other (specify) d Don't know r Refused

<1-41,95,96>[goto sd9c]  
<d,r> [goto sd10]  
<s> [specify]

>sd9c< [define <d><98>] [define <r><99>] [define <s><0>]  
[bold][yellow] (INTERVIEWER: Enter SECOND mention only here.[n][white]

97 NO SECOND MENTION

>sd10< [define <d><999998.00>][define <r><999999.00>]

[r] Could you please tell me how much income you and other members of your [n] household received in the year ending December 31st 2000, before taxes? [n]

[r] Please include income FROM ALL SOURCES such as savings, pensions, rent, and [n] unemployment insurance as well as wages. [n]

[r] TO THE NEAREST THOUSAND DOLLARS, what was your TOTAL HOUSEHOLD INCOME before [n] taxes and other deductions were made? [n]

Enter full amount (include thousands)

d don't know r refused

<1000.00-999996.00> [input format dollar commas] [goto pcod]  
<d,r> [goto d10b]

>d10b< [define <d><98>][define <r><99>]

[r] We don't need the exact amount; could you tell me which of these broad [n] categories it falls into... [n]

- 1...less than \$20,000
- 2...between \$20,000 and \$30,000 (\$29,999.99)
- 3...between \$30,000 and \$40,000
- 4...between \$40,000 and \$50,000
- 5...between \$50,000 and \$60,000
- 6...between \$60,000 and \$70,000
- 7...between \$70,000 and \$80,000
- 8...between \$80,000 and \$90,000
- 9...between \$90,000 and \$100,000, or
- 10...more than \$100,000?

d Don't Know r Refused

<1-10>  
<d,r>

>pcod< [allow 3] [#postal code alpha/numeric mask]

[r] Can you please tell me the FIRST THREE DIGITS of your postal code? [n]

[bold][yellow]  
Enter the first THREE digits of the postal code here  
USE 3 CHARACTERS ONLY --  
LETTER/NUMBER/LETTER --  
use "ref" for refusal or don't know.

Please DO NOT use capital letters  
[n][white]  
====>[goto zip1]

>ISR1< [allow int 2][equiv zip3 position 5]  
[define <d><98>][define <r><99>]

[r] How many separate telephone NUMBERS do you have in this household? [n]

1 One  
2-97 Enter exact number

d Don't Know r Refused

<1> [goto ISR3]  
<2-97> [goto ISR2]  
<d,r> [goto ISR3]

>ISR2< [define <d><98>][define <r><99>]

[r] How many of these numbers are used only for business purposes or by children [n] under 18 years of age? [n]

0-97 Enter exact number

d Don't Know r Refused

<d,r>

>cty1< [allow int 2][define <d><98>][define <r><99>][define <s><0>]

[r] In what COUNTY or regional municipality do you live? [n]

- 18 Durham RM(Oshawa Ajax Newcastle Pickering Whitby)
- 28 Haldimand-Norfolk RM(Nanticoke Dunnville Simcoe Delhi Norfolk)
- 24 Halton RM(Burlington Halton Hills Milton Oakville)
- 25 Hamilton-Wentworth RM(Ancaster Dundas Flamborough Stoney Creek)
- 20 Metro Toronto(North York York East York Scarborough Etobicoke)
- 26 Niagara RM(St Kitts Thorold Welland Niagara-on-the-Lake Grimsby)
- 14 Northumberland C(Brighton Cobourg Port Hope)
- 21 Peel RM(Brampton Mississauga Caledon)
- 43 Simcoe C(Barrie Orillia Collingwood Midland Wasaga Beach)
- 19 York RM(Aurora Markham Newmarket Rich Hill Vaughan King)

s Other (specify)

d Don't Know r Refused

<18,28,24,25,20,26,14,21,43,19> [goto re1]  
<d,r> [goto re1]  
<s> [specify][goto re1]

>cty2< [allow int 2][equiv cty1]  
[r] In what COUNTY or regional municipality do you live? [n]

- 29 Brant C(Brantford Paris Burford)
- 41 Bruce C(Kincardine Port Elgin Southampton Walkerton Wiarton)
- 22 Dufferin C(Orangeville Shelburne Grand Valley)
- 34 Elgin C(St Thomas Aylmer Port Stanley)
- 37 Essex C(Windsor Amherstburg Leamington Tecumseh)
- 42 Grey C(Owen Sound Durham Hanover)

28 Haldimand-Norfolk RM(Nanticoke Dunnville Simcoe Delhi Norfolk)  
25 Hamilton-Wentworth RM(Ancaster Dundas Flamborough Stoney Creek)  
40 Huron C(Clinton Exeter Goderich Seaforth Wingham)  
36 Kent C(Chatham Blenheim Wallaceburg)  
38 Lambton C(Sarnia Forest Petrolia)  
39 Middlesex C(London Strathroy)  
32 Oxford C(Woodstock Ingersoll Tillsonburg)  
21 Peel RM(Brampton Mississauga Caledon)  
31 Perth C(Stratford St Marys Listowel)  
30 Waterloo RM(Cambridge Kitchener Wilmot Woolwich)  
23 Wellington C(Guelph Fergus Mount Forest Arthur Elora)  
s other (specify) d Don't Know r Refused

<29,41,22,34,37,42,28,25,40,36,38,39,32,21,31,30,23>  
[goto re1]  
<d,r> [goto re1]  
<s> [specify][goto re1]

>cty3< [allow int 2][equiv cty1]  
[r] In what COUNTY or regional municipality do you live?  
[n]

10 Frontenac C(Kingston)  
46 Haliburton C(Minden)  
12 Hastings C(Belleville Trenton Tweed Bancroft)  
09 Lanark C(Almonte Carleton Place Smith Falls Perth)  
07 Leeds & Grenville C(Brockville Gananoque Prescott)  
11 Lennox & Addington C(Napanee Bath Newburgh)  
48 Nipissing D(North Bay Mattawa Sturgeon Falls)  
14 Northumberland C(Brighton Cobourg Port Hope)  
06 Ottawa-Carleton RM(Gloucester Kanata Nepean Vanier Cumberland)  
02 Prescott & Russell C(Hawkesbury Rockland)  
13 Prince Edward C(Picton Bloomfield Wellington)  
47 Renfrew C(Pembroke Arnprior Deep River Barryps Bay)  
01 Stormont, Dundas & Glengary C(Cornwall Alexandria)  
s Other (specify) d Don't Know r Refused

<10,46,12,09,07,11,48,14,06,02,13,47,01> [goto re1]

>cty4<[allow int 2][equiv cty1]  
[r] In what COUNTY or regional municipality do you live?  
[n]

57 Algoma D(Sault Ste Marie Blind River Elliott Lake)  
56 Cochrane D(Timmins Hearst Kapuskasing)  
18 Durham RM(Oshawa Ajax Newcastle Pickering Whitby)  
46 Haliburton C(Minden)  
51 Manitoulin D(Gore Bay Little Current)  
44 Muskoka DM(Bracebridge Gravenhurst Huntsville)  
48 Nipissing D(North Bay Mattawa Sturgeon Falls)  
14 Northumberland C(Brighton Cobourg Port Hope)  
49 Parry Sound D(Powassan)  
15 Peterborough C(Havelock Lakefield)  
47 Renfrew C(Pembroke Arnprior Deep River Barryps Bay)  
43 Simcoe C(Barrie Orillia Collingwood Midland Wasaga Beach)  
53 Sudbury RM(Capreol Nickel Centre Rayside Valley East)  
52 Sudbury D(Espanola Chapleau)

54 Timiskaming D(Cobalt Haileybury Kirkland Lake New Liskeard)  
16 Victoria C(Lindsay Bobcaygeon Fenelon Falls)  
19 York RM(Aurora Markham Newmarket RichHill Vaughan King)  
s Other (specify) d Don't know r Refused  
<57,56,18,46,51,44,48,14,49,15,47,43,53,52,54,16,19>  
[goto re1] <d,r> [goto re1]  
<s> [specify][goto re1]

>cty5< [allow int 2][equiv cty1]

[r] In what COUNTY or regional municipality do you live?  
[n]

60 Kenora D(Dryden Keewatin Sioux Lookout)  
59 Rainy River D(Fort Francis)  
58 Thunder Bay D(Geraldton Longlac)

s Other (specify)

d Don't Know r Refused

<d,r>  
<s> [specify]

>stop< [if ETIM eq <>][settime ETIM][endif]  
[goto SET]

## **Appendix C**

### **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 gender 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 Samples

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 age 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:

$$\frac{N \text{ adults in HH}}{\text{Mean } N \text{ adults}} \times \frac{P \text{ of HH in region}}{\text{Sample } P \text{ of HH in region}} \times \frac{\text{Total } N}{12 \text{ (monthly } N)}$$

### 1998 -2001 Samples

For the 1998 - 2001 CM, 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 2001 Census (Ontarians aged 18 and over), the post-stratification adjustment was based on six cells representing the age (18-39; 40-64; 65+) and gender (male; female) configuration. Previous surveys did not employ post-stratification adjustments.

## **Appendix D**

Table D-1: Percentage *Drinking Hazardously or Harmfully (AUDIT 8+)* During the Past 12 Months, by Demographic Characteristics, Ontarians, Aged 18+, 2001

		%	95%CI	Unadjusted Odds Ratio	Adjusted Odds Ratio for Factors 1-6
Total Sample		<b>13.3</b>	(11.8, 14.9)		
1) Gender				***	***
Women	(Comparison Group)	<b>6.3</b>	(5.0, 8.0)	—	—
Men		<b>20.6</b>	(18.1, 23.4)	3.86	3.43
2) Age				***	***
18-29	(Comparison Group)	<b>25.7</b>	(21.4, 30.5)	—	—
30-39		<b>13.8</b>	(10.9, 17.3)	0.46***	0.65*
40-49		<b>10.3</b>	(8.0, 13.4)	0.33***	0.50**
50-64		<b>10.5</b>	(8.0, 13.9)	0.34***	0.45**
65+		† <b>3.5</b>	(2.1, 5.8)	0.10***	0.12***
3) Marital Status				***	**
Married/Living with Partner	(Comparison Group)	<b>9.8</b>	(8.3, 11.5)	—	—
Previously Married		<b>8.8</b>	(6.1, 12.5)	0.89	1.50
Never Married		<b>25.6</b>	(21.4, 30.2)	3.17***	1.78**
4) Public Health Region				NS	NS
Toronto	(vs. Provincial Average)	<b>14.7</b>	(11.2, 19.0)	1.15	0.95
Central South		<b>11.0</b>	(7.2, 16.4)	0.82	0.87
Central West		<b>11.3</b>	(8.2, 15.3)	0.85	0.73
South West		<b>15.8</b>	(12.3, 20.1)	1.25	1.35
Central East		<b>12.1</b>	(8.7, 16.5)	0.92	0.88
East		<b>12.9</b>	(9.7, 16.8)	0.98	1.03
North		<b>14.3</b>	(11.4, 17.7)	1.11	1.36*
5) Education				***	***
Less than high school	(Comparison Group)	<b>10.5</b>	(7.7, 14.3)	—	—
Completed high school		<b>18.6</b>	(15.4, 22.4)	1.95**	1.25
Some college or university		<b>13.7</b>	(11.1, 16.7)	1.34	0.76
University degree		<b>8.9</b>	(6.8, 11.6)	0.83	0.50*
6) Income				*	NS
< \$30,000	(Comparison Group)	<b>10.7</b>	(7.9, 14.2)	—	—
\$30,000-\$49,000		<b>11.6</b>	(8.6, 15.4)	1.10	0.81
\$50,000-\$79,000		<b>13.6</b>	(10.7, 17.2)	1.32	0.99
\$80,000+		<b>17.9</b>	(14.6, 21.9)	1.83**	1.47
Not stated		<b>10.8</b>	(8.2, 14.2)	1.02	0.98

Note: † Estimate suppressed or unstable; \*p<.05; \*\*p<.01; \*\*\*p<.001

Asterisks in shaded rows indicate the significance of the group effect, based on Wald test.

Odds greater than 1.0 indicate that drug use is more likely to occur in the group being compared to the comparison group.

Odds less than 1.0 indicate that drug use is less likely to occur in the group being compared to the comparison group.

Source: CAMH Monitor, Centre for Addiction and Mental Health

Table D-2: Percentage *Drinking Hazardously or Harmfully (AUDIT 8+)* During the Past 12 Months, by Demographic Characteristics, Ontarian Drinkers, Aged 18+, 2001

		%	95%CI	Unadjusted Odds Ratio	Adjusted Odds Ratio for Factors 1-6
Total Drinkers		<b>16.7</b>	(14.9, 18.6)		
<b>1) Gender</b>					
Women	(Comparison Group)	<b>8.3</b>	(6.6, 10.5)	—	—
Men		<b>24.7</b>	(21.7, 27.9)	3.60	3.49
<b>2) Age</b>					
18-29	(Comparison Group)	<b>30.3</b>	(25.3, 35.7)	—	—
30-39		<b>15.9</b>	(12.6, 20.0)	0.44***	0.59*
40-49		<b>13.1</b>	(10.1, 16.8)	0.35***	0.52**
50-64		<b>13.5</b>	(10.2, 17.7)	0.36***	0.47**
65+		† <b>5.2</b>	(3.1, 8.6)	0.73***	0.72***
<b>3) Marital Status</b>					
Married/Living with Partner	(Comparison Group)	<b>12.2</b>	(10.4, 14.3)	—	—
Previously Married		<b>11.9</b>	(8.3, 16.8)	0.97	1.56
Never Married		<b>31.0</b>	(26.2, 36.4)	3.22***	1.87**
<b>4) Public Health Region</b>					
Toronto	(vs. Provincial Average)	<b>18.6</b>	(14.3, 23.8)	1.76	0.96
Central South		<b>14.0</b>	(9.3, 20.7)	0.83	0.87
Central West		<b>14.6</b>	(10.7, 19.6)	0.87	0.77
South West		<b>20.3</b>	(15.8, 25.6)	1.30	1.37
Central East		<b>14.5</b>	(10.5, 19.7)	0.86	0.88
East		<b>15.8</b>	(12.0, 20.5)	0.96	1.03
North		<b>17.8</b>	(14.3, 18.6)	1.11	1.26
<b>5) Education</b>					
Less than high school	(Comparison Group)	<b>16.0</b>	(11.8, 21.5)	—	—
Completed high school		<b>23.0</b>	(19.1, 27.5)	1.57	1.03
Some college or university		<b>16.3</b>	(13.4, 19.8)	1.02	0.66
University degree		<b>10.9</b>	(8.3, 14.2)	0.64*	0.44**
<b>6) Income</b>					
< \$30,000	(Comparison Group)	<b>16.3</b>	(12.2, 21.5)	—	—
\$30,000-\$49,000		<b>15.4</b>	(11.5, 20.3)	0.93	0.68
\$50,000-\$79,000		<b>15.9</b>	(12.5, 20.0)	0.97	0.80
\$80,000+		<b>20.0</b>	(16.3, 24.3)	1.28	1.13
Not stated		<b>16.7</b>	(14.9, 18.6)	0.86	0.81

Note: † Estimate suppressed or unstable; \*p<.05; \*\*p<.01; \*\*\*p<.001

Asterisks in shaded rows indicate the significance of the group effect, based on Wald test.

Odds greater than 1.0 indicate that drug use is more likely to occur in the group being compared to the comparison group.

Odds less than 1.0 indicate that drug use is less likely to occur in the group being compared to the comparison group.

Source: CAMH Monitor, Centre for Addiction and Mental Health

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<sup>1</sup> To ensure that the change from a face-to-face to a telephone interview would not affect estimates of trends in drug use, we conducted a comparison study in 1991 (Adlaf & Ivis. [unpublished]. A Comparison of Telephone and Personal Interview Surveys for Estimating Alcohol and Other Drug Use). Comparisons between the two interview methods showed few differences in rates of alcohol or other drug use. The only significant difference occurred for the use of cocaine, which was higher in the telephone than in the face-to-face interview. This difference, however, will not affect short-term changes in cocaine use since both the 1991 and 1994 samples are based on the same methodology.

<sup>2</sup> Analyses comparing the twelve monthly samples showed similarities according to sex, age, and marital status. Education level slightly differed among the twelve samples, but no discernable seasonal pattern was evident. Response rates varied somewhat among the twelve samples (for details see the technical document, Adlaf et al., 2001).

<sup>3</sup> Effective response or participation rates were computed as follows:

$$R'R = \frac{\text{Completions}}{\text{Eligibles} + \frac{\text{Eligibles}}{\text{Eligibles} + \text{Ineligibles}} \text{Unknown eligibles}}$$

<sup>4</sup> Single, E., Truong, M. V., Adlaf, E. M., & Ialomiteanu, A. (1999). *Canadian Profile: Alcohol, Tobacco and Other Drugs 1999*. Ottawa: Canadian Centre on Substance Abuse and Centre for Addiction and Mental Health. Recommended guidelines indicate that men should limit weekly alcohol intake to no more than 14 standard drinks and women to 9 drinks. In addition, for both sexes alcohol intake on any one day should not exceed two standard drinks.

## Selected Research Publications Derived from the CAMH Monitor

- Anglin, L., Giesbrecht, N., Ialomiteanu, A., McAllister, J., & Ogborne, A. (in press). Public Perception of Alcohol Policy Issues Relating Directly or Indirectly to Privatization: Results from a 1999 Ontario Survey. *Canadian Journal of Public Health*.
- Anglin, L., Kavanagh, L., & Giesbrecht, N. (2001). Alcohol-related policy measures in Ontario: Who supports what and to what degree. *Canadian Journal of Public Health*, 92(1), 24-28.
- Anglin, L., Kavanagh, L., & Giesbrecht, N. (in press). Public opinion analysis suggesting demographic characteristics of persons tending to favour internal versus external control of drinking behaviour. *Journal of Substance Use*.
- Ashley, M., Cohen, J., Ferrence, R., Bull, S., Bondy, S., Poland, B., & Pederson, L. (1998). Smoking in the home: Changing attitudes and current practices. *American Journal of Public Health*, 88, 797-800.
- Bondy, S. J., Ashley, M. J., Rehm, J. T., & Walsh, G. (1999). Do Ontarians drink in moderation? a baseline assessment against Canadian low risk drinking guidelines. *Can J Public Health*, 90(4), 272-276.
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- Bondy, S. J., & Ialomiteanu, A. (1999). Smoking in Ontario in 1998: Data from the Ontario Drug Monitor. *Cancer Prevention and Control*.
- Bondy, S. J., & Lange, P. (2000). Measuring alcohol-related harm: test-retest reliability of a popular measure. *Substance Use and Misuse*, 35(9), 1263-1275.
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- Cunningham, J. A., Ferrence, R., Cohen, J., & Adlaf, E. (in press). Interest in self-help materials among a general population sample of smokers. *Addictive Behaviors*.
- Cunningham, J. A., Koski-Jannes, A., & Toneatto, T. (1999). Why do people stop their drug use? Results from a general population sample. *Contemporary Drug Problems*, 26, 695-710.
- Cunningham, J. A., Wild, T. C., Bondy, S. J., & Lin, E. (2001). Impact of Normative Feedback on Problem Drinkers: A Small-Area Population Study. *Journal of Studies on Alcohol*, 62(2), 228-233.
- Cunningham, J. A., Wild, T. C., & Walsh, G. W. (1999). Interest in self-help materials in a general population sample of drinkers. *Drugs: Education, Prevention and Policy*, 6(2), 209-213.

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- Ialomiteanu, A., & Adlaf, E. M. (2001). Internet gambling among Ontario adults. *The Electronic Journal of Gambling Issues* (<http://www.camh.net/egambling>)(5).
- Ivis, F. J., Adlaf, E. M., & Rehm, J. (2000). Incorporating the AUDIT into a general population telephone survey: A methodological experiment. *Drug and Alcohol Dependence*, *60*, 97-104.
- Ivis, F. J., Bondy, S. J., & Adlaf, E. M. (1997). The effect of question structure on self-reports of heavy drinking: Close-ended versus open-ended questions. *Journal of Studies on Alcohol*, *58*(6), 622-624.
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