

# Canadian Addiction Survey – Nova Scotia Report

Prevalence of alcohol and illicit drug  
use and related harms in Nova Scotia

October 2007



## Overview



Health  
Canada Santé  
Canada



Canadian Executive Council on Addictions  
Conseil exécutif canadien sur les toxicomanies



CCSA - CCLAT

## Acknowledgements

The report provides an overview of the prevalence of alcohol and other drug use in Nova Scotia, as well as the public opinion of Nova Scotians related to alcohol and other drug use issues, and is based on detailed analysis of the Canadian Addiction Survey (CAS) data. This report builds on the knowledge shared under the initial CAS – Prevalence of Use and Related Harms Report published in detail in March 2005.

The CAS was a collaborative initiative sponsored by Health Canada, the Canadian Executive Council on Addictions (CECA) – which includes the Canadian Centre on Substance Abuse (CCSA), the Alberta Alcohol and Drug Abuse Commission (AADAC), the Addictions Foundation of Manitoba (AFM), the Centre for Addiction and Mental Health (CAMH), Prince Edward Island Provincial Health Services Authority, and the Kaiser Foundation – the Centre for Addictions Research of BC (CAR – BC), and the provinces of Nova Scotia, New Brunswick and British Columbia.

The CAS is one of the most detailed and extensive addiction surveys ever conducted in Canada, with over 400 unique questionnaire items. The survey's scope precludes presenting analyses of the full range of responses in a single report. The research advisory team agreed to share the data with partners and other researchers in Canada. As well, they agreed that future analyses would be presented in a common manner but published independently.

© Crown copyright, Province of Nova Scotia, 2007

Library and Archives Canada Cataloguing in Publication

Graham, Linda, 1952-

Canadian Addiction Survey -- Nova Scotia report : prevalence of alcohol and illicit drug use and related harms in Nova Scotia.

Prepared by Linda Graham.

Includes bibliographical references: 22p.

ISBN 978-1-55457-073-7

1. Drug abuse--Nova Scotia. 2. Drinking of alcoholic beverages--Nova Scotia. 3. Substance abuse--Nova Scotia. 4. Drug abuse--Nova Scotia--Public opinion. 5. Drinking of alcoholic beverages--Nova Scotia--Public opinion. I. Nova Scotia. Addiction Services II. Title.

HV5000.C32N68 2006 362.2909716 C2006-905568-8

## Table of Contents

Introduction . . . . .	2
Methods. . . . .	3
Alcohol use and harms. . . . .	4
Illicit drug use and harms. . . . .	9
Alcohol, cannabis and driving . . . . .	13
Public opinions. . . . .	14
Trends in alcohol and cannabis use. . . . .	18
Glossary. . . . .	19
Appendix 1. . . . .	20
Appendix 2. . . . .	21
References. . . . .	22

## CAS errata

The 2004 Canadian Addiction Survey (CAS), published as CAS Highlights (November, 2004), Detailed CAS (March, 2005), and CAS Microdata eGuide (June, 2005), included a brief six-item screener to measure problematic drug use. The screener, the ASSIST, was developed by the World Health Organization.

An error was recently found in one symptom (represented by two items: CNAS5 and ASSIS5) of the ASSIST scale. Properly stated, the question is "Have you ever tried [AND FAILED] to control, cut down or stop using cannabis, marijuana or hashish {or other drugs}. The phrase "and failed" was not asked of respondents. This error, in turn, affects the following derived variables: ASISTCAN, ASISTCN3, ASISTCN2, ASISTIL and ASISTIL3.

To obtain additional copies, please contact,

### **Department of Health Promotion and Protection**

Addiction Services

P.O. Box 487

Halifax NS B3J 2R7

Telephone 902-424-7220

PDF version also available at

<http://www.gov.ns.ca/hpp/>

# Canadian Addiction Survey – Nova Scotia Report

Prevalence of alcohol  
and illicit drug use and  
related harms in Nova Scotia

October, 2007

## Introduction

Alcohol and illicit drug<sup>a</sup> use results in many preventable health and social consequences.<sup>1,2</sup> These consequences include injury, suicide, chronic diseases, hospitalization, premature death, violence, crime, lost productivity, and home life problems. It is estimated that alcohol and illicit drug use cost the Nova Scotia economy approximately \$619.1 million in 2002.<sup>3</sup> A current goal of the Nova Scotia Department of Health Promotion and Protection is to develop evidence-based policies to reduce problems associated with alcohol and illicit drug use. One of the strategies to achieve this goal is to undertake a comprehensive analysis of alcohol and illicit drug use in Nova Scotia.

The purpose of this study was to use the 2004 Canadian Addiction Survey<sup>4</sup> results for Nova Scotia to determine the following:

- prevalence of alcohol and illicit drug use in Nova Scotia;
- proportion of Nova Scotia drinkers who exceed the low-risk drinking guidelines;
- prevalence and types of harms related to alcohol and illicit drug use among Nova Scotians;
- characteristics of Nova Scotians who drink to excess;
- characteristics of Nova Scotians who use illicit drugs;
- any association between quality of life (i.e., self-rated physical and mental health), high-risk alcohol use and exceeding the low-risk drinking guidelines;
- proportion of illicit drug users at risk for health and other problems, characteristics of at-risk users, and frequencies of harms reported;
- prevalence of drinking, illicit drug use and driving;
- attitudes and opinions of Nova Scotians towards alcohol and illicit drugs; and
- level of drinking and cannabis use in Nova Scotia compared to the rest of Canada.

<sup>a</sup> illicit drugs in this report refer to cannabis, hallucinogens, cocaine, speed, ecstasy and heroin. Abuse of prescription drugs is not included.

## Methods

The Canadian Addiction Survey (CAS) provided a recent data source to investigate the prevalence and associated harms of alcohol and illicit drug use in Nova Scotia. The CAS was a collaborative effort by Health Canada, the Canadian Executive Council on Addictions and the provinces of Nova Scotia, New Brunswick and British Columbia. The CAS consists largely of questionnaire items from existing national surveys. A telephone survey was administered between December 2003 and April 2004 to a two-stage random sample of 13,909 Canadians aged 15 years and older.

The sample included 1,002 Nova Scotians, ranging in age from 15-89 years, with more females (58.8%) than males (41.2%) participating. The majority of respondents were married (59.4%), 14.8% had been previously married, and 25.8% had never married. Most of the Nova Scotia sample (81%) had either completed high school, some post-secondary education or a university degree. For more

information about the Nova Scotia sample see Appendix 2. Population estimates used in the survey were based on the October 1, 2003 Statistics Canada estimates for Nova Scotians aged 15 years and older.<sup>b</sup>

Descriptive statistics including frequencies and proportions were calculated for all outcome measures. Logistic regression techniques were used to determine odds ratios for the exposure and explanatory variables. All proportion and regression estimates were weighted to adjust for unequal probabilities of selection into the sample (age, sex and region). Significance levels were set at  $p < 0.05$  or  $p < 0.001$ . The Stata 8.0 computer program was employed for all statistical analyses.<sup>5</sup>

For more detailed information about the survey design and methodology refer to the Canadian Addiction Survey detailed report.<sup>4</sup>

<sup>b</sup> Statistics Canada, Demography Division. Annual population estimates by age and gender for October 1, 2003, Canada, provinces and territories. Total population estimate in Nova Scotia for October 1, 2003 was 937,429, for those aged 15+ 778,690 and aged 18+ 741,250. These population estimates are the most up to date acquired from Statistics Canada on September 26, 2007, and may differ from earlier reports, e.g. Nova Scotia Alcohol Indicator Report, using NS CAS rates which were based on older Statistics Canada population estimates.

## Alcohol use and harms

*Per capita consumption estimates using survey data generally yield much lower than actual results.<sup>1</sup> Per capita consumption of pure alcohol using the 2004 CAS data was estimated at 2.5 litres, approximately 32.1% of the rate when sales data<sup>c</sup> are applied.<sup>6</sup> However, survey data are useful when determining patterns and harms of alcohol use. When interpreting the survey estimates in this report, it is important to remember that if consumption is severely underestimated using survey data perhaps patterns of use and harms are also. The following are highlights from the 2004 CAS Nova Scotia alcohol findings. For more information refer to Appendices 1 and 2.*

- More than 9 out of 10 Nova Scotians (92.8%) aged 15 years and older have had a drink<sup>d</sup> of alcohol in their lifetime. In 2003, this would correspond to about 722,624 Nova Scotians reporting use of alcohol at some point in their lifetime.
- Most Nova Scotians (75.8%) aged 15 or older reported consuming an alcoholic beverage in the twelve months prior to the Canadian Addictions Survey, 16.9% were former drinkers<sup>e</sup> and 7.0% had never taken a drink in their life.

### Current drinkers

*In the 2004 Canadian Addiction Survey current drinkers were identified as those who responded positively to the question “During the past 12 months, have you had a drink of beer, wine, liquor or any other alcoholic beverage?”*

- In Nova Scotia, more males (80.5%) than females (71.5%) consumed alcohol in the year prior to the survey ( $p < 0.05$ ).
- Young adults aged 25-29 years had the highest rate of current alcohol users at 90.9% followed by youths aged 19-24 years at 89.2%. Nova Scotians aged 60 years and older were less likely than any of the other age groups to be current drinkers at 55.5% ( $p < 0.001$ ).
- Nova Scotians who have never been married had higher current drinking rates than married individuals<sup>f</sup>, 82.6 vs 73.3% respectively ( $p < 0.05$ ).

- The average age of first alcohol use for Nova Scotians was 18.5 years with 72.5% of Nova Scotians drinking alcohol by age 19.
- The mean age for first drink varied in the CAS depending on age group (Table 1), with the mean age decreasing over time.

**Table 1** Mean age for starting alcohol use by age group

Age Group (in years)	n(895)	Mean age of first drink	Confidence Interval
15-18	48	14.9	(14.5 - 15.3)
19-24	71	16.6	(15.8 - 17.2)
25-29	61	16.5	(15.8 - 17.2)
30-39	177	16.7	(16.3 - 17.1)
40-49	199	17.8	(16.9 - 18.2)
50-59	168	19.3	(18.5 - 20.1)
60+	171	23.0	(21.7 - 24.3)

- In 2003, Nova Scotians consumed an average of 3.3 drinks at a sitting. As shown in Table 2, those aged 60 years and older drank the least at a sitting, with the 19-24 year age group consuming the most number of drinks at a sitting.

<sup>c</sup> The per capita consumption estimate of pure alcohol using sales data in Nova Scotia for 2003-2004 was 7.8 litres.<sup>7</sup>

<sup>d</sup> An alcoholic beverage (drink) in the survey referred to one bottle or can of beer or a glass of draught, a glass of wine or a wine cooler, one drink or cocktail with one and half ounces of liquor.

<sup>e</sup> Has had a drink in their lifetime but none in the 12 months prior to the survey.

<sup>f</sup> Married individuals also include respondents living with a partner and those who have been previously married.

**Table 2** Average number of drinks at a sitting by age group (n=725)

Age group (in years)	Average number of drinks	Confidence Interval
15-18	4.5	(3.3 – 5.7)
19-24	5.6	(4.6 – 6.7)
25-29	4.6	(3.4 – 5.9)
30-39	3.3	(2.9 – 3.8)
40-49	3.2	(2.2 – 5.2)
50-59	2.4	(1.9 – 3.3)
60+	1.9	(1.1 – 3.9)

- Among current drinkers (n=747), 35.1% drink at least once a month, 32.1% at least once a week (26.5% of all Nova Scotians aged 15 years and older) and 2.9% consume alcohol every day. More men consumed alcohol on a weekly basis than women (33.2 vs 20.5%,  $p < 0.001$ ).
- The practice of making your own beer or wine was similar in Nova Scotia to that reported elsewhere in Canada. In Nova Scotia, 7% reported making their own beer or wine in the year prior to the survey compared to 6.7% in the rest of Canada. Although the 2004 CAS included questions about the amount of self-made wine and beer produced in the year prior to the survey, the Nova Scotia population sample that was asked these questions was too small for meaningful analysis.

### Heavy drinking

*Heavy drinking is defined as five or more drinks for men and four or more drinks for women at a sitting.*

- Six percent of Nova Scotians reported heavy drinking at least once a week and 20.8% at least once a month.
- More than one in four men (27.1%) reported heavy monthly drinking and one in eleven (8.9 %) heavy weekly drinking. Men were almost three times as likely to report heavy weekly and twice as likely to report heavy monthly drinking than were women ( $p < 0.05$ ).

- Never married individuals were seventy percent more likely to report heavy monthly drinking compared to those who were married, living with a partner or previously married at the time of the survey ( $p < 0.05$ ).
- Younger Nova Scotians were more likely to report heavy drinking. Six in ten youths (59.8%) aged 19-24 years reported heavy monthly drinking and two (21.2%) in ten heavy weekly drinking compared to one in twenty (5.3%) and less than one in a hundred (0.4%) seniors ( $p < 0.001$ ). Among current drinkers, 67.1% of youths aged 19-24 years, 45.5% aged 15-18 years, and 32.4% of young adults aged 25-29 years reported heavy monthly drinking. Youths 19-24 years were seven times and underage drinkers (15-18 years) three times as likely to report heavy monthly drinking than current drinkers aged 30 years and older ( $p < 0.05$ ). Youths aged 19-24 years were also five times more likely to engage in heavy weekly drinking ( $p < 0.05$ ).

### High-risk alcohol use

*A significant number of Nova Scotians put themselves at risk for harm as a result of their alcohol use. The AUDIT (Alcohol Use Disorders Identification Test) was created by the World Health Organization (WHO) to assist practitioners in identifying hazardous consumption, harmful alcohol use patterns and alcohol dependence.<sup>7</sup> High-risk drinking is determined by a score of 8 or more on the AUDIT scale. The developers of the AUDIT recommend brief interventions of advice or education for individuals who score between 8 and 15 on the test, and for those who score between 16 to 19, brief interventions consisting of advice, counselling and follow-up are recommended. For those individuals scoring more than 19 on the test, further investigation is required to determine a possible diagnosis of alcohol dependence with appropriate treatment to follow.*

- One in five current drinkers (20.8%) in Nova Scotia was identified as a high-risk drinker, 15.8% of all Nova Scotians aged 15 years and older. Based on Statistics Canada population estimates for 2003, these results suggest that 122,771 Nova Scotians 15 years of age and older are high-risk drinkers.
- In the 2004 CAS, 18.8% of current drinkers aged 15 years or more scored between 8-15, 1.4% between 16 and 19, and 0.6% scored more than 19 on the AUDIT.
- Applying these rates to population estimates for 2003 indicates that potentially 110,966 Nova Scotians may require brief interventions of advice or education, and 8263 may need brief interventions consisting of advice, counselling and follow-up to decrease their risk for problems associated with alcohol use. Investigation for alcohol dependence is recommended for potentially 3541 Nova Scotians.
- Two out of three heavy monthly drinkers (65.9%) and nine out of ten heavy weekly drinkers (92.6%) were identified as high-risk drinkers.
- Men were almost four times more likely than women to be a high-risk drinker ( $p < 0.001$ ), with 30% of currently drinking men identified as high-risk drinkers.
- Those who have never been married were twice as likely as their married counterparts to be high-risk drinkers ( $p < 0.05$ ).
- Young Nova Scotian drinkers were also more likely to engage in high-risk drinking. Compared to current drinkers aged 30 years and older, underage drinkers (15-18 years) and young adults (25-29 years) were identified as high-risk drinkers three times more often ( $p < 0.05$ ), and youths aged 19-24 years six times more often than older Nova Scotians ( $p < 0.001$ ).

- 30.5% of underage Nova Scotians, 45.8% of youths and 32.3% of young adults were identified as prone to high-risk drinking patterns.
- Self-rated physical or mental health was not associated with high-risk consumption of alcohol.

### Low-risk drinking guidelines

*According to the Low-Risk Drinking Guidelines<sup>8</sup> individuals should consume no more than two drinks daily and no more than 14 drinks for men and 9 drinks for women in a week.<sup>8</sup>*

- In the year prior to the survey, 17.7% of Nova Scotians (23.4% of current drinkers) exceeded the low-risk drinking guidelines.
- Men and never married respondents were more than 2.3- and 2.7 times more likely than females and those currently or previously married or living with a partner at the time of the survey to exceed the low risk drinking guidelines ( $p < 0.001$ ).
- Compared to all Nova Scotians aged 30 years and older, youths aged 19-24 years were 2.6 times more likely to exceed the guidelines ( $p < 0.001$ ). More than four in ten youths (43.7%) aged 19-24 reported exceeding the low risk drinking guidelines in the past year.
- No association was observed between self-rated physical or mental health and exceeding the low-risk drinking guidelines.

### Harm from one's own alcohol use

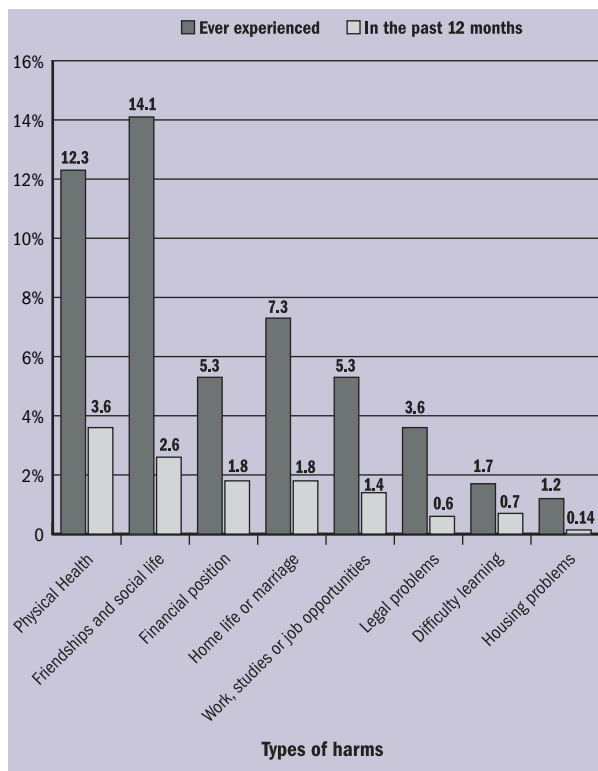
*To identify harms related to their own use of alcohol, respondents were asked about the impact their alcohol use has had on their social life, physical health, home life, employment, finances, legal problems, housing problems and ability to learn.*

<sup>8</sup>The Low-Risk Drinking Guidelines referred to here were developed by the Ontario Addiction Research Foundation and the Canadian Centre on Substance Abuse.



- Slightly more than a quarter of all former and current drinkers (25.8%) in Nova Scotia have caused themselves or others harm from their own use of alcohol in their lifetime.
- Among current drinkers, 8.6% (50,761 Nova Scotians) reported they experienced one or more types of harm from their own alcohol use in the year prior to the survey.
- Almost twice as many men than women (11.4 vs 5.8%) reported harm from their own use of alcohol ( $p < 0.05$ ).
- Among current drinkers, harm from their own drinking impacted most on their physical health and their friendships and social life in the past year (Figure 1).

**Figure 1**  
Percentage of Nova Scotians aged 15+ years reporting harm from one’s own drinking (n=927)

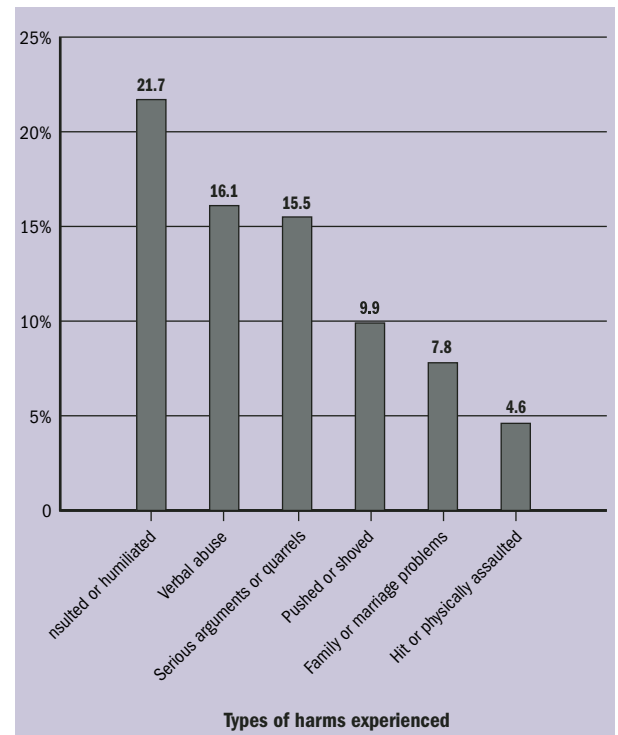


**Harm from other’s use of alcohol**

Respondents aged 18 years and older were asked about harms they experienced such as humiliation, verbal abuse, quarrels, physical harm, and home-life problems from others’ use of alcohol in the year prior to the survey.

- An estimated 237,941 (32.1%) Nova Scotians 18 years of age and older experienced at least one harm in the 12 months prior to the survey from someone else’s use of alcohol.
- Among respondents 18 years of age and older, 21.7% reported being insulted or humiliated, and 16.1% verbally abused by someone who had been drinking in the 12 months prior to the survey. 15.5% had a serious argument or quarrel with someone who had been drinking, and 7.8% experienced family or marital problems. In addition, 9.9% were either pushed or shoved and 4.6% physically assaulted by someone who had been drinking (Figure 2).

**Figure 2** Percentage of Nova Scotians aged 18+ years reporting harm from others’ drinking in the 12 months prior to the survey (n=947)



### Comparisons to the rest of Canada

- The proportion of Nova Scotians (75.8%) who consumed alcohol in the 12 months prior to the survey was slightly lower than the proportion (79.3%) for the rest of Canada ( $p < 0.05$ ).
- Consumption patterns, as shown in Table 3, were similar in Nova Scotia to those observed for the rest of Canada.

**Table 3** Alcohol use in Nova Scotia and Atlantic Canada compared to the rest of Canada

	Nova Scotia (n=1002)		Rest of Canada (n=12,907)	
	%	95% CI*	%	95% CI
<b>Past year use</b>	75.8	(72.9 – 78.5)	79.3	(78.0 – 80.5)
<b>CONSUMPTION PATTERNS</b>				
<b>Heavy monthly drinking</b>	20.8	(18.2 – 23.7)	20.1	(18.9 – 21.4)
<b>Heavy weekly drinking</b>	6.0	(4.6 – 7.8)	4.9	(4.3 – 5.6)
<b>Exceeded drinking guidelines</b>	17.7	(15.2 – 20.4)	17.8	(16.6 – 19.1)
<b>High-risk alcohol use</b>	15.7	(13.3 – 18.3)	13.3	(12.3 – 14.5)

\* CI – Confidence Intervals

- Nova Scotians were no more likely than other Canadians to experience harm from their own alcohol use (8.6% vs 8.8%, respectively) or other's alcohol use in the year prior to the study. Among Nova Scotians, 32.1% indicated they were harmed by someone else's use of alcohol in the past year compared to 32.8% of other Canadians.
- However, more Nova Scotians reported a higher percentage of one or more types of harms in their lifetime from their own use of alcohol compared to other Canadians, 25.8 vs 22.3% ( $p < 0.05$ ).

### Alcohol and cannabis use

- Among Nova Scotians who reported using either alcohol or cannabis, 13.3% indicated that they used both alcohol and cannabis in the 12 months prior to the survey.

Most Nova Scotians, 15 years of age and older, consumed alcohol in the year prior to the Canadian Addiction Survey. More than one in four Nova Scotians consumed alcohol once a week or more often in the year prior to the survey. Almost one in five Nova Scotians exceeded the low risk drinking guidelines, with 15.7% of Nova Scotians exhibiting hazardous drinking patterns. Men, younger drinkers (under 30 years of age), and those who had never been married were observed to be at highest risk for heavy and hazardous drinking patterns. One in three Nova Scotians (32.1%) over 18 years of age reported experiencing one or more harms in the 12 months prior to the survey as a result of someone else's drinking and 8.6% reported experiencing harm from their own drinking. The drinking pattern in Nova Scotia was similar to that found elsewhere in Canada. However, Nova Scotia (75.8%) had a lower proportion of current drinkers than the rest of Canada (79.3%).

## Illicit drug use and harms

*The following are Nova Scotia drug-related findings highlights from the 2004 CAS. Illicit drugs refer to cannabis, hallucinogens, cocaine, speed, ecstasy and heroin.*

- 43.4% of Nova Scotians reported using cannabis at least once in their lifetime. Based on Statistics Canada 2003 population estimates for Nova Scotia, approximately 337,951 Nova Scotians aged 15 years and older have used cannabis at least once in their lifetime.
- In the year prior to the study, 14.4% (approximately 112,131 Nova Scotians) reported using cannabis and 12.3% (approximately 95,779 Nova Scotians) in the three months prior to the survey.
- Among those who reported using cannabis in the twelve months prior to the survey (n=133), 16.4% reported daily use; 27.0% weekly use; 21.2% monthly use; 20.9% less than monthly use; and 14.6% reported no use in the three months prior to the survey.
- Among Nova Scotians who reported using cannabis in the 12 months prior to the study, 26.9% reported using cannabis to treat a medical condition. Among those who reported using cannabis to treat a medical condition (n=37), the most frequently cited reason was to manage pain (46.7%), with 28.8% using cannabis to treat depression.
- Cannabis use in the 12 months prior to the survey was more likely among men, young adults (aged 19-24 years), and those who have never been married. The likelihood of cannabis use increased with income. Men and those aged 19-24 were also more likely to report illicit drug use other than cannabis in the 12 months prior to the survey.
- Among Nova Scotians who reported cannabis use in their lifetime 72.8% started use by age 19. Table 4 displays the wide range for mean starting age of use, going from 15.1 years for the 15-18 age group to 34.6 for those 60 years and older.

**Table 4** Mean age for starting cannabis use by age group

Age group (in years)	n (416)	Mean age of first cannabis use	Confidence Interval
15-18	26	15.1	(14.6 - 15.5)
19-24	45	16.6	(16.0 - 17.2)
25-29	33	17.1	(16.0 - 18.2)
30-39	107	17.3	(16.7 - 18.0)
40-49	122	18.0	(17.2 - 18.9)
50-59	61	21.8	(19.8 - 13.9)
60+	22	34.6	(28.2 - 41.0)

- Cannabis use by Nova Scotians was not significantly different than use reported by other Canadians (Table 5).

**Table 5** Cannabis use in Nova Scotia compared to the rest of Canada

	Nova Scotia (n=1002)		Rest of Canada (n=12,907)	
	%	95% CI*	%	95% CI
<b>Lifetime use</b>	43.4	(43.0 - 46.0)	44.5	(43.0 - 46.1)
<b>Past year use</b>	14.4	(12.2 - 17.0)	14.1	(13.1 - 15.2)
<b>Frequency of use among past year users</b>	(n=133)		(n=1718)	
<b>Never in past 3 months</b>	14.6	(9.3 - 22.3)	20.9	(17.8 - 24.3)
<b>Once or twice</b>	20.9	(14.6 - 29.0)	24.9	(21.5 - 28.6)
<b>Monthly</b>	21.2	(14.8 - 29.2)	15.8	(13.1 - 18.9)
<b>Weekly</b>	27.0	(19.7 - 35.7)	20.0	(16.8 - 23.5)
<b>Daily</b>	16.4	(10.7 - 24.2)	18.0	(15.2 - 21.3)

\* CI - Confidence Intervals

- 13.4% of Nova Scotians (104,344) reported using an illicit drug other than cannabis in their lifetime. Hallucinogens, PCP or LSD (10.6%) and cocaine/crack (7.1%) are the illicit drugs other than cannabis most likely to have been used by Nova Scotians at least once in their lifetime. Ecstasy and speed or amphetamines were used by 3.4% and 3.2% of Nova Scotians, respectively. Heroin was tried at least once by 0.2%.<sup>h</sup>
- In the 12 months prior to the survey, 2.3% of Nova Scotians (17,910) reported use of an illicit drug other than cannabis. Use of hallucinogens, PCP or LSD was reported by 1.5% of Nova Scotia respondents, with cocaine/crack and ecstasy use reported by 1.1%.<sup>i</sup> Less than 1%<sup>i</sup> of respondents reported the use of speed or amphetamines and no survey respondents reported the use of heroin in the year prior to the survey.
- Compared to other Canadians, Nova Scotians aged 15 and older were less likely to have tried an illicit drug other than cannabis in their lifetime (Table 6). No difference was observed for other illicit drug use in the 12 months prior to the survey.

**Table 6** Other illicit drug use\* in Nova Scotia compared to the rest of Canada

	Nova Scotia (n=1002)		Rest of Canada (n=12,907)	
	%	95% CI**	%	95% CI
Lifetime use	13.4	(11.2 - 15.8)	16.6	(15.5 - 17.7)
Past year use	2.3	(1.5 - 3.6)	3.1	(2.6 - 3.6)

\* Illicit drug use other than cannabis. Includes use of hallucinogens, cocaine, speed, ecstasy and heroin.

\*\* Confidence Interval

- Among Nova Scotians who have tried illicit drugs at least once in their lifetime the vast majority have used cannabis alone (86.6%), 12.9% used cannabis and at least one other illicit drug, and 0.5% only used at least one illicit drug other than cannabis.
- Among those who reported illicit drug use in the 12 months prior to the survey, 84.1% reported use of cannabis alone, 15.2% cannabis and at least one other illicit drug, and 0.7% used at least one illicit drug other than cannabis.

**Harms from illicit drug use**

Six items from the WHO ASSIST scale were used to determine risk for substance use disorders and harms.<sup>9</sup> The scores from each item give a total score, with total scores of four or more potentially implying drug problems and the need for intervention. Scores in the moderate range (4-26) suggest a moderate risk for experiencing health and other problems (e.g. social, financial, legal or relationship). Results in the high range (27+) suggest a pattern of use with a high risk of experiencing problems and potential dependency.

- Among those who reported using cannabis in the three months prior to the survey, 74.1% scored in the moderate to high-risk range of the ASSIST scale (Table 7).
- Among users of illicit drugs (n=20) other than cannabis (hallucinogens, cocaine, speed, ecstasy and heroin) 40.3% scored in the moderate to high-risk range.
- 20.3% of those who reported using illicit drugs (including cannabis) in their lifetime experienced one or more types of harm (Figure 3) from their drug use. The most frequently reported harms were to their physical health, friendships or social life, and on their work, studies or employment opportunities.

<sup>h</sup> Items about methamphetamines were not included in the 2004 CAS.

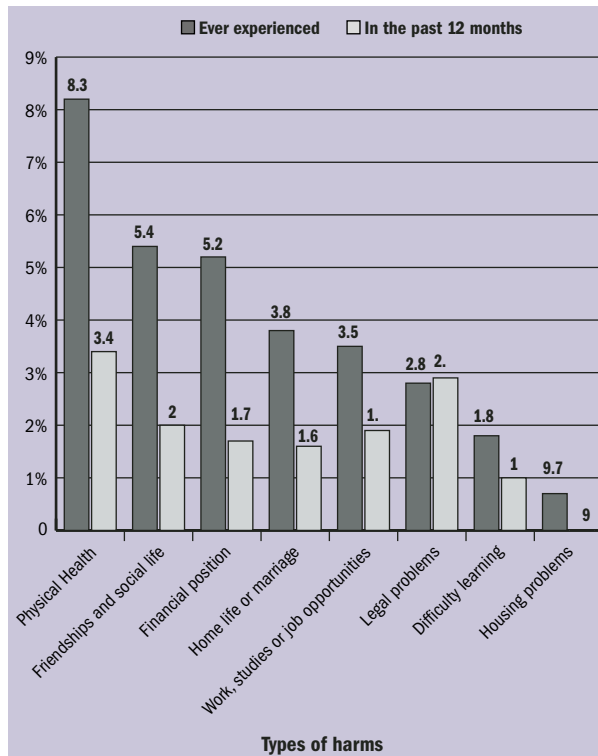
<sup>i</sup> Qualified release because of high sampling variability.

**Table 7** Typology of cannabis use with proportion and population estimates for Nova Scotia using ASSIST scores of 4-26 for at-risk cutoff\*

Category of user	Characteristics of users	% of past 3 month users (n=112)	% of NS population 15 years and older (n=1000)	Estimated** number of users
<b>Abstainer</b>	No use in lifetime	0	56.6	440,739
<b>Past user</b>	Used at least once in lifetime but not in last 12 months	0	28.9	225,041
<b>Past-recent user</b>	Used in past year but not in last 3 months	0	2.1	16,352
<b>Low-risk user</b>	Less than monthly or monthly use in last 3 months and ASSIST score ≤ 3	25.9	3.2	24,918
<b>Moderate-risk user</b>	Daily or near daily use in last 3 months and/or ASSIST score between 4 and 26	72.2	8.9	69,303
<b>Dependent/High-risk user</b>	ASSIST score ≥ 27	1.9	0.2	1,557

\*Based on preliminary typology developed by CCSA<sup>10</sup>

**Figure 3** Percentage of Nova Scotians aged 15+ years reporting harm from one’s own illicit drug use (n=428)



- Among those who used illicit drugs (including cannabis) in the year prior to the study, 7.4% reported experiencing one or more harms from their drug use (Figure 3). The most frequently reported were harms related to physical health, finances, and friendships or social life.
- Harm from one’s own use of illicit drugs in the 12 months prior to the survey was more likely to be reported by young adults (aged 19-24 years), those who have never been married and those who with a university degree.
- 4.9% of Nova Scotians reported being verbally abused and 1.8% physically assaulted by someone using illicit drugs.

Among Nova Scotians aged 15 and older, 43.4% have tried cannabis at least once in their lifetime and 13.4% an illicit drug other than cannabis. In the 12 months prior to the study, 14.4% of Nova Scotians used cannabis and 2.3% used an illicit drug other than cannabis. Men, young adults (aged 19-24 years), those who have never been married and those with higher incomes were more likely to report current cannabis use. Men and young adults were more likely to report use of illicit drugs other than cannabis. 20.3% of lifetime illicit drug users have experienced one or more harms from their illicit drug use, with 7.4% of current users experiencing harm.

## Alcohol, cannabis and driving

*A panel of Nova Scotia participants (n=213-336) in the CAS were asked a number of questions about alcohol and/or cannabis use and motor vehicle use. When interpreting the driving related statistics it is important to note that the sample size of those who drank and/or took illicit drugs and drove a motor vehicle is small.*

### Alcohol and driving

- Among those Nova Scotians 16 years and older who participated in the panel, 10.6% reported driving at least once in the year prior to the survey after consuming two or more drinks in the previous hour. Although the sample was small (n=22), no age or gender differences were found for drinking and driving under the influence.
- More than half of the respondents (53.5%) who reported driving under the influence of alcohol indicated that in the year prior to the survey this behaviour occurred once or twice.
- 11.9% of those Nova Scotians surveyed reported being a passenger in a motor vehicle driven by someone who had two or more drinks in the previous hour. Passengers in a motor vehicle driven by someone under the influence of alcohol were more likely to be male, less than thirty and never married ( $p < 0.05$ ).

### Cannabis and driving

- Most Nova Scotians (88.1%) agreed that someone who had smoked two cannabis joints in the previous 2 hours posed a safety hazard on the roads and 86.1% would not get into the car as a passenger if they knew the driver had smoked two cannabis joints within 2 hours of driving.
- A small block of survey respondents (n=33) was asked about driving and cannabis use. The findings indicate that among those participants asked, 41.3% (13 respondents) reported driving at least once within 2 hours of using cannabis or cannabis/hash in the 12 months prior to the survey.
- 12.5% of respondents reported being a passenger in a vehicle driven by someone within 2 hours of using cannabis/hash in the 12 months prior to the survey (n=336).

## Public opinion towards alcohol and illicit drugs

*A number of questions related to opinions and attitudes towards alcohol- and drug-related risks and harms, and government policy concerning use of alcohol and illicit drugs were asked among select groups of Nova Scotia respondents. With a few exceptions, the panel sample sizes varied from 272-336 for all the opinion and perception calculations. The sample of Nova Scotians used to determine harm from drinking in excess of the low risk drinking guidelines varied from 141-191. The sample used to determine legality and penalties for possession ranged from 112-159.*

### Perceptions about the seriousness of substance use

#### *Seriousness of alcohol abuse:*

- Most Nova Scotians (88.0%) regard alcohol abuse to be a serious problem in Canada, with 90.1% regarding alcohol abuse to be a serious problem here in Nova Scotia, and 68.7% believing it to be a serious issue in their own community.

#### *Seriousness of illicit drug abuse:*

- The majority of Nova Scotians regard illicit drug abuse as a serious issue in Canada (90.5%), and here in Nova Scotia (88.4%). Two out of three Nova Scotians (68.3%) regard it as a serious issue in their own community.

### Perceived harms of alcohol use

- Nova Scotians believe the risk of harming themselves increases substantially when alcohol is consumed on a regular basis with 28.6% and 59.1% believing Nova Scotians are at a moderate or great risk of harm from regular alcohol use compared to 25.1% and 7.9%, respectively, from occasional use. Age of the respondents was not a factor in determining risk from occasional or regular alcohol use.
- Eighty percent of Nova Scotians believe that when men drink in excess of 14 drinks a week they are at a moderate or great risk of harming themselves physically or in other ways. The risks were assessed even higher for women who exceed the weekly low risk drinking guideline of 9 drinks a week, with 82.3% believing that they are at a moderate or great risk of harming themselves physically or in other ways.

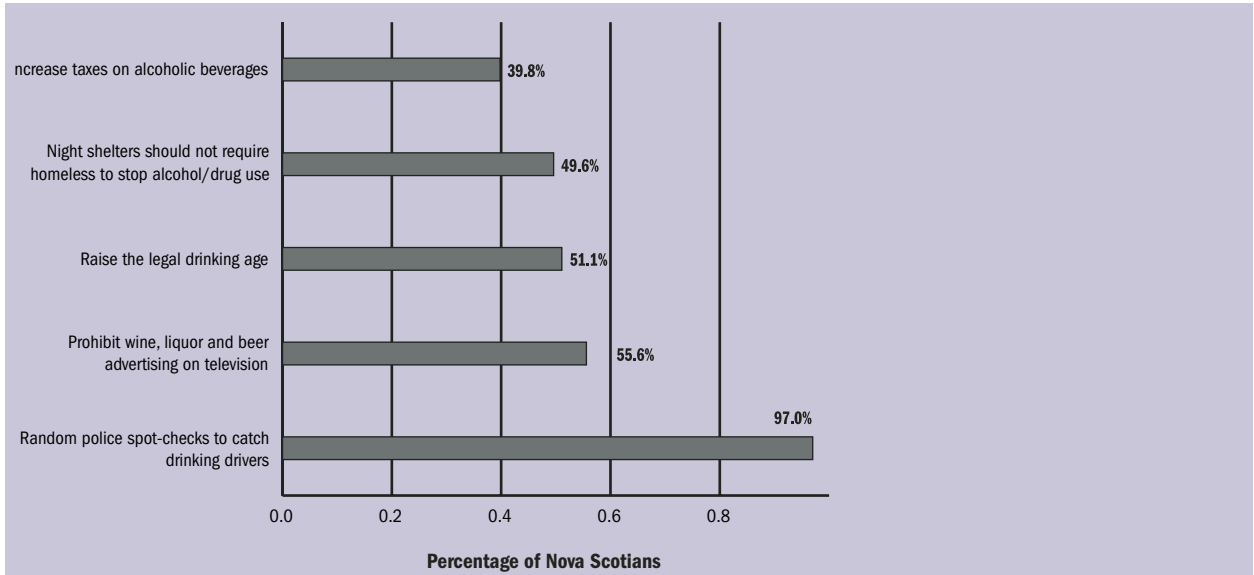
- Nova Scotians also believe the risk of people harming others increases with frequency of alcohol use. 23.6% believe the risk is moderate, and 14.6% believe the risk to be great of harming others from drinking alcohol once in a while. In contrast, 25.1% believe the risk to be moderate, and 58.7% believe there is a great risk of harming others from regular alcohol use.

### Public opinion on alcohol

- When asked whether taxes on alcoholic beverages should be increased to reduce the use and consequences of use of alcohol, the majority of respondents (60.2%) disagreed. When asked specifically whether taxes on alcohol should be increased, decreased, or stay the same, most respondents (61.5%) thought taxes should stay the same, 25.5% thought they should be increased, and 13% decreased. The response to increasing alcohol taxes was even stronger when respondents were asked whether higher taxes on alcohol would help prevent its abuse. A clear majority (74%) disagreed with the statement.
- When asked whether the legal drinking age should be raised to reduce the use and consequences of use of alcohol, the opinions of Nova Scotians were divided (Figure 4). When asked specifically whether the legal drinking age should be raised, lowered, or stay the same, most respondents (60.6%) thought the provincial legal drinking age should stay the same with 34.8% advocating for the legal drinking age to be raised and 4.6% for it to be lowered.
- Of all the strategies to reduce the consequences of alcohol use, random police spot checks received the highest support with 82.3% of Nova Scotians indicating strong support, and 13.9%



**Figure 4** Nova Scotians aged 15 and older support for government policies to reduce alcohol use and its consequences (n=315-336)



showing some support for the policy. It was given the same support as a law to catch drinking drivers with 82.3% indicating strong support, and 13.9% showing some support for the law.

- Nova Scotians were about equally divided in their support for other government policies to reduce the use and consequences of alcohol use (Figure 4).

#### Opinions about other alcohol-related laws concerning alcohol:

- The majority of Nova Scotian respondents (77.2%) thought efforts to prevent intoxicated customers from being served should be increased.
- 41.5% of respondents thought the government should prohibit wine, liquor and beer advertising on the television.
- When asked whether the province should close all government run liquor stores and allow privately run stores to sell alcohol most disagreed, with 41.8% strongly and 23.5% somewhat disagreeing.

#### Public opinion on illicit drugs

- Most Nova Scotians (71.7%) agreed that Canada is not well prepared to deal with drug use, and that international strategies (88.8%) are needed to address drug problems. Almost two-thirds of Nova Scotians (62.9%) believed that the federal, provincial and local governments are not investing enough resources to address drug issues.
- The majority of Nova Scotians view prevention and treatment as the best strategies to deal with drug issues. Four out of five Nova Scotians (80.8%) thought drug issues are best addressed through prevention and treatment, with one out of four (19.2%) believing that law enforcement and incarceration to be the best approach.
- Almost six out of ten Nova Scotians (57%) thought that possession of small amounts of cannabis (15 grams or less) should be against the law. A fair number of respondents (71.8%) were aware of a proposed change in federal legislation for possession of small amounts of cannabis (15 grams or less) from a criminal penalty to a fine, with six out of ten Nova Scotians (59.7%) supporting the change.

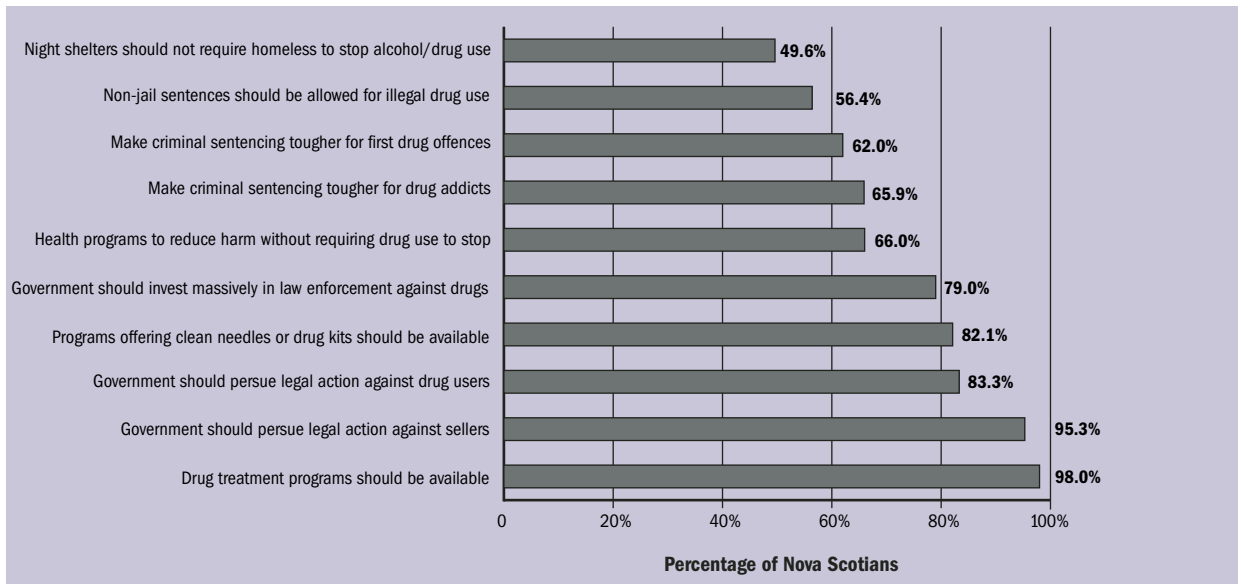
**Knowledge and support for specific programs**

• Survey respondents were asked about their familiarity and support with policy programs (methadone maintenance, needle exchange, harm reduction strategies and drug treatment courts) for illicit drug use. Respondents were most familiar with needle exchange programs (86.3%) followed by methadone maintenance (57.2%). Only 28.9% had heard of drug treatment courts and 15.8% harm reduction strategies. However, strong support was indicated for each of these programs (72.9 - 87.9%).

**Opinions about government actions to reduce the use and consequences of the use of drugs**

• As shown in Figure 5, Nova Scotians indicated fair to strong support for specific drug treatment and harm reduction strategies, as well as, legal actions against illicit drug use. Almost all Nova Scotians think drug treatment programs should be available and that the government should pursue legal action against drugs sellers. Strong support was also observed for legal action against drug users, programs offering clean needles or drug kits and massive government investment in law enforcement against drugs.

**Figure 5** Nova Scotians aged 15 and older who agree with government actions to reduce illicit drug use and its consequences (n=318-334)



Most Nova Scotians regard alcohol abuse to be a serious problem with the risk of self-harm increasing with regular alcohol consumption. Not serving intoxicated customers and conducting random police spot-checks to catch drivers under the influence were the most strongly supported actions by Nova Scotians to decrease the consequences of alcohol abuse. The majority of Nova Scotians do not want taxes increased on alcohol beverages and do not think increasing taxes will prevent its abuse.

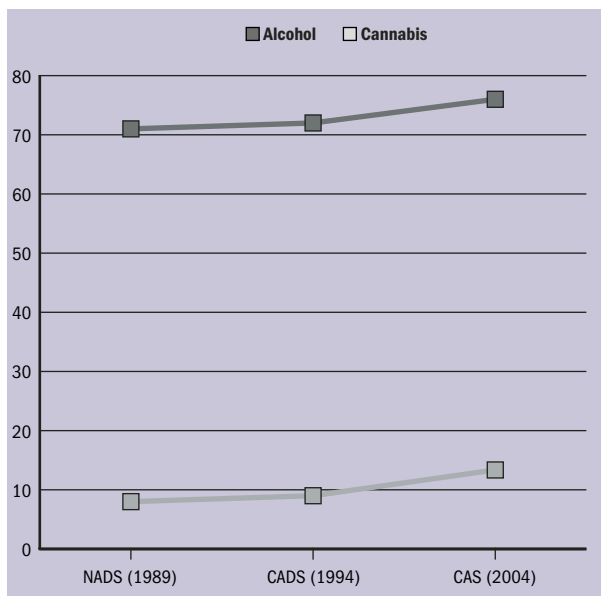
Most Nova Scotians also regard illicit drug abuse as a serious problem here and around the country requiring international strategies to address the issues. Nova Scotians view prevention and treatment as the best strategies to deal with drug issues but also showed strong support for legal actions against drug abuse. Moderate support was observed for federal legislation legalizing small amounts of cannabis.

## Trends in alcohol and cannabis use

Figure 6 displays the trends in past year use of alcohol, cannabis and cocaine/crack from 1989 to 2003.

- The percentage of current drinkers in Nova Scotia has increased steadily over the years from 71.2% in 1989 to 72.1% in 1994 to 75.8% in 2003 (Figure 6).
- A similar trend was noted for cannabis use in Nova Scotia. In 1989, 7.4% of Nova Scotians reported cannabis use in the preceding year, 8.1% in 1994, and 14.4% in 2004.

**Figure 6** Trends in past year use of alcohol and cannabis among Nova Scotians (aged 15 years and older)

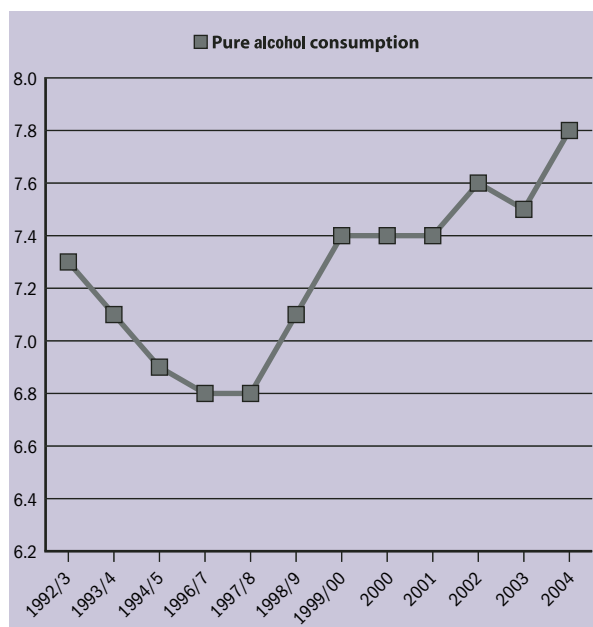


NADS – Eliany M, Giesbrecht N, Nelson M, Wellman B, Wortly S. Alcohol and other drug use by Canadians: A National Alcohol and Other Drugs Survey, Technical Report. Health and Welfare Canada; 1992.

CADS – MacNeil P, Webster I. Canada’s Alcohol and Other Drugs Survey 1994: A discussion of the findings. Health Canada; 1994.

- Figure 7 displays the Statistics Canada rates of per capita consumption of pure alcohol in Nova Scotia from 1992/3 to 2004.<sup>11</sup> Pure alcohol consumption in Nova Scotia decreased in the mid 1990’s then increased steadily until taking a slight dip in 2003. The 2004 rate was the highest observed at 7.8 litres of pure alcohol consumed by Nova Scotians 15 years of age and older.

**Figure 7** Trends in per capita consumption of pure alcohol from 1992/93 to 2004 among Nova Scotians (aged 15 years and older)



- Cannabis use in Nova Scotia has increased dramatically over time with both lifetime and past year use almost doubling since 1989. Lifetime use of cocaine or crack has increased from 1.4% in 1989 to 7.1% in 2003. Past year cannabis use has also increased from 7.4% in 1989 to 8.1% in 1994 to 14.4% in 2003 (Figure 6).

## Glossary

***ASSIST:*** ASSIST scale was developed by the WHO to determine risk for substance use disorders and problems.

***AUDIT:*** The AUDIT (Alcohol Use Disorders Identification Test) was created by the WHO to assist practitioners in identifying hazardous consumption, harmful alcohol use patterns and alcohol dependence.

***Current drinkers:*** In the 2004 Canadian Addiction Survey current drinkers were identified as those who responded positively to the question “During the past 12 months, have you had a drink of beer, wine, liquor or any other alcoholic beverage?”

***Drink:*** An alcoholic beverage (drink) in the survey referred to one bottle or can of beer or a glass of draught, a glass of wine or a wine cooler, one drink or cocktail with one and half ounces of liquor.

***Heavy drinking:*** Heavy drinking is defined as five or more drinks for men and four or more drinks for women at a sitting. Heavy monthly drinking refers to five/four or more drinks at a sitting at least once a month. Heavy weekly drinking refers to this pattern of use at least once a week.

***High-risk drinking:*** High-risk drinking is determined by a score of 8 or more on the AUDIT scale.

***Illicit drugs:*** Illicit drugs in this report refer to cannabis, hallucinogens, cocaine, speed, ecstasy and heroin. Abuse of prescription drugs is not included.

***Low-risk drinking guidelines:*** Individuals should consume no more than two drinks daily and no more than 14 drinks for men and 9 drinks for women in a week.

***Per capita consumption:*** Adult per capita consumption estimates were used in this report. Adult per capita consumption estimates refer to alcohol consumed from all sources by the population in a geographic area (country/ province) in a year divided by the population in that area aged 15 years and older.

## Appendix 1:

**Major CAS alcohol-related indicators** among Nova Scotians in the year prior to the survey by age and gender

	AGE IN YEARS								p-value	GENDER		
	NS	15-18	19-24	25-29	30-39	40-49	50-59	60+		M	F	p-value
n	1002	61	76	64	187	208	182	211		413	589	
	%	%	%	%	%	%	%	%		%	%	
<b>Drinking type</b>												
Abstainer	7.0	18.9	5.5	3.3	3.7	1.2	3.7	14.0	‡	4.1	9.6	†
Former drinker – not in past year	16.9	6.3	5.3	5.8	16.9	15.1	15.2	30.1	‡	15.1	18.7	ns
Current drinker:	75.8	74.8	89.2	90.9	78.7	83.7	81.2	55.5	‡	80.5	71.5	†
<b>Heavy drinking</b>												
Monthly heavy drinking	20.8	34.0	59.8	29.4	20.3	21.2	15.0	5.3	‡	27.1	15.1	‡
Monthly heavy drinking <sup>1</sup>	27.5	45.5	67.1	32.4	25.8	25.4	18.5	9.6	‡	33.7	21.1	‡
Weekly heavy drinking	6.0	10.3	21.2	10.5	5.2	4.0	6.3	0.4	‡	8.9	3.4	‡
Weekly heavy drinking <sup>1</sup>	7.9	13.7	23.8	11.6	6.6	4.7	7.7	0.7	‡	11.1	4.7	†
<i>Exceeded low-risk drinking guidelines</i>												
Exceeded guidelines	17.7	19.9	45.7	23.2	16.5	17.3	19.2	6.3	‡	24.0	11.9	‡
Exceeded guidelines <sup>1</sup>	23.4	26.8	49.1	25.5	21.0	20.7	23.6	11.5	‡	30.0	16.7	‡
<i>High-risk alcohol use</i>												
AUDIT hazardous drinking	15.7	32.3	45.8	30.5	12.7	13.9	11.0	3.4	‡	24.0	8.1	‡
AUDIT hazardous drinking <sup>1</sup>	20.8	43.7	51.6	33.7	16.3	16.6	13.7	6.3	‡	30.0	11.3	‡
<b>Alcohol-related harms</b>												
Any alcohol harm (to self) <sup>1</sup> past year	8.6	34.2	30.8	9.3	6.2	2.9	2.9	1.1	‡	11.4	5.8	†
Any alcohol harm (from others)-past year	32.1	51.8	60.3	37.3	33.9	39.2	24.2	15.7	‡	34.9	29.5	ns

<sup>1</sup>Among current drinkers (n=748)

† p<0.05

‡ p<0.001

ns not significant

## Appendix 2:

**Characteristics of Nova Scotians** who drank alcohol to excess in the year prior to the survey

<b>AMONG CURRENT DRINKERS IN NOVA SCOTIA (N=748)</b>					
<b>CHARACTERISTICS</b>	n	<b>Heavy monthly drinking</b>	<b>Heavy weekly drinking</b>	<b>Exceeded low-risk guidelines</b>	<b>High-risk drinking</b>
		Adj. Odds Ratio	Adj. Odds Ratio	Adj. Odds Ratio	Adj. Odds Ratio
<b>Gender</b>					
Male	330	2.11‡	2.65†	2.27‡	3.81‡
Female	418	1	1	1	1
<b>Age</b>					
15-18 years	45	2.76†	2.25	0.74	3.40†
19-24 years	68	6.63‡	5.22†	2.63†	6.38‡
25-29 years	58	1.69	2.49	1.03	3.07†
30 years and older	570	1	1	1	1
<b>Marital status</b>					
Married	533	1	1	1	1
Never married	211	1.69†	1.41	2.72‡	2.09†
<b>Education</b>					
<High School	111	1	1	1	1
Completed HS	212	1.29	1.49	0.72	1.10
Some post-secondary	210	1.40	1.16	0.96	0.91
University degree	209	1.21	0.98	0.89	0.88
<b>Income Adequacy*</b>					
Lowest income	91	1	1	1	1
Lower middle income	114	1.12	1.68	1.21	1.29
Upper middle income	223	1.15	0.89	1.74	1.30
Highest income	144	1.24	1.64	1.33	1.19

† p&lt;0.05

‡ p&lt;0.001

\* Income adequacy is based on household income and size:

- Lowest income - < \$20,000 with 1-2 persons or < \$30,000 with 3 or more persons
- Lower middle income - \$20-29,000 with 1-2 persons or \$30-49,999 with 3-4 persons or \$30-59,000 with 5 or more persons
- Upper middle income - \$30-59,000 with 1-2 persons or \$50-79,000 with 3-4 persons or \$60-79,000 with 5 or more persons
- Highest income - \$60,000+ with 1-2 persons or \$80,000+ 3 or more persons

## References

- <sup>1</sup> World Health Organization: Dept of Mental Health and Substance Dependence. International Guide for Monitoring Alcohol Consumption and Related Harm. Geneva: World Health Organization; 2000.
- <sup>2</sup> Single E, Collins D, Easton B, Harwood H, Lapsley H, Kopp P, Wilson E. International Guidelines for Estimating the Costs of Substance Abuse. 2nd ed. Ottawa: Canadian Centre on Substance Abuse; 2001.
- <sup>3</sup> Rehm J, Baliunas D, Brochu S, Fischer B, Gnam W, Patra J, Popova S, Sarnocinska-Hart A, Taylor B. The costs of substance abuse in Canada 2002: Highlights. Ottawa: Canadian Centre on Substance Abuse; 2006.
- <sup>4</sup> Adlaf EM, Begin P, Sawka E, editors. Canadian Addiction Survey (CAS): A national survey of Canadians' use of alcohol and other drugs: Prevalence of use and related harms: Detailed report. Ottawa: Canadian Centre on substance Abuse; 2005.
- <sup>5</sup> StataCorp. Stata Statistical Software: Release 8.0. College Station (TX): Stata Corporation; 2003.
- <sup>6</sup> Graham L. Alcohol indicators report: A framework of alcohol indicators describing the consumption of use, patterns of use, and alcohol-related harms in Nova Scotia. ISBN: 0-8871-973-6. Halifax (NS): Nova Scotia Health Promotion; 2005.
- <sup>7</sup> Babor TF, Higgins-Biddle JC, Saunders JB, Monteiro MG. AUDIT. The Alcohol Use Disorders Identification Test: guidelines for use in primary care. 2nd ed. Geneva: World Health Organization, Department of Mental Health and Substance Dependence; 2001.
- <sup>8</sup> Bondy SJ, Rehm J, Ashley MJ, Walsh G, Single E, Room R. Low-risk drinking guidelines: The scientific evidence. Canadian Journal of Public Health 1998; 89(4): 241-247.
- <sup>9</sup> WHO ASSIST Working Group. Alcohol, smoking and substance involvement screening test (ASSIST): Development, reliability and feasibility. Addiction 2002; 97(9): 1183-1194.
- <sup>10</sup> Thomas G, Flight J, Richard K, Racine S. Toward a policy-relevant typology of cannabis use for Canada: Analysis drawn from the 2004 Canadian Addiction Survey. Ottawa (ON): Canadian Centre on Substance Abuse; 2006.
- <sup>11</sup> Statistics Canada. The control and sale of alcoholic beverages in Canada, 2005. [cited 2006 May 23] Available from: <http://dsp-psd.communication.gc.ca/Collection-R/Statcan/63-202-XIB/63-202-XIB-e.html>



